



500 West Big Beaver
Troy, MI 48084
troymi.gov

AGENDA

Employees' Retirement System Board Meeting

November 11th, 2020 at 12:00 PM

Electronic Remote Participation via GoToMeeting

(248) 524-3306

ERSPublicComments@troymi.gov

Roll Call

Public Comment

Minutes from the October 21st, 2020 Meeting

Retirement Requests

Name	Robert Wolfe	MaryBeth Murz	Craig Fitzpatrick
Pension Program	DB	DC	DB
Retirement Date	1/12/2021	1/19/2021	1/30/2021
Department	Police	Purchasing	Police
Service Time	25 years 8 months	8 years 1 month 15 years 4 months Prior gov't service	25 years, 1 month

Name	Kirk Linton	Antonio Cascioli	Jeffrey Strong
Pension Program	DB	DB	DB
Retirement Date	1/30/2021	1/30/2021	3/28/2021
Department	Police	Police	Police
Service Time	25 years, 1 month	26 years, 0 months	25 years, 1 month

Regular Business

- 2021 ERS Board Meeting Dates
- ERS Actuarial Engagement Letter Jan - Dec 2021 - Gabriel, Roeder, Smith (GRS)
- Request for reimbursement to City in the amount of \$6,000,000 in December 2020; \$3,000,000 each from Morgan Stanley and UBS.

Investments

- Graystone Consulting Investment Review
 - Market Slides
 - Performance Report - As of September 30th, 2020
 - Performance Report - As of October 31st, 2020
 - Troy ERS Market Values 11/2/2020



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- Asset Allocation Study - Wealth Strategies Analysis
- Index Concentration
- On the Markets - November 2020
- Recommendations to raise funds to reimburse the City
- UBS Financial Services Investment Review
 - Market Review and discussion
 - Performance and Asset Allocation Review - September 2020
 - Performance and Asset Allocation Review - October 2020
 - Cash Raise Discussion
 - Recommendations:
 - ERS portfolio:
 - Covered Call Options
 - NAIC Portfolio:
 - The NAIC portfolio holds the following stocks that are current sell recommendations by Investor Advisory Service (CFRA). Research included. UBS does not follow these companies.
 - Air Lease - Aircraft Leasing Company
 - Dave & Buster's Entertainment - family entertainment - restaurant venue
 - Essent Group - Private Mortgage Insurance
 - Old Dominion Freight Lines (previously discussed)
 - Review of UBS House View October 2020
- Investor Advisory Service November 2020

Other Business

- MBC Investment Consulting Contract

Adjourn

The next meeting is Wednesday, December 9th, 2020 at 12:00 PM.



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Troy, MI 48084
troymi.gov

MINUTES

Employees' Retirement System Board Meeting

October 21st, 2020 at 12:00 PM

Electronic Remote Participation via GoToMeeting

(248) 524-3306

ERSPublicComments@troymi.gov

Roll Call

The monthly meeting for the Employees' Retirement System Board of Trustees was held on **October 21st, 2020** with electronic remote participation via GoToMeeting.

The meeting was called to order at 12:00 PM by Administrator Maleszyk.

Trustees Present: Mark Calice
Thomas Gordon II
Robert C Maleszyk
Kurt Bovensiep
Mark F Miller
David Hamilton

Trustees Absent: Justin Novak
Mark Owczarzak

Also Present: Rola Ismail – ICMA/RC (left 12:38 PM)
Ray Fortin – ICMA/RC (left 12:38 PM)
Mark Woolhiser – MBC Investment Consulting (left 1:06 PM)
Joe Warsecke – MBC Investment Consulting (left 1:06 PM)
Lori Bluhm
Lisa Burnham
Shazia Fatima

Motion to Excuse Absentees

Resolution # ER – 2020-10-22

Moved by: Miller

Seconded by: Hamilton

RESOLVED, that the absent trustees be excused be **APPROVED**.

Yeas: - 6 – (Calice, Miller, Hamilton, Gordon, Bovensiep, Maleszyk)

Nays: - 0 -

Absent: - 1 – (Novak)

Motion Passes

Resolution: To allow all members to participate in public meetings by electronic means as allowed by Public Act 228 of 2020 and to establish public participation rules as printed in the Agenda Packet

Resolution # ER – 2020-10-23

Moved by: Miller

Seconded by: Calice

RESOLVED, to allow all members to participate in public meetings by electronic means as allowed by Public Act 228 of 2020 and to establish public participation rules as printed in the Agenda Packet be **APPROVED**.

Yeas: - 6 – (Miller, Calice, Hamilton, Gordon, Bovensiep, Maleszyk)

Nays: - 0 -

Absent: - 1 – (Novak)

Motion Passes

Public Comment

- None

Minutes from the August 12th, 2020 Meeting

Resolution # ER – 2020-10-24

Moved by: Calice

Seconded by: Bovensiep

RESOLVED, that the Minutes of the August 12th, 2020 meeting be **APPROVED**.

Yeas: - 6 – (Calice, Bovensiep, Gordon, Hamilton, Miller, Maleszyk)

Nays: - 0 -

Absent: - 1 – (Novak)

Motion Passes

Retirement Requests

Name	Christopher Stout	Curtis Reynolds, Jr.	Uwe (Jake) Diepholz
Pension Program	DB	On-Duty Death DB (with EDRO)	DB
Retirement Date	October 11, 2020	September 24, 2020	November 1, 2020
Department	Police	Police	Water Department
Service Time	25 years 9 months	29 years, 4 months	30 years, 1 month

- Trustee Hamilton sent his thoughts and prayers to the family, friends and colleagues of Officer Reynolds on his untimely passing.

Resolution # ER – 2020-10-25

Moved by: Gordon

Seconded by: Miller

RESOLVED, that the Retirement Requests be **APPROVED**.

Yeas: - 6 - (Gordon, Miller, Calice, Hamilton, Bovensiep, Maleszyk)

Nays: - 0 -

Absent: - 1 – (Novak)

Motion Passes

Regular Business

- **ICMA/RC Investment Review**

- Ray Fortin briefly introduced himself and his role in ICMA/RC.
- Rola and Ray gave an Education Activity Update, and what they are doing to help employees save for retirement.
- They have successfully conducted 294 One-on-One consultations, 11 Group Presentations and One-on-One CFP Consultations.
- A customized website for the City is ready to be rolled out to make it easier for employees to reach out to consultants and CFP's.
- Ray presented the Investment review discussing the Active Vantagepoint and VT Funds, Asset Allocation, strong performing funds and poor performing funds and the Quarterly Fund Performance Report as of 9/30/2020.

Investments

MBC Investment Consulting

- **Defined Contribution Plan Analysis – Mark Woolhiser**

- Mark Woolhiser introduced himself and MBC Investment Consulting.
- MBC Consulting, when hired as a consultant, would share fiduciary responsibility, and work as an advocate to reduce our costs with ICMA/RC.
- They aim to help the Board implement a defined contribution strategy, reduce participant costs, improve the investment lineup by eliminating proprietary funds and establishing quarterly monitoring of investments, and, create an employee education plan that focuses on retirement readiness.
- He explained their Scorecard System Methodology and based on that provided a list of our funds and their scores based on their scoring system, concluding that there are a lot of vantagepoint funds that should be replaced and the Fidelity Puritan fund is on their watchlist.

- **Recommendations:**

- Empower Pension Board to Implement Defined Contribution Solutions
- Hire Defined Contribution Plan Consultant

- **Discussion:**

- Lori Bluhm inquired about MBC's cost to the City of Troy.
- MBC is a MITN Preferred vendor.
- Administrator Maleszyk wants to move forward with the help of Lori to hire MBC. He proposed that we could pay MBC for the first couple of years out of forfeited funds from participants who don't make their vesting. The city would ultimately be paying this fee.
- Lori Bluhm would like to research on it more and also agreed that using forfeited funds would be a good plan for the first few years.
- The Board had a consensus on hiring MBC. Lori will have to put together an agreement and bring it to the Board before a formal hiring is completed.

Other Business

- None

Adjourn

The meeting adjourned at 1:16 PM.

The next meeting is Wednesday, November 11th, 2020 at 12:00 PM.

Thomas Gordon II, Vice Chairman

Robert C Maleszyk, Administrator

**CITY OF TROY
MICHIGAN
PUBLIC NOTICE**

**Employee Retirement System Trust Board of Trustees
2021 REGULAR MEETINGS**

In accordance with the provisions of the Michigan State Law, Notice is hereby given that the Employee Retirement System Board of Trustees of the City of Troy will hold Public Meetings at City Hall, 500 West Big Beaver Road, Troy, Michigan, (248) 524-3330, on the following dates:

Wednesday, January 13th, 2021
Wednesday, February 10th, 2021
Wednesday, March 10th, 2021
Wednesday April 14th, 2021
Wednesday, May 12^h, 2021
Wednesday June 9th, 2021
Wednesday July 14th, 2021
Wednesday, August 11th, 2021
Wednesday September 8th, 2021
Wednesday October 13th, 2021
Wednesday, November 10th, 2021
Wednesday December 8th, 2021

All of the above meetings will be held in the City Hall Council Board Room at 12:00 PM and are open to the public.

This notice is hereby posted as required by Section 4 of the Open Meetings Act, (MCLA 15.261 et seq.).

Robert C Maleszyk
Chief Financial Officer
Pension Administrator

Posted: November 11th, 2020

NOTICE: Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk (248) 524-3317 at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations.



November 3, 2020

Board of Trustees
City of Troy Employees Retirement System
500 West Big Beaver Road
Troy, MI 48084

Re: Proposed Services and Actuarial Fees for the City of Troy Employees Retirement System

Dear Trustees:

We have prepared this engagement letter describing the scope and fees for the following services for the period beginning January 1, 2021:

- Regular Retainer Services (Attachment 1)
- PA 202 Reporting Information (Attachment 2)
- Combined GASB Statements No. 67 and No. 68 Report (Attachment 3)
- EDROs 1/1/2021 – 12/31/2021 (Attachment 4)

Please refer to the enclosed attachments for details regarding specific services and associated fees.

Work related to special projects is not included in these fee quotes. We can prepare separate fee quotes for special projects in advance at your request. Examples of special projects would be proposal work for union negotiations, individual benefit statements, experience studies, summary annual reports, exclusion ratio calculations, etc.

During the course of our engagement, we will advise you promptly if, as a result of unforeseen circumstances, our fees will exceed this quote.

Gabriel, Roeder, Smith & Company appreciates the opportunity to be of service to you. If you have any questions do not hesitate to call me at 248-226-7540.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jeffrey T. Tebeau". The signature is written in a cursive, flowing style.

Jeffrey T. Tebeau, FSA, EA, MAAA

JTT:sc
Enclosures

Attachment 1

Scope of Work to be Performed

Gabriel, Roeder, Smith & Company (GRS) will prepare an actuarial valuation of the City of Troy Employees Retirement System and calculate the contribution requirement for the plan.

At your request, we can discuss any changes to the format of the report. Relatively minor changes will not impact the fee estimates.

Retainer Services and Associated Consulting Fees

The following table illustrates our estimated fees for retainer services:

Item	Proposed Fees
Normal actuarial and consulting services for calendar year 2021:	\$16,250
<ul style="list-style-type: none">- Reasonable consulting services, via telephone or written correspondence, concerning the System's operation or matters of general interest to a public sector retirement program during the course of the year (limited to five hours per year).- Attendance at one meeting per year of the Retirement Board and/or Retirement System staff.- The annual actuarial valuation of active members, inactive members, retirees and beneficiaries on rolls as of December 31, 2020, based upon data furnished by the System in accordance with instructions furnished by the actuary.- Assistance with various filings or reports required by governmental agencies and auditors.- Response to requests from auditors for supplemental information.- Access to the GRS Advantage Website.	

The estimates above assume the following:

- We will receive accurate and complete information (demographic data and financial information).
- There will be only minor changes in the plan provisions since the last valuation.
- There are no significant changes to the format of the report since the last valuation.
- Benefit calculations will be billed separately at a cost of \$210 per case.

Attachment 2

Scope of Work to be Performed

Gabriel, Roeder, Smith & Company (GRS) will prepare an additional exhibit in the actuarial valuation of the City of Troy Employees Retirement System in order to assist the City with complying with the reporting requirements of Michigan PA 202.

PA 202 Reporting Using Uniform Assumptions

Under PA 202, the City will be required to report the System's assets, liabilities, funded ratio and contributions using the Treasurer's uniform assumptions. The following chart compares the System's assumptions to the uniform assumptions for fiscal year 2021.

Assumption/Method	ERS Assumption	Uniform Assumption	PA 202 Compliant?
Investment Return	6.5%	Maximum of 7.0%	Yes
Discount Rate	6.5%	Blended discount rate calculated using GASB No. 68 methodology: <ul style="list-style-type: none">• Maximum of 7.0% when assets are sufficient• 2.2% when assets aren't sufficient	Yes
Salary Increase	3.5%	Minimum of 3.00% or based on experience study	Yes
Mortality Table	Pub-2010	Version of Pub-2010 or based on experience study	Yes
Healthcare Inflation	N/A	N/A (OPEB only)	N/A
Amortization of the UAAL	N/A (no UAAL payment)	18-year closed period	Yes

Associated Consulting Fees

The Treasurer's uniform assumptions changed for 2021. However, the System's assumptions are compliant with the Treasurer's uniform assumptions and, therefore, there will be no additional fees for PA 202 reporting for fiscal year 2021.

Attachment 3

Scope of Work to be Performed

Gabriel, Roeder, Smith & Company (GRS) will prepare a report containing certain disclosures required under the Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68 for the City of Troy Employees Retirement System for the fiscal year ending June 30, 2021.

Combined GASB Statements No. 67 and No. 68 Report

The following table illustrates our estimated fees for the following services:

Item	Proposed Fees
June 30, 2021 Combined GASB Statements No. 67 and No. 68 Report:	\$7,900
- Calculation of the Single Discount Rate based on a full projection of benefit payments, expected contributions and investment returns.	
- Statement of Changes in the Net Pension Liability and Related Ratios, using the Single Discount Rate as determined above.	
- Statement of the Pension Expense and Statement of Outflows and Inflows of Resources related to the Pension Expense.	
- Comparison of the actual employer contributions to the actuarially determined contributions and notes to the schedule of contributions.	
- Calculation of the sensitivity of the Net Pension Liability to the Single Discount Rate.	
- 1-2 hours of consultation with staff and/or the auditors.	

Additional Services Related to GASB Disclosures

For additional fees, we are fully prepared to assist in all of the following areas:

1. Attending meetings with or providing educational sessions for decision makers.
2. Preparing 10-year schedules reflecting past experience.
3. Preparing required narratives and other Note Disclosures.
4. Funding policy preparation or issues.

If you are interested in any of these services, please contact us to discuss.

Attachment 4

Standard EDRO Fee Schedule for Work Completed January 1, 2021 – December 31, 2021

Certifications

Standard Fees

- | | |
|---|---|
| • Reviewing and certifying a DRO that qualifies as an EDRO. | \$1,200 |
| • Reviewing and commenting on a DRO that does not qualify as an EDRO. | \$1,200 + \$400 per hour in excess of 1.5 hours, if any |

Calculations

- | | |
|---|---|
| • First-time calculation by GRS of one scenario of benefits to be paid to the Alternate Payee and/or recouped from the Participant. | \$1,500 + \$600 per additional scenario of benefits, if any |
| • Follow-up calculation by GRS of one scenario of benefits to be paid to the Alternate Payee and/or recouped from the Participant. | \$1,200 + \$600 per additional scenario of benefits, if any |

Model Language Preparation

- | | |
|---|-----|
| • Preparation of EDRO Models, customized with the System's name, administrative contact, mailing address, and telephone number. | TBD |
|---|-----|

A discount can be applied to the above fees if the plan sponsor prepays for the EDRO calculations before the results are delivered.

**MORGAN STANLEY GRAYSTONE CONSULTING
SOUTHEAST MICHIGAN**

**INVESTMENT PERFORMANCE
ANALYSIS FOR**

**CITY OF TROY EMPLOYEES'
RETIREMENT SYSTEM**

QUARTER ENDING SEPTEMBER 30, 2020

**SOUTHEAST MICHIGAN
GRAYSTONE CONSULTING**

**34901 WOODWARD AVENUE, SUITE 300
BIRMINGHAM MI 48009
248-593-2474**

Presented by:

**TIMOTHY M. BRICE, CIMA ®
Managing Director – Wealth Management
Institutional Consulting Director
Corporate Retirement Director
Institutional Consultant
timothy.brice@msgraystone.com**

**AMY R. COLE, CIMA ®
Vice President
Financial Advisor
amy.r.cole@morganstanley.com**

**ROBERT F. ALATI
Senior Vice President
Financial Advisor
robert.f.alati@morganstanley.com**

Meeting Date: November 11, 2020

**Graystone
ConsultingSM**
A business of Morgan Stanley

MORGAN STANLEY GRAYSTONE CONSULTING SOUTHEAST MICHIGAN

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Market Slides

Prepared on October 14, 2020

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Asset Class Index Performance

Capital Market Returns

As of October 1, 2020; Private Real Estate as of June 30, 2020

ASSET CLASS	INDEX IN USD	1-MONTH	YTD	1-YR	3-YR ANN	5-YR ANN
Global Equity						
Global Equity	MSCI All Country World	-3.2%	1.8%	11.0%	7.7%	10.8%
US Equity	S&P 500	-3.8%	5.6%	15.1%	12.2%	14.1%
International Equity	MSCI All Country World ex US	-2.4%	-5.1%	3.4%	1.6%	6.6%
Emerging Markets Equity	MSCI Emerging Markets	-1.6%	-0.9%	10.9%	2.8%	9.2%
Global Fixed Income						
Investment Grade Fixed Income	Barclays US Aggregate	-0.1%	6.8%	7.0%	5.2%	4.2%
Inflation-Linked Securities	Barclays Universal Govt Inflation-Linked	0.4%	7.5%	4.6%	6.1%	5.5%
High Yield	Barclays Global High Yield (H)	-1.5%	-1.0%	2.0%	3.2%	6.4%
Emerging Markets Fixed Income	JP Morgan EM Bonds (UH in USD)	-2.0%	-6.3%	-1.4%	0.8%	1.9%
Alternative Investments						
Global REITs	FTSE EPRA/NAREIT Global REITs	-3.0%	-19.5%	-16.6%	-0.8%	3.3%
Commodities	Bloomberg Commodities	-3.4%	-12.1%	-8.2%	-4.4%	-3.1%
MLPs	Alerian MLP	-13.6%	-46.2%	-48.4%	-20.7%	-12.3%
Hedged Strategies	HFRX Global Hedge Fund Index	-0.2%	1.6%	4.2%	1.5%	2.1%
Managed Futures	HFRX Macro/CTA Index	-1.3%	0.0%	-0.2%	1.4%	0.1%
Private Real Estate	NCREIF Private Real Estate	-	-0.3%	2.7%	5.4%	6.8%
Global Cash						
Cash	Citigroup 3-month Treasury Bill	0.0%	0.6%	1.0%	1.6%	1.2%
Other Fixed Income						
Municipal Fixed Income	Barclays Municipal Bond	0.0%	3.3%	4.1%	4.3%	3.8%

Source: FactSet, Morgan Stanley Wealth Management GIC. For more information about the risks to Master Limited Partnerships (MLPs), please refer to the Risk Considerations section at the end of this material.

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

Asset Class Returns

As of October 1, 2020

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 YTD	10-Yrs ('10-'19) Ann. Return	10-Yrs ('10-'19) Volatility
EM Equities 82.9%	MLPs 35.9%	MLPs 13.9%	REITs 29.8%	US Equities 32.4%	REITs 14.7%	US Equities 1.4%	MLPs 18.3%	EM Equities 37.3%	US Debt 0.0%	US Equities 31.5%	Inflation-Linked 9.2%	US Equities 13.6%	MLPs 17.2%
MLPs 76.4%	EM Equities 20.2%	Inflation-Linked 13.6%	High Yield 19.6%	MLPs 27.6%	US Equities 13.7%	DM Int'l Equities 0.9%	High Yield 14.3%	DM Int'l Equities 26.7%	DM Int'l Debt -0.8%	REITs 23.6%	US Debt 6.8%	REITs 8.9%	Commod. 13.6%
High Yield 59.4%	REITs 20.0%	US Debt 7.8%	EM Equities 19.1%	DM Int'l Equities 24.0%	Managed Futures 12.3%	US Debt 0.5%	US Equities 12.0%	US Equities 21.8%	Inflation-Linked -1.3%	DM Int'l Equities 23.1%	US Equities 5.6%	High Yield 7.3%	US Equities 12.4%
REITs 41.3%	Commod. 16.8%	DM Int'l Debt 6.0%	DM Int'l Equities 18.2%	Diversified Portfolio 15.1%	US Debt 6.0%	REITs -0.4%	Commod. 11.8%	EMD 15.2%	High Yield -4.1%	Diversified Portfolio 19.1%	DM Int'l Debt 5.1%	Diversified Portfolio 7.3%	REITs 12.0%
DM Int'l Equities 33.9%	EMD 15.7%	High Yield 3.1%	EMD 16.8%	Hedged Strategies 8.8%	MLPs 4.8%	Managed Futures -0.9%	EM Equities 10.3%	REITs 15.0%	US Equities -4.4%	EM Equities 18.1%	Hedged Strategies 1.8%	DM Int'l Equities 6.4%	EM Equities 11.9%
US Equities 26.5%	US Equities 15.1%	US Equities 2.1%	US Equities 16.0%	High Yield 7.3%	Diversified Portfolio 4.7%	Inflation-Linked -1.4%	EMD 9.9%	Diversified Portfolio 14.9%	Managed Futures -4.6%	EMD 13.5%	Managed Futures 0.0%	US Debt 4.3%	DM Int'l Equities 11.5%
Diversified Portfolio 23.6%	High Yield 14.8%	EMD -1.8%	Diversified Portfolio 12.0%	REITs 2.2%	Inflation-Linked 3.6%	Diversified Portfolio -1.9%	Diversified Portfolio 7.5%	High Yield 10.4%	REITs -5.5%	High Yield 12.6%	Diversified Portfolio -0.2%	MLPs 4.2%	Diversified Portfolio 7.5%
EMD 22.0%	Diversified Portfolio 12.7%	Diversified Portfolio -2.1%	Inflation-Linked 7.0%	Managed Futures 0.7%	Hedged Strategies 3.4%	High Yield -2.7%	Inflation-Linked 4.7%	DM Int'l Debt 8.8%	Diversified Portfolio -6.1%	US Debt 8.7%	High Yield -0.6%	EM Equities 4.0%	DM Int'l Debt 6.9%
Commod. 18.9%	DM Int'l Equities 9.8%	Managed Futures -4.3%	MLPs ² 4.8%	EM Equities -1.9%	High Yield 0.0%	Hedged Strategies -3.6%	REITs 4.6%	Hedged Strategies 6.0%	EMD -6.2%	Hedged Strategies 10.4%	EM Equities -1.0%	Hedged Strategies 4.0%	High Yield 6.8%
Hedged Strategies 11.5%	DM Int'l Debt 7.0%	Hedged Strategies -5.7%	Hedged Strategies 4.8%	US Debt -2.0%	EM Equities -1.4%	DM Int'l Debt -4.4%	US Debt 2.6%	US Debt 3.5%	Hedged Strategies -7.0%	Inflation-Linked 8.4%	DM Int'l Equities -6.3%	Inflation-Linked 3.4%	Managed Futures 6.5%
Inflation-Linked 11.4%	US Debt 6.5%	REITs -8.1%	US Debt 4.2%	DM Int'l Debt -5.6%	DM Int'l Debt -3.0%	EM Equities -13.5%	Hedged Strategies 2.5%	Inflation-Linked 3.0%	Commod. -11.2%	Commod. 7.7%	EMD -6.3%	EMD 2.7%	Hedged Strategies 4.8%
US Debt 5.9%	Managed Futures 6.4%	DM Int'l Equities -12.2%	DM Int'l Debt 0.5%	Inflation-Linked -8.6%	DM Int'l Equities -4.5%	EMD -14.9%	DM Int'l Debt 2.1%	Commod. 1.7%	MLPs -12.4%	Managed Futures 6.7%	Commod. -12.1%	DM Int'l Debt 1.4%	Inflation-Linked 4.3%
DM Int'l Debt 3.7%	Inflation-Linked 6.3%	Commod. -13.3%	Commod. -1.1%	EMD -9.0%	EMD -5.7%	Commod. -24.7%	DM Int'l Equities 1.6%	Managed Futures -0.8%	DM Int'l Equities -14.0%	MLPs 6.6%	REITs -19.5%	Managed Futures 0.8%	EMD 3.7%
Managed Futures -4.8%	Hedged Strategies 4.2%	EM Equities -19.2%	Managed Futures -1.8%	Commod. -9.5%	Commod. -17.0%	MLPs -32.6%	Managed Futures -4.4%	MLPs -6.5%	EM Equities -14.7%	DM Int'l Debt 4.6%	MLPs -46.2%	Commod. -4.7%	US Debt 2.9%

Source: FactSet, Morgan Stanley Wealth Management GIC; Indices used: Bloomberg Barclays Capital US Aggregate for US Bonds. FTSE 3M Treasury Bill for cash, Bloomberg Barclays US Aggregate for US Bonds, Bloomberg Barclays Global Majors ex US for DM Int'l Bonds, Bloomberg Barclays US TIPS for Inflation-linked securities, Bloomberg Barclays Global High Yield for global high yield, JP Morgan EMBI for EM Bonds, S&P 500 for US Stocks, MSCI EAFE IMI for Int'l Stocks, MSCI EM IMI for Emerging Market Stocks, FTSE EPRA/NAREIT Global for REITs, Bloomberg Commodity Index for commodities, BarclayHedge US Managed Futures Index for Managed Futures [presented w/ 1-month delay], Alerian MLP Index for MLPs, and HFRX Global hedge Funds for hedged strategies. Diversified portfolio is comprised of 25% S&P 500, 10% Russell 2000, 15% MSCI EAFE, 5% MSCI EME, 25% Bloomberg Barclays US Aggregate, 5% 3 mo. T-Bills, 5% HFRX Global Hedge Funds, 5% Bloomberg Commodity Index, and 5% FTSE EPRA/NAREIT Global Index. MLP data begins on January 1, 2007. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

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US Equity Market Capitalization and Style Returns

Return as of September 30, 2020

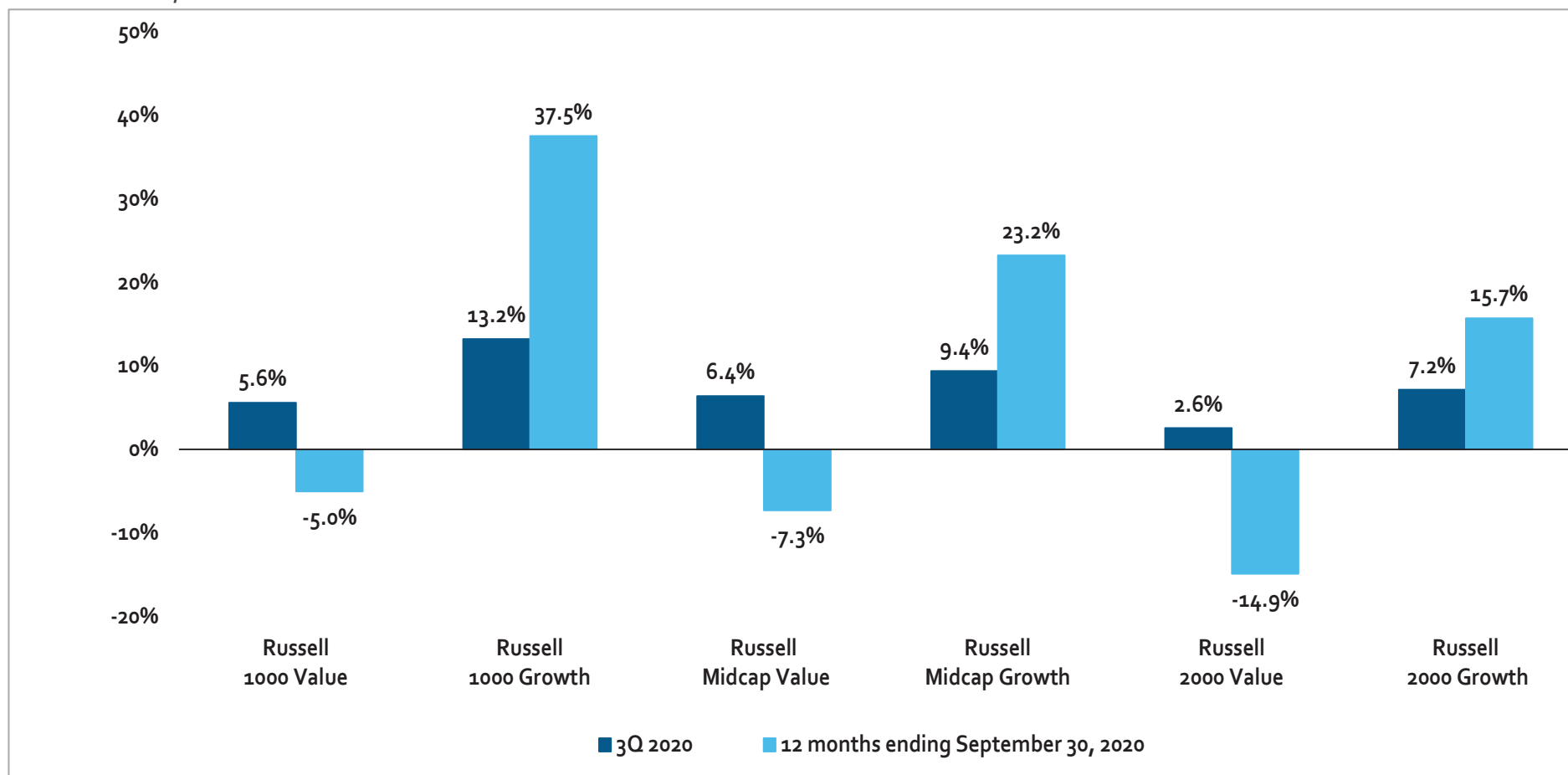
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10-Years ('10-'19) Ann.
Small-Cap Growth 29.1%	Large-Cap Growth 2.6%	Mid-Cap Value 18.5%	Small-Cap Growth 43.3%	Mid-Cap Value 14.7%	Large-Cap Growth 5.7%	Small-Cap Value 31.7%	Large-Cap Growth 30.2%	Large-Cap Growth -1.5%	Large-Cap Growth 36.4%	Large-Cap Growth 24.3%	Large-Cap Growth 18.9%
Mid-Cap Growth 26.4%	S&P 500 2.1%	Small-Cap Value 18.1%	Mid-Cap Growth 35.7%	S&P 500 13.7%	S&P 500 1.4%	Mid-Cap Value 20.0%	Mid-Cap Growth 25.3%	S&P 500 -4.4%	Mid-Cap Growth 35.5%	Mid-Cap Growth 13.9%	Mid-Cap Growth 18.7%
Mid-Cap Value 24.8%	Large-Cap Value 0.4%	Large-Cap Value 17.5%	Small-Cap Value 34.5%	Large-Cap Value 13.5%	Mid-Cap Growth -0.2%	Large-Cap Value 17.3%	Small-Cap Growth 22.2%	Mid-Cap Growth -4.8%	S&P 500 31.5%	S&P 500 5.6%	Small-Cap Growth 16.4%
Small-Cap Value 24.5%	Mid-Cap Value -1.4%	S&P 500 16.0%	Large-Cap Growth 33.5%	Large-Cap Growth 13.0%	Small-Cap Growth -1.4%	S&P 500 12.0%	S&P 500 21.8%	Large-Cap Value -8.3%	Small-Cap Growth 28.5%	Small-Cap Growth 3.9%	S&P 500 16.3%
Large-Cap Growth 16.7%	Mid-Cap Growth -1.7%	Mid-Cap Growth 15.8%	Mid-Cap Value 33.5%	Mid-Cap Growth 11.9%	Large-Cap Value -3.8%	Small-Cap Growth 11.3%	Large-Cap Value 13.7%	Small-Cap Growth -9.3%	Mid-Cap Value 27.1%	Large-Cap Value -11.6%	Mid-Cap Value 15.8%
Large-Cap Value 15.5%	Small-Cap Growth -2.9%	Large-Cap Growth 15.3%	Large-Cap Value 32.5%	Small-Cap Growth 5.6%	Mid-Cap Value -4.8%	Mid-Cap Growth 7.3%	Mid-Cap Value 13.3%	Mid-Cap Value -12.3%	Large-Cap Value 26.5%	Mid-Cap Value -12.8%	Large-Cap Value 13.8%
S&P 500 15.1%	Small-Cap Value -5.5%	Small-Cap Growth 14.6%	S&P 500 32.4%	Small-Cap Value 4.2%	Small-Cap Value -7.5%	Large-Cap Growth 7.1%	Small-Cap Value 7.8%	Small-Cap Value -12.9%	Small-Cap Value 22.4%	Small-Cap Value -21.5%	Small-Cap Value 12.7%

Source: FactSet, Morgan Stanley Wealth Management GIC. Indices used for this analysis include: Russell Midcap Value, Russell 2000 Value, Russell 1000 Value, Russell Midcap Growth, Russell 2000 Growth, Russell 1000 Growth, and S&P 500.

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Russell Style and Market Capitalization Indices

As of October 1, 2020



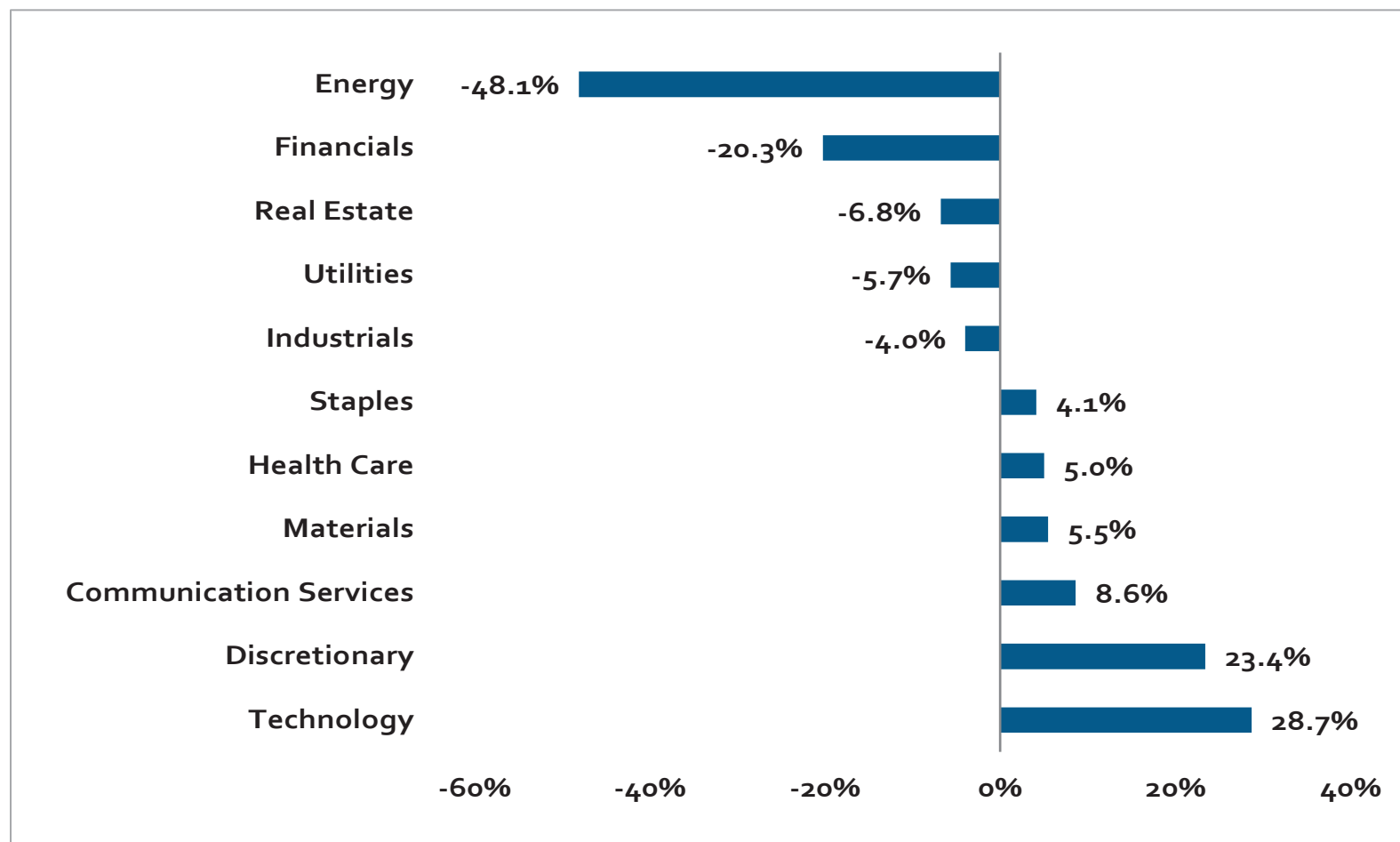
Source: Bloomberg

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S&P 500 Sectors

YTD Total Return

As of October 1, 2020



Source: Bloomberg

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Summary of GIC Tactical Advice: Global Equities

As of October 2, 2020

Global Equities	Relative Weight Within Equities	Rationale
US	Overweight	Global stock markets have entered a bear market on concerns about the negative growth impact of the coronavirus. Although we expected US and global recessions in the second quarter of 2020, our base case is that recent extraordinary policy actions from both central banks and national governments will help cushion the economic impact. Markets are already pricing the most likely scenarios. We recently upgraded our exposure to large-cap growth and small- and mid-cap equities, believing that active stock pickers have a good entry point over the next several months.
International Equities (Developed Markets)	Market Weight	We recently reduced exposure to both Europe and Japan believing that while policy responses were meaningful, their impact may ultimately be lumpy and diluted by additional headwinds—in the case of Europe, the lack of fiscal integration, and in Japan, the strength of yen.
Emerging Markets	Overweight	China was the first country to enter the COVID-19 crisis and appears poised to be the first out. Resumption of economic activity during the second quarter should jump-start global growth, especially given huge government stimulus programs. Ample liquidity from the Fed and a weakening dollar should catalyze investor interest. China stands to gain the most from US tariff rollbacks, and global trade dynamics should improve. Valuations are attractive and local central banks should be able to maintain accommodation and stimulus. For most countries, especially China, the collapse in oil prices is a material tailwind for consumer purchasing power.

Source: Morgan Stanley Wealth Management GIC

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Summary of GIC Tactical Advice: Global Fixed Income

As of October 2, 2020

Global Fixed Income	Relative Weight Within Bonds	Rationale
US Fixed Income (Investment Grade)	Market Weight	We have recommended shorter-duration* (maturities) since March 2018 given the extremely low yields and potential capital losses associated with rising interest rates from such low levels and had been pairing that position with a large exposure to long-term US Treasuries to hedge what we expected would be a modest correction in stocks. With long-term Treasury yields troughing for the cycle, we recently removed that position and resumed a benchmark exposure to duration. Recent dislocation of investment grade credit spreads and market illiquidity have created opportunities. Fed programs aimed at backstopping this market give reason to be an active bond selector.
International Investment Grade	Underweight	Negative interest rates suggest that this is not a preferred asset class for US-dollar clients at this time. Actively managed funds may provide very patient, risk-tolerant clients with income opportunities in select corporate credits.
Inflation-Protected Securities	Underweight	The “sudden stop” recession has caused a severe pricing of real interest rates, pushing them negative and near all-time lows. In the near term, upside appears limited.
High Yield	Overweight	High yield bonds remain at the epicenter of the dual risks from COVID-19 and the collapse in oil prices from the failure of OPEC negotiations. In our view, some of the most extreme risks have been discounted, especially in light of unprecedented monetary and fiscal policy intervention aimed not only at market liquidity but in bridging cash flow requirements. It’s time to ease in opportunistically, using active managers.

* For more information about the risks to Duration please refer to the Risk Considerations section at the end of this material.

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Summary of GIC Tactical Advice: Alternative Investments

As of October 2, 2020

Alternative Investments	Relative Weight Within Alts	Rationale
REITs	Underweight	Real estate investment trusts (REITs) have performed very well as global growth slowed and interest rates fell. However, REITs remain expensive and are vulnerable to credit risks. We will revisit our position as nominal GDP troughs and/or valuations become more attractive.
Commodities	Overweight	The “sudden stop” global recession has driven commodities such as oil to multidecade lows. The rush to the defensive US dollar, which is near multiyear high, has exacerbated these dynamics. While we recognize the complexity of the geopolitical issues that surround oil, we believe that on a six-to-12-month basis the outlook for the global economy and overall demand improves materially. Thus, we suggest risk-oriented clients to establish exposure to the broad diversified asset class through the use of active managers. Pure passive exposure is not advised.
Hedged Strategies (Hedge Funds and Managed Futures)	Overweight	The bear market associated with COVID-19 has driven volatility to historic extremes and led to wide dispersion in price performance and stock-level idiosyncratic risk. These factors tend to create a constructive environment for hedge fund managers who are good stock-pickers and can use leverage and risk management techniques to amplify returns. We prefer very active and fundamental strategies, especially equity long/short.

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Bull Market Intact, but Need Consolidation Followed by Rotation & Higher Rates

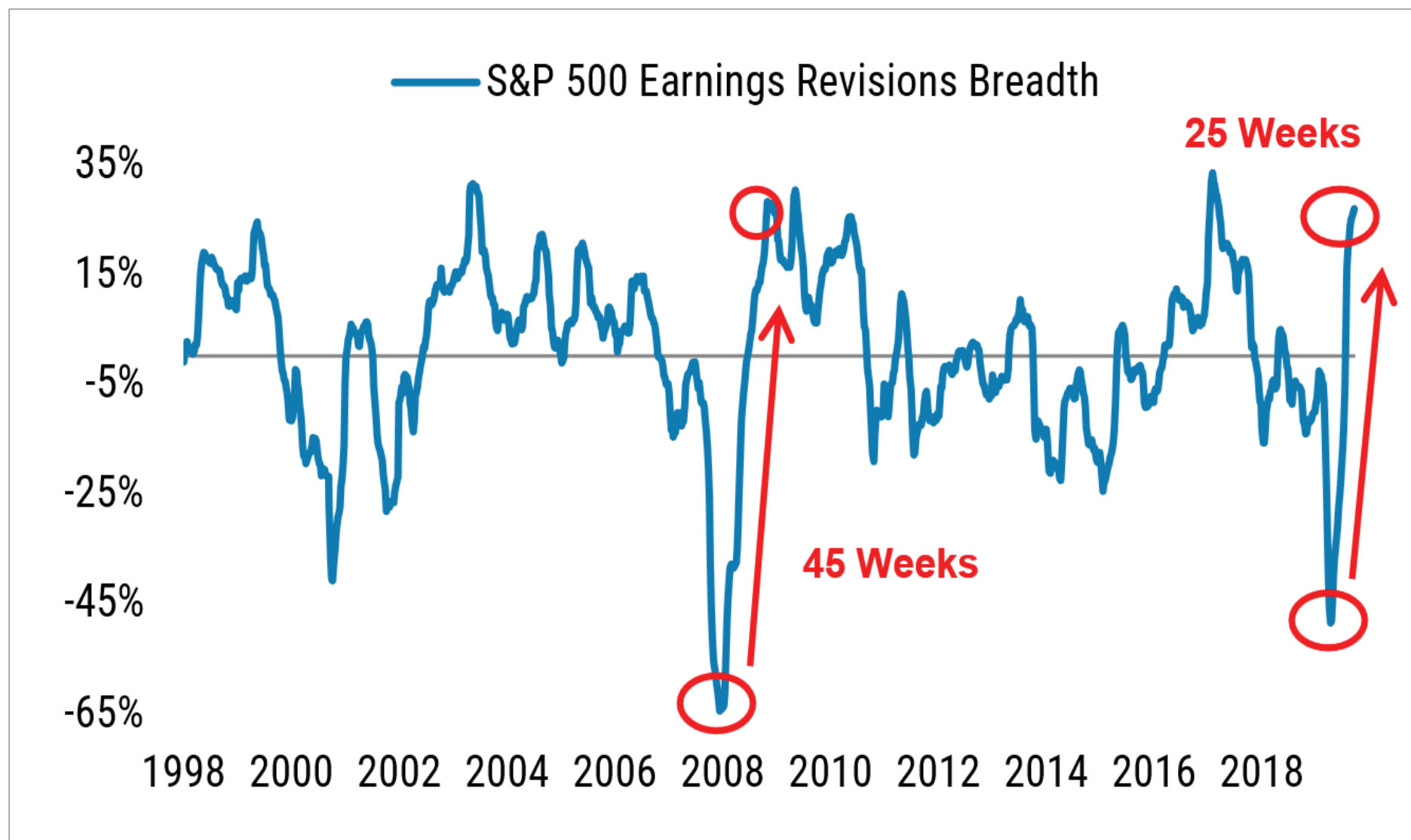
As of October 14, 2020

- **4 Reasons to Remain Bullish:** (1) New bull markets begin with a recession and have typically run for years. (2) The health crisis that triggered this recession has brought unprecedented monetary and fiscal stimulus that is likely to become structural in nature. (3) Economic data surprises and earnings revisions support our V-Shaped recovery. (4) Sentiment and positioning have remained remarkably skeptical considering the size and persistence of the equity rally.
- **4 Reasons for a Likely Correction:** (1) Breadth of the rally and economic data surprises have deteriorated. (2) Congressional gridlock on CARES 2 fiscal stimulus package creates doubt about whether this bill can get passed in a timely fashion. and (3) Fed's new inflation targeting scheme in the absence of yield caps opens the door for potentially much higher back-end rates than markets are expecting if CARES 2 passes. (4) Election uncertainty.
- **V-Shaped Recovery Happening Even Faster than We Expected.** The Fed's unprecedented response, in conjunction with Congress, has driven a strong recovery from the depths of this recession. While there is a long way to go to get back to prior output levels, the economic data surprises and earnings revisions suggest we are well on our way.
- **Barbell of Growth and Cyclical with a Skew Toward Small/Mid Caps.** In line with our recession playbook, we continue to recommend a mix of high-quality growth stocks with the biggest potential beneficiaries of a continued recovery—i.e. cyclicals. Focus on companies that are likely to deliver the most operating leverage as business returns. This is likely to include some lower-quality stocks that would be survivors on the recession and in position to take share and leverage their lower cost structures.
- **Our US style and sector recommendations reflect this view.** Overweight small/mid over large, Financials, Consumer Cyclical, Materials, Industrials, and Healthcare. Underweight Tech, Utilities, and Consumer Staples.
- **Inflation is the Key to the Secular Bull Market for Stocks and Secular Bear Market for Bonds.** The shift in policy from monetary to fiscal dominance is something we have been waiting for to make a more aggressive call on inflation and equities. A US recession was always a necessary condition for this outcome, and now we have it. The health crisis nature of this event further supports this potential outcome. Finally, don't forget the other inflationary trends that were well established before this recession began—populism, nationalism, de-globalization, and a sign that the US dollar may either lose or have to share its reserve currency status.
- **We Recommend Being Overweight to Equities and Credit, Underweight Interest Rate Risk—i.e., Duration.** We also recommend owning some commodities as another inflation hedge. Avoid profitless growth stocks and pure bond proxies/defensives. Cash is not king with front-end rates at zero and rising inflation risks. There will be moments of doubt and uncertainty about the recovery if a second wave of the virus returns, US/China trade relations flare up, and uncertainty around the US election persists. We would use any pullbacks around this doubt as buying opportunities for stocks, led by US cyclicals, international and small/mid caps.

Source: Morgan Stanley & Co. Research

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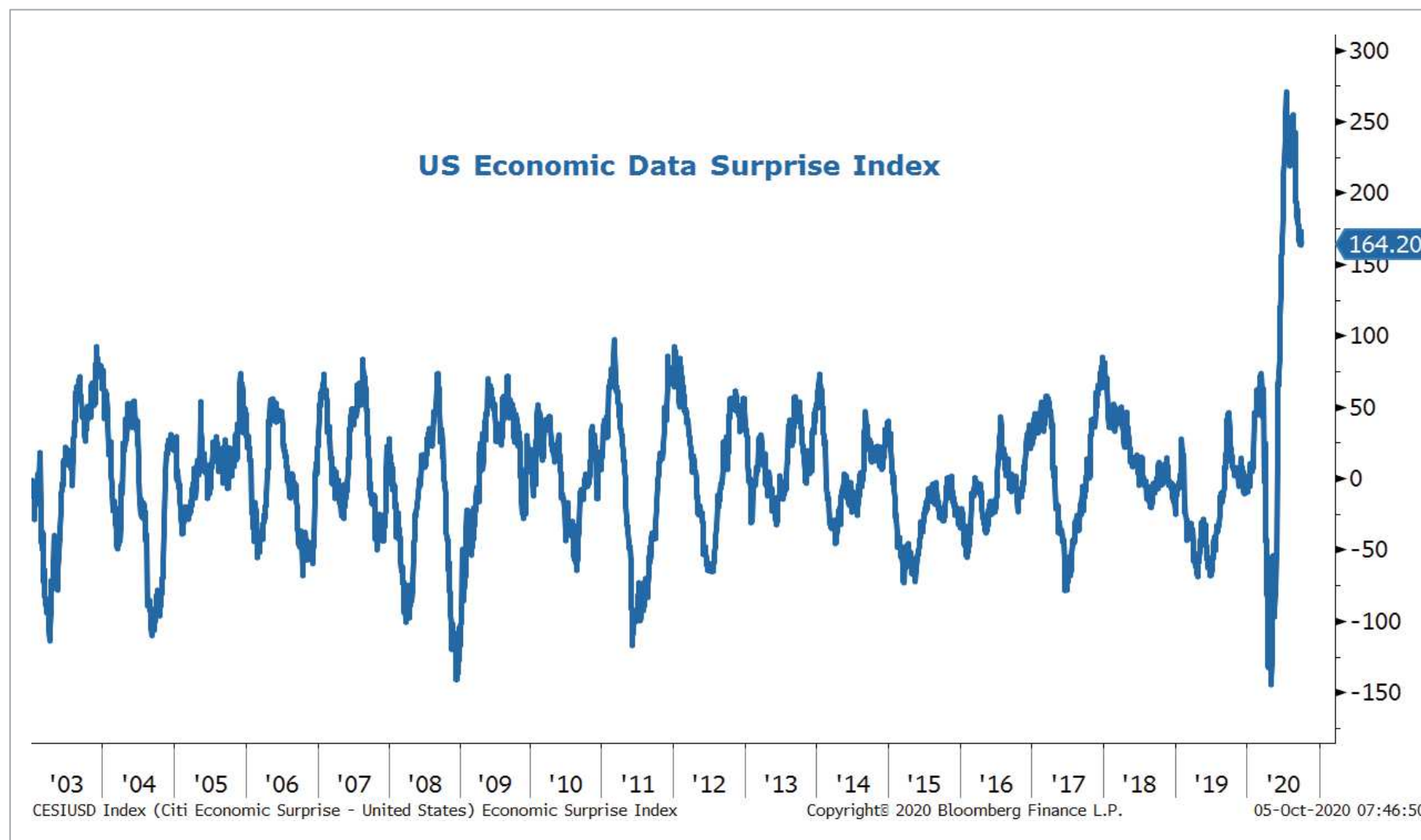
While Policy Is a Primary Driver of Markets, It's Also Driving Earnings Revisions



Source: Bloomberg, Morgan Stanley & Co Research as of October 9, 2020

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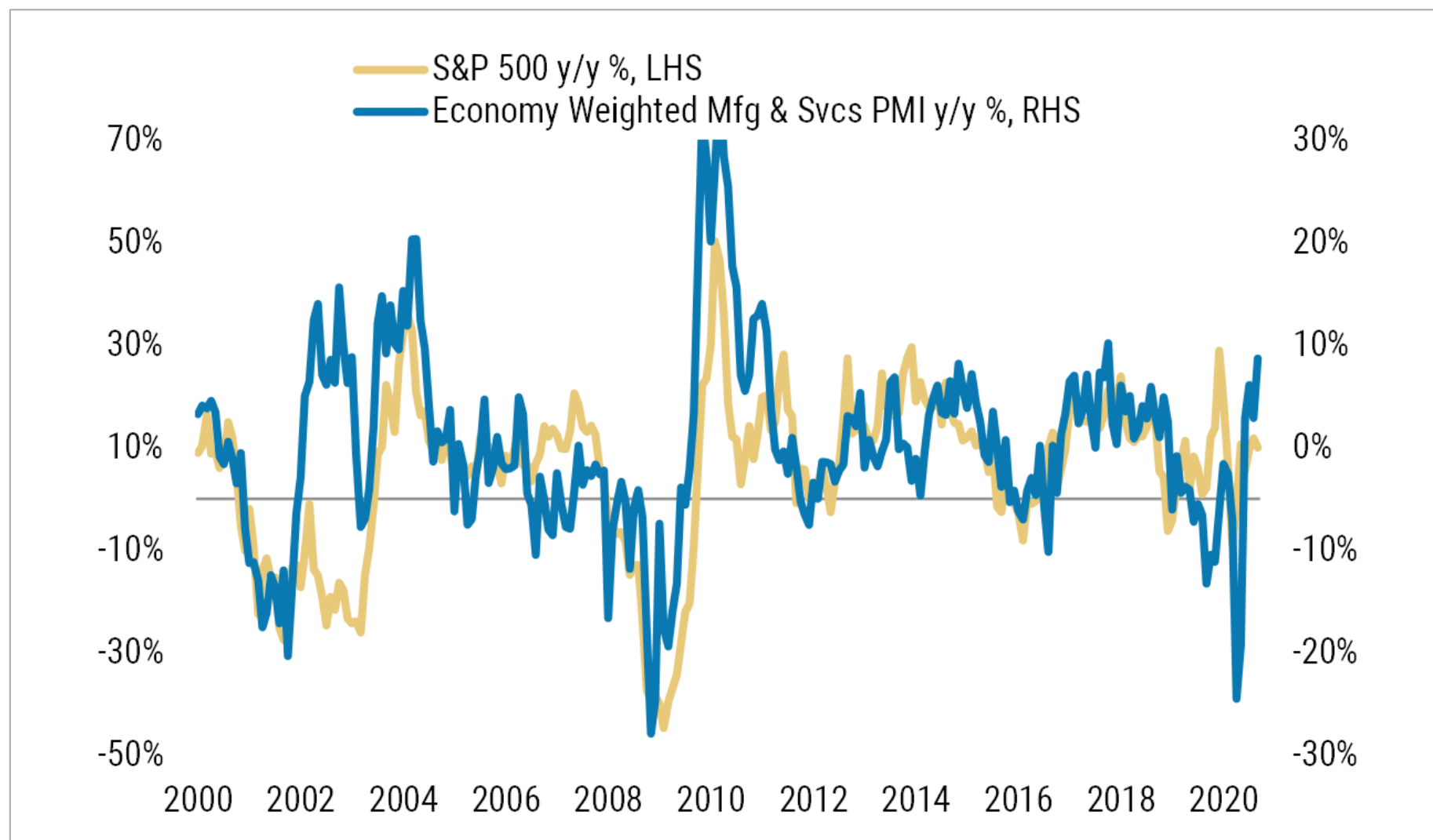
Economic Data Support V-Shaped Recovery—Rate of Change Fading



Source: Bloomberg, Morgan Stanley & Co. Research as of October 5, 2020

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PMIs Rebound Justifies the Move in Stocks at a High Level Unlike 4Q19



Source: Bloomberg, Morgan Stanley & Co. Research as of September 30, 2020

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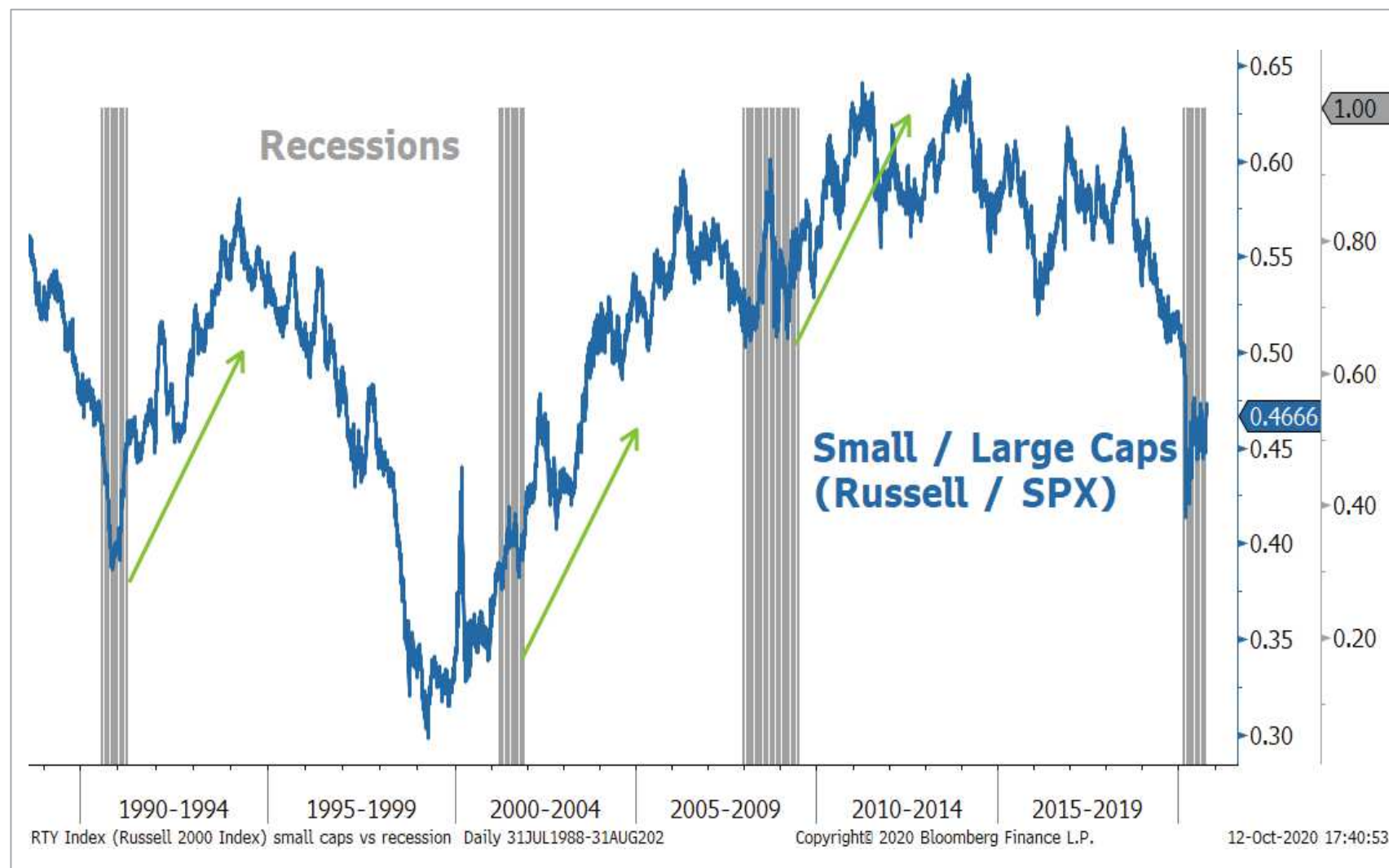
S&P 500 Re-Testing Major Resistance Again on Less Momentum



Source: Bloomberg, Morgan Stanley & Co Research as of October 12, 2020

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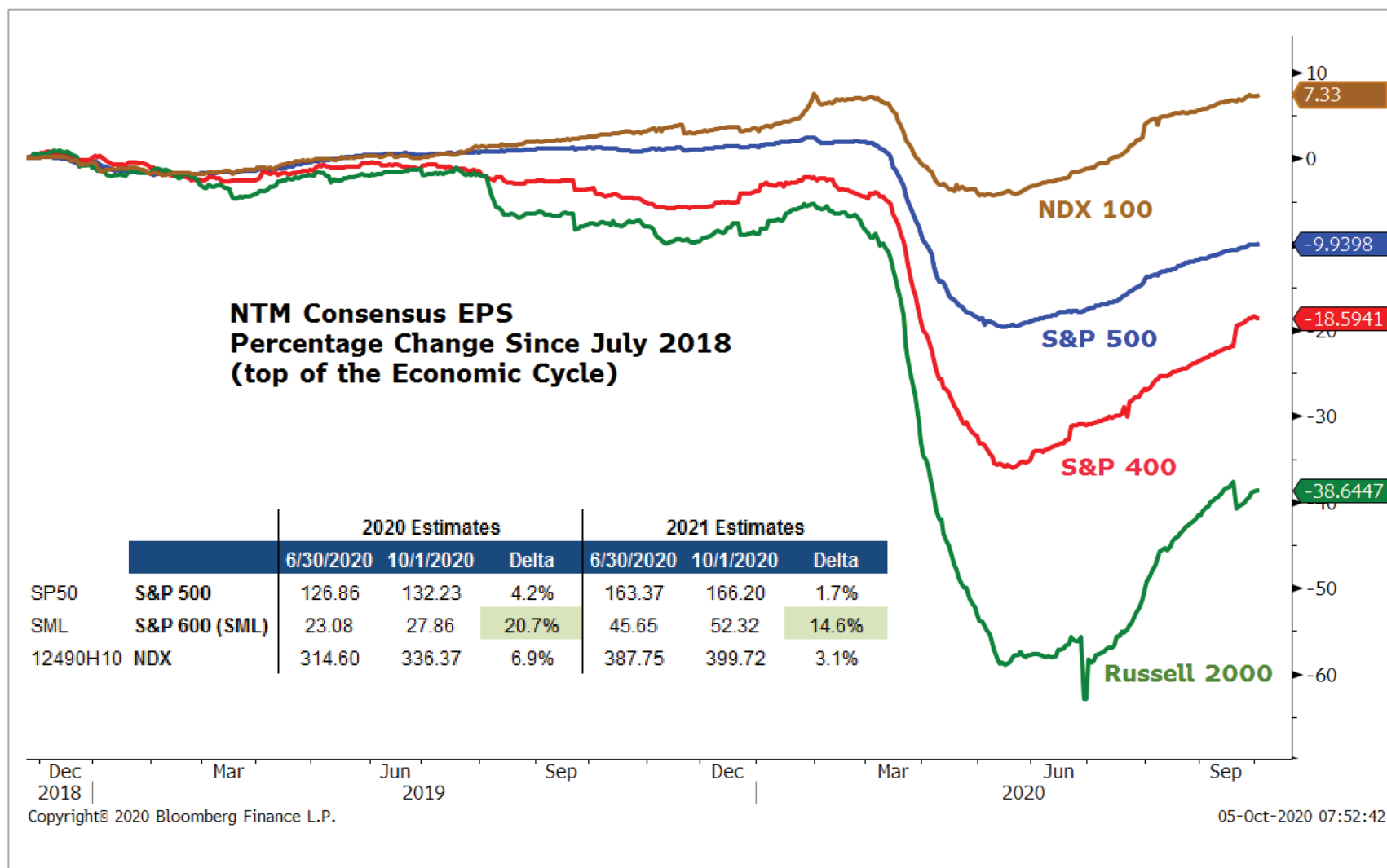
Small Caps Have Typically Outperformed Large Caps Coming Out of a Recession



Source: Bloomberg, Morgan Stanley & Co Research as of October 12, 2020

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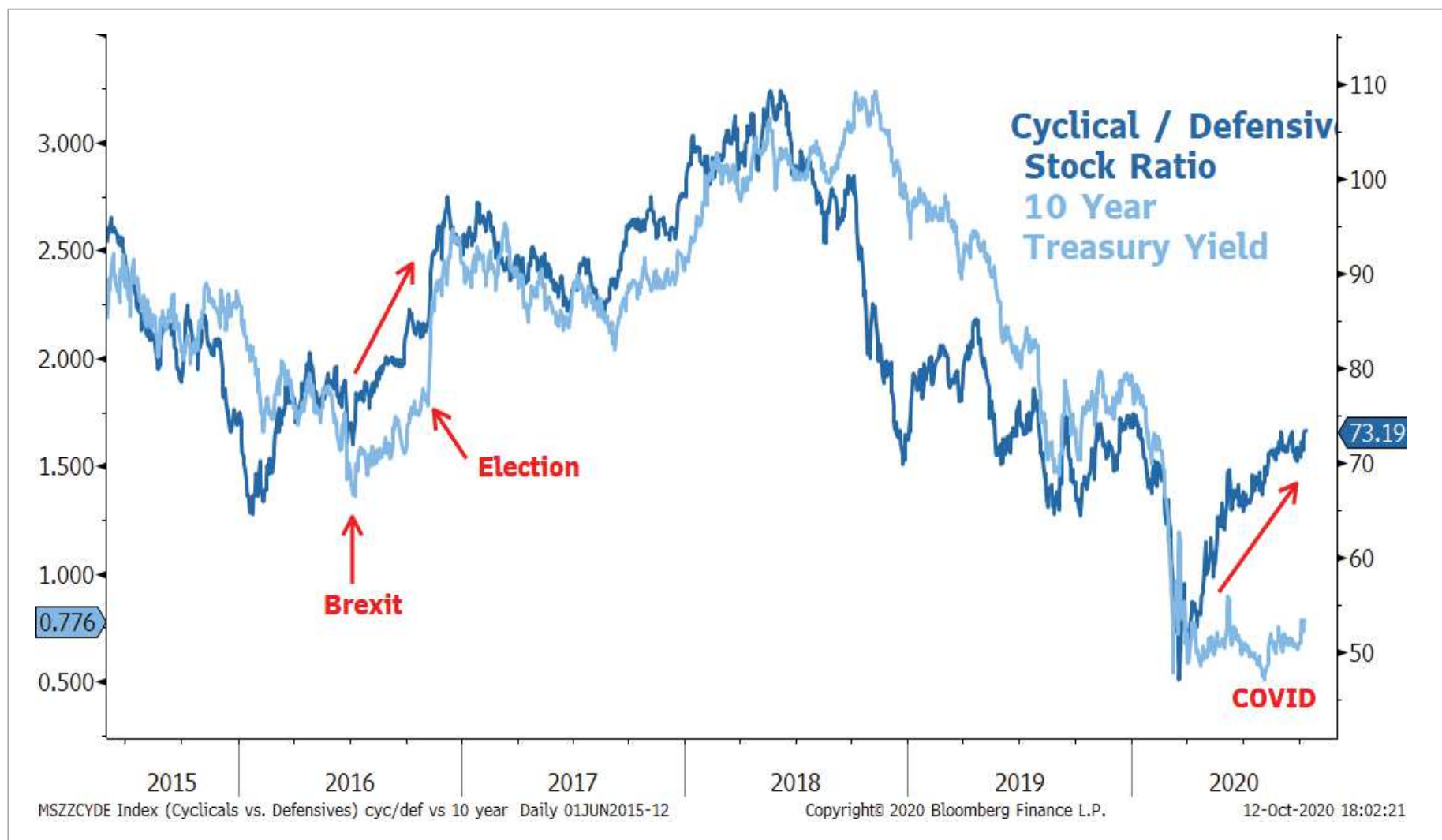
Because Small Caps Typically See Greater Operating Leverage and EPS Growth



Source: Bloomberg, Morgan Stanley & Co Research as of October 5, 2020

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Most Mispriced Asset Is 10-Year US Treasuries—Just Like in 2016



Source: Bloomberg, Morgan Stanley & Co Research as of October 12, 2020

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The proprietary **Value Score** methodology considers an active investment strategies' value proposition relative to its costs. From a historical quantitative study of several quantitative markers, Value Score measures perceived forward-looking benefit and computes (1) "fair value" expense ratios for most traditional investment managers across 40 categories and (2) managers' perceived "excess value" by comparing the fair value expense ratios to actual expense ratios. Managers are then ranked within each category by their excess value to assign a Value Score. Our analysis suggests that greater levels of excess value have historically corresponded to attractive subsequent performance.

For more information on the ranking models, please see *Adverse Active AlphaSM 2.0: Scoring Active Managers According to Potential Alpha and Value Score: Scoring Fee Efficiency by Comparing Managers' "Fair Value" and Actual Expense Ratios*. The whitepapers are available from your Financial Advisor or Private Wealth Advisor. ADVERSE ACTIVE ALPHA is a registered service mark of Morgan Stanley and/or its affiliates. U.S. Pat. No. 8,756,098 applies to the Adverse Active Alpha system and/or methodology.

Additionally, highly ranked managers can have differing risk profiles that might not be appropriate for all investors. For more information on AAA, please see the Adverse Active Alpha Ranking Model and Selecting Managers with Adverse Active Alpha whitepapers. The whitepaper are available from your Financial Advisor or Private Wealth Advisor. ADVERSE ACTIVE ALPHA is a registered service mark of Morgan Stanley and/or its affiliates. U.S. Pat. No. 8,756,098 applies to the Adverse Active Alpha system and/or methodology.

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Please consider the investment objectives, risks, fees, and charges and expenses of mutual funds, ETFs, closed end funds, unit investment trusts, and variable insurance products carefully before investing. The prospectus contains this and other information about each fund. To obtain a prospectus, contact your Financial Advisor or Private Wealth Advisor or visit the Morgan Stanley website at www.morganstanley.com (unsafe: http://www.morganstanley.com](http://www.morganstanley.com)). Please read it carefully before investing.

An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in the fund.

The type of mutual funds and ETFs discussed in this presentation utilizes nontraditional or complex investment strategies and/or derivatives. Examples of these types of funds include those that utilize one or more of the below noted investment strategies or categories or which seek exposure to the following markets: (1) commodities (e.g., agricultural, energy and metals), currency, precious metals; (2) managed futures; (3) leveraged, inverse or inverse leveraged; (4) bear market, hedging, long-short equity, market neutral; (5) real estate; (6) volatility (seeking exposure to the CBOE VIX Index). Investors should keep in mind that while mutual funds and ETFs may, at times, utilize nontraditional investment options and strategies, they should not be equated with unregistered privately offered alternative investments. Because of regulatory limitations, mutual funds and ETFs that seek alternative-like investment exposure must utilize a more limited investment universe. As a result, investment returns and portfolio characteristics of alternative mutual funds and ETFs may vary from traditional hedge funds pursuing similar investment objectives. Moreover, traditional hedge funds have limited liquidity with long “lock-up” periods allowing them to pursue investment strategies without having to factor in the need to meet client redemptions and ETFs trade on an exchange. On the other hand, mutual funds typically must meet daily client redemptions. This differing liquidity profile can have a material impact on the investment returns generated by a mutual fund or ETF pursuing an alternative investing strategy compared with a traditional hedge fund pursuing the same strategy.

Nontraditional investment options and strategies are often employed by a portfolio manager to further a fund’s investment objective and to help offset market risks. However, these features may be complex, making it more difficult to understand the fund’s essential characteristics and risks, and how it will perform in different market environments and over various periods of time. They may also expose the fund to increased volatility and unanticipated risks particularly when used in complex combinations and/or accompanied by the use of borrowing or “leverage.”

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KEY ASSET CLASS CONSIDERATIONS AND OTHER RISKS

Investing in the markets entails the risk of market volatility. The value of all types of investments, including stocks, mutual funds, exchange-traded funds ("ETFs"), closed-end funds, and unit investment trusts, may increase or decrease over varying time periods. To the extent the investments depicted herein represent **international securities**, you should be aware that there may be additional risks associated with international investing, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes, and differences in financial and accounting standards. These risks may be magnified in **emerging markets and frontier markets**. **Small- and mid-capitalization companies** may lack the financial resources, product diversification and competitive strengths of larger companies. In addition, the securities of small- and mid-capitalization companies may not trade as readily as, and be subject to higher volatility than, those of larger, more established companies. The value of **fixed income securities** will fluctuate and, upon a sale, may be worth more or less than their original cost or maturity value. Bonds are subject to interest rate risk, call risk, reinvestment risk, liquidity risk, and credit risk of the issuer. **High yield bonds** are subject to additional risks such as increased risk of default and greater volatility because of the lower credit quality of the issues. In the case of **municipal bonds**, income is generally exempt from federal income taxes. Some income may be subject to state and local taxes and to the federal alternative minimum tax. Capital gains, if any, are subject to tax. **Treasury Inflation Protection Securities' (TIPS)** coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation. There is no guarantee that investors will receive par if TIPS are sold prior to maturity. The returns on a portfolio consisting primarily of **environmental, social, and governance-aware investments ("ESG")** may be lower or higher than a portfolio that is more diversified or where decisions are based solely on investment considerations. Because ESG criteria exclude some investments, investors may not be able to take advantage of the same opportunities or market trends as investors that do not use such criteria. The companies identified and investment examples are for illustrative purposes only and should not be deemed a recommendation to purchase, hold or sell any securities or investment products. They are intended to demonstrate the approaches taken by managers who focus on ESG criteria in their investment strategy. There can be no guarantee that a client's account will be managed as described herein. **Options** and margin trading involve substantial risk and are not appropriate for all investors. Besides the general investment risk of holding securities that may decline in value and the possible loss of principal invested, **closed-end funds** may have additional risks related to declining market prices relative to net asset values (NAVs), active manager underperformance and potential leverage. Closed-end funds, unlike open-end funds, are not continuously offered. There is a one-time public offering and once issued, shares of closed-end funds are sold in the open market through a stock exchange. NAV is total assets less total liabilities divided by the number of shares outstanding. At the time an investor purchases shares of a closed-end fund, shares may have a market price that is above or below NAV. Portfolios that invest a large percentage of assets in only one industry **sector** (or in only a few sectors) are more vulnerable to price fluctuation than those that diversify among a broad range of sectors.

Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are appropriate only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to: Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; Lack of liquidity in that there may be no secondary market for a fund; Volatility of returns; Restrictions on transferring interests in a fund; Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; Risks associated with the operations, personnel, and processes of the manager; and Risks associated with cybersecurity. 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These limitations include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and the index may omit funds, the inclusion of which might significantly affect the performance shown. The HFRI indices are based on information self-reported by hedge fund managers that decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. Composite index results are shown for illustrative purposes and do not represent the performance of a specific investment. Individual funds have specific tax risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice. Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Wealth Management and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley Wealth Management or any of its affiliates, (3) are not guaranteed by Morgan Stanley Wealth Management and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Wealth Management is a registered broker-dealer, not a bank. 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Investment products in this category may employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. Alternative investments are not appropriate for all investors. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

A majority of Alternative Investment managers reviewed and selected by GIMA pay or cause to be paid an ongoing fee for distribution from their management fees to Morgan Stanley Wealth Management in connection with Morgan Stanley Wealth Management clients that purchase an interest in an Alternative Investment and in some instances pay these fees on the investments held by advisory clients. Morgan Stanley Wealth Management rebates such fees that are received and attributable to an investment held by an advisory client and retains the fees paid in connection with investments held by brokerage clients. Morgan Stanley Wealth Management has a conflict of interest in offering alternative investments because Morgan Stanley Wealth Management or our affiliates, in most instances, earn more money in your account from your investments in alternative investments than from other investment options.

It should be noted that the majority of hedge fund indexes are comprised of hedge fund manager returns. This is in contrast to traditional indexes, which are comprised of individual securities in the various market segments they represent and offer complete transparency as to membership and construction methodology. As such, some believe that hedge fund index returns have certain biases that are not present in traditional indexes. Some of these biases inflate index performance, while others may skew performance negatively. However, many studies indicate that overall hedge fund index performance has been biased to the upside. Some studies suggest performance has been inflated by up to 260 basis points or more annually depending on the types of biases included and the time period studied. Although there are numerous potential biases that could affect hedge fund returns, we identify some of the more common ones throughout this paper.

Self-selection bias results when certain manager returns are not included in the index returns and may result in performance being skewed up or down. Because hedge funds are private placements, hedge fund managers are able to decide which fund returns they want to report and are able to opt out of reporting to the various databases. Certain hedge fund managers may choose only to report returns for funds with strong returns and opt out of reporting returns for weak performers. Other hedge funds that close may decide to stop reporting in order to retain secrecy, which may cause a downward bias in returns.

Survivorship bias results when certain constituents are removed from an index. This often results from the closure of funds due to poor performance, “blow ups,” or other such events. As such, this bias typically results in performance being skewed higher. As noted, hedge fund index performance biases can result in positive or negative skew. However, it would appear that the skew is more often positive. While it is difficult to quantify the effects precisely, investors should be aware that idiosyncratic factors may be giving hedge fund index returns an artificial “lift” or upwards bias.

Hedge Funds of Funds and many funds of funds are private investment vehicles restricted to certain qualified private and institutional investors. They are often speculative and include a high degree of risk. Investors can lose all or a substantial amount of their investment. They may be highly illiquid, can engage in leverage and other speculative practices that may increase volatility and the risk of loss, and may be subject to large investment minimums and initial lockups. They involve complex tax structures, tax-inefficient investing and delays in distributing important tax information. Categorically, hedge funds and funds of funds have higher fees and expenses than traditional investments, and such fees and expenses can lower the returns achieved by investors. Funds of funds have an additional layer of fees over and above hedge fund fees that will offset returns. An investment in an **exchange-traded fund** involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. An investment in a **target date portfolio** is subject to the risks attendant to the underlying funds in which it invests, in these portfolios the funds are the Consulting Group Capital Market funds. A target date portfolio is geared to investors who will retire and/or require income at an approximate year. The portfolio is managed to meet the investor’s goals by the pre-established year or “target date.” A target date portfolio will transition its invested assets from a more aggressive portfolio to a more conservative portfolio as the target date draws closer. An investment in the target date portfolio is not guaranteed at any time, including, before or after the target date is reached. **Managed futures** investments are speculative, involve a high degree of risk, use significant leverage, are generally illiquid, have substantial charges, subject investors to conflicts of interest, and are appropriate only for the risk capital portion of an investor’s portfolio. Managed futures investments do not replace equities or bonds but rather may act as a complement in a well diversified portfolio. Managed Futures are complex and not appropriate for all investors. **Rebalancing** does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets. Past performance is no guarantee of future results. Actual results may vary.

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Indices are unmanaged and investors cannot directly invest in them. They are not subject to expenses or fees and are often comprised of securities and other investment instruments the liquidity of which is not restricted. A particular investment product may consist of securities significantly different than those in any index referred to herein. Composite index results are shown for illustrative purposes only, generally do not represent the performance of a specific investment, may not, for a variety of reasons, be an appropriate comparison or benchmark for a particular investment and may not necessarily reflect the actual investment strategy or objective of a particular investment. Consequently, comparing an investment to a particular index may be of limited use.

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For index, indicator and survey definitions referenced in this report please visit the following: <https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions> (unsafe: https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions](https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions))*

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GLOBAL INVESTMENT COMMITTEE (GIC) ASSET ALLOCATION MODELS: The Asset Allocation Models are created by Morgan Stanley Wealth Management's GIC.

HYPOTHETICAL MODEL PERFORMANCE (GROSS): Hypothetical model performance results do not reflect the investment or performance of an actual portfolio following a GIC Strategy, but simply reflect actual historical performance of selected indices on a real-time basis over the specified period of time representing the GIC's strategic and tactical allocations as of the date of this report. The past performance shown here is simulated performance based on benchmark indices, not investment results from an actual portfolio or actual trading. There can be large differences between hypothetical and actual performance results achieved by a particular asset allocation or trading strategy. Hypothetical performance results do not represent actual trading and are generally designed with the benefit of hindsight. Actual performance results of accounts vary due to, for example, market factors (such as liquidity) and client-specific factors (such as investment vehicle selection, timing of contributions and withdrawals, restrictions and rebalancing schedules). Clients would not necessarily have obtained the performance results shown here if they had invested in accordance with any GIC Asset Allocation Model for the periods indicated. Despite the limitations of hypothetical performance, these hypothetical performance results allow clients and Financial Advisors to obtain a sense of the risk/return trade-off of different asset allocation constructs. The hypothetical performance results in this report are calculated using the returns of benchmark indices for the asset classes, and not the returns of securities, fund or other investment products. Models may contain allocations to Hedge Funds, Private Equity and Private Real Estate. The benchmark indices for these asset classes are not issued on a daily basis. When calculating model performance on a day for which no benchmark index data is issued, we have assumed straight line growth between the index levels issued before and after that date.

FEES REDUCE THE PERFORMANCE OF ACTUAL ACCOUNTS: None of the fees or other expenses (e.g. commissions, mark-ups, mark-downs, fees) associated with actual trading or accounts are reflected in the GIC Asset Allocation Models. The GIC Asset Allocation Models and any model performance included in this presentation are intended as educational materials. Were a client to use these models in connection with investing, any investment decisions made would be subject to transaction and other costs which, when compounded over a period of years, would decrease returns. Information regarding Morgan Stanley's standard advisory fees is available in the Form ADV Part 2, which is available at www.morganstanley.com/adv. The following hypothetical illustrates the compound effect fees have on investment returns: For example, if a portfolio's annual rate of return is 15% for 5 years and the account pays 50 basis points in fees per annum, the gross cumulative five-year return would be 101.1% and the five-year return net of fees would be 96.8%. Fees and/or expenses would apply to clients who invest in investments in an account based on these asset allocations, and would reduce clients' returns. The impact of fees and/or expenses can be material.

Variable annuities are long-term investments designed for retirement purposes and may be subject to market fluctuations, investment risk, and possible loss of principal. All guarantees, including optional benefits, are based on the financial strength and claims-paying ability of the issuing insurance company and do not apply to the underlying investment options. Optional riders may not be able to be purchased in combination and are available at an additional cost. Some optional riders must be elected at time of purchase. Optional riders may be subject to specific limitations, restrictions, holding periods, costs, and expenses as specified by the insurance company in the annuity contract. If you are investing in a **variable annuity** through a tax-advantaged retirement plan such as an IRA, you will get no additional tax advantage from the variable annuity. Under these circumstances, you should only consider buying a variable annuity because of its other features, such as lifetime income payments and death benefits protection. Taxable distributions (and certain deemed distributions) are subject to ordinary income tax and, if taken prior to age 59½, may be subject to a 10% federal income tax penalty. Early withdrawals will reduce the death benefit and cash surrender value.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment. **Ultrashort-term fixed income** asset class is comprised of fixed

income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk. Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk. The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value. MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV, and, as a result, the MLP fund's after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention. **Physical precious metals** are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be appropriate for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions. Risks of **private real estate** include: illiquidity; a long-term investment horizon with a limited or nonexistent secondary market; lack of transparency; volatility (risk of loss); and leverage. Principal is returned on a monthly basis over the life of a **mortgage-backed security**. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. **Asset-backed securities** generally decrease in value as a result of interest rate increases, but may benefit less than other fixed-income securities from declining interest rates, principally because of prepayments.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision. **Credit ratings** are subject to change. **Duration**, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. The majority of \$25 and \$1000 par **preferred securities** are "callable" meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per \$25 or \$1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price. The initial interest rate on a **floating-rate security** may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk. The market value of **convertible bonds** and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield. Some \$25 or \$1000 par **preferred securities** are QDI (Qualified Dividend Income) eligible. Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date.

Companies paying **dividends** can reduce or cut payouts at any time.

Nondiversification: For a portfolio that holds a concentrated or limited number of securities, a decline in the value of these investments would cause the portfolio's overall value to decline to a greater degree than a less concentrated portfolio. The **indices selected by Morgan Stanley Wealth Management** to measure performance are representative of broad asset classes. Morgan Stanley Wealth Management retains the right to change representative indices at any time. Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies.

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. **Value investing** does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

Any type of **continuous or periodic investment plan** does not assure a profit and does not protect against loss in declining markets. Since such a plan involves continuous investment in securities regardless of fluctuating price levels of such securities, the investor should consider his financial ability to continue his purchases through periods of low price levels.

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City of Troy Employees Retirement System

City of Troy Quarterly Report

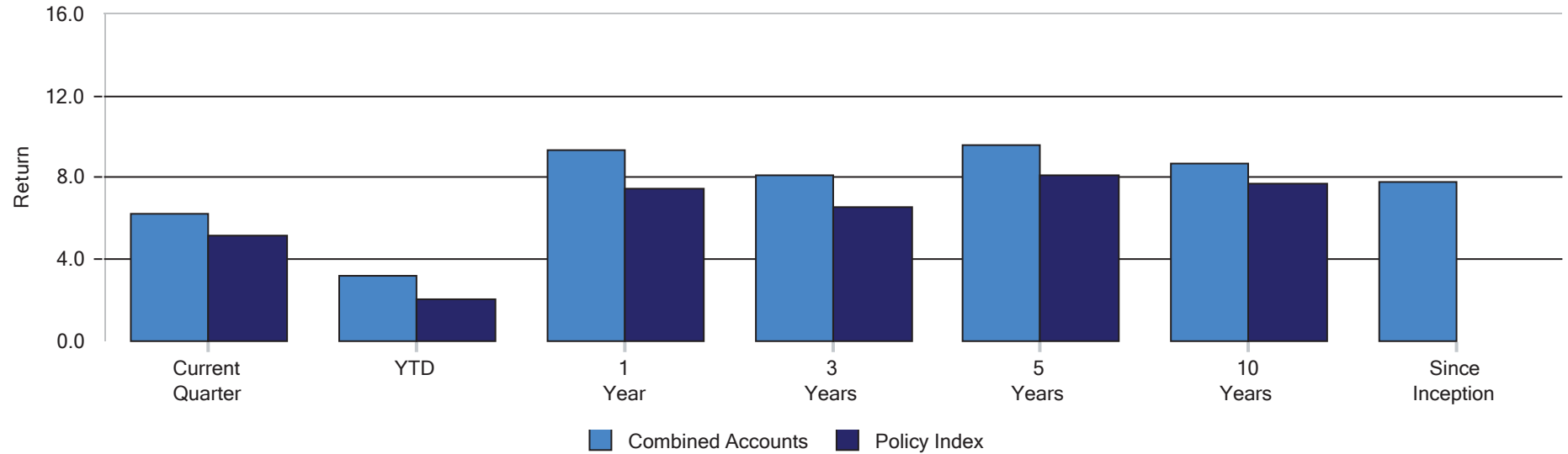
September 30, 2020

City of Troy ERS - Total Fund

Total Fund Performance

City of Troy Employees Retirement System

As of September 30, 2020



	Current Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Combined Accounts	6.24	3.22	9.37	8.16	9.60	8.73	7.78	Oct -91
Policy Index	5.16	2.04	7.49	6.54	8.14	7.70	N/A	
Difference	1.08	1.18	1.88	1.62	1.46	1.03	N/A	

	Current Quarter	YTD	1 Year	3 Years	5 Years	10 Years
<i>Change In Value</i>						
Beginning Market Value	\$196,042,678	\$206,325,739	\$202,442,923	\$204,526,948	\$190,816,233	\$170,479,766
Net Contributions	(\$45,548)	(\$4,262,513)	(\$12,268,134)	(\$39,227,593)	(\$68,531,817)	(\$117,446,169)
Gain/Loss	\$12,229,700	\$6,163,605	\$18,052,040	\$42,927,475	\$85,942,414	\$155,193,233
Ending Market Value	\$208,226,830	\$208,226,830	\$208,226,830	\$208,226,830	\$208,226,830	\$208,226,830

The Policy Index is comprised of 40% Russell 3000 Index, 19% MSCI ACWI ex US (Net), 29% Barclays U.S. Intm Gov/Credit Bond Index, 7% MSCI REIT, and 5% 90 Day T-Bills.

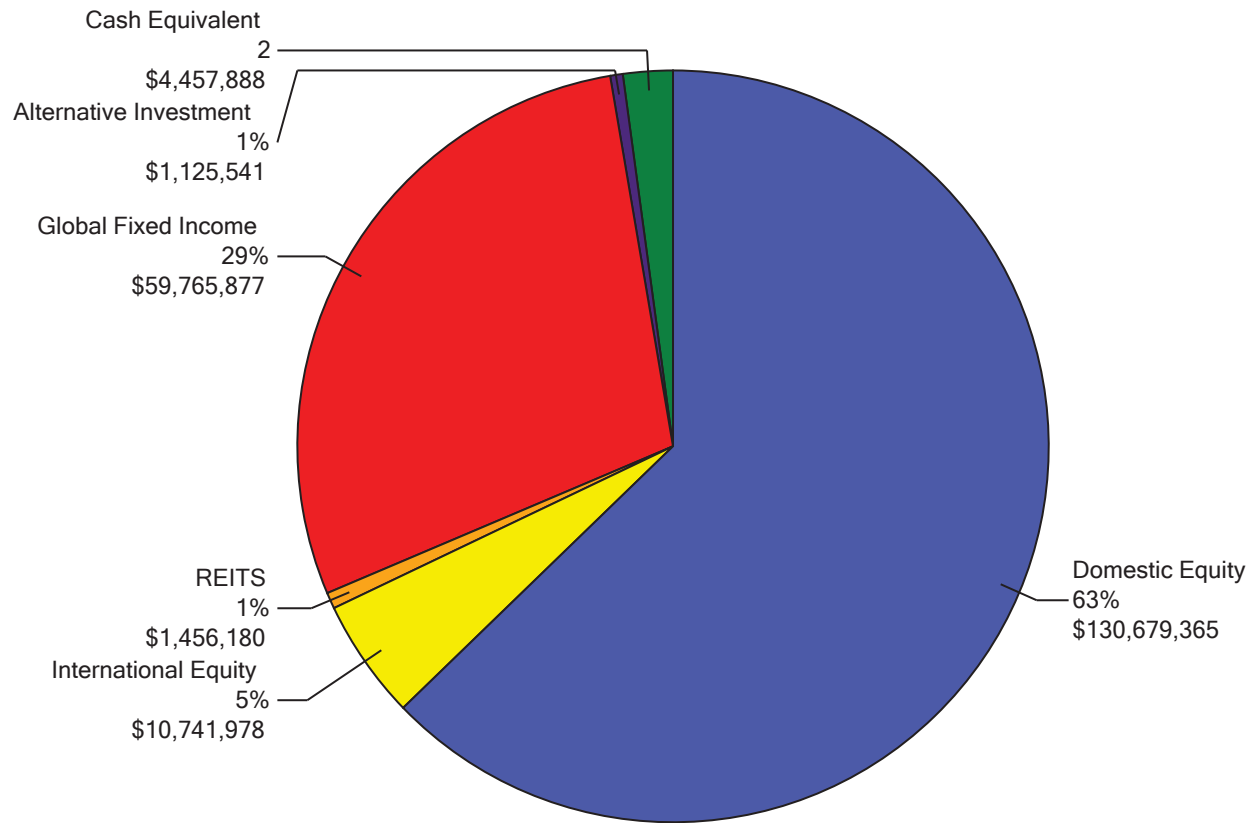
Source: InvestmentMetrics / Paris

Asset Allocation - Total Fund

City of Troy Employees Retirement System

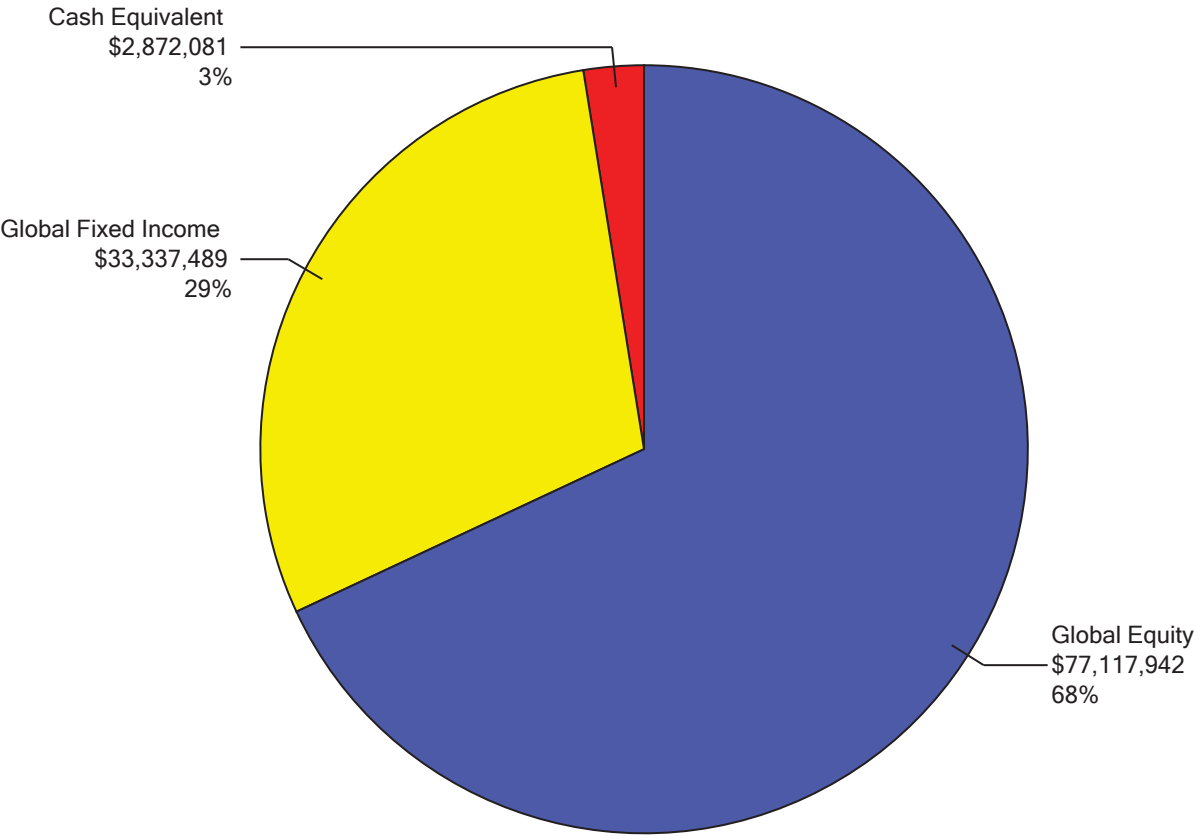
As of September 30, 2020

Total Market Value: \$208,226,830



Asset Allocation - UBS

City of Troy Employees Retirement System	As of September 30, 2020
Total Market Value: \$113,327,512	



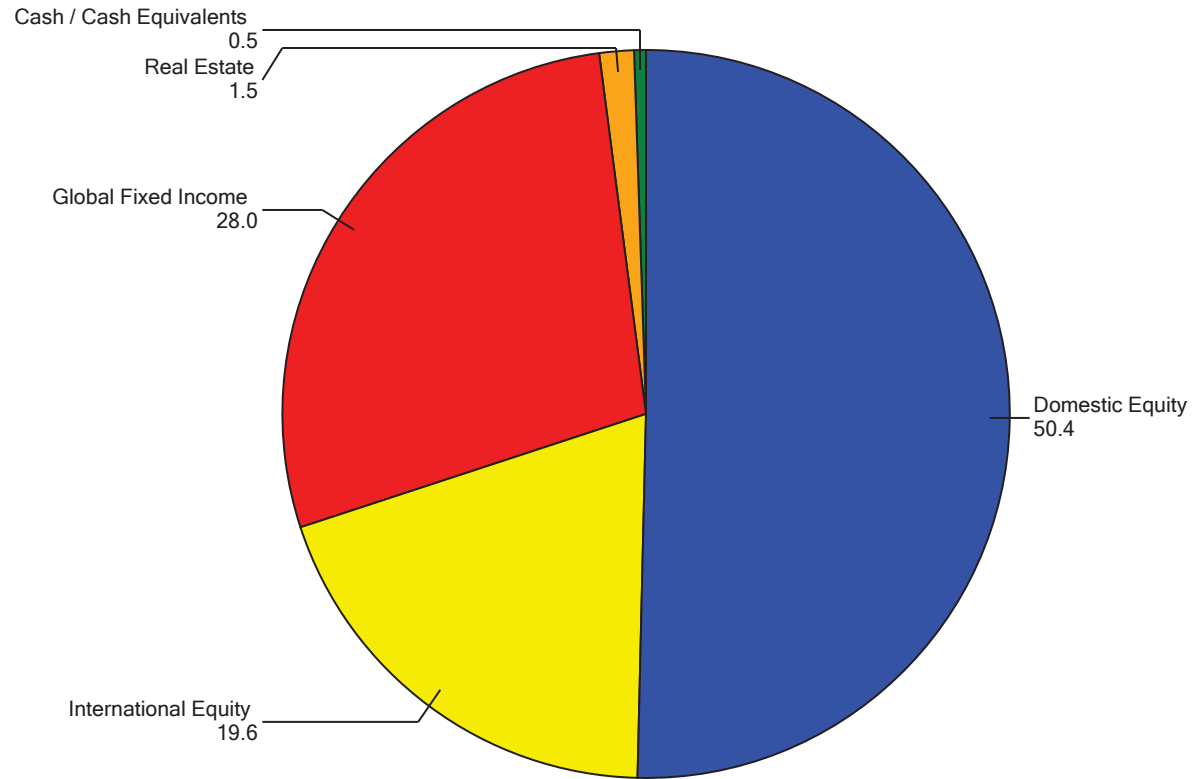
Source: InvestmentMetrics / Paris

Asset Allocation - Morgan Stanley / Graystone

City of Troy Employees Retirement System

As of September 30, 2020

Total Market Value: \$94,899,318



	Market Value (\$)	Allocation (%)
Domestic Equity	47,805,402	50.4
International Equity	18,587,519	19.6
Global Fixed Income	26,550,521	28.0
Real Estate	1,456,180	1.5
Cash / Cash Equivalents	499,695	0.5

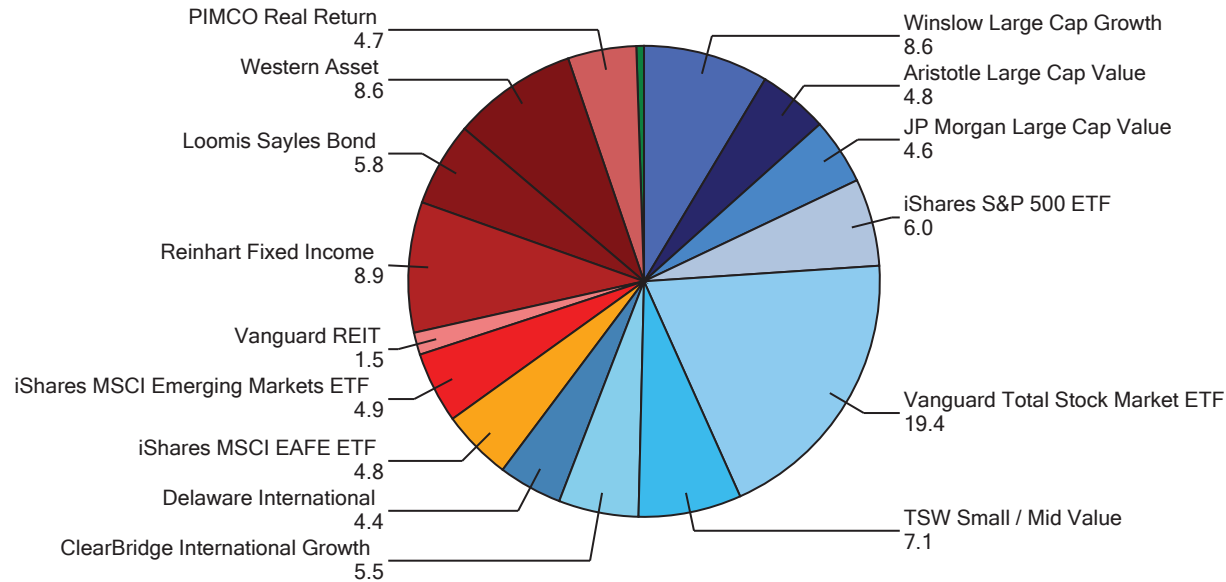
Source: InvestmentMetrics / Paris

Asset Allocation - Manager (Morgan Stanley / Graystone)

City of Troy Employees Retirement System

As of September 30, 2020

Total Market Value: \$94,899,318



	Market Value (\$)	Allocation (%)
Winslow Large Cap Growth	8,145,372	8.6
Aristotle Large Cap Value	4,549,549	4.8
JP Morgan Large Cap Value	4,324,846	4.6
iShares S&P 500 ETF	5,696,889	6.0
Vanguard Total Stock Market ETF	18,391,436	19.4
TSW Small / Mid Value	6,697,310	7.1
ClearBridge International Growth	5,206,122	5.5
Delaware International	4,151,210	4.4
iShares MSCI EAFE ETF	4,597,694	4.8
iShares MSCI Emerging Markets ETF	4,632,492	4.9
Vanguard REIT	1,456,180	1.5
Reinhart Fixed Income	8,491,347	8.9
Loomis Sayles Bond	5,478,128	5.8
Western Asset	8,121,516	8.6
PIMCO Real Return	4,459,530	4.7
Cash / Cash Equivalents	499,695	0.5

Source: InvestmentMetrics / Paris

Manager Performance - Morgan Stanley / Graystone

City of Troy Employees Retirement System								As of September 30, 2020
	Current Quarter	YTD	1 Year	2 Years	3 Years	5 Years	Since Inception	Inception Date
Morgan Stanley / Graystone Composite - Gross	6.19	1.21	7.27	4.39	5.67	8.07	6.24	May -14
Morgan Stanley / Graystone Composite - Net	6.11	0.99	6.99	4.04	5.29	7.67	5.85	May -14
<i>Policy Index (MS)</i>	<i>5.16</i>	<i>2.04</i>	<i>7.49</i>	<i>5.60</i>	<i>6.72</i>	<i>8.52</i>	<i>6.75</i>	
Global Equities								
Winslow Large Cap Growth	12.09	26.63	38.38	19.24	22.59	19.68	16.88	Oct -14
<i>Russell 1000 Growth</i>	<i>13.22</i>	<i>24.33</i>	<i>37.53</i>	<i>19.43</i>	<i>21.67</i>	<i>20.10</i>	<i>17.08</i>	
Aristotle Large Cap Value	8.55	N/A	N/A	N/A	N/A	N/A	31.41	Apr -20
<i>Russell 1000 Value</i>	<i>5.59</i>	<i>-11.58</i>	<i>-5.02</i>	<i>-0.61</i>	<i>2.63</i>	<i>7.66</i>	<i>20.68</i>	
JP Morgan Large Cap Value	7.06	N/A	N/A	N/A	N/A	N/A	21.61	Apr -20
<i>Russell 1000 Value</i>	<i>5.59</i>	<i>-11.58</i>	<i>-5.02</i>	<i>-0.61</i>	<i>2.63</i>	<i>7.66</i>	<i>20.68</i>	
iShares S&P 500 ETF	8.92	5.56	15.12	9.54	N/A	N/A	9.43	Sep -18
<i>S&P 500 Total Return</i>	<i>8.93</i>	<i>5.57</i>	<i>15.15</i>	<i>9.57</i>	<i>12.28</i>	<i>14.15</i>	<i>9.46</i>	
Vanguard Total Stock Market ETF	9.19	5.46	14.96	8.77	11.64	13.68	11.17	Oct -14
<i>MSCI US Broad Market</i>	<i>9.22</i>	<i>5.43</i>	<i>14.99</i>	<i>8.78</i>	<i>11.65</i>	<i>13.70</i>	<i>11.20</i>	
TSW Small / Mid Value	5.63	-19.94	-15.57	-9.87	-4.01	2.11	2.30	Oct -14
<i>Russell 2500 Value</i>	<i>3.54</i>	<i>-18.39</i>	<i>-12.62</i>	<i>-8.58</i>	<i>-2.69</i>	<i>4.65</i>	<i>3.43</i>	
ClearBridge International Growth	9.40	9.35	19.76	N/A	N/A	N/A	19.64	Sep -19
<i>MSCI EAFE Net</i>	<i>4.80</i>	<i>-7.09</i>	<i>0.49</i>	<i>-0.43</i>	<i>0.62</i>	<i>5.26</i>	<i>3.10</i>	
<i>MSCI EAFE Gr Net</i>	<i>8.43</i>	<i>4.60</i>	<i>13.43</i>	<i>7.68</i>	<i>7.06</i>	<i>9.22</i>	<i>13.47</i>	
Delaware International	1.21	-16.46	-8.80	N/A	N/A	N/A	-4.38	Sep -19
<i>MSCI EAFE Net</i>	<i>4.80</i>	<i>-7.09</i>	<i>0.49</i>	<i>-0.43</i>	<i>0.62</i>	<i>5.26</i>	<i>3.10</i>	
<i>MSCI EAFE VL Net</i>	<i>1.19</i>	<i>-18.31</i>	<i>-11.93</i>	<i>-8.49</i>	<i>-5.86</i>	<i>1.14</i>	<i>-7.08</i>	
iShares Developed Mkts ETF	4.72	-7.18	0.33	-0.54	0.53	5.18	5.18	Oct -15
<i>MSCI EAFE Net</i>	<i>4.80</i>	<i>-7.09</i>	<i>0.49</i>	<i>-0.43</i>	<i>0.62</i>	<i>5.26</i>	<i>5.26</i>	
iShares Emerging Mkt ETF	9.38	-1.56	9.93	3.47	1.84	N/A	6.67	Sep -16
<i>MSCI EM Net</i>	<i>9.56</i>	<i>-1.16</i>	<i>10.54</i>	<i>4.07</i>	<i>2.42</i>	<i>8.97</i>	<i>7.28</i>	

The Policy Index is comprised of 40% Russell 3000 Index, 19% MSCI ACWI ex US (Net), 29% Barclays U.S. Intm Gov/Credit Bond Index, 7% MSCI REIT, and 5% 90 Day T-Bills.
Returns for periods greater than one year are annualized. Returns are expressed as percentages.
Source: InvestmentMetrics / Paris

Manager Performance - Morgan Stanley / Graystone

City of Troy Employees Retirement System							As of September 30, 2020	
	Current Quarter	YTD	1 Year	2 Years	3 Years	5 Years	Since Inception	Inception Date
Vanguard REIT	1.31	-12.79	-12.26	2.55	2.34	5.21	5.88	Oct -14
<i>MSCI REIT Gross</i>	<i>1.63</i>	<i>-17.12</i>	<i>-17.76</i>	<i>-1.36</i>	<i>0.31</i>	<i>3.99</i>	<i>4.88</i>	

The Policy Index is comprised of 40% Russell 3000 Index, 19% MSCI ACWI ex US (Net), 29% Barclays U.S. Intm Gov/Credit Bond Index, 7% MSCI REIT, and 5% 90 Day T-Bills.
Returns for periods greater than one year are annualized. Returns are expressed as percentages.
Source: InvestmentMetrics / Paris

Manager Performance - Morgan Stanley / Graystone

City of Troy Employees Retirement System							As of September 30, 2020	
	Current Quarter	YTD	1 Year	2 Years	3 Years	5 Years	Since Inception	Inception Date
Global Fixed Income								
Reinhart Intermediate Fixed Income	0.44	5.85	6.19	6.67	4.38	3.21	3.24	Sep -14
<i>BC Intermediate Gov/Credit</i>	<i>0.62</i>	<i>5.93</i>	<i>6.32</i>	<i>7.24</i>	<i>4.43</i>	<i>3.40</i>	<i>3.14</i>	
Loomis Sayles Bond	2.92	-3.05	-0.73	2.04	1.68	4.00	1.81	Jul -14
<i>Barclays Aggregate</i>	<i>0.62</i>	<i>6.79</i>	<i>6.99</i>	<i>8.63</i>	<i>5.24</i>	<i>4.18</i>	<i>3.83</i>	
PIMCO Real Return	3.41	9.77	10.75	8.56	5.69	4.71	4.11	Jul -15
<i>BC TIPS</i>	<i>3.03</i>	<i>9.22</i>	<i>10.08</i>	<i>8.59</i>	<i>5.79</i>	<i>4.61</i>	<i>4.15</i>	
Western Asset	1.67	N/A	N/A	N/A	N/A	N/A	6.55	Apr -20
<i>Barclays Aggregate</i>	<i>0.62</i>	<i>6.79</i>	<i>6.99</i>	<i>8.63</i>	<i>5.24</i>	<i>4.18</i>	<i>3.53</i>	

The Policy Index is comprised of 40% Russell 3000 Index, 19% MSCI ACWI ex US (Net), 29% Barclays U.S. Intm Gov/Credit Bond Index, 7% MSCI REIT, and 5% 90 Day T-Bills.
Returns for periods greater than one year are annualized. Returns are expressed as percentages.
Source: InvestmentMetrics / Paris

Manager Performance - UBS

City of Troy Employees Retirement System							As of September 30, 2020	
	Current Quarter	YTD	1 Year	2 Years	3 Years	5 Years	Since Inception	Inception Date
UBS Composite - Gross	6.28	4.97	11.20	9.28	10.42	10.99	8.03	Oct -91
NAIC	8.22	7.24	15.86	10.52	14.63	13.31	12.14	Jan -14
ERS	5.72	4.31	9.88	8.99	9.30	10.36	7.80	Jan -14
Global Equities								
SPDR S&P 500 ETF (SPY)	8.91	5.62	15.15	9.53	12.20	N/A	12.44	Mar -17
<i>S&P 500 Total Return</i>	<i>8.93</i>	<i>5.57</i>	<i>15.15</i>	<i>9.57</i>	<i>12.28</i>	<i>14.15</i>	<i>12.50</i>	
Vanguard Mid Cap Value ETF (VOE)	6.57	-13.24	N/A	N/A	N/A	N/A	-13.24	Jan -20
<i>Russell Midcap Value</i>	<i>6.40</i>	<i>-12.84</i>	<i>-7.30</i>	<i>-2.95</i>	<i>0.82</i>	<i>6.38</i>	<i>-12.84</i>	
iShares Russell 2000 ETF (IWM)	4.91	-8.73	0.33	-4.43	1.72	8.00	5.28	Jul -14
<i>Russell 2000</i>	<i>4.93</i>	<i>-8.69</i>	<i>0.39</i>	<i>-4.36</i>	<i>1.77</i>	<i>8.00</i>	<i>5.26</i>	
American Funds World G&I (CWGIX)	7.01	0.73	10.08	5.59	5.98	9.36	8.55	Dec -10
<i>MSCI AC World Net</i>	<i>8.13</i>	<i>1.37</i>	<i>10.44</i>	<i>5.82</i>	<i>7.12</i>	<i>10.30</i>	<i>8.55</i>	
American Funds New World (NEWFX)	8.08	4.64	14.01	10.68	7.27	N/A	9.89	Dec -15
<i>MSCI EM Net</i>	<i>9.56</i>	<i>-1.16</i>	<i>10.54</i>	<i>4.07</i>	<i>2.42</i>	<i>8.97</i>	<i>8.63</i>	
American Funds EuroPacific (AEPGX)	9.57	4.13	14.54	7.44	5.30	8.70	5.25	Feb -00
<i>MSCI EAFE Net</i>	<i>4.80</i>	<i>-7.09</i>	<i>0.49</i>	<i>-0.43</i>	<i>0.62</i>	<i>5.26</i>	<i>3.17</i>	
Columbia Seligman C & I (SLMCX)	6.33	12.22	30.31	20.65	17.93	22.25	10.31	Jan -99
<i>Lipper Science & Technology</i>	<i>11.40</i>	<i>23.71</i>	<i>38.50</i>	<i>19.35</i>	<i>21.34</i>	<i>22.45</i>	<i>8.05</i>	
MFS New Discovery Valu (NDVAX)	-0.72	-21.05	-13.76	-6.66	N/A	N/A	-1.05	Nov -17
<i>Russell 2500 VL</i>	<i>3.54</i>	<i>-18.39</i>	<i>-12.62</i>	<i>-8.58</i>	<i>-2.69</i>	<i>4.65</i>	<i>-2.95</i>	
MFS Value (MEIAX)	5.86	-7.88	-1.42	2.78	N/A	N/A	3.77	Nov -17
<i>Russell 1000 VL</i>	<i>5.59</i>	<i>-11.58</i>	<i>-5.02</i>	<i>-0.61</i>	<i>2.63</i>	<i>7.66</i>	<i>2.45</i>	
Virtus KAR Sm-Cap Growth (PSGAX)	10.43	22.65	32.91	23.16	26.04	N/A	28.07	Mar -17
<i>Russell 2500 GR</i>	<i>9.37</i>	<i>11.58</i>	<i>23.38</i>	<i>8.77</i>	<i>13.36</i>	<i>14.19</i>	<i>14.31</i>	

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.
Source: InvestmentMetrics / Paris

Manager Performance - UBS

City of Troy Employees Retirement System							As of September 30, 2020	
	Current Quarter	YTD	1 Year	2 Years	3 Years	5 Years	Since Inception	Inception Date
TCW Emerging Markets (TGINX)	3.44	-3.00	N/A	N/A	N/A	N/A	-0.85	Nov -19
<i>JPM EMBI Global</i>	<i>2.28</i>	<i>0.37</i>	<i>2.47</i>	<i>6.53</i>	<i>3.27</i>	<i>6.03</i>	<i>2.09</i>	

Manager Performance - UBS

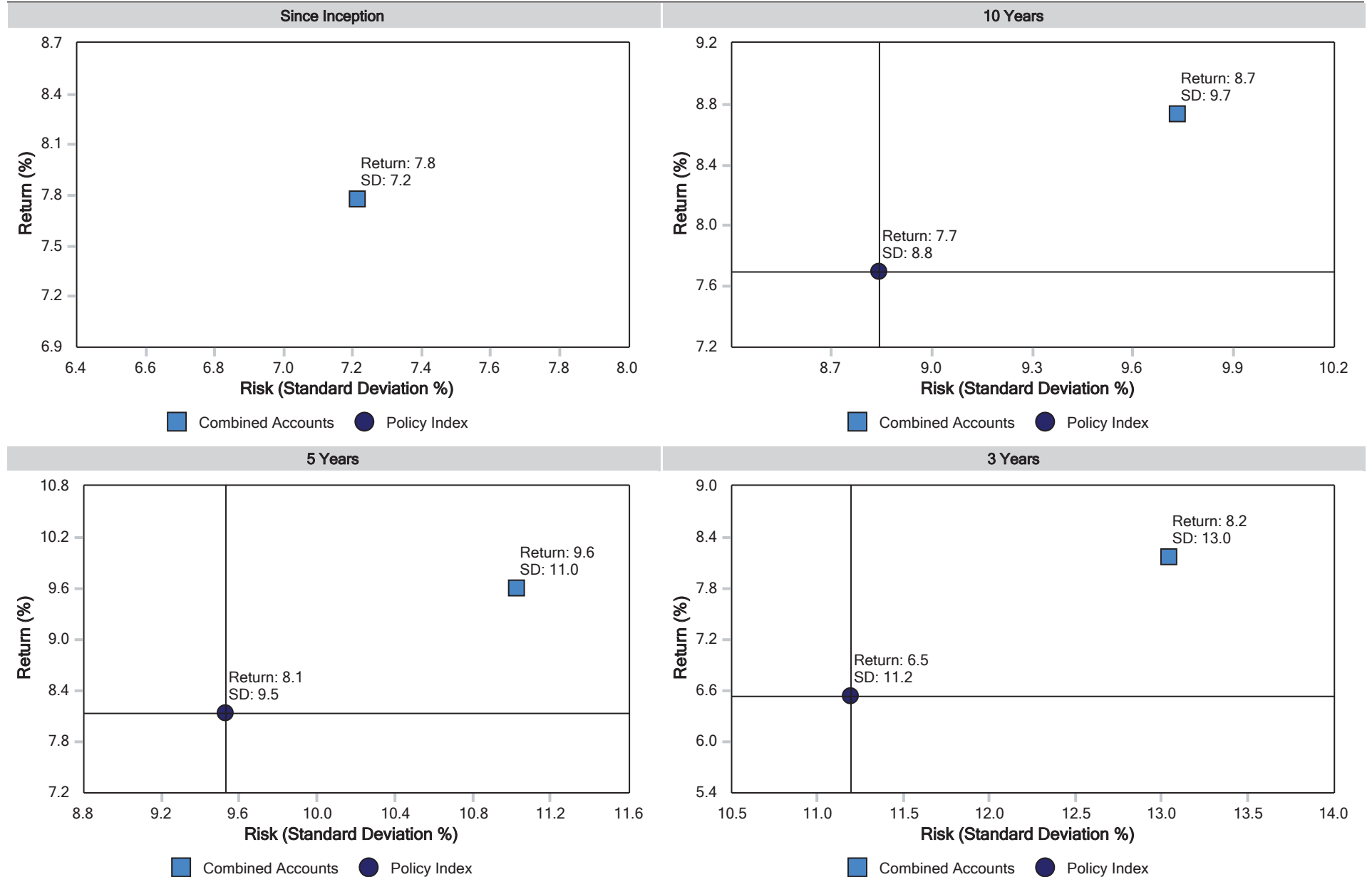
City of Troy Employees Retirement System							As of September 30, 2020	
	Current Quarter	YTD	1 Year	2 Years	3 Years	5 Years	Since Inception	Inception Date
Global Fixed Income								
iShares TIPS ETF (TIP)	2.97	9.21	10.01	8.46	5.67	N/A	4.82	Mar -17
<i>BC Global Inf Linked US TIPS</i>	<i>3.03</i>	<i>9.22</i>	<i>10.08</i>	<i>8.59</i>	<i>5.79</i>	<i>4.61</i>	<i>4.94</i>	
AB High Income (AGDAX)	4.75	-4.85	-1.95	1.36	0.70	4.52	4.00	Dec -12
<i>Citi High Yield Market</i>	<i>4.86</i>	<i>-0.15</i>	<i>2.68</i>	<i>4.19</i>	<i>3.88</i>	<i>6.52</i>	<i>5.07</i>	
BlackRock Strategic Income (BASIX)	2.71	2.75	4.31	4.73	3.32	3.37	2.86	Mar -14
<i>BC Universal</i>	<i>0.99</i>	<i>6.20</i>	<i>6.68</i>	<i>8.36</i>	<i>5.15</i>	<i>4.49</i>	<i>4.07</i>	
BlackRock High Yield Bond (BHYAX)	4.89	-0.71	1.90	3.93	3.67	5.83	5.16	Dec -12
<i>Citi High Yield Market</i>	<i>4.86</i>	<i>-0.15</i>	<i>2.68</i>	<i>4.19</i>	<i>3.88</i>	<i>6.52</i>	<i>5.07</i>	
Loomis Investment Grade Bond (LIGRX)	1.95	7.53	7.96	7.80	5.20	5.50	3.21	Jul -14
<i>Barclays Govt/Credit Bond</i>	<i>0.78</i>	<i>8.04</i>	<i>8.03</i>	<i>9.66</i>	<i>5.86</i>	<i>4.66</i>	<i>4.18</i>	
Met West Total Return Bond (MWTRX)	1.20	7.55	7.79	8.98	5.51	4.20	3.72	Dec -14
<i>Barclays Aggregate</i>	<i>0.62</i>	<i>6.79</i>	<i>6.99</i>	<i>8.63</i>	<i>5.24</i>	<i>4.18</i>	<i>3.78</i>	
Thornburg Limited Term Income (THIFX)	1.31	6.38	6.78	6.41	4.26	N/A	4.05	Apr -17
<i>BC Agg Intm Tr</i>	<i>0.48</i>	<i>5.17</i>	<i>5.66</i>	<i>6.86</i>	<i>4.20</i>	<i>3.27</i>	<i>4.07</i>	

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.
Source: InvestmentMetrics / Paris

Total Fund Risk / Return Analysis

City of Troy Employees Retirement System

As of September 30, 2020

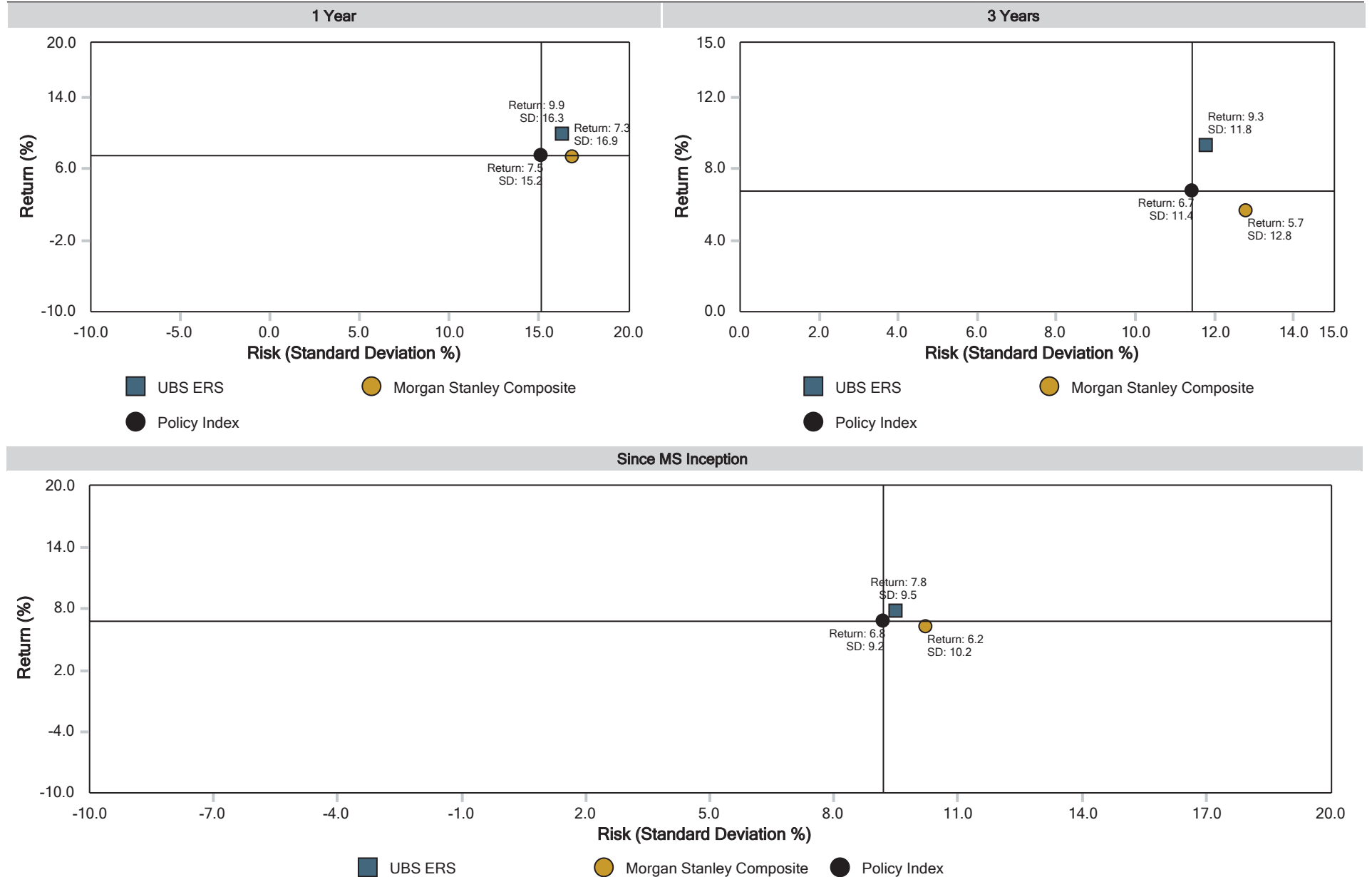


Source: InvestmentMetrics / Paris

Total Fund Risk / Return Analysis

City of Troy Employees Retirement System

As of September 30, 2020



Source: InvestmentMetrics / Paris

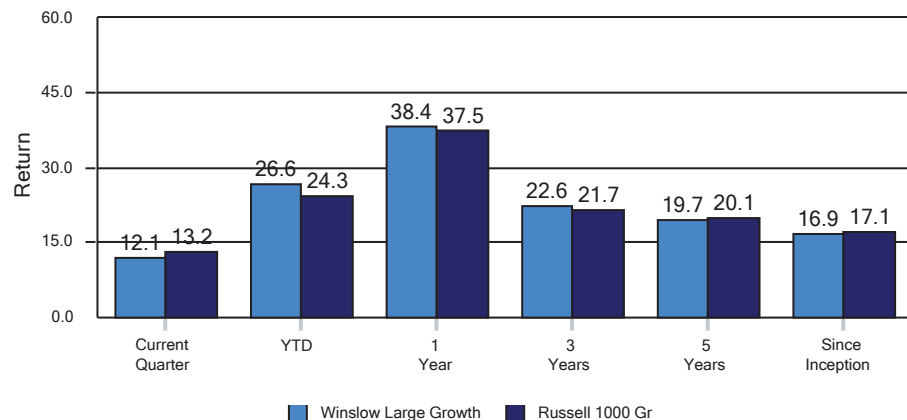
Troy - Morgan Stanley Composite

Winslow Large Growth

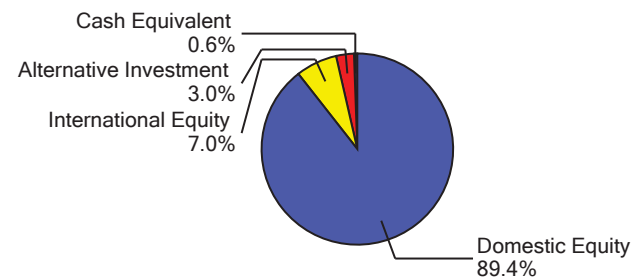
City of Troy Employees Retirement System

As of September 30, 2020

Comparative Performance



Asset Allocation by Segment



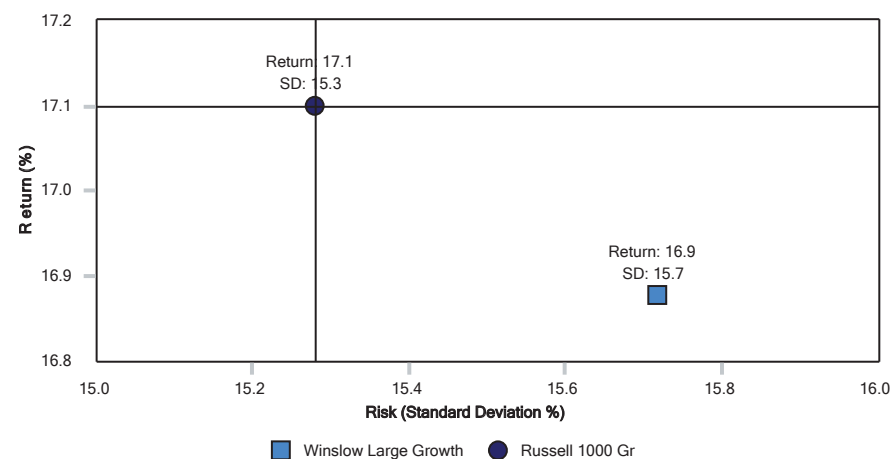
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
Winslow Large Growth	154.9	-0.2	1.0	1.0	100.0	101.0	-15.7	28.5	-15.7	0.0	48.6	3.6	Oct -14
Russell 1000 Gr	157.8	0.0	1.0	1.1	100.0	100.0	-16.0	27.8	-15.9	N/A	0.0	0.0	Oct -14
90-Day T-Bills	5.9	1.0	0.0	N/A	2.4	-1.9	0.0	0.6	0.0	-1.1	33.3	15.3	Oct -14

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
Winslow Large Growth				Oct -14
Beginning Market Value	\$7,273,778	\$6,444,069	\$6,088,457	
Net Contributions	(\$7,175)	(\$12,881)	(\$4,637,755)	
Gain/Loss	\$878,769	\$1,714,183	\$6,694,669	
Ending Market Value	\$8,145,372	\$8,145,372	\$8,145,372	

Risk and Return - Since Inception

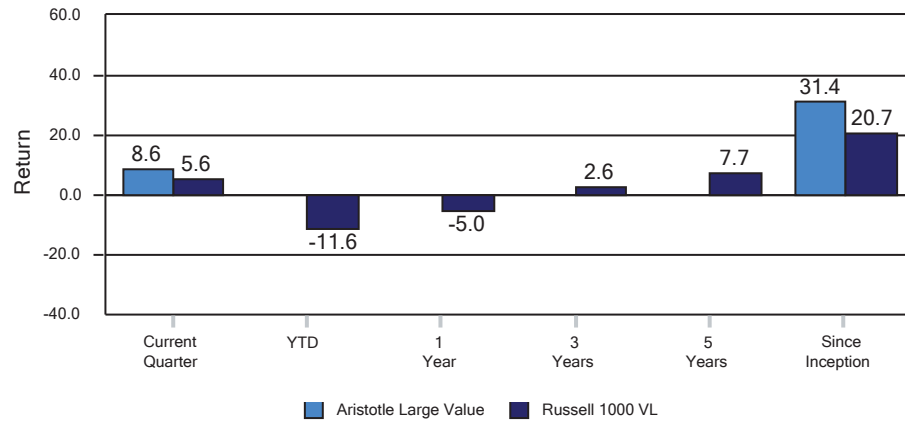


Aristotle Large Value

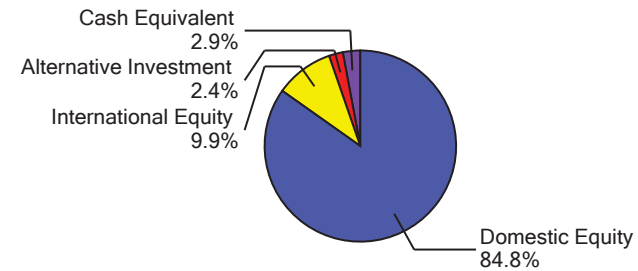
City of Troy Employees Retirement System

As of September 30, 2020

Comparative Performance



Asset Allocation by Segment



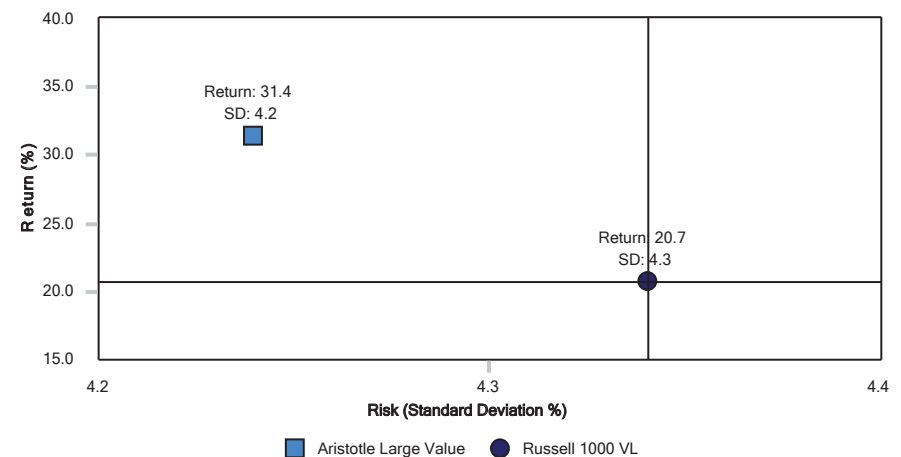
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
Aristotle Large Value	31.4	1.6	1.0	1.1	123.5	-11.4	-1.7	21.1	8.6	2.1	100.0	0.7	Apr -20
Russell 1000 VL	20.7	0.0	1.0	0.8	100.0	100.0	-2.5	14.3	5.6	N/A	0.0	0.0	Apr -20
90-Day T-Bills	0.2	0.0	0.0	N/A	0.6	-0.6	0.0	0.1	0.0	-0.8	33.3	4.3	Apr -20

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
Aristotle Large Value				Apr -20
Beginning Market Value	\$4,195,017	-	\$3,459,471	
Net Contributions	(\$4,040)	-	\$2,515	
Gain/Loss	\$358,573	-	\$1,087,563	
Ending Market Value	\$4,549,549	-	\$4,549,549	

Risk and Return - Since Inception

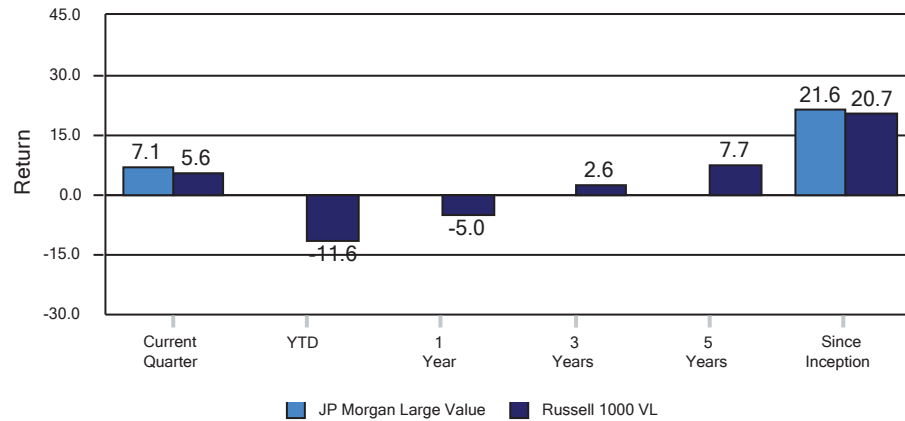


JP Morgan Large Value

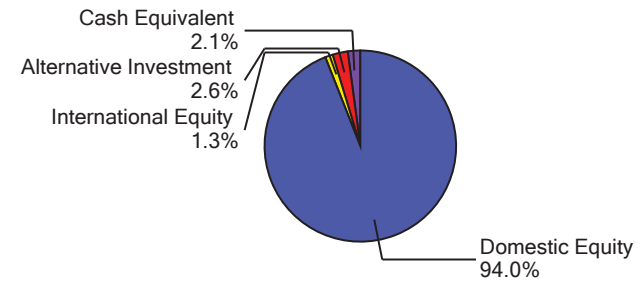
City of Troy Employees Retirement System

As of September 30, 2020

Comparative Performance



Asset Allocation by Segment



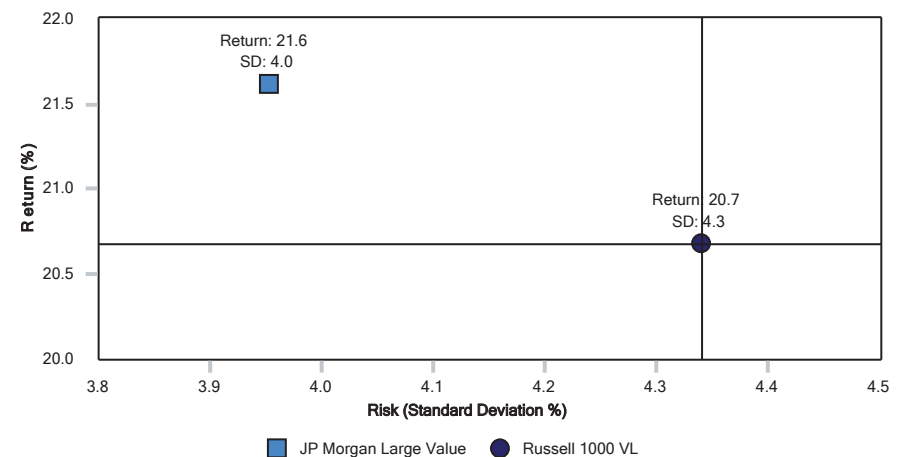
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
JP Morgan Large Value	21.6	0.4	0.9	0.9	98.8	68.8	-2.1	13.6	7.1	0.2	66.7	0.6	Apr -20
Russell 1000 VL	20.7	0.0	1.0	0.8	100.0	100.0	-2.5	14.3	5.6	N/A	0.0	0.0	Apr -20
90-Day T-Bills	0.2	0.0	0.0	N/A	0.6	-0.6	0.0	0.1	0.0	-0.8	33.3	4.3	Apr -20

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
JP Morgan Large Value				Apr -20
Beginning Market Value	\$4,043,381	-	\$3,553,674	
Net Contributions	(\$3,908)	-	\$2,587	
Gain/Loss	\$285,373	-	\$768,585	
Ending Market Value	\$4,324,846	-	\$4,324,846	

Risk and Return - Since Inception

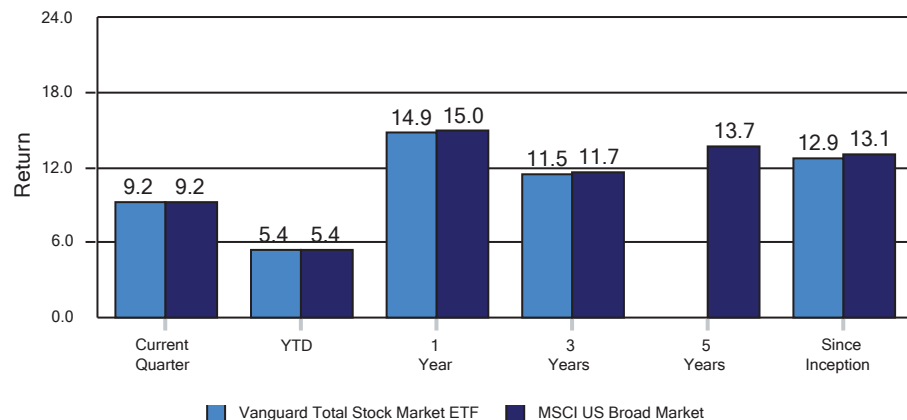


Vanguard Total Stock Market ETF

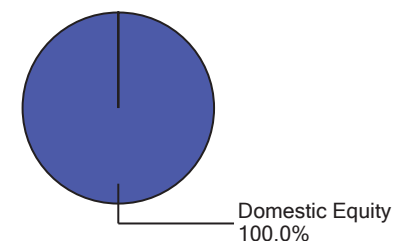
City of Troy Employees Retirement System

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Comparative Performance



Asset Allocation by Segment



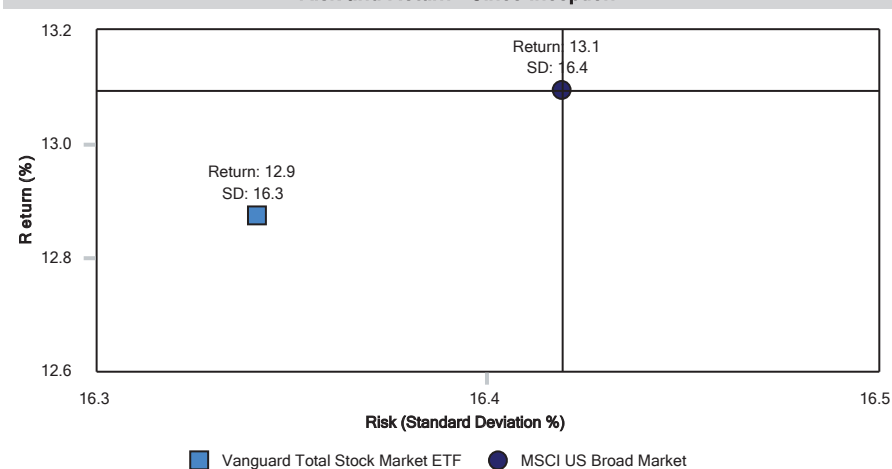
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
Vanguard Total Stock Market ETF	57.5	-0.1	1.0	0.7	99.0	99.5	-20.9	22.0	-20.9	-0.6	46.7	0.4	Jan -17
MSCI US Broad Market	58.6	0.0	1.0	0.7	100.0	100.0	-21.1	22.3	-21.1	N/A	0.0	0.0	Jan -17
90-Day T-Bills	5.6	1.5	0.0	N/A	3.7	-2.5	0.0	0.6	0.0	-0.7	24.4	16.5	Jan -17

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
Vanguard Total Stock Market ETF				Jan -17
Beginning Market Value	\$16,903,362	\$17,668,997	\$18,118,386	
Net Contributions	(\$72,795)	(\$214,637)	(\$8,066,445)	
Gain/Loss	\$1,560,869	\$937,077	\$8,339,495	
Ending Market Value	\$18,391,436	\$18,391,436	\$18,391,436	

Risk and Return - Since Inception

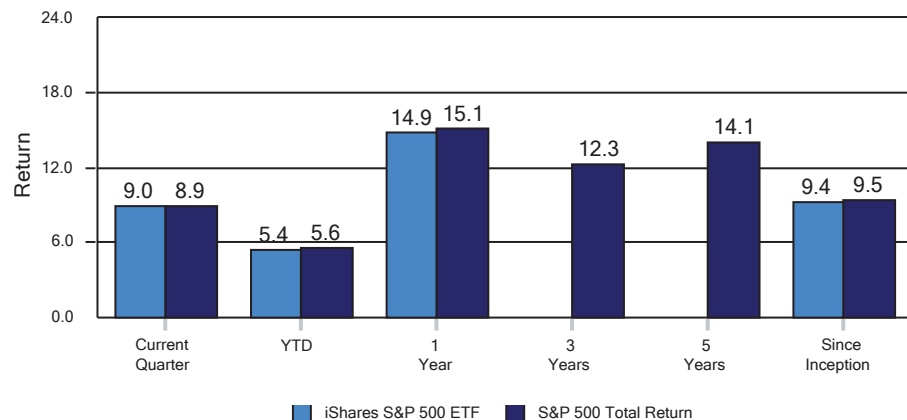


iShares S&P 500 ETF

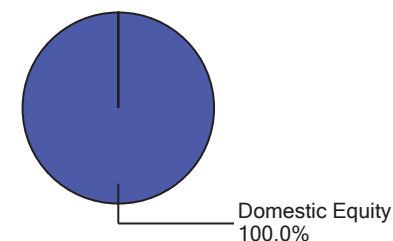
City of Troy Employees Retirement System

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Comparative Performance



Asset Allocation by Segment



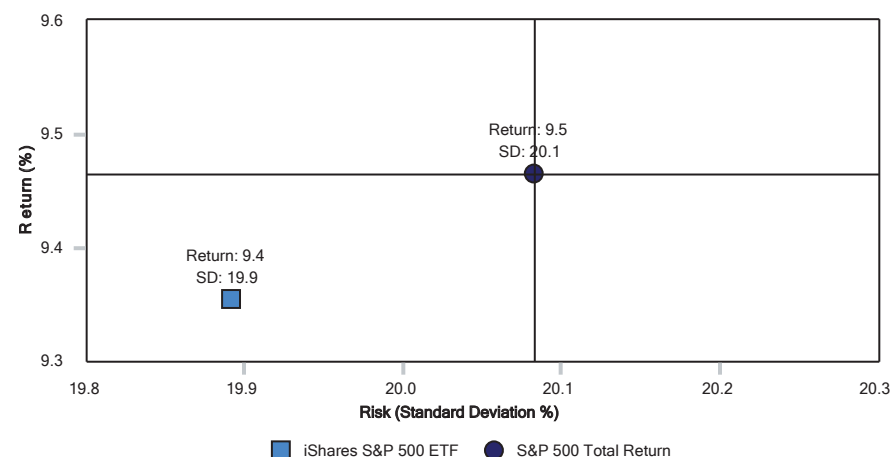
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
iShares S&P 500 ETF	20.5	0.0	1.0	0.5	98.8	98.8	-19.6	20.3	-19.6	-0.2	48.0	0.6	Sep -18
S&P 500 Total Return	20.7	0.0	1.0	0.5	100.0	100.0	-19.6	20.5	-19.6	N/A	0.0	0.0	Sep -18
90-Day T-Bills	3.6	1.7	0.0	N/A	3.3	-2.4	0.0	0.6	0.0	-0.5	32.0	20.1	Sep -18

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
iShares S&P 500 ETF				Sep -18
Beginning Market Value	\$5,249,865	\$5,479,564	\$5,191,395	
Net Contributions	(\$25,526)	(\$72,860)	(\$489,965)	
Gain/Loss	\$472,551	\$290,185	\$995,459	
Ending Market Value	\$5,696,889	\$5,696,889	\$5,696,889	

Risk and Return - Since Inception



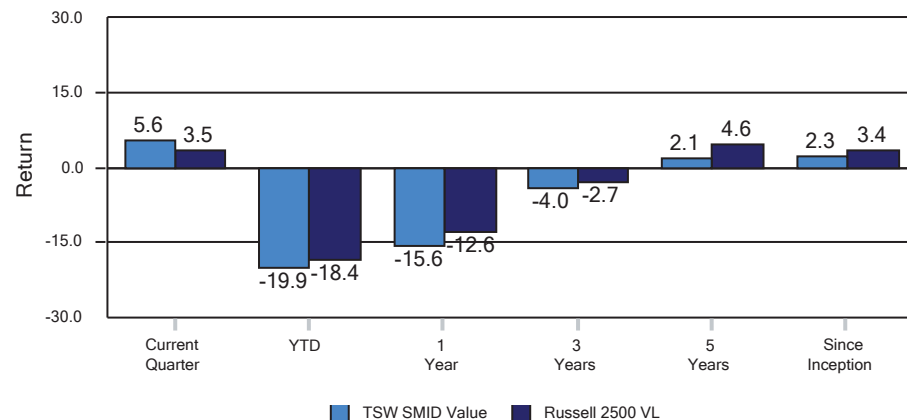
Source: InvestmentMetrics / Paris

TSW SMID Value

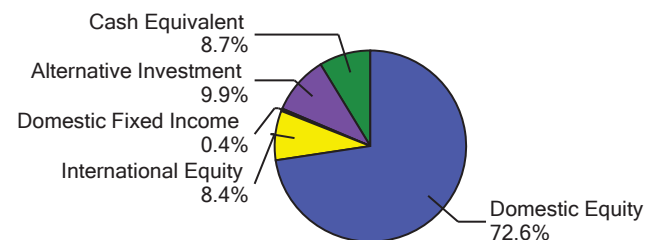
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Comparative Performance



Asset Allocation by Segment



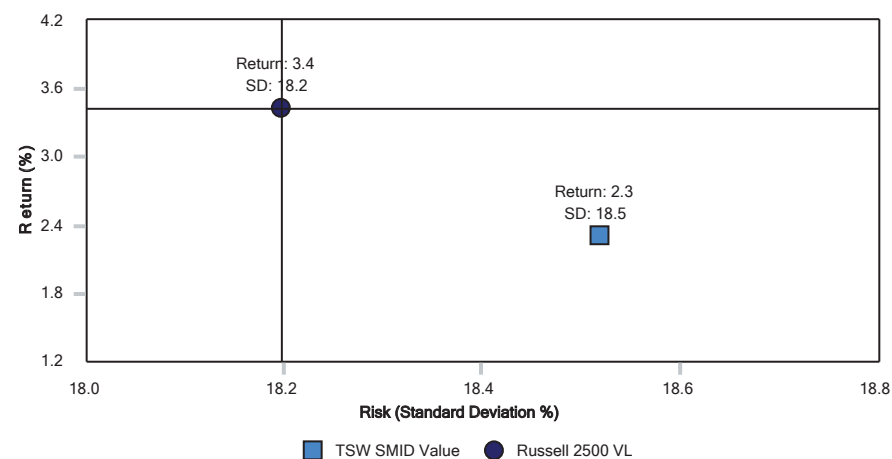
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
TSW SMID Value	14.6	-0.9	1.0	0.2	91.0	93.8	-36.4	19.2	-36.4	-0.2	55.6	4.3	Oct -14
Russell 2500 VL	22.4	0.0	1.0	0.2	100.0	100.0	-34.6	20.6	-34.6	N/A	0.0	0.0	Oct -14
90-Day T-Bills	5.9	1.0	0.0	N/A	2.6	-1.7	0.0	0.6	0.0	-0.2	33.3	18.2	Oct -14

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
TSW SMID Value				Oct -14
Beginning Market Value	\$6,346,555	\$8,381,914	\$5,146,333	
Net Contributions	(\$6,478)	(\$12,951)	\$635,010	
Gain/Loss	\$357,233	(\$1,671,653)	\$915,968	
Ending Market Value	\$6,697,310	\$6,697,310	\$6,697,310	

Risk and Return - Since Inception

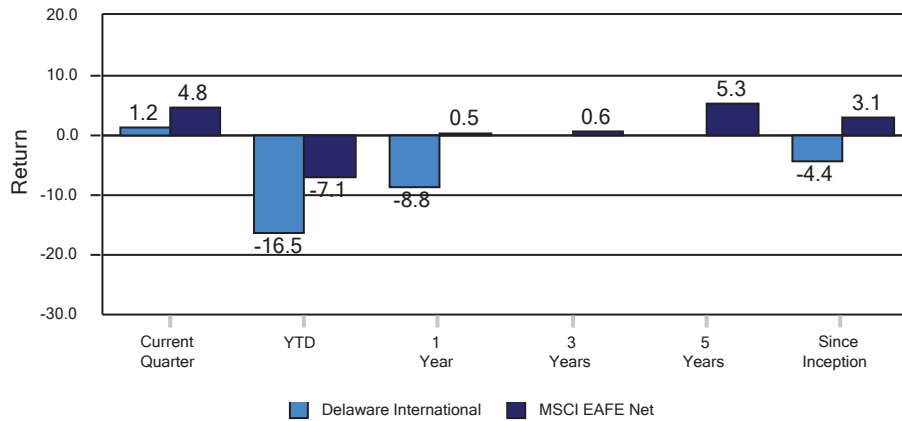


Delaware International

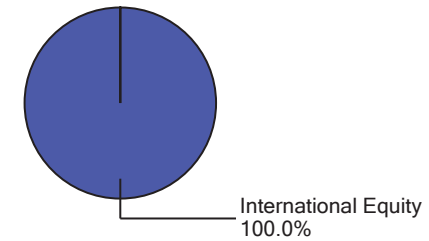
City of Troy Employees Retirement System

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Comparative Performance



Asset Allocation by Segment



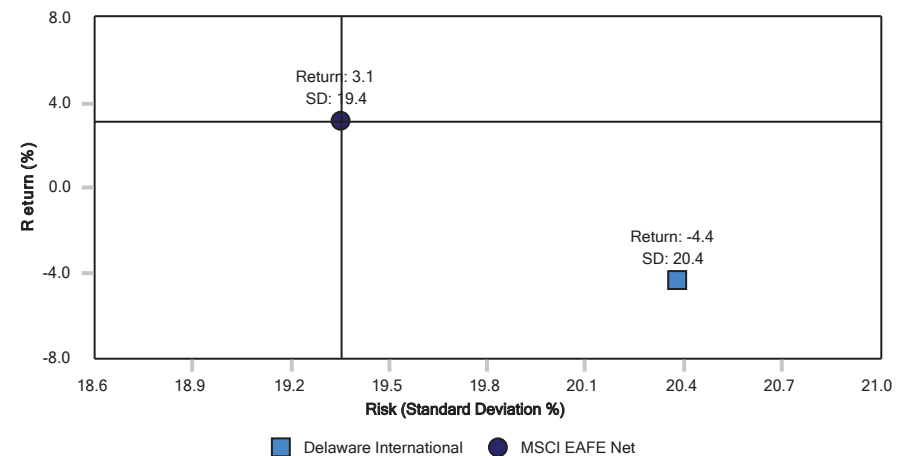
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
Delaware International	-4.7	-7.1	1.0	-0.2	88.4	115.2	-25.0	10.1	-25.0	-1.3	38.5	5.6	Sep -19
MSCI EAFE Net	3.4	0.0	1.0	0.2	100.0	100.0	-22.8	14.9	-22.8	N/A	0.0	0.0	Sep -19
90-Day T-Bills	1.2	1.1	0.0	N/A	2.4	-1.5	0.0	0.5	0.0	-0.2	30.8	19.4	Sep -19

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
Delaware International				Sep -19
Beginning Market Value	\$4,106,595	\$4,981,567	\$4,583,093	
Net Contributions	(\$5,247)	(\$10,382)	(\$246,676)	
Gain/Loss	\$49,863	(\$819,974)	(\$185,206)	
Ending Market Value	\$4,151,210	\$4,151,210	\$4,151,210	

Risk and Return - Since Inception

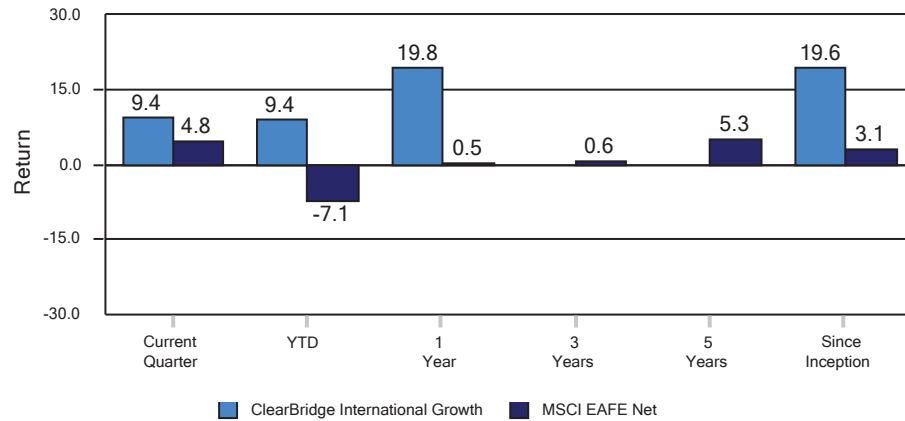


ClearBridge International Growth

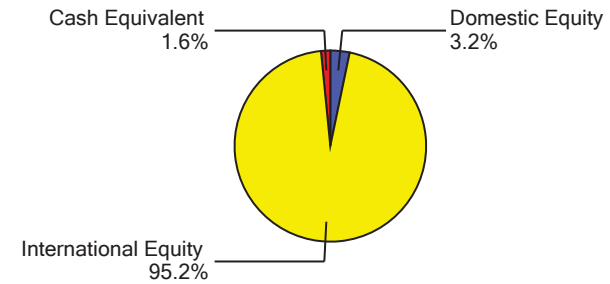
City of Troy Employees Retirement System

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Comparative Performance



Asset Allocation by Segment



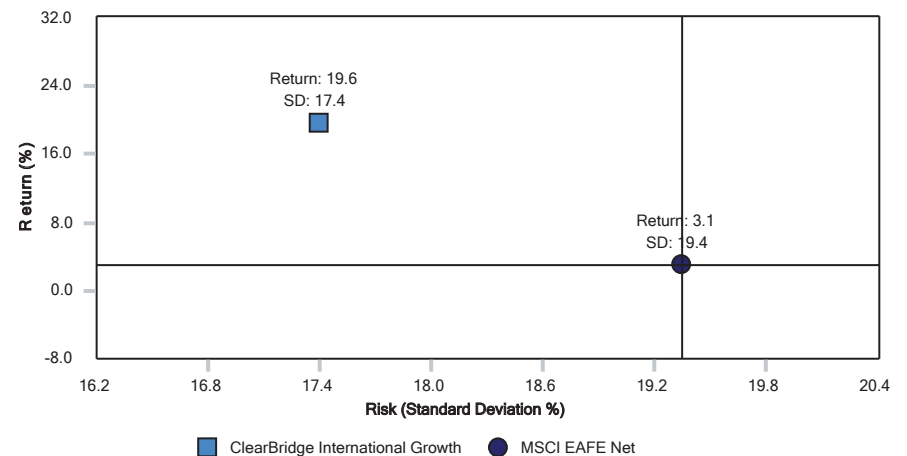
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
ClearBridge International Growth	21.4	16.3	0.9	1.1	122.7	69.0	-17.7	21.5	-17.7	3.1	69.2	4.7	Sep -19
MSCI EAFE Net	3.4	0.0	1.0	0.2	100.0	100.0	-22.8	14.9	-22.8	N/A	0.0	0.0	Sep -19
90-Day T-Bills	1.2	1.1	0.0	N/A	2.4	-1.5	0.0	0.5	0.0	-0.2	30.8	19.4	Sep -19

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
ClearBridge International Growth				Sep -19
Beginning Market Value	\$4,763,451	\$4,770,237	\$4,532,710	
Net Contributions	(\$4,871)	(\$9,181)	(\$259,022)	
Gain/Loss	\$447,542	\$445,066	\$932,434	
Ending Market Value	\$5,206,122	\$5,206,122	\$5,206,122	

Risk and Return - Since Inception

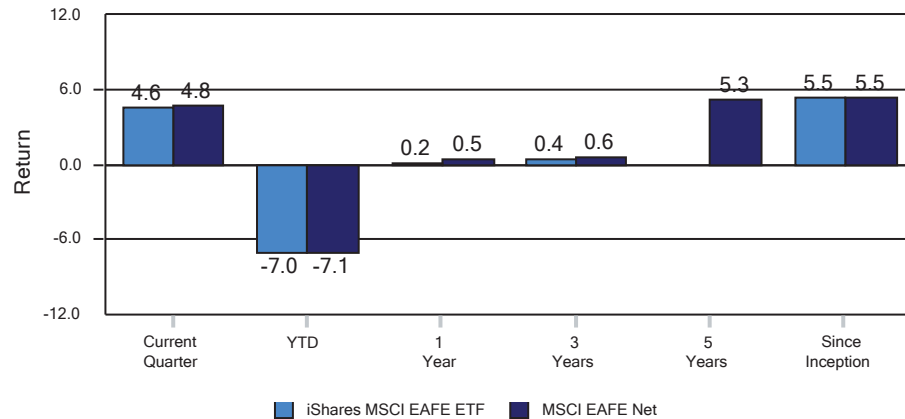


iShares MSCI EAFE ETF

City of Troy Employees Retirement System

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Comparative Performance



Asset Allocation by Segment



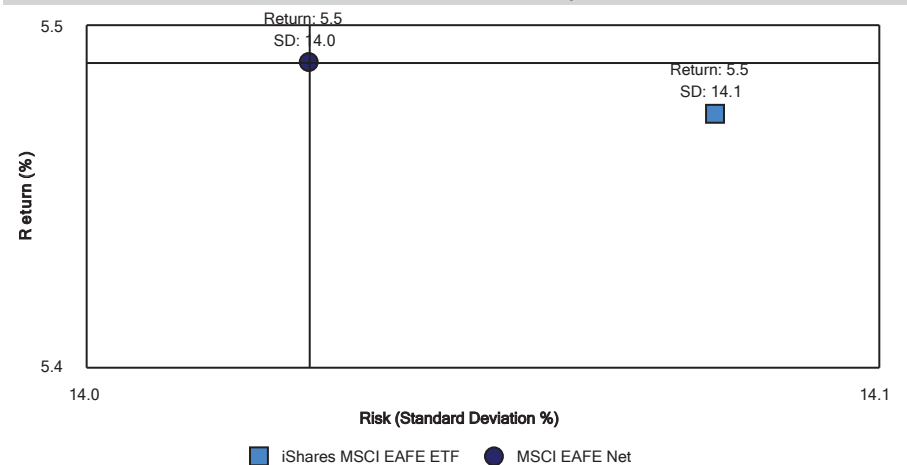
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
iShares MSCI EAFE ETF	22.1	0.0	1.0	0.3	98.7	98.3	-23.0	15.5	-23.0	0.0	42.2	1.7	Jan -17
MSCI EAFE Net	22.2	0.0	1.0	0.3	100.0	100.0	-22.8	14.9	-22.8	N/A	0.0	0.0	Jan -17
90-Day T-Bills	5.6	1.5	0.0	N/A	3.6	-4.0	0.0	0.6	0.0	-0.3	37.8	14.1	Jan -17

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
iShares MSCI EAFE ETF				Jan -17
Beginning Market Value	\$4,396,884	\$5,015,929	\$3,157,542	
Net Contributions	-	(\$61,958)	\$814,948	
Gain/Loss	\$200,811	(\$356,277)	\$625,204	
Ending Market Value	\$4,597,694	\$4,597,694	\$4,597,694	

Risk and Return - Since Inception

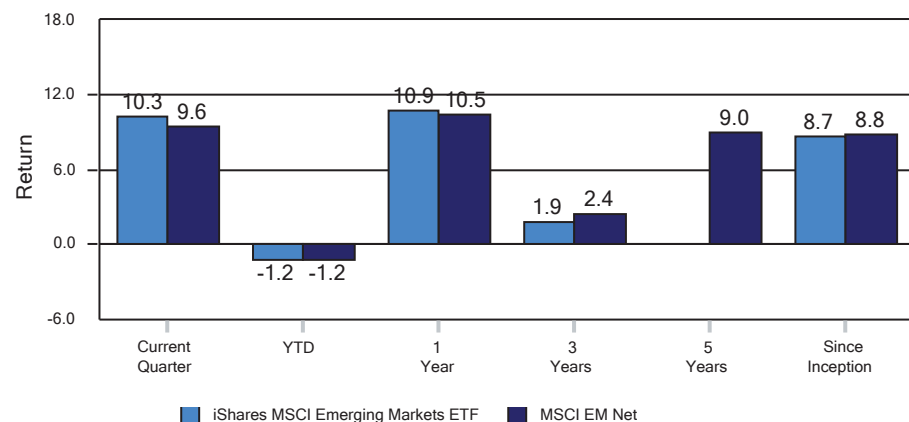


iShares MSCI Emerging Markets ETF

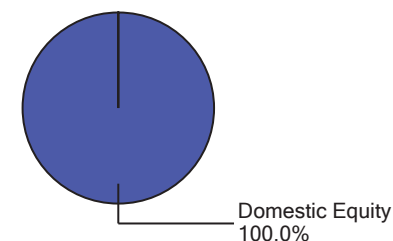
City of Troy Employees Retirement System

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Comparative Performance



Asset Allocation by Segment



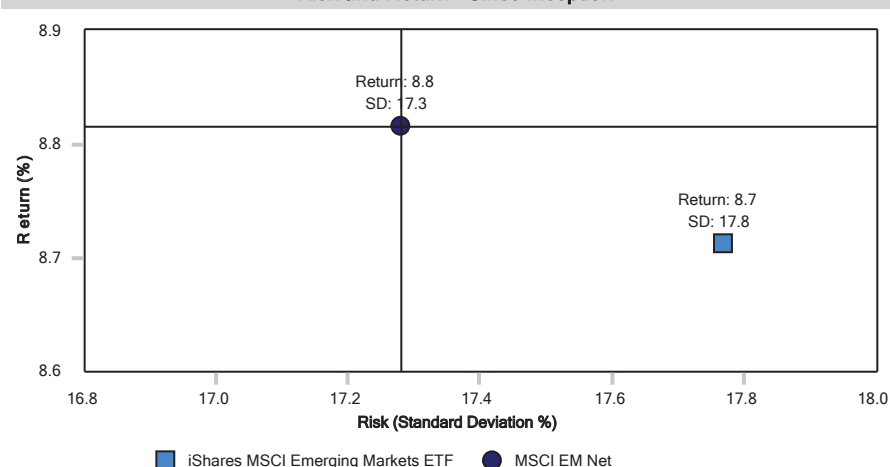
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
iShares MSCI Emerging Markets ETF	36.8	-0.1	1.0	0.5	102.2	103.4	-29.6	18.9	-23.9	0.0	44.4	3.6	Jan -17
MSCI EM Net	37.3	0.0	1.0	0.5	100.0	100.0	-28.7	19.5	-23.6	N/A	0.0	0.0	Jan -17
90-Day T-Bills	5.6	1.5	0.0	N/A	2.6	-3.7	0.0	0.6	0.0	-0.5	40.0	17.3	Jan -17

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
iShares MSCI Emerging Markets ETF				Jan -17
Beginning Market Value	\$4,201,709	\$4,714,446	\$2,145,413	
Net Contributions	-	(\$24,196)	\$1,551,605	
Gain/Loss	\$430,783	(\$57,758)	\$935,474	
Ending Market Value	\$4,632,492	\$4,632,492	\$4,632,492	

Risk and Return - Since Inception

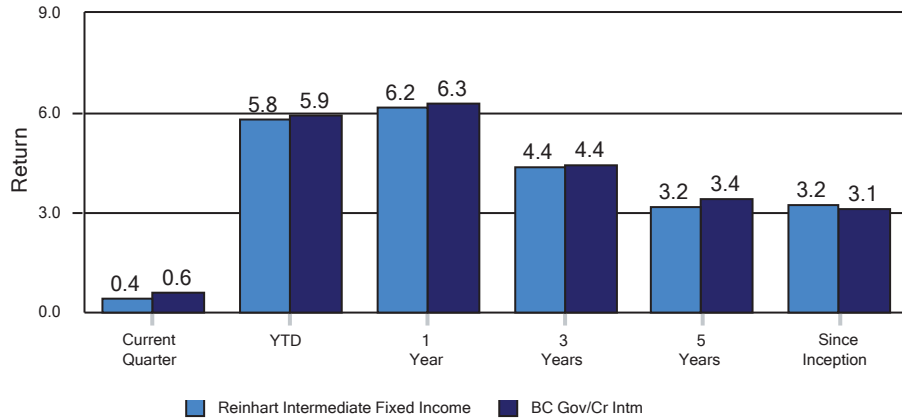


Reinhart Intermediate Fixed Income

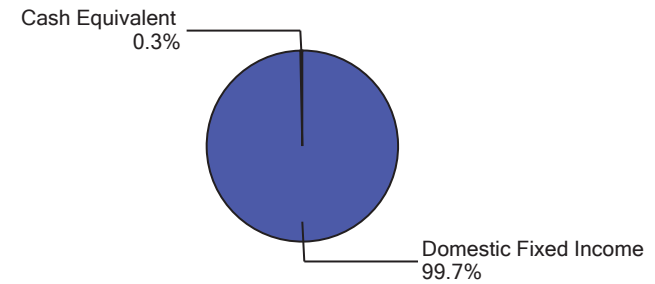
City of Troy Employees Retirement System

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Comparative Performance



Asset Allocation by Segment



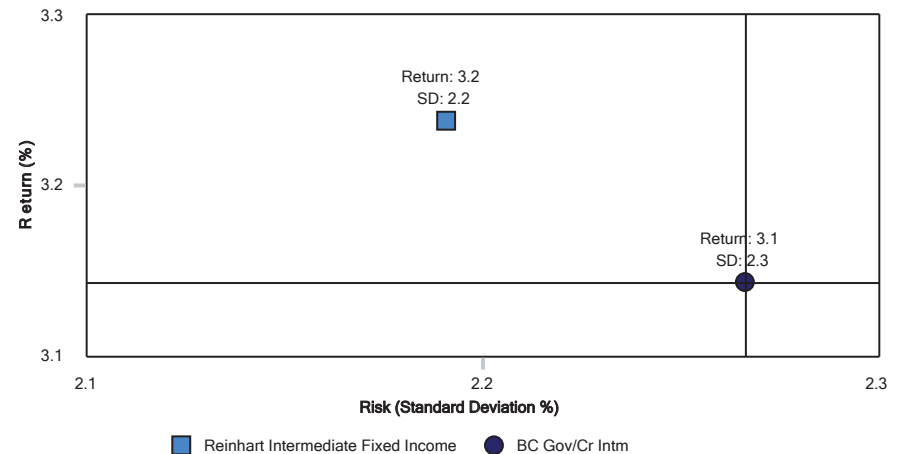
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
Reinhart Intermediate Fixed Income	21.4	0.4	0.9	1.0	96.8	85.3	-3.1	3.1	-1.7	0.1	60.3	0.8	Sep -14
BC Gov/Cr Intm	20.7	0.0	1.0	1.0	100.0	100.0	-2.3	3.0	-2.1	N/A	0.0	0.0	Sep -14
90-Day T-Bills	5.9	0.9	0.0	N/A	13.1	-19.8	0.0	0.6	0.0	-1.0	45.2	2.2	Sep -14

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
Reinhart Intermediate Fixed Income				Sep -14
Beginning Market Value	\$8,459,778	\$8,034,320	\$6,604,737	
Net Contributions	(\$5,261)	(\$12,335)	\$457,317	
Gain/Loss	\$36,831	\$469,363	\$1,429,294	
Ending Market Value	\$8,491,347	\$8,491,347	\$8,491,347	

Risk and Return - Since Inception

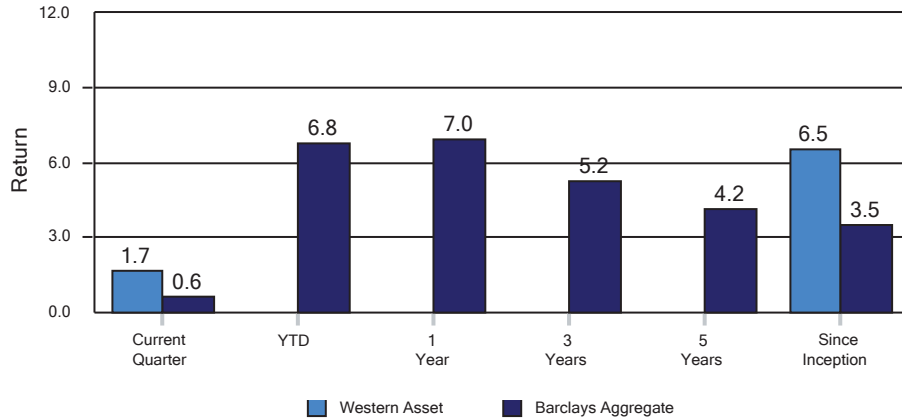


Western Asset

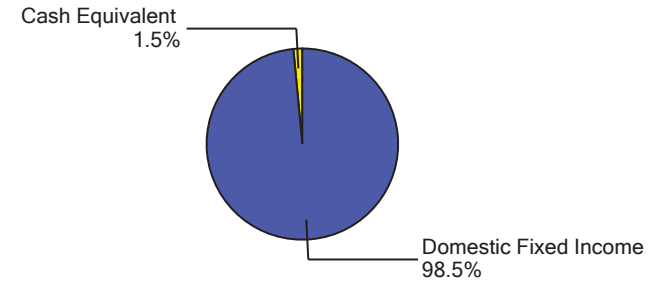
City of Troy Employees Retirement System

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Comparative Performance



Asset Allocation by Segment



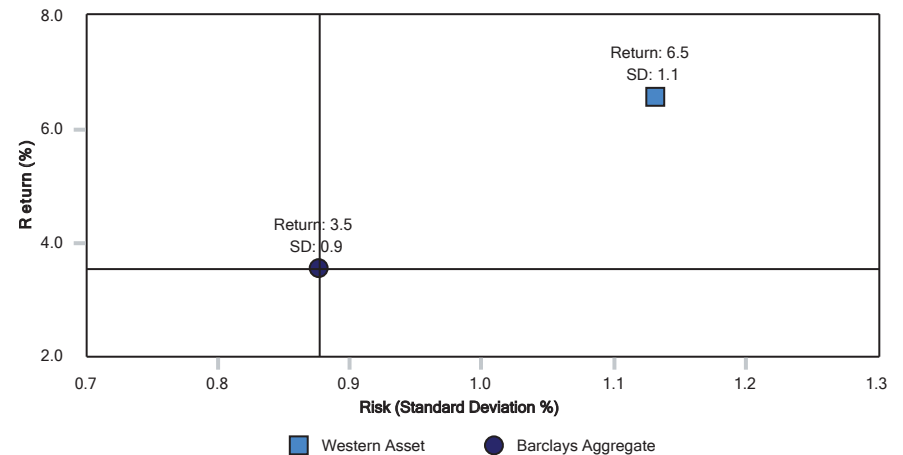
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
Western Asset	6.5	0.4	1.1	0.9	165.3	93.2	-0.8	5.4	1.7	0.9	83.3	0.5	Apr -20
Barclays Aggregate	3.5	0.0	1.0	0.6	100.0	100.0	-0.9	2.9	0.6	N/A	0.0	0.0	Apr -20
90-Day T-Bills	0.2	0.0	0.0	N/A	3.3	-2.4	0.0	0.1	0.0	-0.6	33.3	0.9	Apr -20

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
Western Asset				Apr -20
Beginning Market Value	\$7,996,435	-	\$7,632,246	
Net Contributions	(\$8,659)	-	(\$10,413)	
Gain/Loss	\$133,740	-	\$499,683	
Ending Market Value	\$8,121,516	-	\$8,121,516	

Risk and Return - Since Inception

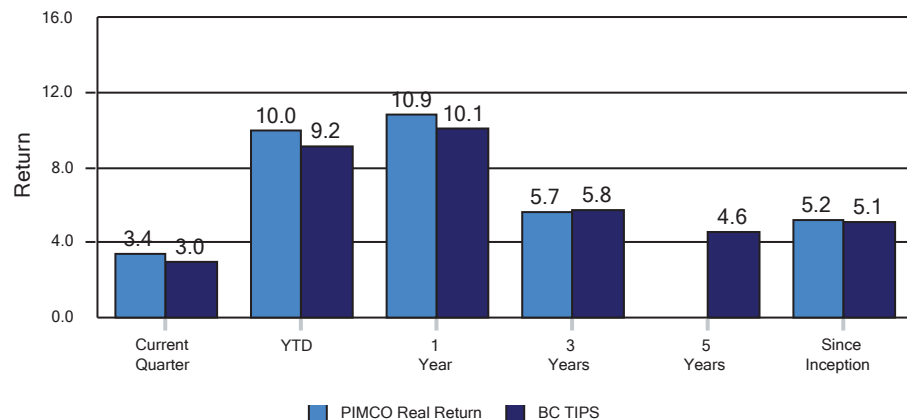


PIMCO Real Return

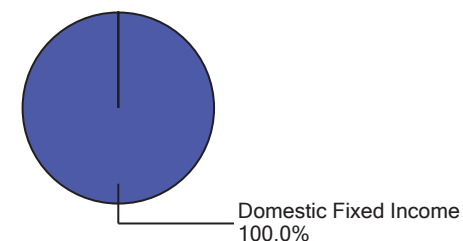
City of Troy Employees Retirement System

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Comparative Performance



Asset Allocation by Segment



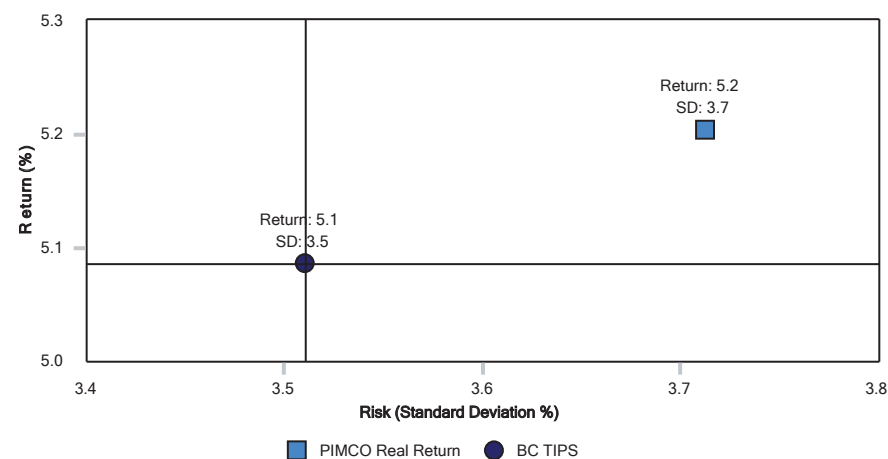
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
PIMCO Real Return	21.0	0.0	1.0	1.0	101.6	100.1	-2.7	5.4	-2.0	0.1	53.3	0.9	Jan -17
BC TIPS	20.4	0.0	1.0	1.0	100.0	100.0	-2.5	4.6	-2.0	N/A	0.0	0.0	Jan -17
90-Day T-Bills	5.6	1.5	0.0	N/A	13.3	-16.1	0.0	0.6	0.0	-1.0	31.1	3.5	Jan -17

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
PIMCO Real Return				Jan -17
Beginning Market Value	\$4,312,293	\$4,054,366	\$2,644,274	
Net Contributions	-	-	\$1,069,766	
Gain/Loss	\$147,237	\$405,164	\$745,490	
Ending Market Value	\$4,459,530	\$4,459,530	\$4,459,530	

Risk and Return - Since Inception

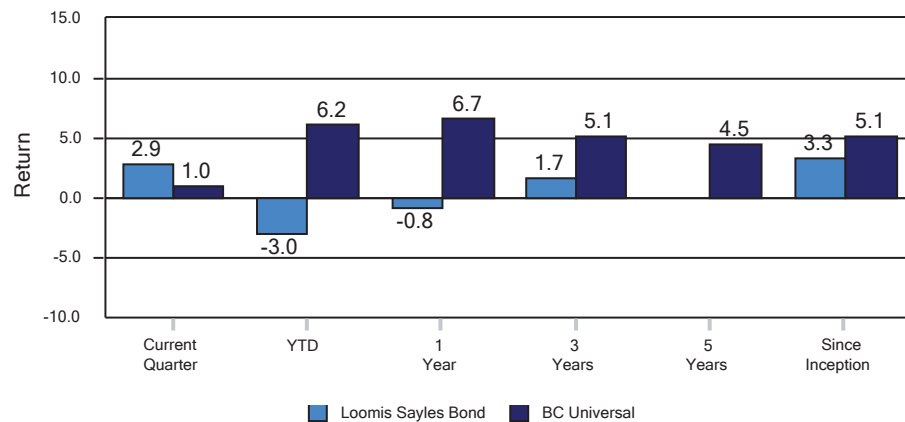


Loomis Sayles Bond

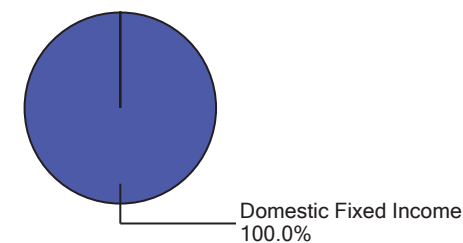
City of Troy Employees Retirement System

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Comparative Performance



Asset Allocation by Segment



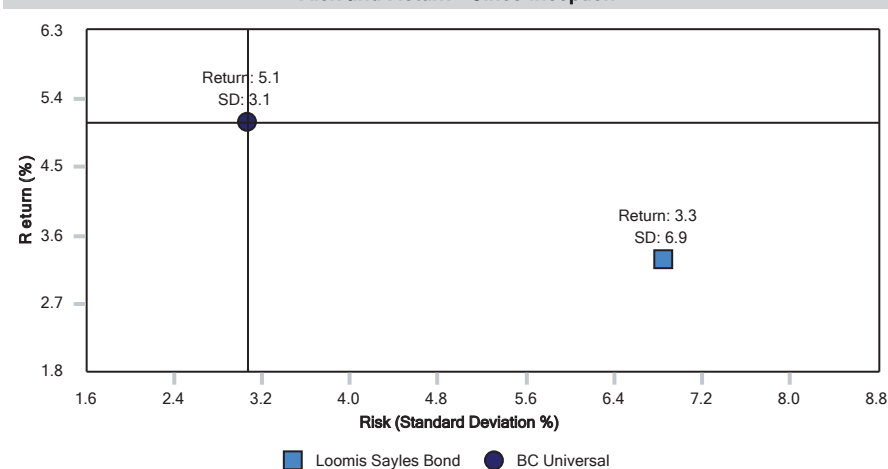
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
Loomis Sayles Bond	12.9	-1.9	1.1	0.3	88.0	134.0	-11.9	8.0	-11.7	-0.3	53.3	6.0	Jan -17
BC Universal	20.5	0.0	1.0	1.2	100.0	100.0	-2.2	4.0	-1.5	N/A	0.0	0.0	Jan -17
90-Day T-Bills	5.6	1.4	0.0	N/A	14.5	-20.8	0.0	0.6	0.0	-1.2	37.8	3.1	Jan -17

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
Loomis Sayles Bond				Jan -17
Beginning Market Value	\$5,322,925	\$5,650,312	\$5,616,682	
Net Contributions	-	-	(\$800,000)	
Gain/Loss	\$155,203	(\$172,184)	\$661,446	
Ending Market Value	\$5,478,128	\$5,478,128	\$5,478,128	

Risk and Return - Since Inception

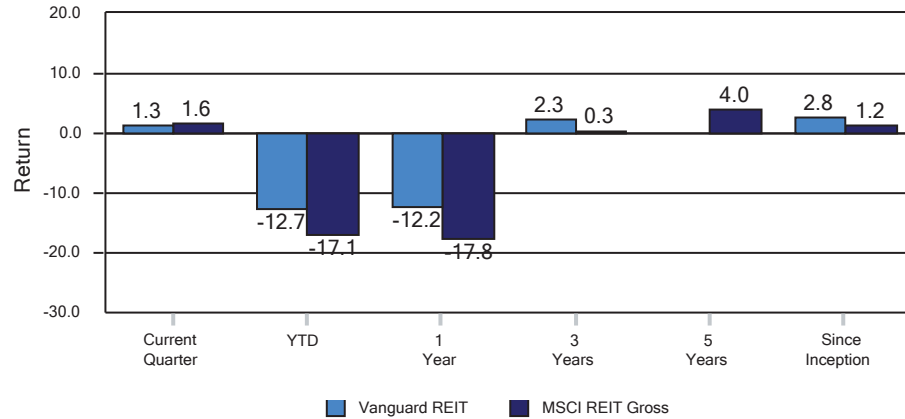


Vanguard REIT

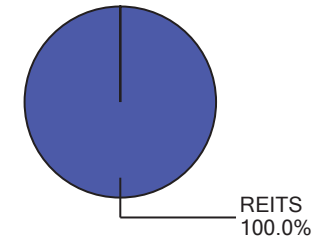
City of Troy Employees Retirement System

As of September 30, 2020

Comparative Performance



Asset Allocation by Segment



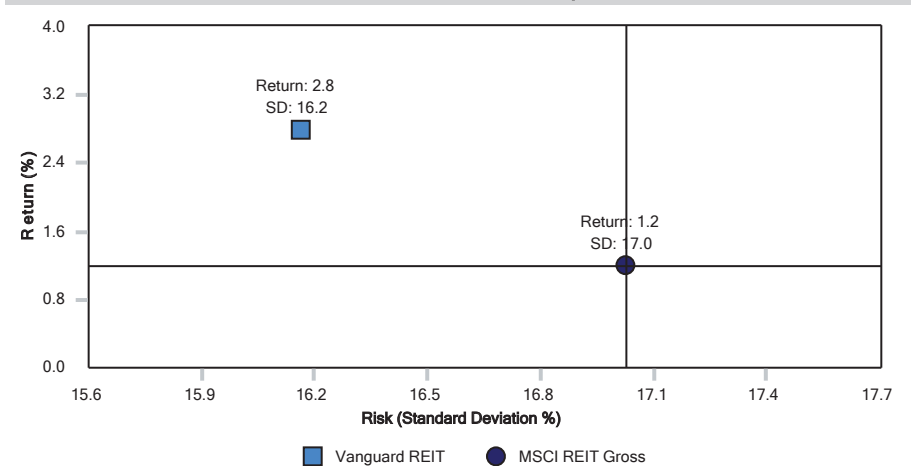
Historical Statistics

	Cumulative Return	Alpha	Beta	Sharpe Ratio	Up Capture	Down Capture	Maximum Drawdown	Best Quarter	Worst Quarter	Information Ratio	Consistency	Tracking Error	Inception Date
Vanguard REIT	10.8	1.5	0.9	0.2	100.1	92.2	-25.0	17.4	-24.1	0.7	51.1	2.0	Jan -17
MSCI REIT Gross	4.6	0.0	1.0	0.1	100.0	100.0	-28.6	16.3	-27.0	N/A	0.0	0.0	Jan -17
90-Day T-Bills	5.6	1.5	0.0	N/A	4.5	-3.1	0.0	0.6	0.0	-0.1	40.0	17.0	Jan -17

Gain/Loss Summary

	Current Quarter	YTD	Since Inception	Inception Date
Vanguard REIT				Jan -17
Beginning Market Value	\$1,448,250	\$1,711,233	\$1,522,018	
Net Contributions	(\$10,883)	(\$36,821)	(\$224,725)	
Gain/Loss	\$18,813	(\$218,232)	\$158,887	
Ending Market Value	\$1,456,180	\$1,456,180	\$1,456,180	

Risk and Return - Since Inception



Source: InvestmentMetrics / Paris

Performance Appendix

Performance Data below is net of fees. Please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 Brochure for advisory accounts and/or any applicable brokerage account trade confirmation statements for a full disclosure of the applicable charges, fees and expenses. Your Financial Advisor will provide those documents to you upon request.

Account Name	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Aristotle	8.40	--	--	--	--	--	31.18	04/01/2020
ClearBridge International Growth	9.24	9.03	19.25	--	--	--	19.06	09/01/2019
Delaware International	1.03	-16.89	-9.40	--	--	--	-4.96	09/01/2019
JP Morgan	6.91	--	--	--	--	--	21.40	04/01/2020
Loomis Sayles Bond	2.92	-3.05	-0.76	1.67	--	--	3.21	12/01/2016
PIMCO Real Return	3.41	9.99	10.90	5.70	--	--	5.09	12/01/2016
Reinhart Intermediate Fixed Income	0.34	5.53	5.77	3.96	2.80	--	2.85	09/01/2014
TSW SMID Value	5.47	-20.39	-16.14	-4.84	1.30	--	1.50	10/01/2014
UBS ERS	5.72	4.31	9.88	9.30	10.36	--	7.80	01/01/2014
UBS NAIC	8.22	7.24	15.86	14.63	13.30	--	12.13	01/01/2014
Vanguard REIT	1.29	-12.72	-12.25	2.32	--	--	3.27	12/01/2016
Vanguard Total Stock Market ETF	9.23	5.43	14.93	11.46	--	--	12.76	12/01/2016
Western Asset	1.51	--	--	--	--	--	6.30	04/01/2020
Winslow Large Growth	11.92	26.13	37.66	21.62	18.81	--	16.05	10/01/2014
iShares MSCI EAFE ETF	4.57	-7.02	0.16	0.43	--	--	5.64	12/01/2016
iShares MSCI Emerging Markets ETF	10.25	-1.15	10.86	1.88	--	--	8.84	12/01/2016
iShares S&P 500 ETF	8.99	5.44	14.95	--	--	--	9.79	08/01/2018

All performance above are Time Weighted(TWR) performance

Glossary of Terms

Active Contribution Return: The gain or loss percentage of an investment relative to the performance of the investment benchmark.

Active Exposure: The percentage difference in weight of the portfolio compared to its policy benchmark.

Active Return: Arithmetic difference between the manager's return and the benchmark's return over a specified time period.

Actual Correlation: A measure of the correlation (linear dependence) between two variables X and Y, with a value between +1 and -1 inclusive. This is also referred to as coefficient of correlation.

Alpha: A measure of a portfolio's time weighted return in excess of the market's return, both adjusted for risk. A positive alpha indicates that the portfolio outperformed the market on a risk-adjusted basis, and a negative alpha indicates the portfolio did worse than the market.

Best Quarter: The highest quarterly return for a certain time period.

Beta: A measure of the sensitivity of a portfolio's time weighted return (net of fees) against that of the market. A beta greater than 1.00 indicates volatility greater than the market.

Consistency: The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.

Core: Refers to an investment strategy mandate that is blend of growth and value styles without a pronounced tilt toward either style.

Cumulative Selection Return (Cumulative Return): Cumulative investment performance over a specified period of time.

Distribution Rate: The most recent distribution paid, annualized, and then divided by the current market price. Distribution rate may consist of investment income, short-term capital gains, long-term capital gains.

and/or return of capital.

Down Market Capture: The ratio of average portfolio returns over the benchmark during periods of negative benchmark return. Lower values indicate better product performance.

Downside Risk: A measure similar to standard deviation, but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the value, the more risk the product has.

Downside Semi Deviation: A statistical calculation that measures the volatility of returns below a minimum acceptable return. This return measure isolates the negative portion of volatility: the larger the number, the greater the volatility.

Drawdown: A drawdown is the peak-to-trough decline during a specific period of an investment, fund or commodity.

Excess over Benchmark: The percentage gain or loss of an investment relative to the investment's benchmark.

Excess Return: Arithmetic difference between the manager's return and the risk-free return over a specified time period.

Growth: A diversified investment strategy which includes investment selections that have capital appreciation as the primary goal, with little or no dividend payouts. These strategies can include reinvestment in expansion, acquisitions, and/or research and development opportunities.

Growth of Dollar: The aggregate amount an investment has gained or lost over a certain time period, also referred to as Cumulative Return, stated in terms of the amount to which an initial dollar investment would have grown over the given time period.

Investment Decision Process (IDP): A model for structuring the investment process and implementing the correct attribution methodologies. The IDP includes every decision made concerning the division of the assets under management over the various asset categories. To analyze each decision's contribution to the total return, a modeling approach must measure the marginal value of every individual decision. In this respect, the hierarchy of the decisions becomes very important. We therefore use the IDP model, which serves as a proper foundation for registering the decisions and relating them to each other.

Information Ratio: Measured by dividing the active rate of return by the tracking error. The higher the Information Ratio, the more value-added contribution by the manager.

Jensen's Alpha: The Jensen's alpha measure is a risk-adjusted performance measure that represents the average return on a portfolio or investment above or below that predicted by the capital asset pricing model (CAPM) given the portfolio's or investment's beta and the average market return. This metric is also commonly referred to as alpha..

Kurtosis: A statistical measure that is used to describe the distribution, or skewness, of observed data around the mean, sometimes referred to as the volatility of volatility.

Maximum Drawdown: The drawdown is defined as the percent retrenchment from a fund's peak to the fund's trough value. It is in effect from the time the fund's retrenchment begins until a new fund high is reached. The maximum drawdown encompasses both the period from the fund's peak to the fund's valley

(length), and the time from the fund's valley to a new fund high (recovery). It measures the largest percentage drawdown that has occurred in any fund's data record.

Modern Portfolio Theory (MPT): An investment analysis theory on how risk-averse investors can construct portfolios to optimize or maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward.

Mutual Fund (MF): An investment program funded by shareholders that trade in diversified holdings and is professionally managed.

Peer Group: A combination of funds that share the same investment style combined as a group for comparison purposes.

Peer/ Plan Sponsor Universe: A combination of asset pools of total plan investments by specific sponsor and plan types for comparison purposes.

Performance Ineligible Assets: Performance returns are not calculated for certain assets because accurate valuations and transaction data for these assets are not processed or maintained by us. Common examples of these include life insurance, some annuities and some assets held externally.

Performance Statistics: A generic term for various measures of investment performance measurement terms.

Portfolio Characteristics: A generic term for various measures of investment portfolio characteristics.

Preferred Return: A term used in the private equity (PE) world, and also referred to as a "Hurdle Rate." It refers to the threshold return that the limited partners of a private equity fund must receive, prior to the PE firm receiving its carried interest or "carry."

Ratio of Cumulative Wealth: A defined ratio of the Cumulative Return of the portfolio divided by the Cumulative Return of the benchmark for a certain time period.

Regression Based Analysis: A statistical process for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables

Residual Correlation: Within returns-based style analysis, residual correlation refers to the portion of a strategy's return pattern that cannot be explained by its correlation to the asset-class benchmarks to which it is being compared.

Return: A rate of investment performance for the specified period.

Rolling Percentile Ranking: A measure of an investment portfolio's ranking versus a peer group for a specific rolling time period (i.e. Last 3 Years, Last 5 years, etc.).

R-Squared: The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

SA/CF (Separate Account/Comingled Fund): Represents an acronym for Separate Account and Comingled Fund investment vehicles.

Sector Benchmark: A market index that serves as a proxy for a sector within an asset class.

Sharpe Ratio: Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance results in.

Standard Deviation: A statistical measure of the range of a portfolio's performance; the variability of a return around its average return over a specified time period.

Total Fund Benchmark: The policy benchmark for a complete asset pool that could consist of multiple investment mandates.

Total Fund Composite: The aggregate of multiple portfolios within an asset pool or household.

Tracking Error: A measure of standard deviation for a portfolio's investment performance, relative to the performance of an appropriate market benchmark.

Treynor Ratio: A ratio that divides the excess return (above the risk free rate) by the portfolio's beta to arrive at a unified measure of risk adjusted return. It is generally used to rank portfolios, funds and benchmarks. A higher ratio is indicative of higher returns per unit of market risk. This measurement can help determine if the portfolio is reaching its goal of increasing returns while managing market risk.

Up Market Capture: The ratio of average portfolio returns over the benchmark during periods of positive benchmark return. Higher values indicate better product performance.

Upside Semi Deviation: A statistical calculation that measures the volatility of returns above an acceptable return. This return measure isolates the positive portion of volatility: the larger the number, the greater the volatility.

Value: A diversified investment strategy that includes investment selections which tend to trade at a lower price relative to its dividends, earnings, and sales. Common attributes are stocks that include high dividend, low price-to-book ratio, and/or low price-to-earnings ratio.

Worst Quarter: The lowest rolling quarterly return for a certain time period.

Information Disclosures

Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, and dividends, interest and income. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Past performance is not a guarantee of future results.

Please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 Brochure for advisory accounts and/or any applicable brokerage account trade confirmation statements for a full disclosure of the applicable charges, fees and expenses. Your Financial Advisor will provide those documents to you upon request.

Benchmark indices and blends included in this material are for informational purposes only, are provided solely as a comparison tool and may not reflect the underlying composition and/or investment objective(s) associated with the account(s). Indices are unmanaged and not available for direct investment. Index returns do not take into account fees or other charges. Such fees and charges would reduce performance.

The performance data shown reflects past performance, which does not guarantee future results. Investment return and principal will fluctuate so that an investor's shares when redeemed may be worth more or less than original cost. Please note, current performance may be higher or lower than the performance data shown. For up to date month-end performance information, please contact your

Financial Advisor or visit the funds' company website.

Investors should carefully consider the fund's investment objectives, risks, charges and expenses before investing. The prospectus and, if available the summary prospectus, contains this and other information that should be read carefully before investing. Investors should review the information in the prospectus carefully. To obtain a prospectus, please contact your Financial Advisor or visit the funds' company website.

Past performance is no guarantee of future results.

Investing involves market risk, including possible loss of principal. **Growth investing** does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. **Value investing** involves the risk that the market may not recognize that securities are undervalued and they may not appreciate as anticipated. **Small and mid-capitalization companies** may lack the financial resources, product diversification and competitive strengths of larger companies. The securities of small capitalization companies may not trade as readily as, and be subject to higher volatility than those of larger, more established companies. **Bond funds** and bond holdings have the same interest rate, inflation and credit risks that are associated with the underlying bonds owned by the funds. The return of principal in bond funds, and in funds with significant bond holdings, is not guaranteed. **International securities'** prices may carry additional risks, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes and differences in financial and accounting standards. International investing may not be for everyone. These risks may be magnified in emerging markets. **Alternative investments**, including private equity funds, real estate funds, hedge funds, managed futures funds, and funds of hedge funds, private equity, and managed futures funds, are speculative and entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds and risks associated with the operations, personnel and processes of the advisor. **Master Limited Partnerships** (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk; and MLP interests in the real estate sector are subject to special risks, including interest rate and property value fluctuations, as well as risks related to general and economic conditions. Because of their narrow focus, MLPs maintain exposure to price volatility of commodities and/or underlying assets and tend to be more volatile than investments that diversify across many sectors and companies. MLPs are also subject to additional risks including: investors having limited control and rights to vote on matters affecting the MLP, limited access to capital, cash flow risk, lack of liquidity, dilution risk, conflict of interests, and limited call rights related to acquisitions.

Mortgage backed securities also involve prepayment risk, in that faster or slower prepayments than expected on underlying mortgage loans can dramatically alter the yield-to-maturity of a mortgage-backed security and prepayment risk includes the possibility that a fund may invest the proceeds at generally lower interest rates.

Tax managed funds may not meet their objective of being tax-efficient.

Real estate investments are subject to special risks, including interest rate

as well as risks related to general and economic conditions. **High yield** fixed income securities, also known as “junk bonds”, are considered speculative, involve greater risk of default and tend to be more volatile than investment grade fixed income securities.

Credit quality is a measure of a bond issuer’s creditworthiness, or ability to repay interest and principal to bondholders in a timely manner. The credit ratings shown are based on security rating as provided by Standard & Poor’s, Moody’s and/or Fitch, as applicable. Credit ratings are issued by the rating agencies for the underlying securities in the fund and not the fund itself, and the credit quality of the securities in the fund does not represent the stability or safety of the fund. Credit ratings shown range from AAA, being the highest, to D, being the lowest based on S&P and Fitch’s classification (the equivalent of Aaa and C, respectively, by Moody(s)). Ratings of BBB or higher by S&P and Fitch (Baa or higher by Moody’s) are considered to be investment grade-quality securities. If two or more of the agencies have assigned different ratings to a security, the highest rating is applied. Securities that are not rated by all three agencies are listed as “NR”.

“**Alpha tilt strategies** comprise a core holding of stocks that mimic a benchmark type index such as the S&P 500 to which additional securities are added to help tilt the fund toward potentially outperforming the market in an effort to enhance overall investment returns. Tilt strategies are subject to significant timing risk and could potentially expose investors to extended periods of underperformance.”

Custom Account Index: The Custom Account Index is an investment benchmark based on your historical target allocations and/or manager selection that you may use to evaluate the performance of your account. The Custom Account index does take into consideration certain changes that may have occurred in your portfolio since the inception of your account, i.e., asset class and/or manager changes. However, in some circumstances, it may not be an appropriate benchmark for use with your specific account composition. For detailed report of the historical composition of this blend please contact your Financial Advisor.

Peer Groups

Peer Groups are a collection of similar investment strategies that essentially group investment products that share the same investment approach. Peer Groups are used for comparison purposes to compare and illustrate a client’s investment portfolio versus its peer across various quantitative metrics like performance and risk. Peer Group comparison is conceptually another form of benchmark comparison whereby the actual investment can be ranked versus its peer across various quantitative metrics.

All Peer Group data are provided by Investment Metrics, LLC.

The URL below provides all the definitions and methodology about the various Peer Groups

<https://www.invmetrics.com/style-peer-groups>

Peer Group Ranking Methodology

A percentile rank denotes the value of a product in which a certain percent of observations fall within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value.

The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low

statistical value. It is important to note that the same ranking methodology applies to all statistics, implying that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation denotes highest risk among peers.

In addition, values may be used to demonstrate quartile rankings. For example, the third quartile is also known as the 75th percentile, and the median is the 50th percentile.

Alternatives

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Traditional alternative investment vehicles are illiquid and usually are not

valuation provided will be as of the most recent date available and will be included in summaries of your assets. Such valuation may not be the most recent provided by the fund in which you are invested. No representation is made that the valuation is a market value or that the interest could be liquidated at this value. We are not required to take any action with respect to your investment unless valid instructions are received from you in a timely manner. Some positions reflected herein may not represent interests in the fund, but rather redemption proceeds withheld by the issuer pending final valuations which are not subject to the investment performance of the fund and may or may not accrue interest for the length of the withholding. Morgan Stanley does not engage in an independent valuation of your alternative investment assets. Morgan Stanley provides periodic information to you including the market value of an alternative investment vehicle based on information received from the management entity of the alternative investment vehicle or another service provider.

Traditional alternative investment vehicles often are speculative and include a high degree of risk. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to: • Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; • Lack of liquidity in that there may be no secondary market for a fund; • Volatility of returns; • Restrictions on transferring interests in a fund; • Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; • Absence of information regarding valuations and pricing; • Complex tax structures and delays in tax reporting; • Less regulation and higher fees than mutual funds; and • Risks associated with the operations, personnel, and processes of the manager. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund.

Indices are unmanaged and investors cannot directly invest in them. Composite index results are shown for illustrative purposes and do not represent the performance of a specific investment. Past performance is no guarantee of future results. Actual results may vary. Diversification does not assure a profit or protect against loss in a declining market. Any performance or related information presented has not been adjusted to reflect the impact of the additional fees paid to a placement agent by an investor (for Morgan Stanley placement clients, a one-time upfront Placement Fee of up to 3%, and for Morgan Stanley investment advisory clients, an annual advisory fee of up to 2.5%), which would result in a substantial reduction in the returns if such fees were incorporated.

For most investment advisory clients, the program account will be charged an asset-based wrap fee every quarter ("the Fee"). In general, the Fee covers investment advisory services and reporting. In addition to the Fee, clients will pay the fees and expenses of any funds in which their account is invested. Fund fees and expenses are charged directly to the pool of assets the fund invests in and impact the valuations. Clients must understand that these fees and expenses are an additional cost and will not be included in the Fee amount in the account statements.

As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, for an account with an initial value of \$100,000 and a 2.5% annual fee, if the gross performance is 5% per year over a three year period, the compounding effect of the fees will result in a net annual compound rate of return of approximately 2.40% per year over a three year period, and the total value of the client's portfolio at the end of the three year period would be approximately \$115,762.50 without the fees and \$107,372.63 with the fees. Please see the applicable Morgan Stanley Smith Barney LLC Form ADV Part 2A for more information including a description of the fee schedule. It is available at www.morganstanley.com/ADV <<http://www.morganstanley.com/ADV>> or from your Financial Advisor/Private Wealth Advisor.

Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing

important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley does not provide tax or legal advice. Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank.

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Money Market Funds

You could lose money in Money Market Funds. Although MMFs classified as government funds (i.e., MMFs that invest 99.5% of total assets in cash and/or securities backed by the U.S government) and retail funds (i.e., MMFs open to natural person investors only) seek to preserve value at \$1.00 per share, they cannot guarantee they will do so. The price of other MMFs will fluctuate and when you sell shares they may be worth more or less than originally paid. MMFs may impose a fee upon sale or temporarily suspend sales if liquidity falls below required minimums. During suspensions, shares would not be available for purchases, withdrawals, check writing or ATM debits. A MMF investment is not insured or guaranteed by the Federal Deposit Insurance Corporation or other government agency.

ALATI/BRICE/BRICE/MESSNER
Tel: 248-258-1750

Performance Update

Prepared on November 03, 2020 for:

CITY OF TROY EMPLOYEES RET SYS

CITY OF TROY EMPLOYEES RET SYS
C/O LISA R BURNHAM
ETF COMPLETION PORTFOLIO
500 W BIG BEAVER ROAD
TROY MI 48084-5254

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ACCOUNT(S) INCLUDED IN THIS REPORT

CITY OF TROY EMPLOYEES RET SYS

Reporting Currency: USD

MORGAN STANLEY WEALTH MANAGEMENT

Account Name and Address	Account Type/ Manager Name	Advisory/ Brokerage	Account Number	Date Opened	Date Closed	Performance (%) Inception - 11/02/20	Total Value (\$) 11/02/20	% of Portfolio 11/02/20
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER RD TROY	Western Core Plus Fixed Income	Advisory	333-XXX474	03/17/20	-	8.09	8,082,629.75	8.56
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER RD TROY	JP Morgan Equity Income	Advisory	333-XXX475	03/17/20	-	35.41	4,313,936.56	4.57
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER RD TROY	Aristotle Value Equity	Advisory	333-XXX476	03/17/20	-	44.35	4,600,267.26	4.87
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY	ICS - ETF Completion Portfolio	Advisory	333-XXX421	02/15/08	-	9.63	97.70	0.00
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY	Consulting Group Advisor	Advisory	333-XXX267	06/02/14	-	6.51	44,940,784.97	47.57
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY	Reinhart Partners - Active Interm Duration	Advisory	333-XXX268	06/02/14	-	2.76	8,463,339.02	8.96
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY	Winslow Large Cap Growth	Advisory	333-XXX148	09/08/14	-	14.55	7,896,656.80	8.36
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY	AAA	Advisory	333-XXX149	09/08/14	-	-	0.00	0.00
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY	Thompson Seigel SMid Val	Advisory	333-XXX152	09/08/14	-	1.25	7,023,750.24	7.44
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY	Delaware/Mondrian Intl ADR	Advisory	333-XXX153	09/08/14	-	-0.44	4,092,337.39	4.33
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY	ClearBridge Intl Growth ADR	Advisory	333-XXX829	08/21/19	-	15.44	5,060,729.64	5.36
Morgan Stanley Wealth Management Total							94,474,529.33	100.00

Investment, insurance and annuity products offered through Morgan Stanley Smith Barney LLC are: NOT FDIC INSURED | MAY LOSE VALUE | NOT BANK GUARANTEED | NOT A BANK DEPOSIT | NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY. All content within this Document applies to the accounts listed above or a subset thereof, unless otherwise indicated. The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

ACCOUNT(S) INCLUDED IN THIS REPORT

CITY OF TROY EMPLOYEES RET SYS

Reporting Currency: USD

MORGAN STANLEY WEALTH MANAGEMENT (Continued)								
Account Name and Address	Account Type/ Manager Name	Advisory/ Brokerage	Account Number	Date Opened	Date Closed	Performance (%) Inception - 11/02/20	Total Value (\$) 11/02/20	% of Portfolio 11/02/20
Total Portfolio							94,474,529.33	100.00

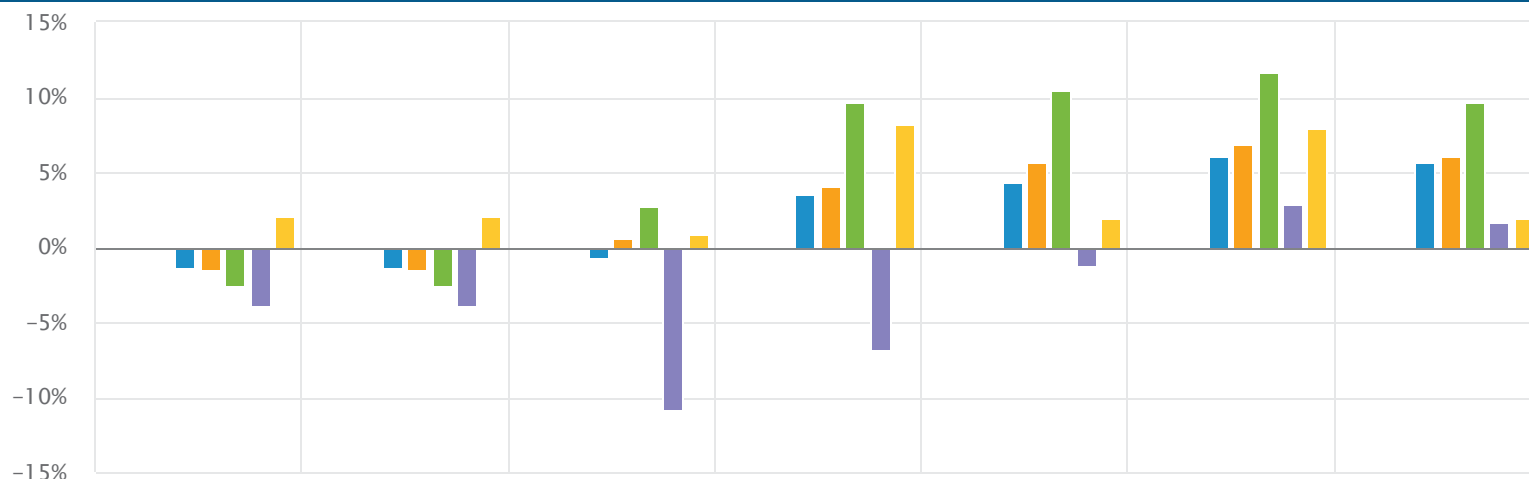
Investment, insurance and annuity products offered through Morgan Stanley Smith Barney LLC are: NOT FDIC INSURED | MAY LOSE VALUE | NOT BANK GUARANTEED | NOT A BANK DEPOSIT | NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY. All content within this Document applies to the accounts listed above or a subset thereof, unless otherwise indicated. The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

TIME WEIGHTED PERFORMANCE SUMMARY

CITY OF TROY EMPLOYEES RET SYS

As of October 31, 2020 | Reporting Currency: USD

RETURN % (GROSS AND NET OF FEES) VS. BENCHMARKS (ANNUALIZED)



	Month to Date 09/30/20 - 10/31/20	Quarter to Date 09/30/20 - 10/31/20	Year to Date 12/31/19 - 10/31/20	Last 12 Months 10/31/19 - 10/31/20	Last 3 Years 10/31/17 - 10/31/20	Last 5 Years 10/31/15 - 10/31/20	Performance Inception Month End 02/29/08 - 10/31/20
Beginning Total Value (\$)	94,899,318.27	94,899,318.27	96,256,829.02	96,209,170.46	84,696,512.83	77,662,916.84	39,693,586.09
Net Contributions/Withdrawals (\$)	42,996.11	42,996.11	-1,791,288.61	-5,732,513.93	-2,299,770.09	-8,196,242.53	10,483,859.91
Investment Earnings (\$)	-1,367,352.34	-1,367,352.34	-890,578.37	3,098,305.51	11,178,219.31	24,108,287.73	43,397,516.05
Ending Total Value (\$)	93,574,962.05	93,574,962.05	93,574,962.05	93,574,962.05	93,574,962.05	93,574,962.05	93,574,962.05
Return % (Gross of Fees)	-1.38	-1.38	-0.43	3.89	4.74	6.49	5.89
Return % (Net of Fees)	-1.44	-1.44	-0.76	3.48	4.27	6.06	5.68
Troy ERS Policy (%)	-1.52	-1.52	0.56	4.13	5.69	6.87	6.06
S&P 500 Total Return (%)	-2.66	-2.66	2.77	9.71	10.43	11.72	9.65
MSCI EAFE Net (%)	-3.99	-3.99	-10.80	-6.86	-1.24	2.85	1.68
MSCI EM Net (%)	2.06	2.06	0.87	8.25	1.94	7.92	1.99
Barclays Aggregate (%)	-0.45	-0.45	6.32	6.19	5.07	4.08	4.19
60% ACWI / 40% Citi WGBI (%)	-1.53	-1.53	2.60	5.93	5.48	6.70	4.58

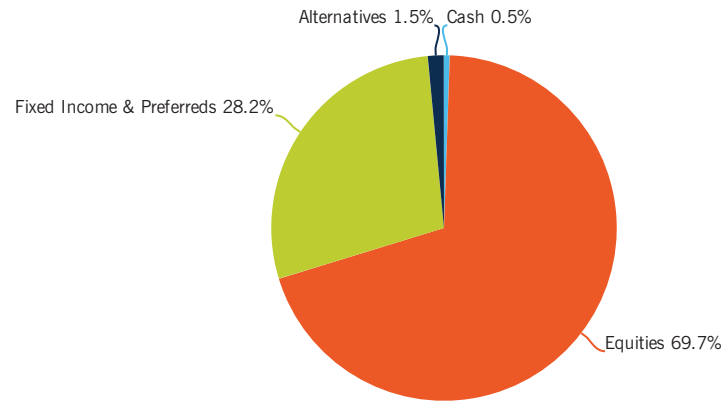
The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

ASSET ALLOCATION

CITY OF TROY EMPLOYEES RET SYS

As of October 31, 2020 | Reporting Currency: USD

ASSET ALLOCATION - ASSET CLASS



ASSET ALLOCATION

	Total Value (\$) 10/31/2020	% of Portfolio 10/31/2020
Cash	499,716.65	0.5
Equities	65,238,897.56	69.7
Fixed Income & Preferreds	26,411,430.87	28.2
Alternatives	1,412,472.78	1.5
TOTAL PORTFOLIO	93,562,517.86	100.0

TIME WEIGHTED PERFORMANCE DETAIL

CITY OF TROY EMPLOYEES RET SYS

As of October 31, 2020 | Reporting Currency: USD

RETURN % (GROSS AND NET OF FEES) VS. BENCHMARKS

Account Name/ Benchmark	Account Number	Performance Inception Date	Total Value (\$) 10/31/20	% Of Portfolio 10/31/20	Net/ Gross (Of Fees)	Month to Date (%) 09/30/20 - 10/31/20	Quarter to Date (%) 09/30/20 - 10/31/20	Year to Date (%) 12/31/19 - 10/31/20	Last 12 Months (%) 10/31/19 - 10/31/20	Last 3 Years (%) 10/31/17 - 10/31/20	Last 5 Years (%) 10/31/15 - 10/31/20	Performance Inception (%) to 10/31/20
ADVISORY		02/22/08	93,574,962.05	100.00		-1.44	-1.44	0.64	4.78	4.55	6.20	5.47
CITY OF TROY EMPLOYEES RET SYS (Consulting Group Advisor) - CG ADVISOR <i>Troy CGA Index Blend</i>	333-XXX267	06/03/14	44,510,853.22	47.57	NET GROSS	-1.59 -1.55 -1.67	-1.59 -1.55 -1.67	4.59 4.74 1.09	9.00 9.19 4.44	6.33 6.50 5.34	7.55 7.71 6.52	6.35 6.54 5.32
CITY OF TROY EMPLOYEES RET SYS (Reinhart Partners - Active Intern Duration) - REINHART - FIXED <i>BC Gov/Cr Intm</i>	333-XXX268	08/22/14	8,466,936.90	9.05	NET GROSS	-0.33 -0.23 -0.22	-0.33 -0.23 -0.22	5.19 5.61 5.69	5.12 5.58 5.67	4.01 4.44 4.36	2.85 3.26 3.37	2.77 3.17 3.08
CITY OF TROY EMPLOYEES RET SYS (Western Core Plus Fixed Income) - WAMCO CPFI <i>Barclays Aggregate</i>	333-XXX474	03/23/20	8,076,139.57	8.63	NET GROSS	-0.61 -0.53 -0.45	-0.61 -0.53 -0.45	8.00 8.35 6.30	- - -	- - -	- - -	8.00 8.35 6.30
CITY OF TROY EMPLOYEES RET SYS (Winslow Large Cap Growth) - WINSLOW - LARGE GROWTH <i>Russell 1000 Gr</i>	333-XXX148	09/11/14	7,863,268.00	8.40	NET GROSS	-3.52 -3.44 -3.40	-3.52 -3.44 -3.40	21.69 22.27 20.11	30.43 31.21 29.22	18.81 19.78 18.78	16.00 16.83 17.34	14.49 15.30 15.78
CITY OF TROY EMPLOYEES RET SYS (Thompson Seigel SMid Val) - TSW - SMID VALUE <i>Russell 2500 VL</i>	333-XXX152	09/11/14	6,851,079.21	7.32	NET GROSS	2.24 2.32 2.26	2.24 2.32 2.26	-18.61 -18.09 -16.54	-15.36 -14.71 -11.92	-3.55 -2.68 -2.14	0.83 1.63 3.92	0.85 1.63 2.89
CITY OF TROY EMPLOYEES RET SYS (ClearBridge Intl Growth ADR) - Clearbridge - INTERNATIONAL <i>MSCI EAFE Net</i>	333-XXX829	08/27/19	5,019,179.26	5.36	NET GROSS	-3.64 -3.57 -3.99	-3.64 -3.57 -3.99	5.06 5.45 -10.80	11.31 11.73 -6.86	- - -	- - -	14.75 15.33 0.61
CITY OF TROY EMPLOYEES RET SYS (Aristotle Value Equity) - Aristotote LCV <i>Russell 1000 VL</i>	333-XXX476	03/23/20	4,523,811.13	4.83	NET GROSS	-0.62 -0.54 -1.31	-0.62 -0.54 -1.31	41.95 42.31 33.61	- - -	- - -	- - -	41.95 42.31 33.61
CITY OF TROY EMPLOYEES RET SYS (JP Morgan Equity Income) - JPMorgan LCV <i>Russell 1000 VL</i>	333-XXX475	03/23/20	4,231,745.38	4.52	NET GROSS	-2.21 -2.13 -1.31	-2.21 -2.13 -1.31	32.83 33.17 33.61	- - -	- - -	- - -	32.83 33.17 33.61
CITY OF TROY EMPLOYEES RET SYS (Delaware/Mondrian Intl ADR) - Delaware - INTERNATIONAL <i>MSCI EAFE Net</i>	333-XXX153	09/10/14	4,031,851.68	4.31	NET GROSS	-2.93 -2.85 -3.99	-2.93 -2.85 -3.99	-19.32 -18.84 -10.80	-15.60 -14.98 -6.86	-6.87 -5.89 -1.24	-1.21 -0.34 2.85	-0.68 0.12 1.56

The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals. Year to Date(YTD), Quarter to Date(QTD) and Month to Date(MTD): Returns are for the period in which position or account was open.

TIME WEIGHTED PERFORMANCE DETAIL

CITY OF TROY EMPLOYEES RET SYS

As of October 31, 2020 | Reporting Currency: USD

RETURN % (GROSS AND NET OF FEES) VS. BENCHMARKS (Continued)

Account Name/ Benchmark	Account Number	Performance Inception Date	Total Value (\$) 10/31/20	% Of Portfolio 10/31/20	Net/ Gross (Of Fees)	Month to Date (%) 09/30/20 - 10/31/20	Quarter to Date (%) 09/30/20 - 10/31/20	Year to Date (%) 12/31/19 - 10/31/20	Last 12 Months (%) 10/31/19 - 10/31/20	Last 3 Years (%) 10/31/17 - 10/31/20	Last 5 Years (%) 10/31/15 - 10/31/20	Performance Inception (%) to 10/31/20
CITY OF TROY EMPLOYEES RET SYS (ICS - ETF Completion Portfolio) - CIC ETF COMPLETION PORTE. <i>FTSE Treasury Bill 3 Month</i>	333-XXX421	02/22/08	97.70	0.00	NET GROSS	0.00 0.00 0.01	0.00 0.00 0.01	0.17 0.11 0.56	0.31 0.23 0.86	1.16 1.20 1.62	0.67 0.74 1.16	9.64 9.72 0.62

The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.
Year to Date(YTD), Quarter to Date(QTD) and Month to Date(MTD): Returns are for the period in which position or account was open.

DISCLOSURES

Explanatory Notes and Disclosures: This document is designed to assist you and your Financial Advisor in understanding portfolio positions, composition and subsets thereof. It is designed solely for your individual use, is for informational purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security. Do not take action relying on this information without confirming its accuracy and completeness. Please read carefully all accompanying notes and disclosures provided in this Document.

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Graystone Consulting is a business of Morgan Stanley.

Additional information about your Floating Rate Notes: For floating rate securities, the estimated accrued interest and estimated annual income are based on the current floating coupon rate and may not reflect historic rates within the accrual period.

Important Information About Auction Rate Securities: For certain Auction Rate Securities there is no or limited liquidity. Therefore, the price(s) for these Auction Rate Securities are indicated as not available by a dash "-". There can be no assurance that a successful auction will occur or that a secondary market exists or will develop for a particular security.

Important Pricing Information: Prices of securities not actively traded may not be available, and are indicated by a dash "-".

Asset Classification: We classify assets based on general characteristics such as: income generation, underlying capital structure, or exposure to certain market sectors. As many assets contain characteristics of more than one asset class, allocations may be under or over inclusive. These classifications do not constitute a recommendation and may differ from the classification of instruments for regulatory or tax purposes. In addition, the Other asset class contains securities that are not included in the various asset class classifications. This can include, but is not limited to, non-traditional investments such as some Equity Unit Trusts, Index Options and Structured Investments issued outside of Morgan Stanley. Additionally, investments for which we are unable to procure market data to properly classify them will appear in the Other category.

Morgan Stanley Wealth Management: Morgan Stanley Wealth Management (custodian type "Morgan Stanley Wealth Management") is a registered trade name of Morgan Stanley Smith Barney LLC.

Additional information about your Structured Products: Structured Investments are complex products and may be subject to special risks, which may include, but are not limited to: loss of initial investment; issuer credit risk and price volatility resulting from any actual or anticipated changes to issuer's and/or guarantor's credit ratings or credit spreads; limited or no appreciation and limits on participation in any appreciation of underlying asset(s); risks associated with the underlying reference asset(s); no periodic payments; call prior to maturity; early redemption fees for market linked deposits; lower interest rates and/or yield compared to conventional debt with comparable maturity; unique tax implications; limited or no secondary market; and conflicts of interest due to affiliation, compensation or other factors which could adversely affect market value or payout to investors. Investors also should consider the concentration risk of owning the related security and their total exposure to any underlying asset.

Morgan Stanley & Co.: Morgan Stanley & Co. LLC ("Morgan Stanley & Co.") is an affiliate of Morgan Stanley Smith Barney LLC ("Morgan Stanley Wealth Management") and both are subsidiaries of

Morgan Stanley, the financial holding company. Morgan Stanley & Co. values shown on your Morgan Stanley Wealth Management statement may differ from the values shown in your official Morgan Stanley & Co. statement due to, among other things, different reporting methods, delays, market conditions and interruptions. The information shown is approximate and subject to updating, correction and other changes. Information being reported by Morgan Stanley Wealth Management on assets held by other custodians, which are related to Income, Performance, Tax Lots, Total Cost, Target Asset Allocation, Asset Classification and Gain/Loss may differ from that information provided by the custodian. In performance calculations, the inception date will align with the first date on which Morgan Stanley Wealth Management received account information from the custodian. If there are discrepancies between your official Morgan Stanley & Co. account statement and your Morgan Stanley Wealth Management supplemental client report, rely on the official Morgan Stanley & Co. account statement.

External Accounts: "External" generally refers to accounts, assets, and/or liabilities that you hold with other financial institutions and/or which may be custodied outside of Morgan Stanley (whose subsidiaries include Morgan Stanley Smith Barney LLC and Morgan Stanley & Co.) ("External Accounts"). External Accounts are not under administration or management at Morgan Stanley and are not reflected in your Morgan Stanley account statements. Information related to External Accounts is provided solely as a service to you and your Financial Advisor/Private Wealth Advisor. The information reference is based upon information provided by external sources which we believe to be reliable. However, we do not independently verify this information. As such, we do not warrant or guarantee that such information is accurate or timely, and any such information may be incomplete or condensed.

Information related to Income, Performance, Tax Lots, Total Cost, Target Asset Allocation, Asset Classification and Gain/Loss may differ from the information provided by your custodian. External information presented herein is subject to, and does not supersede, the confirmations and account statements provided by your custodian. Values shown in an account statement from your custodian may differ from the values shown here due to, among other things, different reporting methods, delays, market conditions and interruptions. If there are discrepancies between your custodian's official account statement and this material, rely on the custodian's official account statement. We are not obligated to notify you or your Financial Advisor/Private Wealth Advisor if information changes. In performance calculations, the inception date referenced will reflect the first date on which Morgan Stanley received account information from the custodian. If information on an External Account cannot be reported, it will be noted.

Assets not custodied with Morgan Stanley are not covered by SIPC protection at Morgan Stanley or by additional protection under Morgan Stanley's excess insurance coverage plans. However, these assets may be subject to SIPC coverage at the entity at which they are custodied.

Timing of Feeds: Account and Position data for Morgan Stanley & Co. and External Accounts is obtained from sources that we believe to be reliable. However, Morgan Stanley Wealth management does not guarantee its accuracy or timeliness as such information may be incomplete, condensed, or based on differing points of time. Please refer to the "Last Update Date" for information regarding when the data was last refreshed. You should not take any action relying upon this information without confirming its accuracy and completeness.

Manually Added assets: "Manually Added" generally refers to accounts, assets, and/or liabilities, as applicable, that you hold with other financial institutions and/or which may be custodied outside of Morgan Stanley (whose subsidiaries include Morgan Stanley Smith Barney LLC and Morgan Stanley & Co.) ("Manually Added External Accounts"). The Manually Added External Accounts referenced are generally not held with Morgan Stanley and are not under administration or management at Morgan Stanley. Information about such Manually Added External Accounts is manually inputted, updated and maintained solely by you and/or your Financial Advisor/Private Wealth Advisor. Morgan Stanley may include information about these Manually Added External Accounts solely as a service to you and your Financial Advisor/Private Wealth Advisor. We do not independently verify any information related to your Manually Added External Accounts. As such, we do not warrant or guarantee that such information is accurate or timely, and any such information may be incomplete or condensed. Valuations and other information about these assets may be provided by you and/or your Financial Advisor/Private Wealth Advisor and are generally based upon estimates. The information is used for position, asset allocation, and product allocation reporting purposes but is not, however, reflected in your Morgan Stanley account statements. Income values, including Estimated Annual Income and Projected Income, are not calculated for Manually Added External Accounts. The information being reported by Morgan Stanley on Manually Added External Accounts related to Performance, Tax Lots, Total Cost, Target Asset Allocation, Asset Classification and Gain/Loss may differ from the information provided to you by the custodian of those assets. If there are discrepancies between your custodian's official account statement and this material, rely on the custodian's official account statement. The inception date referenced in this view will reflect the date on which information about the Manually Added External Accounts was input by you and/or your Financial Advisor/Private Wealth Advisor. If information on a Manually Added asset cannot be reported, it will be noted.

Assets not custodied with Morgan Stanley are not covered by SIPC protection at Morgan Stanley or by additional protection under Morgan Stanley's excess insurance coverage plans. However, these assets may be subject to SIPC coverage at the entity at which they are custodied.

Performance: Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, dividends, interest and income. Depending on the opening or closing date of the account or position, the performance referenced may be for a portion of the time period identified. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Please contact your Financial Advisor for up-to-date performance information. Past performance is not a guarantee of future results. Quotations of performance appearing in this report may include performance experienced in legacy accounts which have been closed and purged, and as such are not included on the Accounts Included in This Report page.

Market values used for performance calculation do not include Performance Ineligible Assets and thus may differ from asset allocation market values. Common examples of Performance Ineligible Assets

include life insurance and annuities as well as Manually Added and External accounts, assets and liabilities.

Unless otherwise indicated, performance is a composite calculation of the entire portfolio and may include brokerage and investment advisory accounts as well as assets for different accounts included in this report. The accounts included in the composite may have (or have had) different investment objectives and strategies, been subject to different restrictions, and incurred different types of fees, markups, commissions and other charges. Accordingly, performance results may blend the performance of assets and strategies that may not have been available in all of the accounts at all times during the reporting period. In addition, accounts in the composite may have changed from brokerage to advisory or vice versa. Accounts may also have moved from one advisory program to another (including from a discretionary program to a non-discretionary program).

For Morgan Stanley Smith Barney LLC accounts, performance information may cover the full history of the account(s) or just the performance of an account(s) since the inception of the current program(s). Performance results on individual accounts will vary and may differ from the composite returns. Your Financial Advisor can provide you with individual account portfolio composition and performance information. For investment advisory accounts, please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 or applicable disclosure brochure and any applicable brokerage commission and/or fee schedule for a full disclosure of fees and expenses. Your Financial Advisor will provide those documents to you upon request. For brokerage accounts, please speak to your Financial Advisor for more information on commissions and other account fees and expenses.

Performance inception date does not necessarily correspond to the account opening date. Where multiple accounts are included in performance calculations, the inception date is the oldest performance inception. Performance data may not be available for all periods as some accounts included in performance may have more recent performance inception dates. Consequently, the actual performance for a group of accounts may differ from reported performance. Please ask your Financial Advisor for the performance inception date for each account.

Gross of Fees: The impact of program fees can be material. These program fees are deducted based on your billing cycle and may have a compounding effect on performance. As fees are deducted periodically throughout the year, the compounding effect may increase the impact of the fees by an amount directly related to the gross account performance.

Indices: Benchmark indices and blends included in this material are for informational purposes only, are provided solely as a comparison tool and may not reflect the underlying composition and/or investment objective(s) associated with the account(s). In some circumstances, the benchmark index may not be an appropriate benchmark for use with the specific composite portfolio. For instance, an index may not take into consideration certain changes that may have occurred in the portfolio since the inception of the account(s), (e.g., changes from a brokerage to an advisory account or from one advisory program to another, asset class changes, or index changes for individual managers). The volatility of the index used for comparison may be materially different from that of the performance shown. Indices are unmanaged and not available for direct investment. Index returns do not take into account fees or other charges. Such fees and charges would reduce performance. Please see the Benchmark Definitions section of this material for additional information on the indices used for comparison.

Performance Inception Month End: Performance Inception Month End refers to performance calculated from the end of the month in which the accounts became eligible for performance. Calculating performance from the Performance Inception Month End allows for a comparison to be made to appropriate benchmarks. Performance Inception Month End does not necessarily correspond to the account opening date.

Additional information about your Alternative Investments: Your interests in Alternative Investments, which may have been purchased through us, are generally not held here, and are generally not covered by SIPC. The information provided to you: 1) is included as a service to you, and certain transactions may not be reported; 2) is derived from you or another external source for which we are not responsible, and may have been modified to take into consideration capital calls or distributions to the extent applicable; 3) may not reflect actual shares, share prices, or values; 4) may include invested or distributed amounts in addition to a fair value estimate; and 5) should not be relied upon for tax reporting purposes. Notwithstanding the foregoing, 1) to the extent this report displays Alternative Investment positions within a Morgan Stanley Individual Retirement Account ("IRA"), such positions are held by Morgan Stanley Smith Barney LLC as the custodian of your Morgan Stanley IRA; and 2) if your Alternative Investment position(s) is held by us and is registered pursuant to the Securities Act of 1933, as amended, your Alternative Investment position(s) is covered by SIPC.

Alternatives may be either traditional alternative investment vehicles or non-traditional alternative strategy vehicles. Traditional alternative investment vehicles may include, but are not limited to, Hedge Funds, Fund of Funds (both registered and unregistered), Exchange Funds, Private Equity Funds, Private Credit Funds, Real Estate Funds, and Managed Futures Funds. Non-traditional alternative strategy vehicles may include, but are not limited to, Open or Closed End Mutual Funds, Exchange-Traded and Closed-End Funds, Unit Investment Trusts, exchange listed Real Estate Investment Trusts (REITs), and Master Limited Partnerships (MLPs). These non-traditional alternative strategy vehicles also seek alternative-like exposure but have significant differences from traditional alternative investment vehicles. Non-traditional alternative strategy vehicles may behave like, have characteristics of, or employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives, and options, which can increase volatility and the risk of investment loss. Characteristics such as correlation to traditional markets, investment strategy, and market sector exposure can play a role in the classification of a traditional security being classified as alternative.

Traditional alternative investment vehicles are illiquid and usually are not valued daily. The estimated valuation provided will be as of the most recent date available and will be included in summaries of your assets. Such valuation may not be the most recent provided by the fund in which you are invested. No representation is made that the valuation is a market value or that the interest could be liquidated at this value. We are not required to take any action with respect to your investment unless valid instructions are received from you in a timely manner. Some positions reflected herein may not represent

interests in the fund, but rather redemption proceeds withheld by the issuer pending final valuations which are not subject to the investment performance of the fund and may or may not accrue interest for the length of the withholding. Morgan Stanley does not engage in an independent valuation of your alternative investment assets. Morgan Stanley provides periodic information to you including the market value of an alternative investment vehicle based on information received from the management entity of the alternative investment vehicle or another service provider.

It is important to note in this report that Morgan Stanley makes a distinction between Alternative Investment products, and products classified as Alternatives by their asset class. Morgan Stanley categorizes traditional and non-traditional alternative investment vehicles under the category "Alternatives" in asset classification based view. For product based views, traditional alternative investments vehicles are classified under the category "Other"; this differs from your official Morgan Stanley account statement, which categorizes traditional alternative investment vehicles such as Hedge Funds under the category "Alternative Investments". Non-traditional alternative strategy vehicles are classified based on their investment type, such as Mutual Fund or Exchange-Traded Funds within both this report and your Morgan Stanley account statement.

Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank.

SMA/WRAP Fee: Overlay Managers or Executing Sub-Managers ("managers") in some of Morgan Stanley's Separately Managed Account ("SMA") programs may affect transactions through broker-dealers other than Morgan Stanley or our affiliates. If your manager trades with another firm, you may be assessed costs by the other firm in addition to Morgan Stanley's fees. Those costs will be included in the net price of the security, not separately reported on trade confirmations or account statements. Certain managers have historically directed most, if not all, of their trades to outside firms. Information provided by managers concerning trade execution away from Morgan Stanley is summarized at: www.morganstanley.com/wealth/investmentsolutions/pdfs/adv/sotresponse.pdf. For more information on trading and costs, please refer to the ADV Brochure for your program(s), available at www.morganstanley.com/ADV, or contact your Financial Advisor/Private Wealth Advisor.

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GENERAL DEFINITIONS

Dollar-Weighted Return (Internal Rate of Return): A return calculation that measures the actual performance of a portfolio over the reporting period. Since dollar weighted returns include the impact of client contributions and withdrawals, they should not be compared to market indices or used to evaluate the performance of a manager, but can be used to evaluate progress toward investment goals.

Gross of Fees: Performance results depicted as "gross" of fees do not reflect the deduction of any wrap fee, investment management fee, trade commissions, and/or other account fees. Your actual returns are lower after deducting these expenses. Please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 Brochure for advisory accounts and/or any applicable brokerage account trade confirmation statements for a full disclosure of the applicable charges, fees and expenses. Your Financial Advisor will provide those documents to you upon request.

Investment Earnings: A combination of the income received and total portfolio value increase or decrease, excluding net contributions and withdrawals, over the reporting period.

Net Contributions/Withdrawals: The net value of cash and securities contributed to or withdrawn from the account(s) during the reporting period. Net contributions and withdrawals may include advisory fees for advisory accounts.

Net of Fees: Performance results depicted as "net" of fees shall mean that any wrap fee, investment management fees, trade commissions, and/or other account fees have been deducted. Any other fees or expenses associated with the account, such as third party custodian fees, may not have been deducted. Please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 Brochure for advisory accounts and/or any applicable brokerage account trade confirmation statements for a full disclosure of the applicable charges, fees and expenses. Your Financial Advisor will provide those documents to you upon request.

Time-Weighted Return: A return calculation that measures the investment performance of a portfolio over the reporting period. Time weighted returns do not include the impact of client contributions and withdrawals and therefore, may not reflect the actual rate of return the client received. Time weighted returns isolate investment actions and can be compared to benchmarks and used to evaluate the performance of a manager.

Total Value: "Total Value" represents the Market Value of the portfolio or Asset Class referenced and includes the accrual of interest and dividends. Total Value in the Asset Allocation view prior to January 2014 does not reflect the accrual of interest and dividends. Total Value for Morgan Stanley & Co. and External accounts also does not include accrued interest and dividends.

BENCHMARK DEFINITIONS

60% ACWI / 40% Citi WGBI: The current allocation is comprised of 40.00% Citi WGBI Unhedged, 60.00% MSCI AC World Net.

Troy ERS Policy: The current allocation is comprised of 29.00% BC Gov/Cr Intm, 7.00% MSCI REIT Gross, 5.00% FTSE Treasury Bill 3 Month, 19.00% MSCI ACWI Ex USA NR USD, 40.00% Russell 3000.

Troy CGA Index Blend: The current allocation is comprised of 8.00% BC TIPS, 11.00% Barclays Govt/Credit Bond, 9.00% BC Universal, 57.00% MSCI AC World Net, 3.00% FTSE Treasury Bill 3 Month, 7.00% BC Multiverse Hedged Index, 5.00% MSCI REIT Net.

Citi WGBI Unhedged: Citi World Government Bond Index is a market capitalization-weighted index consisting of the government bond markets of certain countries. Country eligibility is determined based on market capitalization and investability criteria. All issues have a remaining maturity of at least one year.

MSCI AC World Net: The MSCI ACWI Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The MSCI ACWI consists of 46 country indexes comprising 23 developed and 23 emerging market country indexes. The developed market country indexes included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States. The emerging market country indexes included are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates (as of June 2014). Net total return indices reinvest dividends after the deduction of withholding taxes, using (for international indices) a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

FTSE Treasury Bill 3 Month: Equal dollar amounts of three-month Treasury bills are purchased at the beginning of each of three consecutive months. As each bill matures, all proceeds are rolled over or reinvested in a new three-month bill. The income used to calculate the monthly return is derived by subtracting the original amount invested from the maturity value. The yield curve average is the basis for calculating the return on the index. The index is rebalanced monthly by market capitalization. The 90-Day Treasury Bill is a short-term obligation issued by the United States government. T-bills are purchased at a discount to the full face value, and the investor receives the full value when they mature. The difference of discount is the interest earned. T-bills are issued in denominations of \$10,000 auction and \$1,000 increments thereafter.

MSCI REIT Gross: The MSCI US REIT Index is a free float-adjusted market capitalization weighted index that is comprised of equity REITS that are included in the MSCI US Investable Market 2500 Index, with the exception of specialty equity REITs that do not generate a majority of their revenue and income from real estate rental and leasing operations. The index represents approximately 85% of the US REIT universe.

BC TIPS: The Barclays U.S. TIPS Index is an unmanaged market index comprised of all U.S. Treasury Inflation Protected Securities rated investment grade (Baa3 or better), have at least one year to final maturity, and at least \$250 million par amount outstanding.

MSCI EAFE Net: The MSCI EAFE Index -Europe, Australasia, Far East - is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US and Canada. The MSCI EAFE Index consists of the following 21 developed market country indexes: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom (as of June 2014). Net total return indices reinvest dividends after the deduction of withholding taxes, using (for international indices) a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

MSCI EM Net: The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. The MSCI Emerging Markets Index consists of the following 23 emerging market country indexes: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates (as of June 2014). Net total return indices reinvest dividends after the deduction of withholding taxes, using (for international indices) a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

MSCI ACWI Ex USA NR USD: The MSCI ACWI Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The MSCI ACWI consists of 46 country indexes comprising 23 developed and 23 emerging market country indexes. The developed market country indexes included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States. The emerging market country indexes included are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates (as of June 2014). This index is excluding the United States. Performance is showing net withholding tax. Net total return indices reinvest dividends after the deduction of withholding taxes, using (for international indices) a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

S&P 500 Total Return: The S&P 500 has been widely regarded as the best single gauge of the large cap U.S. equities market since the index was first published in 1957. The index has over \$5.58 trillion benchmarked, with index assets comprising approximately \$1.31 trillion of this total. The index includes 500 leading companies in leading industries of the U.S. economy, capturing 75% coverage of U.S.

equities. This index includes dividend reinvestment.

Russell 2500 VL: The Russell 2500 Value Index is representative of the U.S. market for smaller to medium capitalization stocks containing those companies in the Russell 2500 Index with lower price-to-book ratios and lower forecasted growth.

Russell 1000 Gr: The Russell 1000 Growth Index is representative of the U.S. market for large capitalization stocks containing those companies in the Russell 1000 Index with higher price-to-book ratios and higher forecasted growth.

Russell 1000 VL: The Russell 1000 Value Index is representative of the U.S. market for large capitalization stocks containing those companies in the Russell 1000 Index with lower price-to-book ratios and lower forecasted growth.

BC Gov/Cr Intm: The Barclays Government/Credit Bond Index contains bonds that are investment grade and that have at least one year to maturity. The Barclays Intermediate Government/Credit Bond Index is composed primarily of bonds covered by the Barclays Government/Credit Bond Index with maturities between one and 9.99 years.

Russell 3000: The Russell 3000 Index measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market.

BC Universal: The BC U.S. Universal is a combination of indices. It includes the following indices: BC Aggregate; Corporate High Yield; Eurodollar (Ex-Aggregate); Emerging Markets (Ex-Aggregate/Eurodollar); 144A (Ex-Aggregate), and Commercial Mortgage Backed Securities (CMBS). Each asset class is subject to minimum outstanding size threshold. These thresholds usually increase with the expansion of average issue size. All securities must be dominated in U.S. dollars. All issues must be fixed rate, with the exception of certain emerging-market debt bearing a floating-rate coupon. All securities and certificates must have a remaining maturity of at least one year. There are no rating constraints. Municipal debt, private placements, and non-dollar-denominated issues are excluded.

MSCI REIT Net: The MSCI US REIT Index is a free float-adjusted market capitalization weighted index that is comprised of equity REITS that are included in the MSCI US Investable Market 2500 Index, with the exception of specialty equity REITs that do not generate a majority of their revenue and income from real estate rental and leasing operations. The index represents approximately 85% of the US REIT universe.

Barclays Govt/Credit Bond: The Barclays Government/Credit Bond Index contains bonds that are investment grade and that have at least one year to maturity.

BC Multiverse Hedged Index: The Barclays Capital Multiverse Index provides a broad-based measure of the international fixed-income bond market. The index represents the union of the Global Aggregate and Global High Yield indices. In this sense, we use the term (Multiverse) to refer to the concept of multiple universes in a single marco index. Hedged.

Barclays Aggregate: The Barclays US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency).

City of Troy Employees' Retirement System
11/2/2020

Asset Class	Mandate	Market Value	Portfolio %	Policy Target	Value at Policy Target	Rebalance	Value after Reallocation	% After Reallocation	% Over (Under)	\$ Value Over (Under)
Global Equities (40% - 70%)		\$66,075,398.20	70.0%	59.0%	\$55,715,851.72	\$0	\$66,075,398.20	70.0%	11.0%	\$10,359,546.48
Domestic Equities (30% - 50%)		\$47,707,745.53	50.5%	40.0%	\$37,773,458.79	\$0	\$47,707,745.53	50.5%	10.5%	\$9,934,286.74
Winslow	Domestic Large Cap Growth Equity	\$7,916,755.96	8.4%			\$0	\$7,916,755.96	8.4%		
JP Morgan Equity Income	Domestic Large Cap Value Equity	\$4,309,601.01	4.6%			\$0	\$4,309,601.01	4.6%		
Aristotle	Domestic Large Cap Value Equity	\$4,598,044.36	4.9%			\$0	\$4,598,044.36	4.9%		
iShares S&P 500 (IVV)	Domestic Large Cap Core Equity	\$5,624,504.08	6.0%			\$0	\$5,624,504.08	6.0%		
Thompson Siegel	Domestic Smid Cap Value	\$7,009,602.44	7.4%			\$0	\$7,009,602.44	7.4%		
Vanguard Total Market (VTI)	Domestic Large Cap Equity	\$18,249,237.68	19.3%			\$0	\$18,249,237.68	19.3%		
International Equities (4% - 24%)		\$18,367,652.67	19.5%	19.0%	\$17,942,392.93	\$0	\$18,367,652.67	19.5%	0.5%	\$425,259.74
ClearBridge International Growth	International Equity	\$5,058,888.04	5.4%			\$0	\$5,058,888.04	5.4%		
Delaware International Value	International Equity	\$4,081,006.62	4.3%			\$0	\$4,081,006.62	4.3%		
iShares MSCI EAFE (EFA)	International Equity	\$4,488,620.76	4.8%			\$0	\$4,488,620.76	4.8%		
iShares Emerging Mkts. (EEM)	Emerging Markets Equity	\$4,739,137.25	5.0%			\$0	\$4,739,137.25	5.0%		
Fixed Income (25% - 50%)		\$26,416,367.73	28.0%	29.0%	\$27,385,757.62	\$0	\$26,416,367.73	28.0%	-1.0%	(\$969,389.89)
Reinhart Inter Gov / Credit	Domestic Fixed Income	\$8,469,425.89	9.0%			\$0	\$8,469,425.89	9.0%		
Western Core Plus	Domestic Fixed Income	\$8,076,138.46	8.6%			\$0	\$8,076,138.46	8.6%		
Loomis Sayles Bond (LSBDX)	Domestic Fixed Income	\$5,447,737.36	5.8%			\$0	\$5,447,737.36	5.8%		
PIMCO Real Return (PRLPX)	Domestic Fixed Income	\$4,423,066.02	4.7%			\$0	\$4,423,066.02	4.7%		
Real Estate (0% - 9%)		\$1,442,164.40	1.5%	7.0%	\$6,610,355.29	\$0	\$1,442,164.40	1.5%	-5.5%	(\$5,168,190.89)
Vanguard REIT (VNQ)	REIT	\$1,442,164.40	1.5%			\$0	\$1,442,164.40	1.5%		
Cash (0% - 10%)		\$499,716.65	0.5%	5.0%	\$4,721,682.35	\$0	\$499,716.65	0.5%	-4.5%	(\$4,221,965.70)
Cash - Cont/ Distr	Cash	\$97.70	0.0%			\$0	\$97.70	0.0%		
Cash -Managed & ETF / MF Accounts	Cash	\$499,618.95	0.5%			\$0	\$499,618.95	0.5%		
Combined Accounts		\$94,433,646.98	100.0%	100.0%	\$94,433,646.98	\$0	\$94,433,646.98	100.0%		

Source: Morgan Stanley

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TIMOTHY M. BRICE CIMA
INSTITUTIONAL CONSULTANT / INSTITUTIONAL DIRECTOR
248-593-2475
34901 WOODWARD AVENUE, SUITE 300
BIRMINGHAM MI 48009

Prepared Exclusively For City of Troy Employees' Retirement System

WEALTH STRATEGIES ANALYSIS

NOVEMBER 2020

Graystone Consulting Southeast Michigan
Institutional Consulting Directors
timothy.brice@msgraystone.com
248-593-2475
BIRMINGHAM, MI

EXECUTIVE SUMMARY

The Wealth Strategies Analysis is broken into multiple sections and sub-sections. The sub-sections are designed to stand alone or may be combined with other sub-sections to provide a more complete picture of financial health.

SECTION	SUB-SECTION	DESCRIPTION	ASSUMPTIONS
Linear Growth Analysis	Assumptions and Asset Allocations	An overview of various portfolios and cash considerations along with risk and return assumptions.	Returns: Morgan Stanley's forecasts Output: Gross of cash inflows, cash outflows and advisory fees
	Expected Performance over Time	A linear illustration of how wealth evolves over time assuming that portfolios achieve their annual return assumption each year. There is no guarantee that these assumptions will be achieved.	Returns: Morgan Stanley's forecasts Output: Net of cash inflows, cash outflows and advisory fees
Monte Carlo Analysis	Hypothetical Performance	An analysis of the range of results that various portfolios may achieve over time.	Returns: Morgan Stanley's forecasts Output: Net of cash inflows, cash outflows and advisory fees
	Probability of Success	A summary of the chances that various portfolios achieve certain goals.	Returns: Morgan Stanley's forecasts Output: Net of cash inflows, cash outflows and advisory fees
Historical Analysis	Historical Performance	A report of the historical blended returns for various portfolios based upon asset classes using indices as proxies.	Returns: Historical Output: Gross of cash inflows, cash outflows and advisory fees
	Contribution to Risk and Return	A representation of how much each asset class contributed to historical risk and return for various portfolios.	Returns: Historical Output: Gross of cash inflows, cash outflows and advisory fees
	Market Scenarios	A hypothetical illustration of how various portfolios would have performed historically given a specific change in a market scenario.	Returns: Historical Output: Gross of cash inflows, cash outflows and advisory fees

¹ Important: The projections or other information generated by the Wealth Strategies Analysis Tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Results generated by a Monte Carlo analysis will vary with each use and over time because each portfolio simulation is randomly generated. See the Appendix for assumptions, asset class inputs, a glossary of terms, a description of the risks and disclosures.

ASSUMPTIONS

SUMMARY

Actuarial target return of 6.5%
Market value as of November 2, 2020

Portfolios	Value	Details
City of Troy ERS	\$94,433,647	

-
- 1 The portfolios above are constructed using indices as proxies. Indices are unmanaged. It is not possible to invest directly in an index. Asset allocation does not assure a profit or protect against loss.
- 2 Annual returns are shown gross of cash inflows, cash outflows and advisory fees.
- 3 Past performance is no guarantee of future results.
-

ASSET ALLOCATIONS

SUMMARY

	Current Scenario	Target	Mix 5 Strategic	58/25/17	53/19/28
Cash	0.5%	5.0%	0.0%	0.0%	0.0%
Equities	70.1%	59.3%	78.0%	58.0%	53.0%
US Equities	50.6%	40.2%	38.0%	33.0%	28.0%
US Large Cap Growth	17.4%	13.5%	12.0%	10.0%	8.0%
US Large Cap Value	18.4%	13.5%	15.0%	14.0%	12.0%
US Mid Cap Growth	2.8%	3.3%	1.0%	1.5%	1.0%
US Mid Cap Value	6.5%	3.3%	4.0%	2.0%	2.0%
US Small Cap Growth	0.9%	3.3%	2.0%	2.5%	2.0%
US Small Cap Value	4.6%	3.3%	4.0%	3.0%	3.0%
International Equities	13.7%	14.3%	30.0%	19.0%	18.0%
International Equities	0.0%	0.0%	27.0%	16.0%	15.0%
Japan Equities	0.0%	0.0%	3.0%	0.0%	0.0%
Intl Small Cap Equities	0.0%	0.0%	0.0%	3.0%	3.0%
Emerging & Frontier Mkt	5.8%	4.8%	10.0%	6.0%	7.0%
Fixed Income & Preferreds	28.0%	29.0%	22.0%	25.0%	19.0%
Short Term Fixed Income	0.0%	0.0%	10.0%	6.0%	4.0%
US Fixed Income Taxable	19.8%	29.0%	6.0%	11.0%	8.0%
Intermed Term Govt/Corp	9.0%	0.0%	0.0%	0.0%	0.0%
Securitized	0.0%	0.0%	0.0%	3.0%	2.0%
US Taxable Core	10.8%	0.0%	0.0%	8.0%	6.0%
Intl Fixed Income	0.7%	0.0%	0.0%	0.0%	0.0%
Inflation Linked Secs	4.7%	0.0%	1.0%	0.0%	0.0%
Preferred Securities	0.0%	0.0%	0.0%	2.0%	2.0%
High Yield Fixed Income	2.2%	0.0%	4.0%	4.0%	3.0%

1 The portfolios above are constructed using indices as proxies. Indices are unmanaged. It is not possible to invest directly in an index. Asset allocation does not assure a profit or protect against loss.

2 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.

3 Annual returns are shown gross of cash inflows, cash outflows and advisory fees.

4 Past performance is no guarantee of future results.

ASSET ALLOCATIONS

SUMMARY (CONTINUED)

	Current Scenario	Target	Mix 5 Strategic	58/25/17	53/19/28
Emerging Mkt Fixed Income	0.6%	0.0%	1.0%	2.0%	2.0%
Alternatives	1.5%	7.0%	0.0%	17.0%	28.0%
Real Assets	1.5%	7.0%	0.0%	4.0%	7.0%
REITs	1.5%	7.0%	0.0%	2.0%	2.5%
MLP/Energy Infrastructure	0.0%	0.0%	0.0%	2.0%	2.5%
Infrastructure	0.0%	0.0%	0.0%	0.0%	2.0%
Equity Hedge Assets	0.0%	0.0%	0.0%	2.0%	3.0%
Managed Futures	0.0%	0.0%	0.0%	2.0%	3.0%
Equity Return Assets	0.0%	0.0%	0.0%	3.0%	5.0%
Equity Long/Short	0.0%	0.0%	0.0%	3.0%	5.0%
Private Investments	0.0%	0.0%	0.0%	8.0%	13.0%
Private Real Estate	0.0%	0.0%	0.0%	3.0%	4.0%
Private Equity	0.0%	0.0%	0.0%	5.0%	7.0%
Private Credit	0.0%	0.0%	0.0%	0.0%	2.0%
Strategic Assumptions					
Annual Return	5.8%	5.4%	6.5%	6.4%	6.8%
Standard Deviation	10.5%	9.7%	11.3%	9.9%	9.9%
Sharpe Ratio	0.45	0.44	0.48	0.53	0.57
Annual Yield	2.1%	1.9%	2.1%	2.2%	2.3%
Secular Assumptions					
Annual Return	7.5%	7.0%	7.8%	7.7%	8.0%
Standard Deviation	11.0%	10.1%	11.9%	10.4%	10.3%
Sharpe Ratio	0.44	0.43	0.43	0.49	0.51
Annual Yield	2.7%	2.6%	2.6%	2.6%	2.6%

1 The portfolios above are constructed using indices as proxies. Indices are unmanaged. It is not possible to invest directly in an index. Asset allocation does not assure a profit or protect against loss.

2 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.

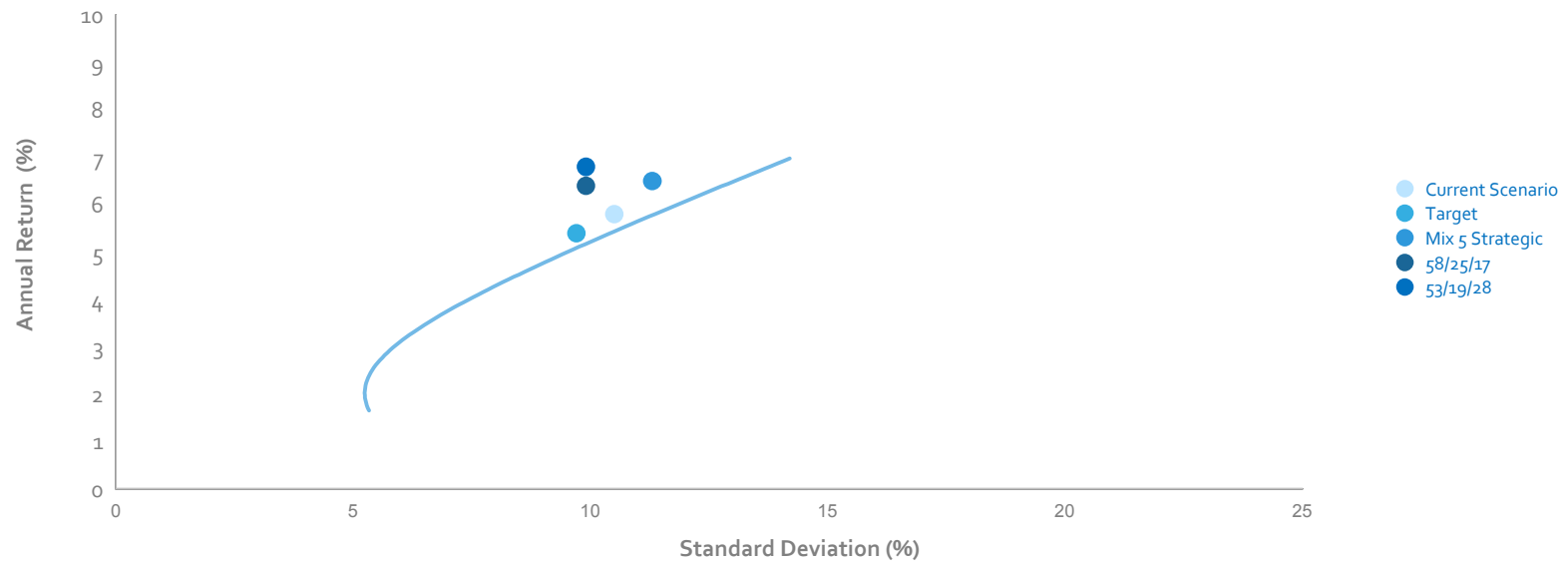
3 Annual returns are shown gross of cash inflows, cash outflows and advisory fees.

4 Past performance is no guarantee of future results.

EFFICIENT FRONTIER

SUMMARY

Efficient Frontier



	Current Scenario	Target	Mix 5 Strategic	58/25/17	53/19/28
Strategic Assumptions					
Annual Return	5.8%	5.4%	6.5%	6.4%	6.8%
Standard Deviation	10.5%	9.7%	11.3%	9.9%	9.9%
Sharpe Ratio	0.45	0.44	0.48	0.53	0.57
Annual Yield	2.1%	1.9%	2.1%	2.2%	2.3%

¹ This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.
² Past performance is no guarantee of future results.

EXPECTED PERFORMANCE OVER TIME

SUMMARY: 2020 - 2029

Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Current Scenario										
Beginning Assets	94,433,647	99,895,830	105,673,954	111,786,293	118,252,179	125,092,061	132,327,572	139,981,597	150,498,697	161,805,969
Interest and Dividends	2,000,648	2,116,368	2,238,782	2,368,277	2,505,261	2,650,170	2,803,459	3,810,752	4,097,062	4,404,883
Capital Appreciation	3,461,535	3,661,755	3,873,557	4,097,609	4,334,621	4,585,342	4,850,565	6,706,348	7,210,210	7,751,927
Cash Inflows	0	0	0	0	0	0	0	0	0	0
Cash Outflows	0	0	0	0	0	0	0	0	0	0
Fees	0	0	0	0	0	0	0	0	0	0
Ending Assets	99,895,830	105,673,954	111,786,293	118,252,179	125,092,061	132,327,572	139,981,597	150,498,697	161,805,969	173,962,779
Target										
Beginning Assets	94,433,647	99,530,708	104,902,884	110,565,023	116,532,776	122,822,640	129,451,999	136,439,178	145,990,035	156,209,461
Interest and Dividends	1,840,245	1,939,573	2,044,261	2,154,600	2,270,895	2,393,467	2,522,654	3,550,532	3,799,072	4,065,010
Capital Appreciation	3,256,816	3,432,603	3,617,878	3,813,153	4,018,968	4,235,892	4,464,525	6,000,326	6,420,353	6,869,784
Cash Inflows	0	0	0	0	0	0	0	0	0	0
Cash Outflows	0	0	0	0	0	0	0	0	0	0
Fees	0	0	0	0	0	0	0	0	0	0
Ending Assets	99,530,708	104,902,884	110,565,023	116,532,776	122,822,640	129,451,999	136,439,178	145,990,035	156,209,461	167,144,254
Mix 5 Strategic										
Beginning Assets	94,433,647	100,548,073	107,058,398	113,990,257	121,370,942	129,229,514	137,596,916	146,506,094	157,864,543	170,103,599
Interest and Dividends	2,019,361	2,150,111	2,289,327	2,437,557	2,595,385	2,763,432	2,942,360	3,749,212	4,039,884	4,353,092
Capital Appreciation	4,095,065	4,360,214	4,642,531	4,943,128	5,263,187	5,603,970	5,966,818	7,609,237	8,199,172	8,834,845
Cash Inflows	0	0	0	0	0	0	0	0	0	0
Cash Outflows	0	0	0	0	0	0	0	0	0	0
Fees	0	0	0	0	0	0	0	0	0	0
Ending Assets	100,548,073	107,058,398	113,990,257	121,370,942	129,229,514	137,596,916	146,506,094	157,864,543	170,103,599	183,291,536

1 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.
2 Past performance is no guarantee of future results.

EXPECTED PERFORMANCE OVER TIME

SUMMARY: 2020 - 2029 (CONTINUED)

Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
58/25/17										
Beginning Assets	94,433,647	100,449,152	106,849,933	113,661,143	120,909,631	128,624,053	136,835,004	145,575,152	156,894,904	169,110,280
Interest and Dividends	2,089,689	2,212,990	2,343,744	2,482,407	2,629,461	2,785,415	2,950,813	3,735,546	4,008,610	4,302,015
Capital Appreciation	3,925,816	4,187,791	4,467,466	4,766,080	5,084,961	5,425,536	5,789,336	7,584,206	8,206,766	8,881,735
Cash Inflows	0	0	0	0	0	0	0	0	0	0
Cash Outflows	0	0	0	0	0	0	0	0	0	0
Fees	0	0	0	0	0	0	0	0	0	0
Ending Assets	100,449,152	106,849,933	113,661,143	120,909,631	128,624,053	136,835,004	145,575,152	156,894,904	169,110,280	182,294,030
53/19/28										
Beginning Assets	94,433,647	100,847,152	107,696,600	115,012,147	122,826,095	131,173,040	140,090,047	149,616,832	161,665,800	174,705,499
Interest and Dividends	2,210,285	2,340,111	2,478,188	2,625,048	2,781,253	2,947,404	3,124,140	3,775,631	4,049,471	4,344,221
Capital Appreciation	4,203,220	4,509,337	4,837,359	5,188,900	5,565,692	5,969,604	6,402,645	8,273,337	8,990,228	9,770,006
Cash Inflows	0	0	0	0	0	0	0	0	0	0
Cash Outflows	0	0	0	0	0	0	0	0	0	0
Fees	0	0	0	0	0	0	0	0	0	0
Ending Assets	100,847,152	107,696,600	115,012,147	122,826,095	131,173,040	140,090,047	149,616,832	161,665,800	174,705,499	188,819,726

1 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.
2 Past performance is no guarantee of future results.

EXPECTED PERFORMANCE OVER TIME

SUMMARY: 2030 - 2039 (CONTINUED)

Year	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Current Scenario										
Beginning Assets	173,962,779	187,032,955	201,085,119	216,193,051	232,436,072	249,899,465	268,674,918	288,861,008	310,563,720	333,897,001
Interest and Dividends	4,735,830	5,091,643	5,474,188	5,885,475	6,327,663	6,803,073	7,314,201	7,863,732	8,454,550	9,089,758
Capital Appreciation	8,334,345	8,960,522	9,633,744	10,357,546	11,135,730	11,972,380	12,871,889	13,838,980	14,878,731	15,996,600
Cash Inflows	0	0	0	0	0	0	0	0	0	0
Cash Outflows	0	0	0	0	0	0	0	0	0	0
Fees	0	0	0	0	0	0	0	0	0	0
Ending Assets	187,032,955	201,085,119	216,193,051	232,436,072	249,899,465	268,674,918	288,861,008	310,563,720	333,897,001	358,983,358
Target										
Beginning Assets	167,144,254	178,844,493	191,363,758	204,759,383	219,092,712	234,429,387	250,839,641	268,398,628	287,186,758	307,290,073
Interest and Dividends	4,349,565	4,654,038	4,979,824	5,328,416	5,701,410	6,100,513	6,527,554	6,984,489	7,473,409	7,996,554
Capital Appreciation	7,350,674	7,865,228	8,415,800	9,004,913	9,635,265	10,309,741	11,031,432	11,803,641	12,629,906	13,514,010
Cash Inflows	0	0	0	0	0	0	0	0	0	0
Cash Outflows	0	0	0	0	0	0	0	0	0	0
Fees	0	0	0	0	0	0	0	0	0	0
Ending Assets	178,844,493	191,363,758	204,759,383	219,092,712	234,429,387	250,839,641	268,398,628	287,186,758	307,290,073	328,800,637
Mix 5 Strategic										
Beginning Assets	183,291,536	197,501,917	212,814,014	229,313,239	247,091,631	266,248,361	286,890,290	309,132,564	333,099,255	358,924,057
Interest and Dividends	4,690,582	5,054,237	5,446,086	5,868,315	6,323,279	6,813,515	7,341,760	7,910,958	8,524,285	9,185,163
Capital Appreciation	9,519,800	10,257,859	11,053,139	11,910,076	12,833,451	13,828,413	14,900,514	16,055,734	17,300,517	18,641,806
Cash Inflows	0	0	0	0	0	0	0	0	0	0
Cash Outflows	0	0	0	0	0	0	0	0	0	0
Fees	0	0	0	0	0	0	0	0	0	0
Ending Assets	197,501,917	212,814,014	229,313,239	247,091,631	266,248,361	286,890,290	309,132,564	333,099,255	358,924,057	386,751,026

1 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.
2 Past performance is no guarantee of future results.

EXPECTED PERFORMANCE OVER TIME

SUMMARY: 2030 - 2039 (CONTINUED)

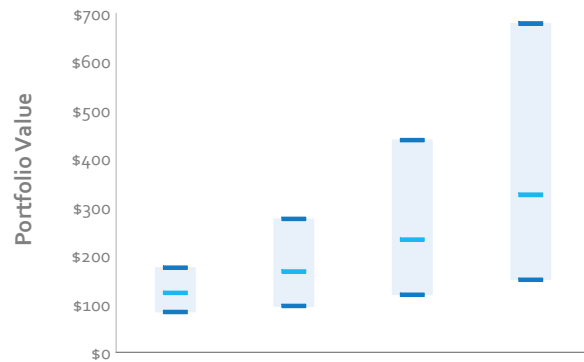
Year	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
58/25/17										
Beginning Assets	182,294,030	196,525,029	211,888,818	228,478,189	246,393,830	265,745,035	286,650,465	309,238,999	333,650,657	360,037,605
Interest and Dividends	4,617,282	4,956,047	5,320,068	5,711,233	6,131,575	6,583,276	7,068,682	7,590,316	8,150,888	8,753,313
Capital Appreciation	9,613,718	10,407,742	11,269,303	12,204,408	13,219,629	14,322,154	15,519,853	16,821,341	18,236,060	19,774,354
Cash Inflows	0	0	0	0	0	0	0	0	0	0
Cash Outflows	0	0	0	0	0	0	0	0	0	0
Fees	0	0	0	0	0	0	0	0	0	0
Ending Assets	196,525,029	211,888,818	228,478,189	246,393,830	265,745,035	286,650,465	309,238,999	333,650,657	360,037,605	388,565,271
53/19/28										
Beginning Assets	188,819,726	204,099,626	220,644,370	238,561,884	257,969,666	278,995,671	301,779,279	326,472,372	353,240,497	382,264,164
Interest and Dividends	4,661,485	5,002,993	5,370,608	5,766,334	6,192,333	6,650,929	7,144,627	7,676,125	8,248,327	8,864,363
Capital Appreciation	10,618,416	11,541,750	12,546,906	13,641,448	14,833,672	16,132,680	17,548,465	19,092,001	20,775,340	22,611,728
Cash Inflows	0	0	0	0	0	0	0	0	0	0
Cash Outflows	0	0	0	0	0	0	0	0	0	0
Fees	0	0	0	0	0	0	0	0	0	0
Ending Assets	204,099,626	220,644,370	238,561,884	257,969,666	278,995,671	301,779,279	326,472,372	353,240,497	382,264,164	413,740,255

¹ This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.
² Past performance is no guarantee of future results.

HYPOTHETICAL PERFORMANCE

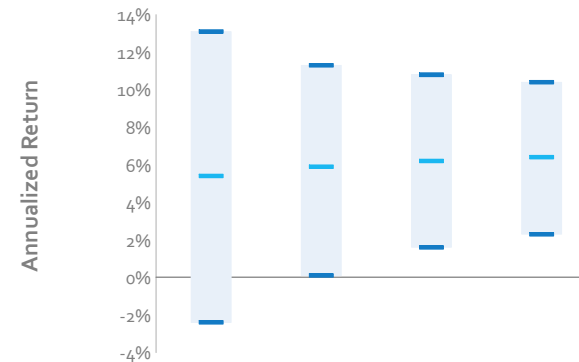
CURRENT SCENARIO: 2020-2039

Portfolio Value Over Time



Year	2024	2029	2034	2039
Portfolio Value				
95th Percentile	\$174.6	\$275.3	\$438.2	\$678.6
50th Percentile	\$123.1	\$166.9	\$232.5	\$325.2
5th Percentile	\$83.6	\$95.8	\$119.0	\$150.0

Annualized Return Over Time



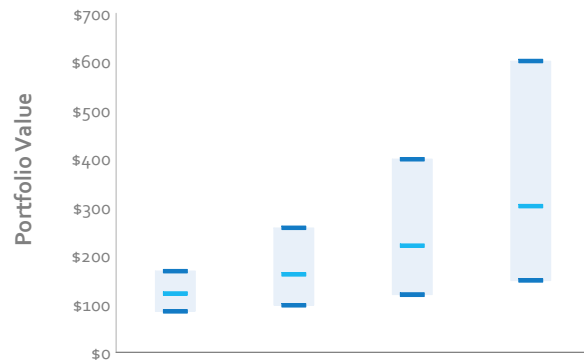
Year	2024	2029	2034	2039
Annualized Return				
95th Percentile	13.1%	11.3%	10.8%	10.4%
50th Percentile	5.4%	5.9%	6.2%	6.4%
5th Percentile	-2.4%	0.1%	1.6%	2.3%

- 1 Portfolio value is shown net of cash inflows, cash outflows and advisory fees. Annualized return is shown gross of cash inflows, cash outflows and advisory fees.
- 2 Portfolio values reflect the future value of the portfolios. Annualized returns reflect nominal growth of the portfolios.
- 3 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.
- 4 Past performance is no guarantee of future results.

HYPOTHETICAL PERFORMANCE

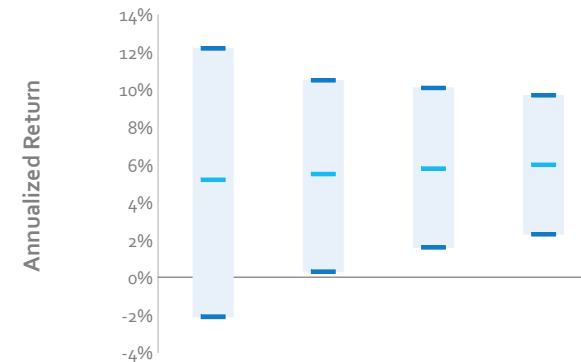
TARGET: 2020-2039

Portfolio Value Over Time



Year	2024	2029	2034	2039
Portfolio Value				
95th Percentile	\$167.7	\$257.0	\$398.7	\$601.1
50th Percentile	\$121.5	\$161.1	\$220.3	\$302.0
5th Percentile	\$84.8	\$97.2	\$119.2	\$148.4

Annualized Return Over Time



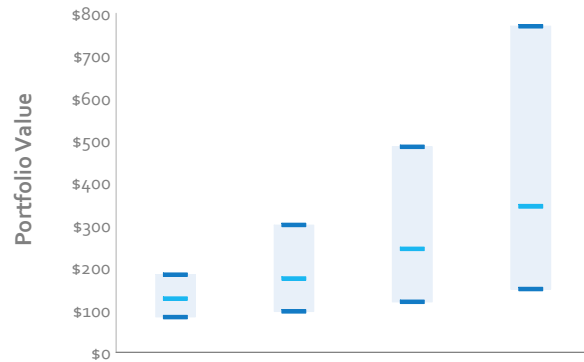
Year	2024	2029	2034	2039
Annualized Return				
95th Percentile	12.2%	10.5%	10.1%	9.7%
50th Percentile	5.2%	5.5%	5.8%	6.0%
5th Percentile	-2.1%	0.3%	1.6%	2.3%

- 1 Portfolio value is shown net of cash inflows, cash outflows and advisory fees. Annualized return is shown gross of cash inflows, cash outflows and advisory fees.
- 2 Portfolio values reflect the future value of the portfolios. Annualized returns reflect nominal growth of the portfolios.
- 3 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.
- 4 Past performance is no guarantee of future results.

HYPOTHETICAL PERFORMANCE

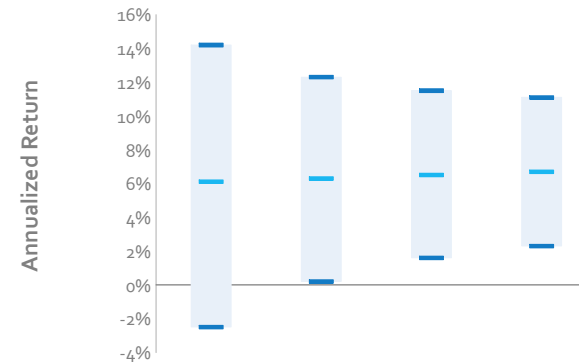
MIX 5 STRATEGIC: 2020-2039

Portfolio Value Over Time



Year	2024	2029	2034	2039
Portfolio Value				
95th Percentile	\$183.3	\$300.3	\$484.9	\$769.4
50th Percentile	\$126.8	\$174.5	\$244.5	\$344.6
5th Percentile	\$83.4	\$96.6	\$119.0	\$149.2

Annualized Return Over Time



Year	2024	2029	2034	2039
Annualized Return				
95th Percentile	14.2%	12.3%	11.5%	11.1%
50th Percentile	6.1%	6.3%	6.5%	6.7%
5th Percentile	-2.5%	0.2%	1.6%	2.3%

1 Portfolio value is shown net of cash inflows, cash outflows and advisory fees. Annualized return is shown gross of cash inflows, cash outflows and advisory fees.

2 Portfolio values reflect the future value of the portfolios. Annualized returns reflect nominal growth of the portfolios.

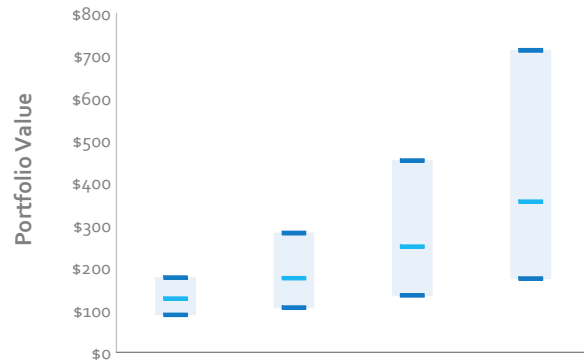
3 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.

4 Past performance is no guarantee of future results.

HYPOTHETICAL PERFORMANCE

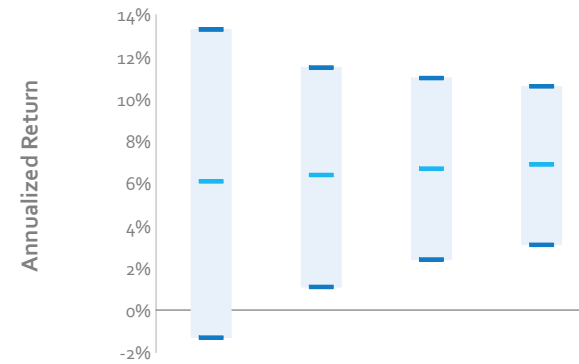
58/25/17: 2020-2039

Portfolio Value Over Time



Year	2024	2029	2034	2039
Portfolio Value				
95th Percentile	\$176.3	\$281.4	\$452.4	\$712.4
50th Percentile	\$126.8	\$175.0	\$249.5	\$355.7
5th Percentile	\$88.5	\$105.7	\$134.3	\$174.0

Annualized Return Over Time



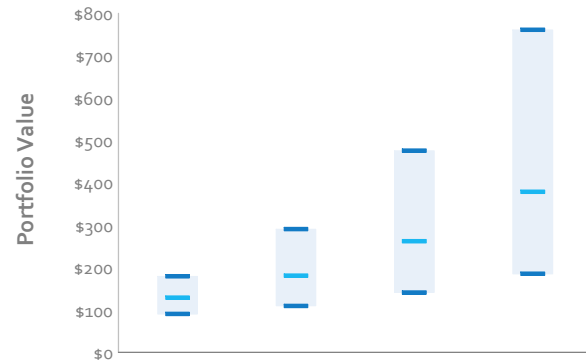
Year	2024	2029	2034	2039
Annualized Return				
95th Percentile	13.3%	11.5%	11.0%	10.6%
50th Percentile	6.1%	6.4%	6.7%	6.9%
5th Percentile	-1.3%	1.1%	2.4%	3.1%

- 1 Portfolio value is shown net of cash inflows, cash outflows and advisory fees. Annualized return is shown gross of cash inflows, cash outflows and advisory fees.
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- 3 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.
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HYPOTHETICAL PERFORMANCE

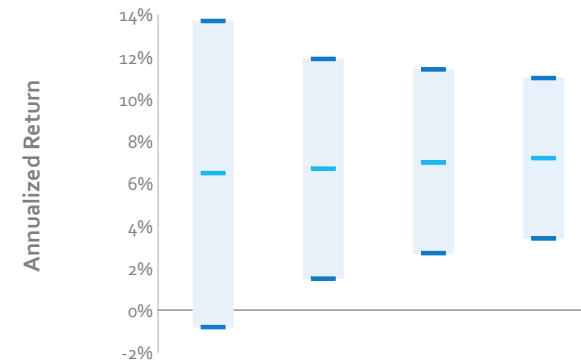
53/19/28: 2020-2039

Portfolio Value Over Time



Year	2024	2029	2034	2039
Portfolio Value				
95th Percentile	\$179.3	\$290.8	\$475.7	\$760.7
50th Percentile	\$129.2	\$180.9	\$262.0	\$378.6
5th Percentile	\$90.6	\$109.8	\$141.4	\$185.3

Annualized Return Over Time



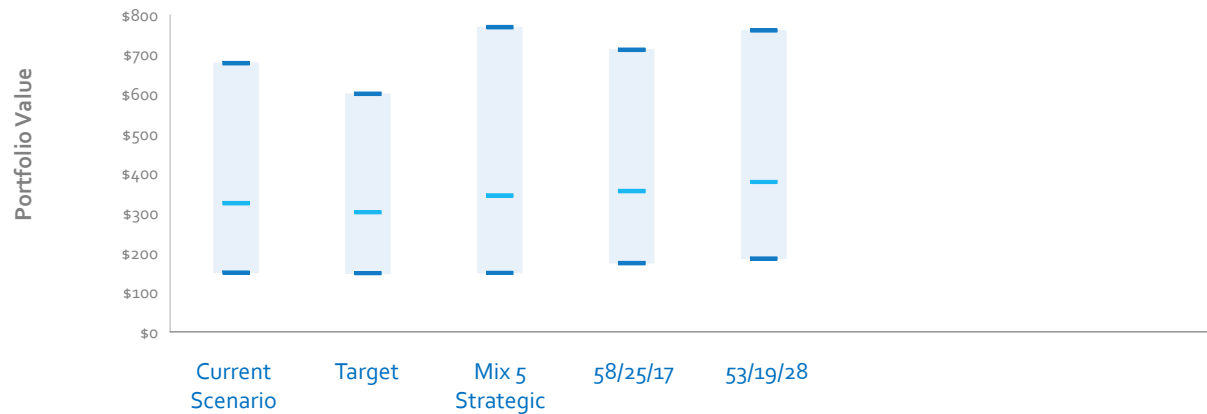
Year	2024	2029	2034	2039
Annualized Return				
95th Percentile	13.7%	11.9%	11.4%	11.0%
50th Percentile	6.5%	6.7%	7.0%	7.2%
5th Percentile	-0.8%	1.5%	2.7%	3.4%

- 1 Portfolio value is shown net of cash inflows, cash outflows and advisory fees. Annualized return is shown gross of cash inflows, cash outflows and advisory fees.
- 2 Portfolio values reflect the future value of the portfolios. Annualized returns reflect nominal growth of the portfolios.
- 3 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.
- 4 Past performance is no guarantee of future results.

SUMMARY PERFORMANCE STATISTICS

SUMMARY: YEAR 2039

Portfolio Value



Portfolio Value						
		Current Scenario	Target	Mix 5 Strategic	58/25/17	53/19/28
95th Percentile		\$678.6	\$601.1	\$769.4	\$712.4	\$760.7
50th Percentile		\$325.2	\$302.0	\$344.6	\$355.7	\$378.6
5th Percentile		\$150.0	\$148.4	\$149.2	\$174.0	\$185.3
Annualized Return						
		Current Scenario	Target	Mix 5 Strategic	58/25/17	53/19/28
95th Percentile		10.4%	9.7%	11.1%	10.6%	11.0%
50th Percentile		6.4%	6.0%	6.7%	6.9%	7.2%
5th Percentile		2.3%	2.3%	2.3%	3.1%	3.4%

1 Portfolio value is shown net of cash inflows, cash outflows and advisory fees. Annualized return is shown gross of cash inflows, cash outflows and advisory fees.

2 Portfolio values reflect the future value of the portfolios. Annualized returns reflect nominal growth of the portfolios.

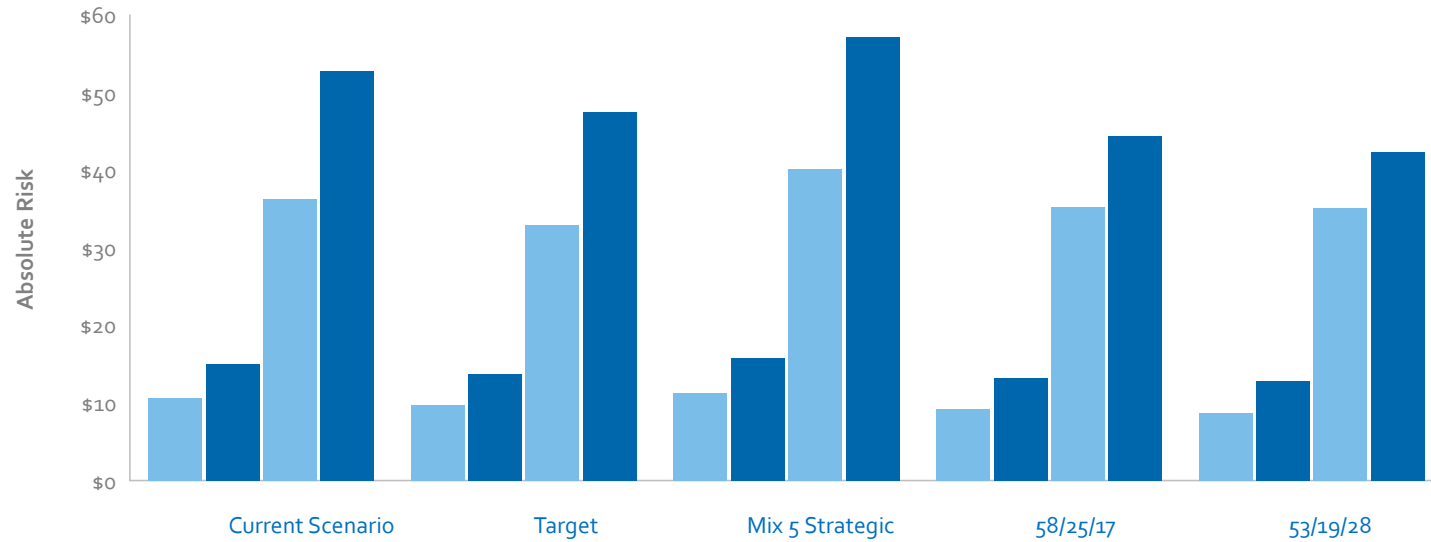
3 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.

4 Past performance is no guarantee of future results.

PORTFOLIO RISK

SUMMARY

Portfolio Risk



Dollar Risk

Value at Risk	\$10.6	\$9.7	\$11.2	\$9.2	\$8.7
Expected Tail Loss	\$15.0	\$13.7	\$15.8	\$13.2	\$12.8
Worst Trial	\$36.3	\$32.9	\$40.2	\$35.2	\$35.1
Max Drawdown	\$52.8	\$47.5	\$57.2	\$44.4	\$42.3

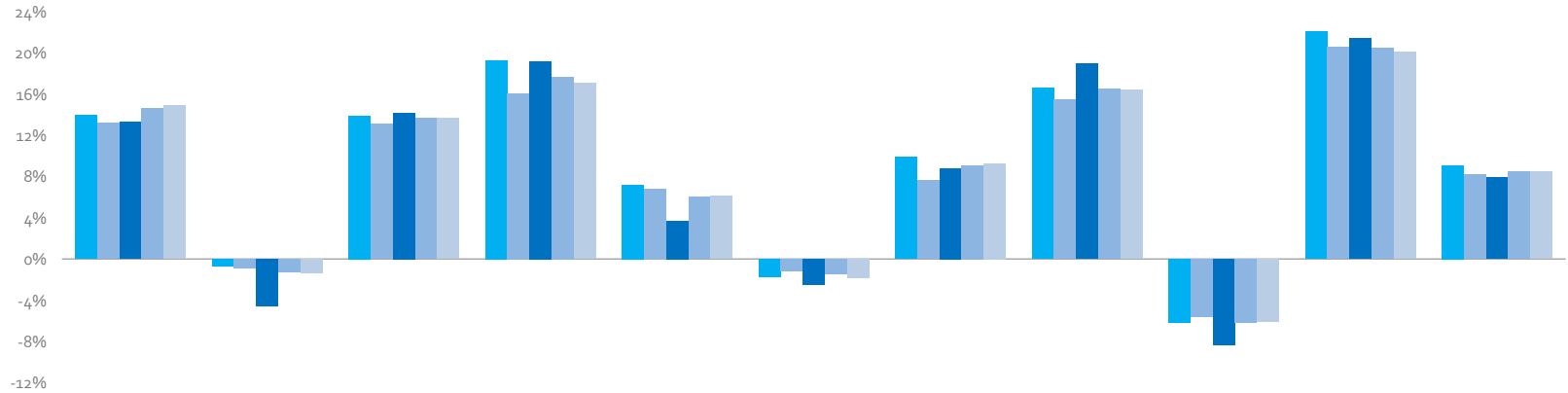
Percentage Risk

Value at Risk	11.2%	10.3%	11.9%	9.7%	9.2%
Expected Tail Loss	15.9%	14.5%	16.7%	14.0%	13.5%
Worst Trial	38.5%	34.8%	42.5%	37.3%	37.1%
Max Drawdown	55.9%	50.3%	60.5%	47.0%	44.8%

- 1 Portfolio risk is shown gross of cash inflows, cash outflows and advisory fees.
- 2 This analysis assumes that the Strategic Assumptions apply for the first 7 years and the Secular Assumptions apply thereafter.
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HISTORICAL PERFORMANCE (LAST 10 YEARS)

SUMMARY



■ Current Scenario
 ■ Target
 ■ Mix 5 Strategic
 ■ 58/25/17
 ■ 53/19/28

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Last 10 Years Annualized
14.0%	-0.7%	13.9%	19.3%	7.2%	-1.7%	9.9%	16.6%	-6.2%	22.1%	9.1%
13.2%	-0.9%	13.1%	16.1%	6.8%	-1.2%	7.6%	15.5%	-5.6%	20.6%	8.2%
13.3%	-4.6%	14.2%	19.2%	3.7%	-2.5%	8.8%	19.0%	-8.3%	21.4%	7.9%
14.6%	-1.3%	13.7%	17.7%	6.0%	-1.5%	9.1%	16.5%	-6.2%	20.5%	8.5%
14.9%	-1.4%	13.7%	17.1%	6.1%	-1.8%	9.3%	16.4%	-6.1%	20.1%	8.5%

¹ Historical returns are shown gross of cash inflows, cash outflows and advisory fees.

² Past performance is no guarantee of future results.

HISTORICAL PERFORMANCE (LAST 10 YEARS)

ASSET CLASS DETAIL

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Last 10 Years Annualized
Cash	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.3%	0.8%	1.9%	2.3%	0.6%
Equities	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	26.6%	8.8%
US Equities	16.9%	1.0%	16.4%	33.6%	12.6%	0.5%	12.7%	21.1%	-5.2%	31.0%	13.4%
US Large Cap Growth	16.7%	2.6%	15.3%	33.5%	13.0%	5.7%	7.1%	30.2%	-1.5%	36.4%	15.2%
US Large Cap Value	15.5%	0.4%	17.5%	32.5%	13.5%	-3.8%	17.3%	13.7%	-8.3%	26.5%	11.8%
US Mid Cap Growth	26.4%	-1.7%	15.8%	35.7%	11.9%	-0.2%	7.3%	25.3%	-4.8%	35.5%	14.2%
US Mid Cap Value	24.8%	-1.4%	18.5%	33.5%	14.7%	-4.8%	20.0%	13.3%	-12.3%	27.1%	12.4%
US Small Cap Growth	29.1%	-2.9%	14.6%	43.3%	5.6%	-1.4%	11.3%	22.2%	-9.3%	28.5%	13.0%
US Small Cap Value	24.5%	-5.5%	18.1%	34.5%	4.2%	-7.5%	31.7%	7.8%	-12.9%	22.4%	10.6%
International Equities	8.9%	-12.2%	16.4%	21.0%	-4.3%	-3.0%	2.7%	24.2%	-14.1%	22.5%	5.3%
International Equities	8.9%	-12.2%	16.4%	21.0%	-4.3%	-3.0%	2.7%	24.2%	-14.1%	22.5%	5.3%
Japan Equities	15.4%	-14.3%	8.2%	27.2%	-4.0%	9.6%	2.4%	24.0%	-12.9%	19.6%	6.6%
Intl Small Cap Equities	24.5%	-15.8%	17.5%	25.6%	-5.3%	5.5%	4.3%	31.0%	-18.1%	25.4%	8.0%
Emerging & Frontier Mkt	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	18.4%	3.7%
Fixed Income & Preferreds	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	8.7%	3.7%
Short Term Fixed Income	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	1.3%	0.8%	1.6%	4.0%	1.5%
US Fixed Income Taxable	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	8.7%	3.7%
Intermed Term Govt/Corp	5.9%	5.8%	3.9%	-0.9%	3.1%	1.1%	2.1%	2.1%	0.9%	6.8%	3.1%
Securitized	6.5%	6.2%	3.0%	-1.3%	5.9%	1.5%	1.8%	2.5%	1.0%	6.4%	3.3%
US Taxable Core	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	8.7%	3.7%
Intl Fixed Income	3.3%	3.9%	6.5%	1.2%	8.8%	1.4%	4.4%	3.1%	3.9%	9.4%	4.6%
Inflation Linked Secs	5.4%	11.1%	5.6%	-5.5%	9.0%	-1.1%	10.2%	3.3%	0.1%	8.4%	4.5%
Preferred Securities	13.7%	4.1%	13.6%	-3.7%	15.4%	7.6%	2.3%	10.6%	-4.3%	17.7%	7.4%
High Yield Fixed Income	13.8%	2.6%	18.9%	8.4%	0.2%	-4.9%	14.0%	10.3%	-3.5%	13.4%	7.0%
Emerging Mkt Fixed Income	12.0%	8.5%	18.5%	-6.6%	5.5%	1.2%	10.2%	9.3%	-4.6%	14.4%	6.6%

1 Historical returns are shown gross of cash inflows, cash outflows and advisory fees.

2 Past performance is no guarantee of future results.

HISTORICAL PERFORMANCE (LAST 10 YEARS)

ASSET CLASS DETAIL (CONTINUED)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Last 10 Years Annualized
Alternatives	9.6%	-6.3%	6.4%	10.3%	2.7%	-0.3%	3.9%	8.2%	-5.3%	11.8%	3.9%
Real Assets	24.4%	0.6%	12.7%	7.2%	3.1%	-21.5%	19.3%	5.7%	-11.4%	17.9%	4.9%
REITs	20.0%	-8.1%	29.8%	2.2%	14.7%	-0.4%	4.6%	15.0%	-5.5%	23.6%	8.9%
MLP/Energy Infrastructure	36.1%	26.1%	10.8%	31.4%	13.9%	-37.1%	43.6%	0.8%	-17.7%	22.3%	10.1%
Infrastructure	6.5%	-1.1%	6.4%	17.5%	6.2%	-7.7%	7.0%	11.3%	-6.5%	20.0%	5.6%
Equity Hedge Assets	10.8%	2.3%	0.5%	1.2%	11.2%	0.8%	-3.1%	2.8%	-1.8%	12.5%	3.6%
Managed Futures	12.2%	-4.2%	-2.9%	-2.6%	18.4%	-0.9%	-6.8%	3.3%	-5.1%	14.0%	2.2%
Equity Return Assets	10.4%	-6.9%	8.2%	14.6%	1.7%	-1.4%	5.5%	10.4%	-5.6%	12.4%	4.7%
Equity Long/Short	9.7%	-9.5%	7.4%	15.4%	1.7%	-0.2%	3.6%	13.0%	-7.9%	15.2%	4.5%
Private Investments	17.4%	12.7%	13.1%	16.1%	11.6%	9.5%	10.7%	12.5%	8.5%	13.4%	12.5%
Private Real Estate	13.1%	14.3%	10.5%	11.0%	11.8%	13.3%	8.0%	7.0%	6.7%	6.4%	10.2%
Private Equity	21.8%	11.2%	15.7%	21.5%	11.4%	5.7%	13.4%	18.4%	10.3%	20.8%	14.9%
Private Credit	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	9.9%	4.2%	1.1%	8.2%	5.2%

1) The historical return returns for Equity Hedge Assets, Equity Return Assets and Private Investments have been adjusted to account for infrequent pricing.

1 Historical returns are shown gross of cash inflows, cash outflows and advisory fees.

2 Past performance is no guarantee of future results.

CONTRIBUTION TO RISK AND RETURN

SUMMARY

	Current Scenario			Target			Mix 5 Strategic		
	Asset Allocation	Return Contribution	Risk Contribution	Asset Allocation	Return Contribution	Risk Contribution	Asset Allocation	Return Contribution	Risk Contribution
Cash	0.5%	0.1%	0.0%	5.0%	1.4%	0.0%	0.0%	0.0%	0.0%
Equities	70.1%	80.3%	97.5%	59.3%	70.4%	92.2%	78.0%	85.8%	97.9%
US Equities	50.6%	64.5%	68.8%	40.2%	54.2%	61.5%	38.0%	52.2%	44.6%
US Large Cap Growth	17.4%	22.2%	24.8%	13.5%	18.4%	21.0%	12.0%	16.7%	14.9%
US Large Cap Value	18.4%	22.4%	22.9%	13.5%	17.5%	18.4%	15.0%	19.8%	15.9%
US Mid Cap Growth	2.8%	4.0%	4.8%	3.3%	4.9%	6.1%	1.0%	1.5%	1.5%
US Mid Cap Value	6.5%	9.0%	8.6%	3.3%	4.8%	4.7%	4.0%	6.0%	4.5%
US Small Cap Growth	0.9%	1.0%	1.5%	3.3%	4.1%	6.4%	2.0%	2.6%	3.2%
US Small Cap Value	4.6%	5.8%	6.1%	3.3%	4.4%	4.8%	4.0%	5.6%	4.6%
International Equities	13.7%	10.3%	19.2%	14.3%	11.5%	22.0%	30.0%	23.3%	37.8%
International Equities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.0%	22.1%	34.7%
Japan Equities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	1.2%	3.1%
Intl Small Cap Equities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Emerging & Frontier Mkt	5.8%	5.5%	9.6%	4.8%	4.8%	8.7%	10.0%	10.3%	15.6%
Fixed Income & Preferreds	28.0%	17.7%	0.8%	29.0%	18.9%	-1.3%	22.0%	14.2%	2.1%
Short Term Fixed Income	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	4.6%	-0.3%
US Fixed Income Taxable	19.8%	11.6%	-1.1%	29.0%	18.9%	-1.3%	6.0%	4.0%	-0.4%
Intermed Term Govt/Corp	9.0%	5.0%	-0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitized	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
US Taxable Core	10.8%	6.6%	-0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Intl Fixed Income	0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Inflation Linked Secs	4.7%	3.1%	0.1%	0.0%	0.0%	0.0%	1.0%	0.7%	0.0%
Preferred Securities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HighYield Fixed Income	2.2%	1.8%	1.4%	0.0%	0.0%	0.0%	4.0%	3.6%	2.3%

1 Past performance is no guarantee of future results.

CONTRIBUTION TO RISK AND RETURN

SUMMARY (CONTINUED)

	Current Scenario			Target			Mix 5 Strategic		
	Asset Allocation	Return Contribution	Risk Contribution	Asset Allocation	Return Contribution	Risk Contribution	Asset Allocation	Return Contribution	Risk Contribution
Emerging Mkt Fixed Income	0.6%	0.7%	0.3%	0.0%	0.0%	0.0%	1.0%	1.2%	0.5%
Alternatives	1.5%	1.8%	1.7%	7.0%	9.2%	9.1%	0.0%	0.0%	0.0%
Real Assets	1.5%	1.8%	1.7%	7.0%	9.2%	9.1%	0.0%	0.0%	0.0%
REITs	1.5%	1.8%	1.7%	7.0%	9.2%	9.1%	0.0%	0.0%	0.0%
MLP/Energy Infrastructure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Infrastructure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Equity Hedge Assets	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Managed Futures	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Equity Return Assets	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Equity Long/Short	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Private Investments	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Private Real Estate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Private Equity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Private Credit	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

¹ Past performance is no guarantee of future results.

CONTRIBUTION TO RISK AND RETURN

SUMMARY (CONTINUED)

	58/25/17			53/19/28		
	Asset Allocation	Return Contribution	Risk Contribution	Asset Allocation	Return Contribution	Risk Contribution
Cash	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Equities	58.0%	62.7%	85.9%	53.0%	56.0%	79.1%
US Equities	33.0%	41.6%	46.7%	28.0%	34.9%	39.2%
US Large Cap Growth	10.0%	12.8%	14.6%	8.0%	10.1%	11.6%
US Large Cap Value	14.0%	17.1%	17.9%	12.0%	14.5%	15.3%
US Mid Cap Growth	1.5%	2.1%	2.7%	1.0%	1.4%	1.8%
US Mid Cap Value	2.0%	2.8%	2.7%	2.0%	2.8%	2.7%
US Small Cap Growth	2.5%	3.0%	4.7%	2.0%	2.3%	3.7%
US Small Cap Value	3.0%	3.9%	4.1%	3.0%	3.8%	4.1%
International Equities	19.0%	15.4%	28.5%	18.0%	14.5%	27.2%
International Equities	16.0%	12.1%	23.9%	15.0%	11.2%	22.5%
Japan Equities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Intl Small Cap Equities	3.0%	3.3%	4.6%	3.0%	3.3%	4.7%
Emerging & Frontier Mkt	6.0%	5.7%	10.7%	7.0%	6.6%	12.7%
Fixed Income & Preferreds	25.0%	16.3%	4.1%	19.0%	12.7%	3.6%
Short Term Fixed Income	6.0%	2.5%	-0.2%	4.0%	1.7%	-0.1%
US Fixed Income Taxable	11.0%	6.7%	-0.6%	8.0%	4.8%	-0.4%
Intermed Term Govt/Corp	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitized	3.0%	1.8%	-0.1%	2.0%	1.2%	-0.1%
US Taxable Core	8.0%	4.9%	-0.5%	6.0%	3.6%	-0.3%
Intl Fixed Income	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Inflation Linked Secs	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Preferred Securities	2.0%	1.4%	0.9%	2.0%	1.4%	0.9%
High Yield Fixed Income	4.0%	3.4%	2.8%	3.0%	2.5%	2.1%

1 Past performance is no guarantee of future results.

CONTRIBUTION TO RISK AND RETURN

SUMMARY (CONTINUED)

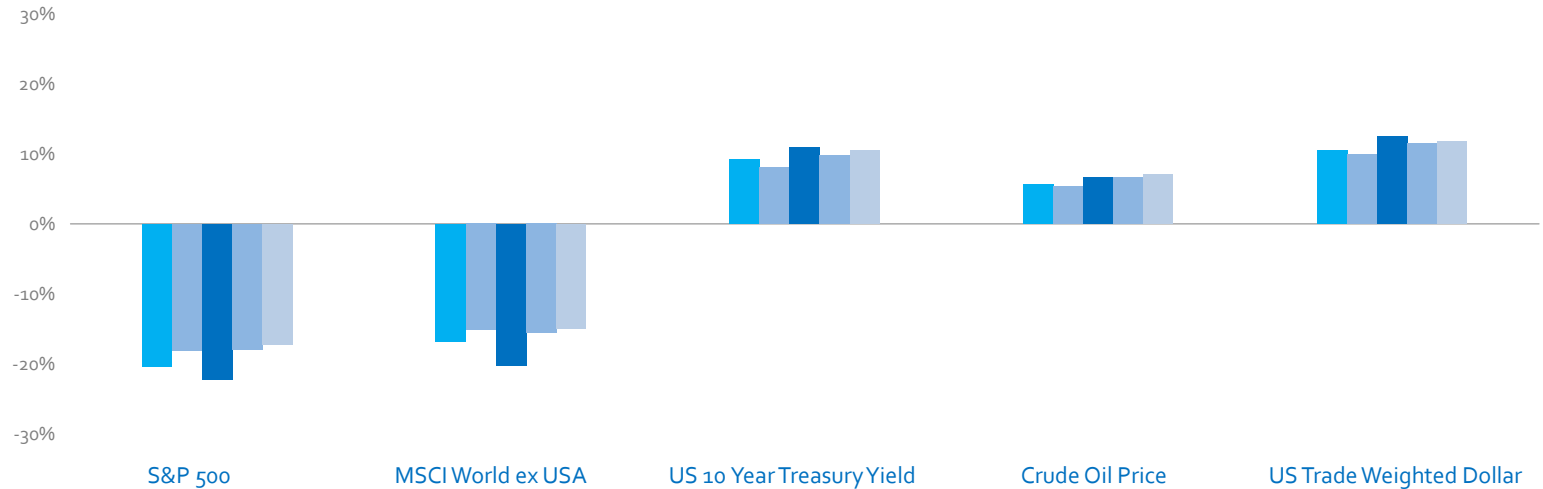
	58/25/17			53/19/28		
	Asset Allocation	Return Contribution	Risk Contribution	Asset Allocation	Return Contribution	Risk Contribution
Emerging Mkt Fixed Income	2.0%	2.3%	1.1%	2.0%	2.2%	1.1%
Alternatives	17.0%	21.0%	10.0%	28.0%	31.4%	17.3%
Real Assets	4.0%	5.7%	4.0%	7.0%	8.2%	7.3%
REITs	2.0%	2.5%	2.4%	2.5%	3.1%	3.0%
MLP/Energy Infrastructure	2.0%	3.2%	1.6%	2.5%	4.0%	2.1%
Infrastructure	0.0%	0.0%	0.0%	2.0%	1.2%	2.2%
Equity Hedge Assets	2.0%	1.1%	-0.3%	3.0%	1.6%	-0.4%
Managed Futures	2.0%	1.1%	-0.3%	3.0%	1.6%	-0.4%
Equity Return Assets	3.0%	3.1%	2.6%	5.0%	5.1%	4.4%
Equity Long/Short	3.0%	3.1%	2.6%	5.0%	5.1%	4.4%
Private Investments	8.0%	11.1%	3.6%	13.0%	16.4%	6.0%
Private Real Estate	3.0%	3.0%	0.2%	4.0%	4.0%	0.3%
Private Equity	5.0%	8.1%	3.4%	7.0%	11.2%	4.9%
Private Credit	0.0%	0.0%	0.0%	2.0%	1.2%	0.8%

1) The contribution returns for Equity Hedge Assets, Equity Return Assets and Private Investments have been adjusted to account for infrequent pricing.

1 Past performance is no guarantee of future results.

MARKET SCENARIOS

SUMMARY



	S&P 500	MSCI World ex USA	US 10 Year Treasury Yield	Crude Oil Price	US Trade Weighted Dollar
	-30%	-30%	+100bps	+30%	-10%
Current Scenario	-20.4%	-16.8%	9.2%	5.7%	10.5%
Target	-18.1%	-15.2%	8.1%	5.3%	9.9%
Mix 5 Strategic	-22.2%	-20.2%	10.9%	6.6%	12.5%
58/25/17	-18.0%	-15.6%	9.8%	6.6%	11.4%
53/19/28	-17.2%	-15.0%	10.4%	7.1%	11.8%

1 Annual returns are shown gross of cash inflows, cash outflows and advisory fees.

2 The market scenarios are changed independently of one another and tested one at a time. Concurrent market scenarios are not tested in this analysis.

3 Past performance is no guarantee of future results.

MARKET SCENARIOS

ASSET CLASS DETAIL

	S&P 500	MSCI World ex USA	US 10 Year Treasury Yield	Crude Oil Price	US Trade Weighted Dollar
	-30%	-30%	+100bps	+30%	-10%
Cash	1.0%	1.3%	1.0%	1.1%	1.2%
Equities	-28.6%	-26.9%	12.6%	7.3%	15.1%
US Equities	-31.1%	-22.7%	11.2%	5.7%	10.3%
US Large Cap Growth	-35.3%	-25.7%	10.8%	4.6%	9.6%
US Large Cap Value	-25.7%	-18.4%	11.8%	7.3%	11.8%
US Mid Cap Growth	-42.8%	-33.1%	11.6%	3.5%	8.4%
US Mid Cap Value	-25.1%	-18.5%	14.0%	9.0%	13.3%
US Small Cap Growth	-41.9%	-31.9%	15.8%	5.9%	10.0%
US Small Cap Value	-23.4%	-15.7%	17.7%	10.7%	13.2%
International Equities	-26.6%	-30.0%	13.5%	8.5%	18.8%
International Equities	-26.6%	-30.0%	13.5%	8.5%	18.8%
Japan Equities	-19.6%	-28.4%	11.9%	7.4%	15.0%
Intl Small Cap Equities	-25.5%	-30.0%	14.5%	9.7%	20.2%
Emerging & Frontier Mkt	-29.3%	-28.9%	20.1%	10.6%	19.0%
Fixed Income & Preferreds	2.7%	2.3%	-1.9%	1.1%	2.7%
Short Term Fixed Income	2.2%	2.1%	0.1%	1.4%	2.2%
US Fixed Income Taxable	2.7%	2.3%	-1.9%	1.1%	2.7%
Intermed Term Govt/Corp	3.3%	2.7%	-1.0%	1.6%	3.1%
Securitized	2.9%	2.5%	-0.4%	2.1%	3.4%
US Taxable Core	2.7%	2.3%	-1.9%	1.1%	2.7%
Intl Fixed Income	-0.7%	-0.5%	-3.1%	-1.5%	-1.1%
Inflation Linked Secs	0.5%	0.3%	-1.6%	1.2%	2.9%
Preferred Securities	-6.0%	-6.7%	1.3%	3.6%	8.2%

1 Annual returns are shown gross of cash inflows, cash outflows and advisory fees.

2 The market scenarios are changed independently of one another and tested one at a time. Concurrent market scenarios are not tested in this analysis.

3 Past performance is no guarantee of future results.

MARKET SCENARIOS

ASSET CLASS DETAIL (CONTINUED)

	S&P 500	MSCI World ex USA	US 10 Year Treasury Yield	Crude Oil Price	US Trade Weighted Dollar
	-30%	-30%	+100bps	+30%	-10%
High Yield Fixed Income	-13.3%	-11.5%	5.8%	4.0%	8.3%
Emerging Mkt Fixed Income	-7.0%	-5.3%	5.1%	5.7%	8.4%
Alternatives	-11.4%	-9.1%	8.1%	4.9%	6.3%
Real Assets	-10.5%	-9.9%	8.9%	9.8%	13.2%
REITs	-17.2%	-15.8%	10.9%	9.5%	15.5%
MLP/Energy Infrastructure	-10.4%	-6.2%	9.9%	10.6%	12.4%
Infrastructure	-19.8%	-17.4%	8.4%	6.5%	12.4%
Equity Hedge Assets	6.9%	6.3%	2.6%	4.9%	6.4%
Managed Futures	12.8%	10.5%	2.7%	6.8%	10.1%
Equity Return Assets	-13.3%	-10.6%	9.4%	5.8%	7.3%
Equity Long/Short	-15.0%	-11.4%	9.9%	6.6%	7.8%
Private Investments	0.5%	1.8%	11.1%	9.7%	10.3%
Private Real Estate	7.5%	7.7%	9.2%	9.1%	9.1%
Private Equity	-6.2%	-3.9%	13.4%	10.6%	11.8%
Private Credit	-2.9%	-1.7%	10.2%	8.0%	9.7%

1) The Market Scenario returns for Equity Hedge Assets, Equity Return Assets and Private Investments have been adjusted to account for infrequent pricing.

1 Annual returns are shown gross of cash inflows, cash outflows and advisory fees.

2 The market scenarios are changed independently of one another and tested one at a time. Concurrent market scenarios are not tested in this analysis.

3 Past performance is no guarantee of future results.

RETURN ASSUMPTIONS

	Strategic Assumptions				Secular Assumptions			
	Annual Return	Standard Deviation	Sharpe Ratio	Yield	Annual Return	Standard Deviation	Sharpe Ratio	Yield
Cash	1.1%	1.0%	0.00	1.1%	2.7%	1.0%	0.00	2.7%
Equities	7.0%	14.2%	0.41	2.1%	8.5%	14.9%	0.39	2.1%
US Equities	5.8%	14.8%	0.32	2.1%	8.9%	15.5%	0.40	2.1%
US Large Cap Growth	4.8%	16.0%	0.23	1.3%	9.0%	16.9%	0.37	1.3%
US Large Cap Value	7.4%	14.3%	0.44	3.0%	8.8%	14.9%	0.41	3.0%
US Mid Cap Growth	3.7%	17.9%	0.14	0.8%	9.6%	19.2%	0.36	0.8%
US Mid Cap Value	9.1%	15.4%	0.52	3.1%	9.3%	16.2%	0.41	3.1%
US Small Cap Growth	6.5%	21.7%	0.25	0.6%	9.0%	23.0%	0.28	0.6%
US Small Cap Value	11.5%	18.3%	0.57	2.9%	9.5%	19.0%	0.36	2.9%
International Equities	8.0%	15.8%	0.44	2.1%	8.0%	16.7%	0.32	2.1%
International Equities	8.0%	15.8%	0.44	2.1%	8.0%	16.7%	0.32	2.1%
Japan Equities	7.3%	18.9%	0.33	1.2%	8.4%	20.5%	0.28	1.2%
Intl Small Cap Equities	8.6%	16.4%	0.46	1.9%	8.6%	17.3%	0.34	1.9%
Emerging & Frontier Mkt	9.7%	21.1%	0.41	2.3%	10.5%	22.6%	0.35	2.3%
Fixed Income & Preferreds	1.7%	5.3%	0.10	1.7%	3.6%	5.3%	0.18	3.6%
Short Term Fixed Income	1.5%	2.6%	0.16	1.5%	3.1%	2.6%	0.17	3.1%
US Fixed Income Taxable	1.7%	5.3%	0.10	1.7%	3.6%	5.3%	0.18	3.6%
Intermed Term Govt/Corp	2.0%	4.1%	0.22	2.0%	3.4%	4.1%	0.18	3.4%
Securitized	2.4%	5.0%	0.27	2.4%	3.5%	5.0%	0.16	3.5%
US Taxable Core	1.7%	5.3%	0.10	1.7%	3.6%	5.3%	0.18	3.6%
Intl Fixed Income	-0.6%	5.2%	-0.33	-0.6%	3.4%	5.2%	0.15	3.4%
Inflation Linked Secs	1.3%	11.4%	0.02	1.3%	4.8%	11.4%	0.19	4.8%
Preferred Securities	3.4%	10.7%	0.22	3.4%	4.6%	10.7%	0.18	4.6%

1. It is not possible to invest directly in an index. The index performance shown does not reflect the impact of any taxes, transaction costs, management fees or other expenses that may be associated with certain investments. Indices are unmanaged.
2. Past performance is no guarantee of future results.

RETURN ASSUMPTIONS (CONTINUED)

	Strategic Assumptions				Secular Assumptions			
	Annual Return	Standard Deviation	Sharpe Ratio	Yield	Annual Return	Standard Deviation	Sharpe Ratio	Yield
HighYield Fixed Income	3.2%	9.0%	0.24	3.2%	5.4%	9.0%	0.30	5.4%
Emerging Mkt Fixed Income	5.5%	10.1%	0.44	5.5%	7.3%	10.1%	0.46	7.3%
Alternatives	4.4%	8.4%	0.39	0.0%	6.2%	8.4%	0.42	0.0%
Real Assets	6.1%	12.7%	0.39	2.4%	6.4%	12.7%	0.30	2.4%
REITs	8.8%	16.7%	0.46	2.7%	8.0%	16.7%	0.32	2.7%
MLP/Energy Infrastructure	8.3%	16.6%	0.43	4.4%	8.2%	16.6%	0.33	4.4%
Infrastructure	6.4%	15.0%	0.35	4.2%	6.7%	15.0%	0.27	4.2%
Equity Hedge Assets	5.0%	8.4%	0.47	0.0%	6.6%	8.4%	0.47	0.0%
Managed Futures	6.7%	15.0%	0.38	0.0%	8.3%	15.0%	0.38	0.0%
Equity Return Assets	4.8%	9.4%	0.39	0.0%	7.1%	9.4%	0.47	0.0%
Equity Long/Short	5.3%	10.4%	0.40	0.0%	7.6%	10.4%	0.47	0.0%
Private Investments	9.1%	9.0%	0.90	3.5%	9.8%	9.0%	0.79	3.2%
Private Real Estate	8.9%	8.4%	0.92	7.1%	8.1%	8.4%	0.64	6.5%
Private Equity	9.7%	12.2%	0.71	0.0%	11.9%	12.2%	0.76	0.0%
Private Credit	7.5%	7.3%	0.87	7.5%	7.2%	7.3%	0.61	7.2%

The Strategic Assumptions represent a time horizon of 7 years while the Secular Assumptions represent a time horizon of 20+ years. In the Linear Growth and Monte Carlo analyses the Strategic Assumptions apply for the first 7 years and the Secular Assumptions for each year thereafter. These assumptions are used for modeling purposes only. They are not guarantees of future returns.

1) The correlation returns for Equity Hedge Assets, Equity Return Assets and Private Investments have been adjusted to account for infrequent pricing.

1. It is not possible to invest directly in an index. The index performance shown does not reflect the impact of any taxes, transaction costs, management fees or other expenses that may be associated with certain investments. Indices are unmanaged.
2. Past performance is no guarantee of future results.

CORRELATION ASSUMPTIONS

	US Equities	International Equities	Emerging & Frontier Mkt	Short Term Fixed Income	US Fixed Income Taxable	Intl Fixed Income	Inflation Linked Secs	Preferred Securities	High Yield Fixed Income	Emerging Mkt Fixed Income
US Equities	1.00	0.68	0.52	0.13	0.21	0.05	0.12	0.58	0.61	0.36
International Equities		1.00	0.60	0.11	0.15	-0.04	0.04	0.40	0.54	0.31
Emerging & Frontier Mkt			1.00	-0.05	-0.02	-0.04	-0.06	0.23	0.43	0.41
Short Term Fixed Income				1.00	0.89	0.23	0.50	0.41	0.37	0.13
US Fixed Income Taxable					1.00	0.31	0.58	0.49	0.44	0.23
Intl Fixed Income						1.00	0.03	0.17	0.14	0.52
Inflation Linked Secs							1.00	0.27	0.26	0.07
Preferred Securities								1.00	0.55	0.22
High Yield Fixed Income									1.00	0.41
Emerging Mkt Fixed Income										1.00
Real Assets										
Equity Hedge Assets										
Equity Return Assets										
Private Investments										

The strategic and secular assumptions have the same correlations.

1. It is not possible to invest directly in an index. The index performance shown does not reflect the impact of any taxes, transaction costs, management fees or other expenses that may be associated with certain investments. Indices are unmanaged.
2. Past performance is no guarantee of future results.

CORRELATION ASSUMPTIONS (CONTINUED)

	Real Assets	Equity Hedge Assets	Equity Return Assets	Private Investments
US Equities	0.57	-0.04	0.81	0.52
International Equities	0.54	-0.03	0.64	0.37
Emerging & Frontier Mkt	0.46	-0.02	0.67	0.20
Short Term Fixed Income	0.16	0.06	0.09	0.12
US Fixed Income Taxable	0.18	0.07	0.12	0.19
Intl Fixed Income	0.08	0.31	0.00	0.14
Inflation Linked Secs	0.04	0.01	0.05	-0.02
Preferred Securities	0.47	0.02	0.45	0.40
High Yield Fixed Income	0.57	-0.04	0.58	0.34
Emerging Mkt Fixed Income	0.35	0.10	0.35	0.12
Real Assets	1.00	0.08	0.58	0.52
Equity Hedge Assets		1.00	0.04	0.02
Equity Return Assets			1.00	0.44
Private Investments				1.00

The strategic and secular assumptions have the same correlations.

1. It is not possible to invest directly in an index. The index performance shown does not reflect the impact of any taxes, transaction costs, management fees or other expenses that may be associated with certain investments. Indices are unmanaged.
2. Past performance is no guarantee of future results.

FEE ASSUMPTIONS

CURRENT SCENARIO

City of Troy ERS

Cash	0.00%
Equities	0.00%
US Equities	0.00%
US Large Cap Growth	0.00%
US Large Cap Value	0.00%
US Mid Cap Growth	0.00%
US Mid Cap Value	0.00%
US Small Cap Growth	0.00%
US Small Cap Value	0.00%
International Equities	0.00%
Emerging & Frontier Mkt	0.00%
Fixed Income & Preferreds	0.00%
US Fixed Income Taxable	0.00%
Intermed Term Govt/Corp	0.00%
US Taxable Core	0.00%
Intl Fixed Income	0.00%
Inflation Linked Secs	0.00%
High Yield Fixed Income	0.00%
Emerging Mkt Fixed Income	0.00%
Alternatives	0.00%
Real Assets	0.00%
REITs	0.00%

1 If included in this analysis, annual fees are hypothetical in nature and do not reflect any specific expenses or fees that might actually be incurred in your portfolio. We include them here to reflect that expenses and fees may impact portfolio performance over time.

FEE ASSUMPTIONS

TARGET

City of Troy ERS

Cash	0.00%
Equities	0.00%
US Equities	0.00%
US Large Cap Growth	0.00%
US Large Cap Value	0.00%
US Mid Cap Growth	0.00%
US Mid Cap Value	0.00%
US Small Cap Growth	0.00%
US Small Cap Value	0.00%
International Equities	0.00%
Emerging & Frontier Mkt	0.00%
Fixed Income & Preferreds	0.00%
US Fixed Income Taxable	0.00%
Alternatives	0.00%
Real Assets	0.00%
REITs	0.00%

¹ If included in this analysis, annual fees are hypothetical in nature and do not reflect any specific expenses or fees that might actually be incurred in your portfolio. We include them here to reflect that expenses and fees may impact portfolio performance over time.

FEE ASSUMPTIONS

MIX 5 STRATEGIC

City of Troy ERS

Equities	0.00%
US Equities	0.00%
US Large Cap Growth	0.00%
US Large Cap Value	0.00%
US Mid Cap Growth	0.00%
US Mid Cap Value	0.00%
US Small Cap Growth	0.00%
US Small Cap Value	0.00%
International Equities	0.00%
International Equities	0.00%
Japan Equities	0.00%
Emerging & Frontier Mkt	0.00%
Fixed Income & Preferreds	0.00%
Short Term Fixed Income	0.00%
US Fixed Income Taxable	0.00%
Inflation Linked Secs	0.00%
High Yield Fixed Income	0.00%
Emerging Mkt Fixed Income	0.00%

1 If included in this analysis, annual fees are hypothetical in nature and do not reflect any specific expenses or fees that might actually be incurred in your portfolio. We include them here to reflect that expenses and fees may impact portfolio performance over time.

FEE ASSUMPTIONS

58/25/17

City of Troy ERS

Equities	0.00%
US Equities	0.00%
US Large Cap Growth	0.00%
US Large Cap Value	0.00%
US Mid Cap Growth	0.00%
US Mid Cap Value	0.00%
US Small Cap Growth	0.00%
US Small Cap Value	0.00%
International Equities	0.00%
International Equities	0.00%
Intl Small Cap Equities	0.00%
Emerging & Frontier Mkt	0.00%
Fixed Income & Preferreds	0.00%
Short Term Fixed Income	0.00%
US Fixed Income Taxable	0.00%
Securitized	0.00%
US Taxable Core	0.00%
Preferred Securities	0.00%
High Yield Fixed Income	0.00%
Emerging Mkt Fixed Income	0.00%
Alternatives	0.00%
Real Assets	0.00%
REITs	0.00%
MLP/Energy Infrastructure	0.00%

¹ If included in this analysis, annual fees are hypothetical in nature and do not reflect any specific expenses or fees that might actually be incurred in your portfolio. We include them here to reflect that expenses and fees may impact portfolio performance over time.

FEE ASSUMPTIONS

58/25/17 (CONTINUED)

City of Troy ERS

Equity Hedge Assets	0.00%
Managed Futures	0.00%
Equity Return Assets	0.00%
Equity Long/Short	0.00%
Private Investments	0.00%
Private Real Estate	0.00%
Private Equity	0.00%

1 If included in this analysis, annual fees are hypothetical in nature and do not reflect any specific expenses or fees that might actually be incurred in your portfolio. We include them here to reflect that expenses and fees may impact portfolio performance over time.

FEE ASSUMPTIONS

53/19/28

City of Troy ERS

Equities	0.00%
US Equities	0.00%
US Large Cap Growth	0.00%
US Large Cap Value	0.00%
US Mid Cap Growth	0.00%
US Mid Cap Value	0.00%
US Small Cap Growth	0.00%
US Small Cap Value	0.00%
International Equities	0.00%
International Equities	0.00%
Intl Small Cap Equities	0.00%
Emerging & Frontier Mkt	0.00%
Fixed Income & Preferreds	0.00%
Short Term Fixed Income	0.00%
US Fixed Income Taxable	0.00%
Securitized	0.00%
US Taxable Core	0.00%
Preferred Securities	0.00%
High Yield Fixed Income	0.00%
Emerging Mkt Fixed Income	0.00%

1 If included in this analysis, annual fees are hypothetical in nature and do not reflect any specific expenses or fees that might actually be incurred in your portfolio. We include them here to reflect that expenses and fees may impact portfolio performance over time.

FEE ASSUMPTIONS

53/19/28 (CONTINUED)

City of Troy ERS

Alternatives	0.00%
Real Assets	0.00%
REITs	0.00%
MLP/Energy Infrastructure	0.00%
Infrastructure	0.00%
Equity Hedge Assets	0.00%
Managed Futures	0.00%
Equity Return Assets	0.00%
Equity Long/Short	0.00%
Private Investments	0.00%
Private Real Estate	0.00%
Private Equity	0.00%
Private Credit	0.00%

¹ If included in this analysis, annual fees are hypothetical in nature and do not reflect any specific expenses or fees that might actually be incurred in your portfolio. We include them here to reflect that expenses and fees may impact portfolio performance over time.

ASSET CLASS ASSUMPTIONS

Asset Class	Benchmark	Data History
Cash	Cash - USD (90-day Tbills)	1978 - 2019
Equities	MSCI All Country World Index Net	1999 - 2019
US Equities	Russell 3000	1979 - 2019
US Large Cap Growth	Russell 1000 Growth	1979 - 2019
US Large Cap Value	Russell 1000 Value	1979 - 2019
US Mid Cap Growth	Russell Mid Cap Growth	1986 - 2019
US Mid Cap Value	Russell Mid Cap Value	1986 - 2019
US Small Cap Growth	Russell 2000 Growth	1979 - 2019
US Small Cap Value	Russell 2000 Value	1979 - 2019
International Equities	MSCI World ex US Net	1970 - 2019
International Equities	MSCI World ex US Net	1970 - 2019
Japan Equities	MSCI Japan Net	1970 - 2019
Intl Small Cap Equities	MSCI World ex US Small Cap Net	1999 - 2019
Emerging & Frontier Mkt	MSCI Emerging Markets Index Net	1999 - 2019
Fixed Income & Preferreds	Barclays U.S. Aggregate Index	1976 - 2019
Short Term Fixed Income	Barclays US Government/Credit 1-3yr	1976 - 2019
US Fixed Income Taxable	Barclays U.S. Aggregate Index	1976 - 2019
Intermed Term Govt/Corp	Barclays U.S. Intermediate Gov't/Credit Bond Index	1973 - 2019
Securitized	Barclays US Securitized	1997 - 2019
US Taxable Core	Barclays U.S. Aggregate Index	1976 - 2019
Intl Fixed Income	Barclays Global Aggregate Non USD (hedged)	1990 - 2019
Inflation Linked Secs	Barclays Global Inflation Linked Index	1997 - 2019
Preferred Securities	The BofA Merrill Lynch Fixed Rate Preferred Securities Total Return Index	1989 - 2019
High Yield Fixed Income	Barclays Capital Global High Yield	2001 - 2019

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2. Past performance is no guarantee of future results.

ASSET CLASS ASSUMPTIONS (CONTINUED)

Asset Class	Benchmark	Data History
Emerging Mkt Fixed Income	JP Morgan Emerging Market Bond Index Global Total Return	1994 - 2019
Alternatives	HFRI Funds Weighted Index	1990 - 2019
Real Assets	Equal Weighted REITs, Commodities, MLP	1972 - 2019
REITs	FTSE EPRA NAREIT Global Total Return	2005 - 2019
MLP/Energy Infrastructure	Alerian Energy MLP Total Return Index	1987 - 2019
Infrastructure	MSCI All Country World Infrastructure Index Net	1999 - 2019
Equity Hedge Assets	50% CS Tremont Global Macro Index, 50% Barclay BTop50	1994 - 2019
Managed Futures	Dow Jones CS Managed Futures Index	1994 - 2019
Equity Return Assets	50% HFRI Equity Hedge Total Index, 50% HFRI Event Driven Total Index	1994 - 2019
Equity Long/Short	HFRI Equity Hedge Total Index	1990 - 2019
Private Investments	50% NCREIF Property Index, 50% Cambridge Associates US Private Equity Index	1972 - 2019
Private Real Estate	NCREIF Property Index	1978 - 2019
Private Equity	Cambridge Associates US Private Equity Index	1986 - 2019
Private Credit	Credit Suisse Leveraged Loan Index	1992 - 2019

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2. Past performance is no guarantee of future results.

METHODOLOGY

Morgan Stanley Wealth Management, in conjunction with your Financial Advisor as well as other resources across Morgan Stanley, has prepared this presentation. The presentation was designed to illustrate the risk and return characteristics of various portfolios when taking into account cash considerations. Each analysis is unique and although no individual analysis can completely describe the risk and return characteristics of a portfolio, the combination of these analyses can assist clients in arriving at an appropriate wealth strategy.

Expected Returns, Standard Deviations and Correlations: Return assumptions are established by the Morgan Stanley Global Investment Committee. The Global Investment Committee utilizes an equilibrium approach to generate expected returns, standard deviations and correlations for each asset class. We believe that by analyzing current and historical economic conditions and market trends, and then making projections of future economic growth, inflation, real yields for each country, we can estimate the equilibrium performance for an asset class. The equilibrium return is simply the central tendency around which market returns tend to fluctuate over a very long period of time. It is possible that actual returns will vary considerably from this equilibrium, even for a number of years, but we believe that market returns will eventually return to their equilibrium trend.

Monte Carlo Analysis: Monte Carlo simulation is an analytical technique which uses several iterations of hypothetical events. Statistics on the distribution of results can help infer which simulated variables are more likely. When simulating hypothetical asset class performance, we utilize Morgan Stanley's expected returns, standard deviations and correlations for each asset class. Small changes in these assumptions may have a sizable impact on the results. As such, the analysis is provided only for general guidance about asset allocation. There can be no assurances that the Monte Carlo-simulated results will be achieved or sustained. Your actual results will surely vary. For example, our simulations don't account for fees or transaction costs, which may be charged when you invest in an actual portfolio of securities. However, the goal of the Monte Carlo analysis is not 100% accurate forecasting, but rather to allow investors to make better, more informed decisions.

Asset Allocations: Unless otherwise stated, this analysis assumes that asset allocations remain constants and achieve the return and standard deviation assumptions over the period in which they are invested.

¹ Important: The projections or other information generated by the Wealth Strategies Analysis Tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Results generated by a Monte Carlo analysis will vary with each use and over time because each portfolio simulation is randomly generated.

Expected Performance: Performance assuming that portfolios achieve their annual return assumption each year in which they are invested.

Expected Tail Loss: The average expected 1-year portfolio loss, at a 95% confidence level, if an extraordinarily bad event does occur.

Sharpe Ratio: This calculation measures a ratio of return above the risk free rate to volatility.

Standard Deviation: A statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution.

Value at Risk: The maximum expected 1-year portfolio loss, at a 95% confidence level, if an extraordinarily bad event does not occur.

RISK OF DIFFERENT INVESTMENTS

Different security types and asset classes carry different risks of investment.

- **Small/Mid Caps U.S. Equity:** Investing in smaller companies involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations and illiquidity.
- **International/Emerging Markets:** International investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include potential and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economics.
- **Fixed Income:** Fixed Income Securities are subject to interest rate risk, credit risk, prepayment risk, market risk, and reinvestment risk. Fixed Income Securities, if held to maturity, may provide a fixed rate of return and a fixed principal value. Fixed Income Securities prices fluctuate and when redeemed, may be worth more or less than their original cost.
- **High Yield Bonds:** HighYield Fixed Income Investments, also known as junk bonds, are considered speculative, involve greater risk of default and tend to be more volatile than investment grade fixed income securities.
- **Hedge Funds:** Hedge funds are appropriate only for long-term, qualified investors. They are generally illiquid, not tax efficient, and have higher fees than many traditional investments. They may also be highly leveraged and engage in speculative investment techniques which can magnify the potential for investment loss or gain.
- **REITS:** REITs investing risks are similar to these associated with direct investments in real estate; lack of liquidity, limited diversification, and sensitivity to economic factors such as interest rate charges and market recessions.
- **Private Equity:** Private equity interests may be highly illiquid, involve a high degree of risk and be subject to transfer restrictions.
- **TIPS:** Because the return of TIPS is linked to inflation, TIPS may significantly underperform vs. fixed return treasuries in times of low inflation.
- **Managed Futures:** Managed futures investments are speculative, involve a high degree of risk, use significant leverage, are generally illiquid, have substantial charges, subject investors to conflicts of interest, and are appropriate only for the risk capital portion of an investor's portfolio. Before investing in any partnership and in order to make an informed decision, investors should read the applicable prospectus and/or offering documents carefully for additional information, including charges, expenses and risks. Investors should read the prospectus and/or offering documents carefully for additional information, including charges, expenses and risks. Managed futures investments do not replace equities or bonds but rather may act as a complement in a well diversified portfolio.

RISK OF DIFFERENT INVESTMENTS

Different security types and asset classes carry different risks of investment.

- **Commodities:** Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.
- **MLPs:** Investment in MLPs entails different risks, including tax risks, than is the case for other types of investments. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in these sectors (including commodity pricing risk, supply and demand risk, depletion risk and exploration risk).
- **Alternative Investments:** Any allocation containing alternative investments should note that they are highly illiquid and are only appropriate for investors willing to put capital at risk for an indefinite period of time. Alternative investments often engage in leverage and other speculative investment practices, may involve complex tax structures, typically have higher fees, and generally are not subject to the same regulatory requirements as traditional asset classes.

DISCLOSURES

These materials are provided for general informational and educational purposes based in part upon publically available information from sources believed to be reliable. While we have taken great care in the preparation of these materials, we cannot be responsible for clerical, computational, or other errors. While we have relied on sources we believe to be reliable, the values reflected in this request may differ from their reported values due to varying reporting methods and valuation methods used by custodians other than those affiliated with us. We cannot assure the accuracy of these reports, nor of the information provided to us and reflected in this report.

Important: The projections or other information generated by the Wealth Strategies Analysis Tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Results generated by a Monte Carlo analysis will vary with each use and over time because each portfolio simulation is randomly generated.

Any samples included in this analysis are not recommendations to pursue any estate planning or asset allocation strategy. They are shown for illustration purposes only.

Since the future cannot be forecast, actual results will vary from the information shown for the future, including estimates and assumptions. The results may vary with each use and over time. It is possible that these variations may be material. The degree of uncertainty normally increases with the length of the future period covered. As a result, Morgan Stanley Wealth Management cannot give any assurances that any estimates, assumptions or other aspects of the following analyses will prove correct. They are subject to actual known and unknown risks, uncertainties and other factors that could cause actual results to differ materially from those shown.

Asset allocation does not assure profit or protect against loss in declining financial markets. Certain assumptions may have been made in the analyses that have resulted in the estimated return contained herein. Any change in these assumptions may have a material impact on any estimated returns.

Many of the views and opinions contained herein regarding asset allocation were prepared by Morgan Stanley Wealth Management and may differ materially from that of others at the Company. Nothing in this allocation is designed to constitute an individual investment plan which should only be devised after discussion with your Financial Advisor.

This Wealth Strategies Analysis Tool may contain historical asset class return data and statistically generated data from 1990-2017 which are not used to forecast potential return but rather to identify relative patterns of behavior among asset classes which when put in different combinations assume various levels of risk.

Blended index portfolio performance is shown for illustration purposes only. Hypothetical performance has inherent limitations and does not reflect actual performance, trading or decision making. The results vary and reflect material economic or market factors such as liquidity constraints or volatility, which have an important impact on decision making and actual performance.

Past performance is no guarantee of future results. These materials do not constitute an offer to either buy or sell securities or to participate in any trading strategy.

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustration purposes only and do not show the performance of any specific investment. Reference to an index does not imply that the portfolio will achieve return, volatility or other results similar to the index. The composition of an index may not reflect the manner in which a portfolio is constructed in relation to expected or achieved returns, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility, or tracking error target, all of which are subject to change over time.

DISCLOSURES

This report was prepared using a brokerage tool and not an advisory tool. This report is not a financial plan and does not create an investment advisory relationship between you and your Morgan Stanley Wealth Management Financial Advisor. We are not your fiduciary either under the Employee Retirement Income Security Act of 1974 (ERISA) or the Internal Revenue Code of 1986, and any information in this report is not intended to form the primary basis for any investment decision by you, or an investment advice or recommendation for either ERISA or Internal Revenue Code purposes. Morgan Stanley Wealth Management will only prepare a financial plan at your specific request using Wealth Management approved financial planning signature.

We may act in the capacity of a broker or that of an advisor. As your broker, we are not your fiduciary and our interests may not always be identical to yours. Please consult with your Financial Advisor to discuss our obligations to disclose to you any conflicts we may from time to time have and our duty to act in your best interest.

We may be paid both by you and by others who compensate us based on what you buy. Our compensation, including that of your Financial Advisor, may vary by product and over time.

Morgan Stanley Smith Barney LLC does not provide tax or legal advice. We strongly recommend that you consult your own legal and tax adviser to determine whether the analyses in these materials apply to your personal circumstances. Particular, legal, accounting and tax implications applicable to you, as well as margin requirements and transaction costs may significantly affect the structure discussed and we do not represent that the results indicated will be achieved by you.

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Index Concentration

Prepared on November 03, 2020

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The Risks Posed by Elevated Index Concentration

As of October 5, 2020

- Passive strategies, often tracking cap-weighted indexes like the S&P 500, may introduce unwanted risk to investors, particularly during times of increased concentration. Currently, the five and 25 largest companies constitute nearly 21% and 42% of the index weight, a post-2000 high.
- Such high concentration can also create unwanted overexposure to high-momentum and high-growth factors, which could drive poor performance if markets see a change in leadership, which is typically witnessed around recessions as late-cycle outperformers give way to early-cycle leaders.
- Given sector concentration in Technology and Internet, a reversal in this sector's performance would also weigh on cap-weighted indices.
- Historically, we have seen peak concentrations serving as leading indicators for the leadership shifts between small-cap & large-cap and value & growth-oriented investments, which have allowed for small-cap and value to outperform in the subsequent months following a peak.
- Given the current environment of high concentration in the S&P 500, investors should consider diversifying their portfolios to not only include value and small-cap oriented investments but also across active managers, as they can help navigate through these volatile markets.

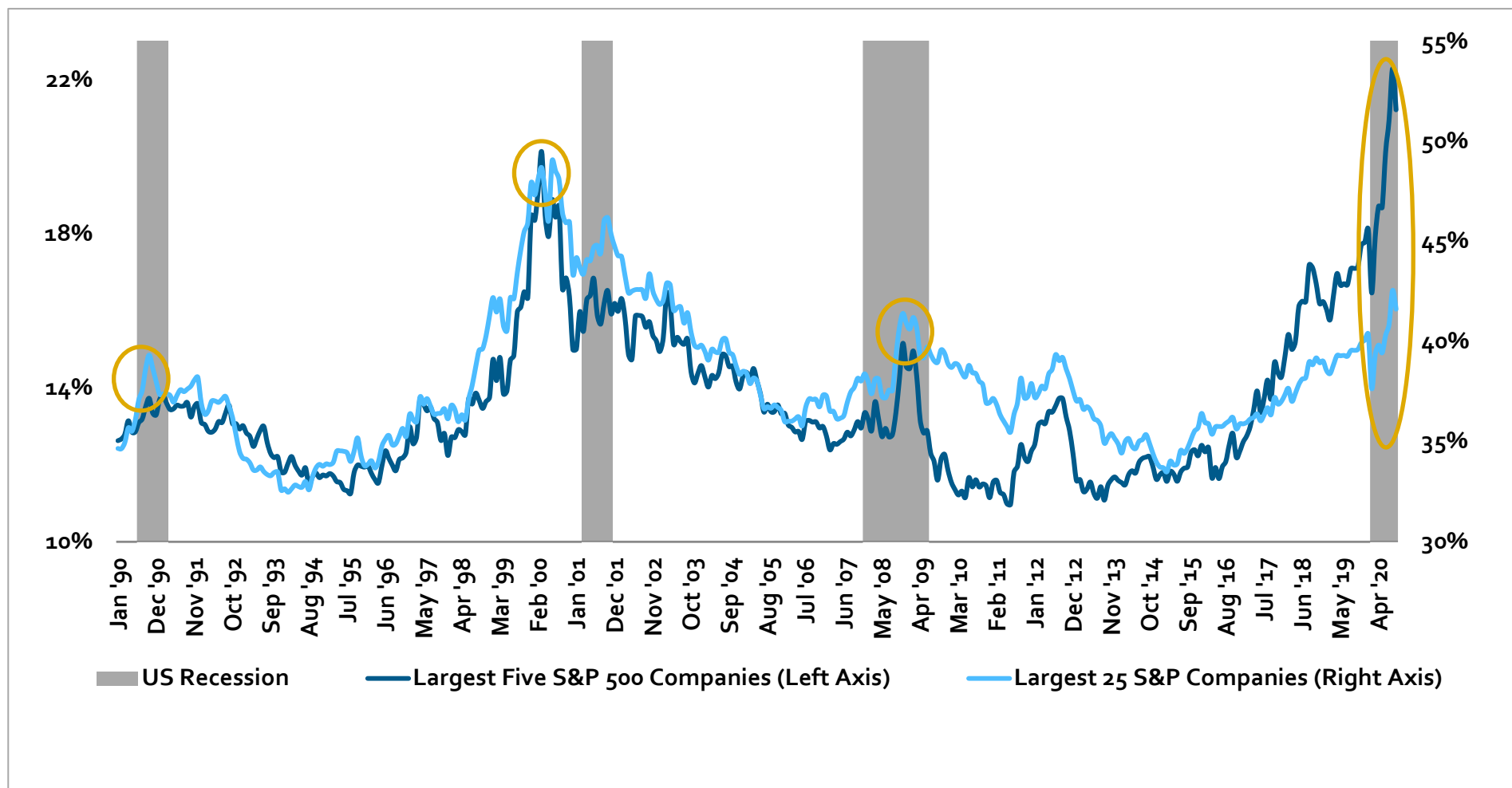
Source: Morgan Stanley Wealth Management GIC

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Large Concentrations in the S&P 500 Have Typically Coincided with Recessions, and this Time May Be No Different

Concentration in the Largest S&P 500 Companies

As of October 2, 2020



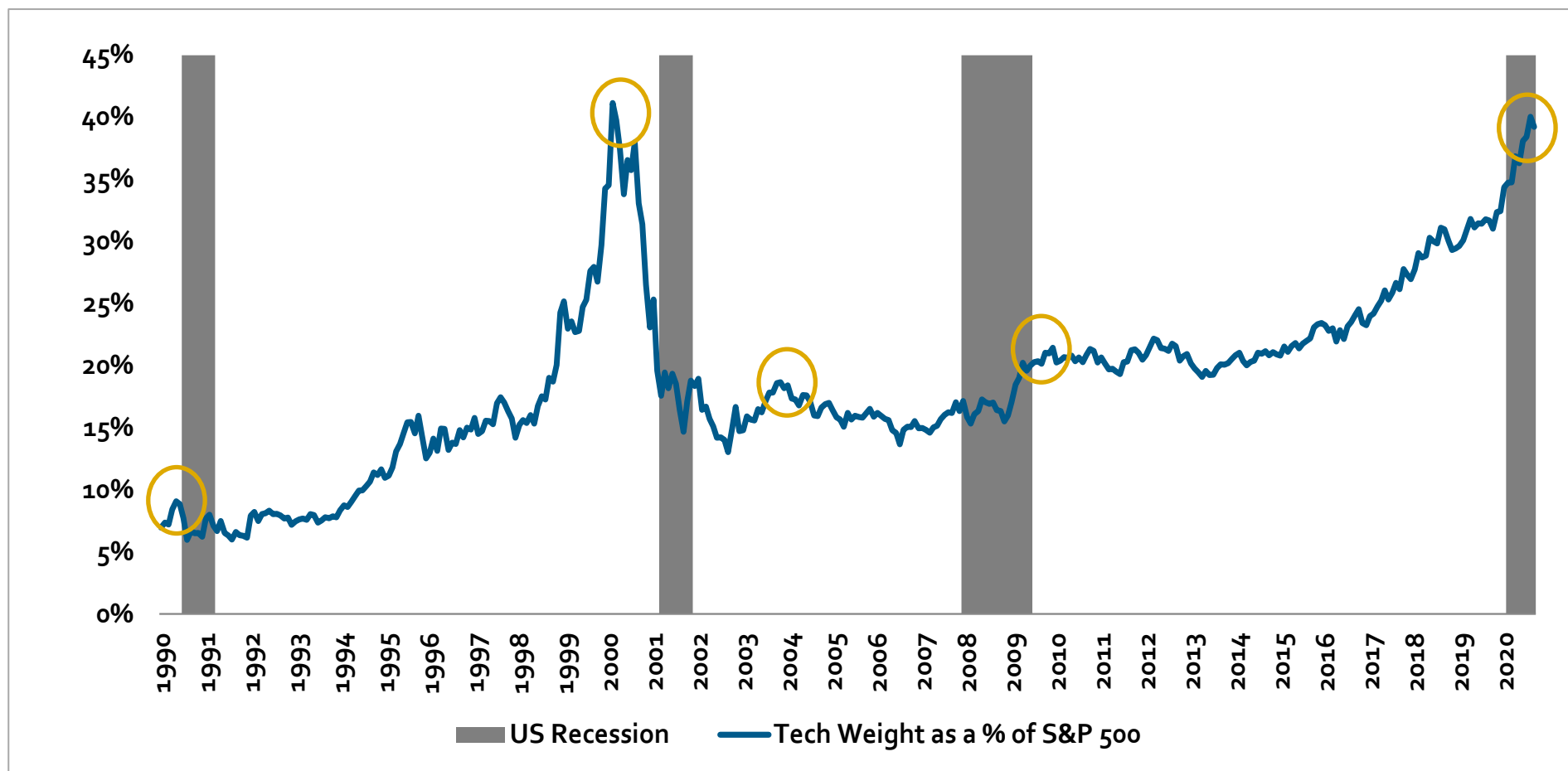
Source: Bloomberg, FactSet, Morgan Stanley Wealth Management Market Strategy

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Technology Concentration in the S&P 500 Is at a New Post-2000 High, And a Reversal in Performance Can Weigh Heavily on the Index

Technology Weight as a Percentage of the S&P 500 Index

As of October 5, 2020



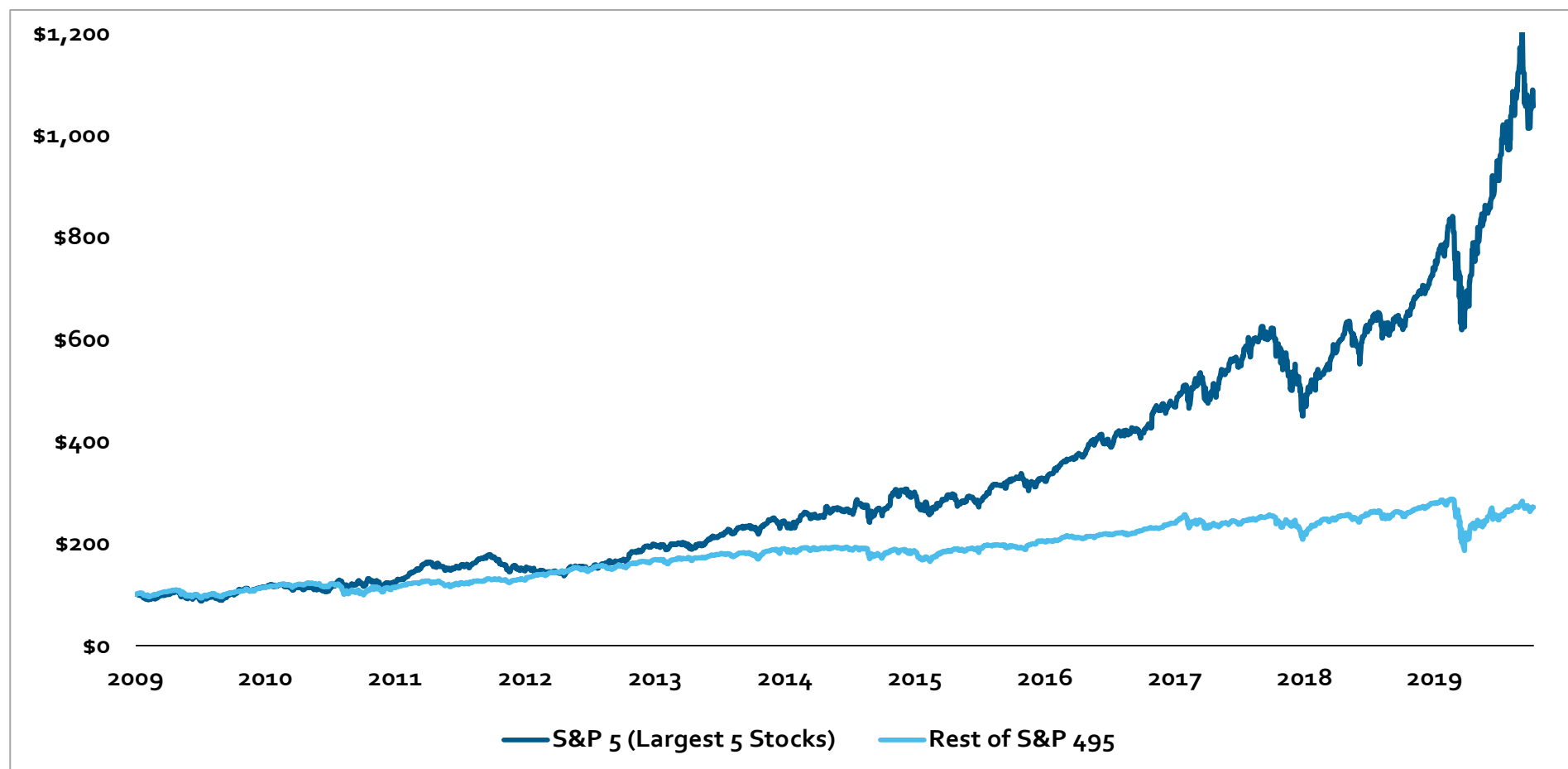
Source: Bloomberg, FactSet, Morgan Stanley Wealth Management Market Strategy. Note: The Technology weight refers to the total weight of Information Technology and Internet companies within the S&P 500 Index.

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The Largest 5 Companies Outperformed Disproportionately Compared to the Rest of the Index

Cumulative Performance of Largest 5 Companies in the S&P 500 vs Rest of the Index (2009-2020)

As of October 4, 2020



Source: Bloomberg, Morgan Stanley Wealth Management Market Strategy

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Concentration Peaks Historically Served as Leading Indicators of Leadership Shifts Between Small-Cap and Large-Cap Equities...

Small-Cap vs. Large-Cap Equity Relative Performance

As of October 5, 2020



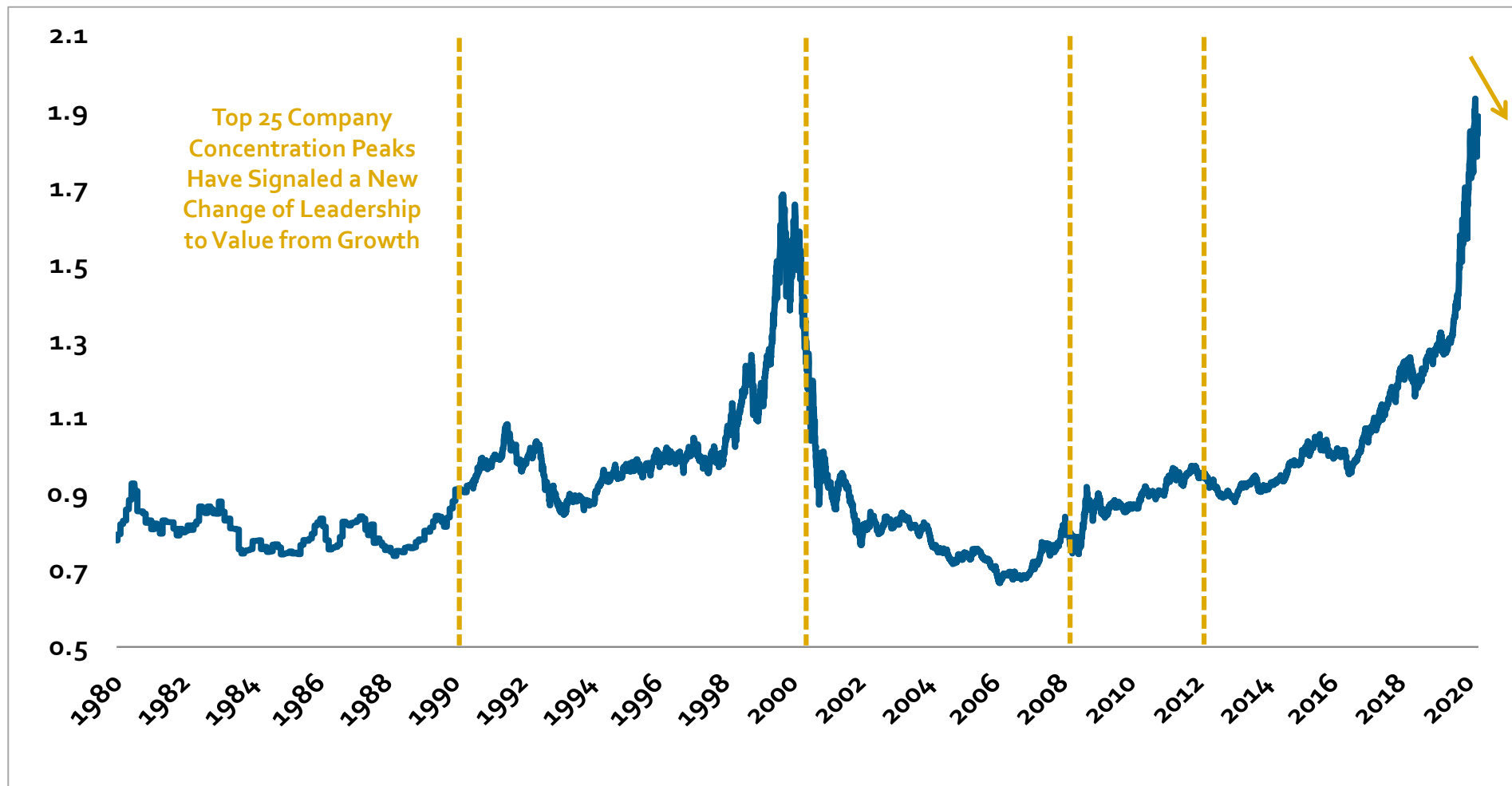
Source: Bloomberg, FactSet, Morgan Stanley Wealth Management Market Strategy

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...As Well as Shifts Between Value and Growth Equities

Value vs. Growth Equity Relative Performance

As of October 5, 2020



Source: Bloomberg, FactSet, Morgan Stanley Wealth Management Market Strategy

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It should be noted that the majority of hedge fund indexes are comprised of hedge fund manager returns. This is in contrast to traditional indexes, which are comprised of individual securities in the various market segments they represent and offer complete transparency as to membership and construction methodology. As such, some believe that hedge fund index returns have certain biases that are not present in traditional indexes. Some of these biases inflate index performance, while others may skew performance negatively. However, many studies indicate that overall hedge fund index performance has been biased to the upside. Some studies suggest performance has been inflated by up to 260 basis points or more annually depending on the types of biases included and the time period studied. Although there are numerous potential biases that could affect hedge fund returns, we identify some of the more common ones throughout this paper.

Self-selection bias results when certain manager returns are not included in the index returns and may result in performance being skewed up or down. Because hedge funds are private placements, hedge fund managers are able to decide which fund returns they want to report and are able to opt out of reporting to the various databases. Certain hedge fund managers may choose only to report returns for funds with strong returns and opt out of reporting returns for weak performers. Other hedge funds that close may decide to stop reporting in order to retain secrecy, which may cause a downward bias in returns.

Survivorship bias results when certain constituents are removed from an index. This often results from the closure of funds due to poor performance, “blow ups,” or other such events. As such, this bias typically results in performance being skewed higher. As noted, hedge fund index performance biases can result in positive or negative skew. However, it would appear that the skew is more often positive. While it is difficult to quantify the effects precisely, investors should be aware that idiosyncratic factors may be giving hedge fund index returns an artificial “lift” or upwards bias.

Hedge Funds of Funds and many funds of funds are private investment vehicles restricted to certain qualified private and institutional investors. They are often speculative and include a high degree of risk. Investors can lose all or a substantial amount of their investment. They may be highly illiquid, can engage in leverage and other speculative practices that may increase volatility and the risk of loss, and may be subject to large investment minimums and initial lockups. They involve complex tax structures, tax-inefficient investing and delays in distributing important tax information. Categorically, hedge funds and funds of funds have higher fees and expenses than traditional investments, and such fees and expenses can lower the returns achieved by investors. Funds of funds have an additional layer of fees over and above hedge fund fees that will offset returns. An investment in an **exchange-traded fund** involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. An investment in a **target date portfolio** is subject to the risks attendant to the underlying funds in which it invests, in these portfolios the funds are the Consulting Group Capital Market funds. A target date portfolio is geared to investors who will retire and/or require income at an approximate year. The portfolio is managed to meet the investor’s goals by the pre-established year or “target date.” A target date portfolio will transition its invested assets from a more aggressive portfolio to a more conservative portfolio as the target date draws closer. An investment in the target date portfolio is not guaranteed at any time, including, before or after the target date is reached. **Managed futures** investments are speculative, involve a high degree of risk, use significant leverage, are generally illiquid, have substantial charges, subject investors to conflicts of interest, and are appropriate only for the risk capital portion of an investor’s portfolio. Managed futures investments do not replace equities or bonds but rather may act as a complement in a well diversified portfolio. Managed Futures are complex and not appropriate for all investors. **Rebalancing** does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy.

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For index, indicator and survey definitions referenced in this report please visit the following: <https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions> (unsafe: <span class=
link><https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions>)
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Variable annuities are long-term investments designed for retirement purposes and may be subject to market fluctuations, investment risk, and possible loss of principal. All guarantees, including optional benefits, are based on the financial strength and claims-paying ability of the issuing insurance company and do not apply to the underlying investment options. Optional riders may not be able to be purchased in combination and are available at an additional cost. Some optional riders must be elected at time of purchase. Optional riders may be subject to specific limitations, restrictions, holding periods, costs, and expenses as specified by the insurance company in the annuity contract. If you are investing in a **variable annuity** through a tax-advantaged retirement plan such as an IRA, you will get no additional tax advantage from the variable annuity. Under these circumstances, you should only consider buying a variable annuity because of its other features, such as lifetime income payments and death benefits protection. Taxable distributions (and certain deemed distributions) are subject to ordinary income tax and, if taken prior to age 59½, may be subject to a 10% federal income tax penalty. Early withdrawals will reduce the death benefit and cash surrender value.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment. **Ultrashort-term fixed income** asset class is comprised of fixed

income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk. Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk. The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value. MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV, and, as a result, the MLP fund's after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention. **Physical precious metals** are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be appropriate for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions. Risks of **private real estate** include: illiquidity; a long-term investment horizon with a limited or nonexistent secondary market; lack of transparency; volatility (risk of loss); and leverage. Principal is returned on a monthly basis over the life of a **mortgage-backed security**. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. **Asset-backed securities** generally decrease in value as a result of interest rate increases, but may benefit less than other fixed-income securities from declining interest rates, principally because of prepayments.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision. **Credit ratings** are subject to change. **Duration**, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. The majority of \$25 and \$1000 par **preferred securities** are "callable" meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per \$25 or \$1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price. The initial interest rate on a **floating-rate security** may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk. The market value of **convertible bonds** and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield. Some \$25 or \$1000 par **preferred securities** are QDI (Qualified Dividend Income) eligible. Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date.

Companies paying **dividends** can reduce or cut payouts at any time.

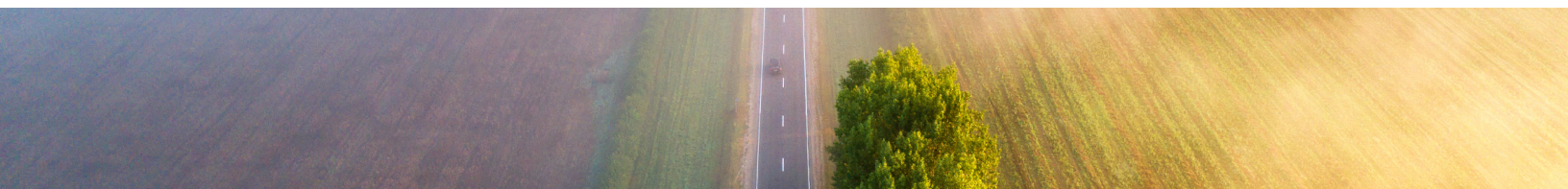
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Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. **Value investing** does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

Any type of **continuous or periodic investment plan** does not assure a profit and does not protect against loss in declining markets. Since such a plan involves continuous investment in securities regardless of fluctuating price levels of such securities, the investor should consider his financial ability to continue his purchases through periods of low price levels.

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Global Investment Committee | November 2020

On the Markets

Known Unknowns

After what is sure to be one of the craziest years in our lifetimes, we have finally arrived at an event many people have been focused on for months, if not years: the 2020 US presidential election. Prior to the outbreak of COVID-19, the economy appeared to be humming along with the lowest unemployment in 50 years, and many companies were doing better than they had in decades. Then everything changed overnight as economies were forced into a sudden-stop lockdown. This resulted in the deepest recession on record with GDP falling more than 30% in the second quarter.

Due to the health crisis nature of this recession, there has been no shortage of stimulus to support those in need and even those who have managed through this period unscathed. As such, the US economy came roaring back in the third quarter with a 30% increase, leaving the third quarter output down just 2.5% from its peak—a truly remarkable feat. Nevertheless, there is work to be done to get the economy back to where it was. Perhaps the most troubling aspect of the recovery is how uneven it remains, with some companies and individuals doing better than they were prior to the pandemic while others are falling further behind. This bifurcation must be addressed.

The good news is that a vaccine now looks close to being approved. This, along with a better understanding of the disease and how to treat it naturally and with therapeutics, should allow us to manage the second wave better than the initial attack. That means by spring we should be able to fully open the economy with safe participation by most people. This is what the financial markets continue to look forward to and why they have traded so well this year.

Back in March, we identified the sell-off as the best opportunity in years to put money to work. Price matters, as we like to say, and such fat pitches don't come around often. Prices are no longer as attractive, but the stock market has recently sold off on election concerns and uncertainty on how the second wave will play out. The bottom line for us is that both are known unknowns at this point and well discounted. In short, both will likely be resolved, and that means higher equity prices over the next 12 months. ■

Michael Wilson

Chief Investment Officer
Chief US Equity Strategist
Morgan Stanley & Co. LLC

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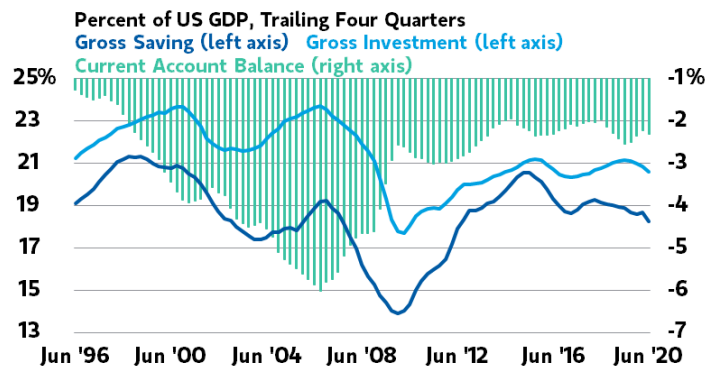
ECONOMICS

Mind the Gap

Chetan Ahya, Chief Global Economist and Global Head of Economics, Morgan Stanley & Co.

The extraordinary policy response to the exogenous COVID-19 shock is one of the key reasons we expect a V-shaped recovery and a return of inflation in this cycle—but that is not all. This policy response will also bring about a remarkable shift in the trend in the US saving-investment gap; that is, the widening of the current account deficit beyond the stable range of 2% to 3% of GDP that it has maintained for the past nine years (see chart). The US policy response and its transmission to the rest of the world via the current account deficit plays an important role in global reflation and supports our call for a synchronous recovery in 2021.

US Current Account Deficit Set for a Remarkable Shift



Source: Bureau of Economic Analysis, Haver Analytics, Morgan Stanley & Co. Research as of Oct. 18, 2020

PUBLIC SAVING DECLINE. Large, ongoing fiscal expansion has led to a further decline in US public saving. The nature of the COVID-19 shock and underlying income inequality issues have combined to prompt a policy response that is tilted toward transfers to households and measures to boost consumption. To contextualize how large these transfers from the CARES Act were, a University of Chicago study found that 76% of workers received more from claiming unemployment insurance than they would have gotten in wages, with the median worker receiving at least 45% more.

Aided by both the faster reopening of the economy and the unprecedented fiscal stimulus, real GDP and consumer demand has rebounded sharply. GDP was already 96.5% of pre-COVID-19 levels in the third quarter, and real personal consumption expenditures are expected to reach 98% of pre-COVID-19 levels in October. With this V-shaped recovery, we expect a very different inflation outcome in this cycle, too. We peg core inflation as moving through a 2% annualized rate on a sustained basis starting in 2022, as measured by the Personal Consumption Expenditure Price Index.

AVERAGE INFLATION TARGETING. In the last cycle, the Fed started to tighten monetary policy well before inflation rose to an annualized 2% and kept tightening even though inflation had not sustainably reached that level. This time, the Fed has already telegraphed its shift to an “average inflation targeting” framework. As it aims for an overshoot of inflation, we are getting greater assurance that monetary policy will remain accommodative for some time. How will these policy responses shape the outlook for saving and investment trends?

Following recessions, public saving typically declines but private saving rises as an offset, given the inherent uncertainty at the start of a downturn. Thus, the consensus view is that the deleveraging pressures will be intense in this cycle, and we will most likely see a repeat of the post-2008 experience in which private saving will remain elevated for some time.

We view things differently. We have consistently argued that the state of private sector balance sheets had been healthier coming into the recession. Private debt/GDP levels had remained stable for some time and US households had completed their deleveraging cycle. A Fed that is committed to its average inflation goal will keep real rates lower for longer in this cycle, too, which will provide greater incentives for the private sector to steer away from saving.

FISCAL CONSIDERATIONS. We think that the trend of broad-based declines in saving has been set in motion, but how far it will go depends on the extent of expansionary fiscal policy. Additional fiscal stimulus after the election is something our US public policy analyst thinks is a possibility in three of the four postelection party configurations. COVID-19 has exacerbated the preexisting income inequality trends in the US, and policymakers will continue to focus their efforts on helping low-income households—suggesting that they will err on the side of running expansionary fiscal policy for longer.

If more fiscal stimulus arrives, it will impart upside risks to the growth and inflation outlook. Consequently, it could lead to a further and more rapid widening in the current account deficit, particularly if the fiscal policy mix remains tilted toward transfers to households.

WEAKENING DOLLAR. The widening current account deficit will be another factor in weakening the US dollar, as the Morgan Stanley & Co. Global Macro Strategy team forecasts. We believe that this set-up of continued low real rates and a widening current account deficit in the US will act as a reflationary impulse for the rest of the world, especially the emerging markets, setting the global economy on a path toward a synchronous recovery in 2021. ■

EQUITIES

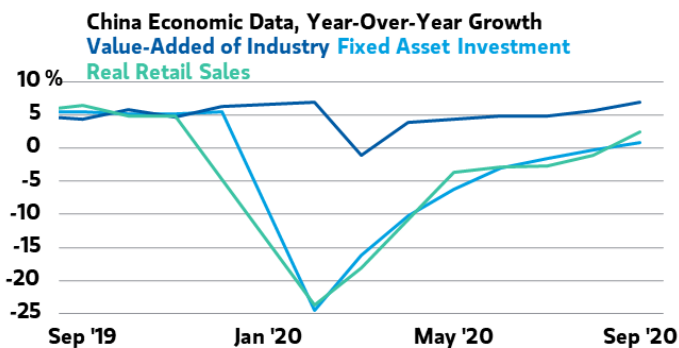
China "Emerges" Again

Lisa Shalett, Chief Investment Officer and Head of Wealth Management
Investment Resources, Morgan Stanley Wealth Management

This year has produced many amazing and unanticipated twists for investors. Truly, who would have guessed that amid the worst global pandemic in a century and the deepest economic downturn since the Great Depression, the S&P 500 Index would be up 2.76% for the year to date (through Oct. 30)? That's less than 10% off the all-time high. What's more, despite a second wave of COVID-19 infections in the US and Europe, anxiety around the US elections and uncertainty about the timing and size of CARES 2.0 stimulus, the US economy's V-shaped recovery remains on track. As encouraging as this scenario may seem to investors, it may not be the most important development in capital markets as we head into 2021.

Other than the global availability of a vaccine, the most important driver of a global recovery is likely to be the speed and durability of China's economic turnaround (see chart). Specifically, China is the only G20 country to have already emerged from recession, with 4.9% year-over-year growth in the third quarter. For the full year, Morgan Stanley & Co. economists now forecast China's GDP growth at 2.3%—a rate that should accelerate to 8.9% in 2021. As the world's second-largest economy and No. 1 trading partner, that resilience cannot be understated as the global economy is still forecast to contract 3.7% this year.

China's Economic Recovery Is Now in Positive Territory



Source: Bloomberg as of Oct. 22, 2020

TRUE ECONOMIC REOPENING. Just as it did in the wake of the financial crisis and ensuing recession, China's rebound appears to be buttressing the world economy. China now accounts for fully 40% of global GDP growth—more than the US, Europe and Japan combined. At the heart of China's success seems a coordination of policy that transcended the borders of monetary and fiscal stimulus to include public health practices that have controlled the virus to make a true

economic reopening possible. While we can debate the veracity of China's reported data, based on WHO data, the US has 4% of the world's population and 21% of the world's COVID-19 deaths. In contrast, China accounts for 18% of the world's population and 0.4% of the deaths.

Although politics around the virus, trade, 5G infrastructure and cyberterrorism may have obscured China's comeback, it has not been lost on investors. To the contrary, China A-shares—renminbi-denominated shares that trade on Chinese exchanges—have been the best-performing global asset class so far this year. They're up 22.2% and at an all-time high in terms of market capitalization, topping \$10 trillion.

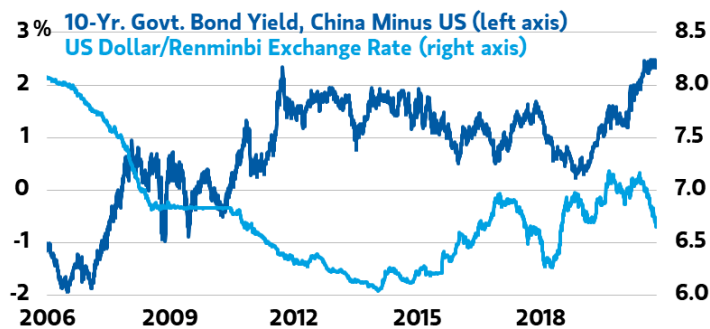
Is there still juice in this lemon? Investors have reason to be skeptical. After all, China's similar stimulus-based surge of 2009-2012 proved unstable and unsustainable, built on a precarious foundation of provincial debt linked to real estate. We think this time is different: Policy is more measured and economic trajectory steadier. More than simply a cyclical trade, in our minds we are at a great entry point for exposure to a multiyear secular growth story.

CONSUMER-ORIENTED. For starters, China's economy has become more stable. This is the eighth consecutive year that consumer sectors represent more than 50% of China's GDP. In 2019, the consumer accounted for 60% of GDP, while exports were only 17%, down from 35% in 2007. Because Chinese consumers' purchasing power has grown, and along with it an appetite for global imports, net trade's contribution to GDP growth is approaching zero. Equally compelling is that, despite the rhetoric around the US' leverage in trade talks with China, this year US imports of Chinese goods are only 3% of China's GDP, down from 12% in 2008.

China is increasingly a domestic demand story. Robin Xing, MS & Co.'s chief China economist, says that the focus on domestic consumer demand is a central pillar of the new five-year economic plan. An equally important goal is to drive the next generation of urbanization by focusing on health care, education and retailing. With China's "social financing"—that is, loans to the private sector—up 14.9% year over year in September, the momentum in household consumption should be solid through next year. Most consumption-linked sectors—including autos, online retailing and housing—have been expanding uninterrupted for at least six months. While the progress is good, it is likely to get better. Although China's industrial production is back at the pre-COVID-19 level, third quarter growth in per capita disposable income was up 6.9% on an annualized basis and consumption spending was up 1.4%. That's well below long-run trends of 8.8% disposable income and 9.9% for consumption spending. To wit, these figures belie the fact that travel-related sectors remain depressed as vacation-related spending is off by nearly 60%.

ON THE MARKETS

China's Yield Advantage Has Helped Strengthen Its Currency



Source: Bloomberg as of Oct. 22, 2020

POLICY FLEXIBILITY. Next, unlike most central banks and sovereign governments in the West, China appears to have ample policy flexibility since it did not have to resort to bond purchases, balance sheet expansion or unprecedented levels of government debt. While the US, Europe and Japan pursued shock-and-awe policies that saw combined fiscal and monetary stimulus move toward 30% of GDP, China's policy expenditures have only been about 6% of GDP so far, which is below that following the financial crisis. Consider that while the US is expected to run annual deficits that approach 16% of GDP—the highest since 1946—China's annual budget shortfall to GDP is approaching 5%, the highest in history. To be clear, these deficits are not comparable to those in the West because of China's high savings rate. Household savings are 23% of GDP, or almost five times their deficits.

A final point is that both interest rates and currency dynamics remain attractive, suggesting a healthy backdrop for attracting foreign capital flows and preserving investors' capital gains. As we illustrate in the chart, China's 10-year government bond yield is at 3.175%, the widest premium to the 10-year US Treasury in 15 years. For its part, the renminbi is now at its strongest since 2018, trading at around 6.65 to the dollar (see chart). These relatively attractive drivers of real returns play into China's other core strategies: the financialization of China's economy and the internationalization of the renminbi. MS & Co. strategists estimate the Chinese currency will garner 10% of foreign reserves by 2030.

BOTTOM LINE. All told, a burgeoning transition to a domestic consumption growth model, policy flexibility, a strengthening currency, relatively high interest rates and improving corporate and government debt dynamics suggest a robust environment for investment gains. Anticipated secular changes to China's role in global capital markets, indexes and currency reserves markets make investments strategic for the coming years. Watch the US dollar/renminbi exchange rate as a strengthening renminbi is positive for Chinese equities—and consider using US interest rate and dollar volatility through the year's end to add to China A-shares and emerging market equities. ■

EQUITIES

The Time Is Right for Mid Caps

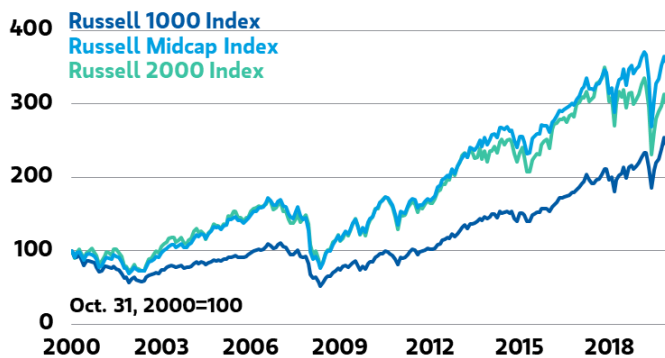
Sachin Manchanda, Investment Strategist, Morgan Stanley Wealth Management

Kevin Demers, CFA, Investment Strategist, Morgan Stanley Wealth Management

For much of the past cycle, subdued economic growth and exceptionally low interest rates drove gains for the stock market's largest companies. Today, the five-largest S&P 500 companies together have a market capitalization that is three times greater than the 1,000 companies in the S&P MidCap 400 and the S&P SmallCap 600 indexes combined. This extreme market concentration, in our view, creates an opportunity for investors to diversify into mid-cap stocks. This is supported by the Global Investment Committee (GIC), which earlier this year increased its allocation to small- and mid-cap stocks. Indeed, Michael Wilson, Morgan Stanley & Co.'s chief US equity strategist, notes that coming out of a recession small caps and mid caps tend to greatly outperform large caps, as they are more cyclically levered and thus sensitive to an economic recovery.

LONG-TERM PERFORMANCE. While large-cap and even mega-cap stocks have dominated in recent years, mid caps have had better long-term results. Since 1999, the Russell Midcap Index has actually outpaced both the large-cap Russell 1000 Index and the small-cap Russell 2000 Index, outperforming by 230% and 150%, respectively (see chart).

Mid-Cap Stocks Have Been Outperformers For the Past 20 Years



Source: Bloomberg as of Sept. 30, 2020

Importantly, mid caps have also delivered better risk-adjusted returns. In the past 20 years, the Russell Midcap Index had a Sharpe ratio (which measures returns per unit of volatility) of 0.3. Again this compares favorably to both large caps and small caps, both of which had 0.2 Sharpe ratios. Recent history would suggest that large-cap stocks are better positioned, but we note that long-lasting cycles tend to revert

to the mean. To this end, we expect the current recession and subsequent economic recovery will be the catalyst to drive the rotation back toward mid caps.

SWEET SPOT. The case for mid caps lies in their position in the corporate lifecycle. As companies grow large enough to be classified as mid cap—between \$2 billion and \$30 billion in market cap—they have passed the start-up phase of their corporate evolution and have become viable businesses. Additionally, mid-cap companies often have improved access to the capital markets given their relatively lower financial risk profile. This provides mid caps with the ability to finance expansion into large and underpenetrated addressable markets, helping to drive top-line growth. Furthermore, mid caps are often able to generate strong margin expansion at this point in their lifecycle as they leverage economies of scale to improve profitability. Thus, mid-cap companies often exhibit better top-line and earnings growth prospects, which create a compelling investment opportunity for long-term investors.

MACRO MATTERS. While mid-cap stocks' historical performance and advantaged growth profile is compelling, we acknowledge that the macro backdrop matters. In periods of sustained low economic growth, large-cap stocks are favored due to perceived relative safety. However, today we see evidence of a cyclical recovery as the economy responds to improving consumer activity and strong stimulus efforts from Congress and the Federal Reserve. This provides the underpinnings of a V-shaped recovery, and augers for mid-cap outperformance.

Indeed, historically mid caps have exhibited strong excess returns during periods of recovery. In fact, they generated 32% excess returns versus large-cap stocks emerging from the last three recessions. Additionally, mid-cap performance has shown high correlation to the outlook for earnings. After having collapsed during the bear market earlier this year, earnings revisions for mid-cap companies have moved up strongly, to 26% in September from -40% in April. This reflects the improvement in economic activity that supports mid-cap profits. As the earnings recovery plays out, we highlight attractive relative valuations that could add fuel to the rotation. Today, mid-cap stocks are trading near decade-low relative valuations versus large caps. Measured by consensus forward P/E, the Russell Midcap Index trades at a forward price/earnings ratio of 20, which is at parity with the S&P 500; historically, mid caps have traded at a 12% premium. This valuation disconnect reinforces our bullish outlook. ■

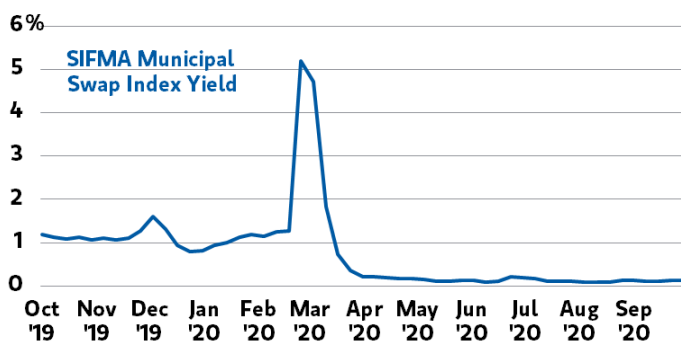
FIXED INCOME

Wide Discounts, Rising Dividends—
Plus Tax-Free Income

John Duggan, Investment Strategist, Morgan Stanley Wealth Management

In a world again beset by lower yields, municipal bond closed-end funds (CEFs) stand out. With many constituents hovering near 5.0%, distribution rates for the national muni bond CEF category offer an exceptional pick-up over commonly quoted benchmarks like the Bond Buyer 20 GO Index, at 2.3%. What's more, muni CEF dividends have been rising rather than falling.

REFERENCE RATE. How is that possible? While several factors account for the differential, the key driver is the reference rate for the vehicles that muni CEFs use to create leverage. Variable rates on preferred and related securities that muni CEFs market to institutions for borrowing purposes are typically tied to the SIFMA Municipal Swap Index (SIFMA), and SIFMA has plummeted (see chart). Having spiked to 5.2% in March, the rate has fallen all the way down to 12 basis points, in sympathy with the trajectory of fed funds and LIBOR. While yield spreads are applied to the reference rate to set borrowing costs for the funds, they are still well below coupons on the longer-maturity bonds that dominate their actively managed portfolios.

Reference Rate Used for Closed-End Funds'
Borrowing Costs Has Collapsed

Source: Bloomberg as of Oct. 23, 2020

The resulting investment dynamic is compelling, as it has boosted fund net income and increased monthly distributions. Of the 31 leveraged perpetual national muni CEFs run by the two largest issuers, BlackRock and Nuveen, 23 have boosted their payouts at least once in the past six months. For some funds, additional increases are likely to follow, in our view. Based on published data through October, distribution coverage ratios for leveraged national perpetual funds from

the two issuers have been running at a historically healthy level of 103.6%, on average.

ATTRACTIVE VALUATION. Another factor producing strong yields for new investors is valuation. The average municipal bond closed-end fund trades at a 6.0% market price discount to its net asset value (NAV). That's a wider discount than at the beginning of 2020 despite the sector's accelerating yield advantage. With some potential buyers spooked by sudden market price declines in February and March, discounts have been more resistant to rebounds than after previous sell-offs. Thus, many remain in the 7% to 8% range. The opportunity to buy at a discount of that magnitude can increase investor distribution rates even further. For instance, a muni CEF with an NAV of \$10 and an NAV distribution rate of 4.5% equates to a market price distribution rate of 4.9% for those purchasing at a 7.5% discount.

Of course, investors in muni CEFs must factor in risks as well. The application of leverage, typically in the range of 30% to 40% of total assets, heightens rate sensitivity, resulting in longer leverage-adjusted durations. In other words, expect leveraged muni CEFs to rise or fall by a greater degree per unit of interest rate movement than similarly invested nonleveraged funds. Furthermore, swings can be amplified by exaggerated price movements amid widening discounts. The funds may also invest across a variety of credit ratings, thereby boosting credit risk over indexes like the AA-focused Bond Buyer 20 GO Index.

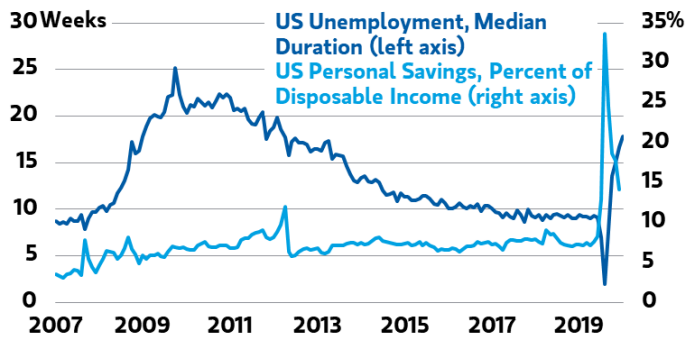
INCREASED VULNERABILITY. Regarding the underlying municipal market, Morgan Stanley's strategists anticipate some near-term bumpiness. Given the rally since March, coupled with a lack of progress on additional federal aid and the potential for rate volatility, vulnerability has increased. However, downside risk is likely less severe than in the spring sell-off. Valuations are cheaper than in early 2020, including relative to corporate bonds, and federal support to date has been an important bulwark. Notably, the Federal Reserve's Municipal Liquidity Facility has mitigated the likelihood of jump-to-default scenarios among investment grade bonds, as states and smaller borrowers have taken advantage of it to help alleviate revenue deterioration.

We urge investors to approach municipal bond CEFs judiciously: They should not constitute the majority of one's income portfolio, but rather serve as one component of a well-balanced portfolio. For those seeking to add active management to their muni income mix while boosting yield in a CEF wrapper, now may be a promising time to search among plentiful opportunities. ■

Short Takes

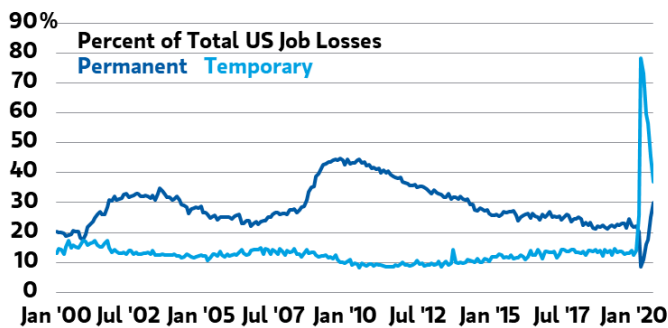
Unemployment Duration Hits Eight-Year High

A stubbornly high unemployment rate of 7.9% means the job market is still recovering from the COVID-19 recession. However, what is more concerning is the median duration of unemployment, which was last this high in 2012 (see chart). At 18 weeks, this compares unfavorably to the just under 10-week average of the past five years. Fortunately, many households held on to this year's stimulus benefits to repair balance sheets but, as the duration of unemployment increases, the savings buffer that households accumulated during the pandemic has declined dramatically. US personal savings as a percent of disposable income is 14.1% as of its most recent reading, well below a high of 33.6% in April. As the CARES Act helped bridge the gap and contributed to a faster than expected rebound in 2020, CARES 2.0—yet to be enacted—would play an outsized role in determining the recovery's forward momentum.—*Chris Baxter*



Source: Bloomberg as of Oct. 7, 2020

Permanent Job Losses Are on the Rise Even Though Total Losses Are Down

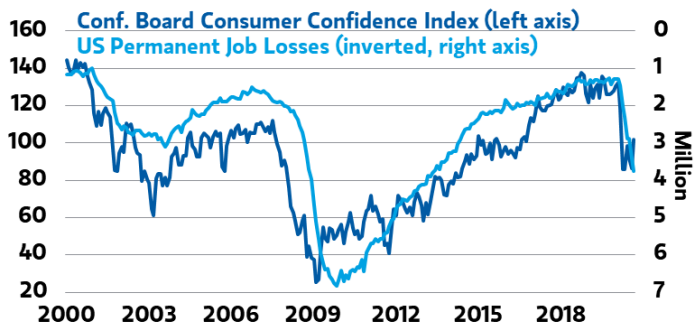


Source: Bloomberg as of Oct. 21, 2020

An evolving dynamic that bears watching is the acceleration in permanent job losses (see chart). Between April and September, temporary job losses as a share of total job losses decreased to 37% from 78%. During this same period, permanent job losses as percentage of total job losses jumped to 29.9% from 8.7%—a much faster rise than after the financial crisis. Looking ahead, another wave of COVID-19 infections could cost additional job losses in retail and hospitality. Moreover, additional businesses could close without the additional financial support that remains stalled in Congress. This could further increase the number of permanent layoffs, slowing the rate of economic recovery.—*Vibhor Dave*

Consumer Sentiment Weighed Down by Soft Labor Market

Consumer sentiment remains one of the critical macro indicators that has yet to follow the economy's V-shaped recovery. We don't expect any change in sentiment in year-end as the labor market first needs to stabilize, especially in service-based and low-wage jobs. How bad is joblessness? Permanent job losses sit at 3.8 million, which is worse than what was experienced in the 2001 tech bubble but only half as bad as the 2008 financial crisis (see chart). We see government stimulus, such as the Payroll Protection Program, as an accelerant for the labor market's recovery. In fact, Ellen Zentner, MS & Co.'s chief US economist, projects unemployment to fall to 7.6% by the end of the year, and 5.5% in 2021. Only then do we expect consumer sentiment to improve.—*Nick Lentini*



Source: Bloomberg as of Oct. 22, 2020

ALTERNATIVES

High Volatility Plays to Hedge Funds' Strength

Daniel Maccarrone, Investment Strategist, Morgan Stanley Wealth Management

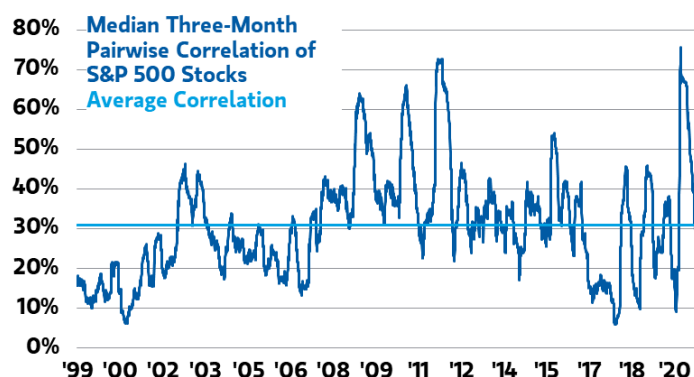
Alain Farrelly, Investment Analyst, Morgan Stanley Wealth Management

Hedge funds had a challenging decade coming out of the financial crisis as the bull market in equities was marked by low volatility, offering little opportunity to employ their downside management or stock-picking abilities. However, with 2020's dramatic pickup in volatility, active managers' performance has improved.

VARIED RETURNS. Of course, performance has naturally varied by investment strategy and manager. Equity managers focused on secular growth winners in the technology sector and other beneficiaries of the pandemic were positioned well for the stock market's rebound. Commodity trading advisors (CTAs) and certain macro strategies managers performed well in the first quarter, delivering uncorrelated returns given elevated market volatility. While CTAs were down 0.5% in the first quarter, top-quartile macro-related strategies gained 6%, according to HFRI. Strategies focused on structured credit faced notable headwinds in the first quarter, falling 13%, given their leverage and illiquidity issues, but managed to claw back approximately two-thirds of their losses by the end of the third quarter as markets stabilized.

Increased volatility led to significant performance dispersion. Within equity hedge strategies, top-quartile funds delivered a year-to-date return of 12% while bottom-quartile funds were down 7% at the end of the third quarter. We believe with the right manager selection, hedge funds can continue to act as an alternative to equities and/or fixed income allocations and provide potential portfolio diversification benefits, downside protection and enhanced returns relative to their appropriate benchmarks.

Greater Market Volatility Shows Up In Correlations Between Stocks



Source: Clarifi, Morgan Stanley Research as of Oct. 8, 2020

PAIRWISE CORRELATION. As the year evolved, so did the opportunities. Pairwise correlations, which measure the degree to which stocks move in the same direction as one another, have fallen (see chart). This is an indication that the market is paying more attention to company fundamentals. Historically, declining pairwise correlations have provided a more fertile ground for stock selection. This has held true in 2020 as hedge funds have been rewarded for picking winners and losers.

The prospect of increased market volatility and higher differentiation between securities and sectors presents more opportunities for hedge funds. In this environment, we prefer equity long/short managers, given their ability to actively manage their portfolio positioning to rotate into new opportunities. While many long/short equity hedge funds have been able to capitalize on the widening gap between growth and value, we have also seen funds take profits and reduce some of their positioning to these growth sectors. Other long/short equity managers who build more style-agnostic portfolios could be set up to capitalize on sector rotations. The ability to short stocks for profit and hedge market volatility also presents an opportunity for skilled managers.

RELATIVE-VALUE STRATEGIES. We also favor relative-value hedge fund strategies that take a multistrategy or equity market-neutral approach. Relative-value strategies generally seek to minimize market volatility and correlation to other asset classes by constructing portfolios that are more fully hedged to the market. Returns are predominantly driven by security selection, with low market beta. These strategies can act as a portfolio diversifier and as an alternative to some fixed income allocations. These strategies typically exhibit low correlation to stocks and bonds and tend to outperform during rapidly falling equity markets. This was the case in 2020's first quarter as the strategy declined 6% versus down 20% for the MSCI World Index.

As markets have recovered to varying degrees since the March sell-off, investors have grown increasingly concerned with higher stock valuations and index concentration of larger capitalization technology companies. Furthermore, record-low interest rates have presented a dilemma for traditional fixed income investors in search of acceptable returns while maintaining the low risk and diversification benefits of bonds.

Consider skilled hedge fund managers within equity long/short and relative-value strategies who have demonstrated a track record of navigating uncertain environments. Selecting the right hedge fund managers can enhance portfolio diversification, provide downside protection and enhance returns when used appropriately as part of a broader asset allocation mix. ■

ALTERNATIVES

Real Estate Market Still Has Sectors of Strength

Brandon Dees, Investment Analyst, Morgan Stanley Wealth Management

Although the COVID-19 pandemic has taken a significant toll on many markets, real estate has been perhaps one of the most visibly affected. The shutdown of nonessential businesses and the implementation of work from home created a material performance decline for public real estate investment trusts (REITs), affecting valuations of the most troubled private real estate assets. Although the reopening of the economy benefited real estate, uncertainties abound including stubbornly high unemployment, delays in additional supportive stimulus for commercial and residential tenants, a potential second wave of COVID-19 cases and the impact of the US presidential election.

Not all real estate assets have been affected in the same way. Instead, there has been material and divergent impact across property types. For example, industrial warehouses, data centers and cell towers have witnessed increased secular demand due to the higher adoption of e-commerce and the greater need for connectivity and bandwidth. Conversely, hotels and shopping malls have been severely impacted by the shutdown and may face potential tenant bankruptcies and foreclosures.

PUBLIC REIT OPPORTUNITIES. While the S&P 500 Index established a new high in early September and closed the third quarter up 5% for the year to date, public REITs were far behind, with the MSCI US REIT Index down 17%. That said, public REITs remain relatively attractive on a number of valuation metrics, including multiples to global equities, cap rate spreads to Treasuries and discounts to private valuations. When compared to private real estate cap rates, public REIT implied cap rates of core property types, including apartments, commercial office and retail, are trading at discounts of approximately 20% (see table). The cap rate is the ratio of net operating income to current real estate valuation. For public REITs, the valuation is the company's equity market capitalization and outstanding debt combined. Cap rates are essentially the inverse of price/earnings multiples, meaning that higher implied cap rates for public REITs indicate cheaper valuations (or discounts) for investors.

So far this year, public REITs have also experienced substantial performance dispersion across property types, including a 75% return differential between the top and bottom performers. The combination of cheap relative valuation and wide performance dispersion generally bodes well for active management and could provide an attractive opportunity for long-term investors. Given current market uncertainties, the selection of good active managers is crucial in terms of navigating potential volatility.

Public REITs Trade at Lower Valuations Than Private Real Estate

Sector	REIT Implied Cap Rate (%)	Private Market Cap Rate (%)	REIT vs. Private Market Valuation Gap (%)
Apartment	5.8	4.6	-20.6
Industrial	3.8	3.6	-4.4
Office	6.9	5.0	-27.7
Retail	7.7	6.8	-11.0
REIT ODCE Proxy*	6.0	4.8	-19.5

*The REIT ODCE Proxy is a universe of REIT stocks built to resemble the NCREIF Fund Index—Open End Diversified Core Equity (ODCE Index). The REIT ODCE Proxy is proprietary to CenterSquare Investment Management and uses REIT names in apartments, retail, industrial and office, and then weights them according to the ODCE Index to create a proxy.

Source: CenterSquare Investment Management as of Oct. 29, 2020

PRIVATE REAL ESTATE. In March, we became more cautious on private real estate due to the heightened potential for negative valuation impact, as private markets tend to meaningfully lag public markets. Although private real estate funds experienced some negative valuation revisions during the first and second quarters, we have subsequently seen valuation improvements in many properties due to better-than-expected rent collection and occupancy.

To date, we've been surprised by how well many private real estate managers have fared during the pandemic. Several private real estate funds have reported rent collections in the mid-to-upper 90% range, well exceeding industry-level collections of approximately 90% as reported by the National Council of Real Estate Investment Fiduciaries (as of Oct. 15). Additionally, managers have negotiated effectively with their lenders when needed, and have displayed flexibility in order to support good tenants that have been adversely impacted.

THE OUTLOOK. In terms of the current outlook on private real estate, Morgan Stanley Global Investment Manager Analysis believes core real estate managers that have largely avoided the most problematic areas, such as malls and hospitality, should be relatively well positioned going forward. We note, however, that if public markets are an indicator for core real estate, then directionally there could be further valuation pressure in the private markets. Despite some elevated near-term valuation and appraisal risk, we remain constructive over the longer term within private real estate and view the asset class as a portfolio diversifier, an alternative source of income and an inflation hedge.

As for opportunistic real estate, which includes the purchase of distressed assets, it's still early in the cycle and the playbook will take longer to materialize. Opportunistic real estate funds that have cash or dry powder will be positioned to take advantage of any distress that may present itself over the next few years. ■

Q&A

How Gender Lens Investing May Lead to Better Returns

As an investment opportunity, "gender diversity" is about identifying the ways in which achieving balance and representation, empowerment and economic opportunities is material to a company's financial outcome. A growing body of evidence points to better financial performance associated with higher levels of gender diversity, but identifying these opportunities beforehand requires systematic consideration of relevant criteria. Emily Thomas, lead analyst for Investing with Impact at Global Investment Manager Analysis, spoke with Heather Smith, lead sustainability research analyst at Impax Asset Management, Rob Fernandez, director of ESG Research, and Abigail Ingalls, senior analyst, of Breckinridge Capital Advisors, about the benefits of and challenges to gender lens investing. The following is an edited version of their conversation.

EMILY THOMAS (ET): Heather, what is the genesis of gender lens investing and how do you define it?

HEATHER SMITH (HS): Gender lens investing can really look different from investor to investor and from manager to manager, but it generally boils down to either identifying investment opportunities that directly benefit the lives of women, and/or intentionally incorporating gender criteria into your investment analysis.

We focus on the risks and opportunities arising from the transition to a more sustainable global economy, and we have long believed that achieving gender equality is both a moral and an economic imperative that will drive this transition.

We have been reviewing the links between gender diversity and leadership and company performance for well over a decade. What the research tells us is companies that have greater balance—gender balance among leadership, companies that use the talents of the entire workforce and eliminate pay inequities—really stand to benefit.

Despite the evidence about the value of diversity, not many companies are positioned to take advantage of these benefits. Women hold only 21% of S&P 500 board seats, fewer than 6% of CEO positions and they're paid about 80% of what their male counterparts are paid.

The challenge is twofold. One, we want to develop a suite of indicators to identify companies that are well positioned to benefit from the gender diversity advantage. We also want to have an impact by working with companies to increase gender diversity within their organizations.

ABIGAIL INGALLS (AI): "Gender lens investing" was initially coined by the Criterion Institute in 2009, but its roots are in the 1990s. It's a way to consider gender criteria within the

investment process, but it also provides certain clients with the ability to dial up the information on gender in the way that we're choosing investments for the client.

ET: What types of data or metrics do you look at?

HS: We've developed a proprietary and systematic rating method to identify the best companies in the world when it comes to advancing women's leadership—assessing companies on multiple criteria of gender leadership, and then assigning them a gender score.

The primary factors in our assessment include the representation of women on the boards of directors and the representation of women in executive management, including whether women hold key leadership positions like CEO or CFO. We've chosen to emphasize these factors based on a well-established body of research that links more women in senior decision-making roles with improved company financial performance, as well as better human resource management, higher revenues from innovation and better sustainability performance.

We also look for the presence of proactive practices that we think promote accountability and transparency at companies and that are key to advancing gender equality throughout the talent pipeline. This includes whether the company has specific efforts in place to recruit, retain and develop women; whether the company is taking steps to address gender pay equity; whether the company is disclosing statistics on its workforce composition by gender; whether the company is setting proactive gender-related goals or targets; and whether the company is a signatory to the United Nations Women's Empowerment Principles, which is signaling an executive-level commitment to gender diversity.

ROB FERNANDEZ (RF): Our methodology when looking at corporate bond issuers is informed by the Women's Empowerment Principles, and it is based on four higher-level categories. We're looking at metrics within women in leadership, women-friendly workplaces, employee diversity and well-being and, then, commitment to global principles.

We're looking at indicators including female CEOs and percentage of women executives and sourcing other employee diversity and well-being metrics from Sustainalytics and MSCI, two third-party ESG data providers. The quality of data is certainly improving, but it's still a challenge.

ET: Are some factors more transparent than others?

HS: For board diversity, data is consistent market to market. We're also able to get executive management data on all companies within our universe—but it generally requires greater analysis and greater synthesis to really determine who constitutes top leadership at a company.

With regard to some of those other gender-related indicators,

ON THE MARKETS

the availability of data has certainly improved in recent years, but gaps in reporting definitely remain.

That's particularly true around issues like gender pay equity and goal setting, which we see companies reporting on at a fairly infrequent rate. For us, that's where engagement comes in. We can use engagement as a tool to help us increase the quality of data that we can use in our investment process.

ET: Can you talk about some of the engagement work you do around gender diversity?

HS: The goal of our engagement is really to partner and collaborate with companies. We're doing so either to gain a deeper understanding of how companies are thinking about or managing a particular issue or to suggest changes that we think would make the company stronger—and a better investment over the long term.

We have a variety of tools that we can use to engage companies, and proxy voting is a very important one for us. We have had a long-standing proxy voting policy of voting against all-male board slates, as well as directors at companies that have just token female representation. We're really trying to send a message to companies that one is not enough and we're really seeking greater gender balance on corporate boards.

We're also actively engaging and collaborating with companies on structural barriers that tend to hold women back from achieving gender equality more broadly. That includes issues like gender pay equity and access to paid family leave. Both of these are areas that company disclosure could certainly be improved upon, so we've filed and co-filed proposals with 20 companies requesting that they conduct a gender pay equity assessment and report on the results.

We've been able to withdraw that proposal with every company except for one, because the companies agreed to take action: They enhanced their public disclosure around pay equity, describing the process and the mechanism in place to ensure gender pay equity within their organizations.

RF: Engagement on the fixed income side is a little different. We can't file a shareholder proposal or resolution, but we can certainly have direct dialogues with companies and company management teams, and we do so on an ongoing basis.

In the last couple of years, we've been engaging on a pace of about 50 to 60 companies a year on a variety of ESG topics. In these direct dialogues we seek to gain a deeper understanding of ESG matters that might pertain to that industry sector or issuer.

Our goal of engaging is to gain a better understanding of the issuer and the industry. On a secondary basis, we're also doing it to provide idea generation for our analysts. Then, third,

when it comes to advocacy, we encourage and advocate for more transparent disclosure on ESG issues. You know, when we're talking to 50 to 60 companies on annual basis, there are certain companies that are real leaders when it comes to ESG reporting.

ET: How do companies respond when you engage with them?

RF: By and large, the response is very positive, and the level of knowledge base of ESG disclosure, as far as a business practice, is much stronger today versus when we started six years ago. I remember bringing up the term ESG five years ago, and there were a number of investor relations teams that didn't even know what that acronym meant. Now they all know.

AI: Gender clearly lies at the crossroads of both the S, social, and, G, governance. Anecdotally speaking, when we engaged on gender diversity in general, I think many companies answered it within the governance sleeves.

Now, they're starting to think about it more as a social issue in a way to either address revenues or costs and other types of things that are more in the day-to-day operations than they are in the overall governance and management of the firm.

ET: Are there any risks associated with companies that don't have gender diversity?

AI: The key here is about how the companies are doing in comparison with their peers. One example relates to retailers and restaurants, where it's really important for these companies to be forward-thinking on their workforce diversity because it will attract different consumers to the retail location and/or, potentially in an e-commerce setting as well. When they're fighting for a finite portion of market share, it's essential for a company's continuity over time.

HS: A company's ability to compete is linked with the quality of its workforce. Those that don't proactively embrace diversity and equality or those with cultures that enable or ignore discrimination and harassment are essentially putting themselves at a disadvantage. They're not going to be able to attract and retain the best workforce, and employee productivity and morale can suffer.

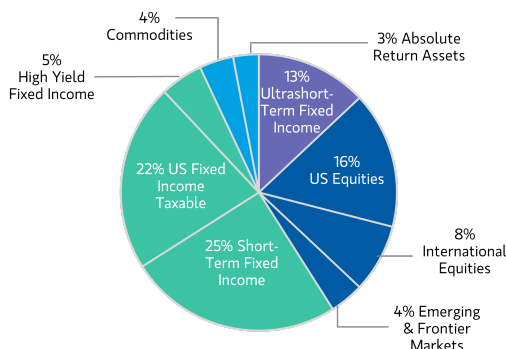
In the era of Me Too and Time's Up, when we have a national conversation around diversity, companies that don't proactively address gender diversity face significant litigation and reputational risks, both of which can cause major loss of value. ■

Heather Smith, Rob Fernandez and Abigail Ingalls are not employees of Morgan Stanley Wealth Management or its affiliates. Opinions expressed by them are their own and may not necessarily reflect those of Morgan Stanley Wealth Management or its affiliates.

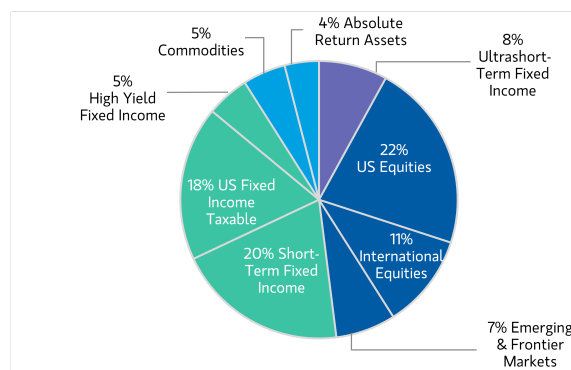
Global Investment Committee Tactical Asset Allocation

The Global Investment Committee provides guidance on asset allocation decisions through its various models. The five models below are recommended for investors with up to \$25 million in investable assets. They are based on an increasing scale of risk (expected volatility) and expected return.

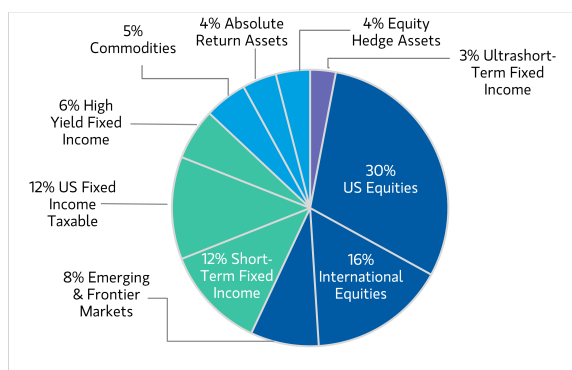
Wealth Conservation



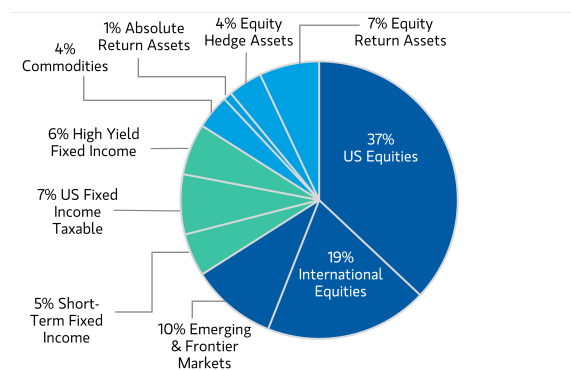
Income



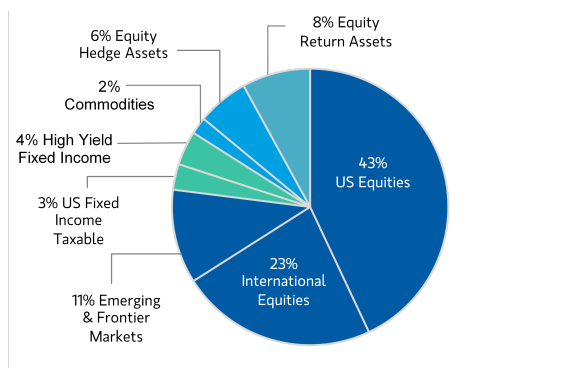
Balanced Growth



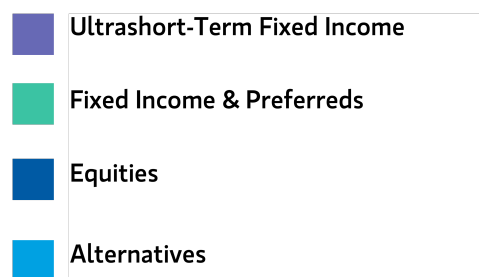
Market Growth



Opportunistic Growth



Key

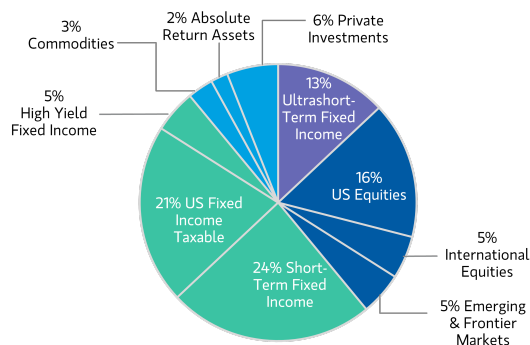


Source: Morgan Stanley Wealth Management GIC as of Oct. 31, 2020

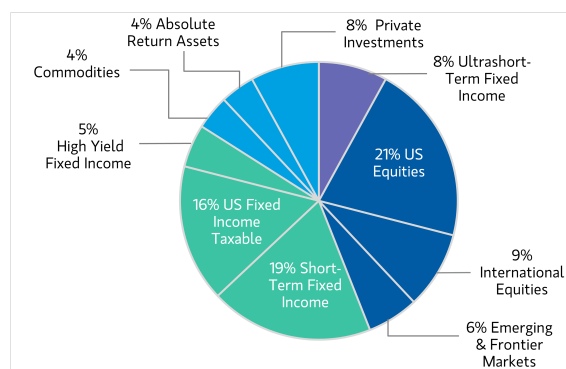
ON THE MARKETS

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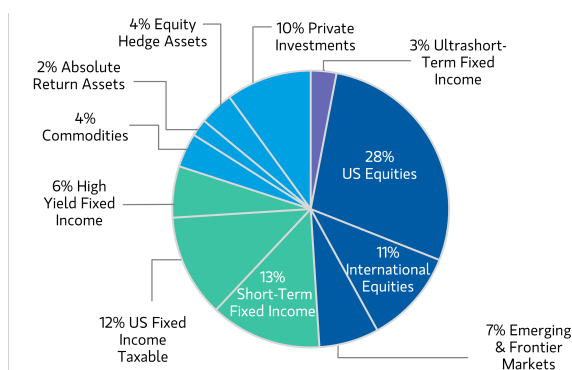
Wealth Conservation



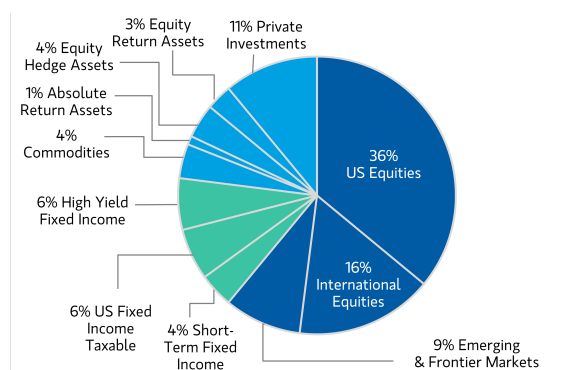
Income



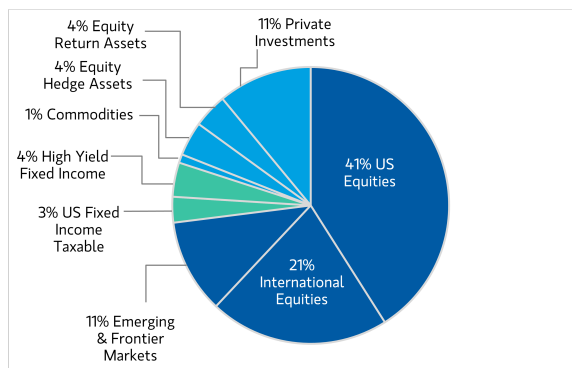
Balanced Growth



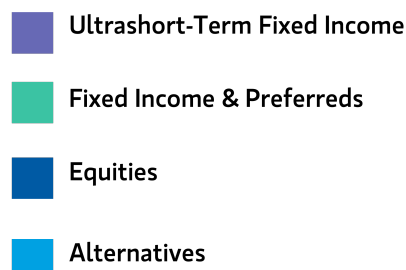
Market Growth



Opportunistic Growth



Key



Source: Morgan Stanley Wealth Management GIC as of Oct. 31, 2020

Tactical Asset Allocation Reasoning

Global Equities		Relative Weight Within Equities
US	Overweight	A V-shaped recovery is central to our thesis that a new business cycle and bull market have begun. Risks remain around election-related policy changes, fiscal stimulus and availability of a COVID-19 vaccine, but we expect 2021 GDP growth in the 5%-to-6% range, which should improve profits among cyclical and small-/mid-cap companies. We prefer active stock-picking rather than holding the S&P 500 Index, which is highly concentrated in tech stocks linked to the work-from-home and smart-phone ecosystems. Those leaders are likely fully priced, facing tough year-over-year comparisons and decelerating sequential momentum.
International Equities (Developed Markets)	Market Weight	We are constructive on international. In Europe, brightening prospects for fiscal stimulus and concrete moves toward pan-Europe fiscal integration are game-changers. In Japan, economic recovery is gaining momentum on the back of resurgent global trade, and we expect the focus on shareholder-friendly and positive return-on-equity policies to persist. The structural as well as cyclical weakening of the US dollar is a tailwind.
Emerging Markets	Overweight	China was the first country to enter the COVID-19 crisis and appears poised to be the first out. Resumption of economic activity during the second quarter should jump-start global growth, especially given huge government stimulus programs. Ample liquidity from the Fed and a weakening dollar should catalyze investor interest. China stands to gain the most from US tariff rollbacks and global trade dynamics should improve. Valuations are attractive and local central banks should be able to maintain accommodation and stimulus. For most countries, especially China, the collapse in oil prices is a material tailwind for consumer purchasing power.
Global Fixed Income		Relative Weight Within Fixed Income
US Investment Grade	Market Weight	We have recommended shorter-duration* (maturities) since March 2018, given the extremely low yields and potential capital losses associated with rising interest rates from such low levels, and had been pairing that position with a large exposure to long-term US Treasuries to hedge what we expected would be a modest correction in stocks. With long-term Treasury yields troughing for the cycle, we recently removed that position and resumed a benchmark exposure to duration. Recent dislocation of investment grade credit spreads and market illiquidity have created opportunities. Fed programs aimed at backstopping this market give reason to be an active bond selector.
International Investment Grade	Underweight	Negative interest rates suggest that this is not a preferred asset class for US-dollar clients at this time. Actively managed funds may provide very patient, risk-tolerant clients with income opportunities in select corporate credits.
Inflation-Protection Securities	Underweight	The "sudden stop" recession has caused a severe pricing of real interest rates, pushing them negative and near all-time lows. In the near term, upside appears limited.
High Yield	Overweight	High yield bonds remain at the epicenter of the dual risks from COVID-19 and the collapse in oil prices from the failure of OPEC negotiations. In our view, some of the most extreme risks have been discounted, especially in light of unprecedented monetary and fiscal policy intervention aimed not only at market liquidity but in bridging cash flow requirements. It's time to ease in opportunistically, using active managers.
Alternative Investments		Relative Weight Within Alternative Investments
REITs	Underweight	Real estate investment trusts (REITs) have performed very well as global growth slowed and interest rates fell. However, REITs remain expensive and are vulnerable to credit risks. We will revisit our position as nominal GDP troughs and/or valuations become more attractive.
Commodities	Overweight	The "sudden stop" global recession has driven commodities such as oil to multidecade lows. The rush to the "safe haven" US dollar, which is near its multiyear high, has exacerbated these dynamics. While we recognize the complexity of the geopolitical issues that surround oil, we believe that on a six-to-12-month basis the outlook for the global economy and overall demand will improve materially. Thus, we suggest risk-oriented clients establish exposure to the broad diversified asset class through the use of active managers. Pure passive exposure is not advised at this time.
Hedged Strategies (Hedge Funds and Managed Futures)	Overweight	The bear market associated with COVID-19 has driven volatility to historic extremes and led to wide dispersion in price performance and stock-level idiosyncratic risk. These factors tend to create a constructive environment for hedge fund managers who are good stock-pickers and can use leverage and risk management techniques to amplify returns. We prefer very active and fundamental strategies, especially equity long/short.

*For more about the risks to Duration, please see the Risk Considerations section beginning on page 15 of this report.
Source: Morgan Stanley Wealth Management GLC as of Oct. 31, 2020

Disclosure Section

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Index Definitions

For index, indicator and survey definitions referenced in this report please visit the following: <https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions>

Risk Considerations

Alternative Investments

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Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are appropriate only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing.

Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing.

Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank.

Hypothetical Performance

General: Hypothetical performance should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives. Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

Hypothetical performance results have inherent limitations. The performance shown here is simulated performance based on benchmark indices, not investment results from an actual portfolio or actual trading. There can be large differences between hypothetical and actual performance results achieved by a particular asset allocation.

Despite the limitations of hypothetical performance, these hypothetical performance results may allow clients and Financial Advisors to obtain a sense of the risk / return trade-off of different asset allocation constructs.

Investing in the market entails the risk of market volatility. The value of all types of securities may increase or decrease over varying time periods.

This analysis does not purport to recommend or implement an investment strategy. Financial forecasts, rates of return, risk, inflation, and other assumptions may be used as the basis for illustrations in this analysis. They should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives. No analysis has the ability to accurately predict the future, eliminate risk or guarantee investment results. As investment returns, inflation, taxes, and other economic conditions vary from the assumptions used in this analysis, your actual results will vary (perhaps significantly) from those presented in this analysis.

The assumed return rates in this analysis are not reflective of any specific investment and do not include any fees or expenses that may be incurred by investing in specific products. The actual returns of a specific investment may be more or less than the returns used in this analysis. The return assumptions are based on hypothetical rates of return of securities indices, which serve as proxies for the asset classes.

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Moreover, different forecasts may choose different indices as a proxy for the same asset class, thus influencing the return of the asset class.

An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in the fund.

ETF Investing

An investment in an **exchange-traded fund** involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. Investing in an international ETF also involves certain risks and considerations not typically associated with investing in an ETF that invests in the securities of U.S. issues, such as political, currency, economic and market risks. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies. ETFs investing in physical commodities and commodity or currency futures have special tax considerations. Physical commodities may be treated as collectibles subject to a maximum 28% long-term capital gains rates, while futures are marked-to-market and may be subject to a blended 60% long- and 40% short-term capital gains tax rate. Rolling futures positions may create taxable events. For specifics and a greater explanation of possible risks with ETFs, along with the ETF's investment objectives, charges and expenses, please consult a copy of the ETF's prospectus. Investing in sectors may be more volatile than diversifying across many industries. The investment return and principal value of ETF investments will fluctuate, so an investor's ETF shares (Creation Units), if or when sold, may be worth more or less than the original cost. ETFs are redeemable only in Creation Unit size through an Authorized Participant and are not individually redeemable from an ETF.

Investors should carefully consider the investment objectives and risks as well as charges and expenses of an exchange-traded fund or mutual fund before investing. The prospectus contains this and other important information about the mutual fund. To obtain a prospectus, contact your Financial Advisor or visit the mutual fund company's website. Please read the prospectus carefully before investing.

MLPs

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk.

The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value.

MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV; and, as a result, the MLP fund's after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

Duration

Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. Generally, if interest rates rise, bond prices fall and vice versa. Longer-term bonds carry a longer or higher duration than shorter-term bonds; as such, they would be affected by changing interest rates for a greater period of time if interest rates were to increase. Consequently, the price of a long-term bond would drop significantly as compared to the price of a short-term bond.

International investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with **emerging markets** and **frontier markets**, since these countries may have relatively unstable governments and less established markets and economies.

Investing in currency involves additional special risks such as credit, interest rate fluctuations, derivative investment risk, and domestic and foreign inflation rates, which can be volatile and may be less liquid than other securities and more sensitive to the effect of varied economic conditions. In addition, international investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

Managed futures investments are speculative, involve a high degree of risk, use significant leverage, have limited liquidity and/or may be generally illiquid, may incur substantial charges, may subject investors to conflicts of interest, and are usually appropriate only for the risk capital portion of an investor's portfolio. Before investing in any partnership and in order to make an informed decision, investors should read the applicable prospectus and/or offering documents carefully for additional information, including charges, expenses, and risks. Managed futures investments are not intended to replace equities or fixed income securities but rather may act as a complement to these asset categories in a diversified portfolio.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited

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to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

Physical precious metals are non-regulated products. Precious metals are speculative investments, which may experience short-term and long-term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. If sold in a declining market, the price you receive may be less than your original investment. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be appropriate for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor. The Securities Investor Protection Corporation ("SIPC") provides certain protection for customers' cash and securities in the event of a brokerage firm's bankruptcy, other financial difficulties, or if customers' assets are missing. SIPC insurance does not apply to precious metals or other commodities.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

Interest on municipal bonds is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Typically, state tax-exemption applies if securities are issued within one's state of residence and, if applicable, local tax-exemption applies if securities are issued within one's city of residence.

Treasury Inflation Protection Securities' (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation.

Ultrashort-term fixed income asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

Although they are backed by the full faith and credit of the U.S. Government as to timely payment of principal and interest, **Treasury Bills** are subject to interest rate and inflation risk, as well as the opportunity risk of other more potentially lucrative investment opportunities.

CDs are insured by the FDIC, an independent agency of the U.S. Government, up to a maximum of \$250,000 (including principal and accrued interest) for all deposits held in the same insurable capacity (e.g. individual account, joint account, IRA etc.) per CD depository. Investors are responsible for monitoring the total amount held with each CD depository. All deposits at a single depository held in the same insurable capacity will be aggregated for the purposes of the applicable FDIC insurance limit, including deposits (such as bank accounts) maintained directly with the depository and CDs of the depository. For more information visit the FDIC website at www.fdic.gov.

The majority of \$25 and \$1000 par **preferred securities** are "callable" meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per \$25 or \$1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price.

The initial interest rate on a **floating-rate security** may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk.

The market value of **convertible bonds** and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield.

Some \$25 or \$1000 par **preferred securities** are QDI (Qualified Dividend Income) eligible. Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date.

Principal is returned on a monthly basis over the life of a **mortgage-backed security**. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO's average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO's average life and likely

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causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO's market price to fall. Some MBS/CMOs may have "original issue discount" (OID). OID occurs if the MBS/CMO's original issue price is below its stated redemption price at maturity, and results in "imputed interest" that must be reported annually for tax purposes, resulting in a tax liability even though interest was not received. Investors are urged to consult their tax advisors for more information.

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Companies paying **dividends** can reduce or cut payouts at any time.

Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies. **Technology stocks** may be especially volatile. Risks applicable to companies in the **energy and natural resources** sectors include commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Credit ratings are subject to change.

The **indices** are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

The **indices selected by Morgan Stanley Wealth Management** to measure performance are representative of broad asset classes. Morgan Stanley Smith Barney LLC retains the right to change representative indices at any time.

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RSI1604412871014 11/2020



**City of Troy Employees Retirement Systems
Defined Benefit and NAIC
Performance Reporting**

**Portfolio Review
November 2020**

Presented By:

***The Wealth Strategy Group
UBS Financial Services Inc.***

Rebecca Sorensen, CFP®, CIMA®
Senior Vice President- Wealth Management, USA
Institutional Consultant

Darin McBride, CRPC®
Senior Vice President- Wealth Management, USA
Senior Portfolio Manager



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SECTION IV	ERS and NAIC Recommendations
SECTION V	Electionwatch
SECTION VI	UBS House View – Roadmap to recovery



Agenda and Recommendations City of Troy

ERS and NAIC

1. Discussion: Election results and COVID

- i. Investment Returns ERS portfolios – September and October 2020
- ii. Anticipated Cash needs December 2020

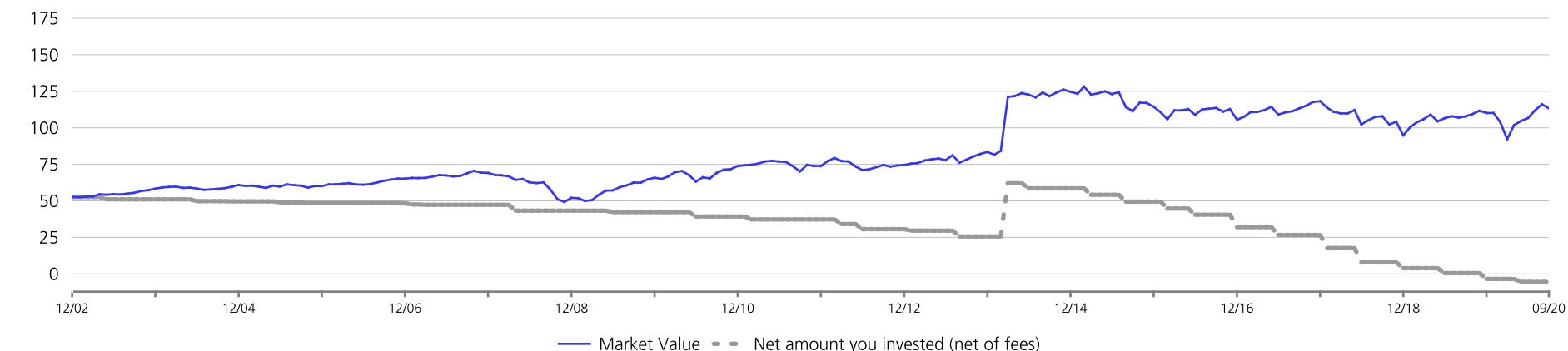
2. Recommendations:

- i. ERS portfolio:
 - a. Covered Call Options – see attached
- ii. NAIC Portfolio:
 - a. The NAIC portfolio holds the following stocks that are current sell recommendations by Investor Advisory Service (CFRA). Research included. UBS does not follow these companies.
 - i. Air Lease – Aircraft Leasing Company
 - ii. Dave & Buster's Entertainment – family entertainment – restaurant venue
 - iii. Essent Group - Private Mortgage Insurance
 - iv. Old Dominion Freight Lines (previously discussed)

Sources of portfolio value

as of September 30, 2020

\$ Millions



	MTD 08/31/2020 to 09/30/2020	QTD 06/30/2020 to 09/30/2020	YTD 12/31/2019 to 09/30/2020	1 Year 09/30/2019 to 09/30/2020	3 Years 09/30/2017 to 09/30/2020	5 Years 09/30/2015 to 09/30/2020	7 Years 09/30/2013 to 09/30/2020	10 Years 09/30/2010 to 09/30/2020	ITD 12/31/2002 to 09/30/2020
Opening value	116,087,424.09	106,672,452.97	110,129,350.62	107,786,026.41	113,301,622.73	111,484,066.25	78,195,351.92	69,160,398.03	52,625,899.06
Net deposits/withdrawals	0.00	0.00	-2,000,025.00	-5,999,750.00	-32,109,875.00	-54,937,266.53	-31,113,129.07	-44,778,015.11	-58,113,069.04
Div./interest income	140,654.55	400,163.17	1,375,957.58	2,760,034.66	8,684,039.12	14,908,514.97	20,536,823.00	26,041,564.48	43,218,292.63
Change in accr. interest	2,298.33	6,540.83	367.85	-1,965.75	-1,466.02	-15,825.82	-24,870.19	-125,123.93	-548,595.49
Change in value	-2,902,864.71	6,248,355.29	3,821,861.20	8,783,166.93	23,453,191.42	41,888,023.38	45,733,336.59	63,028,688.78	76,144,985.09
Closing value	113,327,512.25	113,327,512.25	113,327,512.25	113,327,512.25	113,327,512.25	113,327,512.25	113,327,512.25	113,327,512.25	113,327,512.25
Gross Time-weighted ROR	-2.37	6.29	5.00	11.29	10.48	11.05	9.32	9.73	8.31
Net Time-weighted ROR	-2.38	6.24	4.92	11.15	10.32	10.91	9.20	9.62	8.25

Performance returns are annualized after 1 year. Net deposits and withdrawals include program and account fees.

Benchmarks - Annualized time-weighted returns

Consolidated Blended Index	-2.40	5.85	4.02	10.35	7.73	9.22	7.64	8.26	7.90
US Treasury Bill - 3 Mos	0.01	0.03	0.52	0.96	1.60	1.12	0.81	0.59	1.27
Barclays Agg Bond	-0.05	0.62	6.79	6.98	5.24	4.17	3.97	3.63	4.36
MSCI Emerging Markets-PR	-1.77	8.73	-2.93	8.09	0.01	6.43	1.31	0.06	7.65
Russell 2000	-3.34	4.93	-8.69	0.39	1.77	7.99	6.42	9.84	9.48
S&P 500	-3.80	8.93	5.57	15.15	12.27	14.13	12.67	13.73	10.06

Consolidated Blended Index: Start - Current: 70% MSCI World; 30% Barclays Agg Bond

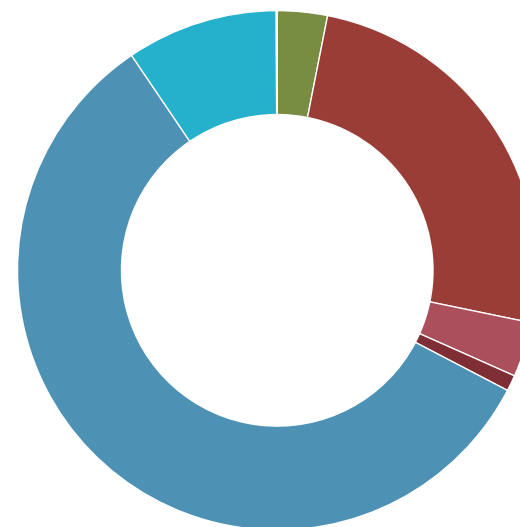
Past performance does not guarantee future results and current performance may be lower/higher than past data presented.

Asset allocation review

as of September 30, 2020

Summary of asset allocation

	Market value (\$)	% of Portfolio
Cash	3,526,256.73	3.11
Cash	3,526,256.73	3.11
US	3,526,256.73	3.11
Fixed Income	33,476,181.65	29.54
US	28,479,689.04	25.13
US Fixed Income	19,751,669.62	17.43
Government	4,243,695.50	3.74
Corporate IG Credit	364,144.65	0.32
Corporate High Yield	4,120,179.27	3.64
Global	3,879,671.40	3.42
Global	3,879,671.40	3.42
International	1,116,821.21	0.99
International	121,944.03	0.11
Emerging Markets	994,877.18	0.88
Equity	76,253,941.17	67.29
US	65,578,657.26	57.87
US Equity	6,750.00	0.01
Large Cap	47,857,986.57	42.23
Mid Cap	13,395,070.86	11.82
Small Cap	4,318,849.83	3.81
Convertibles	0.00	0.00
International	10,675,283.91	9.42
International	2,389,536.27	2.11
Developed Markets	5,625,745.95	4.96
Emerging Markets	2,660,001.69	2.35
Commodities	0.00	0.00
Non-Traditional	0.00	0.00
Other	71,132.70	0.06
Other	71,132.70	0.06
Total Portfolio	\$113,327,512.25	100%



- Cash 3.11%
- US Fixed Income 25.13%
- Global Fixed Income 3.42%
- International Fixed Income 0.99%
- US Equity 57.87%
- International Equity 9.42%
- Other 0.06%

Pooled investment cash allocation: **\$654,175.95**



Asset allocation review - as of September 30, 2020 (continued)

	Market value (\$)	% of Portfolio
Balanced mutual funds represented in multiple asset classes based on Morningstar allocations		

Equity sector analysis

as of September 30, 2020

Summary of equity sector analysis compared to S&P 500 index

	Actual %	Model %	Value of equity (\$)	Model value (\$)	Gap (\$)	Actual (%)	Model (%)	Gap (%)
Communication Services	9.45%	10.99%	7,201,642.96	8,378,626.44	-1,176,983.48	9.45%	10.99%	-1.54%
Consumer Discretionary	15.29%	12.12%	11,653,567.09	9,240,123.07	2,413,444.02	15.29%	12.12%	3.17%
Consumer Staples	7.32%	7.78%	5,583,353.52	5,931,366.13	-348,012.61	7.32%	7.78%	-0.46%
Energy	1.81%	2.02%	1,382,719.11	1,540,020.51	-157,301.40	1.81%	2.02%	-0.21%
Financials	9.53%	9.29%	7,264,580.97	7,082,569.58	182,011.39	9.53%	9.29%	0.24%
Health Care	14.84%	13.63%	11,312,868.26	10,391,326.52	921,541.74	14.84%	13.63%	1.21%
Industrials	12.19%	7.58%	9,290,753.20	5,778,888.85	3,511,864.35	12.19%	7.58%	4.61%
Information Technology	23.86%	27.91%	18,190,640.92	21,278,204.19	-3,087,563.27	23.86%	27.91%	-4.05%
Materials	2.58%	2.60%	1,969,862.76	1,982,204.62	-12,341.86	2.58%	2.60%	-0.02%
Real Estate	1.89%	2.60%	1,437,343.67	1,982,204.62	-544,860.95	1.89%	2.60%	-0.71%
Utilities	1.24%	2.86%	951,306.71	2,180,425.08	-1,229,118.37	1.24%	2.86%	-1.62%

Total classified equity
\$76,238,639.17

Unclassified Securities

\$15,302.00

Rounding calculation may affect totals.



Equity sector analysis - as of September 30, 2020 (continued)

Detail of equity sector analysis

	Number of shares	Price on 09/30/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Communication Services						
ALPHABET INC CL A CUSIP: 02079K305 Symbol: GOOGL	832.00	1,465.60	1,219,379.2 1.60%	Low	Most Preferred	Buy (Rating Exception)
ALPHABET INC CL C CUSIP: 02079K107 Symbol: GOOG	904.00	1,469.60	1,328,518.4 1.74%	Low	Most Preferred	Buy (Rating Exception)
AT&T INC CUSIP: 00206R102 Symbol: T	5,968.00	28.51	170,147.68 0.22%	Low	Most Preferred	Neutral
COMCAST CORP NEW CL A CUSIP: 20030N101 Symbol: CMCSA	10,600.00	46.26	490,356.00 0.64%	Low	Most Preferred	Neutral (Rating Exception)
FACEBOOK INC CL A CUSIP: 30303M102 Symbol: FB	4,000.00	261.90	1,047,600.0 1.37%	Medium	Most Preferred	Buy (Rating Exception)
WALT DISNEY CO (HOLDING CO) DISNEY COM CUSIP: 254687106 Symbol: DIS	5,860.00	124.08	727,108.80 0.97%	Medium	Bellwether	Neutral (Rating Exception)
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			2,218,532.8 2.91%			
Total Communication Services			\$7,201,642.96			
			9.45%			
Consumer Discretionary						
AMAZON.COM INC CUSIP: 023135106 Symbol: AMZN	585.00	3,148.73	1,842,007.0 2.42%	Low	Most Preferred	Buy (Rating Exception)
BOOKING HLDGS INC CUSIP: 09857L108 Symbol: BKNG	200.00	1,710.68	342,136.00 0.45%	Medium		Neutral (Rating Exception)
CARMAX INC CUSIP: 143130102 Symbol: KMX	5,000.00	91.91	459,550.00 0.60%			
D R HORTON INC CUSIP: 23331A109 Symbol: DHI	7,000.00	75.63	529,410.00 0.69%		Bellwether	
DAVE & BUSTERS ENTMT INC CUSIP: 238337109 Symbol: PLAY	5,000.00	15.16	75,800.00 0.10%			
GENTEX CORP CUSIP: 371901109 Symbol: GNTX	5,000.00	25.75	128,750.00 0.17%			
GENUINE PARTS CO CUSIP: 372460105 Symbol: GPC	3,000.00	95.17	285,510.00 0.37%			
LKQ CORP NEW CUSIP: 501889208 Symbol: LKQ	4,000.00	27.73	110,920.00 0.15%			
MCDONALDS CORP CUSIP: 580135101 Symbol: MCD	1,050.00	219.49	230,464.50 0.30%	Low	Most Preferred	Neutral
O REILLY AUTOMOTIVE INC CUSIP: 67103H107 Symbol: ORLY	3,150.00	461.08	1,452,402.0 1.91%	Low		Buy (Rating Exception)
STARBUCKS CORP CUSIP: 855244109 Symbol: SBUX	11,280.00	85.92	969,177.60 1.27%	Low	Bellwether	Neutral (Rating Exception)
TRACTOR SUPPLY COMPANY CUSIP: 892356106 Symbol: TSCO	12,000.00	143.34	1,720,080.0 2.26%	Low		Neutral

Equity sector analysis - as of September 30, 2020 (continued)

	Number of shares	Price on 09/30/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Consumer Discretionary						
ULTA BEAUTY, INC CUSIP: 903845303 Symbol: ULTA	1,000.00	223.98	223,980.00 0.29%	High		Buy
VF CORP CUSIP: 918204108 Symbol: VFC	1,400.00	70.25	98,350.00 0.13%	Medium	Bellwether	Neutral (Rating Exception)
YUM CHINA HLDGS INC CUSIP: 98850P109 Symbol: YUMC	17,000.00	52.95	900,150.00 1.18%	Low		Buy
YUM! BRANDS INC CUSIP: 988498101 Symbol: YUM	7,080.00	91.30	646,404.00 0.85%	Medium	Bellwether	Buy
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			1,638,475.9 2.15%			
Total Consumer Discretionary			\$11,653,567.09 15.29%			
Consumer Staples						
CONAGRA BRANDS, INC. CUSIP: 205887102 Symbol: CAG	3,000.00	35.71	107,130.00 0.14%			
COSTCO WHOLESALE CORP CUSIP: 22160K105 Symbol: COST	3,660.00	355.00	1,299,300.0 1.70%	Low		Buy
DIAGEO PLC NEW GB SPON ADR CUSIP: 25243Q205 Symbol: DEO	1,000.00	137.66	137,660.00 0.18%	Low		Buy
GENL MILLS INC CUSIP: 370334104 Symbol: GIS	4,000.00	61.68	246,720.00 0.32%			
PEPSICO INC CUSIP: 713448108 Symbol: PEP	5,000.00	138.60	693,000.00 0.91%	Low	Most Preferred	Neutral
PROCTER & GAMBLE CO CUSIP: 742718109 Symbol: PG	7,000.00	138.99	972,930.00 1.28%	Low	Most Preferred	Neutral
SMUCKER J M CO NEW CUSIP: 832696405 Symbol: SJM	3,000.00	115.52	346,560.00 0.45%			
WALMART INC CUSIP: 931142103 Symbol: WMT	1,050.00	139.91	146,905.50 0.20%	Low	Most Preferred	Buy (Rating Exception)
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			1,633,148.0 2.14%			
Total Consumer Staples			\$5,583,353.52 7.32%			

Equity sector analysis - as of September 30, 2020 (continued)

	Number of shares	Price on 09/30/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Energy						
CHEVRON CORP CUSIP: 166764100 Symbol: CVX	8,710.00	72.00	627,120.00 0.82%	Medium	Most Preferred	Neutral (Rating Exception)
ONEOK INC NEW CUSIP: 682680103 Symbol: OKE	14,000.00	25.98	363,720.00 0.48%	High		Buy (Rating Exception)
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			391,879.11 0.51%			
Total Energy			\$1,382,719.11 1.81%			
Financials						
BANK OF AMER CORP CUSIP: 060505104 Symbol: BAC	33,050.00	24.09	796,174.50 1.04%	Medium	Bellwether	Neutral (Rating Exception)
BLACKROCK INC CUSIP: 09247X101 Symbol: BLK	1,370.00	563.55	772,063.50 1.01%	Low	Bellwether	Buy
CHUBB LTD CHF CUSIP: H1467J104 Symbol: CB	1,000.00	116.12	116,120.00 0.15%	Medium	Bellwether	Neutral (Rating Exception)
EAST WEST BANCORP INC CUSIP: 27579R104 Symbol: EWBC	5,500.00	32.74	180,070.00 0.24%	Medium		Neutral (Rating Exception)
ESSENT GROUP LTD CUSIP: G3198U102 Symbol: ESNT	10,000.00	37.01	370,100.00 0.49%			
HARTFORD FINCL SERVICES GROUP INC CUSIP: 416515104 Symbol: HIG	4,000.00	36.86	147,440.00 0.19%	High		Buy (Rating Exception)
JPMORGAN CHASE & CO CUSIP: 46625H100 Symbol: JPM	2,000.00	96.27	192,540.00 0.25%	Low	Bellwether	Neutral (Rating Exception)
MARSH & MCLENNAN COS INC CUSIP: 571748102 Symbol: MMC	7,030.00	114.70	806,341.00 1.06%	Low	Bellwether	Buy
META FINANCIAL GROUP INC CUSIP: 59100U108 Symbol: CASH	5,000.00	19.22	96,100.00 0.13%			
SIGNATURE BANK NEW YORK N Y CUSIP: 82669G104 Symbol: SBNY	2,500.00	82.99	207,475.00 0.27%	Medium		Buy (Rating Exception)
TCF FINL CORP NEW CUSIP: 872307103 Symbol: TCF	5,000.00	23.36	116,800.00 0.16%	High		Buy (Rating Exception)
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			3,463,356.9 4.54%			
Total Financials			\$7,264,580.97 9.53%			

Equity sector analysis - as of September 30, 2020 (continued)

	Number of shares	Price on 09/30/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Health Care						
ABBOTT LABS			1,335,235.2	Low	Most Preferred	Buy
CUSIP: 002824100 Symbol: ABT	12,269.00	108.83	1.75%			
BRISTOL MYERS SQUIBB CO			180,870.00	Low	Most Preferred	Neutral
CUSIP: 110122108 Symbol: BMY	3,000.00	60.29	0.24%			
CENTENE CORP			276,017.56		Bellwether	
CUSIP: 151358101 Symbol: CNC	4,732.00	58.33	0.36%			
CIGNA CORP			66,747.54	Low	Bellwether	Buy
CUSIP: 125523100 Symbol: CI	394.00	169.41	0.09%			
DANAHER CORP			2,153,300.0	Low	Most Preferred	Buy
CUSIP: 235851102 Symbol: DHR	10,000.00	215.33	2.82%			
GILEAD SCIENCES INC			884,660.00	Low	Bellwether	Neutral (Rating Exception)
CUSIP: 375558103 Symbol: GILD	14,000.00	63.19	1.16%			
MEDTRONIC PLC			121,066.80	Low	Bellwether	Buy
CUSIP: G5960L103 Symbol: MDT	1,165.00	103.92	0.16%			
MERCK & CO INC NEW COM			121,936.50	Low	Most Preferred	Buy (Rating Exception)
CUSIP: 58933Y105 Symbol: MRK	1,470.00	82.95	0.16%			
PFIZER INC			367,000.00	Low	Bellwether	Neutral
CUSIP: 717081103 Symbol: PFE	10,000.00	36.70	0.48%			
STRYKER CORP			2,708,810.0	Medium		Neutral
CUSIP: 863667101 Symbol: SYK	13,000.00	208.37	3.55%			
SUPERNUS PHARMACEUTICALS INC			156,300.00			
CUSIP: 868459108 Symbol: SUPN	7,500.00	20.84	0.21%			
THERMO FISHER SCIENTIFIC INC			196,476.40	Low	Most Preferred	Buy
CUSIP: 883556102 Symbol: TMO	445.00	441.52	0.26%			
UNITEDHEALTH GROUP INC			174,591.20	Low	Bellwether	Neutral
CUSIP: 91324P102 Symbol: UNH	560.00	311.77	0.23%			
MUTUAL FUNDS COMPONENT			2,569,856.9			
(for further details see last section of this report)			3.37%			
Total Healthcare			\$11,312,868.26			
			14.84%			
Industrials						
AECOM			121,336.00	High		Buy
CUSIP: 00766T100 Symbol: ACM	2,900.00	41.84	0.16%			
AIR LEASE CORP CL A			117,680.00			
CUSIP: 00912X302 Symbol: AL	4,000.00	29.42	0.15%			
AMETEK INC (NEW)			248,500.00			
CUSIP: 031100100 Symbol: AME	2,500.00	99.40	0.33%			
CARRIER GLOBAL CORP			28,402.20	Medium		Buy (Rating Exception)
CUSIP: 14448C104 Symbol: CARR	930.00	30.54	0.04%			
FASTENAL CO			1,442,880.0	Low		Neutral
CUSIP: 311900104 Symbol: FAST	32,000.00	45.09	1.89%			
GENL DYNAMICS CORP			719,836.00	Low	Bellwether	Neutral (Rating Exception)
CUSIP: 369550108 Symbol: GD	5,200.00	138.43	0.94%			

Equity sector analysis - as of September 30, 2020 (continued)

	Number of shares	Price on 09/30/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Industrials						
IDEX CORP			547,230.00			
CUSIP: 45167R104 Symbol: IEX	3,000.00	182.41	0.72%			
KAR AUCTION SVCS INC			72,000.00			
CUSIP: 48238T109 Symbol: KAR	5,000.00	14.40	0.09%			
LOCKHEED MARTIN CORP			122,649.60	Low	Most Preferred	Buy
CUSIP: 539830109 Symbol: LMT	320.00	383.28	0.16%			
OLD DOMINION FREIGHT LINES INC			569,898.00			
CUSIP: 679580100 Symbol: ODFL	3,150.00	180.92	0.75%			
OTIS WORLDWIDE CORP			29,025.30			
CUSIP: 68902V107 Symbol: OTIS	465.00	62.42	0.04%			
PATRICK INDUST INC			460,160.00			
CUSIP: 703343103 Symbol: PATK	8,000.00	57.52	0.60%			
RAYTHEON TECHNOLOGIES CORP			53,512.20	Medium	Most Preferred	Buy
CUSIP: 75513E101 Symbol: RTX	930.00	57.54	0.07%			
ROPER TECHNOLOGIES INC			1,580,440.0			
CUSIP: 776696106 Symbol: ROP	4,000.00	395.11	2.07%			
SENSATA TECHNOLOGIES HLDG PLC EUR			215,700.00			
CUSIP: G8060N102 Symbol: ST	5,000.00	43.14	0.28%			
WATSCO INC			232,890.00			
CUSIP: 942622200 Symbol: WSO	1,000.00	232.89	0.32%			
MUTUAL FUNDS COMPONENT			2,728,613.9			
(for further details see last section of this report)			3.58%			
Total Industrials			\$9,290,753.20			
			12.19%			
Information Technology						
APPLE INC			3,740,663.0	Medium	Bellwether	Neutral
CUSIP: 037833100 Symbol: AAPL	32,300.00	115.81	4.91%			
AUTOMATIC DATA PROCESSNG INC			278,980.00			
CUSIP: 053015103 Symbol: ADP	2,000.00	139.49	0.37%			
COGNEX CORP			520,800.00	Medium		Neutral
CUSIP: 192422103 Symbol: CGNX	8,000.00	65.10	0.68%			
F5 NETWORKS INC			712,066.00			
CUSIP: 315616102 Symbol: FFIV	5,800.00	122.77	0.93%			
FABRINET			252,120.00			
CUSIP: G3323L100 Symbol: FN	4,000.00	63.03	0.33%			
GLOBAL PAYMENTS INC			887,900.00	Medium		Buy
CUSIP: 37940X102 Symbol: GPN	5,000.00	177.58	1.16%			
MICROSOFT CORP			189,297.00	Low	Most Preferred	Buy
CUSIP: 594918104 Symbol: MSFT	900.00	210.33	0.25%			
ORACLE CORP			298,500.00	Low	Most Preferred	Neutral (Rating Exception)
CUSIP: 68389X105 Symbol: ORCL	5,000.00	59.70	0.39%			
PALO ALTO NETWORKS INC			305,937.50	Medium	Most Preferred	Neutral (Rating Exception)
CUSIP: 697435105 Symbol: PANW	1,250.00	244.75	0.40%			

Equity sector analysis - as of September 30, 2020 (continued)

	Number of shares	Price on 09/30/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Information Technology						
SAMSUNG ELECTRS LTD GDR (EACH REP 25 COM STK KRW100) REG. S *GB LINE*	170.00	1,244.12	211,500.57 0.28%			
CUSIP: 7960509A2 Symbol: SKYWORKS SOLUTIONS INC			582,000.00	Medium		Neutral
CUSIP: 83088M102 Symbol: SWKS	4,000.00	145.50	0.76%			
VISA INC CL A			2,399,640.0	Low	Most Preferred	Neutral
CUSIP: 92826C839 Symbol: V	12,000.00	199.97	3.15%			
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			7,811,236.8 10.25%			
Total Information Technology			\$18,190,640.92 23.86%			
Materials						
LINDE PLC EUR			952,520.00	Low	Most Preferred	Buy
CUSIP: G5494J103 Symbol: LIN	4,000.00	238.13	1.25%			
RIO TINTO PLC SPON ADR			307,989.00	Low		Neutral (Rating Exception)
CUSIP: 767204100 Symbol: RIO	5,100.00	60.39	0.40%			
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			709,353.76 0.93%			
Total Materials			\$1,969,862.76 2.58%			
Real Estate						
AMERICAN TOWER CORP REIT			241,730.00	Low	Most Preferred	Buy
CUSIP: 03027X100 Symbol: AMT	1,000.00	241.73	0.32%			
CROWN CASTLE INTL CORP REIT			449,550.00	Low	Bellwether	Neutral (Rating Exception)
CUSIP: 22822V101 Symbol: CCI	2,700.00	166.50	0.59%			
REALTY INCOME CORP MD SBI			303,750.00			
CUSIP: 756109104 Symbol: O	5,000.00	60.75	0.40%			
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			442,313.67 0.58%			
Total Real Estate			\$1,437,343.67 1.89%			



Equity sector analysis - as of September 30, 2020 (continued)

	Number of shares	Price on 09/30/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Utilities						
DUKE ENERGY CORP NEW			269,310.96	Low		Buy
CUSIP: 26441C204 Symbol: DUK	3,041.00	88.56	0.35%			
MUTUAL FUNDS COMPONENT			681,995.75			
(for further details see last section of this report)			0.89%			
Total Utilities			\$951,306.71			
			1.24%			
Total classified equity			\$76,238,639.17			
Unclassified Securities						
CALL ABBOTT LABS DUE 11/20/20 115.000 000132			-2,640.00	Low	Most Preferred	Buy
CUSIP: 99UBB00D9 Symbol: ABT	-10.00	264.00	0.00%			
CALL CHEVRON CORP DUE 12/18/20 125.000 0926P3			-102.00	Medium	Most Preferred	Neutral (Rating Exception)
CUSIP: 99UBBC536 Symbol: CVX	-17.00	6.00	0.00%			
CALL COMCAST CORP NEW CL DUE 06/18/21 50.000 026263			-2,200.00	Low	Most Preferred	Neutral (Rating Exception)
CUSIP: 99UBB0ID6 Symbol: CMCSA	-8.00	275.00	0.00%			
CALL CONAGRA BRANDS, INC DUE 12/18/20 41.000 101290			-450.00			
CUSIP: 99UBB0HH8 Symbol: CAG	-10.00	45.00	0.00%			
CALL COSTCO WHOLESALE CO DUE 10/16/20 375.000 0929G5			-1,456.00	Low		Buy
CUSIP: 99UBB0IW4 Symbol: COST	-16.00	91.00	0.00%			
CALL DUKE ENERGY CORP NE DUE 01/15/21 105.000 119MG4			-400.00	Low		Buy
CUSIP: 99UBAL1G2 Symbol: DUK	-10.00	40.00	0.00%			
CALL FASTENAL CO DUE 11/20/20 45.000 167061			-6,975.00	Low		Neutral
CUSIP: 99UBARSK1 Symbol: FAST	-30.00	232.50	-0.01%			
CALL GENL MILLS INC DUE 10/16/20 67.500 177105			-30.00			
CUSIP: 99UBA7N04 Symbol: GIS	-10.00	3.00	0.00%			
CALL GENUINE PARTS CO DUE 11/20/20 100.000 181455			-2,725.00			
CUSIP: 99UBB0MD1 Symbol: GPC	-10.00	272.50	0.00%			
CALL GLOBAL PAYMENTS INC DUE 11/20/20 220.000 1848N3			-1,800.00	Medium		Buy
CUSIP: 99UBB0N16 Symbol: GPN	-20.00	90.00	0.00%			
CALL HARTFORD FINCL SERV DUE 01/15/21 70.000 1988E4			-150.00	High		Buy (Rating Exception)
CUSIP: 99UBBAGZ7 Symbol: HIG	-10.00	15.00	0.00%			
CALL IDEX CORP DUE 10/16/20 185.000 223085			-3,125.00			
CUSIP: 99UBBG552 Symbol: IEX	-10.00	312.50	0.00%			
CALL JPMORGAN CHASE & CO DUE 12/18/20 125.000 241JP2			-460.00	Low	Bellwether	Neutral (Rating Exception)
CUSIP: 99UBA66E5 Symbol: JPM	-10.00	46.00	0.00%			

Equity sector analysis - as of September 30, 2020 (continued)

			Number of shares	Price on 09/30/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Unclassified Securities								
CALL LINDE PLC EUR DUE 10/16/20	270.000	2621Y8						
CUSIP: 99UBBWVL3 Symbol: LIN			-10.00	20.00	0.00%	Low	Most Preferred	Buy
CALL MARSH & MCLENNAN CO DUE 10/16/20	125.000							
275603			-10.00	10.00	0.00%	Low	Bellwether	Buy
CUSIP: 99UBBS9Y9 Symbol: MMC								
CALL O REILLY AUTOMOTIVE DUE 11/20/20	520.000							
350B81			-5.00	240.00	0.00%	Low		Buy (Rating Exception)
CUSIP: 99UBB0N99 Symbol: ORLY								
CALL ONEOK INC NEW DUE 01/15/21	42.500	3496G4						
CUSIP: 99UBB0N65 Symbol: OKE			-20.00	25.00	0.00%	High		Buy (Rating Exception)
CALL ORACLE CORP DUE 12/18/20	62.500	353752						
CUSIP: 99UBARTO2 Symbol: ORCL			-10.00	227.50	0.00%	Low	Most Preferred	Neutral (Rating Exception)
CALL PEPSICO INC DUE 12/18/20	155.000	368024						
CUSIP: 99UBA7YI3 Symbol: PEP			-10.00	97.00	0.00%	Low	Most Preferred	Neutral
CALL PFIZER INC DUE 06/18/21	40.000	370011						
CUSIP: 99UBAU1X5 Symbol: PFE			-30.00	190.00	-0.01%	Low	Bellwether	Neutral
CALL PROCTER & GAMBLE CO DUE 01/15/21	145.000							
383601			-30.00	420.00	-0.02%	Low	Most Preferred	Neutral
CUSIP: 99UBB1ZM5 Symbol: PG								
CALL RIO TINTO PLC SPON DUE 10/16/20	55.000							
4005C0			-1.00	575.00	0.00%	Low		Neutral (Rating Exception)
CUSIP: 99UBAXI60 Symbol: RIO								
CALL SMUCKER J M CO NEW DUE 01/15/21	130.000							
4258Y5			-10.00	166.00	0.00%			
CUSIP: 99UBBC569 Symbol: SJM								
CALL STARBUCKS CORP DUE 06/18/21	105.000							
509736			-12.00	280.00	0.00%	Low	Bellwether	Neutral (Rating Exception)
CUSIP: 99UBBHL8 Symbol: SBUX								
CALL TRACTOR SUPPLY COMP DUE 10/16/20	160.000							
4608B6			-10.00	30.00	0.00%	Low		Neutral
CUSIP: 99UBB0ON7 Symbol: TSCO								
CALL VISA INC CL A DUE 12/18/20	225.000	488372						
CUSIP: 99UBAQM37 Symbol: V			-10.00	285.00	0.00%	Low	Most Preferred	Neutral
CALL YUM CHINA HLDGS INC DUE 10/16/20	60.000							
518NY1			-30.00	3.00	0.00%	Low		Buy
CUSIP: 99UBAQZA7 Symbol: YUMC								
CALL YUM! BRANDS INC DUE 12/18/20	105.000							
5175J8			-20.00	87.50	0.00%	Medium	Bellwether	Buy
CUSIP: 99UBB0OP2 Symbol: YUM								
ESCROW ALTABA INC					67,800.00			
CUSIP: 021ESC017 Symbol:			3,000.00	22.60	0.09%			
ESCROW GENERAL MTRS CORP 6.250% SER C DUE 07/15/33 CALLBL					0.00			
CONV			20,000.00	0.00	0.00%			
CUSIP: 370ESC717 Symbol:								
PUT APPLE INC DUE 12/18/20	62.500	030911						
CUSIP: 99UBA9HA5 Symbol: AAPL			-40.00	27.00	0.00%	Medium	Bellwether	Neutral

Equity sector analysis - as of September 30, 2020 (continued)

			Number of shares	Price on 09/30/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Unclassified Securities								
PUT LINDE PLC EUR DUE 10/16/20	185.000	2621Y8			-200.00	Low	Most Preferred	Buy
CUSIP: 99UBBHP41 Symbol: LIN			-10.00	20.00	0.00%			
PUT TRACTOR SUPPLY COMP DUE 01/15/21	95.000				-1,325.00	Low		Neutral
4608B6			-10.00	132.50	0.00%			
CUSIP: 99UBBQU2 Symbol: TSCO								
RTS BRISTOL-MYERS SQUIBB CO EXP 03/31/21					6,750.00			
CUSIP: 110122157 Symbol: BMYRT			3,000.00	2.25	0.01%			
Total Unclassified Securities					\$15,302.00			
					0.02%			
Total equity					\$76,253,941.17			

Balanced mutual funds represented in multiple asset classes based on Morningstar allocations.

Rounding calculation may affect totals.

Blended investments included in this report

	Quantity	Price on 09/30/2020 (\$)	Market value on 09/30/2020 (\$)	Equity market value on 09/30/2020 (\$)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
AMER FUNDS CAPITAL WORLD GROWTH & INCOME FUND CL A CUSIP: 140543109 Symbol: CWGIX (94.64% Equity)	27,635.26	51.97	1,436,204.36	1,359,223.81			
AMER FUNDS NEW WORLD FUND CLASS F2 CUSIP: 649280823 Symbol: NFFFX (91.85% Equity)	11,692.50	73.73	862,087.66	791,827.52			
AMERICAN FUNDS NEW WORLD FUND CL A CUSIP: 649280104 Symbol: NEWFX (91.85% Equity)	35,550.20	73.82	2,624,315.76	2,410,434.02			
CLEARBRIDGE INTERNATIONAL GROWTH FUND CLASS I CUSIP: 524686524 Symbol: LMGNX (98.95% Equity)	61,736.91	59.01	3,643,094.94	3,604,842.44			
COLUMBIA SELIGMAN COMMUNICATION AND INFORMATION FUND A CUSIP: 19766H429 Symbol: SLMCX (97.33% Equity)	56,228.39	89.82	5,050,433.81	4,915,587.24			
ISHARES RUSSELL 2000 ETF CUSIP: 464287655 Symbol: IWM (99.61% Equity)	8,819.00	149.79	1,320,998.01	1,315,846.11			
MFS NEW DISCOVERY VALUE FUND CLASS A CUSIP: 55278M100 Symbol: NDVAX (98.89% Equity)	96,515.87	12.76	1,231,542.48	1,217,872.35			
MFS VALUE FUND CLASS A CUSIP: 552983801 Symbol: MEIAX (98.3% Equity)	107,991.21	40.39	4,361,764.85	4,287,614.78			
SPDR S&P 500 ETF TR CUSIP: 78462F103 Symbol: SPY (99.86% Equity)	2,313.00	334.89	774,600.57	773,516.14			
VANGUARD MID-CAP VALUE ETF CUSIP: 922908512 Symbol: VOE (99.98% Equity)	7,580.00	101.37	768,384.60	768,230.92			
VIRTUS KAR SMALL-CAP GROWTH FUND CLASS A CUSIP: 92828N627 Symbol: PSGAX (92.35% Equity)	62,843.63	49.00	3,079,337.87	2,843,768.53			

Bond summary

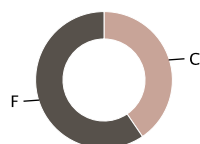
as of September 30, 2020

Bond overview

Total quantity	852,000
Total market value	\$888,669.14
Total accrued interest	\$10,574.90
Total market value plus accrued interest	\$899,244.04
Total estimated annual bond interest	\$28,571.35
Average coupon	3.82%
Average current yield	3.22%
Average yield to maturity	0.21%
Average yield to worst	0.21%
Average modified duration	0.92
Average effective maturity	1.00

Credit quality of bond holdings

Effective credit rating	Issues	Value on 09/30/2020 (\$)	% of port.
A Aaa/AAA/AAA	0	0.00	0.00
B Aa/AA/AA	0	0.00	0.00
C A/A/A	1	364,144.65	39.79
D Baa/BBB/BBB	0	0.00	0.00
E Non-investment grade	0	0.00	0.00
F Certificate of deposit	3	535,099.40	60.21
G Not rated	1	0.00	0.00
Total	5	\$899,244.04	100%

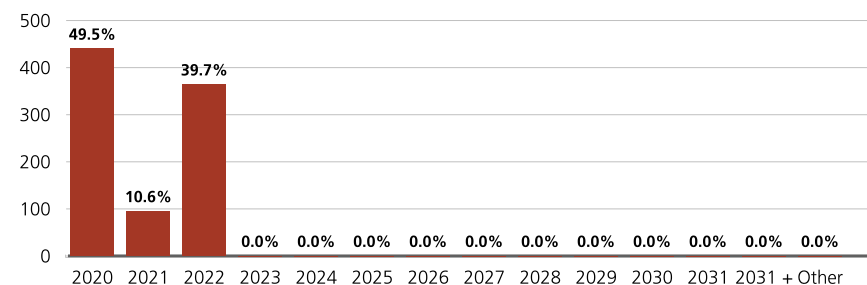


Investment type allocation

Investment type	Taxable (\$)	Tax-exempt / deferred (\$)	Total (\$)	% of bond port.
Certificates of deposit	0.00	535,099.40	535,099.40	59.51
U.S. corporates	0.00	364,144.65	364,144.65	40.49
Total	\$0.00	\$899,244.05	\$899,244.05	100%

Bond maturity schedule

\$ Thousands



Effective maturity schedule

Cash, mutual funds and some preferred securities are not included.



Bond holdings

as of September 30, 2020

Summary of bond holdings

Maturity Year	Issues	Quantity	Est. annual income (\$)	Current yield (%)	Yield to maturity (%)	Yield to worst (%)	Modified duration	Adjusted cost basis (\$)	Unrealized gain/loss (\$)	Mkt. value (\$)	% of bond portfolio maturing
2020	2	440,000	347.50	0.08%	0.06 %	0.06 %	0.22	440,000	23.65	440,051.65	49.51%
2021	1	95,000	142.50	0.15%	0.06 %	0.06 %	0.38	95,000	31.35	95,047.75	10.69%
2022	1	297,000	28,081.35	7.94%	0.43 %	0.43 %	1.93	293,625	59,989.14	364,144.65	39.79%
2023	0	0			NA	NA	NA				
2024	0	0			NA	NA	NA				
2025	0	0			NA	NA	NA				
2026	0	0			NA	NA	NA				
2027	0	0			NA	NA	NA				
2028	0	0			NA	NA	NA				
2029	0	0			NA	NA	NA				
2030	0	0			NA	NA	NA				
2031	0	0			NA	NA	NA				
2032	0	0			NA	NA	NA				
2033	1	20,000	0.00	0.00%	NA	NA	NA	496,763	-496,763.00	0.00	
2034	0	0			NA	NA	NA				
2035	0	0			NA	NA	NA				
2036	0	0			NA	NA	NA				
2037	0	0			NA	NA	NA				
2038	0	0			NA	NA	NA				
2039	0	0			NA	NA	NA				
2040	0	0			NA	NA	NA				
2041	0	0			NA	NA	NA				
2042	0	0			NA	NA	NA				
2043	0	0			NA	NA	NA				
2044	0	0			NA	NA	NA				
2045	0	0			NA	NA	NA				
2046	0	0			NA	NA	NA				
2047	0	0			NA	NA	NA				
2048	0	0			NA	NA	NA				
2049	0	0			NA	NA	NA				
2049 +	0	0			NA	NA	NA				
Other	0	0			NA	NA	NA				
Total	5	852,000	\$28,571.35	3.22%	0.21 %	0.21 %	0.92	\$1,325,388.00	\$-436,718.86	\$899,244.04	

Includes all fixed-rate securities in the selected portfolio. Average yields and durations exclude Structured Product, Pass-Through, Perpetual Preferred, and Foreign securities.



Bond holdings - as of September 30, 2020 (continued)

Details of bond holdings

	Effective rating/ Underlying rating (Mdy/Fitch/S&P)	Quantity	Coupon	Effective maturity	Call date/ Call price (\$)	Est. annual income (\$)/ Curr. yield (%)	YTM (%) / YTW (%)	Modified duration	Adjusted cost basis (\$)/ Unreal. g/l (\$)	Market price (\$)	Mkt. value (\$)/ Accr. interest (\$)	% of bond port.
Total Bond Portfolio		852,000	3.82%	09/29/2021	NA	\$28,571.35 3.22%	0.21% 0.21%	0.92	\$1,325,388.00 \$-436,718.86	NA	\$888,669.14 \$10,574.90 \$899,244.04	100%

Maturing 2020

BANKUNITED NA FLOR FL US RT 00.0500% MAT 12/16/20 FIXED RATE CD /FL CUSIP: 066519PM5 Initial Purchase Date: 09/09/2020 Original Maturity: 12/16/2020	CD	185,000	0.05%	12/16/2020		92.50 0.05%	0.05% 0.05%	0.21	185,000.00 -1.85	99.999	184,998.15 3.55	20.82%
BEAL BANK, SSB TX US RT 00.1000% MAT 12/23/20 FIXED RATE CD /TX CUSIP: 07371ACM3 Initial Purchase Date: 08/17/2020 Original Maturity: 12/23/2020	CD	255,000	0.10%	12/23/2020		255.00 0.10%	0.06% 0.06%	0.23	255,000.00 25.50	100.010	255,025.50 24.45	28.70%
Total 2020		440,000	0.08%	12/20/2020		\$347.50 0.08%	0.06% 0.06%	0.22	\$440,000.00 \$23.65		\$440,023.65 \$28.00	49.51%

Maturing 2021

BEAL BK NV US RT 00.1500% MAT 02/17/21 FIXED RATE CD /NV CUSIP: 07371CDN6 Initial Purchase Date: 08/12/2020 Original Maturity: 02/17/2021	CD	95,000	0.15%	02/17/2021		142.50 0.15%	0.06% 0.06%	0.38	95,000.00 31.35	100.033	95,031.35 16.40	10.69%
Total 2021		95,000	0.15%	02/17/2021		\$142.50 0.15%	0.06% 0.06%	0.38	\$95,000.00 \$31.35		\$95,031.35 \$16.40	10.69%

Includes all fixed-rate securities in the selected portfolio. Average yields and durations exclude Structured Product, Pass-Through, Perpetual Preferred, and Foreign securities.



Bond holdings - as of September 30, 2020 (continued)

	Effective rating/ Underlying rating (Mdy/Fitch/S&P)	Quantity	Coupon	Effective maturity	Call date/ Call price (\$)	Est. annual income (\$)/ Curr. yield (%)	YTM (%)	Modified duration	Adjusted cost basis (\$)/ Unreal. g/l (\$)	Market price (\$)	Mkt. value (\$)/ Accr. interest (\$)	% of bond port.
Maturing 2022												
COMCAST CABLE 09.455% 111522 DTD111802 FC051503 COMMUNICATION CUSIP: 00209TAB1 Initial Purchase Date: 02/13/1992 Original Maturity: 11/15/2022	A3/A-/A- NR/NR/NR	297,000	9.46%	11/15/2022		28,081.35 7.94%	0.43% 0.43%	1.93	293,625.00 59,989.14	119.062	353,614.14 10,530.51	39.79%
Total 2022		297,000	9.46%	11/15/2022		\$28,081.35 7.94%	0.43% 0.43%	1.93	\$293,625.00 \$59,989.14		\$353,614.14 \$10,530.51	39.79%
Maturing 2033												
ESCROW GENERAL MTRS CORP 6.250% SER C DUE 07/15/33 CALLBL CONV /DE CUSIP: 370ESC717 Initial Purchase Date: 07/10/2003 Original Maturity: 07/15/2033	WR/NR/NR NR/NR/NR	20,000	6.25%	07/15/2033	07/15/2033 25.00		NA NA	NA NA	496,763.00 -496,763.00	0.000	0.00 0.00	0.00%
Total 2033		20,000	6.25%	07/15/2033		\$0.00 0.00%	NA NA	NA	\$496,763.00 \$-496,763.00		\$0.00 \$0.00	0.00%
Total Bond Portfolio												
	Effective rating/ Underlying rating (Mdy/Fitch/S&P)	Quantity	Coupon	Effective maturity	Call date/ Call price (\$)	Est. annual income (\$)/ Curr. yield (%)	YTM (%)	Modified duration	Adjusted cost basis (\$)/ Unreal. g/l (\$)	Market price (\$)	Mkt. value (\$)/ Accr. interest (\$)	% of bond port.
		852,000	3.82%	09/29/2021	NA	\$28,571.35 3.22%	0.21% 0.21%	0.92	\$1,325,388.00 \$-436,718.86	NA	\$888,669.14 \$10,574.90 \$899,244.04	100%

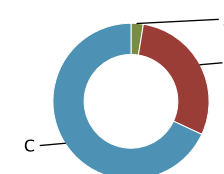
Includes all fixed-rate securities in the selected portfolio. Average yields and durations exclude Structured Product, Pass-Through, Perpetual Preferred, and Foreign securities.

Portfolio holdings

as of September 30, 2020

Summary of Portfolio Holdings

	Cost basis (\$)	Value on 09/30/2020 (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Portfolio
A Cash	2,872,080.78	2,872,080.78	0.00	0.00%	4,390.84	0.15%	2.53%
Cash	2,872,080.78	2,872,080.78	0.00	0.00%	4,390.84	0.15%	2.53%
US	2,872,080.78	2,872,080.78	0.00	0.00%	4,390.84	0.15%	2.53%
B Fixed Income	32,695,028.35	33,337,489.24	642,460.89	1.97%	888,290.63	2.66%	29.42%
US	27,715,791.12	28,462,940.66	747,149.54	2.70%	748,439.36	2.63%	25.12%
US Fixed Income	19,273,533.86	19,734,921.24	461,387.38	2.39%	463,872.29	2.35%	17.41%
Government	3,840,447.15	4,243,695.50	403,248.35	10.50%	34,539.05	0.81%	3.74%
Corporate IG Credit	293,625.00	364,144.65	70,519.65	24.02%	28,081.35	7.94%	0.33%
Corporate High Yield	4,308,185.11	4,120,179.27	-188,005.84	-4.36%	221,946.67	5.39%	3.64%
Global	3,943,224.17	3,879,671.40	-63,552.77	-1.61%	98,842.92	2.55%	3.42%
Global	3,943,224.17	3,879,671.40	-63,552.77	-1.61%	98,842.92	2.55%	3.42%
International	1,036,013.06	994,877.18	-41,135.88	-3.97%	41,008.35	4.12%	0.88%
Emerging Markets	1,036,013.06	994,877.18	-41,135.88	-3.97%	41,008.35	4.12%	0.88%
C Equity	41,314,003.51	77,117,942.24	35,803,938.73	86.66%	939,210.60	1.22%	68.05%
US	28,743,874.54	60,818,004.34	32,074,129.80	111.59%	820,342.75	1.35%	53.67%
US Equity	6,900.00	6,750.00	-150.00	-2.17%	0.00	0.00%	0.01%
Large Cap	17,348,083.24	44,244,631.68	26,896,548.44	155.04%	590,810.74	1.34%	39.04%
Mid Cap	5,632,864.58	9,839,904.30	4,207,039.72	74.69%	184,147.63	1.87%	8.68%
Small Cap	5,259,263.72	6,726,718.36	1,467,454.64	27.90%	45,384.38	0.67%	5.94%
Convertibles	496,763.00	0.00	-496,763.00	-100.00%	0.00	0.00%	0.00%
Global	4,132,772.71	6,486,638.17	2,353,865.46	56.96%	20,173.74	0.31%	5.72%
Global	4,132,772.71	6,486,638.17	2,353,865.46	56.96%	20,173.74	0.31%	5.72%
International	8,437,356.26	9,813,299.73	1,375,943.47	16.31%	98,694.11	1.01%	8.66%
International	84,933.90	252,120.00	167,186.10	196.84%	0.00	0.00%	0.23%
Developed Markets	5,460,600.86	5,863,275.74	402,674.88	7.37%	61,465.06	1.05%	5.17%
Emerging Markets	2,891,821.50	3,697,903.99	806,082.49	27.87%	37,229.05	1.01%	3.26%
D Commodities	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
E Non-Traditional	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
F Other	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
Total Portfolio	\$76,881,112.64	\$113,327,512.25	\$36,446,399.61	47.41%	\$1,831,892.07	1.62%	100%



Balanced mutual funds represented in multiple asset classes based on Morningstar allocations



Portfolio holdings - as of September 30, 2020 (continued)

Details of portfolio holdings

	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of asset class	% of Portfolio
Total Portfolio	\$76,881,112.64	\$113,327,512.25	\$36,446,399.61	47.41%	\$1,831,892.07	1.62%	100%	100%

	Quantity	Purchase price (\$)/ Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Cash	% of Portfolio
Cash											
Cash											
US											
LIQUID ASSETS GOVT FUND CUSIP: 90262Y307 Symbol: MMLIRA	2,872,080.78	1.00	1.00	2,872,080.78	2,872,080.78	0.00	0.00%	4,390.84	0.15%	100.00%	2.53%
Total US				\$2,872,080.78	\$2,872,080.78	\$0.00	0.00%	\$4,390.84	0.15%	100.00%	2.53%
Total Cash				\$2,872,080.78	\$2,872,080.78	\$0.00	0.00%	\$4,390.84	0.15%	100.00%	2.53%
Total Cash				\$2,872,080.78	\$2,872,080.78	\$0.00	0.00%	\$4,390.84	0.15%	100.00%	2.53%

	Quantity	Purchase price (\$)/ Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
Fixed Income											
US											
US Fixed Income											
BANKUNITED NA FLOR FL US RT 00.0500% MAT 12/16/20 FIXED RATE CD CUSIP: 066519PM5 Symbol: ZBEMC Initial purchase date: Sep 09, 2020	185,000.00	100.00	100.00	185,000.00	185,001.70	1.70	0.00%	92.50	0.05%	0.55%	0.16%
BEAL BANK, SSB TX US RT 00.1000% MAT 12/23/20 FIXED RATE CD CUSIP: 07371ACM3 Symbol: ZBDIK Initial purchase date: Aug 17, 2020	255,000.00	100.00	100.01	255,000.00	255,049.95	49.95	0.02%	255.00	0.10%	0.77%	0.23%
BEAL BK NV US RT 00.1500% MAT 02/17/21 FIXED RATE CD CUSIP: 07371CDN6 Symbol: ZBDAM Initial purchase date: Aug 12, 2020	95,000.00	100.00	100.03	95,000.00	95,047.75	47.75	0.05%	142.50	0.15%	0.29%	0.08%



Portfolio holdings - as of September 30, 2020 (continued)

	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
Fixed Income											
US											
LOOMIS SAYLES INVESTMENT GRADE BOND FUND CLASS A CUSIP: 543487144 Symbol: LIGRX Initial purchase date: Jun 13, 2014 Client investment: \$7,097,012.03 Reinvested dividends: \$1,858,639.29 Investment return: \$1,684,635.70 (23.74%)	741,067.32	12.08	11.85	8,955,651.32	8,781,647.72	-174,003.59	-1.94%	256,631.61	2.92%	26.34%	7.74%
METROPOLITAN WEST TOTAL RETURN BOND FUND CUSIP: 592905103 Symbol: MWTRX Initial purchase date: Nov 14, 2014 Client investment: \$3,587,358.91 Reinvested dividends: \$709,348.72 Investment return: \$1,011,410.58 (28.19%)	395,763.30	10.86	11.62	4,296,707.63	4,598,769.49	302,061.86	7.03%	88,622.52	1.93%	13.79%	4.06%
THORNBURG LIMITED TERM INCOME FD CLASS A CUSIP: 885215509 Symbol: THIFX Initial purchase date: Mar 09, 2017 Client investment: \$5,020,625.28 Reinvested dividends: \$465,549.63 Investment return: \$798,779.35 (15.91%)	411,556.20	13.33	14.14	5,486,174.91	5,819,404.63	333,229.72	6.07%	118,128.15	2.03%	17.46%	5.14%
Total US Fixed Income				\$19,273,533.86	\$19,734,921.24	\$461,387.38	2.39%	\$463,872.29	2.35%	59.20%	17.41%
Government											
ISHARES TIPS BOND ETF CUSIP: 464287176 Symbol: TIP Initial purchase date: Feb 16, 2017 Client investment: \$3,689,182.34 Reinvested dividends: \$151,264.81 Investment return: \$554,513.16 (15.03%)	33,547.00	114.48	126.50	3,840,447.15	4,243,695.50	403,248.35	10.50%	34,539.05	0.81%	12.73%	3.74%
Total Government				\$3,840,447.15	\$4,243,695.50	\$403,248.35	10.50%	\$34,539.05	0.81%	12.73%	3.74%
Corporate IG Credit											
COMCAST CABLE 09.455% 111522 DTD111802 FC051503 COMMUNICATION CUSIP: 00209TAB1 Initial purchase date: Feb 13, 1992	297,000.00	98.86	119.06	293,625.00	364,144.65	70,519.65	24.02%	28,081.35	7.94%	1.09%	0.33%
Total Corporate IG Credit				\$293,625.00	\$364,144.65	\$70,519.65	24.02%	\$28,081.35	7.94%	1.09%	0.33%

Corporate High Yield



Portfolio holdings - as of September 30, 2020 (continued)

	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
Fixed Income											
US											
BLACKROCK HIGH YIELD BOND PORTFOLIOA CUSIP: 09260B663 Symbol: BHYAX Initial purchase date: Nov 16, 2012 Client investment: \$1,215,925.43 Reinvested dividends: \$1,110,847.02 Investment return: \$958,733.96 (78.85%)	293,080.78	7.94	7.42	2,326,772.45	2,174,659.39	-152,113.06	-6.54%	113,920.50	5.24%	6.52%	1.92%
BLACKROCK HIGH YIELD BOND PORTFOLIOINSTITUTIONAL CUSIP: 09260B630 Symbol: BHYIX Initial purchase date: Aug 12, 2020 Client investment: \$1,976,775.79 Reinvested dividends: \$4,636.87 Investment return: \$-31,255.91 (-1.58%)	262,199.45	7.56	7.42	1,981,412.66	1,945,519.88	-35,892.78	-1.81%	108,026.17	5.55%	5.84%	1.72%
Total Corporate High Yield				\$4,308,185.11	\$4,120,179.27	\$-188,005.84	-4.36%	\$221,946.67	5.39%	12.36%	3.64%
Total US				\$27,715,791.12	\$28,462,940.66	\$747,149.54	2.70%	\$748,439.36	2.63%	85.38%	25.12%
Global											
Global											
BLACKROCK STRATEGIC INCOME OPPORTUNITIES PORTFOLIOA CUSIP: 09260B416 Symbol: BASIX Initial purchase date: Feb 13, 2014 Client investment: \$3,141,350.15 Reinvested dividends: \$801,874.02 Investment return: \$738,321.25 (23.5%)	385,653.22	10.22	10.06	3,943,224.17	3,879,671.40	-63,552.77	-1.61%	98,842.92	2.55%	11.64%	3.42%
Total Global				\$3,943,224.17	\$3,879,671.40	\$-63,552.77	-1.61%	\$98,842.92	2.55%	11.64%	3.42%
Total Global				\$3,943,224.17	\$3,879,671.40	\$-63,552.77	-1.61%	\$98,842.92	2.55%	11.64%	3.42%
International											
Emerging Markets											
TCW EMERGING MARKETS INCOME FUND CLASS N CUSIP: 87234N351 Symbol: TGINX Initial purchase date: Oct 09, 2019 Client investment: \$1,000,075.00 Reinvested dividends: \$35,938.06 Investment return: \$-5,197.82 (-0.52%)	97,061.19	10.67	10.25	1,036,013.06	994,877.18	-41,135.88	-3.97%	41,008.35	4.12%	2.98%	0.88%
Total Emerging Markets				\$1,036,013.06	\$994,877.18	\$-41,135.88	-3.97%	\$41,008.35	4.12%	2.98%	0.88%



Portfolio holdings - as of September 30, 2020 (continued)

Fixed Income	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
International											
Total International				\$1,036,013.06	\$994,877.18	\$-41,135.88	-3.97%	\$41,008.35	4.12%	2.98%	0.88%
Total Fixed Income				\$32,695,028.35	\$33,337,489.24	\$642,460.89	1.97%	\$888,290.63	2.66%	100.00%	29.42%
Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
US Equity											
RTS BRISTOL-MYERS SQUIBB CO EXP 03/31/21 CUSIP: 110122157 Symbol: BMYRT Initial purchase date: Nov 21, 2019	3,000.00	2.30	2.25	6,900.00	6,750.00	-150.00	-2.17%	0.00	0.00%	0.01%	0.01%
Total US Equity				\$6,900.00	\$6,750.00	\$-150.00	-2.17%	\$0.00	0.00%	0.01%	0.01%
Large Cap											
ABBOTT LABS CUSIP: 002824100 Symbol: ABT Initial purchase date: May 11, 2016	12,269.00	33.01	108.83	404,979.90	1,335,235.27	930,255.37	229.70%	17,667.36	1.32%	1.73%	1.18%
ALPHABET INC CL A CUSIP: 02079K305 Symbol: GOOGL Initial purchase date: Nov 12, 2009	832.00	452.75	1,465.60	376,686.20	1,219,379.20	842,693.00	223.71%	0.00	0.00%	1.58%	1.08%
ALPHABET INC CL C CUSIP: 02079K107 Symbol: GOOG Initial purchase date: Nov 12, 2009	904.00	433.82	1,469.60	392,177.01	1,328,518.40	936,341.39	238.75%	0.00	0.00%	1.72%	1.17%
AMAZON.COM INC CUSIP: 023135106 Symbol: AMZN Initial purchase date: Sep 14, 2016	585.00	769.36	3,148.73	450,073.08	1,842,007.05	1,391,933.97	309.27%	0.00	0.00%	2.39%	1.63%
AMERICAN TOWER CORP REIT CUSIP: 03027X100 Symbol: AMT Initial purchase date: Apr 13, 2012	1,000.00	63.62	241.73	63,618.17	241,730.00	178,111.83	279.97%	4,330.00	1.79%	0.31%	0.21%
APPLE INC CUSIP: 037833100 Symbol: AAPL Initial purchase date: Sep 15, 2011	32,300.00	19.73	115.81	637,380.77	3,740,663.00	3,103,282.23	486.88%	26,486.00	0.71%	4.85%	3.30%
AT&T INC CUSIP: 00206R102 Symbol: T Initial purchase date: Jun 09, 2011	5,968.00	31.24	28.51	186,443.46	170,147.68	-16,295.78	-8.74%	12,413.44	7.30%	0.22%	0.15%
AUTOMATIC DATA PROCESSNG INC CUSIP: 053015103 Symbol: ADP Initial purchase date: Aug 01, 2002	2,000.00	29.12	139.49	58,245.59	278,980.00	220,734.41	378.97%	7,280.00	2.61%	0.36%	0.25%



Portfolio holdings - as of September 30, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
BANK OF AMER CORP CUSIP: 060505104 Symbol: BAC Initial purchase date: Jan 13, 2016	33,050.00	15.11	24.09	499,349.09	796,174.50	296,825.41	59.44%	23,796.00	2.99%	1.03%	0.70%
BLACKROCK INC CUSIP: 09247X101 Symbol: BLK Initial purchase date: Aug 10, 2016	1,370.00	387.24	563.55	530,515.29	772,063.50	241,548.21	45.53%	19,892.40	2.58%	1.00%	0.68%
BOOKING HLDGS INC CUSIP: 09857L108 Symbol: BKNK Initial purchase date: Feb 26, 2019	200.00	1,908.50	1,710.68	381,699.89	342,136.00	-39,563.89	-10.37%	0.00	0.00%	0.44%	0.30%
BRISTOL MYERS SQUIBB CO CUSIP: 110122108 Symbol: BMY Initial purchase date: Nov 21, 2019	3,000.00	56.41	60.29	169,230.00	180,870.00	11,640.00	6.88%	5,400.00	2.99%	0.23%	0.16%
CALL ABBOTT LABS DUE 11/20/20 115.000 000132 CUSIP: 99UBB00D9 Symbol: ABT Initial purchase date: Aug 27, 2020	-10.00	47,508.4	264.00	-4,750.84	-2,640.00	2,110.84	44.43%	0.00	0.00%	0.00%	0.00%
CALL CHEVRON CORP DUE 12/18/20 125.000 0926P3 CUSIP: 99UBBC536 Symbol: CVX Initial purchase date: Feb 14, 2020	-17.00	18,235.5	6.00	-3,100.04	-102.00	2,998.04	96.71%	0.00	0.00%	0.00%	0.00%
CALL COMCAST CORP NEW CL DUE 06/18/21 50.000 026263 CUSIP: 99UBB0ID6 Symbol: CMCSA Initial purchase date: Jul 20, 2020	-8.00	13,738.6	275.00	-1,099.09	-2,200.00	-1,100.91	-100.17%	0.00	0.00%	0.00%	0.00%
CALL COSTCO WHOLESALE CO DUE 10/16/20 375.000 0929G5 CUSIP: 99UBB0IW4 Symbol: COST Initial purchase date: Aug 04, 2020	-16.00	22,149.4	91.00	-3,543.91	-1,456.00	2,087.91	58.92%	0.00	0.00%	0.00%	0.00%
CALL DUKE ENERGY CORP NE DUE 01/15/21 105.000 119MG4 CUSIP: 99UBAL1G2 Symbol: DUK Initial purchase date: Feb 14, 2020	-10.00	32,453.5	40.00	-3,245.35	-400.00	2,845.35	87.67%	0.00	0.00%	0.00%	0.00%
CALL FASTENAL CO DUE 11/20/20 45.000 167061 CUSIP: 99UBARSK1 Symbol: FAST Initial purchase date: May 20, 2020	-30.00	12,582.6	232.50	-3,774.78	-6,975.00	-3,200.22	-84.78%	0.00	0.00%	-0.01%	-0.01%
CALL GENL MILLS INC DUE 10/16/20 67.500 177105 CUSIP: 99UBA7N04 Symbol: GIS Initial purchase date: Jul 20, 2020	-10.00	11,617.2	3.00	-1,161.72	-30.00	1,131.72	97.42%	0.00	0.00%	0.00%	0.00%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
CALL GLOBAL PAYMENTS INC DUE 11/20/20 220.000 1848N3 CUSIP: 99UBB0N16 Symbol: GPN Initial purchase date: Jul 21, 2020	-20.00	20,354.6	90.00	-4,070.93	-1,800.00	2,270.93	55.78%	0.00	0.00%	0.00%	0.00%
CALL JPMORGAN CHASE & CO DUE 12/18/20 125.000 241JP2 CUSIP: 99UBA66E5 Symbol: JPM Initial purchase date: Aug 12, 2020	-10.00	14,857.7	46.00	-1,485.77	-460.00	1,025.77	69.04%	0.00	0.00%	0.00%	0.00%
CALL MARSH & MCLENNAN CO DUE 10/16/20 125.000 275603 CUSIP: 99UBBS9Y9 Symbol: MMC Initial purchase date: Aug 12, 2020	-10.00	10,144.2	10.00	-1,014.42	-100.00	914.42	90.14%	0.00	0.00%	0.00%	0.00%
CALL O REILLY AUTOMOTIVE DUE 11/20/20 520.000 350B81 CUSIP: 99UBB0N99 Symbol: ORLY Initial purchase date: Jul 21, 2020	-5.00	70,623.8	240.00	-3,531.19	-1,200.00	2,331.19	66.02%	0.00	0.00%	0.00%	0.00%
CALL ORACLE CORP DUE 12/18/20 62.500 353752 CUSIP: 99UBARTO2 Symbol: ORCL Initial purchase date: May 20, 2020	-10.00	12,206.4	227.50	-1,220.64	-2,275.00	-1,054.36	-86.38%	0.00	0.00%	0.00%	0.00%
CALL PEPSICO INC DUE 12/18/20 155.000 368024 CUSIP: 99UBA7YI3 Symbol: PEP Initial purchase date: Jul 21, 2020	-10.00	9,653.30	97.00	-965.33	-970.00	-4.67	-0.48%	0.00	0.00%	0.00%	0.00%
CALL PFIZER INC DUE 06/18/21 40.000 370011 CUSIP: 99UBAU1X5 Symbol: PFE Initial purchase date: Jul 21, 2020	-30.00	18,886.7	190.00	-5,666.02	-5,700.00	-33.98	-0.60%	0.00	0.00%	-0.01%	-0.01%
CALL PROCTER & GAMBLE CO DUE 01/15/21 145.000 383601 CUSIP: 99UBB1ZM5 Symbol: PG Initial purchase date: Jul 21, 2020	-30.00	12,287.4	420.00	-3,686.22	-12,600.00	-8,913.78	-241.81%	0.00	0.00%	-0.02%	-0.01%
CALL STARBUCKS CORP DUE 06/18/21 105.000 509736 CUSIP: 99UBBHKL8 Symbol: SBUX Initial purchase date: Aug 12, 2020	-12.00	12,297.7	280.00	-1,475.73	-3,360.00	-1,884.27	-127.68%	0.00	0.00%	0.00%	0.00%
CALL VISA INC CL A DUE 12/18/20 225.000 488372 CUSIP: 99UBAQM37 Symbol: V Initial purchase date: Jul 21, 2020	-10.00	41,506.1	285.00	-4,150.61	-2,850.00	1,300.61	31.34%	0.00	0.00%	0.00%	0.00%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
CALL YUM CHINA HLDGS INC DUE 10/16/20 60.000 518NY1 CUSIP: 99UBAQZA7 Symbol: YUMC Initial purchase date: Jul 21, 2020	-30.00	12,156.2	3.00	-3,646.86	-90.00	3,556.86	97.53%	0.00	0.00%	0.00%	0.00%
CALL YUM! BRANDS INC DUE 12/18/20 105.000 5175J8 CUSIP: 99UBB0OP2 Symbol: YUM Initial purchase date: Jul 21, 2020	-20.00	21,240.2	87.50	-4,248.05	-1,750.00	2,498.05	58.80%	0.00	0.00%	0.00%	0.00%
CENTENE CORP CUSIP: 15135B101 Symbol: CNC Initial purchase date: Mar 25, 2019	4,732.00	66.76	58.33	315,908.32	276,017.56	-39,890.76	-12.63%	0.00	0.00%	0.36%	0.24%
CHEVRON CORP CUSIP: 166764100 Symbol: CVX Initial purchase date: Feb 12, 2009	8,710.00	79.26	72.00	690,314.19	627,120.00	-63,194.19	-9.15%	44,943.60	7.17%	0.81%	0.55%
CIGNA CORP CUSIP: 125523100 Symbol: CI Initial purchase date: Jun 07, 2011	394.00	182.19	169.41	71,780.89	66,747.54	-5,033.35	-7.01%	15.76	0.02%	0.09%	0.06%
COMCAST CORP NEW CL A CUSIP: 20030N101 Symbol: CMCSA Initial purchase date: Oct 09, 2019	10,600.00	38.43	46.26	407,316.21	490,356.00	83,039.79	20.39%	9,752.00	1.99%	0.64%	0.43%
COSTCO WHOLESALE CORP CUSIP: 22160K105 Symbol: COST Initial purchase date: May 10, 2012	3,660.00	93.19	355.00	341,089.59	1,299,300.00	958,210.41	280.93%	10,248.00	0.79%	1.68%	1.15%
CROWN CASTLE INTL CORP REIT CUSIP: 22822V101 Symbol: CCI Initial purchase date: Nov 28, 2016	2,700.00	85.14	166.50	229,878.93	449,550.00	219,671.07	95.56%	12,960.00	2.88%	0.58%	0.40%
DANAHER CORP CUSIP: 235851102 Symbol: DHR Initial purchase date: Jun 09, 2005	10,000.00	12.99	215.33	129,862.63	2,153,300.00	2,023,437.37	1,558.14%	7,200.00	0.33%	2.79%	1.90%
DUKE ENERGY CORP NEW CUSIP: 26441C204 Symbol: DUK Initial purchase date: Apr 09, 2009	3,041.00	40.54	88.56	123,267.64	269,310.96	146,043.32	118.48%	11,738.26	4.36%	0.35%	0.24%
ESCROW ALTABA INC CUSIP: 021ESC017 Initial purchase date: Jun 12, 2014	3,000.00	36.85	22.60	110,545.88	67,800.00	-42,745.88	-38.67%	0.00	0.00%	0.09%	0.06%
FACEBOOK INC CL A CUSIP: 30303M102 Symbol: FB Initial purchase date: May 29, 2019	4,000.00	185.11	261.90	740,424.45	1,047,600.00	307,175.55	41.49%	0.00	0.00%	1.36%	0.92%
FASTENAL CO CUSIP: 311900104 Symbol: FAST Initial purchase date: May 21, 2018	32,000.00	15.33	45.09	490,696.60	1,442,880.00	952,183.40	194.05%	32,000.00	2.22%	1.87%	1.27%

Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
GENL DYNAMICS CORP CUSIP: 369550108 Symbol: GD Initial purchase date: Jan 13, 2000	5,200.00	26.43	138.43	137,455.71	719,836.00	582,380.29	423.69%	22,880.00	3.18%	0.93%	0.64%
GENL MILLS INC CUSIP: 370334104 Symbol: GIS Initial purchase date: Jun 10, 2010	4,000.00	38.13	61.68	152,506.12	246,720.00	94,213.88	61.78%	8,160.00	3.31%	0.32%	0.22%
GILEAD SCIENCES INC CUSIP: 375558103 Symbol: GILD Initial purchase date: Dec 16, 2008	14,000.00	22.05	63.19	308,721.43	884,660.00	575,938.57	186.56%	38,080.00	4.30%	1.15%	0.78%
GLOBAL PAYMENTS INC CUSIP: 37940X102 Symbol: GPN Initial purchase date: Dec 10, 2009	5,000.00	25.78	177.58	128,889.82	887,900.00	759,010.18	588.88%	3,900.00	0.44%	1.15%	0.78%
JPMORGAN CHASE & CO CUSIP: 46625H100 Symbol: JPM Initial purchase date: Aug 14, 1997	2,000.00	37.85	96.27	75,704.64	192,540.00	116,835.36	154.33%	7,200.00	3.74%	0.25%	0.17%
LOCKHEED MARTIN CORP CUSIP: 539830109 Symbol: LMT Initial purchase date: Oct 09, 2019	320.00	388.31	383.28	124,260.66	122,649.60	-1,611.06	-1.30%	3,328.00	2.71%	0.16%	0.11%
MARSH & MCLENNAN COS INC CUSIP: 571748102 Symbol: MMC Initial purchase date: Jan 13, 2016	7,030.00	53.01	114.70	372,652.52	806,341.00	433,688.48	116.38%	13,075.80	1.62%	1.05%	0.71%
MCDONALDS CORP CUSIP: 580135101 Symbol: MCD Initial purchase date: Jan 14, 2010	1,050.00	62.64	219.49	65,769.03	230,464.50	164,695.47	250.41%	5,250.00	2.28%	0.30%	0.20%
MERCK & CO INC NEW COM CUSIP: 58933Y105 Symbol: MRK Initial purchase date: Oct 09, 2019	1,470.00	85.01	82.95	124,962.07	121,936.50	-3,025.57	-2.42%	3,586.80	2.94%	0.16%	0.11%
MFS VALUE FUND CLASS A CUSIP: 552983801 Symbol: MEIAX Initial purchase date: Oct 11, 2017 Client investment: \$3,950,015.75 Reinvested dividends: \$387,304.84 Investment return: \$411,749.10 (10.42%)	107,991.21	40.16	40.39	4,337,320.59	4,361,764.85	24,444.26	0.56%	69,573.34	1.60%	5.66%	3.85%
MICROSOFT CORP CUSIP: 594918104 Symbol: MSFT Initial purchase date: Oct 09, 2019	900.00	139.79	210.33	125,813.00	189,297.00	63,484.00	50.46%	2,016.00	1.06%	0.25%	0.17%
O REILLY AUTOMOTIVE INC CUSIP: 67103H107 Symbol: ORLY Initial purchase date: Jul 01, 2003	3,150.00	17.68	461.08	55,702.33	1,452,402.00	1,396,699.67	2,507.43%	0.00	0.00%	1.88%	1.28%
ORACLE CORP CUSIP: 68389X105 Symbol: ORCL Initial purchase date: Feb 10, 2005	5,000.00	13.18	59.70	65,886.08	298,500.00	232,613.92	353.05%	4,800.00	1.61%	0.39%	0.26%

Portfolio holdings - as of September 30, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
OTIS WORLDWIDE CORP CUSIP: 68902V107 Symbol: OTIS Initial purchase date: Oct 09, 2019	465.00	69.81	62.42	32,462.90	29,025.30	-3,437.60	-10.59%	372.00	1.28%	0.04%	0.03%
PEPSICO INC CUSIP: 713448108 Symbol: PEP Initial purchase date: Oct 17, 2011	5,000.00	62.54	138.60	312,687.24	693,000.00	380,312.76	121.63%	20,450.00	2.95%	0.90%	0.61%
PFIZER INC CUSIP: 717081103 Symbol: PFE Initial purchase date: Jun 16, 2008	10,000.00	2.32	36.70	23,242.20	367,000.00	343,757.80	1,479.02%	15,200.00	4.14%	0.48%	0.32%
PROCTER & GAMBLE CO CUSIP: 742718109 Symbol: PG Initial purchase date: Feb 15, 1996	7,000.00	35.00	138.99	245,024.26	972,930.00	727,905.74	297.07%	22,139.60	2.28%	1.26%	0.86%
PUT APPLE INC DUE 12/18/20 62.500 030911 CUSIP: 99UBA9HA5 Symbol: AAPL Initial purchase date: Aug 14, 2020	-40.00	3,763.53	27.00	-1,505.41	-1,080.00	425.41	28.26%	0.00	0.00%	0.00%	0.00%
RAYTHEON TECHNOLOGIES CORP CUSIP: 75513E101 Symbol: RTX Initial purchase date: Oct 09, 2019	930.00	73.66	57.54	68,506.86	53,512.20	-14,994.66	-21.89%	1,767.00	3.30%	0.07%	0.05%
ROPER TECHNOLOGIES INC CUSIP: 776696106 Symbol: ROP Initial purchase date: Aug 01, 2002	4,000.00	15.11	395.11	60,440.25	1,580,440.00	1,519,999.75	2,514.88%	8,200.00	0.52%	2.05%	1.39%
SPDR S&P 500 ETF TR CUSIP: 78462F103 Symbol: SPY Initial purchase date: Feb 08, 2017 Client investment: \$502,534.43 Reinvested dividends: \$38,950.95 Investment return: \$272,066.14 (54.14%)	2,313.00	234.11	334.89	541,485.38	774,600.57	233,115.19	43.05%	13,140.19	1.70%	1.00%	0.68%
STARBUCKS CORP CUSIP: 855244109 Symbol: SBUX Initial purchase date: May 10, 2012	11,280.00	52.24	85.92	589,287.75	969,177.60	379,889.85	64.47%	18,499.20	1.91%	1.26%	0.86%
STRYKER CORP CUSIP: 863667101 Symbol: SYK Initial purchase date: Jul 17, 1997	13,000.00	16.05	208.37	208,628.87	2,708,810.00	2,500,181.13	1,198.39%	29,900.00	1.10%	3.51%	2.39%
THERMO FISHER SCIENTIFIC INC CUSIP: 883556102 Symbol: TMO Initial purchase date: Oct 09, 2019	445.00	280.04	441.52	124,616.33	196,476.40	71,860.07	57.67%	391.60	0.20%	0.25%	0.17%
UNITEDHEALTH GROUP INC CUSIP: 91324P102 Symbol: UNH Initial purchase date: Oct 09, 2019	560.00	224.30	311.77	125,605.88	174,591.20	48,985.32	39.00%	2,800.00	1.60%	0.23%	0.15%
VISA INC CL A CUSIP: 92826C839 Symbol: V Initial purchase date: Oct 17, 2011	12,000.00	20.74	199.97	248,882.28	2,399,640.00	2,150,757.72	864.17%	14,400.00	0.60%	3.11%	2.12%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
WALMART INC CUSIP: 931142103 Symbol: WMT Initial purchase date: Oct 09, 2019	1,050.00	120.26	139.91	126,275.03	146,905.50	20,630.47	16.34%	2,268.00	1.54%	0.19%	0.13%
WALT DISNEY CO (HOLDING CO) DISNEY COM CUSIP: 254687106 Symbol: DIS Initial purchase date: Dec 09, 2015	5,860.00	104.21	124.08	610,699.80	727,108.80	116,409.00	19.06%	0.00	0.00%	0.94%	0.64%
YUM CHINA HLDGS INC CUSIP: 98850P109 Symbol: YUMC Initial purchase date: Sep 09, 2004	17,000.00	6.25	52.95	106,176.78	900,150.00	793,973.22	747.78%	0.00	0.00%	1.17%	0.79%
YUM! BRANDS INC CUSIP: 988498101 Symbol: YUM Initial purchase date: Sep 09, 2004	7,080.00	14.73	91.30	104,276.56	646,404.00	542,127.44	519.89%	13,310.40	2.06%	0.84%	0.57%
Total Large Cap				\$17,348,083.24	\$44,244,631.68	\$26,896,548.44	155.04%	\$590,810.74	1.34%	57.37%	39.04%
Mid Cap											
AECOM CUSIP: 00766T100 Symbol: ACM Initial purchase date: Feb 05, 2010	2,900.00	25.19	41.84	73,045.33	121,336.00	48,290.67	66.11%	0.00	0.00%	0.16%	0.11%
AMETEK INC (NEW) CUSIP: 031100100 Symbol: AME Initial purchase date: Mar 06, 2017	2,500.00	55.08	99.40	137,689.36	248,500.00	110,810.64	80.48%	1,800.00	0.72%	0.32%	0.22%
CALL CONAGRA BRANDS, INC DUE 12/18/20 41.000 101290 CUSIP: 99UBB0HH8 Symbol: CAG Initial purchase date: Jul 21, 2020	-10.00	9,653.30	45.00	-965.33	-450.00	515.33	53.38%	0.00	0.00%	0.00%	0.00%
CALL GENUINE PARTS CO DUE 11/20/20 100.000 181455 CUSIP: 99UBB0MD1 Symbol: GPC Initial purchase date: Jul 20, 2020	-10.00	18,491.1	272.50	-1,849.11	-2,725.00	-875.89	-47.37%	0.00	0.00%	0.00%	0.00%
CALL HARTFORD FINCL SERV DUE 01/15/21 70.000 1988E4 CUSIP: 99UBBAGZ7 Symbol: HIG Initial purchase date: Oct 09, 2019	-10.00	19,473.1	15.00	-1,947.31	-150.00	1,797.31	92.30%	0.00	0.00%	0.00%	0.00%
CALL IDEX CORP DUE 10/16/20 185.000 223085 CUSIP: 99UBBG552 Symbol: IEX Initial purchase date: Aug 12, 2020	-10.00	39,636.6	312.50	-3,963.66	-3,125.00	838.66	21.16%	0.00	0.00%	0.00%	0.00%

Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
CALL ONEOK INC NEW DUE 01/15/21 42.500 3496G4 CUSIP: 99UBB0N65 Symbol: OKE Initial purchase date: Jul 21, 2020	-20.00	8,945.55	25.00	-1,789.11	-500.00	1,289.11	72.05%	0.00	0.00%	0.00%	0.00%
CALL SMUCKER J M CO NEW DUE 01/15/21 130.000 4258Y5 CUSIP: 99UBBC569 Symbol: SJM Initial purchase date: Feb 14, 2020	-10.00	15,643.3	166.00	-1,564.33	-1,660.00	-95.67	-6.12%	0.00	0.00%	0.00%	0.00%
CALL TRACTOR SUPPLY COMP DUE 10/16/20 160.000 4608B6 CUSIP: 99UBB0ON7 Symbol: TSCO Initial purchase date: Jul 21, 2020	-10.00	25,368.9	30.00	-2,536.89	-300.00	2,236.89	88.17%	0.00	0.00%	0.00%	0.00%
CARMAX INC CUSIP: 143130102 Symbol: KMX Initial purchase date: Jun 12, 2014	5,000.00	44.47	91.91	222,371.77	459,550.00	237,178.23	106.66%	0.00	0.00%	0.60%	0.41%
CARRIER GLOBAL CORP CUSIP: 14448C104 Symbol: CARR Initial purchase date: Oct 09, 2019	930.00	24.96	30.54	23,215.22	28,402.20	5,186.98	22.34%	297.60	1.05%	0.04%	0.03%
COGNEX CORP CUSIP: 192422103 Symbol: CGNX Initial purchase date: Jun 07, 2011	8,000.00	8.42	65.10	67,345.65	520,800.00	453,454.35	673.32%	1,760.00	0.34%	0.68%	0.46%
CONAGRA BRANDS, INC. CUSIP: 205887102 Symbol: CAG Initial purchase date: Oct 09, 2019	3,000.00	28.43	35.71	85,290.85	107,130.00	21,839.15	25.61%	2,550.00	2.38%	0.14%	0.09%
D R HORTON INC CUSIP: 23331A109 Symbol: DHI Initial purchase date: Jan 09, 2019	7,000.00	40.09	75.63	280,621.20	529,410.00	248,788.80	88.66%	4,900.00	0.93%	0.69%	0.47%
EAST WEST BANCORP INC CUSIP: 27579R104 Symbol: EWBC Initial purchase date: Jan 09, 2019	5,500.00	47.90	32.74	263,460.51	180,070.00	-83,390.51	-31.65%	6,050.00	3.36%	0.23%	0.16%
F5 NETWORKS INC CUSIP: 315616102 Symbol: FFIV Initial purchase date: Mar 02, 2015	5,800.00	118.85	122.77	689,354.72	712,066.00	22,711.28	3.29%	0.00	0.00%	0.92%	0.63%
GENTEX CORP CUSIP: 371901109 Symbol: GNTX Initial purchase date: Mar 02, 2015	5,000.00	17.82	25.75	89,080.35	128,750.00	39,669.65	44.53%	2,400.00	1.86%	0.17%	0.11%
GENUINE PARTS CO CUSIP: 372460105 Symbol: GPC Initial purchase date: Apr 13, 2012	3,000.00	63.29	95.17	189,860.40	285,510.00	95,649.60	50.38%	9,480.00	3.32%	0.37%	0.25%



Portfolio holdings - as of September 30, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
HARTFORD FINCL SERVICES GROUP INC CUSIP: 416515104 Symbol: HIG Initial purchase date: Jan 13, 2005	4,000.00	67.53	36.86	270,129.76	147,440.00	-122,689.76	-45.42%	5,200.00	3.53%	0.19%	0.13%
IDEX CORP CUSIP: 45167R104 Symbol: IEX Initial purchase date: Aug 11, 2004	3,000.00	20.50	182.41	61,501.50	547,230.00	485,728.50	789.78%	6,000.00	1.10%	0.71%	0.48%
LKQ CORP NEW CUSIP: 501889208 Symbol: LKQ Initial purchase date: Dec 10, 2009	4,000.00	9.25	27.73	36,990.75	110,920.00	73,929.25	199.86%	0.00	0.00%	0.14%	0.10%
OLD DOMINION FREIGHT LINES INC CUSIP: 679580100 Symbol: ODFL Initial purchase date: Jan 09, 2019	3,150.00	86.10	180.92	271,215.60	569,898.00	298,682.40	110.13%	1,890.00	0.33%	0.74%	0.50%
ONEOK INC NEW CUSIP: 682680103 Symbol: OKE Initial purchase date: May 14, 2009	14,000.00	14.25	25.98	199,490.58	363,720.00	164,229.42	82.32%	52,360.00	14.40%	0.47%	0.32%
PALO ALTO NETWORKS INC CUSIP: 697435105 Symbol: PANW Initial purchase date: Feb 12, 2015	1,250.00	134.89	244.75	168,607.43	305,937.50	137,330.07	81.45%	0.00	0.00%	0.40%	0.27%
PUT TRACTOR SUPPLY COMP DUE 01/15/21 95.000 4608B6 CUSIP: 99UBBHQU2 Symbol: TSCO Initial purchase date: Aug 12, 2020	-10.00	10,635.2	132.50	-1,063.52	-1,325.00	-261.48	-24.59%	0.00	0.00%	0.00%	0.00%
REALTY INCOME CORP MD SBI CUSIP: 756109104 Symbol: O Initial purchase date: May 26, 2015	5,000.00	47.19	60.75	235,951.92	303,750.00	67,798.08	28.73%	14,040.00	4.62%	0.39%	0.27%
SIGNATURE BANK NEW YORK N Y CUSIP: 82669G104 Symbol: SBNY Initial purchase date: Jan 09, 2019	2,500.00	111.91	82.99	279,777.82	207,475.00	-72,302.82	-25.84%	5,600.00	2.70%	0.27%	0.18%
SKYWORKS SOLUTIONS INC CUSIP: 83088M102 Symbol: SWKS Initial purchase date: Feb 26, 2019	4,000.00	83.16	145.50	332,628.80	582,000.00	249,371.20	74.97%	8,000.00	1.37%	0.75%	0.51%
SMUCKER J M CO NEW CUSIP: 832696405 Symbol: SJM Initial purchase date: Jan 14, 2010	3,000.00	62.32	115.52	186,962.73	346,560.00	159,597.27	85.36%	10,800.00	3.12%	0.45%	0.31%
TRACTOR SUPPLY COMPANY CUSIP: 892356106 Symbol: TSCO Initial purchase date: Dec 10, 2008	12,000.00	9.47	143.34	113,653.50	1,720,080.00	1,606,426.50	1,413.44%	19,200.00	1.12%	2.23%	1.49%
ULTA BEAUTY, INC CUSIP: 90384S303 Symbol: ULTA Initial purchase date: Jan 09, 2019	1,000.00	283.02	223.98	283,023.95	223,980.00	-59,043.95	-20.86%	0.00	0.00%	0.29%	0.20%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
VANGUARD MID-CAP VALUE ETF CUSIP: 922908512 Symbol: VOE Initial purchase date: Dec 12, 2019	7,580.00	118.87	101.37	901,026.53	768,384.60	-132,641.93	-14.72%	22,032.03	2.87%	1.00%	0.68%
VF CORP CUSIP: 918204108 Symbol: VFC Initial purchase date: Oct 09, 2019	1,400.00	89.32	70.25	125,044.79	98,350.00	-26,694.79	-21.35%	2,688.00	2.73%	0.13%	0.09%
WATSCO INC CUSIP: 942622200 Symbol: WSO Initial purchase date: Apr 15, 2010	1,000.00	61.20	232.89	61,202.82	232,890.00	171,687.18	280.52%	7,100.00	3.05%	0.30%	0.21%
Total Mid Cap				\$5,632,864.58	\$9,839,904.30	\$4,207,039.72	74.69%	\$184,147.63	1.87%	12.76%	8.68%
Small Cap											
AIR LEASE CORP CL A CUSIP: 00912X302 Symbol: AL Initial purchase date: Aug 29, 2016	4,000.00	28.94	29.42	115,761.25	117,680.00	1,918.75	1.66%	2,400.00	2.04%	0.15%	0.10%
DAVE & BUSTERS ENTMT INC CUSIP: 238337109 Symbol: PLAY Initial purchase date: Feb 26, 2019	5,000.00	51.13	15.16	255,673.62	75,800.00	-179,873.62	-70.35%	0.00	0.00%	0.10%	0.07%
ISHARES RUSSELL 2000 ETF CUSIP: 464287655 Symbol: IWM Initial purchase date: Jun 13, 2014 Client investment: \$999,013.13 Reinvested dividends: \$62,057.32 Investment return: \$321,984.88 (32.23%)	8,819.00	120.32	149.79	1,061,070.45	1,320,998.01	259,927.56	24.50%	18,074.04	1.37%	1.71%	1.17%
KAR AUCTION SVCS INC CUSIP: 48238T109 Symbol: KAR Initial purchase date: Nov 30, 2015	5,000.00	14.97	14.40	74,834.68	72,000.00	-2,834.68	-3.79%	0.00	0.00%	0.09%	0.06%
META FINANCIAL GROUP INC CUSIP: 59100U108 Symbol: CASH Initial purchase date: Feb 19, 2019	5,000.00	25.65	19.22	128,234.81	96,100.00	-32,134.81	-25.06%	1,000.00	1.04%	0.12%	0.08%
MFS NEW DISCOVERY VALUE FUND CLASS A CUSIP: 55278M100 Symbol: NDVAX Initial purchase date: Oct 11, 2017 Client investment: \$1,264,187.35 Reinvested dividends: \$224,095.64 Investment return: \$-32,644.87 (-2.58%)	96,515.87	15.42	12.76	1,488,282.99	1,231,542.48	-256,740.51	-17.25%	8,910.34	0.72%	1.60%	1.09%
PATRICK INDUST INC CUSIP: 703343103 Symbol: PATK Initial purchase date: Jan 09, 2019	8,000.00	35.72	57.52	285,733.51	460,160.00	174,426.49	61.05%	8,000.00	1.74%	0.60%	0.41%
SUPERNU PHARMACEUTICALS INC CUSIP: 868459108 Symbol: SUPN Initial purchase date: Jan 09, 2019	7,500.00	36.70	20.84	275,240.06	156,300.00	-118,940.06	-43.21%	0.00	0.00%	0.20%	0.14%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
TCF FINL CORP NEW CUSIP: 872307103 Symbol: TCF Initial purchase date: Feb 26, 2019	5,000.00	46.90	23.36	234,491.90	116,800.00	-117,691.90	-50.19%	7,000.00	5.99%	0.15%	0.10%
VIRTUS KAR SMALL-CAP GROWTH FUND CLASS A CUSIP: 92828N627 Symbol: PSGAX Initial purchase date: Feb 08, 2017 Client investment: \$1,260,010.50 Reinvested dividends: \$79,929.95 Investment return: \$1,819,327.37 (144.39%)	62,843.63	21.32	49.00	1,339,940.45	3,079,337.87	1,739,397.42	129.81%	0.00	0.00%	3.99%	2.72%
Total Small Cap				\$5,259,263.72	\$6,726,718.36	\$1,467,454.64	27.90%	\$45,384.38	0.67%	8.72%	5.94%
Convertibles											
ESCROW GENERAL MTRS CORP 6.250% SER C DUE 07/15/33 CALLBL CONV CUSIP: 370ESC717 Initial purchase date: Jul 10, 2003	20,000.00	24.84	0.00	496,763.00	0.00	-496,763.00	-100.00%	0.00	0.00%	0.00%	0.00%
Total Convertibles				\$496,763.00	\$0.00	\$-496,763.00	-100.00%	\$0.00	0.00%	0.00%	0.00%
Total US				\$28,743,874.54	\$60,818,004.34	\$32,074,129.80	111.59%	\$820,342.75	1.35%	78.86%	53.67%
Global											
Global											
AMER FUNDS CAPITAL WORLD GROWTH & INCOME FUND CL A CUSIP: 140543109 Symbol: CWGIX Initial purchase date: Nov 12, 2010 Client investment: \$670,980.25 Reinvested dividends: \$384,354.01 Investment return: \$765,224.11 (114.05%)	27,635.26	38.19	51.97	1,055,334.26	1,436,204.36	380,870.10	36.09%	20,173.74	1.40%	1.86%	1.27%
COLUMBIA SELIGMAN COMMUNICATION AND INFORMATION FUND A CUSIP: 19766H429 Symbol: SLMCX Initial purchase date: Oct 19, 2001 Client investment: \$165,000.00 Reinvested dividends: \$2,912,438.45 Investment return: \$4,885,433.81 (2960.87%)	56,228.39	54.73	89.82	3,077,438.45	5,050,433.81	1,972,995.36	64.11%	0.00	0.00%	6.55%	4.45%
Total Global				\$4,132,772.71	\$6,486,638.17	\$2,353,865.46	56.96%	\$20,173.74	0.31%	8.41%	5.72%
Total Global				\$4,132,772.71	\$6,486,638.17	\$2,353,865.46	56.96%	\$20,173.74	0.31%	8.41%	5.72%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
International											
International											
FABRINET CUSIP: G3323L100 Symbol: FN Initial purchase date: Mar 30, 2011	4,000.00	21.23	63.03	84,933.90	252,120.00	167,186.10	196.84%	0.00	0.00%	0.33%	0.23%
Total International				\$84,933.90	\$252,120.00	\$167,186.10	196.84%	\$0.00	0.00%	0.33%	0.23%
Developed Markets											
CALL LINDE PLC EUR DUE 10/16/20 270.000 2621Y8 CUSIP: 99UBBWVL3 Symbol: LIN Initial purchase date: Aug 12, 2020	-10.00	33,240.7	20.00	-3,324.07	-200.00	3,124.07	93.98%	0.00	0.00%	0.00%	0.00%
CALL RIO TINTO PLC SPON DUE 10/16/20 55.000 4005C0 CUSIP: 99UBAXI60 Symbol: RIO Initial purchase date: May 20, 2020	-1.00	30,572.0	575.00	-305.72	-575.00	-269.28	-88.08%	0.00	0.00%	0.00%	0.00%
CHUBB LTD CHF CUSIP: H1467J104 Symbol: CB Initial purchase date: Apr 13, 2016	1,000.00	121.66	116.12	121,658.43	116,120.00	-5,538.43	-4.55%	3,120.00	2.69%	0.15%	0.10%
CLEARBRIDGE INTERNATIONAL GROWTH FUND CLASS I CUSIP: 524686524 Symbol: LMGX Initial purchase date: Aug 12, 2020	61,736.91	58.59	59.01	3,616,886.15	3,643,094.94	26,208.79	0.72%	10,597.88	0.29%	4.72%	3.21%
DIAGEO PLC NEW GB SPON ADR CUSIP: 25243Q205 Symbol: DEO Initial purchase date: Feb 11, 2010	1,000.00	64.02	137.66	64,017.37	137,660.00	73,642.63	115.04%	3,550.38	2.58%	0.18%	0.12%
ESSENT GROUP LTD CUSIP: G3198U102 Symbol: ESNT Initial purchase date: Feb 19, 2019	10,000.00	44.52	37.01	445,167.08	370,100.00	-75,067.08	-16.86%	6,400.00	1.73%	0.48%	0.33%
LINDE PLC EUR CUSIP: G5494J103 Symbol: LIN Initial purchase date: Sep 09, 2004	4,000.00	163.46	238.13	653,820.00	952,520.00	298,700.00	45.69%	15,408.00	1.62%	1.24%	0.84%
MEDTRONIC PLC CUSIP: G5960L103 Symbol: MDT Initial purchase date: Oct 09, 2019	1,165.00	107.77	103.92	125,550.50	121,066.80	-4,483.70	-3.57%	2,702.80	2.23%	0.16%	0.11%
PUT LINDE PLC EUR DUE 10/16/20 185.000 2621Y8 CUSIP: 99UBBHP41 Symbol: LIN Initial purchase date: Sep 08, 2020	-10.00	9,653.30	20.00	-965.33	-200.00	765.33	79.28%	0.00	0.00%	0.00%	0.00%
RIO TINTO PLC SPON ADR CUSIP: 767204100 Symbol: RIO Initial purchase date: Sep 10, 2009	5,100.00	42.96	60.39	219,095.20	307,989.00	88,893.80	40.57%	19,686.00	6.39%	0.40%	0.27%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
International											
SENSATA TECHNOLOGIES HLDG PLC EUR CUSIP: G8060N102 Symbol: ST Initial purchase date: May 29, 2019	5,000.00	43.80	43.14	219,001.25	215,700.00	-3,301.25	-1.51%	0.00	0.00%	0.28%	0.19%
Total Developed Markets				\$5,460,600.86	\$5,863,275.74	\$402,674.88	7.37%	\$61,465.06	1.05%	7.60%	5.17%
Emerging Markets											
AMER FUNDS NEW WORLD FUND CLASS F2 CUSIP: 649280823 Symbol: NFFFX Initial purchase date: Feb 13, 2020	11,692.50	71.92	73.73	840,875.15	862,087.66	21,212.51	2.52%	11,014.33	1.28%	1.12%	0.76%
AMERICAN FUNDS NEW WORLD FUND CL A CUSIP: 649280104 Symbol: NEWFX Initial purchase date: Nov 12, 2015 Client investment: \$1,750,021.00 Reinvested dividends: \$188,857.74 Investment return: \$874,294.76 (49.96%)	35,550.20	54.54	73.82	1,938,878.74	2,624,315.76	685,437.02	35.35%	26,214.72	1.00%	3.40%	2.31%
SAMSUNG ELECTRS LTD GDR (EACH REP 25 COM STK KRW100) REG.S *GB LINE* CUSIP: 7960509A2 Initial purchase date: Jun 13, 2014	170.00	659.22	1,244.12	112,067.61	211,500.57	99,432.96	88.73%	0.00	0.00%	0.27%	0.19%
Total Emerging Markets				\$2,891,821.50	\$3,697,903.99	\$806,082.49	27.87%	\$37,229.05	1.01%	4.80%	3.26%
Total International				\$8,437,356.26	\$9,813,299.73	\$1,375,943.47	16.31%	\$98,694.11	1.01%	12.73%	8.66%
Total Equity				\$41,314,003.51	\$77,117,942.24	\$35,803,938.73	86.66%	\$939,210.60	1.22%	100.00%	68.05%
Total Portfolio				\$76,881,112.64	\$113,327,512.25	\$36,446,399.61	47.41%	\$1,831,892.07	1.62%	100%	100%
Total accrued interest (included in market values): \$10,574.90											
* Balanced mutual funds are displayed in unbundled view											



Additional information about your portfolio

as of September 30, 2020

Benchmark composition

Consolidated

Blended Index

Start - Current: 70% MSCI World; 30% Barclays Agg Bond



Disclosures applicable to accounts at UBS Financial Services Inc.

This section contains important disclosures regarding the information and valuations presented here. All information presented is subject to change at any time and is provided only as of the date indicated. The information in this report is for informational purposes only and should not be relied upon as the basis of an investment or liquidation decision. UBS FS account statements and official tax documents are the only official record of your accounts and are not replaced, amended or superseded by any of the information presented in these reports. You should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise.

UBS FS offers a number of investment advisory programs to clients, acting in our capacity as an investment adviser, including fee-based financial planning, discretionary account management, non-discretionary investment advisory programs, and advice on the selection of investment managers and mutual funds offered through our investment advisory programs. When we act as your investment adviser, we will have a written agreement with you expressly acknowledging our investment advisory relationship with you and describing our obligations to you. At the beginning of our advisory relationship, we will give you our Form ADV brochure(s) for the program(s) you selected that provides detailed information about, among other things, the advisory services we provide, our fees, our personnel, our other business activities and financial industry affiliations and conflicts between our interests and your interests.

In our attempt to provide you with the highest quality information available, we have compiled this report using data obtained from recognized statistical sources and authorities in the financial industry. While we believe this information to be reliable, we cannot make any representations regarding its accuracy or completeness. Please keep this guide as your Advisory Review.

Please keep in mind that most investment objectives are long term. Although it is important to evaluate your portfolio's performance over multiple time periods, we believe the greatest emphasis should be placed on the longer period returns.

Please review the report content carefully and contact your Financial Advisor with any questions.

Client Accounts: This report may include all assets in the accounts listed and may include eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your accounts and does not reflect the performance of your accounts in the fee-based program. As a result, the performance reflected in this report can

vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. When shown on a report, the risk profile and return objectives describe your overall goals for these accounts. For each account you maintain, you choose one return objective and a primary risk profile. If you have questions regarding these objectives or wish to change them, please contact your Financial Advisor to update your account records.

Performance: This report presents account activity and performance depending on which inception type you've chosen. The two options are: (1) All Assets (Since Performance Start): This presents performance for all assets since the earliest possible date; (2) Advisory Assets (Advisory Strategy Start) for individual advisory accounts: This presents Advisory level performance since the Latest Strategy Start date; If an account that has never been managed is included in the consolidated report, the total performance of that unmanaged account will be included since inception.

Time-weighted Returns for accounts / SWP/AAP sleeves (Monthly periods): The report displays a time weighted rate of return (TWR) that is calculated using the Modified Dietz Method. This calculation uses the beginning and ending portfolio values for the month and weights each contribution/withdrawal based upon the day the cash flow occurred. Periods greater than one month are calculated by linking the monthly returns. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. All periods shown which are greater than 12 months are annualized. This applies to all performance for all assets before 09/30/2010, Advisory assets before 12/31/2010 and SWP sleeves before 04/30/2018.

Time-weighted Returns for accounts / SWP/AAP sleeves (Daily periods): The report displays a time weighted rate of return (TWR) that is calculated by dividing the portfolio's daily gain/loss by the previous day's closing market value plus the net value of cash flows that occurred during the day, if it was positive. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. Periods greater than one day are calculated by linking the daily returns. All periods shown which are greater than 12 months are annualized. For reports generated prior to 01/26/2018, the performance calculations used the account's end of day value on the performance inception (listed in the report under the column "ITD") and all cash flows were posted at end of day. As a result of the change, the overall rate of return (TWR) and beginning market value displayed can vary from prior generated reports. This

applies to all performance for all assets on or after 09/30/2010, Advisory assets on or after 12/31/2010, SWP/AAP sleeves on or after 04/30/2018 as well as all Asset Class and Security level returns.

Money-weighted returns: Money-weighted return (MWR) is a measure of the rate of return for an asset or portfolio of assets. It is calculated by finding the daily Internal Rate of Return (IRR) for the period and then compounding this return by the number of days in the period being measured. The MWR incorporates the size and timing of cash flows, so it is an effective measure of returns on a portfolio.

Annualized Performance: All performance periods greater than one year are calculated (unless otherwise stated) on an annualized basis, which represents the return on an investment multiplied or divided to give a comparable one year return.

Cumulative Performance: A cumulative return is the aggregate amount that an investment has gained or lost over time, independent of the period of time involved.

Net of Fees and Gross of Fees Performance: Performance is presented on a "net of fees" and "gross of fees" basis, where indicated. Net returns do not reflect Program and wrap fees prior to 10/31/10 for accounts that are billed separately via invoice through a separate account billing arrangement. Gross returns do not reflect the deduction of fees, commissions or other charges. The payment of actual fees and expenses will reduce a client's return. The compound effect of such fees and expenses should be considered when reviewing returns. For example, the net effect of the deduction of fees on annualized performance, including the compounded effect over time, is determined by the relative size of the fee and the account's investment performance. It should also be noted that where gross returns are compared to an index, the index performance also does not reflect any transaction costs, which would lower the performance results. Market index data maybe subject to review and revision.

Benchmark/Major Indices: The past performance of an index is not a guarantee of future results. Any benchmark is shown for informational purposes only and relates to historical performance of market indices and not the performance of actual investments. Although most portfolios use indices as benchmarks, portfolios are actively managed and generally are not restricted to investing only in securities in the index. As a result, your portfolio holdings and performance may vary substantially from the index. Each index reflects an unmanaged universe of securities without any deduction for advisory fees or other expenses that would reduce actual returns, as well as the reinvestment of all income and dividends. An actual investment in the securities included in the index would require an investor to incur transaction costs, which would lower the performance

results. Indices are not actively managed and investors cannot invest directly in the indices. Market index data maybe subject to review and revision. Further, there is no guarantee that an investor's account will meet or exceed the stated benchmark. Index performance information has been obtained from third parties deemed to be reliable. We have not independently verified this information, nor do we make any representations or warranties to the accuracy or completeness of this information.

Blended Index - For Advisory accounts, Blended Index is designed to reflect the asset categories in which your account is invested. For Brokerage accounts, you have the option to select any benchmark from the list.

For certain products, the blended index represents the investment style corresponding to your client target allocation. If you change your client target allocation, your blended index will change in step with your change to your client target allocation.

Blended Index 2 - 8 - are optional indices selected by you which may consist of a blend of indexes. For advisory accounts, these indices are for informational purposes only. Depending on the selection, the benchmark selected may not be an appropriate basis for comparison of your portfolio based on it's holdings.

Custom Time Periods: If represented on this report, the performance start date and the performance end date have been selected by your Financial Advisor in order to provide performance and account activity information for your account for the specified period of time only. As a result, only a portion of your account's activity and performance information is presented in the performance report, and, therefore, presents a distorted representation of your account's activity and performance.

Net Deposits/Withdrawals: When shown on a report, this information represents the net value of all cash and securities contributions and withdrawals, program fees (including wrap fees) and other fees added to or subtracted from your accounts from the first day to the last day of the period. When fees are shown separately, net deposits / withdrawals does not include program fees (including wrap fees). When investment return is displayed net deposits / withdrawals does not include program fees (including wrap fees). For security contributions and withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts. Wrap fees will be included in this calculation except when paid via an invoice or through a separate accounts billing arrangement. When shown on Client summary and/or Portfolio review report, program fees (including wrap fees) may not be included in net deposits/withdrawals. PACE Program fees paid from sources other than your PACE account are treated as a contribution. A PACE



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

Program Fee rebate that is not reinvested is treated as a withdrawal.

Deposits: When shown on a report, this information represents the net value of all cash and securities contributions added to your accounts from the first day to the last day of the period. On Client Summary Report and/or Portfolio Review Report, this may exclude the Opening balance. For security contributions, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Withdrawals: When shown on a report, this information represents the net value of all cash and securities withdrawals subtracted from your accounts from the first day to the last day of the period. On Client summary and/or portfolio review report Withdrawals may not include program fees (including wrap fees). For security withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Dividends/Interest: Dividend and interest earned, when shown on a report, does not reflect your account's tax status or reporting requirements. Use only official tax reporting documents (i.e. 1099) for tax reporting purposes. The classification of private investment distributions can only be determined by referring to the official year-end tax-reporting document provided by the issuer.

Change in Accrued Interest: When shown on a report, this information represents the difference between the accrued interest at the beginning of the period from the accrued interest at the end of the period.

Change in Value: Represents the change in value of the portfolio during the reporting period, excluding additions/withdrawals, dividend and interest income earned and accrued interest. Change in Value may include programs fees (including wrap fees) and other fees.

Fees: Fees represented in this report include program and wrap fees. Program and wrap fees prior to October 1, 2010 for accounts that are billed separately via invoice through a separate account billing arrangement are not included in this report.

Beta: A measure of sensitivity of a portfolio of equities in relation to market movements. Beta measures the covariance of a portfolio in relation to the rest of the stock market as measured by a benchmark index. A portfolio with a higher beta would be expected to rise and fall further than the market. A portfolio with a low beta (less than 1) indicates that it would be expected to rise and fall less than the market.

Performance Start Date Changes: The Performance Start Date for accounts marked with a 'A' have changed.

Performance figures of an account with a changed Performance Start Date may not include the entire history of the account. The new Performance Start Date will generate performance returns and activity information for a shorter period than is available at UBS FS. As a result, the overall performance of these accounts may generate better performance than the period of time that would be included if the report used the inception date of the account. UBS FS recommends reviewing performance reports that use the inception date of the account because reports with longer time frames are usually more helpful when evaluating investment programs and strategies. Performance reports may include accounts with inception dates that precede the new Performance Start Date and will show performance and activity information from the earliest available inception date.

The change in Performance Start Date may be the result of a performance gap due to a zero-balance that prevents the calculation of continuous returns from the inception of the account. The Performance Start Date may also change if an account has failed one of our performance data integrity tests. In such instances, the account will be labeled as 'Review Required' and performance prior to that failure will be restricted. Finally, the Performance Start Date will change if you have explicitly requested a performance restart. Please contact your Financial Advisor for additional details regarding your new Performance Start Date.

Closed Account Performance: Accounts that have been closed may be included in the consolidated performance report. When closed accounts are included in the consolidated report, the performance report will only include information for the time period the account was active during the consolidated performance reporting time period.

Portfolio: For purposes of this report "portfolio" is defined as all of the accounts presented on the cover page or the header of this report and does not necessarily include all of the client's accounts held at UBS FS or elsewhere.

Percentage: Portfolio (in the "% Portfolio / Total" column) includes all holdings held in the account(s) selected when this report was generated. Broad asset class (in the "% broad asset class" column) includes all holdings held in that broad asset class in the account(s) selected when this report was generated.

Tax lots: This report displays security tax lots as either one line item (i.e., lumped tax lots) or as separate tax lot level information. If you choose to display security tax lots as one line item, the total cost equals the total value of all tax lots. The unit cost is an average of the total cost divided by the total number of shares. If the shares were purchased in different lots, the unit price listed does not represent the actual cost paid for each lot. The unrealized gain/loss value is calculated by combining the

total value of all tax lots plus or minus the total market value of the security.

If you choose to display tax lot level information as separate line items on the Portfolio Holdings report, the tax lot information may include information from sources other than UBS FS. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS FS. As a result this information may not be accurate and is provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. See your monthly statement for additional information.

Pricing: All securities are priced using the closing price reported on the last business day preceding the date of this report. Every reasonable attempt has been made to accurately price securities; however, we make no warranty with respect to any security's price. Please refer to the back of the first page of your UBS FS account statement for important information regarding the pricing used for certain types of securities, the sources of pricing data and other qualifications concerning the pricing of securities. To determine the value of securities in your account, we generally rely on third party quotation services. If a price is unavailable or believed to be unreliable, we may determine the price in good faith and may use other sources such as the last recorded transaction. When securities are held at another custodian or if you hold illiquid or restricted securities for which there is no published price, we will generally rely on the value provided by the custodian or issuer of that security.

Cash: Cash on deposit at UBS Bank USA is protected by the Federal Deposit Insurance Corporation (FDIC) up to \$250,000 in principal and accrued interest per depositor for each ownership type. Deposits made in an individual's own name, joint name, or individual retirement account are each held in a separate type of ownership. Such deposits are not guaranteed by UBS FS. More information is available upon request.

Margin: The quantity value may indicate that all or part of this position is held on margin or held in the short account. When an account holds a debit balance, this debit balance is incorporated into the account's total market value and deducted from the total value. When calculating the percent of portfolio on each security, the percentage will be impacted by the total market value of the account. Therefore, if the account's market value is reduced by a debit value of a holding the percent of portfolio will be greater and if the account's market value is increased by a holding then the percent of portfolio will be less.

Asset Allocation: Your allocation analysis is based on your current portfolio. The Asset Allocation portion of

this report shows the mix of various investment classes in your account. An asset allocation that shows a significantly higher percentage of equity investments may be more appropriate for an investor with a more aggressive investment strategy and higher tolerance for risk. Similarly, the asset allocation of a more conservative investor may show a higher percentage of fixed income investments.

Separately Managed Accounts and Pooled Investment Vehicles (such as mutual funds, closed end funds and exchanged traded funds): The asset classification displayed is based on firm's proprietary methodology for classifying assets. Please note that the asset classification assigned to rolled up strategies may include individual investments that provide exposure to other asset classes. For example, an International Developed Markets strategy may include exposure to Emerging Markets, and a US Large Cap strategy may include exposure to Mid Cap and Small Cap, etc.

Mutual Fund Asset Allocation: If the option to unbundle balanced mutual funds is selected and if a fund's holdings data is available, mutual funds will be classified by the asset class, subclass, and style breakdown of their underlying holdings. Where a mutual fund or ETF contains equity holdings from multiple equity sectors, this report will proportionately allocate the underlying holdings of the fund to those sectors measured as a percentage of the total fund's asset value as of the date shown.

This information is supplied by Morningstar, Inc. on a daily basis to UBS FS based on data supplied by the fund which may not be current. Mutual funds change their portfolio holdings on a regular (often daily) basis. Accordingly, any analysis that includes mutual funds may not accurately reflect the current composition of these funds. If a fund's underlying holding data is not available, it will be classified based on its corresponding overall Morningstar classification. All data is as of the date indicated in the report.

All pooled investment vehicles (such as mutual funds, closed end mutual funds, and exchange traded funds) incorporate internal management and operation expenses, which are reflected in the performance returns. Please see relevant fund prospectus for more information. Please note, performance for mutual funds is inclusive of multiple share classes.

Ineligible Assets: We require that you hold and purchase only eligible managed assets in your advisory accounts. Please contact your Financial Advisor for a list of the eligible assets in your program. These reports may provide performance information for eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your advisory assets. As a result, the



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

performance reflected in this report can vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. Neither UBS nor your Financial Advisor will act as your investment adviser with respect to Ineligible Assets.

Variable Annuity Asset Allocation: If the option to unbundle a variable annuity is selected and if a variable annuity's holdings data is available, variable annuities will be classified by the asset class, subclass, and style breakdown for their underlying holdings. Where a variable annuity contains equity holdings from multiple equity sectors, this report will proportionately allocate the underlying holdings of the variable annuity to those sectors measured as a percentage of the total variable annuity's asset value as of the date shown.

This information is supplied by Morningstar, Inc. on a weekly basis to UBS FS based on data supplied by the variable annuity which may not be current. Portfolio holdings of variable annuities change on a regular (often daily) basis. Accordingly, any analysis that includes variable annuities may not accurately reflect the current composition of these variable annuities. If a variable annuity's underlying holding data is not available, it will remain classified as an annuity. All data is as of the date indicated in the report.

Equity Style: The Growth, Value and Core labels are determined by Morningstar. If an Equity Style is unclassified, it is due to non-availability of data required by Morningstar to assign it a particular style.

Equity Capitalization: Market Capitalization is determined by Morningstar. Equity securities are classified as Large Cap, Mid Cap or Small Cap by Morningstar. Unclassified securities are those for which no capitalization is available on Morningstar.

Equity Sectors: The Equity sector analysis may include a variety of accounts, each with different investment and risk parameters. As a result, the overweighting or underweighting in a particular sector or asset class should not be viewed as an isolated factor in making investment/liquidation decisions; but should be assessed on an account by account basis to determine the overall impact on the account's portfolio.

Classified Equity: Classified equities are defined as those equities for which the firm can confirm the specific industry and sector of the underlying equity instrument.

Estimated Annual Income: The Estimated Annual Income is calculated by summing the previous four dividend/interest rates per share and multiplying by the quantity of shares held in the selected account(s) as of

the End Date of Report. For savings product & sweep funds this value is not calculated and is displayed as 0.

Current Yield: Current yield is defined as the estimated annual income divided by the total market value.

Research Rating: UBS CIO GWM Research is produced by UBS Global Wealth Management (a UBS business group that includes, among others, UBS Financial Services Inc. and UBS International, Inc.) and UBS Investment Research is produced by UBS Investment Bank. Both sources of information are independent of one another and reflect the different assumptions, views and analytical methods of the analysts who prepared them, there may exist a difference of opinions between the two sources. For more information about each research source, please go to UBS Online Services or ask your Financial Advisor.

UBS CIO Global Wealth Management Rating Under Review The CIO GWM Relative Sector Rating for this stock has been placed Under Review by the analyst.

UBS Investment Research Rating: Rating Exception Recommendation and price target information temporarily suspended due to restriction or pending review. **Rating Exception** The rating for this stock may have been placed Under Review by the analyst, or may have an exception to the core rating bands. For further information, please refer to the "Research Rating Exceptions" daily report or contact your financial advisor or representative.

Your Portfolio Manager uses a variety of research sources in making its investment decisions for your account, including research issued by the Firm, UBS affiliates and independent sources. Your Portfolio Manager is not required to follow the Firm or UBS issued research and may, in its discretion, take positions for your account that contradict the research issued by UBS and its affiliates.

UBS CIO Global Wealth Management: Opinions may differ or be contrary to those expressed by other business areas or groups of UBS AG, its subsidiaries and affiliates. UBS Chief Investment Office Wealth Management (UBS CIO GWM) is written by UBS Global Wealth Management (a UBS business group that includes, among others, UBS Financial Services Inc. and UBS International, Inc.). UBS Investment Research is written by UBS Investment Bank. The research process of UBS CIO GWM is independent of UBS Investment Research. As a consequence research methodologies applied and assumptions made by UBS CIO GWM and UBS Investment Research may differ, for example, in terms of investment horizon, model assumptions, and valuation methods. Therefore investment recommendations independently provided by the two UBS research organizations can be different.

Your Portfolio Manager uses a variety of research sources in making its investment decisions for your account, including research issued by the Firm, UBS affiliates and independent sources. Your Portfolio Manager is not required to follow the Firm or UBS issued research and may, in its discretion, take positions for your account that contradict the research issued by UBS and its affiliates.

There are two sources of UBS research. Reports from the first source, UBS CIO Global Wealth Management, are designed for individual investors and are produced by UBS Wealth Management Americas (which includes UBS Financial Services Inc. and UBS International, Inc.). The second research source is UBS Investment Research, and its reports are produced by UBS Investment Bank, whose primary business focus is institutional investors. The two sources operate independently and may therefore have different recommendations.

The various research content provided does not take into account the unique investment objectives, financial situation or particular needs of any specific individual investor. If you have any questions, please consult your Financial Advisor.

Bond Rating: These ratings are obtained from independent industry sources and are not verified by UBS FS. Securities without rating information are left blank. Rating agencies may discontinue ratings on high yield securities.

NR: When NR is displayed under bond rating column, no ratings are currently available from that rating agency.

High Yield: This report may designate a security as a high yield fixed income security even though one or more rating agencies rate the security as an investment grade security. Further, this report may incorporate a rating that is no longer current with the rating agency. For more information about the rating for any high yield fixed income security, or to consider whether to hold or sell a high yield fixed income security, please contact your financial advisor or representative and do not make any investment decision based on this report.

Credit/Event Risk: Investments are subject to event risk and changes in credit quality of the issuer. Issuers can experience economic situations that may have adverse effects on the market value of their securities.

Interest Rate Risk: Bonds are subject to market value fluctuations as interest rates rise and fall. If sold prior to maturity, the price received for an issue may be less than the original purchase price.

Reinvestment Risk: Since most corporate issues pay interest semiannually, the coupon payments over the life of the bond can have a major impact on the bond's total return.

Call Provisions: When evaluating the purchase of a corporate bond, one should be aware of any features that may allow the issuer to call the security. This is particularly important when considering an issue that is trading at a premium to its call price, since the return may be negatively impacted if the issue is redeemed. Should an issue be called, investors may be faced with an earlier than anticipated reinvestment decision, and may be unable to reinvest their principal at equally favorable rates.

Effective Maturity: Effective maturity is the expected redemption due to pre-refunding, puts, or maturity and does not reflect any sinking fund activity, optional or extraordinary calls. Securities without a maturity date are left blank and typically include Preferred Securities, Mutual Funds and Fixed Income UITs.

Yields: Yield to Maturity and Yield to Worst are calculated to the worst call.

Accrued Interest: Interest that has accumulated between the most recent payment and the report date may be reflected in market values for interest bearing securities.

Bond Averages: All averages are weighted averages calculated based on market value of the holding, not including accrued interest.

Tax Status: "Taxable" includes all securities held in a taxable account that are subject to federal and/or state or local taxation. "Tax-exempt" includes all securities held in a taxable account that are exempt from federal, state and local taxation. "Tax-deferred" includes all securities held in a tax-deferred account, regardless of the status of the security.

Bond sensitivity analysis: This analysis uses Modified Duration which approximates the percentage price change of a security for a given change in yield. The higher the modified duration of a security, the higher its risk. For callable securities, modified duration does not address the impact of changing interest rates on a bond's expected cash flow as a result of a call or prepayment.

Gain/Loss: The gain/loss information may include calculations based upon non-UBS FS cost basis information. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS FS. In addition, if this report contains positions with unavailable cost basis, the gain/(loss) for these positions are excluded in the calculation for the Gain/(Loss). As a result these figures may not be accurate and are provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. Rely only on year-end tax forms



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

when preparing your tax return. See your monthly statement for additional information.

The account listing may or may not include all of your accounts with UBS FS. The accounts included in this report are listed under the "Accounts included in this review" shown on the first page or listed at the top of each page. If an account number begins with "@" this denotes assets or liabilities held at other financial institutions. Information about these assets, including valuation, account type and cost basis, is based on the information you provided to us, or provided to us by third party data aggregators or custodians at your direction. We have not verified, and are not responsible for, the accuracy or completeness of this information.

Account name(s) displayed in this report and labels used for groupings of accounts can be customizable "nicknames" chosen by you to assist you with your recordkeeping or may have been included by your financial advisor for reference purposes only. The names used have no legal effect, are not intended to reflect any strategy, product, recommendation, investment objective or risk profile associated with your accounts or any group of accounts, and are not a promise or guarantee that wealth, or any financial results, can or will be achieved. All investments involve the risk of loss, including the risk of loss of the entire investment.

For more information about account or group names, or to make changes, contact your Financial Advisor.

Account changes: At UBS, we are committed to helping you work toward your financial goals. So that we may continue providing you with financial advice that is consistent with your investment objectives, please consider the following two questions:

- 1) Have there been any changes to your financial situation or investment objectives?
 - 2) Would you like to implement or modify any restrictions regarding the management of your account?
- If the answer to either question is "yes," it is important that you contact your Financial Advisor as soon as possible to discuss these changes. For MAC advisory accounts, please contact your investment manager directly if you would like to impose or change any investment restrictions on your account.

ADV disclosure: A complimentary copy of our current Form ADV Disclosure Brochure that describes the advisory program and related fees is available through your Financial Advisor. Please contact your Financial Advisor if you have any questions.

Important information for former Piper Jaffray and McDonald Investments clients: As an accommodation to former Piper Jaffray and McDonald Investments clients, these reports include performance history for their Piper Jaffray accounts prior to August 12, 2006 and

McDonald Investments accounts prior to February 9, 2007, the date the respective accounts were converted to UBS FS. UBS FS has not independently verified this information nor do we make any representations or warranties as to the accuracy or completeness of that information and will not be liable to you if any such information is unavailable, delayed or inaccurate.

For insurance, annuities, and 529 Plans, UBS FS relies on information obtained from third party services it believes to be reliable. UBS FS does not independently verify or guarantee the accuracy or validity of any information provided by third parties. Information for insurance, annuities, and 529 Plans that has been provided by a third party service may not reflect the quantity and market value as of the previous business day. When available, an "as of" date is included in the description.

Investors outside the U.S. are subject to securities and tax regulations within their applicable jurisdiction that are not addressed in this report. Nothing in this report shall be construed to be a solicitation to buy or offer to sell any security, product or service to any non-U.S. investor, nor shall any such security, product or service be solicited, offered or sold in any jurisdiction where such activity would be contrary to the securities laws or other local laws and regulations or would subject UBS to any registration requirement within such jurisdiction.

Performance History prior to the account's inception at UBS Financial Services, Inc. may have been included in this report and is based on data provided by third party sources. UBS Financial Services Inc. has not independently verified this information nor does UBS Financial Services Inc. guarantee the accuracy or validity of the information.

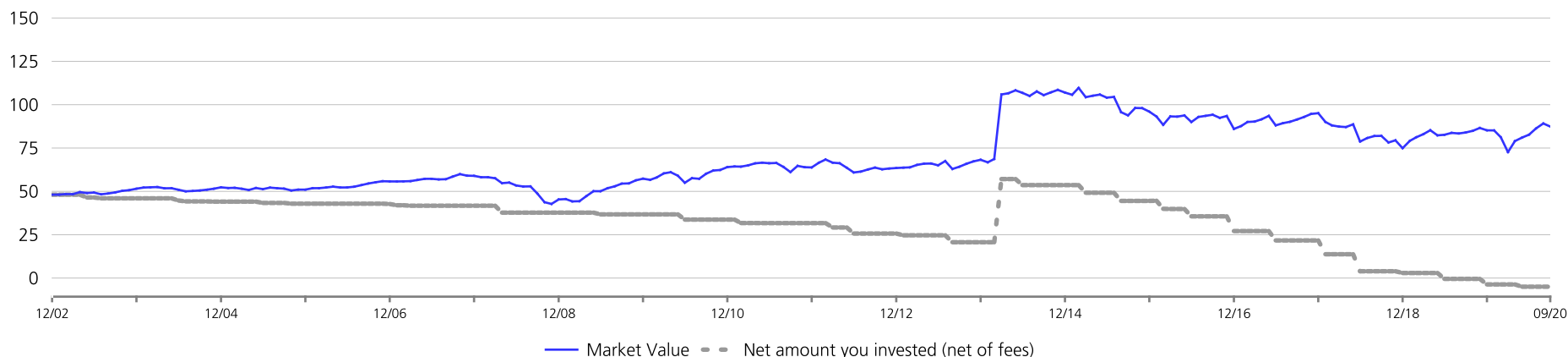
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Sources of portfolio value

as of September 30, 2020

\$ Millions



	MTD 08/31/2020 to 09/30/2020	QTD 06/30/2020 to 09/30/2020	YTD 12/31/2019 to 09/30/2020	1 Year 09/30/2019 to 09/30/2020	3 Years 09/30/2017 to 09/30/2020	5 Years 09/30/2015 to 09/30/2020	7 Years 09/30/2013 to 09/30/2020	10 Years 09/30/2010 to 09/30/2020	ITD 12/31/2002 to 09/30/2020
Opening value	89,168,658.24	82,688,323.43	85,204,028.21	83,966,700.70	91,445,037.85	93,816,174.11	64,211,227.43	60,156,834.32	48,080,148.50
Net deposits/withdrawals	0.00	0.00	-1,316,623.33	-4,518,479.33	-26,694,554.33	-49,483,945.86	-25,659,758.40	-38,716,612.77	-53,064,970.02
Div./interest income	110,013.55	334,885.52	1,168,900.95	2,483,200.98	7,858,793.36	13,634,640.33	18,924,787.80	24,062,775.88	40,604,446.06
Change in accr. interest	2,298.33	6,540.83	367.85	-1,965.75	-1,466.02	-15,825.82	-24,870.19	-125,123.93	-548,595.49
Change in value	-1,908,219.93	4,343,000.41	2,316,076.50	5,443,293.58	14,764,939.32	29,421,707.42	29,921,363.54	41,994,876.68	52,301,721.13
Closing value	87,372,750.18	87,372,750.18	87,372,750.18	87,372,750.18	87,372,750.18	87,372,750.18	87,372,750.18	87,372,750.18	87,372,750.18
Gross Time-weighted ROR	-2.01	5.72	4.34	9.96	9.28	10.37	8.48	8.76	7.79
Net Time-weighted ROR	-2.01	5.67	4.25	9.81	9.15	10.25	8.37	8.66	7.73

Performance returns are annualized after 1 year. Net deposits and withdrawals include program and account fees.

Benchmarks - Annualized time-weighted returns

Blended Index	-2.40	5.85	4.02	10.35	7.73	9.22	7.64	8.26	7.90
US Treasury Bill - 3 Mos	0.01	0.03	0.52	0.96	1.60	1.12	0.81	0.59	1.27
Barclays Agg Bond	-0.05	0.62	6.79	6.98	5.24	4.17	3.97	3.63	4.36
MSCI Emerging Markets-PR	-1.77	8.73	-2.93	8.09	0.01	6.43	1.31	0.06	7.65
Russell 2000	-3.34	4.93	-8.69	0.39	1.77	7.99	6.42	9.84	9.48
S&P 500	-3.80	8.93	5.57	15.15	12.27	14.13	12.67	13.73	10.06

Blended Index: Start - Current: 70% MSCI World; 30% Barclays Agg Bond

Past performance does not guarantee future results and current performance may be lower/higher than past data presented.



Portfolio holdings

as of September 30, 2020

Summary of Portfolio Holdings

TX XX595 • ERS • Defined Benefit

Prepared for

CITY OF TROY

Risk profile:

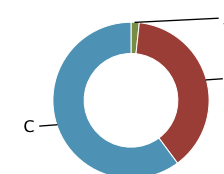
Moderate

Return Objective:

Current Income and Capital Appreciation

	Cost basis (\$)	Value on 09/30/2020 (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Portfolio
A Cash	1,488,861.73	1,488,861.73	0.00	0.00%	2,276.17	0.15%	1.70%
Cash	1,488,861.73	1,488,861.73	0.00	0.00%	2,276.17	0.15%	1.70%
US	1,488,861.73	1,488,861.73	0.00	0.00%	2,276.17	0.15%	1.70%
B Fixed Income	32,695,028.35	33,337,489.24	642,460.89	1.97%	888,290.63	2.66%	38.16%
US	27,715,791.12	28,462,940.66	747,149.54	2.70%	748,439.36	2.63%	32.58%
US Fixed Income	19,273,533.86	19,734,921.24	461,387.38	2.39%	463,872.29	2.35%	22.58%
Government	3,840,447.15	4,243,695.50	403,248.35	10.50%	34,539.05	0.81%	4.86%
Corporate IG Credit	293,625.00	364,144.65	70,519.65	24.02%	28,081.35	7.94%	0.42%
Corporate High Yield	4,308,185.11	4,120,179.27	-188,005.84	-4.36%	221,946.67	5.39%	4.72%
Global	3,943,224.17	3,879,671.40	-63,552.77	-1.61%	98,842.92	2.55%	4.44%
Global	3,943,224.17	3,879,671.40	-63,552.77	-1.61%	98,842.92	2.55%	4.44%
International	1,036,013.06	994,877.18	-41,135.88	-3.97%	41,008.35	4.12%	1.14%
Emerging Markets	1,036,013.06	994,877.18	-41,135.88	-3.97%	41,008.35	4.12%	1.14%
C Equity	31,884,316.20	52,546,399.22	20,662,083.02	64.80%	679,152.28	1.29%	60.14%
US	20,063,289.46	37,084,381.32	17,021,091.86	84.84%	566,684.43	1.53%	42.44%
US Equity	6,900.00	6,750.00	-150.00	-2.17%	0.00	0.00%	0.01%
Large Cap	13,299,946.24	27,529,737.66	14,229,791.42	106.99%	414,792.42	1.51%	31.50%
Mid Cap	2,370,386.33	3,916,015.30	1,545,628.97	65.21%	124,907.63	3.19%	4.48%
Small Cap	3,889,293.89	5,631,878.36	1,742,584.47	44.80%	26,984.38	0.48%	6.45%
Convertibles	496,763.00	0.00	-496,763.00	-100.00%	0.00	0.00%	0.00%
Global	4,132,772.71	6,486,638.17	2,353,865.46	56.96%	20,173.74	0.31%	7.43%
Global	4,132,772.71	6,486,638.17	2,353,865.46	56.96%	20,173.74	0.31%	7.43%
International	7,688,254.03	8,975,379.73	1,287,125.70	16.74%	92,294.11	1.03%	10.27%
Developed Markets	4,796,432.53	5,277,475.74	481,043.21	10.03%	55,065.06	1.04%	6.04%
Emerging Markets	2,891,821.50	3,697,903.99	806,082.49	27.87%	37,229.05	1.01%	4.23%
D Commodities	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
E Non-Traditional	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
F Other	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
Total Portfolio	\$66,068,206.28	\$87,372,750.18	\$21,304,543.90	32.25%	\$1,569,719.08	1.80%	100%

Balanced mutual funds represented in multiple asset classes based on Morningstar allocations





Portfolio holdings - as of September 30, 2020 (continued)

Details of portfolio holdings

	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of asset class	% of Portfolio
Total Portfolio	\$66,068,206.28	\$87,372,750.18	\$21,304,543.90	32.25%	\$1,569,719.08	1.80%	100%	100%

	Quantity	Purchase price (\$)/ Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Cash	% of Portfolio
Cash											
Cash											
US											
LIQUID ASSETS GOVT FUND CUSIP: 90262Y307 Symbol: MMLIRA	1,488,861.73	1.00	1.00	1,488,861.73	1,488,861.73	0.00	0.00%	2,276.17	0.15%	100.00%	1.70%
Total US				\$1,488,861.73	\$1,488,861.73	\$0.00	0.00%	\$2,276.17	0.15%	100.00%	1.70%

Total Cash				\$1,488,861.73	\$1,488,861.73	\$0.00	0.00%	\$2,276.17	0.15%	100.00%	1.70%
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Total Cash				\$1,488,861.73	\$1,488,861.73	\$0.00	0.00%	\$2,276.17	0.15%	100.00%	1.70%
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	Quantity	Purchase price (\$)/ Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
Fixed Income											
US											
US Fixed Income											
BANKUNITED NA FLOR FL US RT 00.0500% MAT 12/16/20 FIXED RATE CD CUSIP: 066519PM5 Symbol: ZBEMC Initial purchase date: Sep 09, 2020	185,000.00	100.00	100.00	185,000.00	185,001.70	1.70	0.00%	92.50	0.05%	0.55%	0.21%
BEAL BANK, SSB TX US RT 00.1000% MAT 12/23/20 FIXED RATE CD CUSIP: 07371ACM3 Symbol: ZBDIK Initial purchase date: Aug 17, 2020	255,000.00	100.00	100.01	255,000.00	255,049.95	49.95	0.02%	255.00	0.10%	0.77%	0.29%
BEAL BK NV US RT 00.1500% MAT 02/17/21 FIXED RATE CD CUSIP: 07371CDN6 Symbol: ZBDAM Initial purchase date: Aug 12, 2020	95,000.00	100.00	100.03	95,000.00	95,047.75	47.75	0.05%	142.50	0.15%	0.29%	0.11%



Portfolio holdings - as of September 30, 2020 (continued)

Fixed Income	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
US											
LOOMIS SAYLES INVESTMENT GRADE BOND FUND CLASS A CUSIP: 543487144 Symbol: LIGRX Initial purchase date: Jun 13, 2014 Client investment: \$7,097,012.03 Reinvested dividends: \$1,858,639.29 Investment return: \$1,684,635.70 (23.74%)	741,067.32	12.08	11.85	8,955,651.32	8,781,647.72	-174,003.59	-1.94%	256,631.61	2.92%	26.34%	10.05%
METROPOLITAN WEST TOTAL RETURN BOND FUND CUSIP: 592905103 Symbol: MWTRX Initial purchase date: Nov 14, 2014 Client investment: \$3,587,358.91 Reinvested dividends: \$709,348.72 Investment return: \$1,011,410.58 (28.19%)	395,763.30	10.86	11.62	4,296,707.63	4,598,769.49	302,061.86	7.03%	88,622.52	1.93%	13.79%	5.26%
THORNBURG LIMITED TERM INCOME FD CLASS A CUSIP: 885215509 Symbol: THIFX Initial purchase date: Mar 09, 2017 Client investment: \$5,020,625.28 Reinvested dividends: \$465,549.63 Investment return: \$798,779.35 (15.91%)	411,556.20	13.33	14.14	5,486,174.91	5,819,404.63	333,229.72	6.07%	118,128.15	2.03%	17.46%	6.66%
Total US Fixed Income				\$19,273,533.86	\$19,734,921.24	\$461,387.38	2.39%	\$463,872.29	2.35%	59.20%	22.58%
Government											
ISHARES TIPS BOND ETF CUSIP: 464287176 Symbol: TIP Initial purchase date: Feb 16, 2017 Client investment: \$3,689,182.34 Reinvested dividends: \$151,264.81 Investment return: \$554,513.16 (15.03%)	33,547.00	114.48	126.50	3,840,447.15	4,243,695.50	403,248.35	10.50%	34,539.05	0.81%	12.73%	4.86%
Total Government				\$3,840,447.15	\$4,243,695.50	\$403,248.35	10.50%	\$34,539.05	0.81%	12.73%	4.86%
Corporate IG Credit											
COMCAST CABLE 09.455% 111522 DTD111802 FC051503 COMMUNICATION CUSIP: 00209TAB1 Initial purchase date: Feb 13, 1992	297,000.00	98.86	119.06	293,625.00	364,144.65	70,519.65	24.02%	28,081.35	7.94%	1.09%	0.42%
Total Corporate IG Credit				\$293,625.00	\$364,144.65	\$70,519.65	24.02%	\$28,081.35	7.94%	1.09%	0.42%



Portfolio holdings - as of September 30, 2020 (continued)

Fixed Income	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
US											
Corporate High Yield											
BLACKROCK HIGH YIELD BOND PORTFOLIOA CUSIP: 09260B663 Symbol: BHYAX Initial purchase date: Nov 16, 2012 Client investment: \$1,215,925.43 Reinvested dividends: \$1,110,847.02 Investment return: \$958,733.96 (78.85%)	293,080.78	7.94	7.42	2,326,772.45	2,174,659.39	-152,113.06	-6.54%	113,920.50	5.24%	6.52%	2.49%
BLACKROCK HIGH YIELD BOND PORTFOLIOINSTITUTIONAL CUSIP: 09260B630 Symbol: BHYIX Initial purchase date: Aug 12, 2020 Client investment: \$1,976,775.79 Reinvested dividends: \$4,636.87 Investment return: \$-31,255.91 (-1.58%)	262,199.45	7.56	7.42	1,981,412.66	1,945,519.88	-35,892.78	-1.81%	108,026.17	5.55%	5.84%	2.23%
Total Corporate High Yield				\$4,308,185.11	\$4,120,179.27	\$-188,005.84	-4.36%	\$221,946.67	5.39%	12.36%	4.72%
Total US				\$27,715,791.12	\$28,462,940.66	\$747,149.54	2.70%	\$748,439.36	2.63%	85.38%	32.58%
Global											
Global											
BLACKROCK STRATEGIC INCOME OPPORTUNITIES PORTFOLIOA CUSIP: 09260B416 Symbol: BASIX Initial purchase date: Feb 13, 2014 Client investment: \$3,141,350.15 Reinvested dividends: \$801,874.02 Investment return: \$738,321.25 (23.5%)	385,653.22	10.22	10.06	3,943,224.17	3,879,671.40	-63,552.77	-1.61%	98,842.92	2.55%	11.64%	4.44%
Total Global				\$3,943,224.17	\$3,879,671.40	\$-63,552.77	-1.61%	\$98,842.92	2.55%	11.64%	4.44%
Total Global				\$3,943,224.17	\$3,879,671.40	\$-63,552.77	-1.61%	\$98,842.92	2.55%	11.64%	4.44%
International											
Emerging Markets											
TCW EMERGING MARKETS INCOME FUND CLASS N CUSIP: 87234N351 Symbol: TGINX Initial purchase date: Oct 09, 2019 Client investment: \$1,000,075.00 Reinvested dividends: \$35,938.06 Investment return: \$-5,197.82 (-0.52%)	97,061.19	10.67	10.25	1,036,013.06	994,877.18	-41,135.88	-3.97%	41,008.35	4.12%	2.98%	1.14%



Portfolio holdings - as of September 30, 2020 (continued)

Fixed Income	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
International											
Total Emerging Markets				\$1,036,013.06	\$994,877.18	\$-41,135.88	-3.97%	\$41,008.35	4.12%	2.98%	1.14%
Total International				\$1,036,013.06	\$994,877.18	\$-41,135.88	-3.97%	\$41,008.35	4.12%	2.98%	1.14%
Total Fixed Income				\$32,695,028.35	\$33,337,489.24	\$642,460.89	1.97%	\$888,290.63	2.66%	100.00%	38.16%

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
US Equity											
RTS BRISTOL-MYERS SQUIBB CO EXP 03/31/21 CUSIP: 110122157 Symbol: BMVRT Initial purchase date: Nov 21, 2019	3,000.00	2.30	2.25	6,900.00	6,750.00	-150.00	-2.17%	0.00	0.00%	0.01%	0.01%
Total US Equity				\$6,900.00	\$6,750.00	\$-150.00	-2.17%	\$0.00	0.00%	0.01%	0.01%

Large Cap											
ABBOTT LABS CUSIP: 002824100 Symbol: ABT Initial purchase date: May 11, 2016	3,045.00	38.39	108.83	116,912.23	331,387.35	214,475.12	183.45%	4,384.80	1.32%	0.63%	0.38%
ALPHABET INC CL A CUSIP: 02079K305 Symbol: GOOGL Initial purchase date: Nov 12, 2009	832.00	452.75	1,465.60	376,686.20	1,219,379.20	842,693.00	223.71%	0.00	0.00%	2.32%	1.40%
ALPHABET INC CL C CUSIP: 02079K107 Symbol: GOOG Initial purchase date: Nov 12, 2009	904.00	433.82	1,469.60	392,177.01	1,328,518.40	936,341.39	238.75%	0.00	0.00%	2.53%	1.52%
AMAZON.COM INC CUSIP: 023135106 Symbol: AMZN Initial purchase date: Sep 14, 2016	585.00	769.36	3,148.73	450,073.08	1,842,007.05	1,391,933.97	309.27%	0.00	0.00%	3.51%	2.11%
AMERICAN TOWER CORP REIT CUSIP: 03027X100 Symbol: AMT Initial purchase date: Apr 13, 2012	1,000.00	63.62	241.73	63,618.17	241,730.00	178,111.83	279.97%	4,330.00	1.79%	0.46%	0.28%
APPLE INC CUSIP: 037833100 Symbol: AAPL Initial purchase date: Sep 15, 2011	12,300.00	14.01	115.81	172,382.83	1,424,463.00	1,252,080.17	726.34%	10,086.00	0.71%	2.71%	1.63%
AT&T INC CUSIP: 00206R102 Symbol: T Initial purchase date: Jun 09, 2011	5,968.00	31.24	28.51	186,443.46	170,147.68	-16,295.78	-8.74%	12,413.44	7.30%	0.32%	0.19%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
BANK OF AMER CORP CUSIP: 060505104 Symbol: BAC Initial purchase date: Jan 13, 2016	33,050.00	15.11	24.09	499,349.09	796,174.50	296,825.41	59.44%	23,796.00	2.99%	1.52%	0.91%
BLACKROCK INC CUSIP: 09247X101 Symbol: BLK Initial purchase date: Aug 10, 2016	670.00	370.32	563.55	248,115.95	377,578.50	129,462.55	52.18%	9,728.40	2.58%	0.72%	0.43%
BRISTOL MYERS SQUIBB CO CUSIP: 110122108 Symbol: BMY Initial purchase date: Nov 21, 2019	3,000.00	56.41	60.29	169,230.00	180,870.00	11,640.00	6.88%	5,400.00	2.99%	0.34%	0.21%
CALL ABBOTT LABS DUE 11/20/20 115.000 000132 CUSIP: 99UBB00D9 Symbol: ABT Initial purchase date: Aug 27, 2020	-10.00	47,508.4	264.00	-4,750.84	-2,640.00	2,110.84	44.43%	0.00	0.00%	-0.01%	0.00%
CALL CHEVRON CORP DUE 12/18/20 125.000 0926P3 CUSIP: 99UBBC536 Symbol: CVX Initial purchase date: Feb 14, 2020	-17.00	18,235.5	6.00	-3,100.04	-102.00	2,998.04	96.71%	0.00	0.00%	0.00%	0.00%
CALL COMCAST CORP NEW CL DUE 06/18/21 50.000 026263 CUSIP: 99UBB0ID6 Symbol: CMCSA Initial purchase date: Jul 20, 2020	-8.00	13,738.6	275.00	-1,099.09	-2,200.00	-1,100.91	-100.17%	0.00	0.00%	0.00%	0.00%
CALL COSTCO WHOLESALE CO DUE 10/16/20 375.000 0929G5 CUSIP: 99UBB0IW4 Symbol: COST Initial purchase date: Aug 04, 2020	-16.00	22,149.4	91.00	-3,543.91	-1,456.00	2,087.91	58.92%	0.00	0.00%	0.00%	0.00%
CALL DUKE ENERGY CORP NE DUE 01/15/21 105.000 119MG4 CUSIP: 99UBAL1G2 Symbol: DUK Initial purchase date: Feb 14, 2020	-10.00	32,453.5	40.00	-3,245.35	-400.00	2,845.35	87.67%	0.00	0.00%	0.00%	0.00%
CALL FASTENAL CO DUE 11/20/20 45.000 167061 CUSIP: 99UBARSK1 Symbol: FAST Initial purchase date: May 20, 2020	-30.00	12,582.6	232.50	-3,774.78	-6,975.00	-3,200.22	-84.78%	0.00	0.00%	-0.01%	-0.01%
CALL GENL MILLS INC DUE 10/16/20 67.500 177105 CUSIP: 99UBA7N04 Symbol: GIS Initial purchase date: Jul 20, 2020	-10.00	11,617.2	3.00	-1,161.72	-30.00	1,131.72	97.42%	0.00	0.00%	0.00%	0.00%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
CALL GLOBAL PAYMENTS INC DUE 11/20/20 220.000 1848N3 CUSIP: 99UBBON16 Symbol: GPN Initial purchase date: Jul 21, 2020	-20.00	20,354.6	90.00	-4,070.93	-1,800.00	2,270.93	55.78%	0.00	0.00%	0.00%	0.00%
CALL JPMORGAN CHASE & CO DUE 12/18/20 125.000 241JP2 CUSIP: 99UBA66E5 Symbol: JPM Initial purchase date: Aug 12, 2020	-10.00	14,857.7	46.00	-1,485.77	-460.00	1,025.77	69.04%	0.00	0.00%	0.00%	0.00%
CALL MARSH & MCLENNAN CO DUE 10/16/20 125.000 275603 CUSIP: 99UBBS9Y9 Symbol: MMC Initial purchase date: Aug 12, 2020	-10.00	10,144.2	10.00	-1,014.42	-100.00	914.42	90.14%	0.00	0.00%	0.00%	0.00%
CALL O REILLY AUTOMOTIVE DUE 11/20/20 520.000 350B81 CUSIP: 99UBBON99 Symbol: ORLY Initial purchase date: Jul 21, 2020	-5.00	70,623.8	240.00	-3,531.19	-1,200.00	2,331.19	66.02%	0.00	0.00%	0.00%	0.00%
CALL ORACLE CORP DUE 12/18/20 62.500 353752 CUSIP: 99UBARTO2 Symbol: ORCL Initial purchase date: May 20, 2020	-10.00	12,206.4	227.50	-1,220.64	-2,275.00	-1,054.36	-86.38%	0.00	0.00%	0.00%	0.00%
CALL PEPSICO INC DUE 12/18/20 155.000 368024 CUSIP: 99UBA7YI3 Symbol: PEP Initial purchase date: Jul 21, 2020	-10.00	9,653.30	97.00	-965.33	-970.00	-4.67	-0.48%	0.00	0.00%	0.00%	0.00%
CALL PFIZER INC DUE 06/18/21 40.000 370011 CUSIP: 99UBAU1X5 Symbol: PFE Initial purchase date: Jul 21, 2020	-30.00	18,886.7	190.00	-5,666.02	-5,700.00	-33.98	-0.60%	0.00	0.00%	-0.01%	-0.01%
CALL PROCTER & GAMBLE CO DUE 01/15/21 145.000 383601 CUSIP: 99UBB1ZM5 Symbol: PG Initial purchase date: Jul 21, 2020	-30.00	12,287.4	420.00	-3,686.22	-12,600.00	-8,913.78	-241.81%	0.00	0.00%	-0.02%	-0.01%
CALL STARBUCKS CORP DUE 06/18/21 105.000 509736 CUSIP: 99UBBHKL8 Symbol: SBUX Initial purchase date: Aug 12, 2020	-12.00	12,297.7	280.00	-1,475.73	-3,360.00	-1,884.27	-127.68%	0.00	0.00%	-0.01%	0.00%



Portfolio holdings - as of September 30, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
CALL VISA INC CL A DUE 12/18/20 225.000 488372 CUSIP: 99UBAQM37 Symbol: V Initial purchase date: Jul 21, 2020	-10.00	41,506.1	285.00	-4,150.61	-2,850.00	1,300.61	31.34%	0.00	0.00%	-0.01%	0.00%
CALL YUM CHINA HLDGS INC DUE 10/16/20 60.000 518NY1 CUSIP: 99UBAQZA7 Symbol: YUMC Initial purchase date: Jul 21, 2020	-30.00	12,156.2	3.00	-3,646.86	-90.00	3,556.86	97.53%	0.00	0.00%	0.00%	0.00%
CALL YUM! BRANDS INC DUE 12/18/20 105.000 5175J8 CUSIP: 99UBB0OP2 Symbol: YUM Initial purchase date: Jul 21, 2020	-20.00	21,240.2	87.50	-4,248.05	-1,750.00	2,498.05	58.80%	0.00	0.00%	0.00%	0.00%
CHEVRON CORP CUSIP: 166764100 Symbol: CVX Initial purchase date: Feb 12, 2009	8,710.00	79.26	72.00	690,314.19	627,120.00	-63,194.19	-9.15%	44,943.60	7.17%	1.19%	0.72%
COMCAST CORP NEW CL A CUSIP: 20030N101 Symbol: CMCSA Initial purchase date: Oct 09, 2019	2,800.00	44.80	46.26	125,450.93	129,528.00	4,077.07	3.25%	2,576.00	1.99%	0.25%	0.15%
COSTCO WHOLESALE CORP CUSIP: 22160K105 Symbol: COST Initial purchase date: May 10, 2012	3,660.00	93.19	355.00	341,089.59	1,299,300.00	958,210.41	280.93%	10,248.00	0.79%	2.47%	1.49%
DANAHER CORP CUSIP: 235851102 Symbol: DHR Initial purchase date: Jun 09, 2005	2,000.00	20.72	215.33	41,434.65	430,660.00	389,225.35	939.37%	1,440.00	0.33%	0.82%	0.49%
DUKE ENERGY CORP NEW CUSIP: 26441C204 Symbol: DUK Initial purchase date: Apr 09, 2009	3,041.00	40.54	88.56	123,267.64	269,310.96	146,043.32	118.48%	11,738.26	4.36%	0.51%	0.31%
ESCROW ALABA INC CUSIP: 021ESCO17 Initial purchase date: Jun 12, 2014	3,000.00	36.85	22.60	110,545.88	67,800.00	-42,745.88	-38.67%	0.00	0.00%	0.13%	0.08%
FASTENAL CO CUSIP: 311900104 Symbol: FAST Initial purchase date: May 21, 2018	16,000.00	27.04	45.09	432,571.60	721,440.00	288,868.40	66.78%	16,000.00	2.22%	1.37%	0.83%
GENL DYNAMICS CORP CUSIP: 369550108 Symbol: GD Initial purchase date: Jan 13, 2000	5,200.00	26.43	138.43	137,455.71	719,836.00	582,380.29	423.69%	22,880.00	3.18%	1.37%	0.82%
GENL MILLS INC CUSIP: 370334104 Symbol: GIS Initial purchase date: Jun 10, 2010	4,000.00	38.13	61.68	152,506.12	246,720.00	94,213.88	61.78%	8,160.00	3.31%	0.47%	0.28%

Portfolio holdings - as of September 30, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
GLOBAL PAYMENTS INC CUSIP: 37940X102 Symbol: GPN Initial purchase date: Dec 10, 2009	5,000.00	25.78	177.58	128,889.82	887,900.00	759,010.18	588.88%	3,900.00	0.44%	1.69%	1.02%
JPMORGAN CHASE & CO CUSIP: 46625H100 Symbol: JPM Initial purchase date: Aug 14, 1997	2,000.00	37.85	96.27	75,704.64	192,540.00	116,835.36	154.33%	7,200.00	3.74%	0.37%	0.22%
LOCKHEED MARTIN CORP CUSIP: 539830109 Symbol: LMT Initial purchase date: Oct 09, 2019	320.00	388.31	383.28	124,260.66	122,649.60	-1,611.06	-1.30%	3,328.00	2.71%	0.23%	0.14%
MARSH & MCLENNAN COS INC CUSIP: 571748102 Symbol: MMC Initial purchase date: Jan 13, 2016	7,030.00	53.01	114.70	372,652.52	806,341.00	433,688.48	116.38%	13,075.80	1.62%	1.53%	0.92%
MCDONALDS CORP CUSIP: 580135101 Symbol: MCD Initial purchase date: Jan 14, 2010	1,050.00	62.64	219.49	65,769.03	230,464.50	164,695.47	250.41%	5,250.00	2.28%	0.44%	0.26%
MERCK & CO INC NEW COM CUSIP: 58933Y105 Symbol: MRK Initial purchase date: Oct 09, 2019	1,470.00	85.01	82.95	124,962.07	121,936.50	-3,025.57	-2.42%	3,586.80	2.94%	0.23%	0.14%
MFS VALUE FUND CLASS A CUSIP: 552983801 Symbol: MEIAX Initial purchase date: Oct 11, 2017 Client investment: \$3,950,015.75 Reinvested dividends: \$387,304.84 Investment return: \$411,749.10 (10.42%)	107,991.21	40.16	40.39	4,337,320.59	4,361,764.85	24,444.26	0.56%	69,573.34	1.60%	8.30%	4.96%
MICROSOFT CORP CUSIP: 594918104 Symbol: MSFT Initial purchase date: Oct 09, 2019	900.00	139.79	210.33	125,813.00	189,297.00	63,484.00	50.46%	2,016.00	1.06%	0.36%	0.22%
O REILLY AUTOMOTIVE INC CUSIP: 67103H107 Symbol: ORLY Initial purchase date: Jul 01, 2003	1,500.00	16.91	461.08	25,366.87	691,620.00	666,253.13	2,626.47%	0.00	0.00%	1.32%	0.79%
ORACLE CORP CUSIP: 68389X105 Symbol: ORCL Initial purchase date: Feb 10, 2005	5,000.00	13.18	59.70	65,886.08	298,500.00	232,613.92	353.05%	4,800.00	1.61%	0.57%	0.34%
OTIS WORLDWIDE CORP CUSIP: 68902V107 Symbol: OTIS Initial purchase date: Oct 09, 2019	465.00	69.81	62.42	32,462.90	29,025.30	-3,437.60	-10.59%	372.00	1.28%	0.06%	0.03%
PEPSICO INC CUSIP: 713448108 Symbol: PEP Initial purchase date: Oct 17, 2011	5,000.00	62.54	138.60	312,687.24	693,000.00	380,312.76	121.63%	20,450.00	2.95%	1.32%	0.79%
PFIZER INC CUSIP: 717081103 Symbol: PFE Initial purchase date: Jun 16, 2008	10,000.00	2.32	36.70	23,242.20	367,000.00	343,757.80	1,479.02%	15,200.00	4.14%	0.70%	0.42%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
PROCTER & GAMBLE CO CUSIP: 742718109 Symbol: PG Initial purchase date: Feb 15, 1996	7,000.00	35.00	138.99	245,024.26	972,930.00	727,905.74	297.07%	22,139.60	2.28%	1.85%	1.11%
PUT APPLE INC DUE 12/18/20 62.500 030911 CUSIP: 99UBA9HA5 Symbol: AAPL Initial purchase date: Aug 14, 2020	-40.00	3,763.53	27.00	-1,505.41	-1,080.00	425.41	28.26%	0.00	0.00%	0.00%	0.00%
RAYTHEON TECHNOLOGIES CORP CUSIP: 75513E101 Symbol: RTX Initial purchase date: Oct 09, 2019	930.00	73.66	57.54	68,506.86	53,512.20	-14,994.66	-21.89%	1,767.00	3.30%	0.10%	0.06%
SPDR S&P 500 ETF TR CUSIP: 78462F103 Symbol: SPY Initial purchase date: Feb 08, 2017 Client investment: \$502,534.43 Reinvested dividends: \$38,950.95 Investment return: \$272,066.14 (54.14%)	2,313.00	234.11	334.89	541,485.38	774,600.57	233,115.19	43.05%	13,140.19	1.70%	1.47%	0.89%
STARBUCKS CORP CUSIP: 855244109 Symbol: SBUX Initial purchase date: May 10, 2012	11,280.00	52.24	85.92	589,287.75	969,177.60	379,889.85	64.47%	18,499.20	1.91%	1.84%	1.11%
THERMO FISHER SCIENTIFIC INC CUSIP: 883556102 Symbol: TMO Initial purchase date: Oct 09, 2019	445.00	280.04	441.52	124,616.33	196,476.40	71,860.07	57.67%	391.60	0.20%	0.37%	0.22%
UNITEDHEALTH GROUP INC CUSIP: 91324P102 Symbol: UNH Initial purchase date: Oct 09, 2019	560.00	224.30	311.77	125,605.88	174,591.20	48,985.32	39.00%	2,800.00	1.60%	0.33%	0.20%
VISA INC CL A CUSIP: 92826C839 Symbol: V Initial purchase date: Oct 17, 2011	3,000.00	23.56	199.97	70,692.57	599,910.00	529,217.43	748.62%	3,600.00	0.60%	1.14%	0.69%
WALMART INC CUSIP: 931142103 Symbol: WMT Initial purchase date: Oct 09, 2019	1,050.00	120.26	139.91	126,275.03	146,905.50	20,630.47	16.34%	2,268.00	1.54%	0.28%	0.17%
WALT DISNEY CO (HOLDING CO) DISNEY COM CUSIP: 254687106 Symbol: DIS Initial purchase date: Dec 09, 2015	5,860.00	104.21	124.08	610,699.80	727,108.80	116,409.00	19.06%	0.00	0.00%	1.38%	0.83%
YUM CHINA HLDGS INC CUSIP: 98850P109 Symbol: YUMC Initial purchase date: Sep 09, 2004	17,000.00	6.25	52.95	106,176.78	900,150.00	793,973.22	747.78%	0.00	0.00%	1.71%	1.03%
YUM! BRANDS INC CUSIP: 988498101 Symbol: YUM Initial purchase date: Sep 09, 2004	7,080.00	14.73	91.30	104,276.56	646,404.00	542,127.44	519.89%	13,310.40	2.06%	1.23%	0.74%
Total Large Cap				\$13,299,946.24	\$27,529,737.66	\$14,229,791.42	106.99%	\$414,792.42	1.51%	52.39%	31.50%



Portfolio holdings - as of September 30, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Mid Cap											
AECOM CUSIP: 00766T100 Symbol: ACM Initial purchase date: Feb 05, 2010	2,900.00	25.19	41.84	73,045.33	121,336.00	48,290.67	66.11%	0.00	0.00%	0.23%	0.14%
CALL CONAGRA BRANDS, INC DUE 12/18/20 41.000 101290 CUSIP: 99UBB0HH8 Symbol: CAG Initial purchase date: Jul 21, 2020	-10.00	9,653.30	45.00	-965.33	-450.00	515.33	53.38%	0.00	0.00%	0.00%	0.00%
CALL GENUINE PARTS CO DUE 11/20/20 100.000 181455 CUSIP: 99UBB0MD1 Symbol: GPC Initial purchase date: Jul 20, 2020	-10.00	18,491.1	272.50	-1,849.11	-2,725.00	-875.89	-47.37%	0.00	0.00%	-0.01%	0.00%
CALL HARTFORD FINCL SERV DUE 01/15/21 70.000 1988E4 CUSIP: 99UBBAGZ7 Symbol: HIG Initial purchase date: Oct 09, 2019	-10.00	19,473.1	15.00	-1,947.31	-150.00	1,797.31	92.30%	0.00	0.00%	0.00%	0.00%
CALL IDEX CORP DUE 10/16/20 185.000 223085 CUSIP: 99UBBG552 Symbol: IEX Initial purchase date: Aug 12, 2020	-10.00	39,636.6	312.50	-3,963.66	-3,125.00	838.66	21.16%	0.00	0.00%	-0.01%	0.00%
CALL ONEOK INC NEW DUE 01/15/21 42.500 3496G4 CUSIP: 99UBB0N65 Symbol: OKE Initial purchase date: Jul 21, 2020	-20.00	8,945.55	25.00	-1,789.11	-500.00	1,289.11	72.05%	0.00	0.00%	0.00%	0.00%
CALL SMUCKER J M CO NEW DUE 01/15/21 130.000 4258Y5 CUSIP: 99UBBC569 Symbol: SJM Initial purchase date: Feb 14, 2020	-10.00	15,643.3	166.00	-1,564.33	-1,660.00	-95.67	-6.12%	0.00	0.00%	0.00%	0.00%
CALL TRACTOR SUPPLY COMP DUE 10/16/20 160.000 4608B6 CUSIP: 99UBB0ON7 Symbol: TSCO Initial purchase date: Jul 21, 2020	-10.00	25,368.9	30.00	-2,536.89	-300.00	2,236.89	88.17%	0.00	0.00%	0.00%	0.00%
CARRIER GLOBAL CORP CUSIP: 14448C104 Symbol: CARR Initial purchase date: Oct 09, 2019	930.00	24.96	30.54	23,215.22	28,402.20	5,186.98	22.34%	297.60	1.05%	0.05%	0.03%
CONAGRA BRANDS, INC. CUSIP: 205887102 Symbol: CAG Initial purchase date: Oct 09, 2019	3,000.00	28.43	35.71	85,290.85	107,130.00	21,839.15	25.61%	2,550.00	2.38%	0.20%	0.12%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
GENUINE PARTS CO CUSIP: 372460105 Symbol: GPC Initial purchase date: Apr 13, 2012	3,000.00	63.29	95.17	189,860.40	285,510.00	95,649.60	50.38%	9,480.00	3.32%	0.54%	0.33%
HARTFORD FINCL SERVICES GROUP INC CUSIP: 416515104 Symbol: HIG Initial purchase date: Jan 13, 2005	4,000.00	67.53	36.86	270,129.76	147,440.00	-122,689.76	-45.42%	5,200.00	3.53%	0.28%	0.17%
IDEX CORP CUSIP: 45167R104 Symbol: IEX Initial purchase date: Aug 11, 2004	3,000.00	20.50	182.41	61,501.50	547,230.00	485,728.50	789.78%	6,000.00	1.10%	1.04%	0.63%
ONEOK INC NEW CUSIP: 682680103 Symbol: OKE Initial purchase date: May 14, 2009	14,000.00	14.25	25.98	199,490.58	363,720.00	164,229.42	82.32%	52,360.00	14.40%	0.69%	0.42%
PALO ALTO NETWORKS INC CUSIP: 697435105 Symbol: PANW Initial purchase date: Feb 12, 2015	1,250.00	134.89	244.75	168,607.43	305,937.50	137,330.07	81.45%	0.00	0.00%	0.58%	0.35%
PUT TRACTOR SUPPLY COMP DUE 01/15/21 95.000 4608B6 CUSIP: 99UBBHQU2 Symbol: TSCO Initial purchase date: Aug 12, 2020	-10.00	10,635.2	132.50	-1,063.52	-1,325.00	-261.48	-24.59%	0.00	0.00%	0.00%	0.00%
SMUCKER J M CO NEW CUSIP: 832696405 Symbol: SJM Initial purchase date: Jan 14, 2010	3,000.00	62.32	115.52	186,962.73	346,560.00	159,597.27	85.36%	10,800.00	3.12%	0.66%	0.40%
TRACTOR SUPPLY COMPANY CUSIP: 892356106 Symbol: TSCO Initial purchase date: Dec 10, 2008	4,000.00	10.17	143.34	40,687.65	573,360.00	532,672.35	1,309.17%	6,400.00	1.12%	1.09%	0.66%
VANGUARD MID-CAP VALUE ETF CUSIP: 922908512 Symbol: VOE Initial purchase date: Dec 12, 2019	7,580.00	118.87	101.37	901,026.53	768,384.60	-132,641.93	-14.72%	22,032.03	2.87%	1.46%	0.85%
VF CORP CUSIP: 918204108 Symbol: VFC Initial purchase date: Oct 09, 2019	1,400.00	89.32	70.25	125,044.79	98,350.00	-26,694.79	-21.35%	2,688.00	2.73%	0.19%	0.11%
WATSCO INC CUSIP: 942622200 Symbol: WSO Initial purchase date: Apr 15, 2010	1,000.00	61.20	232.89	61,202.82	232,890.00	171,687.18	280.52%	7,100.00	3.05%	0.44%	0.27%
Total Mid Cap				\$2,370,386.33	\$3,916,015.30	\$1,545,628.97	65.21%	\$124,907.63	3.19%	7.45%	4.48%

Small Cap

Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
ISHARES RUSSELL 2000 ETF CUSIP: 464287655 Symbol: IWM Initial purchase date: Jun 13, 2014 Client investment: \$999,013.13 Reinvested dividends: \$62,057.32 Investment return: \$321,984.88 (32.23%)	8,819.00	120.32	149.79	1,061,070.45	1,320,998.01	259,927.56	24.50%	18,074.04	1.37%	2.51%	1.51%
MFS NEW DISCOVERY VALUE FUND CLASS A CUSIP: 55278M100 Symbol: NDVAX Initial purchase date: Oct 11, 2017 Client investment: \$1,264,187.35 Reinvested dividends: \$224,095.64 Investment return: \$-32,644.87 (-2.58%)	96,515.87	15.42	12.76	1,488,282.99	1,231,542.48	-256,740.51	-17.25%	8,910.34	0.72%	2.34%	1.42%
VIRTUS KAR SMALL-CAP GROWTH FUND CLASS A CUSIP: 92828N627 Symbol: PSGAX Initial purchase date: Feb 08, 2017 Client investment: \$1,260,010.50 Reinvested dividends: \$79,929.95 Investment return: \$1,819,327.37 (144.39%)	62,843.63	21.32	49.00	1,339,940.45	3,079,337.87	1,739,397.42	129.81%	0.00	0.00%	5.86%	3.52%
Total Small Cap				\$3,889,293.89	\$5,631,878.36	\$1,742,584.47	44.80%	\$26,984.38	0.48%	10.72%	6.45%
Convertibles											
ESCROW GENERAL MTRS CORP 6.250% SER C DUE 07/15/33 CALLBL CONV CUSIP: 370ESC717 Initial purchase date: Jul 10, 2003	20,000.00	24.84	0.00	496,763.00	0.00	-496,763.00	-100.00%	0.00	0.00%	0.00%	0.00%
Total Convertibles				\$496,763.00	\$0.00	\$-496,763.00	-100.00%	\$0.00	0.00%	0.00%	0.00%
Total US				\$20,063,289.46	\$37,084,381.32	\$17,021,091.86	84.84%	\$566,684.43	1.53%	70.57%	42.44%
Global											
AMER FUNDS CAPITAL WORLD GROWTH & INCOME FUND CL A CUSIP: 140543109 Symbol: CWGIX Initial purchase date: Nov 12, 2010 Client investment: \$670,980.25 Reinvested dividends: \$384,354.01 Investment return: \$765,224.11 (114.05%)	27,635.26	38.19	51.97	1,055,334.26	1,436,204.36	380,870.10	36.09%	20,173.74	1.40%	2.73%	1.65%

Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Global											
COLUMBIA SELIGMAN COMMUNICATION AND INFORMATION FUND A CUSIP: 19766H429 Symbol: SLMCX Initial purchase date: Oct 19, 2001 Client investment: \$165,000.00 Reinvested dividends: \$2,912,438.45 Investment return: \$4,885,433.81 (2960.87%)	56,228.39	54.73	89.82	3,077,438.45	5,050,433.81	1,972,995.36	64.11%	0.00	0.00%	9.61%	5.78%
Total Global				\$4,132,772.71	\$6,486,638.17	\$2,353,865.46	56.96%	\$20,173.74	0.31%	12.35%	7.43%
Total Global				\$4,132,772.71	\$6,486,638.17	\$2,353,865.46	56.96%	\$20,173.74	0.31%	12.35%	7.43%
International											
Developed Markets											
CALL LINDE PLC EUR DUE 10/16/2027 270.000 2621Y8 CUSIP: 99UBBWVL3 Symbol: LIN Initial purchase date: Aug 12, 2020	-10.00	33,240.7	20.00	-3,324.07	-200.00	3,124.07	93.98%	0.00	0.00%	0.00%	0.00%
CALL RIO TINTO PLC SPON DUE 10/16/2020 55.000 4005C0 CUSIP: 99UBAXI60 Symbol: RIO Initial purchase date: May 20, 2020	-1.00	30,572.0	575.00	-305.72	-575.00	-269.28	-88.08%	0.00	0.00%	0.00%	0.00%
CHUBB LTD CHF CUSIP: H1467J104 Symbol: CB Initial purchase date: Apr 13, 2016	1,000.00	121.66	116.12	121,658.43	116,120.00	-5,538.43	-4.55%	3,120.00	2.69%	0.22%	0.13%
CLEARBRIDGE INTERNATIONAL GROWTH FUND CLASS I CUSIP: 524686524 Symbol: LMGNX Initial purchase date: Aug 12, 2020	61,736.91	58.59	59.01	3,616,886.15	3,643,094.94	26,208.79	0.72%	10,597.88	0.29%	6.93%	4.17%
DIAGEO PLC NEW GB SPON ADR CUSIP: 25243Q205 Symbol: DEO Initial purchase date: Feb 11, 2010	1,000.00	64.02	137.66	64,017.37	137,660.00	73,642.63	115.04%	3,550.38	2.58%	0.26%	0.16%
LINDE PLC EUR CUSIP: G5494J103 Symbol: LIN Initial purchase date: Sep 09, 2004	4,000.00	163.46	238.13	653,820.00	952,520.00	298,700.00	45.69%	15,408.00	1.62%	1.81%	1.09%
MEDTRONIC PLC CUSIP: G5960L103 Symbol: MDT Initial purchase date: Oct 09, 2019	1,165.00	107.77	103.92	125,550.50	121,066.80	-4,483.70	-3.57%	2,702.80	2.23%	0.23%	0.14%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
International											
PUT LINDE PLC EUR DUE 10/16/20185.000 2621Y8 CUSIP: 99UBBHP41 Symbol: LIN Initial purchase date: Sep 08, 2020	-10.00	9,653.30	20.00	-965.33	-200.00	765.33	79.28%	0.00	0.00%	0.00%	0.00%
RIO TINTO PLC SPON ADR CUSIP: 767204100 Symbol: RIO Initial purchase date: Sep 10, 2009	5,100.00	42.96	60.39	219,095.20	307,989.00	88,893.80	40.57%	19,686.00	6.39%	0.59%	0.35%
Total Developed Markets				\$4,796,432.53	\$5,277,475.74	\$481,043.21	10.03%	\$55,065.06	1.04%	10.04%	6.04%
Emerging Markets											
AMER FUNDS NEW WORLD FUND CLASS F2 CUSIP: 649280823 Symbol: NFFFX Initial purchase date: Feb 13, 2020	11,692.50	71.92	73.73	840,875.15	862,087.66	21,212.51	2.52%	11,014.33	1.28%	1.64%	0.99%
AMERICAN FUNDS NEW WORLD FUND CL A CUSIP: 649280104 Symbol: NEWFX Initial purchase date: Nov 12, 2015 Client investment: \$1,750,021.00 Reinvested dividends: \$188,857.74 Investment return: \$874,294.76 (49.96%)	35,550.20	54.54	73.82	1,938,878.74	2,624,315.76	685,437.02	35.35%	26,214.72	1.00%	4.99%	3.00%
SAMSUNG ELECTRS LTD GDR (EACH REP 25 COM STK KRW100) REG.S *GB LINE* CUSIP: 7960509A2 Initial purchase date: Jun 13, 2014	170.00	659.22	1,244.12	112,067.61	211,500.57	99,432.96	88.73%	0.00	0.00%	0.40%	0.24%
Total Emerging Markets				\$2,891,821.50	\$3,697,903.99	\$806,082.49	27.87%	\$37,229.05	1.01%	7.04%	4.23%
Total International				\$7,688,254.03	\$8,975,379.73	\$1,287,125.70	16.74%	\$92,294.11	1.03%	17.08%	10.27%
Total Equity				\$31,884,316.20	\$52,546,399.22	\$20,662,083.02	64.80%	\$679,152.28	1.29%	100.00%	60.14%
				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of asset class	% of Portfolio
Total Portfolio				\$66,068,206.28	\$87,372,750.18	\$21,304,543.90	32.25%	\$1,569,719.08	1.80%	100%	100%

Total accrued interest (included in market values): \$10,574.90

* Balanced mutual funds are displayed in unbundled view



Additional information about your portfolio

as of September 30, 2020

Benchmark composition

Account TX XX595

Blended Index

Start - Current: 70% MSCI World; 30% Barclays Agg Bond



Disclosures applicable to accounts at UBS Financial Services Inc.

This section contains important disclosures regarding the information and valuations presented here. All information presented is subject to change at any time and is provided only as of the date indicated. The information in this report is for informational purposes only and should not be relied upon as the basis of an investment or liquidation decision. UBS FS account statements and official tax documents are the only official record of your accounts and are not replaced, amended or superseded by any of the information presented in these reports. You should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise.

UBS FS offers a number of investment advisory programs to clients, acting in our capacity as an investment adviser, including fee-based financial planning, discretionary account management, non-discretionary investment advisory programs, and advice on the selection of investment managers and mutual funds offered through our investment advisory programs. When we act as your investment adviser, we will have a written agreement with you expressly acknowledging our investment advisory relationship with you and describing our obligations to you. At the beginning of our advisory relationship, we will give you our Form ADV brochure(s) for the program(s) you selected that provides detailed information about, among other things, the advisory services we provide, our fees, our personnel, our other business activities and financial industry affiliations and conflicts between our interests and your interests.

In our attempt to provide you with the highest quality information available, we have compiled this report using data obtained from recognized statistical sources and authorities in the financial industry. While we believe this information to be reliable, we cannot make any representations regarding its accuracy or completeness. Please keep this guide as your Advisory Review.

Please keep in mind that most investment objectives are long term. Although it is important to evaluate your portfolio's performance over multiple time periods, we believe the greatest emphasis should be placed on the longer period returns.

Please review the report content carefully and contact your Financial Advisor with any questions.

Client Accounts: This report may include all assets in the accounts listed and may include eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your accounts and does not reflect the performance of your accounts in the fee-based program. As a result, the performance reflected in this report can

vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. When shown on a report, the risk profile and return objectives describe your overall goals for these accounts. For each account you maintain, you choose one return objective and a primary risk profile. If you have questions regarding these objectives or wish to change them, please contact your Financial Advisor to update your account records.

Performance: This report presents account activity and performance depending on which inception type you've chosen. The two options are: (1) All Assets (Since Performance Start): This presents performance for all assets since the earliest possible date; (2) Advisory Assets (Advisory Strategy Start) for individual advisory accounts: This presents Advisory level performance since the Latest Strategy Start date; If an account that has never been managed is included in the consolidated report, the total performance of that unmanaged account will be included since inception.

Time-weighted Returns for accounts / SWP/AAP sleeves (Monthly periods): The report displays a time weighted rate of return (TWR) that is calculated using the Modified Dietz Method. This calculation uses the beginning and ending portfolio values for the month and weights each contribution/withdrawal based upon the day the cash flow occurred. Periods greater than one month are calculated by linking the monthly returns. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. All periods shown which are greater than 12 months are annualized. This applies to all performance for all assets before 09/30/2010, Advisory assets before 12/31/2010 and SWP sleeves before 04/30/2018.

Time-weighted Returns for accounts / SWP/AAP sleeves (Daily periods): The report displays a time weighted rate of return (TWR) that is calculated by dividing the portfolio's daily gain/loss by the previous day's closing market value plus the net value of cash flows that occurred during the day, if it was positive. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. Periods greater than one day are calculated by linking the daily returns. All periods shown which are greater than 12 months are annualized. For reports generated prior to 01/26/2018, the performance calculations used the account's end of day value on the performance inception (listed in the report under the column "ITD") and all cash flows were posted at end of day. As a result of the change, the overall rate of return (TWR) and beginning market value displayed can vary from prior generated reports. This

applies to all performance for all assets on or after 09/30/2010, Advisory assets on or after 12/31/2010, SWP/AAP sleeves on or after 04/30/2018 as well as all Asset Class and Security level returns.

Money-weighted returns: Money-weighted return (MWR) is a measure of the rate of return for an asset or portfolio of assets. It is calculated by finding the daily Internal Rate of Return (IRR) for the period and then compounding this return by the number of days in the period being measured. The MWR incorporates the size and timing of cash flows, so it is an effective measure of returns on a portfolio.

Annualized Performance: All performance periods greater than one year are calculated (unless otherwise stated) on an annualized basis, which represents the return on an investment multiplied or divided to give a comparable one year return.

Cumulative Performance: A cumulative return is the aggregate amount that an investment has gained or lost over time, independent of the period of time involved.

Net of Fees and Gross of Fees Performance: Performance is presented on a "net of fees" and "gross of fees" basis, where indicated. Net returns do not reflect Program and wrap fees prior to 10/31/10 for accounts that are billed separately via invoice through a separate account billing arrangement. Gross returns do not reflect the deduction of fees, commissions or other charges. The payment of actual fees and expenses will reduce a client's return. The compound effect of such fees and expenses should be considered when reviewing returns. For example, the net effect of the deduction of fees on annualized performance, including the compounded effect over time, is determined by the relative size of the fee and the account's investment performance. It should also be noted that where gross returns are compared to an index, the index performance also does not reflect any transaction costs, which would lower the performance results. Market index data maybe subject to review and revision.

Benchmark/Major Indices: The past performance of an index is not a guarantee of future results. Any benchmark is shown for informational purposes only and relates to historical performance of market indices and not the performance of actual investments. Although most portfolios use indices as benchmarks, portfolios are actively managed and generally are not restricted to investing only in securities in the index. As a result, your portfolio holdings and performance may vary substantially from the index. Each index reflects an unmanaged universe of securities without any deduction for advisory fees or other expenses that would reduce actual returns, as well as the reinvestment of all income and dividends. An actual investment in the securities included in the index would require an investor to incur transaction costs, which would lower the performance

results. Indices are not actively managed and investors cannot invest directly in the indices. Market index data maybe subject to review and revision. Further, there is no guarantee that an investor's account will meet or exceed the stated benchmark. Index performance information has been obtained from third parties deemed to be reliable. We have not independently verified this information, nor do we make any representations or warranties to the accuracy or completeness of this information.

Blended Index - For Advisory accounts, Blended Index is designed to reflect the asset categories in which your account is invested. For Brokerage accounts, you have the option to select any benchmark from the list.

For certain products, the blended index represents the investment style corresponding to your client target allocation. If you change your client target allocation, your blended index will change in step with your change to your client target allocation.

Blended Index 2 - 8 - are optional indices selected by you which may consist of a blend of indexes. For advisory accounts, these indices are for informational purposes only. Depending on the selection, the benchmark selected may not be an appropriate basis for comparison of your portfolio based on it's holdings.

Custom Time Periods: If represented on this report, the performance start date and the performance end date have been selected by your Financial Advisor in order to provide performance and account activity information for your account for the specified period of time only. As a result, only a portion of your account's activity and performance information is presented in the performance report, and, therefore, presents a distorted representation of your account's activity and performance.

Net Deposits/Withdrawals: When shown on a report, this information represents the net value of all cash and securities contributions and withdrawals, program fees (including wrap fees) and other fees added to or subtracted from your accounts from the first day to the last day of the period. When fees are shown separately, net deposits / withdrawals does not include program fees (including wrap fees). When investment return is displayed net deposits / withdrawals does not include program fees (including wrap fees). For security contributions and withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts. Wrap fees will be included in this calculation except when paid via an invoice or through a separate accounts billing arrangement. When shown on Client summary and/or Portfolio review report, program fees (including wrap fees) may not be included in net deposits/withdrawals. PACE Program fees paid from sources other than your PACE account are treated as a contribution. A PACE



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

Program Fee rebate that is not reinvested is treated as a withdrawal.

Deposits: When shown on a report, this information represents the net value of all cash and securities contributions added to your accounts from the first day to the last day of the period. On Client Summary Report and/or Portfolio Review Report, this may exclude the Opening balance. For security contributions, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Withdrawals: When shown on a report, this information represents the net value of all cash and securities withdrawals subtracted from your accounts from the first day to the last day of the period. On Client summary and/or portfolio review report Withdrawals may not include program fees (including wrap fees). For security withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Dividends/Interest: Dividend and interest earned, when shown on a report, does not reflect your account's tax status or reporting requirements. Use only official tax reporting documents (i.e. 1099) for tax reporting purposes. The classification of private investment distributions can only be determined by referring to the official year-end tax-reporting document provided by the issuer.

Change in Accrued Interest: When shown on a report, this information represents the difference between the accrued interest at the beginning of the period from the accrued interest at the end of the period.

Change in Value: Represents the change in value of the portfolio during the reporting period, excluding additions/withdrawals, dividend and interest income earned and accrued interest. Change in Value may include programs fees (including wrap fees) and other fees.

Fees: Fees represented in this report include program and wrap fees. Program and wrap fees prior to October 1, 2010 for accounts that are billed separately via invoice through a separate account billing arrangement are not included in this report.

Performance Start Date Changes: The Performance Start Date for accounts marked with a 'A' have changed. Performance figures of an account with a changed Performance Start Date may not include the entire history of the account. The new Performance Start Date will generate performance returns and activity information for a shorter period than is available at UBS FS. As a result, the overall performance of these accounts may generate better performance than the period of time that would be included if the report used the inception date of the account. UBS FS recommends

reviewing performance reports that use the inception date of the account because reports with longer time frames are usually more helpful when evaluating investment programs and strategies. Performance reports may include accounts with inception dates that precede the new Performance Start Date and will show performance and activity information from the earliest available inception date. The change in Performance Start Date may be the result of a performance gap due to a zero-balance that prevents the calculation of continuous returns from the inception of the account. The Performance Start Date may also change if an account has failed one of our performance data integrity tests. In such instances, the account will be labeled as 'Review Required' and performance prior to that failure will be restricted. Finally, the Performance Start Date will change if you have explicitly requested a performance restart. Please contact your Financial Advisor for additional details regarding your new Performance Start Date.

Closed Account Performance: Accounts that have been closed may be included in the consolidated performance report. When closed accounts are included in the consolidated report, the performance report will only include information for the time period the account was active during the consolidated performance reporting time period.

Portfolio: For purposes of this report "portfolio" is defined as all of the accounts presented on the cover page or the header of this report and does not necessarily include all of the client's accounts held at UBS FS or elsewhere.

Percentage: Portfolio (in the "% Portfolio / Total" column) includes all holdings held in the account(s) selected when this report was generated. Broad asset class (in the "% broad asset class" column) includes all holdings held in that broad asset class in the account(s) selected when this report was generated.

Tax lots: This report displays security tax lots as either one line item (i.e., lumped tax lots) or as separate tax lot level information. If you choose to display security tax lots as one line item, the total cost equals the total value of all tax lots. The unit cost is an average of the total cost divided by the total number of shares. If the shares were purchased in different lots, the unit price listed does not represent the actual cost paid for each lot. The unrealized gain/loss value is calculated by combining the total value of all tax lots plus or minus the total market value of the security.

If you choose to display tax lot level information as separate line items on the Portfolio Holdings report, the tax lot information may include information from sources other than UBS FS. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other

than UBS FS. As a result this information may not be accurate and is provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. See your monthly statement for additional information.

Pricing: All securities are priced using the closing price reported on the last business day preceding the date of this report. Every reasonable attempt has been made to accurately price securities; however, we make no warranty with respect to any security's price. Please refer to the back of the first page of your UBS FS account statement for important information regarding the pricing used for certain types of securities, the sources of pricing data and other qualifications concerning the pricing of securities. To determine the value of securities in your account, we generally rely on third party quotation services. If a price is unavailable or believed to be unreliable, we may determine the price in good faith and may use other sources such as the last recorded transaction. When securities are held at another custodian or if you hold illiquid or restricted securities for which there is no published price, we will generally rely on the value provided by the custodian or issuer of that security.

Cash: Cash on deposit at UBS Bank USA is protected by the Federal Deposit Insurance Corporation (FDIC) up to \$250,000 in principal and accrued interest per depositor for each ownership type. Deposits made in an individual's own name, joint name, or individual retirement account are each held in a separate type of ownership. Such deposits are not guaranteed by UBS FS. More information is available upon request.

Margin: The quantity value may indicate that all or part of this position is held on margin or held in the short account. When an account holds a debit balance, this debit balance is incorporated into the account's total market value and deducted from the total value. When calculating the percent of portfolio on each security, the percentage will be impacted by the total market value of the account. Therefore, if the account's market value is reduced by a debit value of a holding the percent of portfolio will be greater and if the account's market value is increased by a holding then the percent of portfolio will be less.

Mutual Fund Asset Allocation: If the option to unbundle balanced mutual funds is selected and if a fund's holdings data is available, mutual funds will be classified by the asset class, subclass, and style breakdown of their underlying holdings. Where a mutual fund or ETF contains equity holdings from multiple equity sectors, this report will proportionately allocate the underlying holdings of the fund to those sectors measured as a percentage of the total fund's asset value as of the date shown.

This information is supplied by Morningstar, Inc. on a daily basis to UBS FS based on data supplied by the fund which may not be current. Mutual funds change their portfolio holdings on a regular (often daily) basis. Accordingly, any analysis that includes mutual funds may not accurately reflect the current composition of these funds. If a fund's underlying holding data is not available, it will be classified based on its corresponding overall Morningstar classification. All data is as of the date indicated in the report.

All pooled investment vehicles (such as mutual funds, closed end mutual funds, and exchange traded funds) incorporate internal management and operation expenses, which are reflected in the performance returns. Please see relevant fund prospectus for more information. Please note, performance for mutual funds is inclusive of multiple share classes.

Ineligible Assets: We require that you hold and purchase only eligible managed assets in your advisory accounts. Please contact your Financial Advisor for a list of the eligible assets in your program. These reports may provide performance information for eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your advisory assets. As a result, the performance reflected in this report can vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. Neither UBS nor your Financial Advisor will act as your investment adviser with respect to Ineligible Assets.

Equity Style: The Growth, Value and Core labels are determined by Morningstar. If an Equity Style is unclassified, it is due to non-availability of data required by Morningstar to assign it a particular style.

Equity Capitalization: Market Capitalization is determined by Morningstar. Equity securities are classified as Large Cap, Mid Cap or Small Cap by Morningstar. Unclassified securities are those for which no capitalization is available on Morningstar.

Equity Sectors: The Equity sector analysis may include a variety of accounts, each with different investment and risk parameters. As a result, the overweighting or underweighting in a particular sector or asset class should not be viewed as an isolated factor in making investment/liquidation decisions; but should be assessed on an account by account basis to determine the overall impact on the account's portfolio.

Classified Equity: Classified equities are defined as those equities for which the firm can confirm the specific



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

industry and sector of the underlying equity instrument.

Estimated Annual Income: The Estimated Annual Income is calculated by summing the previous four dividend/interest rates per share and multiplying by the quantity of shares held in the selected account(s) as of the End Date of Report. For savings product & sweep funds this value is not calculated and is displayed as 0.

Current Yield: Current yield is defined as the estimated annual income divided by the total market value.

Credit/Event Risk: Investments are subject to event risk and changes in credit quality of the issuer. Issuers can experience economic situations that may have adverse effects on the market value of their securities.

Interest Rate Risk: Bonds are subject to market value fluctuations as interest rates rise and fall. If sold prior to maturity, the price received for an issue may be less than the original purchase price.

Reinvestment Risk: Since most corporate issues pay interest semiannually, the coupon payments over the life of the bond can have a major impact on the bond's total return.

Accrued Interest: Interest that has accumulated between the most recent payment and the report date may be reflected in market values for interest bearing securities.

Gain/Loss: The gain/loss information may include calculations based upon non-UBS FS cost basis information. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS FS. In addition, if this report contains positions with unavailable cost basis, the gain/(loss) for these positions are excluded in the calculation for the Gain/(Loss). As a result these figures may not be accurate and are provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. Rely only on year-end tax forms when preparing your tax return. See your monthly statement for additional information.

The account listing may or may not include all of your accounts with UBS FS. The accounts included in this report are listed under the "Accounts included in this review" shown on the first page or listed at the top of each page. If an account number begins with "@" this denotes assets or liabilities held at other financial institutions. Information about these assets, including valuation, account type and cost basis, is based on the information you provided to us, or provided to us by third party data aggregators or custodians at your direction. We have not verified, and are not responsible for, the accuracy or completeness of this information.

Account name(s) displayed in this report and labels used for groupings of accounts can be customizable "nicknames" chosen by you to assist you with your recordkeeping or may have been included by your financial advisor for reference purposes only. The names used have no legal effect, are not intended to reflect any strategy, product, recommendation, investment objective or risk profile associated with your accounts or any group of accounts, and are not a promise or guarantee that wealth, or any financial results, can or will be achieved. All investments involve the risk of loss, including the risk of loss of the entire investment.

For more information about account or group names, or to make changes, contact your Financial Advisor.

Account changes: At UBS, we are committed to helping you work toward your financial goals. So that we may continue providing you with financial advice that is consistent with your investment objectives, please consider the following two questions:

- 1) Have there been any changes to your financial situation or investment objectives?
 - 2) Would you like to implement or modify any restrictions regarding the management of your account?
- If the answer to either question is "yes," it is important that you contact your Financial Advisor as soon as possible to discuss these changes. For MAC advisory accounts, please contact your investment manager directly if you would like to impose or change any investment restrictions on your account.

ADV disclosure: A complimentary copy of our current Form ADV Disclosure Brochure that describes the advisory program and related fees is available through your Financial Advisor. Please contact your Financial Advisor if you have any questions.

Important information for former Piper Jaffray and McDonald Investments clients:

As an accommodation to former Piper Jaffray and McDonald Investments clients, these reports include performance history for their Piper Jaffray accounts prior to August 12, 2006 and McDonald Investments accounts prior to February 9, 2007, the date the respective accounts were converted to UBS FS. UBS FS has not independently verified this information nor do we make any representations or warranties as to the accuracy or completeness of that information and will not be liable to you if any such information is unavailable, delayed or inaccurate.

For insurance, annuities, and 529 Plans, UBS FS relies on information obtained from third party services it believes to be reliable. UBS FS does not independently verify or guarantee the accuracy or validity of any information provided by third parties. Information for insurance, annuities, and 529 Plans that has been provided by a third party service may not reflect the quantity and market value as of the previous business day. When

available, an "as of" date is included in the description.

Investors outside the U.S. are subject to securities and tax regulations within their applicable jurisdiction that are not addressed in this report. Nothing in this report shall be construed to be a solicitation to buy or offer to sell any security, product or service to any non-U.S. investor, nor shall any such security, product or service be solicited, offered or sold in any jurisdiction where such activity would be contrary to the securities laws or other local laws and regulations or would subject UBS to any registration requirement within such jurisdiction.

Performance History prior to the account's inception at UBS Financial Services, Inc. may have been included in this report and is based on data provided by third party sources. UBS Financial Services Inc. has not independently verified this information nor does UBS Financial Services Inc. guarantee the accuracy or validity of the information.

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Sources of portfolio value

as of September 30, 2020

\$ Millions

TX XX600 • NAIC • Defined Benefit

Prepared for

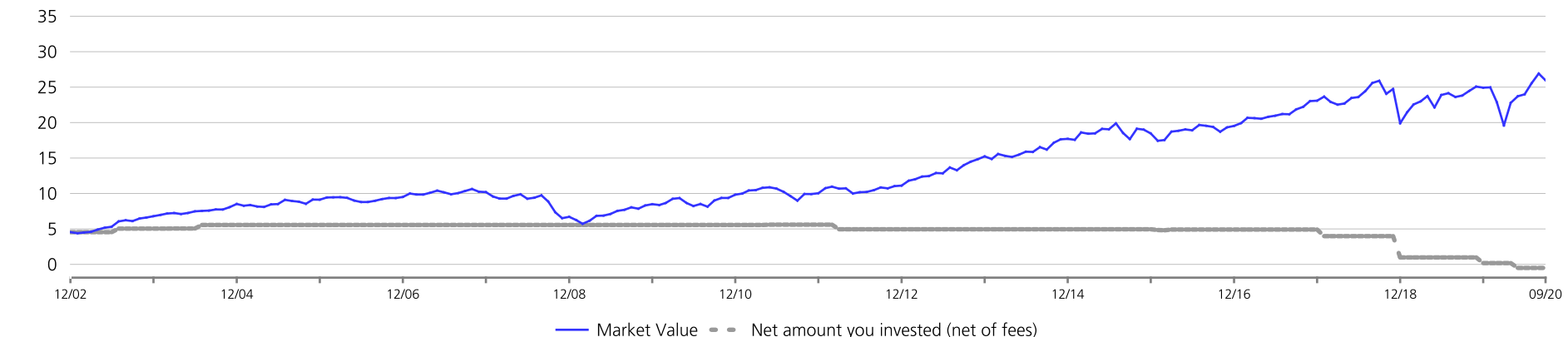
CITY OF TROY

Risk profile:

Moderate

Return Objective:

Current Income and Capital Appreciation



	MTD 08/31/2020 to 09/30/2020	QTD 06/30/2020 to 09/30/2020	YTD 12/31/2019 to 09/30/2020	1 Year 09/30/2019 to 09/30/2020	3 Years 09/30/2017 to 09/30/2020	5 Years 09/30/2015 to 09/30/2020	7 Years 09/30/2013 to 09/30/2020	10 Years 09/30/2010 to 09/30/2020	ITD 12/31/2002 to 09/30/2020
Opening value	26,918,765.85	23,984,129.54	24,925,322.41	23,819,325.70	21,856,584.88	17,667,892.14	13,984,124.49	9,003,563.71	4,545,750.56
Net deposits/withdrawals	0.00	0.00	-683,401.67	-1,481,270.67	-5,415,320.67	-5,453,320.67	-5,453,370.67	-6,061,402.34	-5,048,099.02
Div./interest income	30,641.00	65,277.65	207,056.63	276,833.68	825,245.76	1,273,874.64	1,612,035.20	1,978,788.60	2,613,846.57
Change in accr. interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change in value	-994,644.78	1,905,354.88	1,505,784.70	3,339,873.36	8,688,252.10	12,466,315.96	15,811,973.05	21,033,812.10	23,843,263.96
Closing value	25,954,762.07	25,954,762.07	25,954,762.07	25,954,762.07	25,954,762.07	25,954,762.07	25,954,762.07	25,954,762.07	25,954,762.07
Gross Time-weighted ROR	-3.58	8.23	7.33	15.97	15.04	13.58	13.27	14.68	11.27
Net Time-weighted ROR	-3.58	8.22	7.25	15.89	14.77	13.39	13.11	14.55	11.20

Performance returns are annualized after 1 year. Net deposits and withdrawals include program and account fees.

Benchmarks - Annualized time-weighted returns

Blended Index	-2.40	5.85	4.02	10.35	7.73	9.22	7.64	8.26	7.90
US Treasury Bill - 3 Mos	0.01	0.03	0.52	0.96	1.60	1.12	0.81	0.59	1.27
Barclays Agg Bond	-0.05	0.62	6.79	6.98	5.24	4.17	3.97	3.63	4.36
MSCI Emerging Markets-PR	-1.77	8.73	-2.93	8.09	0.01	6.43	1.31	0.06	7.65
Russell 2000	-3.34	4.93	-8.69	0.39	1.77	7.99	6.42	9.84	9.48
S&P 500	-3.80	8.93	5.57	15.15	12.27	14.13	12.67	13.73	10.06

Blended Index: Start - Current: 70% MSCI World; 30% Barclays Agg Bond

Past performance does not guarantee future results and current performance may be lower/higher than past data presented.



Portfolio holdings

as of September 30, 2020

Summary of Portfolio Holdings

TX XX600 • NAIC • Defined Benefit

Prepared for

CITY OF TROY

Risk profile:

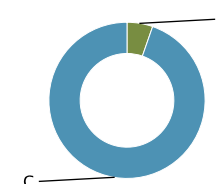
Moderate

Return Objective:

Current Income and Capital Appreciation

	Cost basis (\$)	Value on 09/30/2020 (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Portfolio
A Cash	1,383,219.05	1,383,219.05	0.00	0.00%	2,114.67	0.15%	5.33%
Cash	1,383,219.05	1,383,219.05	0.00	0.00%	2,114.67	0.15%	5.33%
US	1,383,219.05	1,383,219.05	0.00	0.00%	2,114.67	0.15%	5.33%
B Fixed Income	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
C Equity	9,429,687.31	24,571,543.02	15,141,855.71	160.58%	260,058.32	1.06%	94.67%
US	8,680,585.08	23,733,623.02	15,053,037.94	173.41%	253,658.32	1.07%	91.44%
Large Cap	4,048,137.00	16,714,894.02	12,666,757.02	312.90%	176,018.32	1.05%	64.40%
Mid Cap	3,262,478.25	5,923,889.00	2,661,410.75	81.58%	59,240.00	1.00%	22.82%
Small Cap	1,369,969.83	1,094,840.00	-275,129.83	-20.08%	18,400.00	1.68%	4.22%
International	749,102.23	837,920.00	88,817.77	11.86%	6,400.00	0.76%	3.23%
International	84,933.90	252,120.00	167,186.10	196.84%	0.00	0.00%	0.97%
Developed Markets	664,168.33	585,800.00	-78,368.33	-11.80%	6,400.00	1.09%	2.26%
D Commodities	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
E Non-Traditional	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
F Other	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
Total Portfolio	\$10,812,906.36	\$25,954,762.07	\$15,141,855.71	140.04%	\$262,172.99	1.01%	100%

Balanced mutual funds represented in multiple asset classes based on Morningstar allocations





Portfolio holdings - as of September 30, 2020 (continued)

Details of portfolio holdings

				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of asset class	% of Portfolio
Total Portfolio				\$10,812,906.36	\$25,954,762.07	\$15,141,855.71	140.04%	\$262,172.99	1.01%	100%	100%

	Quantity	Purchase price (\$)/ Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Cash	% of Portfolio
Cash											
US											
LIQUID ASSETS GOVT FUND	1,383,219.05	1.00	1.00	1,383,219.05	1,383,219.05	0.00	0.00%	2,114.67	0.15%	100.00%	5.33%
CUSIP: 90262Y307 Symbol: MMLIRA											
Total US				\$1,383,219.05	\$1,383,219.05	\$0.00	0.00%	\$2,114.67	0.15%	100.00%	5.33%
Total Cash				\$1,383,219.05	\$1,383,219.05	\$0.00	0.00%	\$2,114.67	0.15%	100.00%	5.33%
Total Cash				\$1,383,219.05	\$1,383,219.05	\$0.00	0.00%	\$2,114.67	0.15%	100.00%	5.33%

	Quantity	Purchase price (\$)/ Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Equity											
US											
Large Cap											
ABBOTT LABS	9,224.00	31.23	108.83	288,067.67	1,003,847.92	715,780.25	248.48%	13,282.56	1.32%	4.09%	3.87%
CUSIP: 002824100 Symbol: ABT											
Initial purchase date: Sep 12, 2002											
APPLE INC	20,000.00	23.25	115.81	464,997.94	2,316,200.00	1,851,202.06	398.11%	16,400.00	0.71%	9.43%	8.92%
CUSIP: 037833100 Symbol: AAPL											
Initial purchase date: Jun 12, 2014											
AUTOMATIC DATA PROCESSNG INC	2,000.00	29.12	139.49	58,245.59	278,980.00	220,734.41	378.97%	7,280.00	2.61%	1.14%	1.07%
CUSIP: 053015103 Symbol: ADP											
Initial purchase date: Aug 01, 2002											
BLACKROCK INC	700.00	403.43	563.55	282,399.34	394,485.00	112,085.66	39.69%	10,164.00	2.58%	1.61%	1.52%
CUSIP: 09247X101 Symbol: BLK											
Initial purchase date: Jan 09, 2019											
BOOKING HLDGS INC	200.00	1,908.50	1,710.68	381,699.89	342,136.00	-39,563.89	-10.37%	0.00	0.00%	1.39%	1.32%
CUSIP: 09857L108 Symbol: BKNG											
Initial purchase date: Feb 26, 2019											



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
CENTENE CORP CUSIP: 15135B101 Symbol: CNC Initial purchase date: Mar 25, 2019	4,732.00	66.76	58.33	315,908.32	276,017.56	-39,890.76	-12.63%	0.00	0.00%	1.12%	1.06%
CIGNA CORP CUSIP: 125523100 Symbol: CI Initial purchase date: Jun 07, 2011	394.00	182.19	169.41	71,780.89	66,747.54	-5,033.35	-7.01%	15.76	0.02%	0.27%	0.26%
COMCAST CORP NEW CL A CUSIP: 20030N101 Symbol: CMCSA Initial purchase date: Jan 09, 2019	7,800.00	36.14	46.26	281,865.28	360,828.00	78,962.72	28.01%	7,176.00	1.99%	1.47%	1.39%
CROWN CASTLE INTL CORP REIT CUSIP: 22822V101 Symbol: CCI Initial purchase date: Nov 28, 2016	2,700.00	85.14	166.50	229,878.93	449,550.00	219,671.07	95.56%	12,960.00	2.88%	1.83%	1.73%
DANAHER CORP CUSIP: 235851102 Symbol: DHR Initial purchase date: Sep 12, 2002	8,000.00	11.05	215.33	88,427.98	1,722,640.00	1,634,212.02	1,848.07%	5,760.00	0.33%	7.01%	6.64%
FACEBOOK INC CL A CUSIP: 30303M102 Symbol: FB Initial purchase date: May 29, 2019	4,000.00	185.11	261.90	740,424.45	1,047,600.00	307,175.55	41.49%	0.00	0.00%	4.26%	4.04%
FASTENAL CO CUSIP: 311900104 Symbol: FAST Initial purchase date: Sep 27, 2000	16,000.00	3.63	45.09	58,125.00	721,440.00	663,315.00	1,141.19%	16,000.00	2.22%	2.94%	2.78%
GILEAD SCIENCES INC CUSIP: 375558103 Symbol: GILD Initial purchase date: Dec 16, 2008	14,000.00	22.05	63.19	308,721.43	884,660.00	575,938.57	186.56%	38,080.00	4.30%	3.60%	3.41%
O REILLY AUTOMOTIVE INC CUSIP: 67103H107 Symbol: ORLY Initial purchase date: Jan 09, 2004	1,650.00	18.39	461.08	30,335.46	760,782.00	730,446.54	2,407.90%	0.00	0.00%	3.10%	2.93%
ROPER TECHNOLOGIES INC CUSIP: 776696106 Symbol: ROP Initial purchase date: Aug 01, 2002	4,000.00	15.11	395.11	60,440.25	1,580,440.00	1,519,999.75	2,514.88%	8,200.00	0.52%	6.43%	6.09%
STRYKER CORP CUSIP: 863667101 Symbol: SYK Initial purchase date: Jul 17, 1997	13,000.00	16.05	208.37	208,628.87	2,708,810.00	2,500,181.13	1,198.39%	29,900.00	1.10%	11.02%	10.44%
VISA INC CL A CUSIP: 92826C839 Symbol: V Initial purchase date: Mar 30, 2011	9,000.00	19.80	199.97	178,189.71	1,799,730.00	1,621,540.29	910.01%	10,800.00	0.60%	7.32%	6.93%
Total Large Cap				\$4,048,137.00	\$16,714,894.02	\$12,666,757.02	312.90%	\$176,018.32	1.05%	68.02%	64.40%
Mid Cap											
AMETEK INC (NEW) CUSIP: 031100100 Symbol: AME Initial purchase date: Mar 06, 2017	2,500.00	55.08	99.40	137,689.36	248,500.00	110,810.64	80.48%	1,800.00	0.72%	1.01%	0.96%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
CARMAX INC CUSIP: 143130102 Symbol: KMX Initial purchase date: Jun 12, 2014	5,000.00	44.47	91.91	222,371.77	459,550.00	237,178.23	106.66%	0.00	0.00%	1.87%	1.77%
COGNEX CORP CUSIP: 192422103 Symbol: CGNX Initial purchase date: Jun 07, 2011	8,000.00	8.42	65.10	67,345.65	520,800.00	453,454.35	673.32%	1,760.00	0.34%	2.12%	2.01%
D R HORTON INC CUSIP: 23331A109 Symbol: DHI Initial purchase date: Jan 09, 2019	7,000.00	40.09	75.63	280,621.20	529,410.00	248,788.80	88.66%	4,900.00	0.93%	2.15%	2.04%
EAST WEST BANCORP INC CUSIP: 27579R104 Symbol: EWBC Initial purchase date: Jan 09, 2019	5,500.00	47.90	32.74	263,460.51	180,070.00	-83,390.51	-31.65%	6,050.00	3.36%	0.73%	0.69%
F5 NETWORKS INC CUSIP: 315616102 Symbol: FFIV Initial purchase date: Mar 02, 2015	5,800.00	118.85	122.77	689,354.72	712,066.00	22,711.28	3.29%	0.00	0.00%	2.90%	2.74%
GENTEX CORP CUSIP: 371901109 Symbol: GNTX Initial purchase date: Mar 02, 2015	5,000.00	17.82	25.75	89,080.35	128,750.00	39,669.65	44.53%	2,400.00	1.86%	0.52%	0.50%
LKQ CORP NEW CUSIP: 501889208 Symbol: LKQ Initial purchase date: Dec 10, 2009	4,000.00	9.25	27.73	36,990.75	110,920.00	73,929.25	199.86%	0.00	0.00%	0.45%	0.43%
OLD DOMINION FREIGHT LINES INC CUSIP: 679580100 Symbol: ODFL Initial purchase date: Jan 09, 2019	3,150.00	86.10	180.92	271,215.60	569,898.00	298,682.40	110.13%	1,890.00	0.33%	2.32%	2.20%
REALTY INCOME CORP MD SBI CUSIP: 756109104 Symbol: O Initial purchase date: May 26, 2015	5,000.00	47.19	60.75	235,951.92	303,750.00	67,798.08	28.73%	14,040.00	4.62%	1.24%	1.17%
SIGNATURE BANK NEW YORK N Y CUSIP: 82669G104 Symbol: SBNY Initial purchase date: Jan 09, 2019	2,500.00	111.91	82.99	279,777.82	207,475.00	-72,302.82	-25.84%	5,600.00	2.70%	0.84%	0.80%
SKYWORKS SOLUTIONS INC CUSIP: 83088M102 Symbol: SWKS Initial purchase date: Feb 26, 2019	4,000.00	83.16	145.50	332,628.80	582,000.00	249,371.20	74.97%	8,000.00	1.37%	2.37%	2.24%
TRACTOR SUPPLY COMPANY CUSIP: 892356106 Symbol: TSCO Initial purchase date: Apr 14, 2008	8,000.00	9.12	143.34	72,965.85	1,146,720.00	1,073,754.15	1,471.58%	12,800.00	1.12%	4.67%	4.41%
ULTA BEAUTY, INC CUSIP: 90384S303 Symbol: ULTA Initial purchase date: Jan 09, 2019	1,000.00	283.02	223.98	283,023.95	223,980.00	-59,043.95	-20.86%	0.00	0.00%	0.91%	0.86%
Total Mid Cap				\$3,262,478.25	\$5,923,889.00	\$2,661,410.75	81.58%	\$59,240.00	1.00%	24.11%	22.82%



Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Small Cap											
AIR LEASE CORP CL A CUSIP: 00912X302 Symbol: AL Initial purchase date: Aug 29, 2016	4,000.00	28.94	29.42	115,761.25	117,680.00	1,918.75	1.66%	2,400.00	2.04%	0.48%	0.45%
DAVE & BUSTERS ENTMT INC CUSIP: 238337109 Symbol: PLAY Initial purchase date: Feb 26, 2019	5,000.00	51.13	15.16	255,673.62	75,800.00	-179,873.62	-70.35%	0.00	0.00%	0.31%	0.29%
KAR AUCTION SVCS INC CUSIP: 48238T109 Symbol: KAR Initial purchase date: Nov 30, 2015	5,000.00	14.97	14.40	74,834.68	72,000.00	-2,834.68	-3.79%	0.00	0.00%	0.29%	0.29%
META FINANCIAL GROUP INC CUSIP: 59100U108 Symbol: CASH Initial purchase date: Feb 19, 2019	5,000.00	25.65	19.22	128,234.81	96,100.00	-32,134.81	-25.06%	1,000.00	1.04%	0.39%	0.37%
PATRICK INDUST INC CUSIP: 703343103 Symbol: PATK Initial purchase date: Jan 09, 2019	8,000.00	35.72	57.52	285,733.51	460,160.00	174,426.49	61.05%	8,000.00	1.74%	1.87%	1.77%
SUPERNUS PHARMACEUTICALS INC CUSIP: 868459108 Symbol: SUPN Initial purchase date: Jan 09, 2019	7,500.00	36.70	20.84	275,240.06	156,300.00	-118,940.06	-43.21%	0.00	0.00%	0.64%	0.60%
TCF FINL CORP NEW CUSIP: 872307103 Symbol: TCF Initial purchase date: Feb 26, 2019	5,000.00	46.90	23.36	234,491.90	116,800.00	-117,691.90	-50.19%	7,000.00	5.99%	0.48%	0.45%
Total Small Cap				\$1,369,969.83	\$1,094,840.00	\$-275,129.83	-20.08%	\$18,400.00	1.68%	4.46%	4.22%
Total US				\$8,680,585.08	\$23,733,623.02	\$15,053,037.94	173.41%	\$253,658.32	1.07%	96.59%	91.44%
International											
International											
FABRINET CUSIP: G3323L100 Symbol: FN Initial purchase date: Mar 30, 2011	4,000.00	21.23	63.03	84,933.90	252,120.00	167,186.10	196.84%	0.00	0.00%	1.03%	0.97%
Total International				\$84,933.90	\$252,120.00	\$167,186.10	196.84%	\$0.00	0.00%	1.03%	0.97%
Developed Markets											
ESSENT GROUP LTD CUSIP: G3198U102 Symbol: ESNT Initial purchase date: Feb 19, 2019	10,000.00	44.52	37.01	445,167.08	370,100.00	-75,067.08	-16.86%	6,400.00	1.73%	1.51%	1.43%

Portfolio holdings - as of September 30, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/30/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
International											
SENSATA TECHNOLOGIES HLDG PLC EUR CUSIP: G8060N102 Symbol: ST Initial purchase date: May 29, 2019	5,000.00	43.80	43.14	219,001.25	215,700.00	-3,301.25	-1.51%	0.00	0.00%	0.88%	0.83%
Total Developed Markets				\$664,168.33	\$585,800.00	\$-78,368.33	-11.80%	\$6,400.00	1.09%	2.38%	2.26%
Total International				\$749,102.23	\$837,920.00	\$88,817.77	11.86%	\$6,400.00	0.76%	3.41%	3.23%
Total Equity				\$9,429,687.31	\$24,571,543.02	\$15,141,855.71	160.58%	\$260,058.32	1.06%	100.00%	94.67%
				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of asset class	% of Portfolio
Total Portfolio				\$10,812,906.36	\$25,954,762.07	\$15,141,855.71	140.04%	\$262,172.99	1.01%	100%	100%

Total accrued interest (included in market values): \$0.00

* Balanced mutual funds are displayed in unbundled view



Additional information about your portfolio

as of September 30, 2020

Benchmark composition

Account TX XX600

Blended Index

Start - Current: 70% MSCI World; 30% Barclays Agg Bond



Disclosures applicable to accounts at UBS Financial Services Inc.

This section contains important disclosures regarding the information and valuations presented here. All information presented is subject to change at any time and is provided only as of the date indicated. The information in this report is for informational purposes only and should not be relied upon as the basis of an investment or liquidation decision. UBS FS account statements and official tax documents are the only official record of your accounts and are not replaced, amended or superseded by any of the information presented in these reports. You should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise.

UBS FS offers a number of investment advisory programs to clients, acting in our capacity as an investment adviser, including fee-based financial planning, discretionary account management, non-discretionary investment advisory programs, and advice on the selection of investment managers and mutual funds offered through our investment advisory programs. When we act as your investment adviser, we will have a written agreement with you expressly acknowledging our investment advisory relationship with you and describing our obligations to you. At the beginning of our advisory relationship, we will give you our Form ADV brochure(s) for the program(s) you selected that provides detailed information about, among other things, the advisory services we provide, our fees, our personnel, our other business activities and financial industry affiliations and conflicts between our interests and your interests.

In our attempt to provide you with the highest quality information available, we have compiled this report using data obtained from recognized statistical sources and authorities in the financial industry. While we believe this information to be reliable, we cannot make any representations regarding its accuracy or completeness. Please keep this guide as your Advisory Review.

Please keep in mind that most investment objectives are long term. Although it is important to evaluate your portfolio's performance over multiple time periods, we believe the greatest emphasis should be placed on the longer period returns.

Please review the report content carefully and contact your Financial Advisor with any questions.

Client Accounts: This report may include all assets in the accounts listed and may include eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your accounts and does not reflect the performance of your accounts in the fee-based program. As a result, the performance reflected in this report can

vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. When shown on a report, the risk profile and return objectives describe your overall goals for these accounts. For each account you maintain, you choose one return objective and a primary risk profile. If you have questions regarding these objectives or wish to change them, please contact your Financial Advisor to update your account records.

Performance: This report presents account activity and performance depending on which inception type you've chosen. The two options are: (1) All Assets (Since Performance Start): This presents performance for all assets since the earliest possible date; (2) Advisory Assets (Advisory Strategy Start) for individual advisory accounts: This presents Advisory level performance since the Latest Strategy Start date; If an account that has never been managed is included in the consolidated report, the total performance of that unmanaged account will be included since inception.

Time-weighted Returns for accounts / SWP/AAP sleeves (Monthly periods): The report displays a time weighted rate of return (TWR) that is calculated using the Modified Dietz Method. This calculation uses the beginning and ending portfolio values for the month and weights each contribution/withdrawal based upon the day the cash flow occurred. Periods greater than one month are calculated by linking the monthly returns. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. All periods shown which are greater than 12 months are annualized. This applies to all performance for all assets before 09/30/2010, Advisory assets before 12/31/2010 and SWP sleeves before 04/30/2018.

Time-weighted Returns for accounts / SWP/AAP sleeves (Daily periods): The report displays a time weighted rate of return (TWR) that is calculated by dividing the portfolio's daily gain/loss by the previous day's closing market value plus the net value of cash flows that occurred during the day, if it was positive. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. Periods greater than one day are calculated by linking the daily returns. All periods shown which are greater than 12 months are annualized. For reports generated prior to 01/26/2018, the performance calculations used the account's end of day value on the performance inception (listed in the report under the column "ITD") and all cash flows were posted at end of day. As a result of the change, the overall rate of return (TWR) and beginning market value displayed can vary from prior generated reports. This

applies to all performance for all assets on or after 09/30/2010, Advisory assets on or after 12/31/2010, SWP/AAP sleeves on or after 04/30/2018 as well as all Asset Class and Security level returns.

Money-weighted returns: Money-weighted return (MWR) is a measure of the rate of return for an asset or portfolio of assets. It is calculated by finding the daily Internal Rate of Return (IRR) for the period and then compounding this return by the number of days in the period being measured. The MWR incorporates the size and timing of cash flows, so it is an effective measure of returns on a portfolio.

Annualized Performance: All performance periods greater than one year are calculated (unless otherwise stated) on an annualized basis, which represents the return on an investment multiplied or divided to give a comparable one year return.

Cumulative Performance: A cumulative return is the aggregate amount that an investment has gained or lost over time, independent of the period of time involved.

Net of Fees and Gross of Fees Performance: Performance is presented on a "net of fees" and "gross of fees" basis, where indicated. Net returns do not reflect Program and wrap fees prior to 10/31/10 for accounts that are billed separately via invoice through a separate account billing arrangement. Gross returns do not reflect the deduction of fees, commissions or other charges. The payment of actual fees and expenses will reduce a client's return. The compound effect of such fees and expenses should be considered when reviewing returns. For example, the net effect of the deduction of fees on annualized performance, including the compounded effect over time, is determined by the relative size of the fee and the account's investment performance. It should also be noted that where gross returns are compared to an index, the index performance also does not reflect any transaction costs, which would lower the performance results. Market index data maybe subject to review and revision.

Benchmark/Major Indices: The past performance of an index is not a guarantee of future results. Any benchmark is shown for informational purposes only and relates to historical performance of market indices and not the performance of actual investments. Although most portfolios use indices as benchmarks, portfolios are actively managed and generally are not restricted to investing only in securities in the index. As a result, your portfolio holdings and performance may vary substantially from the index. Each index reflects an unmanaged universe of securities without any deduction for advisory fees or other expenses that would reduce actual returns, as well as the reinvestment of all income and dividends. An actual investment in the securities included in the index would require an investor to incur transaction costs, which would lower the performance

results. Indices are not actively managed and investors cannot invest directly in the indices. Market index data maybe subject to review and revision. Further, there is no guarantee that an investor's account will meet or exceed the stated benchmark. Index performance information has been obtained from third parties deemed to be reliable. We have not independently verified this information, nor do we make any representations or warranties to the accuracy or completeness of this information.

Blended Index - For Advisory accounts, Blended Index is designed to reflect the asset categories in which your account is invested. For Brokerage accounts, you have the option to select any benchmark from the list.

For certain products, the blended index represents the investment style corresponding to your client target allocation. If you change your client target allocation, your blended index will change in step with your change to your client target allocation.

Blended Index 2 - 8 - are optional indices selected by you which may consist of a blend of indexes. For advisory accounts, these indices are for informational purposes only. Depending on the selection, the benchmark selected may not be an appropriate basis for comparison of your portfolio based on it's holdings.

Custom Time Periods: If represented on this report, the performance start date and the performance end date have been selected by your Financial Advisor in order to provide performance and account activity information for your account for the specified period of time only. As a result, only a portion of your account's activity and performance information is presented in the performance report, and, therefore, presents a distorted representation of your account's activity and performance.

Net Deposits/Withdrawals: When shown on a report, this information represents the net value of all cash and securities contributions and withdrawals, program fees (including wrap fees) and other fees added to or subtracted from your accounts from the first day to the last day of the period. When fees are shown separately, net deposits / withdrawals does not include program fees (including wrap fees). When investment return is displayed net deposits / withdrawals does not include program fees (including wrap fees). For security contributions and withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts. Wrap fees will be included in this calculation except when paid via an invoice or through a separate accounts billing arrangement. When shown on Client summary and/or Portfolio review report, program fees (including wrap fees) may not be included in net deposits/withdrawals. PACE Program fees paid from sources other than your PACE account are treated as a contribution. A PACE



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

Program Fee rebate that is not reinvested is treated as a withdrawal.

Deposits: When shown on a report, this information represents the net value of all cash and securities contributions added to your accounts from the first day to the last day of the period. On Client Summary Report and/or Portfolio Review Report, this may exclude the Opening balance. For security contributions, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Withdrawals: When shown on a report, this information represents the net value of all cash and securities withdrawals subtracted from your accounts from the first day to the last day of the period. On Client summary and/or portfolio review report Withdrawals may not include program fees (including wrap fees). For security withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Dividends/Interest: Dividend and interest earned, when shown on a report, does not reflect your account's tax status or reporting requirements. Use only official tax reporting documents (i.e. 1099) for tax reporting purposes. The classification of private investment distributions can only be determined by referring to the official year-end tax-reporting document provided by the issuer.

Change in Accrued Interest: When shown on a report, this information represents the difference between the accrued interest at the beginning of the period from the accrued interest at the end of the period.

Change in Value: Represents the change in value of the portfolio during the reporting period, excluding additions/withdrawals, dividend and interest income earned and accrued interest. Change in Value may include programs fees (including wrap fees) and other fees.

Fees: Fees represented in this report include program and wrap fees. Program and wrap fees prior to October 1, 2010 for accounts that are billed separately via invoice through a separate account billing arrangement are not included in this report.

Performance Start Date Changes: The Performance Start Date for accounts marked with a 'A' have changed. Performance figures of an account with a changed Performance Start Date may not include the entire history of the account. The new Performance Start Date will generate performance returns and activity information for a shorter period than is available at UBS FS. As a result, the overall performance of these accounts may generate better performance than the period of time that would be included if the report used the inception date of the account. UBS FS recommends

reviewing performance reports that use the inception date of the account because reports with longer time frames are usually more helpful when evaluating investment programs and strategies. Performance reports may include accounts with inception dates that precede the new Performance Start Date and will show performance and activity information from the earliest available inception date. The change in Performance Start Date may be the result of a performance gap due to a zero-balance that prevents the calculation of continuous returns from the inception of the account. The Performance Start Date may also change if an account has failed one of our performance data integrity tests. In such instances, the account will be labeled as 'Review Required' and performance prior to that failure will be restricted. Finally, the Performance Start Date will change if you have explicitly requested a performance restart. Please contact your Financial Advisor for additional details regarding your new Performance Start Date.

Closed Account Performance: Accounts that have been closed may be included in the consolidated performance report. When closed accounts are included in the consolidated report, the performance report will only include information for the time period the account was active during the consolidated performance reporting time period.

Portfolio: For purposes of this report "portfolio" is defined as all of the accounts presented on the cover page or the header of this report and does not necessarily include all of the client's accounts held at UBS FS or elsewhere.

Percentage: Portfolio (in the "% Portfolio / Total" column) includes all holdings held in the account(s) selected when this report was generated. Broad asset class (in the "% broad asset class" column) includes all holdings held in that broad asset class in the account(s) selected when this report was generated.

Tax lots: This report displays security tax lots as either one line item (i.e., lumped tax lots) or as separate tax lot level information. If you choose to display security tax lots as one line item, the total cost equals the total value of all tax lots. The unit cost is an average of the total cost divided by the total number of shares. If the shares were purchased in different lots, the unit price listed does not represent the actual cost paid for each lot. The unrealized gain/loss value is calculated by combining the total value of all tax lots plus or minus the total market value of the security.

If you choose to display tax lot level information as separate line items on the Portfolio Holdings report, the tax lot information may include information from sources other than UBS FS. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other

than UBS FS. As a result this information may not be accurate and is provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. See your monthly statement for additional information.

Pricing: All securities are priced using the closing price reported on the last business day preceding the date of this report. Every reasonable attempt has been made to accurately price securities; however, we make no warranty with respect to any security's price. Please refer to the back of the first page of your UBS FS account statement for important information regarding the pricing used for certain types of securities, the sources of pricing data and other qualifications concerning the pricing of securities. To determine the value of securities in your account, we generally rely on third party quotation services. If a price is unavailable or believed to be unreliable, we may determine the price in good faith and may use other sources such as the last recorded transaction. When securities are held at another custodian or if you hold illiquid or restricted securities for which there is no published price, we will generally rely on the value provided by the custodian or issuer of that security.

Cash: Cash on deposit at UBS Bank USA is protected by the Federal Deposit Insurance Corporation (FDIC) up to \$250,000 in principal and accrued interest per depositor for each ownership type. Deposits made in an individual's own name, joint name, or individual retirement account are each held in a separate type of ownership. Such deposits are not guaranteed by UBS FS. More information is available upon request.

Margin: The quantity value may indicate that all or part of this position is held on margin or held in the short account. When an account holds a debit balance, this debit balance is incorporated into the account's total market value and deducted from the total value. When calculating the percent of portfolio on each security, the percentage will be impacted by the total market value of the account. Therefore, if the account's market value is reduced by a debit value of a holding the percent of portfolio will be greater and if the account's market value is increased by a holding then the percent of portfolio will be less.

Mutual Fund Asset Allocation: If the option to unbundle balanced mutual funds is selected and if a fund's holdings data is available, mutual funds will be classified by the asset class, subclass, and style breakdown of their underlying holdings. Where a mutual fund or ETF contains equity holdings from multiple equity sectors, this report will proportionately allocate the underlying holdings of the fund to those sectors measured as a percentage of the total fund's asset value as of the date shown.

This information is supplied by Morningstar, Inc. on a daily basis to UBS FS based on data supplied by the fund which may not be current. Mutual funds change their portfolio holdings on a regular (often daily) basis. Accordingly, any analysis that includes mutual funds may not accurately reflect the current composition of these funds. If a fund's underlying holding data is not available, it will be classified based on its corresponding overall Morningstar classification. All data is as of the date indicated in the report.

All pooled investment vehicles (such as mutual funds, closed end mutual funds, and exchange traded funds) incorporate internal management and operation expenses, which are reflected in the performance returns. Please see relevant fund prospectus for more information. Please note, performance for mutual funds is inclusive of multiple share classes.

Ineligible Assets: We require that you hold and purchase only eligible managed assets in your advisory accounts. Please contact your Financial Advisor for a list of the eligible assets in your program. These reports may provide performance information for eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your advisory assets. As a result, the performance reflected in this report can vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. Neither UBS nor your Financial Advisor will act as your investment adviser with respect to Ineligible Assets.

Equity Style: The Growth, Value and Core labels are determined by Morningstar. If an Equity Style is unclassified, it is due to non-availability of data required by Morningstar to assign it a particular style.

Equity Capitalization: Market Capitalization is determined by Morningstar. Equity securities are classified as Large Cap, Mid Cap or Small Cap by Morningstar. Unclassified securities are those for which no capitalization is available on Morningstar.

Equity Sectors: The Equity sector analysis may include a variety of accounts, each with different investment and risk parameters. As a result, the overweighting or underweighting in a particular sector or asset class should not be viewed as an isolated factor in making investment/liquidation decisions; but should be assessed on an account by account basis to determine the overall impact on the account's portfolio.

Classified Equity: Classified equities are defined as those equities for which the firm can confirm the specific



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

industry and sector of the underlying equity instrument.

Estimated Annual Income: The Estimated Annual Income is calculated by summing the previous four dividend/interest rates per share and multiplying by the quantity of shares held in the selected account(s) as of the End Date of Report. For savings product & sweep funds this value is not calculated and is displayed as 0.

Current Yield: Current yield is defined as the estimated annual income divided by the total market value.

Credit/Event Risk: Investments are subject to event risk and changes in credit quality of the issuer. Issuers can experience economic situations that may have adverse effects on the market value of their securities.

Interest Rate Risk: Bonds are subject to market value fluctuations as interest rates rise and fall. If sold prior to maturity, the price received for an issue may be less than the original purchase price.

Reinvestment Risk: Since most corporate issues pay interest semiannually, the coupon payments over the life of the bond can have a major impact on the bond's total return.

Accrued Interest: Interest that has accumulated between the most recent payment and the report date may be reflected in market values for interest bearing securities.

Gain/Loss: The gain/loss information may include calculations based upon non-UBS FS cost basis information. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS FS. In addition, if this report contains positions with unavailable cost basis, the gain/(loss) for these positions are excluded in the calculation for the Gain/(Loss). As a result these figures may not be accurate and are provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. Rely only on year-end tax forms when preparing your tax return. See your monthly statement for additional information.

The account listing may or may not include all of your accounts with UBS FS. The accounts included in this report are listed under the "Accounts included in this review" shown on the first page or listed at the top of each page. If an account number begins with "@" this denotes assets or liabilities held at other financial institutions. Information about these assets, including valuation, account type and cost basis, is based on the information you provided to us, or provided to us by third party data aggregators or custodians at your direction. We have not verified, and are not responsible for, the accuracy or completeness of this information.

Account name(s) displayed in this report and labels used for groupings of accounts can be customizable "nicknames" chosen by you to assist you with your recordkeeping or may have been included by your financial advisor for reference purposes only. The names used have no legal effect, are not intended to reflect any strategy, product, recommendation, investment objective or risk profile associated with your accounts or any group of accounts, and are not a promise or guarantee that wealth, or any financial results, can or will be achieved. All investments involve the risk of loss, including the risk of loss of the entire investment.

For more information about account or group names, or to make changes, contact your Financial Advisor.

Account changes: At UBS, we are committed to helping you work toward your financial goals. So that we may continue providing you with financial advice that is consistent with your investment objectives, please consider the following two questions:

- 1) Have there been any changes to your financial situation or investment objectives?
 - 2) Would you like to implement or modify any restrictions regarding the management of your account?
- If the answer to either question is "yes," it is important that you contact your Financial Advisor as soon as possible to discuss these changes. For MAC advisory accounts, please contact your investment manager directly if you would like to impose or change any investment restrictions on your account.

ADV disclosure: A complimentary copy of our current Form ADV Disclosure Brochure that describes the advisory program and related fees is available through your Financial Advisor. Please contact your Financial Advisor if you have any questions.

Important information for former Piper Jaffray and McDonald Investments clients:

As an accommodation to former Piper Jaffray and McDonald Investments clients, these reports include performance history for their Piper Jaffray accounts prior to August 12, 2006 and McDonald Investments accounts prior to February 9, 2007, the date the respective accounts were converted to UBS FS. UBS FS has not independently verified this information nor do we make any representations or warranties as to the accuracy or completeness of that information and will not be liable to you if any such information is unavailable, delayed or inaccurate.

For insurance, annuities, and 529 Plans, UBS FS relies on information obtained from third party services it believes to be reliable. UBS FS does not independently verify or guarantee the accuracy or validity of any information provided by third parties. Information for insurance, annuities, and 529 Plans that has been provided by a third party service may not reflect the quantity and market value as of the previous business day. When

available, an "as of" date is included in the description.

Investors outside the U.S. are subject to securities and tax regulations within their applicable jurisdiction that are not addressed in this report. Nothing in this report shall be construed to be a solicitation to buy or offer to sell any security, product or service to any non-U.S. investor, nor shall any such security, product or service be solicited, offered or sold in any jurisdiction where such activity would be contrary to the securities laws or other local laws and regulations or would subject UBS to any registration requirement within such jurisdiction.

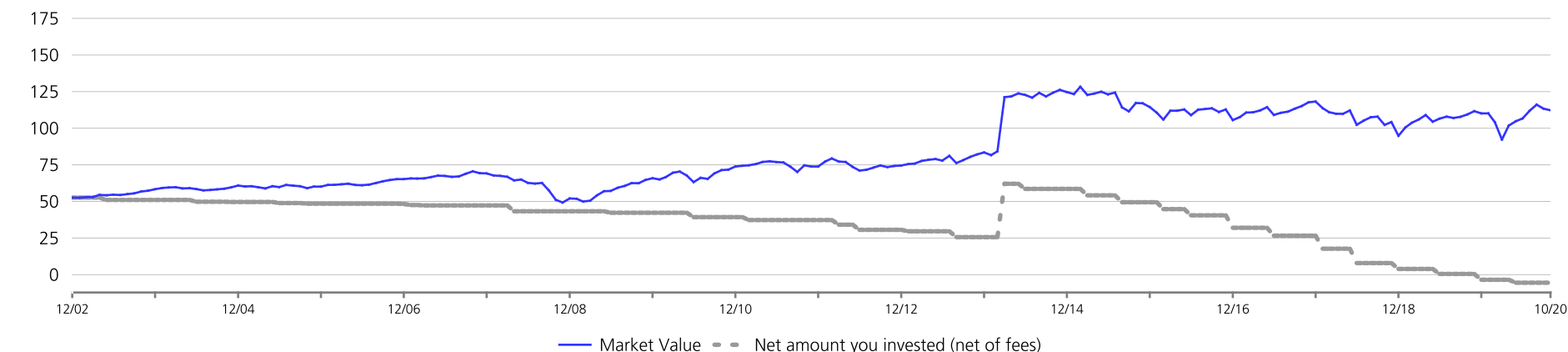
Performance History prior to the account's inception at UBS Financial Services, Inc. may have been included in this report and is based on data provided by third party sources. UBS Financial Services Inc. has not independently verified this information nor does UBS Financial Services Inc. guarantee the accuracy or validity of the information.

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Sources of portfolio value

as of October 31, 2020

\$ Millions



	MTD 09/30/2020 to 10/31/2020	YTD 12/31/2019 to 10/31/2020	1 Year 10/31/2019 to 10/31/2020	3 Years 10/31/2017 to 10/31/2020	5 Years 10/31/2015 to 10/31/2020	7 Years 10/31/2013 to 10/31/2020	10 Years 10/31/2010 to 10/31/2020	ITD 12/31/2002 to 10/31/2020
Opening value	113,370,846.37	110,129,350.62	109,408,053.11	115,161,986.19	117,219,633.73	80,411,974.05	71,380,252.76	52,625,899.06
Net deposits/withdrawals	0.00	-2,000,025.00	-5,999,750.00	-32,109,875.00	-54,937,266.53	-31,113,129.07	-44,778,015.11	-58,113,069.04
Div./interest income	69,532.13	1,488,823.83	2,753,143.33	8,675,621.35	14,900,650.58	20,544,526.57	26,009,832.14	43,331,158.88
Change in accr. interest	2,459.73	2,827.59	-3,946.38	-3,038.99	-25,758.43	-26,647.32	-118,755.35	-546,135.75
Change in value	-1,213,028.76	2,608,832.44	6,072,309.41	20,505,115.92	35,072,550.12	42,413,085.24	59,736,495.02	74,931,956.32
Closing value	112,229,809.47	112,229,809.47	112,229,809.47	112,229,809.47	112,229,809.47	112,229,809.47	112,229,809.47	112,229,809.47
Gross Time-weighted ROR	-1.00	3.99	8.54	9.52	9.73	8.74	9.28	8.21
Net Time-weighted ROR	-1.01	3.91	8.44	9.36	9.59	8.61	9.17	8.15

Performance returns are annualized after 1 year. Net deposits and withdrawals include program and account fees.

Benchmarks - Annualized time-weighted returns

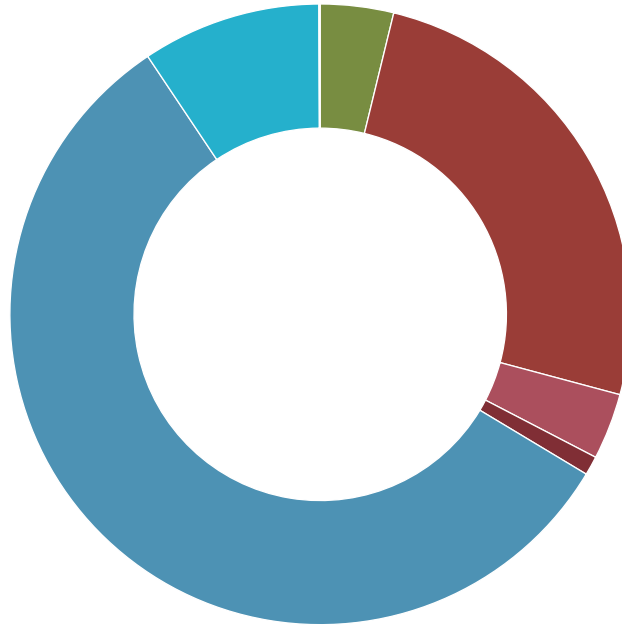
Consolidated Blended Index	-1.56	1.29	5.67	5.52	7.16	6.16	6.93	7.72
US Treasury Bill - 3 Mos	0.01	0.53	0.79	1.58	1.13	0.81	0.59	1.27
Barclays Agg Bond	-0.45	6.32	6.19	5.06	4.08	3.78	3.55	4.32
MSCI Emerging Markets-PR	1.98	-1.00	5.90	-0.47	5.41	0.93	-0.02	7.73
Russell 2000	2.09	-6.77	-0.14	2.18	7.26	6.36	9.63	9.56
S&P 500	-2.66	2.77	9.71	10.41	11.70	11.52	13.00	9.84

Consolidated Blended Index: Start - Current: 30% Barclays Govt/Credit Int; 70% MSCI AC World IMI - GR

Past performance does not guarantee future results and current performance may be lower/higher than past data presented.

Asset allocation review

as of October 31, 2020



- Cash 3.81%
- US Fixed Income 25.36%
- Global Fixed Income 3.45%
- International Fixed Income 0.99%
- US Equity 57.01%
- International Equity 9.31%
- Other 0.07%

Pooled investment cash allocation: **\$588,713.74**



Asset allocation review - as of October 31, 2020 (continued)

Consolidated report prepared for CITY OF TROY

TX XX595 ERS
TX XX600 NAIC

	Market value (\$)	% of Portfolio
Cash	4,279,605.52	3.81
Cash	4,279,605.52	3.81
US	4,279,605.52	3.81
US Cash	4,279,605.52	3.81
Fixed Income	33,446,659.52	29.80
US	28,458,741.41	25.36
US Fixed Income	19,736,443.06	17.59
Short	5,815,662.60	5.18
Intermediate	13,370,766.88	11.91
Other	550,013.58	0.50
Government	4,214,991.34	3.76
Other	4,214,991.34	3.76
Corporate IG Credit	364,575.83	0.32
Short	364,575.83	0.32
Corporate High Yield	4,142,731.18	3.69
Corporate High Yield	4,142,731.18	3.69
Global	3,877,268.61	3.45
Global	3,877,268.61	3.45
Global	3,877,268.61	3.45
International	1,110,649.50	0.99
International	114,197.10	0.10
International	114,197.10	0.10
Emerging Markets	996,452.40	0.89
Emerging Markets	996,452.40	0.89
Equity	74,429,856.75	66.32
US	63,980,519.45	57.01
US Equity	9,780.00	0.01
Other	9,780.00	0.01
Large Cap	45,596,417.24	40.63
Core	23,937,144.42	21.33
Growth	10,727,214.24	9.56
Value	10,702,408.58	9.54
Public Real Estate	229,650.00	0.20
Mid Cap	13,914,750.31	12.40
Core	4,168,932.01	3.71
Growth	6,507,065.36	5.80
Value	2,949,452.94	2.63
Public Real Estate	289,300.00	0.26
Small Cap	4,459,571.90	3.97
Core	1,711,397.33	1.52

	Market value (\$)	% of Portfolio
Equity		
US		
Small Cap		
Growth	1,553,454.38	1.38
Value	1,194,720.19	1.07
Convertibles	0.00	0.00
Convertibles	0.00	0.00
International	10,449,337.30	9.31
International	2,369,480.00	2.11
Core	240,080.00	0.21
Other	2,129,400.00	1.90
Developed Markets	5,410,147.98	4.82
Core	1,875,664.05	1.67
Growth	3,250,633.93	2.90
Value	283,850.00	0.25
Emerging Markets	2,669,709.32	2.38
Growth	2,457,714.90	2.19
Other	211,994.42	0.19
Commodities	0.00	0.00
Non-Traditional	0.00	0.00
Other	73,687.68	0.07
Other	73,687.68	0.07
Other	73,687.68	0.07
Other	73,687.68	0.07
Total Portfolio	\$112,229,809.47	100%

Balanced mutual funds represented in multiple asset classes based on Morningstar allocations

Equity sector analysis

as of October 31, 2020

Summary of equity sector analysis compared to S&P 500 index

	Actual %	Model %	Value of equity (\$)	Model value (\$)	Gap (\$)	Actual (%)	Model (%)	Gap (%)
Communication Services	9.87%	11.36%	7,345,108.20	8,449,924.85	-1,104,816.65	9.87%	11.36%	-1.49%
Consumer Discretionary	15.29%	12.12%	11,370,742.07	9,015,236.72	2,355,505.35	15.29%	12.12%	3.17%
Consumer Staples	6.64%	7.77%	4,935,996.50	5,779,570.08	-843,573.58	6.64%	7.77%	-1.13%
Energy	1.85%	1.98%	1,374,253.84	1,472,786.20	-98,532.36	1.85%	1.98%	-0.13%
Financials	9.68%	9.53%	7,199,462.68	7,088,713.36	110,749.32	9.68%	9.53%	0.15%
Health Care	15.00%	13.49%	11,156,157.70	10,034,285.75	1,121,871.95	15.00%	13.49%	1.51%
Industrials	11.97%	7.64%	8,902,741.31	5,682,871.99	3,219,869.32	11.97%	7.64%	4.33%
Information Technology	23.93%	27.12%	17,798,435.03	20,172,707.91	-2,374,272.88	23.93%	27.12%	-3.19%
Materials	2.55%	2.65%	1,899,251.36	1,971,153.24	-71,901.88	2.55%	2.65%	-0.10%
Real Estate	1.89%	2.58%	1,406,573.99	1,919,085.04	-512,511.05	1.89%	2.58%	-0.69%
Utilities	1.33%	3.09%	994,418.57	2,298,439.06	-1,304,020.49	1.33%	3.09%	-1.76%

Total classified equity
\$74,383,141.25

Unclassified Securities

\$46,715.50

Rounding calculation may affect totals.

Equity sector analysis - as of October 31, 2020 (continued)

Detail of equity sector analysis

	Number of shares	Price on 10/31/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Communication Services						
ALPHABET INC CL A CUSIP: 02079K305 Symbol: GOOGL	832.00	1,616.11	1,344,603.5 1.81%	Low	Most Preferred	Buy (Rating Exception)
ALPHABET INC CL C CUSIP: 02079K107 Symbol: GOOG	904.00	1,621.01	1,465,393.0 1.97%	Low	Most Preferred	Buy (Rating Exception)
AT&T INC CUSIP: 00206R102 Symbol: T	5,968.00	27.02	161,255.36 0.22%	Low	Most Preferred	Neutral (Rating Exception)
COMCAST CORP NEW CL A CUSIP: 20030N101 Symbol: CMCSA	10,600.00	42.24	447,744.00 0.60%	Low	Most Preferred	Neutral
FACEBOOK INC CL A CUSIP: 30303M102 Symbol: FB	4,000.00	263.11	1,052,440.0 1.41%	Medium	Most Preferred	Buy (Rating Exception)
WALT DISNEY CO (HOLDING CO) DISNEY COM CUSIP: 254687106 Symbol: DIS	5,860.00	121.25	710,525.00 0.95%	Medium	Bellwether	Neutral
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			2,163,147.2 2.91%			
Total Communication Services			\$7,345,108.20			
			9.87%			
Consumer Discretionary						
AMAZON.COM INC CUSIP: 023135106 Symbol: AMZN	585.00	3,036.15	1,776,147.7 2.39%	Low	Most Preferred	Buy (Rating Exception)
BOOKING HLDGS INC CUSIP: 09857L108 Symbol: BKNG	200.00	1,622.50	324,500.00 0.44%	Medium		Neutral (Rating Exception)
CARMAX INC CUSIP: 143130102 Symbol: KMX	5,000.00	86.44	432,200.00 0.58%			
D R HORTON INC CUSIP: 23331A109 Symbol: DHI	7,000.00	66.81	467,670.00 0.63%		Bellwether	
DAVE & BUSTERS ENTMT INC CUSIP: 238337109 Symbol: PLAY	5,000.00	17.16	85,800.00 0.12%			
GENTEX CORP CUSIP: 371901109 Symbol: GNTX	5,000.00	27.67	138,350.00 0.19%			
GENUINE PARTS CO CUSIP: 372460105 Symbol: GPC	3,000.00	90.43	271,290.00 0.36%			
LKQ CORP NEW CUSIP: 501889208 Symbol: LKQ	4,000.00	31.99	127,960.00 0.17%			
MCDONALDS CORP CUSIP: 580135101 Symbol: MCD	1,050.00	213.00	223,650.00 0.30%	Low	Most Preferred	Neutral
O REILLY AUTOMOTIVE INC CUSIP: 67103H107 Symbol: ORLY	3,150.00	436.60	1,375,290.0 1.85%	Low		Buy (Rating Exception)
STARBUCKS CORP CUSIP: 855244109 Symbol: SBUX	11,280.00	86.96	980,908.80 1.32%	Low	Bellwether	Neutral (Rating Exception)
TRACTOR SUPPLY COMPANY CUSIP: 892356106 Symbol: TSCO	12,000.00	133.21	1,598,520.0 2.15%	Low		Neutral (Rating Exception)

Equity sector analysis - as of October 31, 2020 (continued)

	Number of shares	Price on 10/31/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Consumer Discretionary						
ULTA BEAUTY, INC CUSIP: 903845303 Symbol: ULTA	1,000.00	206.77	206,770.00 0.28%	High		Buy
VF CORP CUSIP: 918204108 Symbol: VFC	1,400.00	67.20	94,080.00 0.13%	Medium	Bellwether	Neutral (Rating Exception)
YUM CHINA HLDGS INC CUSIP: 98850P109 Symbol: YUMC	17,000.00	53.23	904,910.00 1.22%	Low		Buy
YUM! BRANDS INC CUSIP: 988498101 Symbol: YUM	7,080.00	93.33	660,776.40 0.87%	Medium	Bellwether	Buy (Rating Exception)
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			1,701,919.1 2.29%			
Total Consumer Discretionary			\$11,370,742.07 15.29%			
Consumer Staples						
CONAGRA BRANDS, INC. CUSIP: 205887102 Symbol: CAG	3,000.00	35.09	105,270.00 0.14%			
COSTCO WHOLESALE CORP CUSIP: 22160K105 Symbol: COST	2,060.00	357.62	736,697.20 0.99%	Low		Buy (Rating Exception)
DIAGEO PLC NEW GB SPON ADR CUSIP: 25243Q205 Symbol: DEO	1,000.00	130.18	130,180.00 0.18%	Low		Buy (Rating Exception)
GENL MILLS INC CUSIP: 370334104 Symbol: GIS	4,000.00	59.12	236,480.00 0.32%			
PEPSICO INC CUSIP: 713448108 Symbol: PEP	5,000.00	133.29	666,450.00 0.90%	Low	Most Preferred	Neutral
PROCTER & GAMBLE CO CUSIP: 742718109 Symbol: PG	7,000.00	137.10	959,700.00 1.29%	Low	Most Preferred	Neutral (Rating Exception)
SMUCKER J M CO NEW CUSIP: 832696405 Symbol: SJM	3,000.00	112.20	336,600.00 0.45%			
WALMART INC CUSIP: 931142103 Symbol: WMT	1,050.00	138.75	145,687.50 0.19%	Low	Most Preferred	Buy (Rating Exception)
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			1,618,931.8 2.18%			
Total Consumer Staples			\$4,935,996.50 6.64%			

Equity sector analysis - as of October 31, 2020 (continued)

	Number of shares	Price on 10/31/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Energy						
CHEVRON CORP			605,345.00	Medium	Most Preferred	Neutral (Rating Exception)
CUSIP: 166764100 Symbol: CVX	8,710.00	69.50	0.81%			
ONEOK INC NEW			406,000.00	High		Buy (Rating Exception)
CUSIP: 682680103 Symbol: OKE	14,000.00	29.00	0.55%			
MUTUAL FUNDS COMPONENT			362,908.84			
(for further details see last section of this report)			0.49%			
Total Energy			\$1,374,253.84			
			1.85%			
Financials						
BANK OF AMER CORP			783,285.00	Medium	Most Preferred	Neutral (Rating Exception)
CUSIP: 060505104 Symbol: BAC	33,050.00	23.70	1.05%			
BLACKROCK INC			820,917.70	Low	Bellwether	Buy (Rating Exception)
CUSIP: 09247X101 Symbol: BLK	1,370.00	599.21	1.10%			
CHUBB LTD CHF			129,910.00	Medium	Bellwether	Neutral (Rating Exception)
CUSIP: H1467J104 Symbol: CB	1,000.00	129.91	0.17%			
EAST WEST BANCORP INC			200,640.00	High		Neutral (Rating Exception)
CUSIP: 27579R104 Symbol: EWBC	5,500.00	36.48	0.27%			
ESSENT GROUP LTD			398,500.00			
CUSIP: G3198U102 Symbol: ESNT	10,000.00	39.85	0.54%			
HARTFORD FINCL SERVICES GROUP INC			154,080.00	High		Buy (Rating Exception)
CUSIP: 416515104 Symbol: HIG	4,000.00	38.52	0.21%			
JPMORGAN CHASE & CO			196,080.00	Low	Bellwether	Neutral (Rating Exception)
CUSIP: 46625H100 Symbol: JPM	2,000.00	98.04	0.26%			
MARSH & MCLENNAN COS INC			727,323.80	Low	Bellwether	Buy
CUSIP: 571748102 Symbol: MMC	7,030.00	103.46	0.98%			
META FINANCIAL GROUP INC			146,700.00			
CUSIP: 59100U108 Symbol: CASH	5,000.00	29.34	0.20%			
SIGNATURE BANK NEW YORK N Y			201,850.00	Medium		Buy (Rating Exception)
CUSIP: 82669G104 Symbol: SBNY	2,500.00	80.74	0.27%			
TCF FINL CORP NEW			136,050.00	High		Buy (Rating Exception)
CUSIP: 872307103 Symbol: TCF	5,000.00	27.21	0.19%			
MUTUAL FUNDS COMPONENT			3,304,126.1			
(for further details see last section of this report)			4.44%			
Total Financials			\$7,199,462.68			
			9.68%			

Equity sector analysis - as of October 31, 2020 (continued)

	Number of shares	Price on 10/31/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Health Care						
ABBOTT LABS			1,289,594.5	Low	Most Preferred	Buy (Rating Exception)
CUSIP: 002824100 Symbol: ABT	12,269.00	105.11	1.73%			
BRISTOL MYERS SQUIBB CO			175,350.00	Low	Most Preferred	Neutral
CUSIP: 110122108 Symbol: BMY	3,000.00	58.45	0.24%			
CENTENE CORP			279,661.20		Bellwether	
CUSIP: 151358101 Symbol: CNC	4,732.00	59.10	0.38%			
CIGNA CORP			65,786.18	Low	Bellwether	Buy
CUSIP: 125523100 Symbol: CI	394.00	166.97	0.09%			
DANAHER CORP			2,295,400.0	Low	Most Preferred	Buy (Rating Exception)
CUSIP: 235851102 Symbol: DHR	10,000.00	229.54	3.09%			
GILEAD SCIENCES INC			814,100.00	Low	Bellwether	Neutral (Rating Exception)
CUSIP: 375558103 Symbol: GILD	14,000.00	58.15	1.09%			
MEDTRONIC PLC			117,164.05	Low	Bellwether	Buy
CUSIP: G5960L103 Symbol: MDT	1,165.00	100.57	0.16%			
MERCK & CO INC NEW COM			110,558.70	Low	Most Preferred	Buy
CUSIP: 58933Y105 Symbol: MRK	1,470.00	75.21	0.15%			
PFIZER INC			354,800.00	Low	Bellwether	Neutral
CUSIP: 717081103 Symbol: PFE	10,000.00	35.48	0.48%			
STRYKER CORP			2,626,130.0	Medium		Neutral (Rating Exception)
CUSIP: 863667101 Symbol: SYK	13,000.00	202.01	3.53%			
SUPERNUS PHARMACEUTICALS INC			137,700.00			
CUSIP: 868459108 Symbol: SUPN	7,500.00	18.36	0.19%			
THERMO FISHER SCIENTIFIC INC			210,538.40	Low	Most Preferred	Buy (Rating Exception)
CUSIP: 883556102 Symbol: TMO	445.00	473.12	0.28%			
UNITEDHEALTH GROUP INC			170,878.40	Low	Bellwether	Neutral
CUSIP: 91324P102 Symbol: UNH	560.00	305.14	0.22%			
MUTUAL FUNDS COMPONENT			2,508,496.1			
(for further details see last section of this report)			3.37%			
Total Healthcare			\$11,156,157.70			
			15.00%			
Industrials						
AECOM			130,036.00	High		Buy (Rating Exception)
CUSIP: 00766T100 Symbol: ACM	2,900.00	44.84	0.17%			
AIR LEASE CORP CL A			108,960.00			
CUSIP: 00912X302 Symbol: AL	4,000.00	27.24	0.15%			
AMETEK INC (NEW)			245,500.00			
CUSIP: 031100100 Symbol: AME	2,500.00	98.20	0.33%			
CARRIER GLOBAL CORP			31,052.70	Medium		Buy (Rating Exception)
CUSIP: 14448C104 Symbol: CARR	930.00	33.39	0.04%			
FASTENAL CO			1,383,360.0	Low		Neutral
CUSIP: 311900104 Symbol: FAST	32,000.00	43.23	1.86%			
GENL DYNAMICS CORP			682,916.00	Low	Bellwether	Neutral (Rating Exception)
CUSIP: 369550108 Symbol: GD	5,200.00	131.33	0.92%			

Equity sector analysis - as of October 31, 2020 (continued)

	Number of shares	Price on 10/31/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Industrials						
IDEX CORP			340,780.00			
CUSIP: 45167R104 Symbol: IEX	2,000.00	170.39	0.46%			
KAR AUCTION SVCS INC			72,800.00			
CUSIP: 48238T109 Symbol: KAR	5,000.00	14.56	0.10%			
LOCKHEED MARTIN CORP			112,041.60	Low	Most Preferred	Buy
CUSIP: 539830109 Symbol: LMT	320.00	350.13	0.15%			
OLD DOMINION FREIGHT LINES INC			599,665.50			
CUSIP: 679580100 Symbol: ODFL	3,150.00	190.37	0.81%			
OTIS WORLDWIDE CORP			28,495.20			
CUSIP: 68902V107 Symbol: OTIS	465.00	61.28	0.04%			
PATRICK INDUST INC			446,000.00			
CUSIP: 703343103 Symbol: PATK	8,000.00	55.75	0.60%			
RAYTHEON TECHNOLOGIES CORP			50,517.60	Medium	Most Preferred	Buy
CUSIP: 75513E101 Symbol: RTX	930.00	54.32	0.07%			
ROPER TECHNOLOGIES INC			1,485,360.0			
CUSIP: 776696106 Symbol: ROP	4,000.00	371.34	2.00%			
SENSATA TECHNOLOGIES HLDG PLC EUR			218,550.00			
CUSIP: G8060N102 Symbol: ST	5,000.00	43.71	0.29%			
WATSCO INC			224,140.00			
CUSIP: 942622200 Symbol: WSO	1,000.00	224.14	0.29%			
MUTUAL FUNDS COMPONENT			2,742,566.7			
(for further details see last section of this report)			3.69%			
Total Industrials			\$8,902,741.31			
			11.97%			
Information Technology						
APPLE INC			3,516,178.0	Medium	Bellwether	Neutral (Rating Exception)
CUSIP: 037833100 Symbol: AAPL	32,300.00	108.86	4.73%			
AUTOMATIC DATA PROCESSNG INC			315,920.00			
CUSIP: 053015103 Symbol: ADP	2,000.00	157.96	0.42%			
COGNEX CORP			527,200.00	Medium		Neutral
CUSIP: 192422103 Symbol: CGNX	8,000.00	65.90	0.71%			
F5 NETWORKS INC			771,052.00			
CUSIP: 315616102 Symbol: FFIV	5,800.00	132.94	1.04%			
FABRINET			240,080.00			
CUSIP: G3323L100 Symbol: FN	4,000.00	60.02	0.32%			
GLOBAL PAYMENTS INC			788,700.00	Medium		Buy
CUSIP: 37940X102 Symbol: GPN	5,000.00	157.74	1.06%			
MICROSOFT CORP			182,223.00	Low	Most Preferred	Buy
CUSIP: 594918104 Symbol: MSFT	900.00	202.47	0.24%			
ORACLE CORP			280,550.00	Low	Most Preferred	Neutral
CUSIP: 68389X105 Symbol: ORCL	5,000.00	56.11	0.38%			
PALO ALTO NETWORKS INC			276,487.50	Medium	Most Preferred	Neutral (Rating Exception)
CUSIP: 697435105 Symbol: PANW	1,250.00	221.19	0.37%			

Equity sector analysis - as of October 31, 2020 (continued)

	Number of shares	Price on 10/31/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Information Technology						
SAMSUNG ELECTRS LTD GDR (EACH REP 25 COM STK KRW100) REG. S *GB LINE*	170.00	1,247.03	211,994.42 0.29%			
CUSIP: 7960509A2 Symbol: SKYWORKS SOLUTIONS INC			565,160.00 0.76%	Medium		Neutral (Rating Exception)
CUSIP: 83088M102 Symbol: SWKS	4,000.00	141.29				
VISA INC CL A			2,180,520.0 2.93%	Low	Most Preferred	Neutral
CUSIP: 92826C839 Symbol: V MUTUAL FUNDS COMPONENT (for further details see last section of this report)	12,000.00	181.71	7,942,370.1 10.68%			
Total Information Technology			\$17,798,435.03 23.93%			
Materials						
LINDE PLC EUR			881,360.00 1.18%	Low	Most Preferred	Buy
CUSIP: G5494J103 Symbol: LIN	4,000.00	220.34				
RIO TINTO PLC SPON ADR			283,850.00 0.38%	Low		Neutral
CUSIP: 767204100 Symbol: RIO MUTUAL FUNDS COMPONENT (for further details see last section of this report)	5,000.00	56.77	734,041.36 0.99%			
Total Materials			\$1,899,251.36 2.55%			
Real Estate						
AMERICAN TOWER CORP REIT			229,650.00 0.31%	Low	Most Preferred	Buy
CUSIP: 03027X100 Symbol: AMT	1,000.00	229.65				
CROWN CASTLE INTL CORP REIT			421,740.00 0.57%	Low	Bellwether	Neutral
CUSIP: 22822V101 Symbol: CCI	2,700.00	156.20				
REALTY INCOME CORP MD SBI			289,300.00 0.38%	Medium		Buy
CUSIP: 756109104 Symbol: O MUTUAL FUNDS COMPONENT (for further details see last section of this report)	5,000.00	57.86	465,883.99 0.63%			
Total Real Estate			\$1,406,573.99 1.89%			

Equity sector analysis - as of October 31, 2020 (continued)

	Number of shares	Price on 10/31/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Utilities						
DUKE ENERGY CORP NEW			280,106.51	Low		Buy
CUSIP: 26441C204 Symbol: DUK	3,041.00	92.11	0.37%			
MUTUAL FUNDS COMPONENT			714,312.06			
(for further details see last section of this report)			0.96%			
Total Utilities			\$994,418.57			
			1.33%			
Total classified equity			\$74,383,141.25			
Unclassified Securities						
CALL ABBOTT LABS DUE 11/20/20 115.000 000132			-670.00	Low	Most Preferred	Buy (Rating Exception)
CUSIP: 99UBB00D9 Symbol: ABT	-10.00	67.00	0.00%			
CALL CHEVRON CORP DUE 12/18/20 125.000 0926P3			-102.00	Medium	Most Preferred	Neutral (Rating Exception)
CUSIP: 99UBBC536 Symbol: CVX	-17.00	6.00	0.00%			
CALL COMCAST CORP NEW CL DUE 06/18/21 50.000 026263			-1,040.00	Low	Most Preferred	Neutral
CUSIP: 99UBB0ID6 Symbol: CMCSA	-8.00	130.00	0.00%			
CALL CONAGRA BRANDS, INC DUE 12/18/20 41.000 101290			-110.00			
CUSIP: 99UBB0HH8 Symbol: CAG	-10.00	11.00	0.00%			
CALL DUKE ENERGY CORP NE DUE 01/15/21 105.000 119MG4			-600.00	Low		Buy
CUSIP: 99UBAL1G2 Symbol: DUK	-10.00	60.00	0.00%			
CALL FASTENAL CO DUE 11/20/20 45.000 167061			-2,040.00	Low		Neutral
CUSIP: 99UBARSK1 Symbol: FAST	-30.00	68.00	0.00%			
CALL GENUINE PARTS CO DUE 11/20/20 100.000 181455			-700.00			
CUSIP: 99UBB0MD1 Symbol: GPC	-10.00	70.00	0.00%			
CALL GLOBAL PAYMENTS INC DUE 11/20/20 220.000 1848N3			-500.00	Medium		Buy
CUSIP: 99UBB0N16 Symbol: GPN	-20.00	25.00	0.00%			
CALL HARTFORD FINCL SERV DUE 01/15/21 70.000 1988E4			-200.00	High		Buy (Rating Exception)
CUSIP: 99UBBAGZ7 Symbol: HIG	-10.00	20.00	0.00%			
CALL JPMORGAN CHASE & CO DUE 12/18/20 125.000 241JP2			-140.00	Low	Bellwether	Neutral (Rating Exception)
CUSIP: 99UBA66E5 Symbol: JPM	-10.00	14.00	0.00%			
CALL O REILLY AUTOMOTIVE DUE 11/20/20 520.000 350B81			-287.50	Low		Buy (Rating Exception)
CUSIP: 99UBB0N99 Symbol: ORLY	-5.00	57.50	0.00%			
CALL ONEOK INC NEW DUE 01/15/21 42.500 3496G4			-400.00	High		Buy (Rating Exception)
CUSIP: 99UBB0N65 Symbol: OKE	-20.00	20.00	0.00%			
CALL ORACLE CORP DUE 12/18/20 62.500 353752			-665.00	Low	Most Preferred	Neutral
CUSIP: 99UBARTO2 Symbol: ORCL	-10.00	66.50	0.00%			

Equity sector analysis - as of October 31, 2020 (continued)

			Number of shares	Price on 10/31/2020 (\$)	Value of equity (\$/%)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
Unclassified Securities								
CALL PEPSICO INC DUE 12/18/20	155.000	368024						
CUSIP: 99UBA7Y13 Symbol: PEP			-10.00	25.00	-250.00 0.00%	Low	Most Preferred	Neutral
CALL PFIZER INC DUE 06/18/21	40.000	370011						
CUSIP: 99UBAU1X5 Symbol: PFE			-30.00	173.00	-5,190.00 -0.01%	Low	Bellwether	Neutral
CALL PROCTER & GAMBLE CO DUE 01/15/21	145.000							
383601			-30.00	319.00	-9,570.00 -0.01%	Low	Most Preferred	Neutral (Rating Exception)
CUSIP: 99UBB1ZM5 Symbol: PG								
CALL SMUCKER J M CO NEW DUE 01/15/21	130.000							
4258Y5			-10.00	118.00	-1,180.00 0.00%			
CUSIP: 99UBBC569 Symbol: SJM								
CALL STARBUCKS CORP DUE 06/18/21	105.000							
509736			-12.00	270.00	-3,240.00 0.00%	Low	Bellwether	Neutral (Rating Exception)
CUSIP: 99UBBHL8 Symbol: SBUX								
CALL VISA INC CL A DUE 12/18/20	225.000	488372						
CUSIP: 99UBAQM37 Symbol: V			-10.00	49.00	-490.00 0.00%	Low	Most Preferred	Neutral
CALL YUM! BRANDS INC DUE 12/18/20	105.000							
5175J8			-20.00	79.00	-1,580.00 0.00%	Medium	Bellwether	Buy (Rating Exception)
CUSIP: 99UBB0OP2 Symbol: YUM								
ESCROW ALTABA INC					67,800.00			
CUSIP: 021ESC017 Symbol:			3,000.00	22.60	0.09%			
ESCROW GENERAL MTRS CORP 6.250% SER C DUE 07/15/33 CALLBL					0.00			
CONV			20,000.00	0.00	0.00%			
CUSIP: 370ESC717 Symbol:								
PUT APPLE INC DUE 12/18/20	62.500	030911						
CUSIP: 99UBA9HA5 Symbol: AAPL			-40.00	19.00	-760.00 0.00%	Medium	Bellwether	Neutral (Rating Exception)
PUT TRACTOR SUPPLY COMP DUE 01/15/21	95.000							
4608B6			-10.00	115.00	-1,150.00 0.00%	Low		Neutral (Rating Exception)
CUSIP: 99UBBHQU2 Symbol: TSCO								
RTS BRISTOL-MYERS SQUIBB CO EXP 03/31/21					9,780.00			
CUSIP: 110122157 Symbol: BMVRT			3,000.00	3.26	0.01%			
Total Unclassified Securities					\$46,715.50			
					0.06%			

Total equity **\$74,429,856.75**

Balanced mutual funds represented in multiple asset classes based on Morningstar allocations.

Rounding calculation may affect totals.

Blended investments included in this report

	Quantity	Price on 10/31/2020 (\$)	Market value on 10/31/2020 (\$)	Equity market value on 10/31/2020 (\$)	Volatility/ 60-month beta	CIO GWM Recommendation	UBS Investment Research rating
AMER FUNDS CAPITAL WORLD GROWTH & INCOME FUND CL A CUSIP: 140543109 Symbol: CWGIX (95.59% Equity)	27,635.26	50.74	1,402,212.99	1,340,375.39			
AMER FUNDS NEW WORLD FUND CLASS F2 CUSIP: 649280823 Symbol: NFFFX (91.47% Equity)	11,692.50	73.82	863,139.98	789,514.22			
AMERICAN FUNDS NEW WORLD FUND CL A CUSIP: 649280104 Symbol: NEWFX (91.47% Equity)	35,550.20	73.88	2,626,448.78	2,402,412.92			
CLEARBRIDGE INTERNATIONAL GROWTH FUND CLASS I CUSIP: 524686524 Symbol: LMGNX (98.23% Equity)	61,736.91	56.99	3,518,386.39	3,456,111.02			
COLUMBIA SELIGMAN COMMUNICATION AND INFORMATION FUND A CUSIP: 19766H429 Symbol: SLMCX (99.12% Equity)	56,228.39	89.33	5,022,881.90	4,978,680.63			
ISHARES RUSSELL 2000 ETF CUSIP: 464287655 Symbol: IWM (99.81% Equity)	8,819.00	153.09	1,350,100.71	1,347,535.52			
MFS NEW DISCOVERY VALUE FUND CLASS A CUSIP: 55278M100 Symbol: NDVAX (98.1% Equity)	96,515.87	13.16	1,270,148.82	1,246,016.00			
MFS VALUE FUND CLASS A CUSIP: 552983801 Symbol: MEIAX (98.79% Equity)	107,991.21	39.60	4,276,451.80	4,224,706.73			
SPDR S&P 500 ETF TR CUSIP: 78462F103 Symbol: SPY (99.63% Equity)	2,322.00	326.54	758,225.88	755,420.44			
VANGUARD MID-CAP VALUE ETF CUSIP: 922908512 Symbol: VOE (99.97% Equity)	7,580.00	101.88	772,250.40	772,018.73			
VIRTUS KAR SMALL-CAP GROWTH FUND CLASS A CUSIP: 92828N627 Symbol: PSGAX (92.35% Equity)	62,843.63	50.76	3,189,942.66	2,945,912.04			

Bond summary

as of October 31, 2020

Bond overview

Total quantity	852,000
Total market value	\$886,666.61
Total accrued interest	\$13,034.64
Total market value plus accrued interest	\$899,701.25
Total estimated annual bond interest	\$28,571.35
Average coupon	3.80%
Average current yield	3.22%
Average yield to maturity	0.20%
Average yield to worst	0.20%
Average modified duration	0.84
Average effective maturity	0.91

Credit quality of bond holdings

Effective credit rating	Issues	Value on 10/31/2020 (\$)	% of port.
A Aaa/AAA/AAA	0	0.00	0.00
B Aa/AA/AA	0	0.00	0.00
C A/A/A	1	364,575.83	39.66
D Baa/BBB/BBB	0	0.00	0.00
E Non-investment grade	0	0.00	0.00
F Certificate of deposit	3	535,125.41	60.34
G Not rated	1	0.00	0.00
Total	5	\$899,701.25	100%



Investment type allocation

Investment type	Taxable (\$)	Tax-exempt / deferred (\$)	Total (\$)	% of bond port.
Certificates of deposit	0.00	535,125.41	535,125.41	59.48
U.S. corporates	0.00	364,575.83	364,575.83	40.52
Total	\$0.00	\$899,701.24	\$899,701.24	100%

Bond maturity schedule

\$ Thousands



Effective maturity schedule

Cash, mutual funds and some preferred securities are not included.



Bond holdings

as of October 31, 2020

Summary of bond holdings

Maturity Year	Issues	Quantity	Est. annual income (\$)	Current yield (%)	Yield to maturity (%)	Yield to worst (%)	Modified duration	Adjusted cost basis (\$)	Unrealized gain/loss (\$)	Mkt. value (\$)	% of bond portfolio maturing
2020	2	440,000	347.50	0.08%	0.06 %	0.06 %	0.14	440,000	10.90	440,068.41	49.63%
2021	1	95,000	142.50	0.15%	0.05 %	0.05 %	0.30	95,000	28.50	95,057.00	10.72%
2022	1	297,000	28,081.35	7.99%	0.40 %	0.40 %	1.85	293,625	58,002.21	364,575.83	39.66%
2023	0	0			NA	NA	NA				
2024	0	0			NA	NA	NA				
2025	0	0			NA	NA	NA				
2026	0	0			NA	NA	NA				
2027	0	0			NA	NA	NA				
2028	0	0			NA	NA	NA				
2029	0	0			NA	NA	NA				
2030	0	0			NA	NA	NA				
2031	0	0			NA	NA	NA				
2032	0	0			NA	NA	NA				
2033	1	20,000	0.00	0.00%	NA	NA	NA	496,763	-496,763.00	0.00	
2034	0	0			NA	NA	NA				
2035	0	0			NA	NA	NA				
2036	0	0			NA	NA	NA				
2037	0	0			NA	NA	NA				
2038	0	0			NA	NA	NA				
2039	0	0			NA	NA	NA				
2040	0	0			NA	NA	NA				
2041	0	0			NA	NA	NA				
2042	0	0			NA	NA	NA				
2043	0	0			NA	NA	NA				
2044	0	0			NA	NA	NA				
2045	0	0			NA	NA	NA				
2046	0	0			NA	NA	NA				
2047	0	0			NA	NA	NA				
2048	0	0			NA	NA	NA				
2049	0	0			NA	NA	NA				
2049 +	0	0			NA	NA	NA				
Other	0	0			NA	NA	NA				
Total	5	852,000	\$28,571.35	3.22%	0.20 %	0.20 %	0.84	\$1,325,388.00	\$-438,721.39	\$899,701.25	

Includes all fixed-rate securities in the selected portfolio. Average yields and durations exclude Structured Product, Pass-Through, Perpetual Preferred, and Foreign securities.



Bond holdings - as of October 31, 2020 (continued)

Details of bond holdings

	Effective rating/ Underlying rating (Mdy/Fitch/S&P)	Quantity	Coupon	Effective maturity	Call date/ Call price (\$)	Est. annual income (\$)/ Curr. yield (%)	YTM (%) / YTW (%)	Modified duration	Adjusted cost basis (\$)/ Unreal. g/l (\$)	Market price (\$)	Mkt. value (\$)/ Accr. interest (\$)	% of bond port.
Total Bond Portfolio		852,000	3.80%	09/28/2021	NA	\$28,571.35 3.22%	0.20% 0.20%	0.84	\$1,325,388.00 \$-438,721.39	NA	\$886,666.61 \$13,034.64 \$899,701.25	100%

Maturing 2020

BANKUNITED NA FLOR FL US RT 00.0500% MAT 12/16/20 FIXED RATE CD /FL CUSIP: 066519PM5 Initial Purchase Date: 09/09/2020 Original Maturity: 12/16/2020	CD	185,000	0.05%	12/16/2020		92.50 0.05%	0.06% 0.06%	0.13	185,000.00 -1.85	99.999	184,998.15 11.40	20.86%
BEAL BANK, SSB TX US RT 00.1000% MAT 12/23/20 FIXED RATE CD /TX CUSIP: 07371ACM3 Initial Purchase Date: 08/17/2020 Original Maturity: 12/23/2020	CD	255,000	0.10%	12/23/2020		255.00 0.10%	0.07% 0.07%	0.15	255,000.00 12.75	100.005	255,012.75 46.11	28.76%
Total 2020		440,000	0.08%	12/20/2020		\$347.50 0.08%	0.06% 0.06%	0.14	\$440,000.00 \$10.90		\$440,010.90 \$57.51	49.63%

Maturing 2021

BEAL BK NV US RT 00.1500% MAT 02/17/21 FIXED RATE CD /NV CUSIP: 07371CDN6 Initial Purchase Date: 08/12/2020 Original Maturity: 02/17/2021	CD	95,000	0.15%	02/17/2021		142.50 0.15%	0.05% 0.05%	0.30	95,000.00 28.50	100.030	95,028.50 28.50	10.72%
Total 2021		95,000	0.15%	02/17/2021		\$142.50 0.15%	0.05% 0.05%	0.30	\$95,000.00 \$28.50		\$95,028.50 \$28.50	10.72%

Includes all fixed-rate securities in the selected portfolio. Average yields and durations exclude Structured Product, Pass-Through, Perpetual Preferred, and Foreign securities.



Bond holdings - as of October 31, 2020 (continued)

	Effective rating/ Underlying rating (Mdy/Fitch/S&P)	Quantity	Coupon	Effective maturity	Call date/ Call price (\$)	Est. annual income (\$)/ Curr. yield (%)	YTM (%)	Modified duration	Adjusted cost basis (\$)/ Unreal. g/l (\$)	Market price (\$)	Mkt. value (\$)/ Accr. interest (\$)	% of bond port.
Maturing 2022												
COMCAST CABLE 09.455% 111522 DTD111802 FC051503 COMMUNICATION CUSIP: 00209TAB1 Initial Purchase Date: 02/13/1992 Original Maturity: 11/15/2022	A3/A-/A- NR/NR/NR	297,000	9.46%	11/15/2022		28,081.35 7.99%	0.40% 0.40%	1.85	293,625.00 58,002.21	118.393	351,627.21 12,948.62	39.66%
Total 2022		297,000	9.46%	11/15/2022		\$28,081.35 7.99%	0.40% 0.40%	1.85	\$293,625.00 \$58,002.21		\$351,627.21 \$12,948.62	39.66%
Maturing 2033												
ESCROW GENERAL MTRS CORP 6.250% SER C DUE 07/15/33 CALLBL CONV /DE CUSIP: 370ESC717 Initial Purchase Date: 07/10/2003 Original Maturity: 07/15/2033	WR/NR/NR NR/NR/NR	20,000	6.25%	07/15/2033	07/15/2033 25.00		NA NA	NA NA	496,763.00 -496,763.00	0.000	0.00 0.00	0.00%
Total 2033		20,000	6.25%	07/15/2033		\$0.00 0.00%	NA NA	NA	\$496,763.00 \$-496,763.00		\$0.00 \$0.00	0.00%
Total Bond Portfolio												
	Effective rating/ Underlying rating (Mdy/Fitch/S&P)	Quantity	Coupon	Effective maturity	Call date/ Call price (\$)	Est. annual income (\$)/ Curr. yield (%)	YTM (%)	Modified duration	Adjusted cost basis (\$)/ Unreal. g/l (\$)	Market price (\$)	Mkt. value (\$)/ Accr. interest (\$)	% of bond port.
		852,000	3.80%	09/28/2021	NA	\$28,571.35 3.22%	0.20% 0.20%	0.84	\$1,325,388.00 \$-438,721.39	NA	\$886,666.61 \$13,034.64 \$899,701.25	100%

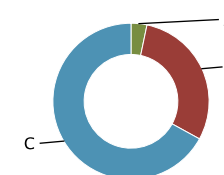
Includes all fixed-rate securities in the selected portfolio. Average yields and durations exclude Structured Product, Pass-Through, Perpetual Preferred, and Foreign securities.

Portfolio holdings

as of October 31, 2020

Summary of Portfolio Holdings

	Cost basis (\$)	Value on 10/31/2020 (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Portfolio
A Cash	3,690,891.78	3,690,891.78	0.00	0.00%	4,544.01	0.12%	3.29%
Cash	3,690,891.78	3,690,891.78	0.00	0.00%	4,544.01	0.12%	3.29%
US	3,690,891.78	3,690,891.78	0.00	0.00%	4,544.01	0.12%	3.29%
US Cash	3,690,891.78	3,690,891.78	0.00	0.00%	4,544.01	0.12%	3.29%
B Fixed Income	32,772,367.91	33,317,574.27	545,206.36	1.66%	886,856.09	2.66%	29.69%
US	27,780,413.13	28,443,853.25	663,440.12	2.39%	747,936.34	2.63%	25.34%
US Fixed Income	19,307,221.94	19,721,554.89	414,332.95	2.15%	456,327.94	2.31%	17.57%
Short	5,494,797.87	5,815,662.60	320,864.73	5.84%	115,648.02	1.99%	5.18%
Intermediate	13,277,424.07	13,370,766.88	93,342.81	0.70%	340,189.92	2.54%	11.91%
Other	535,000.00	535,125.41	125.41	0.02%	490.00	0.09%	0.48%
Government	3,854,404.85	4,214,991.34	360,586.49	9.36%	42,088.39	1.00%	3.76%
Other	3,854,404.85	4,214,991.34	360,586.49	9.36%	42,088.39	1.00%	3.76%
Corporate IG Credit	293,625.00	364,575.84	70,950.83	24.16%	28,081.35	7.99%	0.32%
Short	293,625.00	364,575.84	70,950.83	24.16%	28,081.35	7.99%	0.32%
Corporate High Yield	4,325,161.34	4,142,731.18	-182,430.15	-4.22%	221,438.66	5.35%	3.69%
Corporate High Yield	4,325,161.34	4,142,731.18	-182,430.15	-4.22%	221,438.66	5.35%	3.69%
Global	3,952,418.40	3,877,268.61	-75,149.78	-1.90%	98,574.63	2.54%	3.45%
Global	3,952,418.40	3,877,268.61	-75,149.78	-1.90%	98,574.63	2.54%	3.45%
Global	3,952,418.40	3,877,268.61	-75,149.78	-1.90%	98,574.63	2.54%	3.45%
International	1,039,536.38	996,452.41	-43,083.98	-4.14%	40,345.12	4.05%	0.90%
Emerging Markets	1,039,536.38	996,452.41	-43,083.98	-4.14%	40,345.12	4.05%	0.90%
Emerging Markets	1,039,536.38	996,452.41	-43,083.98	-4.14%	40,345.12	4.05%	0.90%
C Equity	41,177,530.70	75,221,343.42	34,043,812.72	82.68%	945,843.07	1.26%	67.02%
US	28,607,102.60	59,176,684.92	30,569,582.32	106.86%	827,376.68	1.40%	52.73%
US Equity	6,900.00	9,780.00	2,880.00	41.74%	0.00	0.00%	0.01%
Other	6,900.00	9,780.00	2,880.00	41.74%	0.00	0.00%	0.01%
Large Cap	17,163,495.86	41,921,981.33	24,758,485.47	144.25%	574,820.27	1.37%	37.35%
Core	5,373,243.44	21,119,739.35	15,746,495.91	293.05%	206,132.04	0.98%	18.82%
Growth	3,052,030.11	8,814,877.31	5,762,847.20	188.82%	31,740.00	0.36%	7.85%
Value	8,674,604.14	11,757,714.67	3,083,110.53	35.54%	332,618.23	2.83%	10.48%
Public Real Estate	63,618.17	229,650.00	166,031.83	260.98%	4,330.00	1.89%	0.20%
Mid Cap	5,680,680.02	10,300,721.40	4,620,041.38	81.33%	207,172.03	2.01%	9.18%
Core	1,321,945.61	3,425,072.00	2,103,126.39	159.09%	36,700.00	1.07%	3.05%
Growth	1,680,887.84	4,010,813.00	2,329,925.16	138.61%	41,610.00	1.04%	3.57%
Value	2,441,894.65	2,575,536.40	133,641.75	5.47%	114,822.03	4.46%	2.29%
Public Real Estate	235,951.92	289,300.00	53,348.08	22.61%	14,040.00	4.85%	0.27%
Small Cap	5,259,263.72	6,944,202.19	1,684,938.47	32.04%	45,384.38	0.65%	6.19%





Portfolio holdings - as of October 31, 2020 (continued)

	Cost basis (\$)	Value on 10/31/2020 (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Portfolio
Core	1,475,038.77	1,942,800.71	467,761.94	31.71%	27,074.04	1.39%	1.73%
Growth	1,615,180.51	3,327,642.66	1,712,462.15	106.02%	0.00	0.00%	2.97%
Value	2,169,044.44	1,673,758.82	-495,285.62	-22.83%	18,310.34	1.09%	1.49%
Convertibles	496,763.00	0.00	-496,763.00	-100.00%	0.00	0.00%	0.00%
Convertibles	496,763.00	0.00	-496,763.00	-100.00%	0.00	0.00%	0.00%
Global	4,132,772.71	6,425,094.89	2,292,322.18	55.47%	20,173.74	0.31%	5.72%
Global	4,132,772.71	6,425,094.89	2,292,322.18	55.47%	20,173.74	0.31%	5.72%
Core	4,132,772.71	6,425,094.89	2,292,322.18	55.47%	20,173.74	0.31%	5.72%
International	8,437,655.39	9,619,563.61	1,181,908.22	14.01%	98,292.65	1.02%	8.57%
International	84,933.90	240,080.00	155,146.10	182.67%	0.00	0.00%	0.21%
Core	84,933.90	240,080.00	155,146.10	182.67%	0.00	0.00%	0.21%
Developed Markets	5,460,899.99	5,677,900.43	217,000.45	3.97%	61,063.60	1.08%	5.06%
Core	1,629,214.63	1,875,664.05	246,449.42	15.13%	31,165.72	1.66%	1.67%
Growth	3,616,886.15	3,518,386.38	-98,499.76	-2.72%	10,597.88	0.30%	3.13%
Value	214,799.21	283,850.00	69,050.79	32.15%	19,300.00	6.80%	0.26%
Emerging Markets	2,891,821.50	3,701,583.18	809,761.67	28.00%	37,229.05	1.01%	3.30%
Growth	2,779,753.89	3,489,588.76	709,834.86	25.54%	37,229.05	1.07%	3.11%
Other	112,067.61	211,994.42	99,926.81	89.17%	0.00	0.00%	0.19%
D Commodities	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
E Non-Traditional	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
F Other	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
Total Portfolio	\$77,640,790.39	\$112,229,809.47	\$34,589,019.08	44.55%	\$1,837,243.17	1.64%	100%

Balanced mutual funds represented in multiple asset classes based on Morningstar allocations



Portfolio holdings - as of October 31, 2020 (continued)

Details of portfolio holdings

	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of asset class	% of Portfolio
Total Portfolio	\$77,640,790.39	\$112,229,809.47	\$34,589,019.08	44.55%	\$1,837,243.17	1.64%	100%	100%

	Quantity	Purchase price (\$)/ Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Cash	% of Portfolio
Cash											
Cash											
US											
US Cash											
LIQUID ASSETS GOVT FUND CUSIP: 90262Y307 Symbol: MMLIRA	3,690,714.68	1.00	1.00	3,690,714.68	3,690,714.68	0.00	0.00%	4,544.01	0.12%	100.00%	3.29%
USD CASH	177.10	1.00	1.00	177.10	177.10	0.00	0.00%	0.00	0.00%	0.00%	0.00%
Total US Cash				\$3,690,891.78	\$3,690,891.78	\$0.00	0.00%	\$4,544.01	0.12%	100.00%	3.29%
Total US				\$3,690,891.78	\$3,690,891.78	\$0.00	0.00%	\$4,544.01	0.12%	100.00%	3.29%
Total Cash				\$3,690,891.78	\$3,690,891.78	\$0.00	0.00%	\$4,544.01	0.12%	100.00%	3.29%
Total Cash				\$3,690,891.78	\$3,690,891.78	\$0.00	0.00%	\$4,544.01	0.12%	100.00%	3.29%

	Quantity	Purchase price (\$)/ Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
Fixed Income											
US											
US Fixed Income											
Short											
THORNBURG LIMITED TERM INCOME FD CLASS A CUSIP: 885215509 Symbol: THIFX Initial purchase date: Mar 09, 2017 Client investment: \$5,020,625.28 Reinvested dividends: \$474,172.59 Investment return: \$795,037.32 (15.84%)	412,166.02	13.33	14.11	5,494,797.87	5,815,662.60	320,864.73	5.84%	115,648.02	1.99%	17.46%	5.18%
Total Short				\$5,494,797.87	\$5,815,662.60	\$320,864.73	5.84%	\$115,648.02	1.99%	17.46%	5.18%

Intermediate



Portfolio holdings - as of October 31, 2020 (continued)

Fixed Income	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
US											
Intermediate											
LOOMIS SAYLES INVESTMENT GRADE BOND FUND CLASS A CUSIP: 543487144 Symbol: LIGRX Initial purchase date: Jun 13, 2014 Client investment: \$7,097,012.03 Reinvested dividends: \$1,878,944.53 Investment return: \$1,690,034.13 (23.81%)	742,776.51	12.08	11.83	8,975,956.56	8,787,046.16	-188,910.40	-2.10%	255,218.01	2.90%	26.37%	7.83%
METROPOLITAN WEST TOTAL RETURN BOND FUND CUSIP: 592905103 Symbol: MWTRX Initial purchase date: Nov 14, 2014 Client investment: \$3,587,358.91 Reinvested dividends: \$714,108.60 Investment return: \$996,361.81 (27.77%)	396,172.92	10.86	11.57	4,301,467.51	4,583,720.72	282,253.21	6.56%	84,971.92	1.85%	13.76%	4.08%
Total Intermediate				\$13,277,424.07	\$13,370,766.88	\$93,342.81	0.70%	\$340,189.92	2.54%	40.12%	11.91%
Other											
BANKUNITED NA FLOR FL US RT 00.0500% MAT 12/16/20 FIXED RATE CD CUSIP: 066519PM5 Symbol: ZBEMC Initial purchase date: Sep 09, 2020	185,000.00	100.00	100.00	185,000.00	185,009.55	9.55	0.01%	92.50	0.05%	0.56%	0.16%
BEAL BANK, SSB TX US RT 00.1000% MAT 12/23/20 FIXED RATE CD CUSIP: 07371ACM3 Symbol: ZBDIK Initial purchase date: Aug 17, 2020	255,000.00	100.00	100.01	255,000.00	255,058.86	58.86	0.02%	255.00	0.10%	0.77%	0.23%
BEAL BK NV US RT 00.1500% MAT 02/17/21 FIXED RATE CD CUSIP: 07371CDN6 Symbol: ZBDAM Initial purchase date: Aug 12, 2020	95,000.00	100.00	100.03	95,000.00	95,057.00	57.00	0.06%	142.50	0.15%	0.29%	0.09%
Total Other				\$535,000.00	\$535,125.41	\$125.41	0.02%	\$490.00	0.09%	1.61%	0.48%
Total US Fixed Income				\$19,307,221.94	\$19,721,554.89	\$414,332.95	2.15%	\$456,327.94	2.31%	59.19%	17.57%
Government											
Other											
ISHARES TIPS BOND ETF CUSIP: 464287176 Symbol: TIP Initial purchase date: Feb 16, 2017 Client investment: \$3,689,182.34 Reinvested dividends: \$165,222.51 Investment return: \$525,809.00 (14.25%)	33,658.00	114.52	125.23	3,854,404.85	4,214,991.34	360,586.49	9.36%	42,088.39	1.00%	12.65%	3.76%



Portfolio holdings - as of October 31, 2020 (continued)

	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
Fixed Income											
US											
Other											
Total Other				\$3,854,404.85	\$4,214,991.34	\$360,586.49	9.36%	\$42,088.39	1.00%	12.65%	3.76%
Total Government				\$3,854,404.85	\$4,214,991.34	\$360,586.49	9.36%	\$42,088.39	1.00%	12.65%	3.76%
Corporate IG Credit											
Short											
COMCAST CABLE 09.455% 111522 DTD111802 FC051503 COMMUNICATION CUSIP: 00209TAB1 Initial purchase date: Feb 13, 1992	297,000.00	98.86	118.39	293,625.00	364,575.84	70,950.83	24.16%	28,081.35	7.99%	1.09%	0.32%
Total Short				\$293,625.00	\$364,575.84	\$70,950.83	24.16%	\$28,081.35	7.99%	1.10%	0.32%
Total Corporate IG Credit				\$293,625.00	\$364,575.84	\$70,950.83	24.16%	\$28,081.35	7.99%	1.10%	0.32%
Corporate High Yield											
Corporate High Yield											
BLACKROCK HIGH YIELD BOND PORTFOLIOA CUSIP: 09260B663 Symbol: BHYAX Initial purchase date: Nov 16, 2012 Client investment: \$1,215,925.43 Reinvested dividends: \$1,119,535.46 Investment return: \$970,364.92 (79.8%)	294,251.73	7.94	7.43	2,335,460.89	2,186,290.34	-149,170.54	-6.39%	113,610.59	5.20%	6.56%	1.95%
BLACKROCK HIGH YIELD BOND PORTFOLIOINSTITUTIONAL CUSIP: 09260B630 Symbol: BHYIX Initial purchase date: Aug 12, 2020 Client investment: \$1,976,775.79 Reinvested dividends: \$12,924.66 Investment return: \$-20,334.95 (-1.03%)	263,316.40	7.56	7.43	1,989,700.45	1,956,440.84	-33,259.61	-1.67%	107,828.06	5.51%	5.87%	1.74%
Total Corporate High Yield				\$4,325,161.34	\$4,142,731.18	\$-182,430.15	-4.22%	\$221,438.66	5.35%	12.43%	3.69%
Total Corporate High Yield				\$4,325,161.34	\$4,142,731.18	\$-182,430.15	-4.22%	\$221,438.66	5.35%	12.43%	3.69%
Total US				\$27,780,413.13	\$28,443,853.25	\$663,440.12	2.39%	\$747,936.34	2.63%	85.37%	25.34%



Portfolio holdings - as of October 31, 2020 (continued)

	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
Fixed Income											
Global											
Global											
Global											
BLACKROCK STRATEGIC INCOME OPPORTUNITIES PORTFOLIO A	386,567.16	10.22	10.03	3,952,418.40	3,877,268.61	-75,149.79	-1.90%	98,574.63	2.54%	11.64%	3.45%
CUSIP: 09260B416 Symbol: BASIX											
Initial purchase date: Feb 13, 2014											
Client investment: \$3,141,350.15											
Reinvested dividends: \$811,068.25											
Investment return: \$735,918.46 (23.43%)											
Total Global				\$3,952,418.40	\$3,877,268.61	\$-75,149.78	-1.90%	\$98,574.63	2.54%	11.64%	3.45%
Total Global				\$3,952,418.40	\$3,877,268.61	\$-75,149.78	-1.90%	\$98,574.63	2.54%	11.64%	3.45%
Total Global				\$3,952,418.40	\$3,877,268.61	\$-75,149.78	-1.90%	\$98,574.63	2.54%	11.64%	3.45%
International											
Emerging Markets											
Emerging Markets											
TCW EMERGING MARKETS INCOME FUND CLASS N	97,404.93	10.67	10.23	1,039,536.38	996,452.41	-43,083.98	-4.14%	40,345.12	4.05%	2.99%	0.90%
CUSIP: 87234N351 Symbol: TGINX											
Initial purchase date: Oct 09, 2019											
Client investment: \$1,000,075.00											
Reinvested dividends: \$39,461.38											
Investment return: \$-3,622.60 (-0.36%)											
Total Emerging Markets				\$1,039,536.38	\$996,452.41	\$-43,083.98	-4.14%	\$40,345.12	4.05%	2.99%	0.90%
Total Emerging Markets				\$1,039,536.38	\$996,452.41	\$-43,083.98	-4.14%	\$40,345.12	4.05%	2.99%	0.90%
Total International				\$1,039,536.38	\$996,452.41	\$-43,083.98	-4.14%	\$40,345.12	4.05%	2.99%	0.90%
Total Fixed Income				\$32,772,367.91	\$33,317,574.27	\$545,206.36	1.66%	\$886,856.09	2.66%	100.00%	29.69%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
US Equity											
Other											
RTS BRISTOL-MYERS SQUIBB CO EXP 03/31/21 CUSIP: 110122157 Symbol: BMYRT Initial purchase date: Nov 21, 2019	3,000.00	2.30	3.26	6,900.00	9,780.00	2,880.00	41.74%	0.00	0.00%	0.01%	0.01%
Total Other				\$6,900.00	\$9,780.00	\$2,880.00	41.74%	\$0.00	0.00%	0.02%	0.01%
Total US Equity				\$6,900.00	\$9,780.00	\$2,880.00	41.74%	\$0.00	0.00%	0.02%	0.01%
Large Cap											
Core											
ABBOTT LABS CUSIP: 002824100 Symbol: ABT Initial purchase date: May 11, 2016	12,269.00	33.01	105.11	404,979.90	1,289,594.59	884,614.69	218.43%	17,667.36	1.37%	1.71%	1.15%
APPLE INC CUSIP: 037833100 Symbol: AAPL Initial purchase date: Sep 15, 2011	32,300.00	19.73	108.86	637,380.77	3,516,178.00	2,878,797.23	451.66%	26,486.00	0.75%	4.67%	3.10%
AUTOMATIC DATA PROCESSNG INC CUSIP: 053015103 Symbol: ADP Initial purchase date: Aug 01, 2002	2,000.00	29.12	157.96	58,245.59	315,920.00	257,674.41	442.39%	7,280.00	2.30%	0.42%	0.28%
BRISTOL MYERS SQUIBB CO CUSIP: 110122108 Symbol: BMY Initial purchase date: Nov 21, 2019	3,000.00	56.41	58.45	169,230.00	175,350.00	6,120.00	3.62%	5,400.00	3.08%	0.23%	0.16%
CALL ABBOTT LABS DUE 11/20/20 115.000 CUSIP: 99UBB00D9 Symbol: ABT Initial purchase date: Aug 27, 2020	-10.00	47,508.4	67.00	-4,750.84	-670.00	4,080.84	85.90%	0.00	0.00%	0.00%	0.00%
CALL FASTENAL CO DUE 11/20/20 45.000 CUSIP: 99UBARSK1 Symbol: FAST Initial purchase date: May 20, 2020	-30.00	12,582.6	68.00	-3,774.78	-2,040.00	1,734.78	45.96%	0.00	0.00%	0.00%	0.00%
CALL GLOBAL PAYMENTS INC DUE 11/20/20 220.000 CUSIP: 99UBB0N16 Symbol: GPN Initial purchase date: Jul 21, 2020	-20.00	20,354.6	25.00	-4,070.93	-500.00	3,570.93	87.72%	0.00	0.00%	0.00%	0.00%
CALL O REILLY AUTOMOTIVE DUE 11/20/20 520.000 CUSIP: 99UBB0N99 Symbol: ORLY Initial purchase date: Jul 21, 2020	-5.00	70,623.8	57.50	-3,531.19	-287.50	3,243.69	91.86%	0.00	0.00%	0.00%	0.00%



Portfolio holdings - as of October 31, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Core											
CALL PROCTER & GAMBLE CO DUE 01/15/21 145.000 383601 CUSIP: 99UBB1ZM5 Symbol: PG Initial purchase date: Jul 21, 2020	-30.00	12,287.4	319.00	-3,686.22	-9,570.00	-5,883.78	-159.62%	0.00	0.00%	-0.01%	-0.01%
CALL STARBUCKS CORP DUE 06/18/21 105.000 509736 CUSIP: 99UBBHKL8 Symbol: SBUX Initial purchase date: Aug 12, 2020	-12.00	12,297.7	270.00	-1,475.73	-3,240.00	-1,764.27	-119.55%	0.00	0.00%	0.00%	0.00%
CALL YUM! BRANDS INC DUE 12/18/20 105.000 5175J8 CUSIP: 99UBB0OP2 Symbol: YUM Initial purchase date: Jul 21, 2020	-20.00	21,240.2	79.00	-4,248.05	-1,580.00	2,668.05	62.81%	0.00	0.00%	0.00%	0.00%
CENTENE CORP CUSIP: 15135B101 Symbol: CNC Initial purchase date: Mar 25, 2019	4,732.00	66.76	59.10	315,908.32	279,661.20	-36,247.12	-11.47%	0.00	0.00%	0.37%	0.25%
CIGNA CORP CUSIP: 125523100 Symbol: CI Initial purchase date: Jun 07, 2011	394.00	182.19	166.97	71,780.89	65,786.18	-5,994.71	-8.35%	15.76	0.02%	0.09%	0.06%
COSTCO WHOLESALE CORP CUSIP: 22160K105 Symbol: COST Initial purchase date: May 10, 2012	2,060.00	100.01	357.62	206,030.16	736,697.20	530,667.04	257.57%	5,768.00	0.78%	0.98%	0.66%
D R HORTON INC CUSIP: 23331A109 Symbol: DHI Initial purchase date: Jan 09, 2019	7,000.00	40.09	66.81	280,621.20	467,670.00	187,048.80	66.66%	4,900.00	1.05%	0.62%	0.42%
DANAHER CORP CUSIP: 235851102 Symbol: DHR Initial purchase date: Jun 09, 2005	10,000.00	12.99	229.54	129,862.63	2,295,400.00	2,165,537.37	1,667.56%	7,200.00	0.31%	3.05%	2.05%
GLOBAL PAYMENTS INC CUSIP: 37940X102 Symbol: GPN Initial purchase date: Dec 10, 2009	5,000.00	25.78	157.74	128,889.82	788,700.00	659,810.18	511.92%	3,900.00	0.49%	1.05%	0.70%
LOCKHEED MARTIN CORP CUSIP: 539830109 Symbol: LMT Initial purchase date: Oct 09, 2019	320.00	388.31	350.13	124,260.66	112,041.60	-12,219.06	-9.83%	3,328.00	2.97%	0.15%	0.10%
MCDONALDS CORP CUSIP: 580135101 Symbol: MCD Initial purchase date: Jan 14, 2010	1,050.00	62.64	213.00	65,769.03	223,650.00	157,880.97	240.05%	5,418.00	2.42%	0.30%	0.20%
O REILLY AUTOMOTIVE INC CUSIP: 67103H107 Symbol: ORLY Initial purchase date: Jul 01, 2003	3,150.00	17.68	436.60	55,702.33	1,375,290.00	1,319,587.67	2,369.00%	0.00	0.00%	1.83%	1.23%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Core											
OTIS WORLDWIDE CORP CUSIP: 68902V107 Symbol: OTIS Initial purchase date: Oct 09, 2019	465.00	69.81	61.28	32,462.90	28,495.20	-3,967.70	-12.22%	372.00	1.31%	0.04%	0.03%
PROCTER & GAMBLE CO CUSIP: 742718109 Symbol: PG Initial purchase date: Feb 15, 1996	7,000.00	35.00	137.10	245,024.26	959,700.00	714,675.74	291.68%	22,139.60	2.31%	1.28%	0.86%
PUT APPLE INC DUE 12/18/20 62.500 030911 CUSIP: 99UBA9HA5 Symbol: AAPL Initial purchase date: Aug 14, 2020	-40.00	3,763.53	19.00	-1,505.41	-760.00	745.41	49.52%	0.00	0.00%	0.00%	0.00%
ROPER TECHNOLOGIES INC CUSIP: 776696106 Symbol: ROP Initial purchase date: Aug 01, 2002	4,000.00	15.11	371.34	60,440.25	1,485,360.00	1,424,919.75	2,357.57%	8,200.00	0.55%	1.97%	1.32%
SPDR S&P 500 ETF TR CUSIP: 78462F103 Symbol: SPY Initial purchase date: Feb 08, 2017 Client investment: \$502,534.43 Reinvested dividends: \$41,871.48 Investment return: \$255,691.45 (50.88%)	2,322.00	234.46	326.54	544,405.91	758,225.88	213,819.97	39.28%	13,191.32	1.74%	1.01%	0.68%
STARBUCKS CORP CUSIP: 855244109 Symbol: SBUX Initial purchase date: May 10, 2012	11,280.00	52.24	86.96	589,287.75	980,908.80	391,621.05	66.46%	20,304.00	2.07%	1.30%	0.87%
STRYKER CORP CUSIP: 863667101 Symbol: SYK Initial purchase date: Jul 17, 1997	13,000.00	16.05	202.01	208,628.87	2,626,130.00	2,417,501.13	1,158.76%	29,900.00	1.14%	3.49%	2.34%
THERMO FISHER SCIENTIFIC INC CUSIP: 883556102 Symbol: TMO Initial purchase date: Oct 09, 2019	445.00	280.04	473.12	124,616.33	210,538.40	85,922.07	68.95%	391.60	0.19%	0.28%	0.19%
UNITEDHEALTH GROUP INC CUSIP: 91324P102 Symbol: UNH Initial purchase date: Oct 09, 2019	560.00	224.30	305.14	125,605.88	170,878.40	45,272.52	36.04%	2,800.00	1.64%	0.23%	0.15%
WALT DISNEY CO (HOLDING CO) DISNEY COM CUSIP: 254687106 Symbol: DIS Initial purchase date: Dec 09, 2015	5,860.00	104.21	121.25	610,699.80	710,525.00	99,825.20	16.35%	0.00	0.00%	0.94%	0.63%
YUM CHINA HLDGS INC CUSIP: 98850P109 Symbol: YUMC Initial purchase date: Sep 09, 2004	17,000.00	6.25	53.23	106,176.78	904,910.00	798,733.22	752.27%	8,160.00	0.90%	1.20%	0.81%
YUM! BRANDS INC CUSIP: 988498101 Symbol: YUM Initial purchase date: Sep 09, 2004	7,080.00	14.73	93.33	104,276.56	660,776.40	556,499.84	533.68%	13,310.40	2.01%	0.88%	0.59%
Total Core				\$5,373,243.44	\$21,119,739.35	\$15,746,495.91	293.05%	\$206,132.04	0.98%	28.07%	18.82%



Portfolio holdings - as of October 31, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Growth											
ALPHABET INC CL A CUSIP: 02079K305 Symbol: GOOGL Initial purchase date: Nov 12, 2009	832.00	452.75	1,616.11	376,686.20	1,344,603.52	967,917.32	256.96%	0.00	0.00%	1.79%	1.20%
ALPHABET INC CL C CUSIP: 023135106 Symbol: GOOG Initial purchase date: Nov 12, 2009	904.00	433.82	1,621.01	392,177.01	1,465,393.04	1,073,216.03	273.66%	0.00	0.00%	1.95%	1.31%
AMAZON.COM INC CUSIP: 023135106 Symbol: AMZN Initial purchase date: Sep 14, 2016	585.00	769.36	3,036.15	450,073.08	1,776,147.75	1,326,074.67	294.64%	0.00	0.00%	2.36%	1.58%
BOOKING HLDGS INC CUSIP: 09857L108 Symbol: BKNG Initial purchase date: Feb 26, 2019	200.00	1,908.50	1,622.50	381,699.89	324,500.00	-57,199.89	-14.99%	0.00	0.00%	0.43%	0.29%
CALL VISA INC CL A DUE 12/18/20 225.000 488372 CUSIP: 99UBAQM37 Symbol: V Initial purchase date: Jul 21, 2020	-10.00	41,506.1	49.00	-4,150.61	-490.00	3,660.61	88.19%	0.00	0.00%	0.00%	0.00%
CROWN CASTLE INTL CORP REIT CUSIP: 22822V101 Symbol: CCI Initial purchase date: Nov 28, 2016	2,700.00	85.14	156.20	229,878.93	421,740.00	191,861.07	83.46%	14,364.00	3.41%	0.56%	0.38%
ESCROW ALTABA INC CUSIP: 021ESCO17 Initial purchase date: Jun 12, 2014	3,000.00	36.85	22.60	110,545.88	67,800.00	-42,745.88	-38.67%	0.00	0.00%	0.09%	0.06%
FACEBOOK INC CL A CUSIP: 30303M102 Symbol: FB Initial purchase date: May 29, 2019	4,000.00	185.11	263.11	740,424.45	1,052,440.00	312,015.55	42.14%	0.00	0.00%	1.40%	0.94%
MICROSOFT CORP CUSIP: 594918104 Symbol: MSFT Initial purchase date: Oct 09, 2019	900.00	139.79	202.47	125,813.00	182,223.00	56,410.00	44.84%	2,016.00	1.11%	0.24%	0.16%
VISA INC CL A CUSIP: 92826C839 Symbol: V Initial purchase date: Oct 17, 2011	12,000.00	20.74	181.71	248,882.28	2,180,520.00	1,931,637.72	776.13%	15,360.00	0.70%	2.90%	1.93%
Total Growth				\$3,052,030.11	\$8,814,877.31	\$5,762,847.20	188.82%	\$31,740.00	0.36%	11.72%	7.85%
Value											
AT&T INC CUSIP: 00206R102 Symbol: T Initial purchase date: Jun 09, 2011	5,968.00	31.24	27.02	186,443.46	161,255.36	-25,188.10	-13.51%	12,413.44	7.70%	0.21%	0.14%
BANK OF AMER CORP CUSIP: 060505104 Symbol: BAC Initial purchase date: Jan 13, 2016	33,050.00	15.11	23.70	499,349.09	783,285.00	283,935.91	56.86%	23,796.00	3.04%	1.04%	0.70%
BLACKROCK INC CUSIP: 09247X101 Symbol: BLK Initial purchase date: Aug 10, 2016	1,370.00	387.24	599.21	530,515.29	820,917.70	290,402.41	54.74%	19,892.40	2.42%	1.09%	0.73%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Value											
CALL CHEVRON CORP DUE 12/18/20 125.000 0926P3 CUSIP: 99UBBC536 Symbol: CVX Initial purchase date: Feb 14, 2020	-17.00	18,235.5	6.00	-3,100.04	-102.00	2,998.04	96.71%	0.00	0.00%	0.00%	0.00%
CALL COMCAST CORP NEW CL DUE 06/18/21 50.000 026263 CUSIP: 99UBB0ID6 Symbol: CMCSA Initial purchase date: Jul 20, 2020	-8.00	13,738.6	130.00	-1,099.09	-1,040.00	59.09	5.38%	0.00	0.00%	0.00%	0.00%
CALL DUKE ENERGY CORP NE DUE 01/15/21 105.000 119MG4 CUSIP: 99UBAL1G2 Symbol: DUK Initial purchase date: Feb 14, 2020	-10.00	32,453.5	60.00	-3,245.35	-600.00	2,645.35	81.51%	0.00	0.00%	0.00%	0.00%
CALL JPMORGAN CHASE & CO DUE 12/18/20 125.000 241JP2 CUSIP: 99UBA66E5 Symbol: JPM Initial purchase date: Aug 12, 2020	-10.00	14,857.7	14.00	-1,485.77	-140.00	1,345.77	90.58%	0.00	0.00%	0.00%	0.00%
CALL ORACLE CORP DUE 12/18/20 62.500 353752 CUSIP: 99UBARTO2 Symbol: ORCL Initial purchase date: May 20, 2020	-10.00	12,206.4	66.50	-1,220.64	-665.00	555.64	45.52%	0.00	0.00%	0.00%	0.00%
CALL PEPSICO INC DUE 12/18/20 155.000 368024 CUSIP: 99UBA7YI3 Symbol: PEP Initial purchase date: Jul 21, 2020	-10.00	9,653.30	25.00	-965.33	-250.00	715.33	74.10%	0.00	0.00%	0.00%	0.00%
CALL PFIZER INC DUE 06/18/21 40.000 370011 CUSIP: 99UBAU1X5 Symbol: PFE Initial purchase date: Jul 21, 2020	-30.00	18,886.7	173.00	-5,666.02	-5,190.00	476.02	8.40%	0.00	0.00%	-0.01%	0.00%
CARRIER GLOBAL CORP CUSIP: 14448C104 Symbol: CARR Initial purchase date: Oct 09, 2019	930.00	24.96	33.39	23,215.22	31,052.70	7,837.48	33.76%	297.60	0.96%	0.04%	0.03%
CHEVRON CORP CUSIP: 166764100 Symbol: CVX Initial purchase date: Feb 12, 2009	8,710.00	79.26	69.50	690,314.19	605,345.00	-84,969.19	-12.31%	44,943.60	7.42%	0.80%	0.54%
COMCAST CORP NEW CL A CUSIP: 20030N101 Symbol: CMCSA Initial purchase date: Oct 09, 2019	10,600.00	38.43	42.24	407,316.21	447,744.00	40,427.79	9.93%	9,752.00	2.18%	0.60%	0.40%
DUKE ENERGY CORP NEW CUSIP: 26441C204 Symbol: DUK Initial purchase date: Apr 09, 2009	3,041.00	40.54	92.11	123,267.64	280,106.51	156,838.87	127.23%	11,738.26	4.19%	0.37%	0.25%



Portfolio holdings - as of October 31, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Value											
GENL DYNAMICS CORP CUSIP: 369550108 Symbol: GD Initial purchase date: Jan 13, 2000	5,200.00	26.43	131.33	137,455.71	682,916.00	545,460.29	396.83%	22,880.00	3.35%	0.91%	0.61%
GENL MILLS INC CUSIP: 370334104 Symbol: GIS Initial purchase date: Jun 10, 2010	4,000.00	38.13	59.12	152,506.12	236,480.00	83,973.88	55.06%	8,160.00	3.45%	0.31%	0.21%
GILEAD SCIENCES INC CUSIP: 375558103 Symbol: GILD Initial purchase date: Dec 16, 2008	14,000.00	22.05	58.15	308,721.43	814,100.00	505,378.57	163.70%	38,080.00	4.68%	1.08%	0.73%
JPMORGAN CHASE & CO CUSIP: 46625H100 Symbol: JPM Initial purchase date: Aug 14, 1997	2,000.00	37.85	98.04	75,704.64	196,080.00	120,375.36	159.01%	7,200.00	3.67%	0.26%	0.17%
MARSH & MCLENNAN COS INC CUSIP: 571748102 Symbol: MMC Initial purchase date: Jan 13, 2016	7,030.00	53.01	103.46	372,652.52	727,323.80	354,671.28	95.17%	13,075.80	1.80%	0.97%	0.65%
MERCK & CO INC NEW COM CUSIP: 58933Y105 Symbol: MRK Initial purchase date: Oct 09, 2019	1,470.00	85.01	75.21	124,962.07	110,558.70	-14,403.37	-11.53%	3,586.80	3.24%	0.15%	0.10%
MFS VALUE FUND CLASS A CUSIP: 552983801 Symbol: MEIAX Initial purchase date: Oct 11, 2017 Client investment: \$3,950,015.75 Reinvested dividends: \$387,304.84 Investment return: \$326,436.05 (8.26%)	107,991.21	40.16	39.60	4,337,320.59	4,276,451.80	-60,868.79	-1.40%	69,573.34	1.63%	5.69%	3.80%
ORACLE CORP CUSIP: 68389X105 Symbol: ORCL Initial purchase date: Feb 10, 2005	5,000.00	13.18	56.11	65,886.08	280,550.00	214,663.92	325.81%	4,800.00	1.71%	0.37%	0.25%
PEPSICO INC CUSIP: 713448108 Symbol: PEP Initial purchase date: Oct 17, 2011	5,000.00	62.54	133.29	312,687.24	666,450.00	353,762.76	113.14%	20,450.00	3.07%	0.89%	0.59%
PFIZER INC CUSIP: 717081103 Symbol: PFE Initial purchase date: Jun 16, 2008	10,000.00	2.32	35.48	23,242.20	354,800.00	331,557.80	1,426.53%	15,200.00	4.28%	0.47%	0.32%
RAYTHEON TECHNOLOGIES CORP CUSIP: 75513E101 Symbol: RTX Initial purchase date: Oct 09, 2019	930.00	73.66	54.32	68,506.86	50,517.60	-17,989.26	-26.26%	1,767.00	3.50%	0.07%	0.05%
VF CORP CUSIP: 918204108 Symbol: VFC Initial purchase date: Oct 09, 2019	1,400.00	89.32	67.20	125,044.79	94,080.00	-30,964.79	-24.76%	2,744.00	2.92%	0.13%	0.08%
WALMART INC CUSIP: 931142103 Symbol: WMT Initial purchase date: Oct 09, 2019	1,050.00	120.26	138.75	126,275.03	145,687.50	19,412.47	15.37%	2,268.00	1.56%	0.19%	0.13%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Value											
Total Value				\$8,674,604.14	\$11,757,714.67	\$3,083,110.53	35.54%	\$332,618.23	2.83%	15.63%	10.48%
Public Real Estate											
AMERICAN TOWER CORP REIT CUSIP: 03027X100 Symbol: AMT Initial purchase date: Apr 13, 2012	1,000.00	63.62	229.65	63,618.17	229,650.00	166,031.83	260.98%	4,330.00	1.89%	0.31%	0.20%
Total Public Real Estate				\$63,618.17	\$229,650.00	\$166,031.83	260.98%	\$4,330.00	1.89%	0.31%	0.20%
Total Large Cap				\$17,163,495.86	\$41,921,981.33	\$24,758,485.47	144.25%	\$574,820.27	1.37%	55.73%	37.35%
Mid Cap											
Core											
CALL CONAGRA BRANDS, INC DUE 12/18/20 41.000 101290 CUSIP: 99UBB0HH8 Symbol: CAG Initial purchase date: Jul 21, 2020	-10.00	9,653.30	11.00	-965.33	-110.00	855.33	88.60%	0.00	0.00%	0.00%	0.01%
F5 NETWORKS INC CUSIP: 315616102 Symbol: FFIV Initial purchase date: Mar 02, 2015	5,800.00	118.85	132.94	689,354.72	771,052.00	81,697.28	11.85%	0.00	0.00%	1.03%	0.69%
GENTEX CORP CUSIP: 371901109 Symbol: GNTX Initial purchase date: Mar 02, 2015	5,000.00	17.82	27.67	89,080.35	138,350.00	49,269.65	55.31%	2,400.00	1.73%	0.18%	0.12%
LKQ CORP NEW CUSIP: 501889208 Symbol: LKQ Initial purchase date: Dec 10, 2009	4,000.00	9.25	31.99	36,990.75	127,960.00	90,969.25	245.92%	0.00	0.00%	0.17%	0.11%
SKYWORKS SOLUTIONS INC CUSIP: 83088M102 Symbol: SWKS Initial purchase date: Feb 26, 2019	4,000.00	83.16	141.29	332,628.80	565,160.00	232,531.20	69.91%	8,000.00	1.42%	0.75%	0.50%
TRACTOR SUPPLY COMPANY CUSIP: 892356106 Symbol: TSCO Initial purchase date: Dec 10, 2008	12,000.00	9.47	133.21	113,653.50	1,598,520.00	1,484,866.50	1,306.49%	19,200.00	1.20%	2.13%	1.42%
WATSCO INC CUSIP: 942622200 Symbol: WSO Initial purchase date: Apr 15, 2010	1,000.00	61.20	224.14	61,202.82	224,140.00	162,937.18	266.22%	7,100.00	3.17%	0.30%	0.20%
Total Core				\$1,321,945.61	\$3,425,072.00	\$2,103,126.39	159.09%	\$36,700.00	1.07%	4.55%	3.05%
Growth											
AMETEK INC (NEW) CUSIP: 031100100 Symbol: AME Initial purchase date: Mar 06, 2017	2,500.00	55.08	98.20	137,689.36	245,500.00	107,810.64	78.30%	1,800.00	0.73%	0.33%	0.22%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Growth											
CARMAX INC CUSIP: 143130102 Symbol: KMX Initial purchase date: Jun 12, 2014	5,000.00	44.47	86.44	222,371.77	432,200.00	209,828.23	94.36%	0.00	0.00%	0.57%	0.39%
COGNEX CORP CUSIP: 192422103 Symbol: CGNX Initial purchase date: Jun 07, 2011	8,000.00	8.42	65.90	67,345.65	527,200.00	459,854.35	682.83%	1,920.00	0.36%	0.70%	0.47%
FASTENAL CO CUSIP: 311900104 Symbol: FAST Initial purchase date: May 21, 2018	32,000.00	15.33	43.23	490,696.60	1,383,360.00	892,663.40	181.92%	32,000.00	2.31%	1.84%	1.23%
IDEX CORP CUSIP: 45167R104 Symbol: IEX Initial purchase date: Aug 11, 2004	2,000.00	20.50	170.39	41,001.00	340,780.00	299,779.00	731.15%	4,000.00	1.17%	0.45%	0.30%
OLD DOMINION FREIGHT LINES INC CUSIP: 679580100 Symbol: ODFL Initial purchase date: Jan 09, 2019	3,150.00	86.10	190.37	271,215.60	599,665.50	328,449.90	121.10%	1,890.00	0.32%	0.80%	0.53%
PALO ALTO NETWORKS INC CUSIP: 697435105 Symbol: PANW Initial purchase date: Feb 12, 2015	1,250.00	134.89	221.19	168,607.43	276,487.50	107,880.07	63.98%	0.00	0.00%	0.37%	0.25%
PUT TRACTOR SUPPLY COMP DUE 01/15/21 95.000 4608B6 CUSIP: 99UBBHQU2 Symbol: TSCO Initial purchase date: Aug 12, 2020	-10.00	10,635.2	115.00	-1,063.52	-1,150.00	-86.48	-8.13%	0.00	0.00%	0.00%	0.00%
ULTA BEAUTY, INC CUSIP: 903845303 Symbol: ULTA Initial purchase date: Jan 09, 2019	1,000.00	283.02	206.77	283,023.95	206,770.00	-76,253.95	-26.94%	0.00	0.00%	0.27%	0.18%
Total Growth				\$1,680,887.84	\$4,010,813.00	\$2,329,925.16	138.61%	\$41,610.00	1.04%	5.33%	3.57%
Value											
AECOM CUSIP: 00766T100 Symbol: ACM Initial purchase date: Feb 05, 2010	2,900.00	25.19	44.84	73,045.33	130,036.00	56,990.67	78.02%	0.00	0.00%	0.17%	0.12%
CALL GENUINE PARTS CO DUE 11/20/20 100.000 181455 CUSIP: 99UBB0MD1 Symbol: GPC Initial purchase date: Jul 20, 2020	-10.00	18,491.1	70.00	-1,849.11	-700.00	1,149.11	62.14%	0.00	0.00%	0.00%	0.00%
CALL HARTFORD FINCL SERV DUE 01/15/21 70.000 1988E4 CUSIP: 99UBBAGZ7 Symbol: HIG Initial purchase date: Oct 09, 2019	-10.00	19,473.1	20.00	-1,947.31	-200.00	1,747.31	89.73%	0.00	0.00%	0.00%	0.00%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Value											
CALL ONEOK INC NEW DUE 01/15/21 42.500 3496G4 CUSIP: 99UBB0N65 Symbol: OKE Initial purchase date: Jul 21, 2020	-20.00	8,945.55	20.00	-1,789.11	-400.00	1,389.11	77.64%	0.00	0.00%	0.00%	0.00%
CALL SMUCKER J M CO NEW DUE 01/15/21 130.000 4258Y5 CUSIP: 99UBBC569 Symbol: SJM Initial purchase date: Feb 14, 2020	-10.00	15,643.3	118.00	-1,564.33	-1,180.00	384.33	24.57%	0.00	0.00%	0.00%	0.00%
CONAGRA BRANDS, INC. CUSIP: 205887102 Symbol: CAG Initial purchase date: Oct 09, 2019	3,000.00	28.43	35.09	85,290.85	105,270.00	19,979.15	23.42%	3,300.00	3.13%	0.14%	0.09%
EAST WEST BANCORP INC CUSIP: 27579R104 Symbol: EWBC Initial purchase date: Jan 09, 2019	5,500.00	47.90	36.48	263,460.51	200,640.00	-62,820.51	-23.84%	6,050.00	3.02%	0.27%	0.18%
GENUINE PARTS CO CUSIP: 372460105 Symbol: GPC Initial purchase date: Apr 13, 2012	3,000.00	63.29	90.43	189,860.40	271,290.00	81,429.60	42.89%	9,480.00	3.49%	0.36%	0.24%
HARTFORD FINCL SERVICES GROUP INC CUSIP: 416515104 Symbol: HIG Initial purchase date: Jan 13, 2005	4,000.00	67.53	38.52	270,129.76	154,080.00	-116,049.76	-42.96%	5,200.00	3.37%	0.20%	0.14%
ONEOK INC NEW CUSIP: 682680103 Symbol: OKE Initial purchase date: May 14, 2009	14,000.00	14.25	29.00	199,490.58	406,000.00	206,509.42	103.52%	52,360.00	12.90%	0.54%	0.36%
SIGNATURE BANK NEW YORK N Y CUSIP: 82669G104 Symbol: SBNY Initial purchase date: Jan 09, 2019	2,500.00	111.91	80.74	279,777.82	201,850.00	-77,927.82	-27.85%	5,600.00	2.77%	0.27%	0.18%
SMUCKER J M CO NEW CUSIP: 832696405 Symbol: SJM Initial purchase date: Jan 14, 2010	3,000.00	62.32	112.20	186,962.73	336,600.00	149,637.27	80.04%	10,800.00	3.21%	0.45%	0.30%
VANGUARD MID-CAP VALUE ETF CUSIP: 922908512 Symbol: VOE Initial purchase date: Dec 12, 2019	7,580.00	118.87	101.88	901,026.53	772,250.40	-128,776.13	-14.29%	22,032.03	2.85%	1.03%	0.68%
Total Value				\$2,441,894.65	\$2,575,536.40	\$133,641.75	5.47%	\$114,822.03	4.46%	3.42%	2.29%
Public Real Estate											
REALTY INCOME CORP MD SBI CUSIP: 756109104 Symbol: O Initial purchase date: May 26, 2015	5,000.00	47.19	57.86	235,951.92	289,300.00	53,348.08	22.61%	14,040.00	4.85%	0.38%	0.27%
Total Public Real Estate				\$235,951.92	\$289,300.00	\$53,348.08	22.61%	\$14,040.00	4.85%	0.39%	0.27%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Total Mid Cap				\$5,680,680.02	\$10,300,721.40	\$4,620,041.38	81.33%	\$207,172.03	2.01%	13.69%	9.18%
Small Cap											
Core											
ISHARES RUSSELL 2000 ETF CUSIP: 464287655 Symbol: IWM Initial purchase date: Jun 13, 2014 Client investment: \$999,013.13 Reinvested dividends: \$62,057.32 Investment return: \$351,087.58 (35.14%)	8,819.00	120.32	153.09	1,061,070.45	1,350,100.71	289,030.26	27.24%	18,074.04	1.34%	1.79%	1.20%
META FINANCIAL GROUP INC CUSIP: 59100U108 Symbol: CASH Initial purchase date: Feb 19, 2019	5,000.00	25.65	29.34	128,234.81	146,700.00	18,465.19	14.40%	1,000.00	0.68%	0.20%	0.13%
PATRICK INDUST INC CUSIP: 703343103 Symbol: PATK Initial purchase date: Jan 09, 2019	8,000.00	35.72	55.75	285,733.51	446,000.00	160,266.49	56.09%	8,000.00	1.79%	0.59%	0.40%
Total Core				\$1,475,038.77	\$1,942,800.71	\$467,761.94	31.71%	\$27,074.04	1.39%	2.58%	1.73%
Growth											
SUPERNUS PHARMACEUTICALS INC CUSIP: 868459108 Symbol: SUPN Initial purchase date: Jan 09, 2019	7,500.00	36.70	18.36	275,240.06	137,700.00	-137,540.06	-49.97%	0.00	0.00%	0.18%	0.13%
VIRTUS KAR SMALL-CAP GROWTH FUND CLASS A CUSIP: 92828N627 Symbol: PSGAX Initial purchase date: Feb 08, 2017 Client investment: \$1,260,010.50 Reinvested dividends: \$79,929.95 Investment return: \$1,929,932.16 (153.17%)	62,843.63	21.32	50.76	1,339,940.45	3,189,942.66	1,850,002.21	138.07%	0.00	0.00%	4.24%	2.84%
Total Growth				\$1,615,180.51	\$3,327,642.66	\$1,712,462.15	106.02%	\$0.00	0.00%	4.42%	2.97%
Value											
AIR LEASE CORP CL A CUSIP: 00912X302 Symbol: AL Initial purchase date: Aug 29, 2016	4,000.00	28.94	27.24	115,761.25	108,960.00	-6,801.25	-5.88%	2,400.00	2.20%	0.14%	0.10%
DAVE & BUSTERS ENTMT INC CUSIP: 238337109 Symbol: PLAY Initial purchase date: Feb 26, 2019	5,000.00	51.13	17.16	255,673.62	85,800.00	-169,873.62	-66.44%	0.00	0.00%	0.11%	0.08%
KAR AUCTION SVCS INC CUSIP: 48238T109 Symbol: KAR Initial purchase date: Nov 30, 2015	5,000.00	14.97	14.56	74,834.68	72,800.00	-2,034.68	-2.72%	0.00	0.00%	0.10%	0.06%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Value											
MFS NEW DISCOVERY VALUE FUND CLASS A CUSIP: 55278M100 Symbol: NDVAX Initial purchase date: Oct 11, 2017 Client investment: \$1,264,187.35 Reinvested dividends: \$224,095.64 Investment return: \$5,961.47 (0.47%)	96,515.87	15.42	13.16	1,488,282.99	1,270,148.82	-218,134.17	-14.66%	8,910.34	0.70%	1.69%	1.13%
TCF FINL CORP NEW CUSIP: 872307103 Symbol: TCF Initial purchase date: Feb 26, 2019	5,000.00	46.90	27.21	234,491.90	136,050.00	-98,441.90	-41.98%	7,000.00	5.15%	0.18%	0.12%
Total Value				\$2,169,044.44	\$1,673,758.82	\$-495,285.62	-22.83%	\$18,310.34	1.09%	2.23%	1.49%
Total Small Cap				\$5,259,263.72	\$6,944,202.19	\$1,684,938.47	32.04%	\$45,384.38	0.65%	9.23%	6.19%
Convertibles											
Convertibles											
ESCROW GENERAL MTRS CORP 6.250% SER C DUE 07/15/33 CALLBL CONV CUSIP: 370ESC717 Initial purchase date: Jul 10, 2003	20,000.00	24.84	0.00	496,763.00	0.00	-496,763.00	-100.00%	0.00	0.00%	0.00%	0.00%
Total Convertibles				\$496,763.00	\$0.00	\$-496,763.00	-100.00%	\$0.00	0.00%	0.00%	0.00%
Total Convertibles				\$496,763.00	\$0.00	\$-496,763.00	-100.00%	\$0.00	0.00%	0.00%	0.00%
Total US				\$28,607,102.60	\$59,176,684.92	\$30,569,582.32	106.86%	\$827,376.68	1.40%	78.67%	52.73%
Global											
Global											
Core											
AMER FUNDS CAPITAL WORLD GROWTH & INCOME FUND CL A CUSIP: 140543109 Symbol: CWGIX Initial purchase date: Nov 12, 2010 Client investment: \$670,980.25 Reinvested dividends: \$384,354.01 Investment return: \$731,232.74 (108.98%)	27,635.26	38.19	50.74	1,055,334.26	1,402,212.99	346,878.73	32.87%	20,173.74	1.44%	1.86%	1.25%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Global											
Core											
COLUMBIA SELIGMAN COMMUNICATION AND INFORMATION FUND A CUSIP: 19766H429 Symbol: SLMCX Initial purchase date: Oct 19, 2001 Client investment: \$165,000.00 Reinvested dividends: \$2,912,438.45 Investment return: \$4,857,881.90 (2944.17%)	56,228.39	54.73	89.33	3,077,438.45	5,022,881.90	1,945,443.45	63.22%	0.00	0.00%	6.68%	4.47%
Total Core				\$4,132,772.71	\$6,425,094.89	\$2,292,322.18	55.47%	\$20,173.74	0.31%	8.54%	5.72%
Total Global				\$4,132,772.71	\$6,425,094.89	\$2,292,322.18	55.47%	\$20,173.74	0.31%	8.54%	5.72%
Total Global				\$4,132,772.71	\$6,425,094.89	\$2,292,322.18	55.47%	\$20,173.74	0.31%	8.54%	5.72%
International											
International											
Core											
FABRINET CUSIP: G3323L100 Symbol: FN Initial purchase date: Mar 30, 2011	4,000.00	21.23	60.02	84,933.90	240,080.00	155,146.10	182.67%	0.00	0.00%	0.32%	0.21%
Total Core				\$84,933.90	\$240,080.00	\$155,146.10	182.67%	\$0.00	0.00%	0.32%	0.21%
Total International				\$84,933.90	\$240,080.00	\$155,146.10	182.67%	\$0.00	0.00%	0.32%	0.21%
Developed Markets											
Core											
CHUBB LTD CHF CUSIP: H1467J104 Symbol: CB Initial purchase date: Apr 13, 2016	1,000.00	121.66	129.91	121,658.43	129,910.00	8,251.57	6.78%	3,120.00	2.40%	0.17%	0.12%
DIAGEO PLC NEW GB SPON ADR CUSIP: 25243Q205 Symbol: DEO Initial purchase date: Feb 11, 2010	1,000.00	64.02	130.18	64,017.37	130,180.00	66,162.63	103.35%	3,534.92	2.72%	0.17%	0.12%
ESSENT GROUP LTD CUSIP: G3198U102 Symbol: ESNT Initial purchase date: Feb 19, 2019	10,000.00	44.52	39.85	445,167.08	398,500.00	-46,667.08	-10.48%	6,400.00	1.61%	0.53%	0.36%
LINDE PLC EUR CUSIP: G5494J103 Symbol: LIN Initial purchase date: Sep 09, 2004	4,000.00	163.46	220.34	653,820.00	881,360.00	227,540.00	34.80%	15,408.00	1.75%	1.17%	0.78%
MEDTRONIC PLC CUSIP: G5960L103 Symbol: MDT Initial purchase date: Oct 09, 2019	1,165.00	107.77	100.57	125,550.50	117,164.05	-8,386.45	-6.68%	2,702.80	2.31%	0.16%	0.10%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
International											
Core											
SENSATA TECHNOLOGIES HLDG PLC EUR CUSIP: G8060N102 Symbol: ST Initial purchase date: May 29, 2019	5,000.00	43.80	43.71	219,001.25	218,550.00	-451.25	-0.21%	0.00	0.00%	0.29%	0.19%
Total Core				\$1,629,214.63	\$1,875,664.05	\$246,449.42	15.13%	\$31,165.72	1.66%	2.49%	1.67%
Growth											
CLEARBRIDGE INTERNATIONAL GROWTH FUND CLASS I CUSIP: 524686524 Symbol: LMGX Initial purchase date: Aug 12, 2020	61,736.91	58.59	56.99	3,616,886.15	3,518,386.38	-98,499.76	-2.72%	10,597.88	0.30%	4.68%	3.13%
Total Growth				\$3,616,886.15	\$3,518,386.38	\$-98,499.76	-2.72%	\$10,597.88	0.30%	4.68%	3.13%
Value											
RIO TINTO PLC SPON ADR CUSIP: 767204100 Symbol: RIO Initial purchase date: Sep 10, 2009	5,000.00	42.96	56.77	214,799.21	283,850.00	69,050.79	32.15%	19,300.00	6.80%	0.38%	0.26%
Total Value				\$214,799.21	\$283,850.00	\$69,050.79	32.15%	\$19,300.00	6.80%	0.38%	0.26%
Total Developed Markets				\$5,460,899.99	\$5,677,900.43	\$217,000.45	3.97%	\$61,063.60	1.08%	7.55%	5.06%
Emerging Markets											
Growth											
AMER FUNDS NEW WORLD FUND CLASS F2 CUSIP: 649280823 Symbol: NFFFX Initial purchase date: Feb 13, 2020	11,692.50	71.92	73.82	840,875.15	863,139.98	22,264.83	2.65%	11,014.33	1.28%	1.15%	0.77%
AMERICAN FUNDS NEW WORLD FUND CL A CUSIP: 649280104 Symbol: NEWFX Initial purchase date: Nov 12, 2015 Client investment: \$1,750,021.00 Reinvested dividends: \$188,857.74 Investment return: \$876,427.78 (50.08%)	35,550.20	54.54	73.88	1,938,878.74	2,626,448.78	687,570.04	35.46%	26,214.72	1.00%	3.49%	2.34%
Total Growth				\$2,779,753.89	\$3,489,588.76	\$709,834.86	25.54%	\$37,229.05	1.07%	4.64%	3.11%
Other											
SAMSUNG ELECTRS LTD GDR (EACH REP 25 COM STK KRW100) REG.S *GB LINE* CUSIP: 7960509A2 Initial purchase date: Jun 13, 2014	170.00	659.22	1,247.03	112,067.61	211,994.42	99,926.81	89.17%	0.00	0.00%	0.28%	0.19%
Total Other				\$112,067.61	\$211,994.42	\$99,926.81	89.17%	\$0.00	0.00%	0.28%	0.19%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
International											
Total Emerging Markets				\$2,891,821.50	\$3,701,583.18	\$809,761.67	28.00%	\$37,229.05	1.01%	4.92%	3.30%
Total International				\$8,437,655.39	\$9,619,563.61	\$1,181,908.22	14.01%	\$98,292.65	1.02%	12.79%	8.57%
Total Equity				\$41,177,530.70	\$75,221,343.42	\$34,043,812.72	82.68%	\$945,843.07	1.26%	100.00%	67.02%
Total Portfolio											
				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of asset class	% of Portfolio
Total Portfolio				\$77,640,790.39	\$112,229,809.47	\$34,589,019.08	44.55%	\$1,837,243.17	1.64%	100%	100%

Total accrued interest (included in market values): \$13,034.64

* Balanced mutual funds are displayed in unbundled view



Additional information about your portfolio

as of October 31, 2020

Benchmark composition

Consolidated

Blended Index

Start - Current: 30% Barclays Govt/Credit Int; 70% MSCI AC World IMI - GR



Disclosures applicable to accounts at UBS Financial Services Inc.

This section contains important disclosures regarding the information and valuations presented here. All information presented is subject to change at any time and is provided only as of the date indicated. The information in this report is for informational purposes only and should not be relied upon as the basis of an investment or liquidation decision. UBS FS account statements and official tax documents are the only official record of your accounts and are not replaced, amended or superseded by any of the information presented in these reports. You should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise.

UBS FS offers a number of investment advisory programs to clients, acting in our capacity as an investment adviser, including fee-based financial planning, discretionary account management, non-discretionary investment advisory programs, and advice on the selection of investment managers and mutual funds offered through our investment advisory programs. When we act as your investment adviser, we will have a written agreement with you expressly acknowledging our investment advisory relationship with you and describing our obligations to you. At the beginning of our advisory relationship, we will give you our Form ADV brochure(s) for the program(s) you selected that provides detailed information about, among other things, the advisory services we provide, our fees, our personnel, our other business activities and financial industry affiliations and conflicts between our interests and your interests.

In our attempt to provide you with the highest quality information available, we have compiled this report using data obtained from recognized statistical sources and authorities in the financial industry. While we believe this information to be reliable, we cannot make any representations regarding its accuracy or completeness. Please keep this guide as your Advisory Review.

Please keep in mind that most investment objectives are long term. Although it is important to evaluate your portfolio's performance over multiple time periods, we believe the greatest emphasis should be placed on the longer period returns.

Please review the report content carefully and contact your Financial Advisor with any questions.

Client Accounts: This report may include all assets in the accounts listed and may include eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your accounts and does not reflect the performance of your accounts in the fee-based program. As a result, the performance reflected in this report can

vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. When shown on a report, the risk profile and return objectives describe your overall goals for these accounts. For each account you maintain, you choose one return objective and a primary risk profile. If you have questions regarding these objectives or wish to change them, please contact your Financial Advisor to update your account records.

Performance: This report presents account activity and performance depending on which inception type you've chosen. The two options are: (1) All Assets (Since Performance Start): This presents performance for all assets since the earliest possible date; (2) Advisory Assets (Advisory Strategy Start) for individual advisory accounts: This presents Advisory level performance since the Latest Strategy Start date; If an account that has never been managed is included in the consolidated report, the total performance of that unmanaged account will be included since inception.

Time-weighted Returns for accounts / SWP/AAP sleeves (Monthly periods): The report displays a time weighted rate of return (TWR) that is calculated using the Modified Dietz Method. This calculation uses the beginning and ending portfolio values for the month and weights each contribution/withdrawal based upon the day the cash flow occurred. Periods greater than one month are calculated by linking the monthly returns. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. All periods shown which are greater than 12 months are annualized. This applies to all performance for all assets before 09/30/2010, Advisory assets before 12/31/2010 and SWP sleeves before 04/30/2018.

Time-weighted Returns for accounts / SWP/AAP sleeves (Daily periods): The report displays a time weighted rate of return (TWR) that is calculated by dividing the portfolio's daily gain/loss by the previous day's closing market value plus the net value of cash flows that occurred during the day, if it was positive. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. Periods greater than one day are calculated by linking the daily returns. All periods shown which are greater than 12 months are annualized. For reports generated prior to 01/26/2018, the performance calculations used the account's end of day value on the performance inception (listed in the report under the column "ITD") and all cash flows were posted at end of day. As a result of the change, the overall rate of return (TWR) and beginning market value displayed can vary from prior generated reports. This

applies to all performance for all assets on or after 09/30/2010, Advisory assets on or after 12/31/2010, SWP/AAP sleeves on or after 04/30/2018 as well as all Asset Class and Security level returns.

Money-weighted returns: Money-weighted return (MWR) is a measure of the rate of return for an asset or portfolio of assets. It is calculated by finding the daily Internal Rate of Return (IRR) for the period and then compounding this return by the number of days in the period being measured. The MWR incorporates the size and timing of cash flows, so it is an effective measure of returns on a portfolio.

Annualized Performance: All performance periods greater than one year are calculated (unless otherwise stated) on an annualized basis, which represents the return on an investment multiplied or divided to give a comparable one year return.

Cumulative Performance: A cumulative return is the aggregate amount that an investment has gained or lost over time, independent of the period of time involved.

Net of Fees and Gross of Fees Performance: Performance is presented on a "net of fees" and "gross of fees" basis, where indicated. Net returns do not reflect Program and wrap fees prior to 10/31/10 for accounts that are billed separately via invoice through a separate account billing arrangement. Gross returns do not reflect the deduction of fees, commissions or other charges. The payment of actual fees and expenses will reduce a client's return. The compound effect of such fees and expenses should be considered when reviewing returns. For example, the net effect of the deduction of fees on annualized performance, including the compounded effect over time, is determined by the relative size of the fee and the account's investment performance. It should also be noted that where gross returns are compared to an index, the index performance also does not reflect any transaction costs, which would lower the performance results. Market index data maybe subject to review and revision.

Benchmark/Major Indices: The past performance of an index is not a guarantee of future results. Any benchmark is shown for informational purposes only and relates to historical performance of market indices and not the performance of actual investments. Although most portfolios use indices as benchmarks, portfolios are actively managed and generally are not restricted to investing only in securities in the index. As a result, your portfolio holdings and performance may vary substantially from the index. Each index reflects an unmanaged universe of securities without any deduction for advisory fees or other expenses that would reduce actual returns, as well as the reinvestment of all income and dividends. An actual investment in the securities included in the index would require an investor to incur transaction costs, which would lower the performance

results. Indices are not actively managed and investors cannot invest directly in the indices. Market index data maybe subject to review and revision. Further, there is no guarantee that an investor's account will meet or exceed the stated benchmark. Index performance information has been obtained from third parties deemed to be reliable. We have not independently verified this information, nor do we make any representations or warranties to the accuracy or completeness of this information.

Blended Index - For Advisory accounts, Blended Index is designed to reflect the asset categories in which your account is invested. For Brokerage accounts, you have the option to select any benchmark from the list.

For certain products, the blended index represents the investment style corresponding to your client target allocation. If you change your client target allocation, your blended index will change in step with your change to your client target allocation.

Blended Index 2 - 8 - are optional indices selected by you which may consist of a blend of indexes. For advisory accounts, these indices are for informational purposes only. Depending on the selection, the benchmark selected may not be an appropriate basis for comparison of your portfolio based on it's holdings.

Custom Time Periods: If represented on this report, the performance start date and the performance end date have been selected by your Financial Advisor in order to provide performance and account activity information for your account for the specified period of time only. As a result, only a portion of your account's activity and performance information is presented in the performance report, and, therefore, presents a distorted representation of your account's activity and performance.

Net Deposits/Withdrawals: When shown on a report, this information represents the net value of all cash and securities contributions and withdrawals, program fees (including wrap fees) and other fees added to or subtracted from your accounts from the first day to the last day of the period. When fees are shown separately, net deposits / withdrawals does not include program fees (including wrap fees). When investment return is displayed net deposits / withdrawals does not include program fees (including wrap fees). For security contributions and withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts. Wrap fees will be included in this calculation except when paid via an invoice or through a separate accounts billing arrangement. When shown on Client summary and/or Portfolio review report, program fees (including wrap fees) may not be included in net deposits/withdrawals. PACE Program fees paid from sources other than your PACE account are treated as a contribution. A PACE



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

Program Fee rebate that is not reinvested is treated as a withdrawal.

Deposits: When shown on a report, this information represents the net value of all cash and securities contributions added to your accounts from the first day to the last day of the period. On Client Summary Report and/or Portfolio Review Report, this may exclude the Opening balance. For security contributions, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Withdrawals: When shown on a report, this information represents the net value of all cash and securities withdrawals subtracted from your accounts from the first day to the last day of the period. On Client summary and/or portfolio review report Withdrawals may not include program fees (including wrap fees). For security withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Dividends/Interest: Dividend and interest earned, when shown on a report, does not reflect your account's tax status or reporting requirements. Use only official tax reporting documents (i.e. 1099) for tax reporting purposes. The classification of private investment distributions can only be determined by referring to the official year-end tax-reporting document provided by the issuer.

Change in Accrued Interest: When shown on a report, this information represents the difference between the accrued interest at the beginning of the period from the accrued interest at the end of the period.

Change in Value: Represents the change in value of the portfolio during the reporting period, excluding additions/withdrawals, dividend and interest income earned and accrued interest. Change in Value may include programs fees (including wrap fees) and other fees.

Fees: Fees represented in this report include program and wrap fees. Program and wrap fees prior to October 1, 2010 for accounts that are billed separately via invoice through a separate account billing arrangement are not included in this report.

Beta: A measure of sensitivity of a portfolio of equities in relation to market movements. Beta measures the covariance of a portfolio in relation to the rest of the stock market as measured by a benchmark index. A portfolio with a higher beta would be expected to rise and fall further than the market. A portfolio with a low beta (less than 1) indicates that it would be expected to rise and fall less than the market.

Performance Start Date Changes: The Performance Start Date for accounts marked with a 'A' have changed.

Performance figures of an account with a changed Performance Start Date may not include the entire history of the account. The new Performance Start Date will generate performance returns and activity information for a shorter period than is available at UBS FS. As a result, the overall performance of these accounts may generate better performance than the period of time that would be included if the report used the inception date of the account. UBS FS recommends reviewing performance reports that use the inception date of the account because reports with longer time frames are usually more helpful when evaluating investment programs and strategies. Performance reports may include accounts with inception dates that precede the new Performance Start Date and will show performance and activity information from the earliest available inception date.

The change in Performance Start Date may be the result of a performance gap due to a zero-balance that prevents the calculation of continuous returns from the inception of the account. The Performance Start Date may also change if an account has failed one of our performance data integrity tests. In such instances, the account will be labeled as 'Review Required' and performance prior to that failure will be restricted. Finally, the Performance Start Date will change if you have explicitly requested a performance restart. Please contact your Financial Advisor for additional details regarding your new Performance Start Date.

Closed Account Performance: Accounts that have been closed may be included in the consolidated performance report. When closed accounts are included in the consolidated report, the performance report will only include information for the time period the account was active during the consolidated performance reporting time period.

Portfolio: For purposes of this report "portfolio" is defined as all of the accounts presented on the cover page or the header of this report and does not necessarily include all of the client's accounts held at UBS FS or elsewhere.

Percentage: Portfolio (in the "% Portfolio / Total" column) includes all holdings held in the account(s) selected when this report was generated. Broad asset class (in the "% broad asset class" column) includes all holdings held in that broad asset class in the account(s) selected when this report was generated.

Tax lots: This report displays security tax lots as either one line item (i.e., lumped tax lots) or as separate tax lot level information. If you choose to display security tax lots as one line item, the total cost equals the total value of all tax lots. The unit cost is an average of the total cost divided by the total number of shares. If the shares were purchased in different lots, the unit price listed does not represent the actual cost paid for each lot. The unrealized gain/loss value is calculated by combining the

total value of all tax lots plus or minus the total market value of the security.

If you choose to display tax lot level information as separate line items on the Portfolio Holdings report, the tax lot information may include information from sources other than UBS FS. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS FS. As a result this information may not be accurate and is provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. See your monthly statement for additional information.

Pricing: All securities are priced using the closing price reported on the last business day preceding the date of this report. Every reasonable attempt has been made to accurately price securities; however, we make no warranty with respect to any security's price. Please refer to the back of the first page of your UBS FS account statement for important information regarding the pricing used for certain types of securities, the sources of pricing data and other qualifications concerning the pricing of securities. To determine the value of securities in your account, we generally rely on third party quotation services. If a price is unavailable or believed to be unreliable, we may determine the price in good faith and may use other sources such as the last recorded transaction. When securities are held at another custodian or if you hold illiquid or restricted securities for which there is no published price, we will generally rely on the value provided by the custodian or issuer of that security.

Cash: Cash on deposit at UBS Bank USA is protected by the Federal Deposit Insurance Corporation (FDIC) up to \$250,000 in principal and accrued interest per depositor for each ownership type. Deposits made in an individual's own name, joint name, or individual retirement account are each held in a separate type of ownership. Such deposits are not guaranteed by UBS FS. More information is available upon request.

Margin: The quantity value may indicate that all or part of this position is held on margin or held in the short account. When an account holds a debit balance, this debit balance is incorporated into the account's total market value and deducted from the total value. When calculating the percent of portfolio on each security, the percentage will be impacted by the total market value of the account. Therefore, if the account's market value is reduced by a debit value of a holding the percent of portfolio will be greater and if the account's market value is increased by a holding then the percent of portfolio will be less.

Asset Allocation: Your allocation analysis is based on your current portfolio. The Asset Allocation portion of

this report shows the mix of various investment classes in your account. An asset allocation that shows a significantly higher percentage of equity investments may be more appropriate for an investor with a more aggressive investment strategy and higher tolerance for risk. Similarly, the asset allocation of a more conservative investor may show a higher percentage of fixed income investments.

Separately Managed Accounts and Pooled Investment Vehicles (such as mutual funds, closed end funds and exchanged traded funds): The asset classification displayed is based on firm's proprietary methodology for classifying assets. Please note that the asset classification assigned to rolled up strategies may include individual investments that provide exposure to other asset classes. For example, an International Developed Markets strategy may include exposure to Emerging Markets, and a US Large Cap strategy may include exposure to Mid Cap and Small Cap, etc.

Mutual Fund Asset Allocation: If the option to unbundle balanced mutual funds is selected and if a fund's holdings data is available, mutual funds will be classified by the asset class, subclass, and style breakdown of their underlying holdings. Where a mutual fund or ETF contains equity holdings from multiple equity sectors, this report will proportionately allocate the underlying holdings of the fund to those sectors measured as a percentage of the total fund's asset value as of the date shown.

This information is supplied by Morningstar, Inc. on a daily basis to UBS FS based on data supplied by the fund which may not be current. Mutual funds change their portfolio holdings on a regular (often daily) basis. Accordingly, any analysis that includes mutual funds may not accurately reflect the current composition of these funds. If a fund's underlying holding data is not available, it will be classified based on its corresponding overall Morningstar classification. All data is as of the date indicated in the report.

All pooled investment vehicles (such as mutual funds, closed end mutual funds, and exchange traded funds) incorporate internal management and operation expenses, which are reflected in the performance returns. Please see relevant fund prospectus for more information. Please note, performance for mutual funds is inclusive of multiple share classes.

Ineligible Assets: We require that you hold and purchase only eligible managed assets in your advisory accounts. Please contact your Financial Advisor for a list of the eligible assets in your program. These reports may provide performance information for eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your advisory assets. As a result, the



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

performance reflected in this report can vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. Neither UBS nor your Financial Advisor will act as your investment adviser with respect to Ineligible Assets.

Variable Annuity Asset Allocation: If the option to unbundle a variable annuity is selected and if a variable annuity's holdings data is available, variable annuities will be classified by the asset class, subclass, and style breakdown for their underlying holdings. Where a variable annuity contains equity holdings from multiple equity sectors, this report will proportionately allocate the underlying holdings of the variable annuity to those sectors measured as a percentage of the total variable annuity's asset value as of the date shown.

This information is supplied by Morningstar, Inc. on a weekly basis to UBS FS based on data supplied by the variable annuity which may not be current. Portfolio holdings of variable annuities change on a regular (often daily) basis. Accordingly, any analysis that includes variable annuities may not accurately reflect the current composition of these variable annuities. If a variable annuity's underlying holding data is not available, it will remain classified as an annuity. All data is as of the date indicated in the report.

Equity Style: The Growth, Value and Core labels are determined by Morningstar. If an Equity Style is unclassified, it is due to non-availability of data required by Morningstar to assign it a particular style.

Equity Capitalization: Market Capitalization is determined by Morningstar. Equity securities are classified as Large Cap, Mid Cap or Small Cap by Morningstar. Unclassified securities are those for which no capitalization is available on Morningstar.

Equity Sectors: The Equity sector analysis may include a variety of accounts, each with different investment and risk parameters. As a result, the overweighting or underweighting in a particular sector or asset class should not be viewed as an isolated factor in making investment/liquidation decisions; but should be assessed on an account by account basis to determine the overall impact on the account's portfolio.

Classified Equity: Classified equities are defined as those equities for which the firm can confirm the specific industry and sector of the underlying equity instrument.

Estimated Annual Income: The Estimated Annual Income is calculated by summing the previous four dividend/interest rates per share and multiplying by the quantity of shares held in the selected account(s) as of

the End Date of Report. For savings product & sweep funds this value is not calculated and is displayed as 0.

Current Yield: Current yield is defined as the estimated annual income divided by the total market value.

Research Rating: UBS CIO GWM Research is produced by UBS Global Wealth Management (a UBS business group that includes, among others, UBS Financial Services Inc. and UBS International, Inc.) and UBS Investment Research is produced by UBS Investment Bank. Both sources of information are independent of one another and reflect the different assumptions, views and analytical methods of the analysts who prepared them, there may exist a difference of opinions between the two sources. For more information about each research source, please go to UBS Online Services or ask your Financial Advisor.

UBS CIO Global Wealth Management Rating Under Review The CIO GWM Relative Sector Rating for this stock has been placed Under Review by the analyst.

UBS Investment Research Rating: Rating Exception Recommendation and price target information temporarily suspended due to restriction or pending review. **Rating Exception** The rating for this stock may have been placed Under Review by the analyst, or may have an exception to the core rating bands. For further information, please refer to the "Research Rating Exceptions" daily report or contact your financial advisor or representative.

Your Portfolio Manager uses a variety of research sources in making its investment decisions for your account, including research issued by the Firm, UBS affiliates and independent sources. Your Portfolio Manager is not required to follow the Firm or UBS issued research and may, in its discretion, take positions for your account that contradict the research issued by UBS and its affiliates.

UBS CIO Global Wealth Management: Opinions may differ or be contrary to those expressed by other business areas or groups of UBS AG, its subsidiaries and affiliates. UBS Chief Investment Office Wealth Management (UBS CIO GWM) is written by UBS Global Wealth Management (a UBS business group that includes, among others, UBS Financial Services Inc. and UBS International, Inc.). UBS Investment Research is written by UBS Investment Bank. The research process of UBS CIO GWM is independent of UBS Investment Research. As a consequence research methodologies applied and assumptions made by UBS CIO GWM and UBS Investment Research may differ, for example, in terms of investment horizon, model assumptions, and valuation methods. Therefore investment recommendations independently provided by the two UBS research organizations can be different.

Your Portfolio Manager uses a variety of research sources in making its investment decisions for your account, including research issued by the Firm, UBS affiliates and independent sources. Your Portfolio Manager is not required to follow the Firm or UBS issued research and may, in its discretion, take positions for your account that contradict the research issued by UBS and its affiliates.

There are two sources of UBS research. Reports from the first source, UBS CIO Global Wealth Management, are designed for individual investors and are produced by UBS Wealth Management Americas (which includes UBS Financial Services Inc. and UBS International, Inc.). The second research source is UBS Investment Research, and its reports are produced by UBS Investment Bank, whose primary business focus is institutional investors. The two sources operate independently and may therefore have different recommendations.

The various research content provided does not take into account the unique investment objectives, financial situation or particular needs of any specific individual investor. If you have any questions, please consult your Financial Advisor.

Bond Rating: These ratings are obtained from independent industry sources and are not verified by UBS FS. Securities without rating information are left blank. Rating agencies may discontinue ratings on high yield securities.

NR: When NR is displayed under bond rating column, no ratings are currently available from that rating agency.

High Yield: This report may designate a security as a high yield fixed income security even though one or more rating agencies rate the security as an investment grade security. Further, this report may incorporate a rating that is no longer current with the rating agency. For more information about the rating for any high yield fixed income security, or to consider whether to hold or sell a high yield fixed income security, please contact your financial advisor or representative and do not make any investment decision based on this report.

Credit/Event Risk: Investments are subject to event risk and changes in credit quality of the issuer. Issuers can experience economic situations that may have adverse effects on the market value of their securities.

Interest Rate Risk: Bonds are subject to market value fluctuations as interest rates rise and fall. If sold prior to maturity, the price received for an issue may be less than the original purchase price.

Reinvestment Risk: Since most corporate issues pay interest semiannually, the coupon payments over the life of the bond can have a major impact on the bond's total return.

Call Provisions: When evaluating the purchase of a corporate bond, one should be aware of any features that may allow the issuer to call the security. This is particularly important when considering an issue that is trading at a premium to its call price, since the return may be negatively impacted if the issue is redeemed. Should an issue be called, investors may be faced with an earlier than anticipated reinvestment decision, and may be unable to reinvest their principal at equally favorable rates.

Effective Maturity: Effective maturity is the expected redemption due to pre-refunding, puts, or maturity and does not reflect any sinking fund activity, optional or extraordinary calls. Securities without a maturity date are left blank and typically include Preferred Securities, Mutual Funds and Fixed Income UITs.

Yields: Yield to Maturity and Yield to Worst are calculated to the worst call.

Accrued Interest: Interest that has accumulated between the most recent payment and the report date may be reflected in market values for interest bearing securities.

Bond Averages: All averages are weighted averages calculated based on market value of the holding, not including accrued interest.

Tax Status: "Taxable" includes all securities held in a taxable account that are subject to federal and/or state or local taxation. "Tax-exempt" includes all securities held in a taxable account that are exempt from federal, state and local taxation. "Tax-deferred" includes all securities held in a tax-deferred account, regardless of the status of the security.

Bond sensitivity analysis: This analysis uses Modified Duration which approximates the percentage price change of a security for a given change in yield. The higher the modified duration of a security, the higher its risk. For callable securities, modified duration does not address the impact of changing interest rates on a bond's expected cash flow as a result of a call or prepayment.

Gain/Loss: The gain/loss information may include calculations based upon non-UBS FS cost basis information. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS FS. In addition, if this report contains positions with unavailable cost basis, the gain/(loss) for these positions are excluded in the calculation for the Gain/(Loss). As a result these figures may not be accurate and are provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. Rely only on year-end tax forms



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

when preparing your tax return. See your monthly statement for additional information.

The account listing may or may not include all of your accounts with UBS FS. The accounts included in this report are listed under the "Accounts included in this review" shown on the first page or listed at the top of each page. If an account number begins with "@" this denotes assets or liabilities held at other financial institutions. Information about these assets, including valuation, account type and cost basis, is based on the information you provided to us, or provided to us by third party data aggregators or custodians at your direction. We have not verified, and are not responsible for, the accuracy or completeness of this information.

Account name(s) displayed in this report and labels used for groupings of accounts can be customizable "nicknames" chosen by you to assist you with your recordkeeping or may have been included by your financial advisor for reference purposes only. The names used have no legal effect, are not intended to reflect any strategy, product, recommendation, investment objective or risk profile associated with your accounts or any group of accounts, and are not a promise or guarantee that wealth, or any financial results, can or will be achieved. All investments involve the risk of loss, including the risk of loss of the entire investment.

For more information about account or group names, or to make changes, contact your Financial Advisor.

Account changes: At UBS, we are committed to helping you work toward your financial goals. So that we may continue providing you with financial advice that is consistent with your investment objectives, please consider the following two questions:

- 1) Have there been any changes to your financial situation or investment objectives?
 - 2) Would you like to implement or modify any restrictions regarding the management of your account?
- If the answer to either question is "yes," it is important that you contact your Financial Advisor as soon as possible to discuss these changes. For MAC advisory accounts, please contact your investment manager directly if you would like to impose or change any investment restrictions on your account.

ADV disclosure: A complimentary copy of our current Form ADV Disclosure Brochure that describes the advisory program and related fees is available through your Financial Advisor. Please contact your Financial Advisor if you have any questions.

Important information for former Piper Jaffray and McDonald Investments clients: As an accommodation to former Piper Jaffray and McDonald Investments clients, these reports include performance history for their Piper Jaffray accounts prior to August 12, 2006 and

McDonald Investments accounts prior to February 9, 2007, the date the respective accounts were converted to UBS FS. UBS FS has not independently verified this information nor do we make any representations or warranties as to the accuracy or completeness of that information and will not be liable to you if any such information is unavailable, delayed or inaccurate.

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Performance History prior to the account's inception at UBS Financial Services, Inc. may have been included in this report and is based on data provided by third party sources. UBS Financial Services Inc. has not independently verified this information nor does UBS Financial Services Inc. guarantee the accuracy or validity of the information.

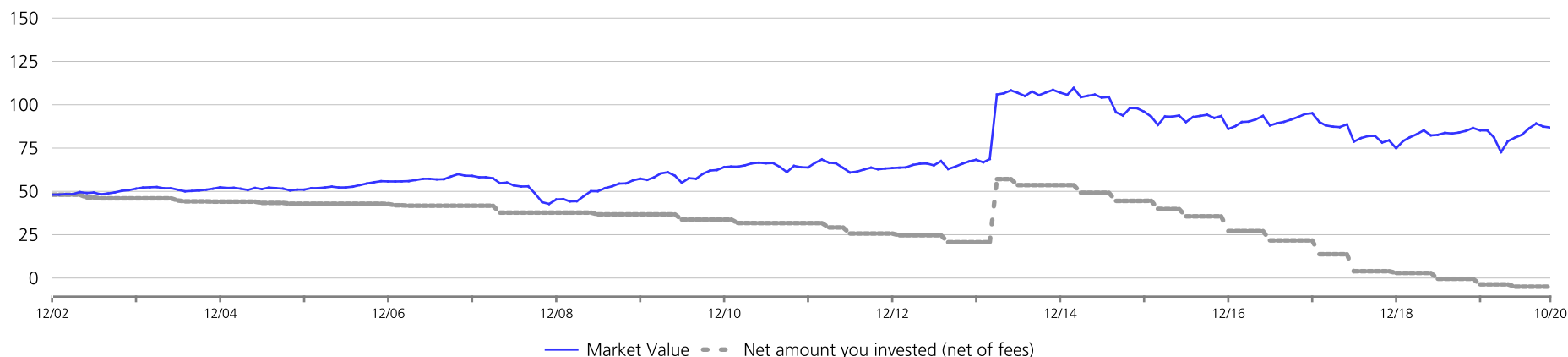
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Sources of portfolio value

as of October 31, 2020

\$ Millions



	MTD 09/30/2020 to 10/31/2020	YTD 12/31/2019 to 10/31/2020	1 Year 10/31/2019 to 10/31/2020	3 Years 10/31/2017 to 10/31/2020	5 Years 10/31/2015 to 10/31/2020	7 Years 10/31/2013 to 10/31/2020	10 Years 10/31/2010 to 10/31/2020	ITD 12/31/2002 to 10/31/2020
Opening value	87,415,944.25	85,204,028.21	84,933,637.80	92,934,890.68	98,090,366.77	65,929,218.12	62,011,298.27	48,080,148.50
Net deposits/withdrawals	0.00	-1,316,623.33	-4,518,479.33	-26,694,554.33	-49,483,945.86	-25,659,758.40	-38,716,612.77	-53,064,970.02
Div./interest income	52,333.13	1,264,428.15	2,478,821.57	7,850,450.37	13,624,563.65	18,928,580.36	24,022,972.66	40,699,973.26
Change in accr. interest	2,459.73	2,827.59	-3,946.38	-3,038.99	-25,758.43	-26,647.32	-118,755.35	-546,135.75
Change in value	-636,694.26	1,679,382.24	3,944,009.19	12,746,295.12	24,628,816.72	27,662,650.09	39,635,140.03	51,665,026.86
Closing value	86,834,042.85	86,834,042.85	86,834,042.85	86,834,042.85	86,834,042.85	86,834,042.85	86,834,042.85	86,834,042.85
Gross Time-weighted ROR	-0.66	3.70	8.00	8.47	9.26	7.98	8.37	7.71
Net Time-weighted ROR	-0.67	3.61	7.89	8.34	9.14	7.87	8.26	7.65

Performance returns are annualized after 1 year. Net deposits and withdrawals include program and account fees.

Benchmarks - Annualized time-weighted returns

Blended Index	-1.56	1.29	5.67	5.52	7.16	6.16	6.93	7.72
US Treasury Bill - 3 Mos	0.01	0.53	0.79	1.58	1.13	0.81	0.59	1.27
Barclays Agg Bond	-0.45	6.32	6.19	5.06	4.08	3.78	3.55	4.32
MSCI Emerging Markets-PR	1.98	-1.00	5.90	-0.47	5.41	0.93	-0.02	7.73
Russell 2000	2.09	-6.77	-0.14	2.18	7.26	6.36	9.63	9.56
S&P 500	-2.66	2.77	9.71	10.41	11.70	11.52	13.00	9.84

Blended Index:Start - Current: 30% Barclays Govt/Credit Int; 70% MSCI AC World IMI - GR

Past performance does not guarantee future results and current performance may be lower/higher than past data presented.



Portfolio holdings

as of October 31, 2020

Summary of Portfolio Holdings

TX XX595 • ERS • Defined Benefit

Prepared for

CITY OF TROY

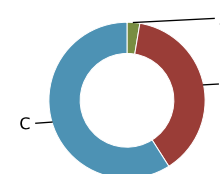
Risk profile:

Moderate

Return Objective:

Current Income and Capital Appreciation

	Cost basis (\$)	Value on 10/31/2020 (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Portfolio
A Cash	2,290,333.68	2,290,333.68	0.00	0.00%	2,819.64	0.12%	2.64%
Cash	2,290,333.68	2,290,333.68	0.00	0.00%	2,819.64	0.12%	2.64%
US	2,290,333.68	2,290,333.68	0.00	0.00%	2,819.64	0.12%	2.64%
US Cash	2,290,333.68	2,290,333.68	0.00	0.00%	2,819.64	0.12%	2.64%
B Fixed Income	32,772,367.91	33,317,574.27	545,206.36	1.66%	886,856.09	2.66%	38.37%
US	27,780,413.13	28,443,853.25	663,440.12	2.39%	747,936.34	2.63%	32.75%
US Fixed Income	19,307,221.94	19,721,554.89	414,332.95	2.15%	456,327.94	2.31%	22.71%
Short	5,494,797.87	5,815,662.60	320,864.73	5.84%	115,648.02	1.99%	6.70%
Intermediate	13,277,424.07	13,370,766.88	93,342.81	0.70%	340,189.92	2.54%	15.39%
Other	535,000.00	535,125.41	125.41	0.02%	490.00	0.09%	0.62%
Government	3,854,404.85	4,214,991.34	360,586.49	9.36%	42,088.39	1.00%	4.85%
Other	3,854,404.85	4,214,991.34	360,586.49	9.36%	42,088.39	1.00%	4.85%
Corporate IG Credit	293,625.00	364,575.84	70,950.83	24.16%	28,081.35	7.99%	0.42%
Short	293,625.00	364,575.84	70,950.83	24.16%	28,081.35	7.99%	0.42%
Corporate High Yield	4,325,161.34	4,142,731.18	-182,430.15	-4.22%	221,438.66	5.35%	4.77%
Corporate High Yield	4,325,161.34	4,142,731.18	-182,430.15	-4.22%	221,438.66	5.35%	4.77%
Global	3,952,418.40	3,877,268.61	-75,149.78	-1.90%	98,574.63	2.54%	4.47%
Global	3,952,418.40	3,877,268.61	-75,149.78	-1.90%	98,574.63	2.54%	4.47%
Global	3,952,418.40	3,877,268.61	-75,149.78	-1.90%	98,574.63	2.54%	4.47%
International	1,039,536.38	996,452.41	-43,083.98	-4.14%	40,345.12	4.05%	1.15%
Emerging Markets	1,039,536.38	996,452.41	-43,083.98	-4.14%	40,345.12	4.05%	1.15%
Emerging Markets	1,039,536.38	996,452.41	-43,083.98	-4.14%	40,345.12	4.05%	1.15%
C Equity	31,747,843.39	51,226,134.90	19,478,291.51	61.35%	683,500.75	1.33%	58.99%
US	19,926,517.52	36,038,606.40	16,112,088.88	80.86%	571,434.36	1.59%	41.50%
US Equity	6,900.00	9,780.00	2,880.00	41.74%	0.00	0.00%	0.01%
Other	6,900.00	9,780.00	2,880.00	41.74%	0.00	0.00%	0.01%
Large Cap	12,892,862.66	25,980,920.31	13,088,057.65	101.51%	407,777.95	1.57%	29.92%
Core	3,505,789.27	10,175,767.33	6,669,978.06	190.26%	120,393.72	1.18%	11.72%
Growth	1,521,837.13	5,380,807.31	3,858,970.18	253.57%	5,856.00	0.11%	6.20%
Value	7,801,618.09	10,194,695.67	2,393,077.58	30.67%	277,198.23	2.72%	11.74%
Public Real Estate	63,618.17	229,650.00	166,031.83	260.98%	4,330.00	1.89%	0.26%
Mid Cap	2,640,697.97	4,237,713.90	1,597,015.93	60.48%	136,672.03	3.23%	4.88%
Core	100,925.14	756,870.00	655,944.86	649.93%	13,500.00	1.78%	0.87%
Growth	641,116.51	1,307,797.50	666,680.99	103.99%	20,000.00	1.53%	1.51%
Value	1,898,656.32	2,173,046.40	274,390.08	14.45%	103,172.03	4.75%	2.50%
Small Cap	3,889,293.89	5,810,192.19	1,920,898.30	49.39%	26,984.38	0.46%	6.69%
Core	1,061,070.45	1,350,100.71	289,030.26	27.24%	18,074.04	1.34%	1.55%





Portfolio holdings - as of October 31, 2020 (continued)

	Cost basis (\$)	Value on 10/31/2020 (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Portfolio
Growth	1,339,940.45	3,189,942.66	1,850,002.21	138.07%	0.00	0.00%	3.67%
Value	1,488,282.99	1,270,148.82	-218,134.17	-14.66%	8,910.34	0.70%	1.47%
Convertibles	496,763.00	0.00	-496,763.00	-100.00%	0.00	0.00%	0.00%
Convertibles	496,763.00	0.00	-496,763.00	-100.00%	0.00	0.00%	0.00%
Global	4,132,772.71	6,425,094.89	2,292,322.18	55.47%	20,173.74	0.31%	7.40%
Global	4,132,772.71	6,425,094.89	2,292,322.18	55.47%	20,173.74	0.31%	7.40%
Core	4,132,772.71	6,425,094.89	2,292,322.18	55.47%	20,173.74	0.31%	7.40%
International	7,688,553.16	8,762,433.61	1,073,880.45	13.97%	91,892.65	1.05%	10.09%
Developed Markets	4,796,731.66	5,060,850.43	264,118.78	5.51%	54,663.60	1.08%	5.83%
Core	965,046.30	1,258,614.05	293,567.75	30.42%	24,765.72	1.97%	1.45%
Growth	3,616,886.15	3,518,386.38	-98,499.76	-2.72%	10,597.88	0.30%	4.05%
Value	214,799.21	283,850.00	69,050.79	32.15%	19,300.00	6.80%	0.33%
Emerging Markets	2,891,821.50	3,701,583.18	809,761.67	28.00%	37,229.05	1.01%	4.26%
Growth	2,779,753.89	3,489,588.76	709,834.86	25.54%	37,229.05	1.07%	4.02%
Other	112,067.61	211,994.42	99,926.81	89.17%	0.00	0.00%	0.24%
D Commodities	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
E Non-Traditional	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
F Other	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
Total Portfolio	\$66,810,544.98	\$86,834,042.85	\$20,023,497.87	29.97%	\$1,573,176.48	1.81%	100%

Balanced mutual funds represented in multiple asset classes based on Morningstar allocations



Portfolio holdings - as of October 31, 2020 (continued)

Details of portfolio holdings

	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of asset class	% of Portfolio
Total Portfolio	\$66,810,544.98	\$86,834,042.85	\$20,023,497.87	29.97%	\$1,573,176.48	1.81%	100%	100%

	Quantity	Purchase price (\$)/ Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Cash	% of Portfolio
Cash											
Cash											
US											
US Cash											
LIQUID ASSETS GOVT FUND CUSIP: 90262Y307 Symbol: MMLIRA	2,290,156.58	1.00	1.00	2,290,156.58	2,290,156.58	0.00	0.00%	2,819.64	0.12%	99.99%	2.64%
USD CASH	177.10	1.00	1.00	177.10	177.10	0.00	0.00%	0.00	0.00%	0.01%	0.00%
Total US Cash				\$2,290,333.68	\$2,290,333.68	\$0.00	0.00%	\$2,819.64	0.12%	100.00%	2.64%
Total US				\$2,290,333.68	\$2,290,333.68	\$0.00	0.00%	\$2,819.64	0.12%	100.00%	2.64%
Total Cash				\$2,290,333.68	\$2,290,333.68	\$0.00	0.00%	\$2,819.64	0.12%	100.00%	2.64%
Total Cash				\$2,290,333.68	\$2,290,333.68	\$0.00	0.00%	\$2,819.64	0.12%	100.00%	2.64%

	Quantity	Purchase price (\$)/ Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
Fixed Income											
US											
US Fixed Income											
Short											
THORNBURG LIMITED TERM INCOME FD CLASS A CUSIP: 885215509 Symbol: THIFX Initial purchase date: Mar 09, 2017 Client investment: \$5,020,625.28 Reinvested dividends: \$474,172.59 Investment return: \$795,037.32 (15.84%)	412,166.02	13.33	14.11	5,494,797.87	5,815,662.60	320,864.73	5.84%	115,648.02	1.99%	17.46%	6.70%
Total Short				\$5,494,797.87	\$5,815,662.60	\$320,864.73	5.84%	\$115,648.02	1.99%	17.46%	6.70%

Intermediate



Portfolio holdings - as of October 31, 2020 (continued)

	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
Fixed Income											
US											
Intermediate											
LOOMIS SAYLES INVESTMENT GRADE BOND FUND CLASS A CUSIP: 543487144 Symbol: LIGRX Initial purchase date: Jun 13, 2014 Client investment: \$7,097,012.03 Reinvested dividends: \$1,878,944.53 Investment return: \$1,690,034.13 (23.81%)	742,776.51	12.08	11.83	8,975,956.56	8,787,046.16	-188,910.40	-2.10%	255,218.01	2.90%	26.37%	10.11%
METROPOLITAN WEST TOTAL RETURN BOND FUND CUSIP: 592905103 Symbol: MWTRX Initial purchase date: Nov 14, 2014 Client investment: \$3,587,358.91 Reinvested dividends: \$714,108.60 Investment return: \$996,361.81 (27.77%)	396,172.92	10.86	11.57	4,301,467.51	4,583,720.72	282,253.21	6.56%	84,971.92	1.85%	13.76%	5.28%
Total Intermediate				\$13,277,424.07	\$13,370,766.88	\$93,342.81	0.70%	\$340,189.92	2.54%	40.12%	15.39%
Other											
BANKUNITED NA FLOR FL US RT 00.0500% MAT 12/16/20 FIXED RATE CD CUSIP: 066519PM5 Symbol: ZBEMC Initial purchase date: Sep 09, 2020	185,000.00	100.00	100.00	185,000.00	185,009.55	9.55	0.01%	92.50	0.05%	0.56%	0.21%
BEAL BANK, SSB TX US RT 00.1000% MAT 12/23/20 FIXED RATE CD CUSIP: 07371ACM3 Symbol: ZBDIK Initial purchase date: Aug 17, 2020	255,000.00	100.00	100.01	255,000.00	255,058.86	58.86	0.02%	255.00	0.10%	0.77%	0.29%
BEAL BK NV US RT 00.1500% MAT 02/17/21 FIXED RATE CD CUSIP: 07371CDN6 Symbol: ZBDAM Initial purchase date: Aug 12, 2020	95,000.00	100.00	100.03	95,000.00	95,057.00	57.00	0.06%	142.50	0.15%	0.29%	0.12%
Total Other				\$535,000.00	\$535,125.41	\$125.41	0.02%	\$490.00	0.09%	1.61%	0.62%
Total US Fixed Income				\$19,307,221.94	\$19,721,554.89	\$414,332.95	2.15%	\$456,327.94	2.31%	59.19%	22.71%
Government											
Other											



Portfolio holdings - as of October 31, 2020 (continued)

	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
Fixed Income											
US											
Other											
ISHARES TIPS BOND ETF CUSIP: 464287176 Symbol: TIP Initial purchase date: Feb 16, 2017 Client investment: \$3,689,182.34 Reinvested dividends: \$165,222.51 Investment return: \$525,809.00 (14.25%)	33,658.00	114.52	125.23	3,854,404.85	4,214,991.34	360,586.49	9.36%	42,088.39	1.00%	12.65%	4.85%
Total Other				\$3,854,404.85	\$4,214,991.34	\$360,586.49	9.36%	\$42,088.39	1.00%	12.65%	4.85%
Total Government				\$3,854,404.85	\$4,214,991.34	\$360,586.49	9.36%	\$42,088.39	1.00%	12.65%	4.85%
Corporate IG Credit											
Short											
COMCAST CABLE 09.455% 111522 DTD111802 FC051503 COMMUNICATION CUSIP: 00209TAB1 Initial purchase date: Feb 13, 1992	297,000.00	98.86	118.39	293,625.00	364,575.84	70,950.83	24.16%	28,081.35	7.99%	1.09%	0.42%
Total Short				\$293,625.00	\$364,575.84	\$70,950.83	24.16%	\$28,081.35	7.99%	1.10%	0.42%
Total Corporate IG Credit				\$293,625.00	\$364,575.84	\$70,950.83	24.16%	\$28,081.35	7.99%	1.10%	0.42%
Corporate High Yield											
Corporate High Yield											
BLACKROCK HIGH YIELD BOND PORTFOLIOA CUSIP: 09260B663 Symbol: BHYAX Initial purchase date: Nov 16, 2012 Client investment: \$1,215,925.43 Reinvested dividends: \$1,119,535.46 Investment return: \$970,364.92 (79.8%)	294,251.73	7.94	7.43	2,335,460.89	2,186,290.34	-149,170.54	-6.39%	113,610.59	5.20%	6.56%	2.52%
BLACKROCK HIGH YIELD BOND PORTFOLIOINSTITUTIONAL CUSIP: 09260B630 Symbol: BHYIX Initial purchase date: Aug 12, 2020 Client investment: \$1,976,775.79 Reinvested dividends: \$12,924.66 Investment return: \$-20,334.95 (-1.03%)	263,316.40	7.56	7.43	1,989,700.45	1,956,440.84	-33,259.61	-1.67%	107,828.06	5.51%	5.87%	2.25%
Total Corporate High Yield				\$4,325,161.34	\$4,142,731.18	\$-182,430.15	-4.22%	\$221,438.66	5.35%	12.43%	4.77%
Total Corporate High Yield				\$4,325,161.34	\$4,142,731.18	\$-182,430.15	-4.22%	\$221,438.66	5.35%	12.43%	4.77%



Portfolio holdings - as of October 31, 2020 (continued)

	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Fixed Income	% of Portfolio
Fixed Income											
US											
Total US				\$27,780,413.13	\$28,443,853.25	\$663,440.12	2.39%	\$747,936.34	2.63%	85.37%	32.75%
Global											
Global											
Global											
BLACKROCK STRATEGIC INCOME OPPORTUNITIES PORTFOLIOA CUSIP: 09260B416 Symbol: BASIX Initial purchase date: Feb 13, 2014 Client investment: \$3,141,350.15 Reinvested dividends: \$811,068.25 Investment return: \$735,918.46 (23.43%)	386,567.16	10.22	10.03	3,952,418.40	3,877,268.61	-75,149.79	-1.90%	98,574.63	2.54%	11.64%	4.47%
Total Global				\$3,952,418.40	\$3,877,268.61	\$-75,149.78	-1.90%	\$98,574.63	2.54%	11.64%	4.47%
Total Global				\$3,952,418.40	\$3,877,268.61	\$-75,149.78	-1.90%	\$98,574.63	2.54%	11.64%	4.47%
Total Global				\$3,952,418.40	\$3,877,268.61	\$-75,149.78	-1.90%	\$98,574.63	2.54%	11.64%	4.47%
International											
Emerging Markets											
Emerging Markets											
TCW EMERGING MARKETS INCOME FUND CLASS N CUSIP: 87234N351 Symbol: TGINX Initial purchase date: Oct 09, 2019 Client investment: \$1,000,075.00 Reinvested dividends: \$39,461.38 Investment return: \$-3,622.60 (-0.36%)	97,404.93	10.67	10.23	1,039,536.38	996,452.41	-43,083.98	-4.14%	40,345.12	4.05%	2.99%	1.15%
Total Emerging Markets				\$1,039,536.38	\$996,452.41	\$-43,083.98	-4.14%	\$40,345.12	4.05%	2.99%	1.15%
Total Emerging Markets				\$1,039,536.38	\$996,452.41	\$-43,083.98	-4.14%	\$40,345.12	4.05%	2.99%	1.15%
Total International				\$1,039,536.38	\$996,452.41	\$-43,083.98	-4.14%	\$40,345.12	4.05%	2.99%	1.15%
Total Fixed Income				\$32,772,367.91	\$33,317,574.27	\$545,206.36	1.66%	\$886,856.09	2.66%	100.00%	38.37%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
US Equity											
Other											
RTS BRISTOL-MYERS SQUIBB CO EXP 03/31/21 CUSIP: 110122157 Symbol: BMYRT Initial purchase date: Nov 21, 2019	3,000.00	2.30	3.26	6,900.00	9,780.00	2,880.00	41.74%	0.00	0.00%	0.02%	0.01%
Total Other				\$6,900.00	\$9,780.00	\$2,880.00	41.74%	\$0.00	0.00%	0.02%	0.01%
Total US Equity				\$6,900.00	\$9,780.00	\$2,880.00	41.74%	\$0.00	0.00%	0.02%	0.01%
Large Cap											
Core											
ABBOTT LABS CUSIP: 002824100 Symbol: ABT Initial purchase date: May 11, 2016	3,045.00	38.39	105.11	116,912.23	320,059.95	203,147.72	173.76%	4,384.80	1.37%	0.62%	0.37%
APPLE INC CUSIP: 037833100 Symbol: AAPL Initial purchase date: Sep 15, 2011	12,300.00	14.01	108.86	172,382.83	1,338,978.00	1,166,595.17	676.75%	10,086.00	0.75%	2.61%	1.53%
BRISTOL MYERS SQUIBB CO CUSIP: 110122108 Symbol: BMY Initial purchase date: Nov 21, 2019	3,000.00	56.41	58.45	169,230.00	175,350.00	6,120.00	3.62%	5,400.00	3.08%	0.34%	0.20%
CALL ABBOTT LABS DUE 11/20/20 115.000 000132 CUSIP: 99UBB00D9 Symbol: ABT Initial purchase date: Aug 27, 2020	-10.00	47,508.4	67.00	-4,750.84	-670.00	4,080.84	85.90%	0.00	0.00%	0.00%	0.00%
CALL FASTENAL CO DUE 11/20/20 45.000 167061 CUSIP: 99UBARSK1 Symbol: FAST Initial purchase date: May 20, 2020	-30.00	12,582.6	68.00	-3,774.78	-2,040.00	1,734.78	45.96%	0.00	0.00%	0.00%	0.00%
CALL GLOBAL PAYMENTS INC DUE 11/20/20 220.000 1848N3 CUSIP: 99UBB0N16 Symbol: GPN Initial purchase date: Jul 21, 2020	-20.00	20,354.6	25.00	-4,070.93	-500.00	3,570.93	87.72%	0.00	0.00%	0.00%	0.00%
CALL O REILLY AUTOMOTIVE DUE 11/20/20 520.000 350B81 CUSIP: 99UBB0N99 Symbol: ORLY Initial purchase date: Jul 21, 2020	-5.00	70,623.8	57.50	-3,531.19	-287.50	3,243.69	91.86%	0.00	0.00%	0.00%	0.00%



Portfolio holdings - as of October 31, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Core											
CALL PROCTER & GAMBLE CO DUE 01/15/21 145.000 383601 CUSIP: 99UBB1ZM5 Symbol: PG Initial purchase date: Jul 21, 2020	-30.00	12,287.4	319.00	-3,686.22	-9,570.00	-5,883.78	-159.62%	0.00	0.00%	-0.02%	-0.01%
CALL STARBUCKS CORP DUE 06/18/21 105.000 509736 CUSIP: 99UBBHKL8 Symbol: SBUX Initial purchase date: Aug 12, 2020	-12.00	12,297.7	270.00	-1,475.73	-3,240.00	-1,764.27	-119.55%	0.00	0.00%	-0.01%	0.00%
CALL YUM! BRANDS INC DUE 12/18/20 105.000 5175J8 CUSIP: 99UBB0OP2 Symbol: YUM Initial purchase date: Jul 21, 2020	-20.00	21,240.2	79.00	-4,248.05	-1,580.00	2,668.05	62.81%	0.00	0.00%	0.00%	0.00%
COSTCO WHOLESALE CORP CUSIP: 22160K105 Symbol: COST Initial purchase date: May 10, 2012	2,060.00	100.01	357.62	206,030.16	736,697.20	530,667.04	257.57%	5,768.00	0.78%	1.44%	0.85%
DANAHER CORP CUSIP: 235851102 Symbol: DHR Initial purchase date: Jun 09, 2005	2,000.00	20.72	229.54	41,434.65	459,080.00	417,645.35	1,007.96%	1,440.00	0.31%	0.90%	0.53%
GLOBAL PAYMENTS INC CUSIP: 37940X102 Symbol: GPN Initial purchase date: Dec 10, 2009	5,000.00	25.78	157.74	128,889.82	788,700.00	659,810.18	511.92%	3,900.00	0.49%	1.54%	0.91%
LOCKHEED MARTIN CORP CUSIP: 539830109 Symbol: LMT Initial purchase date: Oct 09, 2019	320.00	388.31	350.13	124,260.66	112,041.60	-12,219.06	-9.83%	3,328.00	2.97%	0.22%	0.13%
MCDONALDS CORP CUSIP: 580135101 Symbol: MCD Initial purchase date: Jan 14, 2010	1,050.00	62.64	213.00	65,769.03	223,650.00	157,880.97	240.05%	5,418.00	2.42%	0.44%	0.26%
O REILLY AUTOMOTIVE INC CUSIP: 67103H107 Symbol: ORLY Initial purchase date: Jul 01, 2003	1,500.00	16.91	436.60	25,366.87	654,900.00	629,533.13	2,481.71%	0.00	0.00%	1.28%	0.75%
OTIS WORLDWIDE CORP CUSIP: 68902V107 Symbol: OTIS Initial purchase date: Oct 09, 2019	465.00	69.81	61.28	32,462.90	28,495.20	-3,967.70	-12.22%	372.00	1.31%	0.06%	0.03%
PROCTER & GAMBLE CO CUSIP: 742718109 Symbol: PG Initial purchase date: Feb 15, 1996	7,000.00	35.00	137.10	245,024.26	959,700.00	714,675.74	291.68%	22,139.60	2.31%	1.87%	1.11%



Portfolio holdings - as of October 31, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Core											
PUT APPLE INC DUE 12/18/20 62.500 030911 CUSIP: 99UBA9HA5 Symbol: AAPL Initial purchase date: Aug 14, 2020	-40.00	3,763.53	19.00	-1,505.41	-760.00	745.41	49.52%	0.00	0.00%	0.00%	0.00%
SPDR S&P 500 ETF TR CUSIP: 78462F103 Symbol: SPY Initial purchase date: Feb 08, 2017 Client investment: \$502,534.43 Reinvested dividends: \$41,871.48 Investment return: \$255,691.45 (50.88%)	2,322.00	234.46	326.54	544,405.91	758,225.88	213,819.97	39.28%	13,191.32	1.74%	1.48%	0.87%
STARBUCKS CORP CUSIP: 855244109 Symbol: SBUX Initial purchase date: May 10, 2012	11,280.00	52.24	86.96	589,287.75	980,908.80	391,621.05	66.46%	20,304.00	2.07%	1.91%	1.13%
THERMO FISHER SCIENTIFIC INC CUSIP: 883556102 Symbol: TMO Initial purchase date: Oct 09, 2019	445.00	280.04	473.12	124,616.33	210,538.40	85,922.07	68.95%	391.60	0.19%	0.41%	0.24%
UNITEDHEALTH GROUP INC CUSIP: 91324P102 Symbol: UNH Initial purchase date: Oct 09, 2019	560.00	224.30	305.14	125,605.88	170,878.40	45,272.52	36.04%	2,800.00	1.64%	0.33%	0.20%
WALT DISNEY CO (HOLDING CO) DISNEY COM CUSIP: 254687106 Symbol: DIS Initial purchase date: Dec 09, 2015	5,860.00	104.21	121.25	610,699.80	710,525.00	99,825.20	16.35%	0.00	0.00%	1.39%	0.82%
YUM CHINA HLDGS INC CUSIP: 98850P109 Symbol: YUMC Initial purchase date: Sep 09, 2004	17,000.00	6.25	53.23	106,176.78	904,910.00	798,733.22	752.27%	8,160.00	0.90%	1.77%	1.04%
YUM! BRANDS INC CUSIP: 988498101 Symbol: YUM Initial purchase date: Sep 09, 2004	7,080.00	14.73	93.33	104,276.56	660,776.40	556,499.84	533.68%	13,310.40	2.01%	1.29%	0.76%
Total Core				\$3,505,789.27	\$10,175,767.33	\$6,669,978.06	190.26%	\$120,393.72	1.18%	19.86%	11.72%
Growth											
ALPHABET INC CL A CUSIP: 02079K305 Symbol: GOOGL Initial purchase date: Nov 12, 2009	832.00	452.75	1,616.11	376,686.20	1,344,603.52	967,917.32	256.96%	0.00	0.00%	2.62%	1.55%
ALPHABET INC CL C CUSIP: 02079K107 Symbol: GOOG Initial purchase date: Nov 12, 2009	904.00	433.82	1,621.01	392,177.01	1,465,393.04	1,073,216.03	273.66%	0.00	0.00%	2.86%	1.69%
AMAZON.COM INC CUSIP: 023135106 Symbol: AMZN Initial purchase date: Sep 14, 2016	585.00	769.36	3,036.15	450,073.08	1,776,147.75	1,326,074.67	294.64%	0.00	0.00%	3.47%	2.04%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Growth											
CALL VISA INC CL A DUE 12/18/2025.000 488372 CUSIP: 99UBAQM37 Symbol: V Initial purchase date: Jul 21, 2020	-10.00	41,506.1	49.00	-4,150.61	-490.00	3,660.61	88.19%	0.00	0.00%	0.00%	0.00%
ESCROW ALTABA INC CUSIP: 021ESC017 Initial purchase date: Jun 12, 2014	3,000.00	36.85	22.60	110,545.88	67,800.00	-42,745.88	-38.67%	0.00	0.00%	0.13%	0.08%
MICROSOFT CORP CUSIP: 594918104 Symbol: MSFT Initial purchase date: Oct 09, 2019	900.00	139.79	202.47	125,813.00	182,223.00	56,410.00	44.84%	2,016.00	1.11%	0.36%	0.21%
VISA INC CL A CUSIP: 92826C839 Symbol: V Initial purchase date: Oct 17, 2011	3,000.00	23.56	181.71	70,692.57	545,130.00	474,437.43	671.13%	3,840.00	0.70%	1.06%	0.63%
Total Growth				\$1,521,837.13	\$5,380,807.31	\$3,858,970.18	253.57%	\$5,856.00	0.11%	10.50%	6.20%
Value											
AT&T INC CUSIP: 00206R102 Symbol: T Initial purchase date: Jun 09, 2011	5,968.00	31.24	27.02	186,443.46	161,255.36	-25,188.10	-13.51%	12,413.44	7.70%	0.31%	0.19%
BANK OF AMER CORP CUSIP: 060505104 Symbol: BAC Initial purchase date: Jan 13, 2016	33,050.00	15.11	23.70	499,349.09	783,285.00	283,935.91	56.86%	23,796.00	3.04%	1.53%	0.90%
BLACKROCK INC CUSIP: 09247X101 Symbol: BLK Initial purchase date: Aug 10, 2016	670.00	370.32	599.21	248,115.95	401,470.70	153,354.75	61.81%	9,728.40	2.42%	0.78%	0.46%
CALL CHEVRON CORP DUE 12/18/2025.000 0926P3 CUSIP: 99UBBC536 Symbol: CVX Initial purchase date: Feb 14, 2020	-17.00	18,235.5	6.00	-3,100.04	-102.00	2,998.04	96.71%	0.00	0.00%	0.00%	0.00%
CALL COMCAST CORP NEW CL DUE 06/18/21 50.000 026263 CUSIP: 99UBB0ID6 Symbol: CMCSA Initial purchase date: Jul 20, 2020	-8.00	13,738.6	130.00	-1,099.09	-1,040.00	59.09	5.38%	0.00	0.00%	0.00%	0.00%
CALL DUKE ENERGY CORP NE DUE 01/15/21 105.000 119MG4 CUSIP: 99UBAL1G2 Symbol: DUK Initial purchase date: Feb 14, 2020	-10.00	32,453.5	60.00	-3,245.35	-600.00	2,645.35	81.51%	0.00	0.00%	0.00%	0.00%

Portfolio holdings - as of October 31, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Value											
CALL JPMORGAN CHASE & CO DUE 12/18/20 125.000 241JP2 CUSIP: 99UBA66E5 Symbol: JPM Initial purchase date: Aug 12, 2020	-10.00	14,857.7	14.00	-1,485.77	-140.00	1,345.77	90.58%	0.00	0.00%	0.00%	0.00%
CALL ORACLE CORP DUE 12/18/20 62.500 353752 CUSIP: 99UBARTO2 Symbol: ORCL Initial purchase date: May 20, 2020	-10.00	12,206.4	66.50	-1,220.64	-665.00	555.64	45.52%	0.00	0.00%	0.00%	0.00%
CALL PEPSICO INC DUE 12/18/20 155.000 368024 CUSIP: 99UBA7YI3 Symbol: PEP Initial purchase date: Jul 21, 2020	-10.00	9,653.30	25.00	-965.33	-250.00	715.33	74.10%	0.00	0.00%	0.00%	0.00%
CALL PFIZER INC DUE 06/18/21 40.000 370011 CUSIP: 99UBAU1X5 Symbol: PFE Initial purchase date: Jul 21, 2020	-30.00	18,886.7	173.00	-5,666.02	-5,190.00	476.02	8.40%	0.00	0.00%	-0.01%	-0.01%
CARRIER GLOBAL CORP CUSIP: 14448C104 Symbol: CARR Initial purchase date: Oct 09, 2019	930.00	24.96	33.39	23,215.22	31,052.70	7,837.48	33.76%	297.60	0.96%	0.06%	0.04%
CHEVRON CORP CUSIP: 166764100 Symbol: CVX Initial purchase date: Feb 12, 2009	8,710.00	79.26	69.50	690,314.19	605,345.00	-84,969.19	-12.31%	44,943.60	7.42%	1.18%	0.70%
COMCAST CORP NEW CL A CUSIP: 20030N101 Symbol: CMCSA Initial purchase date: Oct 09, 2019	2,800.00	44.80	42.24	125,450.93	118,272.00	-7,178.93	-5.72%	2,576.00	2.18%	0.23%	0.14%
DUKE ENERGY CORP NEW CUSIP: 26441C204 Symbol: DUK Initial purchase date: Apr 09, 2009	3,041.00	40.54	92.11	123,267.64	280,106.51	156,838.87	127.23%	11,738.26	4.19%	0.55%	0.32%
GENL DYNAMICS CORP CUSIP: 369550108 Symbol: GD Initial purchase date: Jan 13, 2000	5,200.00	26.43	131.33	137,455.71	682,916.00	545,460.29	396.83%	22,880.00	3.35%	1.33%	0.79%
GENL MILLS INC CUSIP: 370334104 Symbol: GIS Initial purchase date: Jun 10, 2010	4,000.00	38.13	59.12	152,506.12	236,480.00	83,973.88	55.06%	8,160.00	3.45%	0.46%	0.27%
JPMORGAN CHASE & CO CUSIP: 46625H100 Symbol: JPM Initial purchase date: Aug 14, 1997	2,000.00	37.85	98.04	75,704.64	196,080.00	120,375.36	159.01%	7,200.00	3.67%	0.38%	0.23%
MARSH & MCLENNAN COS INC CUSIP: 571748102 Symbol: MMC Initial purchase date: Jan 13, 2016	7,030.00	53.01	103.46	372,652.52	727,323.80	354,671.28	95.17%	13,075.80	1.80%	1.42%	0.84%



Portfolio holdings - as of October 31, 2020 (continued)

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Value											
MERCK & CO INC NEW COM CUSIP: 58933Y105 Symbol: MRK Initial purchase date: Oct 09, 2019	1,470.00	85.01	75.21	124,962.07	110,558.70	-14,403.37	-11.53%	3,586.80	3.24%	0.22%	0.13%
MFS VALUE FUND CLASS A CUSIP: 552983801 Symbol: MEIAX Initial purchase date: Oct 11, 2017 Client investment: \$3,950,015.75 Reinvested dividends: \$387,304.84 Investment return: \$326,436.05 (8.26%)	107,991.21	40.16	39.60	4,337,320.59	4,276,451.80	-60,868.79	-1.40%	69,573.34	1.63%	8.35%	4.90%
ORACLE CORP CUSIP: 68389X105 Symbol: ORCL Initial purchase date: Feb 10, 2005	5,000.00	13.18	56.11	65,886.08	280,550.00	214,663.92	325.81%	4,800.00	1.71%	0.55%	0.32%
PEPSICO INC CUSIP: 713448108 Symbol: PEP Initial purchase date: Oct 17, 2011	5,000.00	62.54	133.29	312,687.24	666,450.00	353,762.76	113.14%	20,450.00	3.07%	1.30%	0.77%
PFIZER INC CUSIP: 717081103 Symbol: PFE Initial purchase date: Jun 16, 2008	10,000.00	2.32	35.48	23,242.20	354,800.00	331,557.80	1,426.53%	15,200.00	4.28%	0.69%	0.41%
RAYTHEON TECHNOLOGIES CORP CUSIP: 75513E101 Symbol: RTX Initial purchase date: Oct 09, 2019	930.00	73.66	54.32	68,506.86	50,517.60	-17,989.26	-26.26%	1,767.00	3.50%	0.10%	0.06%
VF CORP CUSIP: 918204108 Symbol: VFC Initial purchase date: Oct 09, 2019	1,400.00	89.32	67.20	125,044.79	94,080.00	-30,964.79	-24.76%	2,744.00	2.92%	0.18%	0.11%
WALMART INC CUSIP: 931142103 Symbol: WMT Initial purchase date: Oct 09, 2019	1,050.00	120.26	138.75	126,275.03	145,687.50	19,412.47	15.37%	2,268.00	1.56%	0.28%	0.17%
Total Value				\$7,801,618.09	\$10,194,695.67	\$2,393,077.58	30.67%	\$277,198.23	2.72%	19.90%	11.74%
Public Real Estate											
AMERICAN TOWER CORP REIT CUSIP: 03027X100 Symbol: AMT Initial purchase date: Apr 13, 2012	1,000.00	63.62	229.65	63,618.17	229,650.00	166,031.83	260.98%	4,330.00	1.89%	0.45%	0.26%
Total Public Real Estate				\$63,618.17	\$229,650.00	\$166,031.83	260.98%	\$4,330.00	1.89%	0.46%	0.26%
Total Large Cap				\$12,892,862.66	\$25,980,920.31	\$13,088,057.65	101.51%	\$407,777.95	1.57%	50.72%	29.92%
Mid Cap											
Core											



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Core											
CALL CONAGRA BRANDS, INC DUE 12/18/20 41.000 101290 CUSIP: 99UBB0HH8 Symbol: CAG Initial purchase date: Jul 21, 2020	-10.00	9,653.30	11.00	-965.33	-110.00	855.33	88.60%	0.00	0.00%	0.00%	0.00%
TRACTOR SUPPLY COMPANY CUSIP: 892356106 Symbol: TSCO Initial purchase date: Dec 10, 2008	4,000.00	10.17	133.21	40,687.65	532,840.00	492,152.35	1,209.59%	6,400.00	1.20%	1.04%	0.61%
WATSCO INC CUSIP: 942622200 Symbol: WSO Initial purchase date: Apr 15, 2010	1,000.00	61.20	224.14	61,202.82	224,140.00	162,937.18	266.22%	7,100.00	3.17%	0.44%	0.26%
Total Core				\$100,925.14	\$756,870.00	\$655,944.86	649.93%	\$13,500.00	1.78%	1.48%	0.87%
Growth											
FASTENAL CO CUSIP: 311900104 Symbol: FAST Initial purchase date: May 21, 2018	16,000.00	27.04	43.23	432,571.60	691,680.00	259,108.40	59.90%	16,000.00	2.31%	1.35%	0.80%
IDEX CORP CUSIP: 45167R104 Symbol: IEX Initial purchase date: Aug 11, 2004	2,000.00	20.50	170.39	41,001.00	340,780.00	299,779.00	731.15%	4,000.00	1.17%	0.67%	0.39%
PALO ALTO NETWORKS INC CUSIP: 697435105 Symbol: PANW Initial purchase date: Feb 12, 2015	1,250.00	134.89	221.19	168,607.43	276,487.50	107,880.07	63.98%	0.00	0.00%	0.54%	0.32%
PUT TRACTOR SUPPLY COMP DUE 01/15/21 95.000 4608B6 CUSIP: 99UBBHQU2 Symbol: TSCO Initial purchase date: Aug 12, 2020	-10.00	10,635.2	115.00	-1,063.52	-1,150.00	-86.48	-8.13%	0.00	0.00%	0.00%	0.00%
Total Growth				\$641,116.51	\$1,307,797.50	\$666,680.99	103.99%	\$20,000.00	1.53%	2.55%	1.51%
Value											
AECOM CUSIP: 00766T100 Symbol: ACM Initial purchase date: Feb 05, 2010	2,900.00	25.19	44.84	73,045.33	130,036.00	56,990.67	78.02%	0.00	0.00%	0.25%	0.15%
CALL GENUINE PARTS CO DUE 11/20/20 100.000 181455 CUSIP: 99UBB0MD1 Symbol: GPC Initial purchase date: Jul 20, 2020	-10.00	18,491.1	70.00	-1,849.11	-700.00	1,149.11	62.14%	0.00	0.00%	0.00%	0.00%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Value											
CALL HARTFORD FINCL SERV DUE 01/15/21 70.000 1988E4 CUSIP: 99UBBAGZ7 Symbol: HIG Initial purchase date: Oct 09, 2019	-10.00	19,473.1	20.00	-1,947.31	-200.00	1,747.31	89.73%	0.00	0.00%	0.00%	0.00%
CALL ONEOK INC NEW DUE 01/15/21 42.500 3496G4 CUSIP: 99UBB0N65 Symbol: OKE Initial purchase date: Jul 21, 2020	-20.00	8,945.55	20.00	-1,789.11	-400.00	1,389.11	77.64%	0.00	0.00%	0.00%	0.00%
CALL SMUCKER J M CO NEW DUE 01/15/21 130.000 4258Y5 CUSIP: 99UBBC569 Symbol: SJM Initial purchase date: Feb 14, 2020	-10.00	15,643.3	118.00	-1,564.33	-1,180.00	384.33	24.57%	0.00	0.00%	0.00%	0.00%
CONAGRA BRANDS, INC. CUSIP: 205887102 Symbol: CAG Initial purchase date: Oct 09, 2019	3,000.00	28.43	35.09	85,290.85	105,270.00	19,979.15	23.42%	3,300.00	3.13%	0.21%	0.12%
GENUINE PARTS CO CUSIP: 372460105 Symbol: GPC Initial purchase date: Apr 13, 2012	3,000.00	63.29	90.43	189,860.40	271,290.00	81,429.60	42.89%	9,480.00	3.49%	0.53%	0.31%
HARTFORD FINCL SERVICES GROUP INC CUSIP: 416515104 Symbol: HIG Initial purchase date: Jan 13, 2005	4,000.00	67.53	38.52	270,129.76	154,080.00	-116,049.76	-42.96%	5,200.00	3.37%	0.30%	0.18%
ONEOK INC NEW CUSIP: 682680103 Symbol: OKE Initial purchase date: May 14, 2009	14,000.00	14.25	29.00	199,490.58	406,000.00	206,509.42	103.52%	52,360.00	12.90%	0.79%	0.47%
SMUCKER J M CO NEW CUSIP: 832696405 Symbol: SJM Initial purchase date: Jan 14, 2010	3,000.00	62.32	112.20	186,962.73	336,600.00	149,637.27	80.04%	10,800.00	3.21%	0.66%	0.39%
VANGUARD MID-CAP VALUE ETF CUSIP: 922908512 Symbol: VOE Initial purchase date: Dec 12, 2019	7,580.00	118.87	101.88	901,026.53	772,250.40	-128,776.13	-14.29%	22,032.03	2.85%	1.51%	0.88%
Total Value				\$1,898,656.32	\$2,173,046.40	\$274,390.08	14.45%	\$103,172.03	4.75%	4.24%	2.50%
Total Mid Cap				\$2,640,697.97	\$4,237,713.90	\$1,597,015.93	60.48%	\$136,672.03	3.23%	8.27%	4.88%

Small Cap
Core



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Core											
ISHARES RUSSELL 2000 ETF CUSIP: 464287655 Symbol: IWM Initial purchase date: Jun 13, 2014 Client investment: \$999,013.13 Reinvested dividends: \$62,057.32 Investment return: \$351,087.58 (35.14%)	8,819.00	120.32	153.09	1,061,070.45	1,350,100.71	289,030.26	27.24%	18,074.04	1.34%	2.64%	1.55%
Total Core				\$1,061,070.45	\$1,350,100.71	\$289,030.26	27.24%	\$18,074.04	1.34%	2.64%	1.55%
Growth											
VIRTUS KAR SMALL-CAP GROWTH FUND CLASS A CUSIP: 92828N627 Symbol: PSGAX Initial purchase date: Feb 08, 2017 Client investment: \$1,260,010.50 Reinvested dividends: \$79,929.95 Investment return: \$1,929,932.16 (153.17%)	62,843.63	21.32	50.76	1,339,940.45	3,189,942.66	1,850,002.21	138.07%	0.00	0.00%	6.23%	3.67%
Total Growth				\$1,339,940.45	\$3,189,942.66	\$1,850,002.21	138.07%	\$0.00	0.00%	6.22%	3.67%
Value											
MFS NEW DISCOVERY VALUE FUND CLASS A CUSIP: 55278M100 Symbol: NDVAX Initial purchase date: Oct 11, 2017 Client investment: \$1,264,187.35 Reinvested dividends: \$224,095.64 Investment return: \$5,961.47 (0.47%)	96,515.87	15.42	13.16	1,488,282.99	1,270,148.82	-218,134.17	-14.66%	8,910.34	0.70%	2.48%	1.47%
Total Value				\$1,488,282.99	\$1,270,148.82	\$-218,134.17	-14.66%	\$8,910.34	0.70%	2.48%	1.47%
Total Small Cap				\$3,889,293.89	\$5,810,192.19	\$1,920,898.30	49.39%	\$26,984.38	0.46%	11.34%	6.69%
Convertibles											
Convertibles											
ESCROW GENERAL MTRS CORP 6.250% SER C DUE 07/15/33 CALLBL CONV CUSIP: 370ESC717 Initial purchase date: Jul 10, 2003	20,000.00	24.84	0.00	496,763.00	0.00	-496,763.00	-100.00%	0.00	0.00%	0.00%	0.00%
Total Convertibles				\$496,763.00	\$0.00	\$-496,763.00	-100.00%	\$0.00	0.00%	0.00%	0.00%
Total Convertibles				\$496,763.00	\$0.00	\$-496,763.00	-100.00%	\$0.00	0.00%	0.00%	0.00%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Total US				\$19,926,517.52	\$36,038,606.40	\$16,112,088.88	80.86%	\$571,434.36	1.59%	70.35%	41.50%
Global											
Global											
Core											
AMER FUNDS CAPITAL WORLD GROWTH & INCOME FUND CL A CUSIP: 140543109 Symbol: CWGIX Initial purchase date: Nov 12, 2010 Client investment: \$670,980.25 Reinvested dividends: \$384,354.01 Investment return: \$731,232.74 (108.98%)	27,635.26	38.19	50.74	1,055,334.26	1,402,212.99	346,878.73	32.87%	20,173.74	1.44%	2.74%	1.62%
COLUMBIA SELIGMAN COMMUNICATION AND INFORMATION FUND A CUSIP: 19766H429 Symbol: SLMCX Initial purchase date: Oct 19, 2001 Client investment: \$165,000.00 Reinvested dividends: \$2,912,438.45 Investment return: \$4,857,881.90 (2944.17%)	56,228.39	54.73	89.33	3,077,438.45	5,022,881.90	1,945,443.45	63.22%	0.00	0.00%	9.81%	5.78%
Total Core				\$4,132,772.71	\$6,425,094.89	\$2,292,322.18	55.47%	\$20,173.74	0.31%	12.54%	7.40%
Total Global				\$4,132,772.71	\$6,425,094.89	\$2,292,322.18	55.47%	\$20,173.74	0.31%	12.54%	7.40%
Total Global				\$4,132,772.71	\$6,425,094.89	\$2,292,322.18	55.47%	\$20,173.74	0.31%	12.54%	7.40%
International											
Developed Markets											
Core											
CHUBB LTD CHF CUSIP: H1467J104 Symbol: CB Initial purchase date: Apr 13, 2016	1,000.00	121.66	129.91	121,658.43	129,910.00	8,251.57	6.78%	3,120.00	2.40%	0.25%	0.15%
DIAGEO PLC NEW GB SPON ADR CUSIP: 25243Q205 Symbol: DEO Initial purchase date: Feb 11, 2010	1,000.00	64.02	130.18	64,017.37	130,180.00	66,162.63	103.35%	3,534.92	2.72%	0.25%	0.15%
LINDE PLC EUR CUSIP: G5494J103 Symbol: LIN Initial purchase date: Sep 09, 2004	4,000.00	163.46	220.34	653,820.00	881,360.00	227,540.00	34.80%	15,408.00	1.75%	1.72%	1.01%
MEDTRONIC PLC CUSIP: G5960L103 Symbol: MDT Initial purchase date: Oct 09, 2019	1,165.00	107.77	100.57	125,550.50	117,164.05	-8,386.45	-6.68%	2,702.80	2.31%	0.23%	0.14%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
International											
Core											
Total Core				\$965,046.30	\$1,258,614.05	\$293,567.75	30.42%	\$24,765.72	1.97%	2.46%	1.45%
Growth											
CLEARBRIDGE INTERNATIONAL GROWTH FUND CLASS I CUSIP: 524686524 Symbol: LMGNX Initial purchase date: Aug 12, 2020	61,736.91	58.59	56.99	3,616,886.15	3,518,386.38	-98,499.76	-2.72%	10,597.88	0.30%	6.87%	4.05%
Total Growth				\$3,616,886.15	\$3,518,386.38	\$-98,499.76	-2.72%	\$10,597.88	0.30%	6.87%	4.05%
Value											
RIO TINTO PLC SPON ADR CUSIP: 767204100 Symbol: RIO Initial purchase date: Sep 10, 2009	5,000.00	42.96	56.77	214,799.21	283,850.00	69,050.79	32.15%	19,300.00	6.80%	0.55%	0.33%
Total Value				\$214,799.21	\$283,850.00	\$69,050.79	32.15%	\$19,300.00	6.80%	0.55%	0.33%
Total Developed Markets				\$4,796,731.66	\$5,060,850.43	\$264,118.78	5.51%	\$54,663.60	1.08%	9.88%	5.83%
Emerging Markets											
Growth											
AMER FUNDS NEW WORLD FUND CLASS F2 CUSIP: 649280823 Symbol: NFFFX Initial purchase date: Feb 13, 2020	11,692.50	71.92	73.82	840,875.15	863,139.98	22,264.83	2.65%	11,014.33	1.28%	1.68%	1.00%
AMERICAN FUNDS NEW WORLD FUND CL A CUSIP: 649280104 Symbol: NEWFX Initial purchase date: Nov 12, 2015 Client investment: \$1,750,021.00 Reinvested dividends: \$188,857.74 Investment return: \$876,427.78 (50.08%)	35,550.20	54.54	73.88	1,938,878.74	2,626,448.78	687,570.04	35.46%	26,214.72	1.00%	5.13%	3.02%
Total Growth				\$2,779,753.89	\$3,489,588.76	\$709,834.86	25.54%	\$37,229.05	1.07%	6.81%	4.02%
Other											
SAMSUNG ELECTRS LTD GDR (EACH REP 25 COM STK KRW100) REG.S *GB LINE* CUSIP: 7960509A2 Initial purchase date: Jun 13, 2014	170.00	659.22	1,247.03	112,067.61	211,994.42	99,926.81	89.17%	0.00	0.00%	0.41%	0.24%
Total Other				\$112,067.61	\$211,994.42	\$99,926.81	89.17%	\$0.00	0.00%	0.42%	0.24%
Total Emerging Markets				\$2,891,821.50	\$3,701,583.18	\$809,761.67	28.00%	\$37,229.05	1.01%	7.23%	4.26%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
International											
Total International				\$7,688,553.16	\$8,762,433.61	\$1,073,880.45	13.97%	\$91,892.65	1.05%	17.11%	10.09%
Total Equity				\$31,747,843.39	\$51,226,134.90	\$19,478,291.51	61.35%	\$683,500.75	1.33%	100.00%	58.99%
				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of asset class	% of Portfolio
Total Portfolio				\$66,810,544.98	\$86,834,042.85	\$20,023,497.87	29.97%	\$1,573,176.48	1.81%	100%	100%

Total accrued interest (included in market values): \$13,034.64

* Balanced mutual funds are displayed in unbundled view



Additional information about your portfolio

as of October 31, 2020

Benchmark composition

Account TX XX595

Blended Index

Start - Current: 30% Barclays Govt/Credit Int; 70% MSCI AC World IMI - GR



Disclosures applicable to accounts at UBS Financial Services Inc.

This section contains important disclosures regarding the information and valuations presented here. All information presented is subject to change at any time and is provided only as of the date indicated. The information in this report is for informational purposes only and should not be relied upon as the basis of an investment or liquidation decision. UBS FS account statements and official tax documents are the only official record of your accounts and are not replaced, amended or superseded by any of the information presented in these reports. You should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise.

UBS FS offers a number of investment advisory programs to clients, acting in our capacity as an investment adviser, including fee-based financial planning, discretionary account management, non-discretionary investment advisory programs, and advice on the selection of investment managers and mutual funds offered through our investment advisory programs. When we act as your investment adviser, we will have a written agreement with you expressly acknowledging our investment advisory relationship with you and describing our obligations to you. At the beginning of our advisory relationship, we will give you our Form ADV brochure(s) for the program(s) you selected that provides detailed information about, among other things, the advisory services we provide, our fees, our personnel, our other business activities and financial industry affiliations and conflicts between our interests and your interests.

In our attempt to provide you with the highest quality information available, we have compiled this report using data obtained from recognized statistical sources and authorities in the financial industry. While we believe this information to be reliable, we cannot make any representations regarding its accuracy or completeness. Please keep this guide as your Advisory Review.

Please keep in mind that most investment objectives are long term. Although it is important to evaluate your portfolio's performance over multiple time periods, we believe the greatest emphasis should be placed on the longer period returns.

Please review the report content carefully and contact your Financial Advisor with any questions.

Client Accounts: This report may include all assets in the accounts listed and may include eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your accounts and does not reflect the performance of your accounts in the fee-based program. As a result, the performance reflected in this report can

vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. When shown on a report, the risk profile and return objectives describe your overall goals for these accounts. For each account you maintain, you choose one return objective and a primary risk profile. If you have questions regarding these objectives or wish to change them, please contact your Financial Advisor to update your account records.

Performance: This report presents account activity and performance depending on which inception type you've chosen. The two options are: (1) All Assets (Since Performance Start): This presents performance for all assets since the earliest possible date; (2) Advisory Assets (Advisory Strategy Start) for individual advisory accounts: This presents Advisory level performance since the Latest Strategy Start date; If an account that has never been managed is included in the consolidated report, the total performance of that unmanaged account will be included since inception.

Time-weighted Returns for accounts / SWP/AAP sleeves (Monthly periods): The report displays a time weighted rate of return (TWR) that is calculated using the Modified Dietz Method. This calculation uses the beginning and ending portfolio values for the month and weights each contribution/withdrawal based upon the day the cash flow occurred. Periods greater than one month are calculated by linking the monthly returns. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. All periods shown which are greater than 12 months are annualized. This applies to all performance for all assets before 09/30/2010, Advisory assets before 12/31/2010 and SWP sleeves before 04/30/2018.

Time-weighted Returns for accounts / SWP/AAP sleeves (Daily periods): The report displays a time weighted rate of return (TWR) that is calculated by dividing the portfolio's daily gain/loss by the previous day's closing market value plus the net value of cash flows that occurred during the day, if it was positive. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. Periods greater than one day are calculated by linking the daily returns. All periods shown which are greater than 12 months are annualized. For reports generated prior to 01/26/2018, the performance calculations used the account's end of day value on the performance inception (listed in the report under the column "ITD") and all cash flows were posted at end of day. As a result of the change, the overall rate of return (TWR) and beginning market value displayed can vary from prior generated reports. This

applies to all performance for all assets on or after 09/30/2010, Advisory assets on or after 12/31/2010, SWP/AAP sleeves on or after 04/30/2018 as well as all Asset Class and Security level returns.

Money-weighted returns: Money-weighted return (MWR) is a measure of the rate of return for an asset or portfolio of assets. It is calculated by finding the daily Internal Rate of Return (IRR) for the period and then compounding this return by the number of days in the period being measured. The MWR incorporates the size and timing of cash flows, so it is an effective measure of returns on a portfolio.

Annualized Performance: All performance periods greater than one year are calculated (unless otherwise stated) on an annualized basis, which represents the return on an investment multiplied or divided to give a comparable one year return.

Cumulative Performance: A cumulative return is the aggregate amount that an investment has gained or lost over time, independent of the period of time involved.

Net of Fees and Gross of Fees Performance: Performance is presented on a "net of fees" and "gross of fees" basis, where indicated. Net returns do not reflect Program and wrap fees prior to 10/31/10 for accounts that are billed separately via invoice through a separate account billing arrangement. Gross returns do not reflect the deduction of fees, commissions or other charges. The payment of actual fees and expenses will reduce a client's return. The compound effect of such fees and expenses should be considered when reviewing returns. For example, the net effect of the deduction of fees on annualized performance, including the compounded effect over time, is determined by the relative size of the fee and the account's investment performance. It should also be noted that where gross returns are compared to an index, the index performance also does not reflect any transaction costs, which would lower the performance results. Market index data maybe subject to review and revision.

Benchmark/Major Indices: The past performance of an index is not a guarantee of future results. Any benchmark is shown for informational purposes only and relates to historical performance of market indices and not the performance of actual investments. Although most portfolios use indices as benchmarks, portfolios are actively managed and generally are not restricted to investing only in securities in the index. As a result, your portfolio holdings and performance may vary substantially from the index. Each index reflects an unmanaged universe of securities without any deduction for advisory fees or other expenses that would reduce actual returns, as well as the reinvestment of all income and dividends. An actual investment in the securities included in the index would require an investor to incur transaction costs, which would lower the performance

results. Indices are not actively managed and investors cannot invest directly in the indices. Market index data maybe subject to review and revision. Further, there is no guarantee that an investor's account will meet or exceed the stated benchmark. Index performance information has been obtained from third parties deemed to be reliable. We have not independently verified this information, nor do we make any representations or warranties to the accuracy or completeness of this information.

Blended Index - For Advisory accounts, Blended Index is designed to reflect the asset categories in which your account is invested. For Brokerage accounts, you have the option to select any benchmark from the list.

For certain products, the blended index represents the investment style corresponding to your client target allocation. If you change your client target allocation, your blended index will change in step with your change to your client target allocation.

Blended Index 2 - 8 - are optional indices selected by you which may consist of a blend of indexes. For advisory accounts, these indices are for informational purposes only. Depending on the selection, the benchmark selected may not be an appropriate basis for comparison of your portfolio based on it's holdings.

Custom Time Periods: If represented on this report, the performance start date and the performance end date have been selected by your Financial Advisor in order to provide performance and account activity information for your account for the specified period of time only. As a result, only a portion of your account's activity and performance information is presented in the performance report, and, therefore, presents a distorted representation of your account's activity and performance.

Net Deposits/Withdrawals: When shown on a report, this information represents the net value of all cash and securities contributions and withdrawals, program fees (including wrap fees) and other fees added to or subtracted from your accounts from the first day to the last day of the period. When fees are shown separately, net deposits / withdrawals does not include program fees (including wrap fees). When investment return is displayed net deposits / withdrawals does not include program fees (including wrap fees). For security contributions and withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts. Wrap fees will be included in this calculation except when paid via an invoice or through a separate accounts billing arrangement. When shown on Client summary and/or Portfolio review report, program fees (including wrap fees) may not be included in net deposits/withdrawals. PACE Program fees paid from sources other than your PACE account are treated as a contribution. A PACE



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

Program Fee rebate that is not reinvested is treated as a withdrawal.

Deposits: When shown on a report, this information represents the net value of all cash and securities contributions added to your accounts from the first day to the last day of the period. On Client Summary Report and/or Portfolio Review Report, this may exclude the Opening balance. For security contributions, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Withdrawals: When shown on a report, this information represents the net value of all cash and securities withdrawals subtracted from your accounts from the first day to the last day of the period. On Client summary and/or portfolio review report Withdrawals may not include program fees (including wrap fees). For security withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Dividends/Interest: Dividend and interest earned, when shown on a report, does not reflect your account's tax status or reporting requirements. Use only official tax reporting documents (i.e. 1099) for tax reporting purposes. The classification of private investment distributions can only be determined by referring to the official year-end tax-reporting document provided by the issuer.

Change in Accrued Interest: When shown on a report, this information represents the difference between the accrued interest at the beginning of the period from the accrued interest at the end of the period.

Change in Value: Represents the change in value of the portfolio during the reporting period, excluding additions/withdrawals, dividend and interest income earned and accrued interest. Change in Value may include programs fees (including wrap fees) and other fees.

Fees: Fees represented in this report include program and wrap fees. Program and wrap fees prior to October 1, 2010 for accounts that are billed separately via invoice through a separate account billing arrangement are not included in this report.

Performance Start Date Changes: The Performance Start Date for accounts marked with a 'A' have changed. Performance figures of an account with a changed Performance Start Date may not include the entire history of the account. The new Performance Start Date will generate performance returns and activity information for a shorter period than is available at UBS FS. As a result, the overall performance of these accounts may generate better performance than the period of time that would be included if the report used the inception date of the account. UBS FS recommends

reviewing performance reports that use the inception date of the account because reports with longer time frames are usually more helpful when evaluating investment programs and strategies. Performance reports may include accounts with inception dates that precede the new Performance Start Date and will show performance and activity information from the earliest available inception date. The change in Performance Start Date may be the result of a performance gap due to a zero-balance that prevents the calculation of continuous returns from the inception of the account. The Performance Start Date may also change if an account has failed one of our performance data integrity tests. In such instances, the account will be labeled as 'Review Required' and performance prior to that failure will be restricted. Finally, the Performance Start Date will change if you have explicitly requested a performance restart. Please contact your Financial Advisor for additional details regarding your new Performance Start Date.

Closed Account Performance: Accounts that have been closed may be included in the consolidated performance report. When closed accounts are included in the consolidated report, the performance report will only include information for the time period the account was active during the consolidated performance reporting time period.

Portfolio: For purposes of this report "portfolio" is defined as all of the accounts presented on the cover page or the header of this report and does not necessarily include all of the client's accounts held at UBS FS or elsewhere.

Percentage: Portfolio (in the "% Portfolio / Total" column) includes all holdings held in the account(s) selected when this report was generated. Broad asset class (in the "% broad asset class" column) includes all holdings held in that broad asset class in the account(s) selected when this report was generated.

Tax lots: This report displays security tax lots as either one line item (i.e., lumped tax lots) or as separate tax lot level information. If you choose to display security tax lots as one line item, the total cost equals the total value of all tax lots. The unit cost is an average of the total cost divided by the total number of shares. If the shares were purchased in different lots, the unit price listed does not represent the actual cost paid for each lot. The unrealized gain/loss value is calculated by combining the total value of all tax lots plus or minus the total market value of the security.

If you choose to display tax lot level information as separate line items on the Portfolio Holdings report, the tax lot information may include information from sources other than UBS FS. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other

than UBS FS. As a result this information may not be accurate and is provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. See your monthly statement for additional information.

Pricing: All securities are priced using the closing price reported on the last business day preceding the date of this report. Every reasonable attempt has been made to accurately price securities; however, we make no warranty with respect to any security's price. Please refer to the back of the first page of your UBS FS account statement for important information regarding the pricing used for certain types of securities, the sources of pricing data and other qualifications concerning the pricing of securities. To determine the value of securities in your account, we generally rely on third party quotation services. If a price is unavailable or believed to be unreliable, we may determine the price in good faith and may use other sources such as the last recorded transaction. When securities are held at another custodian or if you hold illiquid or restricted securities for which there is no published price, we will generally rely on the value provided by the custodian or issuer of that security.

Cash: Cash on deposit at UBS Bank USA is protected by the Federal Deposit Insurance Corporation (FDIC) up to \$250,000 in principal and accrued interest per depositor for each ownership type. Deposits made in an individual's own name, joint name, or individual retirement account are each held in a separate type of ownership. Such deposits are not guaranteed by UBS FS. More information is available upon request.

Margin: The quantity value may indicate that all or part of this position is held on margin or held in the short account. When an account holds a debit balance, this debit balance is incorporated into the account's total market value and deducted from the total value. When calculating the percent of portfolio on each security, the percentage will be impacted by the total market value of the account. Therefore, if the account's market value is reduced by a debit value of a holding the percent of portfolio will be greater and if the account's market value is increased by a holding then the percent of portfolio will be less.

Mutual Fund Asset Allocation: If the option to unbundle balanced mutual funds is selected and if a fund's holdings data is available, mutual funds will be classified by the asset class, subclass, and style breakdown of their underlying holdings. Where a mutual fund or ETF contains equity holdings from multiple equity sectors, this report will proportionately allocate the underlying holdings of the fund to those sectors measured as a percentage of the total fund's asset value as of the date shown.

This information is supplied by Morningstar, Inc. on a daily basis to UBS FS based on data supplied by the fund which may not be current. Mutual funds change their portfolio holdings on a regular (often daily) basis. Accordingly, any analysis that includes mutual funds may not accurately reflect the current composition of these funds. If a fund's underlying holding data is not available, it will be classified based on its corresponding overall Morningstar classification. All data is as of the date indicated in the report.

All pooled investment vehicles (such as mutual funds, closed end mutual funds, and exchange traded funds) incorporate internal management and operation expenses, which are reflected in the performance returns. Please see relevant fund prospectus for more information. Please note, performance for mutual funds is inclusive of multiple share classes.

Ineligible Assets: We require that you hold and purchase only eligible managed assets in your advisory accounts. Please contact your Financial Advisor for a list of the eligible assets in your program. These reports may provide performance information for eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your advisory assets. As a result, the performance reflected in this report can vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. Neither UBS nor your Financial Advisor will act as your investment adviser with respect to Ineligible Assets.

Equity Style: The Growth, Value and Core labels are determined by Morningstar. If an Equity Style is unclassified, it is due to non-availability of data required by Morningstar to assign it a particular style.

Equity Capitalization: Market Capitalization is determined by Morningstar. Equity securities are classified as Large Cap, Mid Cap or Small Cap by Morningstar. Unclassified securities are those for which no capitalization is available on Morningstar.

Equity Sectors: The Equity sector analysis may include a variety of accounts, each with different investment and risk parameters. As a result, the overweighting or underweighting in a particular sector or asset class should not be viewed as an isolated factor in making investment/liquidation decisions; but should be assessed on an account by account basis to determine the overall impact on the account's portfolio.

Classified Equity: Classified equities are defined as those equities for which the firm can confirm the specific



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

industry and sector of the underlying equity instrument.

Estimated Annual Income: The Estimated Annual Income is calculated by summing the previous four dividend/interest rates per share and multiplying by the quantity of shares held in the selected account(s) as of the End Date of Report. For savings product & sweep funds this value is not calculated and is displayed as 0.

Current Yield: Current yield is defined as the estimated annual income divided by the total market value.

Credit/Event Risk: Investments are subject to event risk and changes in credit quality of the issuer. Issuers can experience economic situations that may have adverse effects on the market value of their securities.

Interest Rate Risk: Bonds are subject to market value fluctuations as interest rates rise and fall. If sold prior to maturity, the price received for an issue may be less than the original purchase price.

Reinvestment Risk: Since most corporate issues pay interest semiannually, the coupon payments over the life of the bond can have a major impact on the bond's total return.

Accrued Interest: Interest that has accumulated between the most recent payment and the report date may be reflected in market values for interest bearing securities.

Gain/Loss: The gain/loss information may include calculations based upon non-UBS FS cost basis information. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS FS. In addition, if this report contains positions with unavailable cost basis, the gain/(loss) for these positions are excluded in the calculation for the Gain/(Loss). As a result these figures may not be accurate and are provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. Rely only on year-end tax forms when preparing your tax return. See your monthly statement for additional information.

The account listing may or may not include all of your accounts with UBS FS. The accounts included in this report are listed under the "Accounts included in this review" shown on the first page or listed at the top of each page. If an account number begins with "@" this denotes assets or liabilities held at other financial institutions. Information about these assets, including valuation, account type and cost basis, is based on the information you provided to us, or provided to us by third party data aggregators or custodians at your direction. We have not verified, and are not responsible for, the accuracy or completeness of this information.

Account name(s) displayed in this report and labels used for groupings of accounts can be customizable "nicknames" chosen by you to assist you with your recordkeeping or may have been included by your financial advisor for reference purposes only. The names used have no legal effect, are not intended to reflect any strategy, product, recommendation, investment objective or risk profile associated with your accounts or any group of accounts, and are not a promise or guarantee that wealth, or any financial results, can or will be achieved. All investments involve the risk of loss, including the risk of loss of the entire investment.

For more information about account or group names, or to make changes, contact your Financial Advisor.

Account changes: At UBS, we are committed to helping you work toward your financial goals. So that we may continue providing you with financial advice that is consistent with your investment objectives, please consider the following two questions:

- 1) Have there been any changes to your financial situation or investment objectives?
 - 2) Would you like to implement or modify any restrictions regarding the management of your account?
- If the answer to either question is "yes," it is important that you contact your Financial Advisor as soon as possible to discuss these changes. For MAC advisory accounts, please contact your investment manager directly if you would like to impose or change any investment restrictions on your account.

ADV disclosure: A complimentary copy of our current Form ADV Disclosure Brochure that describes the advisory program and related fees is available through your Financial Advisor. Please contact your Financial Advisor if you have any questions.

Important information for former Piper Jaffray and McDonald Investments clients:

As an accommodation to former Piper Jaffray and McDonald Investments clients, these reports include performance history for their Piper Jaffray accounts prior to August 12, 2006 and McDonald Investments accounts prior to February 9, 2007, the date the respective accounts were converted to UBS FS. UBS FS has not independently verified this information nor do we make any representations or warranties as to the accuracy or completeness of that information and will not be liable to you if any such information is unavailable, delayed or inaccurate.

For insurance, annuities, and 529 Plans, UBS FS relies on information obtained from third party services it believes to be reliable. UBS FS does not independently verify or guarantee the accuracy or validity of any information provided by third parties. Information for insurance, annuities, and 529 Plans that has been provided by a third party service may not reflect the quantity and market value as of the previous business day. When

available, an "as of" date is included in the description.

Investors outside the U.S. are subject to securities and tax regulations within their applicable jurisdiction that are not addressed in this report. Nothing in this report shall be construed to be a solicitation to buy or offer to sell any security, product or service to any non-U.S. investor, nor shall any such security, product or service be solicited, offered or sold in any jurisdiction where such activity would be contrary to the securities laws or other local laws and regulations or would subject UBS to any registration requirement within such jurisdiction.

Performance History prior to the account's inception at UBS Financial Services, Inc. may have been included in this report and is based on data provided by third party sources. UBS Financial Services Inc. has not independently verified this information nor does UBS Financial Services Inc. guarantee the accuracy or validity of the information.

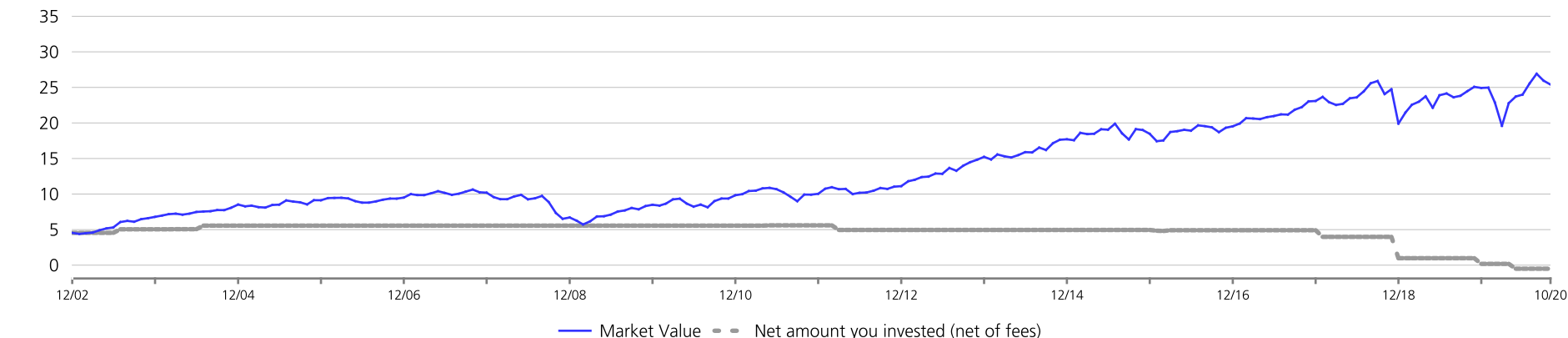
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Sources of portfolio value

as of October 31, 2020

\$ Millions



	MTD 09/30/2020 to 10/31/2020	YTD 12/31/2019 to 10/31/2020	1 Year 10/31/2019 to 10/31/2020	3 Years 10/31/2017 to 10/31/2020	5 Years 10/31/2015 to 10/31/2020	7 Years 10/31/2013 to 10/31/2020	10 Years 10/31/2010 to 10/31/2020	ITD 12/31/2002 to 10/31/2020
Opening value	25,954,902.12	24,925,322.41	24,474,415.31	22,227,095.51	19,129,266.96	14,482,755.93	9,368,954.49	4,545,750.56
Net deposits/withdrawals	0.00	-683,401.67	-1,481,270.67	-5,415,320.67	-5,453,320.67	-5,453,370.67	-6,061,402.34	-5,048,099.02
Div./interest income	17,199.00	224,395.68	274,321.76	825,170.98	1,276,086.93	1,615,946.21	1,986,859.48	2,631,185.62
Change in accr. interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change in value	-576,334.50	929,450.20	2,128,300.22	7,758,820.80	10,443,733.40	14,750,435.15	20,101,354.99	23,266,929.46
Closing value	25,395,766.62	25,395,766.62	25,395,766.62	25,395,766.62	25,395,766.62	25,395,766.62	25,395,766.62	25,395,766.62
Gross Time-weighted ROR	-2.15	5.01	10.43	13.57	11.31	12.35	13.98	11.08
Net Time-weighted ROR	-2.15	4.94	10.36	13.30	11.12	12.19	13.85	11.01

Performance returns are annualized after 1 year. Net deposits and withdrawals include program and account fees.

Benchmarks - Annualized time-weighted returns

Blended Index	-1.56	1.29	5.67	5.52	7.16	6.16	6.93	7.72
US Treasury Bill - 3 Mos	0.01	0.53	0.79	1.58	1.13	0.81	0.59	1.27
Barclays Agg Bond	-0.45	6.32	6.19	5.06	4.08	3.78	3.55	4.32
MSCI Emerging Markets-PR	1.98	-1.00	5.90	-0.47	5.41	0.93	-0.02	7.73
Russell 2000	2.09	-6.77	-0.14	2.18	7.26	6.36	9.63	9.56
S&P 500	-2.66	2.77	9.71	10.41	11.70	11.52	13.00	9.84

Blended Index: Start - Current: 30% Barclays Govt/Credit Int; 70% MSCI AC World IMI - GR

Past performance does not guarantee future results and current performance may be lower/higher than past data presented.



Portfolio holdings

as of October 31, 2020

Summary of Portfolio Holdings

TX XX600 • NAIC • Defined Benefit

Prepared for

CITY OF TROY

Risk profile:

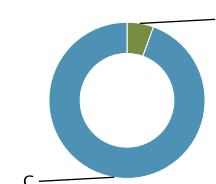
Moderate

Return Objective:

Current Income and Capital Appreciation

	Cost basis (\$)	Value on 10/31/2020 (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Portfolio
A Cash	1,400,558.10	1,400,558.10	0.00	0.00%	1,724.37	0.12%	5.51%
Cash	1,400,558.10	1,400,558.10	0.00	0.00%	1,724.37	0.12%	5.51%
US	1,400,558.10	1,400,558.10	0.00	0.00%	1,724.37	0.12%	5.51%
US Cash	1,400,558.10	1,400,558.10	0.00	0.00%	1,724.37	0.12%	5.51%
B Fixed Income	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
C Equity	9,429,687.31	23,995,208.52	14,565,521.21	154.46%	262,342.32	1.09%	94.49%
US	8,680,585.08	23,138,078.52	14,457,493.44	166.55%	255,942.32	1.11%	91.11%
Large Cap	4,270,633.20	15,941,061.02	11,670,427.82	273.27%	167,042.32	1.05%	62.77%
Core	1,867,454.17	10,943,972.02	9,076,517.85	486.04%	85,738.32	0.78%	43.09%
Growth	1,530,192.98	3,434,070.00	1,903,877.02	124.42%	25,884.00	0.75%	13.52%
Value	872,986.05	1,563,019.00	690,032.95	79.04%	55,420.00	3.55%	6.16%
Mid Cap	3,039,982.05	6,063,007.50	3,023,025.45	99.44%	70,500.00	1.16%	23.87%
Core	1,221,020.47	2,668,202.00	1,447,181.53	118.52%	23,200.00	0.87%	10.51%
Growth	1,039,771.33	2,703,015.50	1,663,244.17	159.96%	21,610.00	0.80%	10.64%
Value	543,238.33	402,490.00	-140,748.33	-25.91%	11,650.00	2.89%	1.58%
Public Real Estate	235,951.92	289,300.00	53,348.08	22.61%	14,040.00	4.85%	1.14%
Small Cap	1,369,969.83	1,134,010.00	-235,959.83	-17.22%	18,400.00	1.62%	4.47%
Core	413,968.32	592,700.00	178,731.68	43.18%	9,000.00	1.52%	2.33%
Growth	275,240.06	137,700.00	-137,540.06	-49.97%	0.00	0.00%	0.55%
Value	680,761.45	403,610.00	-277,151.45	-40.71%	9,400.00	2.33%	1.59%
International	749,102.23	857,130.00	108,027.77	14.42%	6,400.00	0.75%	3.38%
International	84,933.90	240,080.00	155,146.10	182.67%	0.00	0.00%	0.95%
Core	84,933.90	240,080.00	155,146.10	182.67%	0.00	0.00%	0.95%
Developed Markets	664,168.33	617,050.00	-47,118.33	-7.09%	6,400.00	1.04%	2.43%
Core	664,168.33	617,050.00	-47,118.33	-7.09%	6,400.00	1.04%	2.43%
D Commodities	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
E Non-Traditional	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
F Other	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
Total Portfolio	\$10,830,245.41	\$25,395,766.62	\$14,565,521.21	134.49%	\$264,066.69	1.04%	100%

Balanced mutual funds represented in multiple asset classes based on Morningstar allocations





Portfolio holdings - as of October 31, 2020 (continued)

Details of portfolio holdings

	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of asset class	% of Portfolio
Total Portfolio	\$10,830,245.41	\$25,395,766.62	\$14,565,521.21	134.49%	\$264,066.69	1.04%	100%	100%

	Quantity	Purchase price (\$)/ Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Cash	% of Portfolio
Cash											
Cash											
US											
US Cash											
LIQUID ASSETS GOVT FUND CUSIP: 90262Y307 Symbol: MMLIRA	1,400,558.10	1.00	1.00	1,400,558.10	1,400,558.10	0.00	0.00%	1,724.37	0.12%	100.00%	5.51%
Total US Cash				\$1,400,558.10	\$1,400,558.10	\$0.00	0.00%	\$1,724.37	0.12%	100.00%	5.51%
Total US				\$1,400,558.10	\$1,400,558.10	\$0.00	0.00%	\$1,724.37	0.12%	100.00%	5.51%
Total Cash				\$1,400,558.10	\$1,400,558.10	\$0.00	0.00%	\$1,724.37	0.12%	100.00%	5.51%
Total Cash				\$1,400,558.10	\$1,400,558.10	\$0.00	0.00%	\$1,724.37	0.12%	100.00%	5.51%

	Quantity	Purchase price (\$)/ Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Equity											
US											
Large Cap											
Core											
ABBOTT LABS CUSIP: 002824100 Symbol: ABT Initial purchase date: Sep 12, 2002	9,224.00	31.23	105.11	288,067.67	969,534.64	681,466.97	236.56%	13,282.56	1.37%	4.04%	3.82%
APPLE INC CUSIP: 037833100 Symbol: AAPL Initial purchase date: Jun 12, 2014	20,000.00	23.25	108.86	464,997.94	2,177,200.00	1,712,202.06	368.22%	16,400.00	0.75%	9.07%	8.57%
AUTOMATIC DATA PROCESSNG INC CUSIP: 053015103 Symbol: ADP Initial purchase date: Aug 01, 2002	2,000.00	29.12	157.96	58,245.59	315,920.00	257,674.41	442.39%	7,280.00	2.30%	1.32%	1.24%
CENTENE CORP CUSIP: 15135B101 Symbol: CNC Initial purchase date: Mar 25, 2019	4,732.00	66.76	59.10	315,908.32	279,661.20	-36,247.12	-11.47%	0.00	0.00%	1.17%	1.10%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Core											
CIGNA CORP CUSIP: 125523100 Symbol: CI Initial purchase date: Jun 07, 2011	394.00	182.19	166.97	71,780.89	65,786.18	-5,994.71	-8.35%	15.76	0.02%	0.27%	0.26%
D R HORTON INC CUSIP: 23331A109 Symbol: DHI Initial purchase date: Jan 09, 2019	7,000.00	40.09	66.81	280,621.20	467,670.00	187,048.80	66.66%	4,900.00	1.05%	1.95%	1.84%
DANAHER CORP CUSIP: 235851102 Symbol: DHR Initial purchase date: Sep 12, 2002	8,000.00	11.05	229.54	88,427.98	1,836,320.00	1,747,892.02	1,976.63%	5,760.00	0.31%	7.65%	7.23%
O REILLY AUTOMOTIVE INC CUSIP: 67103H107 Symbol: ORLY Initial purchase date: Jan 09, 2004	1,650.00	18.39	436.60	30,335.46	720,390.00	690,054.54	2,274.75%	0.00	0.00%	3.00%	2.84%
ROPER TECHNOLOGIES INC CUSIP: 776696106 Symbol: ROP Initial purchase date: Aug 01, 2002	4,000.00	15.11	371.34	60,440.25	1,485,360.00	1,424,919.75	2,357.57%	8,200.00	0.55%	6.19%	5.85%
STRYKER CORP CUSIP: 863667101 Symbol: SYK Initial purchase date: Jul 17, 1997	13,000.00	16.05	202.01	208,628.87	2,626,130.00	2,417,501.13	1,158.76%	29,900.00	1.14%	10.94%	10.34%
Total Core				\$1,867,454.17	\$10,943,972.02	\$9,076,517.85	486.04%	\$85,738.32	0.78%	45.61%	43.09%
Growth											
BOOKING HLDGS INC CUSIP: 09857L108 Symbol: BKNG Initial purchase date: Feb 26, 2019	200.00	1,908.50	1,622.50	381,699.89	324,500.00	-57,199.89	-14.99%	0.00	0.00%	1.35%	1.28%
CROWN CASTLE INTL CORP REIT CUSIP: 22822V101 Symbol: CCI Initial purchase date: Nov 28, 2016	2,700.00	85.14	156.20	229,878.93	421,740.00	191,861.07	83.46%	14,364.00	3.41%	1.76%	1.66%
FACEBOOK INC CL A CUSIP: 30303M102 Symbol: FB Initial purchase date: May 29, 2019	4,000.00	185.11	263.11	740,424.45	1,052,440.00	312,015.55	42.14%	0.00	0.00%	4.39%	4.14%
VISA INC CL A CUSIP: 92826C839 Symbol: V Initial purchase date: Mar 30, 2011	9,000.00	19.80	181.71	178,189.71	1,635,390.00	1,457,200.29	817.78%	11,520.00	0.70%	6.82%	6.44%
Total Growth				\$1,530,192.98	\$3,434,070.00	\$1,903,877.02	124.42%	\$25,884.00	0.75%	14.31%	13.52%
Value											
BLACKROCK INC CUSIP: 09247X101 Symbol: BLK Initial purchase date: Jan 09, 2019	700.00	403.43	599.21	282,399.34	419,447.00	137,047.66	48.53%	10,164.00	2.42%	1.75%	1.65%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Value											
COMCAST CORP NEW CL A CUSIP: 20030N101 Symbol: CMCSA Initial purchase date: Jan 09, 2019	7,800.00	36.14	42.24	281,865.28	329,472.00	47,606.72	16.89%	7,176.00	2.18%	1.37%	1.30%
GILEAD SCIENCES INC CUSIP: 375558103 Symbol: GILD Initial purchase date: Dec 16, 2008	14,000.00	22.05	58.15	308,721.43	814,100.00	505,378.57	163.70%	38,080.00	4.68%	3.39%	3.21%
Total Value				\$872,986.05	\$1,563,019.00	\$690,032.95	79.04%	\$55,420.00	3.55%	6.51%	6.16%
Total Large Cap				\$4,270,633.20	\$15,941,061.02	\$11,670,427.82	273.27%	\$167,042.32	1.05%	66.43%	62.77%
Mid Cap											
Core											
F5 NETWORKS INC CUSIP: 315616102 Symbol: FFIV Initial purchase date: Mar 02, 2015	5,800.00	118.85	132.94	689,354.72	771,052.00	81,697.28	11.85%	0.00	0.00%	3.21%	3.04%
GENTEX CORP CUSIP: 371901109 Symbol: GNTX Initial purchase date: Mar 02, 2015	5,000.00	17.82	27.67	89,080.35	138,350.00	49,269.65	55.31%	2,400.00	1.73%	0.58%	0.54%
LKQ CORP NEW CUSIP: 501889208 Symbol: LKQ Initial purchase date: Dec 10, 2009	4,000.00	9.25	31.99	36,990.75	127,960.00	90,969.25	245.92%	0.00	0.00%	0.53%	0.50%
SKYWORKS SOLUTIONS INC CUSIP: 83088M102 Symbol: SWKS Initial purchase date: Feb 26, 2019	4,000.00	83.16	141.29	332,628.80	565,160.00	232,531.20	69.91%	8,000.00	1.42%	2.36%	2.23%
TRACTOR SUPPLY COMPANY CUSIP: 892356106 Symbol: TSCO Initial purchase date: Apr 14, 2008	8,000.00	9.12	133.21	72,965.85	1,065,680.00	992,714.15	1,360.52%	12,800.00	1.20%	4.44%	4.20%
Total Core				\$1,221,020.47	\$2,668,202.00	\$1,447,181.53	118.52%	\$23,200.00	0.87%	11.12%	10.51%
Growth											
AMETEK INC (NEW) CUSIP: 031100100 Symbol: AME Initial purchase date: Mar 06, 2017	2,500.00	55.08	98.20	137,689.36	245,500.00	107,810.64	78.30%	1,800.00	0.73%	1.02%	0.97%
CARMAX INC CUSIP: 143130102 Symbol: KMX Initial purchase date: Jun 12, 2014	5,000.00	44.47	86.44	222,371.77	432,200.00	209,828.23	94.36%	0.00	0.00%	1.80%	1.70%
COGNEX CORP CUSIP: 192422103 Symbol: CGNX Initial purchase date: Jun 07, 2011	8,000.00	8.42	65.90	67,345.65	527,200.00	459,854.35	682.83%	1,920.00	0.36%	2.20%	2.08%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Growth											
FASTENAL CO CUSIP: 311900104 Symbol: FAST Initial purchase date: Sep 27, 2000	16,000.00	3.63	43.23	58,125.00	691,680.00	633,555.00	1,089.99%	16,000.00	2.31%	2.88%	2.72%
OLD DOMINION FREIGHT LINES INC CUSIP: 679580100 Symbol: ODFL Initial purchase date: Jan 09, 2019	3,150.00	86.10	190.37	271,215.60	599,665.50	328,449.90	121.10%	1,890.00	0.32%	2.50%	2.36%
ULTA BEAUTY, INC CUSIP: 903845303 Symbol: ULTA Initial purchase date: Jan 09, 2019	1,000.00	283.02	206.77	283,023.95	206,770.00	-76,253.95	-26.94%	0.00	0.00%	0.86%	0.81%
Total Growth				\$1,039,771.33	\$2,703,015.50	\$1,663,244.17	159.96%	\$21,610.00	0.80%	11.26%	10.64%
Value											
EAST WEST BANCORP INC CUSIP: 27579R104 Symbol: EWBC Initial purchase date: Jan 09, 2019	5,500.00	47.90	36.48	263,460.51	200,640.00	-62,820.51	-23.84%	6,050.00	3.02%	0.84%	0.79%
SIGNATURE BANK NEW YORK N Y CUSIP: 82669G104 Symbol: SBNY Initial purchase date: Jan 09, 2019	2,500.00	111.91	80.74	279,777.82	201,850.00	-77,927.82	-27.85%	5,600.00	2.77%	0.84%	0.79%
Total Value				\$543,238.33	\$402,490.00	\$-140,748.33	-25.91%	\$11,650.00	2.89%	1.68%	1.58%
Public Real Estate											
REALTY INCOME CORP MD SBI CUSIP: 756109104 Symbol: O Initial purchase date: May 26, 2015	5,000.00	47.19	57.86	235,951.92	289,300.00	53,348.08	22.61%	14,040.00	4.85%	1.21%	1.14%
Total Public Real Estate				\$235,951.92	\$289,300.00	\$53,348.08	22.61%	\$14,040.00	4.85%	1.21%	1.14%
Total Mid Cap				\$3,039,982.05	\$6,063,007.50	\$3,023,025.45	99.44%	\$70,500.00	1.16%	25.27%	23.87%
Small Cap											
Core											
META FINANCIAL GROUP INC CUSIP: 59100U108 Symbol: CASH Initial purchase date: Feb 19, 2019	5,000.00	25.65	29.34	128,234.81	146,700.00	18,465.19	14.40%	1,000.00	0.68%	0.61%	0.58%
PATRICK INDUST INC CUSIP: 703343103 Symbol: PATK Initial purchase date: Jan 09, 2019	8,000.00	35.72	55.75	285,733.51	446,000.00	160,266.49	56.09%	8,000.00	1.79%	1.86%	1.75%
Total Core				\$413,968.32	\$592,700.00	\$178,731.68	43.18%	\$9,000.00	1.52%	2.47%	2.33%
Growth											

Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Growth											
SUPERNUS PHARMACEUTICALS INC CUSIP: 868459108 Symbol: SUPN Initial purchase date: Jan 09, 2019	7,500.00	36.70	18.36	275,240.06	137,700.00	-137,540.06	-49.97%	0.00	0.00%	0.57%	0.55%
Total Growth				\$275,240.06	\$137,700.00	\$-137,540.06	-49.97%	\$0.00	0.00%	0.58%	0.55%
Value											
AIR LEASE CORP CL A CUSIP: 00912X302 Symbol: AL Initial purchase date: Aug 29, 2016	4,000.00	28.94	27.24	115,761.25	108,960.00	-6,801.25	-5.88%	2,400.00	2.20%	0.45%	0.43%
DAVE & BUSTERS ENTMT INC CUSIP: 238337109 Symbol: PLAY Initial purchase date: Feb 26, 2019	5,000.00	51.13	17.16	255,673.62	85,800.00	-169,873.62	-66.44%	0.00	0.00%	0.36%	0.34%
KAR AUCTION SVCS INC CUSIP: 48238T109 Symbol: KAR Initial purchase date: Nov 30, 2015	5,000.00	14.97	14.56	74,834.68	72,800.00	-2,034.68	-2.72%	0.00	0.00%	0.30%	0.29%
TCF FINL CORP NEW CUSIP: 872307103 Symbol: TCF Initial purchase date: Feb 26, 2019	5,000.00	46.90	27.21	234,491.90	136,050.00	-98,441.90	-41.98%	7,000.00	5.15%	0.57%	0.53%
Total Value				\$680,761.45	\$403,610.00	\$-277,151.45	-40.71%	\$9,400.00	2.33%	1.68%	1.59%
Total Small Cap				\$1,369,969.83	\$1,134,010.00	\$-235,959.83	-17.22%	\$18,400.00	1.62%	4.73%	4.47%
Total US				\$8,680,585.08	\$23,138,078.52	\$14,457,493.44	166.55%	\$255,942.32	1.11%	96.43%	91.11%
International											
International											
Core											
FABRINET CUSIP: G3323L100 Symbol: FN Initial purchase date: Mar 30, 2011	4,000.00	21.23	60.02	84,933.90	240,080.00	155,146.10	182.67%	0.00	0.00%	1.00%	0.95%
Total Core				\$84,933.90	\$240,080.00	\$155,146.10	182.67%	\$0.00	0.00%	1.00%	0.95%
Total International				\$84,933.90	\$240,080.00	\$155,146.10	182.67%	\$0.00	0.00%	1.00%	0.95%
Developed Markets											
Core											
ESSENT GROUP LTD CUSIP: G3198U102 Symbol: ESNT Initial purchase date: Feb 19, 2019	10,000.00	44.52	39.85	445,167.08	398,500.00	-46,667.08	-10.48%	6,400.00	1.61%	1.66%	1.57%



Portfolio holdings - as of October 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 10/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
International											
Core											
SENSATA TECHNOLOGIES HLDG PLC EUR CUSIP: G8060N102 Symbol: ST Initial purchase date: May 29, 2019	5,000.00	43.80	43.71	219,001.25	218,550.00	-451.25	-0.21%	0.00	0.00%	0.91%	0.86%
Total Core				\$664,168.33	\$617,050.00	\$-47,118.33	-7.09%	\$6,400.00	1.04%	2.57%	2.43%
Total Developed Markets				\$664,168.33	\$617,050.00	\$-47,118.33	-7.09%	\$6,400.00	1.04%	2.57%	2.43%
Total International				\$749,102.23	\$857,130.00	\$108,027.77	14.42%	\$6,400.00	0.75%	3.57%	3.38%
Total Equity				\$9,429,687.31	\$23,995,208.52	\$14,565,521.21	154.46%	\$262,342.32	1.09%	100.00%	94.49%
				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of asset class	% of Portfolio
Total Portfolio				\$10,830,245.41	\$25,395,766.62	\$14,565,521.21	134.49%	\$264,066.69	1.04%	100%	100%

Total accrued interest (included in market values): \$0.00

* Balanced mutual funds are displayed in unbundled view



Additional information about your portfolio

as of October 31, 2020

Benchmark composition

Account TX XX600

Blended Index

Start - Current: 30% Barclays Govt/Credit Int; 70% MSCI AC World IMI - GR



Disclosures applicable to accounts at UBS Financial Services Inc.

This section contains important disclosures regarding the information and valuations presented here. All information presented is subject to change at any time and is provided only as of the date indicated. The information in this report is for informational purposes only and should not be relied upon as the basis of an investment or liquidation decision. UBS FS account statements and official tax documents are the only official record of your accounts and are not replaced, amended or superseded by any of the information presented in these reports. You should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise.

UBS FS offers a number of investment advisory programs to clients, acting in our capacity as an investment adviser, including fee-based financial planning, discretionary account management, non-discretionary investment advisory programs, and advice on the selection of investment managers and mutual funds offered through our investment advisory programs. When we act as your investment adviser, we will have a written agreement with you expressly acknowledging our investment advisory relationship with you and describing our obligations to you. At the beginning of our advisory relationship, we will give you our Form ADV brochure(s) for the program(s) you selected that provides detailed information about, among other things, the advisory services we provide, our fees, our personnel, our other business activities and financial industry affiliations and conflicts between our interests and your interests.

In our attempt to provide you with the highest quality information available, we have compiled this report using data obtained from recognized statistical sources and authorities in the financial industry. While we believe this information to be reliable, we cannot make any representations regarding its accuracy or completeness. Please keep this guide as your Advisory Review.

Please keep in mind that most investment objectives are long term. Although it is important to evaluate your portfolio's performance over multiple time periods, we believe the greatest emphasis should be placed on the longer period returns.

Please review the report content carefully and contact your Financial Advisor with any questions.

Client Accounts: This report may include all assets in the accounts listed and may include eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your accounts and does not reflect the performance of your accounts in the fee-based program. As a result, the performance reflected in this report can

vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. When shown on a report, the risk profile and return objectives describe your overall goals for these accounts. For each account you maintain, you choose one return objective and a primary risk profile. If you have questions regarding these objectives or wish to change them, please contact your Financial Advisor to update your account records.

Performance: This report presents account activity and performance depending on which inception type you've chosen. The two options are: (1) All Assets (Since Performance Start): This presents performance for all assets since the earliest possible date; (2) Advisory Assets (Advisory Strategy Start) for individual advisory accounts: This presents Advisory level performance since the Latest Strategy Start date; If an account that has never been managed is included in the consolidated report, the total performance of that unmanaged account will be included since inception.

Time-weighted Returns for accounts / SWP/AAP sleeves (Monthly periods): The report displays a time weighted rate of return (TWR) that is calculated using the Modified Dietz Method. This calculation uses the beginning and ending portfolio values for the month and weights each contribution/withdrawal based upon the day the cash flow occurred. Periods greater than one month are calculated by linking the monthly returns. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. All periods shown which are greater than 12 months are annualized. This applies to all performance for all assets before 09/30/2010, Advisory assets before 12/31/2010 and SWP sleeves before 04/30/2018.

Time-weighted Returns for accounts / SWP/AAP sleeves (Daily periods): The report displays a time weighted rate of return (TWR) that is calculated by dividing the portfolio's daily gain/loss by the previous day's closing market value plus the net value of cash flows that occurred during the day, if it was positive. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. Periods greater than one day are calculated by linking the daily returns. All periods shown which are greater than 12 months are annualized. For reports generated prior to 01/26/2018, the performance calculations used the account's end of day value on the performance inception (listed in the report under the column "ITD") and all cash flows were posted at end of day. As a result of the change, the overall rate of return (TWR) and beginning market value displayed can vary from prior generated reports. This

applies to all performance for all assets on or after 09/30/2010, Advisory assets on or after 12/31/2010, SWP/AAP sleeves on or after 04/30/2018 as well as all Asset Class and Security level returns.

Money-weighted returns: Money-weighted return (MWR) is a measure of the rate of return for an asset or portfolio of assets. It is calculated by finding the daily Internal Rate of Return (IRR) for the period and then compounding this return by the number of days in the period being measured. The MWR incorporates the size and timing of cash flows, so it is an effective measure of returns on a portfolio.

Annualized Performance: All performance periods greater than one year are calculated (unless otherwise stated) on an annualized basis, which represents the return on an investment multiplied or divided to give a comparable one year return.

Cumulative Performance: A cumulative return is the aggregate amount that an investment has gained or lost over time, independent of the period of time involved.

Net of Fees and Gross of Fees Performance: Performance is presented on a "net of fees" and "gross of fees" basis, where indicated. Net returns do not reflect Program and wrap fees prior to 10/31/10 for accounts that are billed separately via invoice through a separate account billing arrangement. Gross returns do not reflect the deduction of fees, commissions or other charges. The payment of actual fees and expenses will reduce a client's return. The compound effect of such fees and expenses should be considered when reviewing returns. For example, the net effect of the deduction of fees on annualized performance, including the compounded effect over time, is determined by the relative size of the fee and the account's investment performance. It should also be noted that where gross returns are compared to an index, the index performance also does not reflect any transaction costs, which would lower the performance results. Market index data maybe subject to review and revision.

Benchmark/Major Indices: The past performance of an index is not a guarantee of future results. Any benchmark is shown for informational purposes only and relates to historical performance of market indices and not the performance of actual investments. Although most portfolios use indices as benchmarks, portfolios are actively managed and generally are not restricted to investing only in securities in the index. As a result, your portfolio holdings and performance may vary substantially from the index. Each index reflects an unmanaged universe of securities without any deduction for advisory fees or other expenses that would reduce actual returns, as well as the reinvestment of all income and dividends. An actual investment in the securities included in the index would require an investor to incur transaction costs, which would lower the performance

results. Indices are not actively managed and investors cannot invest directly in the indices. Market index data maybe subject to review and revision. Further, there is no guarantee that an investor's account will meet or exceed the stated benchmark. Index performance information has been obtained from third parties deemed to be reliable. We have not independently verified this information, nor do we make any representations or warranties to the accuracy or completeness of this information.

Blended Index - For Advisory accounts, Blended Index is designed to reflect the asset categories in which your account is invested. For Brokerage accounts, you have the option to select any benchmark from the list.

For certain products, the blended index represents the investment style corresponding to your client target allocation. If you change your client target allocation, your blended index will change in step with your change to your client target allocation.

Blended Index 2 - 8 - are optional indices selected by you which may consist of a blend of indexes. For advisory accounts, these indices are for informational purposes only. Depending on the selection, the benchmark selected may not be an appropriate basis for comparison of your portfolio based on it's holdings.

Custom Time Periods: If represented on this report, the performance start date and the performance end date have been selected by your Financial Advisor in order to provide performance and account activity information for your account for the specified period of time only. As a result, only a portion of your account's activity and performance information is presented in the performance report, and, therefore, presents a distorted representation of your account's activity and performance.

Net Deposits/Withdrawals: When shown on a report, this information represents the net value of all cash and securities contributions and withdrawals, program fees (including wrap fees) and other fees added to or subtracted from your accounts from the first day to the last day of the period. When fees are shown separately, net deposits / withdrawals does not include program fees (including wrap fees). When investment return is displayed net deposits / withdrawals does not include program fees (including wrap fees). For security contributions and withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts. Wrap fees will be included in this calculation except when paid via an invoice or through a separate accounts billing arrangement. When shown on Client summary and/or Portfolio review report, program fees (including wrap fees) may not be included in net deposits/withdrawals. PACE Program fees paid from sources other than your PACE account are treated as a contribution. A PACE



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

Program Fee rebate that is not reinvested is treated as a withdrawal.

Deposits: When shown on a report, this information represents the net value of all cash and securities contributions added to your accounts from the first day to the last day of the period. On Client Summary Report and/or Portfolio Review Report, this may exclude the Opening balance. For security contributions, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Withdrawals: When shown on a report, this information represents the net value of all cash and securities withdrawals subtracted from your accounts from the first day to the last day of the period. On Client summary and/or portfolio review report Withdrawals may not include program fees (including wrap fees). For security withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Dividends/Interest: Dividend and interest earned, when shown on a report, does not reflect your account's tax status or reporting requirements. Use only official tax reporting documents (i.e. 1099) for tax reporting purposes. The classification of private investment distributions can only be determined by referring to the official year-end tax-reporting document provided by the issuer.

Change in Accrued Interest: When shown on a report, this information represents the difference between the accrued interest at the beginning of the period from the accrued interest at the end of the period.

Change in Value: Represents the change in value of the portfolio during the reporting period, excluding additions/withdrawals, dividend and interest income earned and accrued interest. Change in Value may include programs fees (including wrap fees) and other fees.

Fees: Fees represented in this report include program and wrap fees. Program and wrap fees prior to October 1, 2010 for accounts that are billed separately via invoice through a separate account billing arrangement are not included in this report.

Performance Start Date Changes: The Performance Start Date for accounts marked with a 'A' have changed. Performance figures of an account with a changed Performance Start Date may not include the entire history of the account. The new Performance Start Date will generate performance returns and activity information for a shorter period than is available at UBS FS. As a result, the overall performance of these accounts may generate better performance than the period of time that would be included if the report used the inception date of the account. UBS FS recommends

reviewing performance reports that use the inception date of the account because reports with longer time frames are usually more helpful when evaluating investment programs and strategies. Performance reports may include accounts with inception dates that precede the new Performance Start Date and will show performance and activity information from the earliest available inception date. The change in Performance Start Date may be the result of a performance gap due to a zero-balance that prevents the calculation of continuous returns from the inception of the account. The Performance Start Date may also change if an account has failed one of our performance data integrity tests. In such instances, the account will be labeled as 'Review Required' and performance prior to that failure will be restricted. Finally, the Performance Start Date will change if you have explicitly requested a performance restart. Please contact your Financial Advisor for additional details regarding your new Performance Start Date.

Closed Account Performance: Accounts that have been closed may be included in the consolidated performance report. When closed accounts are included in the consolidated report, the performance report will only include information for the time period the account was active during the consolidated performance reporting time period.

Portfolio: For purposes of this report "portfolio" is defined as all of the accounts presented on the cover page or the header of this report and does not necessarily include all of the client's accounts held at UBS FS or elsewhere.

Percentage: Portfolio (in the "% Portfolio / Total" column) includes all holdings held in the account(s) selected when this report was generated. Broad asset class (in the "% broad asset class" column) includes all holdings held in that broad asset class in the account(s) selected when this report was generated.

Tax lots: This report displays security tax lots as either one line item (i.e., lumped tax lots) or as separate tax lot level information. If you choose to display security tax lots as one line item, the total cost equals the total value of all tax lots. The unit cost is an average of the total cost divided by the total number of shares. If the shares were purchased in different lots, the unit price listed does not represent the actual cost paid for each lot. The unrealized gain/loss value is calculated by combining the total value of all tax lots plus or minus the total market value of the security.

If you choose to display tax lot level information as separate line items on the Portfolio Holdings report, the tax lot information may include information from sources other than UBS FS. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other

than UBS FS. As a result this information may not be accurate and is provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. See your monthly statement for additional information.

Pricing: All securities are priced using the closing price reported on the last business day preceding the date of this report. Every reasonable attempt has been made to accurately price securities; however, we make no warranty with respect to any security's price. Please refer to the back of the first page of your UBS FS account statement for important information regarding the pricing used for certain types of securities, the sources of pricing data and other qualifications concerning the pricing of securities. To determine the value of securities in your account, we generally rely on third party quotation services. If a price is unavailable or believed to be unreliable, we may determine the price in good faith and may use other sources such as the last recorded transaction. When securities are held at another custodian or if you hold illiquid or restricted securities for which there is no published price, we will generally rely on the value provided by the custodian or issuer of that security.

Cash: Cash on deposit at UBS Bank USA is protected by the Federal Deposit Insurance Corporation (FDIC) up to \$250,000 in principal and accrued interest per depositor for each ownership type. Deposits made in an individual's own name, joint name, or individual retirement account are each held in a separate type of ownership. Such deposits are not guaranteed by UBS FS. More information is available upon request.

Margin: The quantity value may indicate that all or part of this position is held on margin or held in the short account. When an account holds a debit balance, this debit balance is incorporated into the account's total market value and deducted from the total value. When calculating the percent of portfolio on each security, the percentage will be impacted by the total market value of the account. Therefore, if the account's market value is reduced by a debit value of a holding the percent of portfolio will be greater and if the account's market value is increased by a holding then the percent of portfolio will be less.

Mutual Fund Asset Allocation: If the option to unbundle balanced mutual funds is selected and if a fund's holdings data is available, mutual funds will be classified by the asset class, subclass, and style breakdown of their underlying holdings. Where a mutual fund or ETF contains equity holdings from multiple equity sectors, this report will proportionately allocate the underlying holdings of the fund to those sectors measured as a percentage of the total fund's asset value as of the date shown.

This information is supplied by Morningstar, Inc. on a daily basis to UBS FS based on data supplied by the fund which may not be current. Mutual funds change their portfolio holdings on a regular (often daily) basis. Accordingly, any analysis that includes mutual funds may not accurately reflect the current composition of these funds. If a fund's underlying holding data is not available, it will be classified based on its corresponding overall Morningstar classification. All data is as of the date indicated in the report.

All pooled investment vehicles (such as mutual funds, closed end mutual funds, and exchange traded funds) incorporate internal management and operation expenses, which are reflected in the performance returns. Please see relevant fund prospectus for more information. Please note, performance for mutual funds is inclusive of multiple share classes.

Ineligible Assets: We require that you hold and purchase only eligible managed assets in your advisory accounts. Please contact your Financial Advisor for a list of the eligible assets in your program. These reports may provide performance information for eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your advisory assets. As a result, the performance reflected in this report can vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. Neither UBS nor your Financial Advisor will act as your investment adviser with respect to Ineligible Assets.

Equity Style: The Growth, Value and Core labels are determined by Morningstar. If an Equity Style is unclassified, it is due to non-availability of data required by Morningstar to assign it a particular style.

Equity Capitalization: Market Capitalization is determined by Morningstar. Equity securities are classified as Large Cap, Mid Cap or Small Cap by Morningstar. Unclassified securities are those for which no capitalization is available on Morningstar.

Equity Sectors: The Equity sector analysis may include a variety of accounts, each with different investment and risk parameters. As a result, the overweighting or underweighting in a particular sector or asset class should not be viewed as an isolated factor in making investment/liquidation decisions; but should be assessed on an account by account basis to determine the overall impact on the account's portfolio.

Classified Equity: Classified equities are defined as those equities for which the firm can confirm the specific



Disclosures applicable to accounts at UBS Financial Services Inc. (continued)

industry and sector of the underlying equity instrument.

Estimated Annual Income: The Estimated Annual Income is calculated by summing the previous four dividend/interest rates per share and multiplying by the quantity of shares held in the selected account(s) as of the End Date of Report. For savings product & sweep funds this value is not calculated and is displayed as 0.

Current Yield: Current yield is defined as the estimated annual income divided by the total market value.

Credit/Event Risk: Investments are subject to event risk and changes in credit quality of the issuer. Issuers can experience economic situations that may have adverse effects on the market value of their securities.

Interest Rate Risk: Bonds are subject to market value fluctuations as interest rates rise and fall. If sold prior to maturity, the price received for an issue may be less than the original purchase price.

Reinvestment Risk: Since most corporate issues pay interest semiannually, the coupon payments over the life of the bond can have a major impact on the bond's total return.

Accrued Interest: Interest that has accumulated between the most recent payment and the report date may be reflected in market values for interest bearing securities.

Gain/Loss: The gain/loss information may include calculations based upon non-UBS FS cost basis information. The Firm does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS FS. In addition, if this report contains positions with unavailable cost basis, the gain/(loss) for these positions are excluded in the calculation for the Gain/(Loss). As a result these figures may not be accurate and are provided for informational purposes only. Clients should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise. Rely only on year-end tax forms when preparing your tax return. See your monthly statement for additional information.

The account listing may or may not include all of your accounts with UBS FS. The accounts included in this report are listed under the "Accounts included in this review" shown on the first page or listed at the top of each page. If an account number begins with "@" this denotes assets or liabilities held at other financial institutions. Information about these assets, including valuation, account type and cost basis, is based on the information you provided to us, or provided to us by third party data aggregators or custodians at your direction. We have not verified, and are not responsible for, the accuracy or completeness of this information.

Account name(s) displayed in this report and labels used for groupings of accounts can be customizable "nicknames" chosen by you to assist you with your recordkeeping or may have been included by your financial advisor for reference purposes only. The names used have no legal effect, are not intended to reflect any strategy, product, recommendation, investment objective or risk profile associated with your accounts or any group of accounts, and are not a promise or guarantee that wealth, or any financial results, can or will be achieved. All investments involve the risk of loss, including the risk of loss of the entire investment.

For more information about account or group names, or to make changes, contact your Financial Advisor.

Account changes: At UBS, we are committed to helping you work toward your financial goals. So that we may continue providing you with financial advice that is consistent with your investment objectives, please consider the following two questions:

- 1) Have there been any changes to your financial situation or investment objectives?
 - 2) Would you like to implement or modify any restrictions regarding the management of your account?
- If the answer to either question is "yes," it is important that you contact your Financial Advisor as soon as possible to discuss these changes. For MAC advisory accounts, please contact your investment manager directly if you would like to impose or change any investment restrictions on your account.

ADV disclosure: A complimentary copy of our current Form ADV Disclosure Brochure that describes the advisory program and related fees is available through your Financial Advisor. Please contact your Financial Advisor if you have any questions.

Important information for former Piper Jaffray and McDonald Investments clients:

As an accommodation to former Piper Jaffray and McDonald Investments clients, these reports include performance history for their Piper Jaffray accounts prior to August 12, 2006 and McDonald Investments accounts prior to February 9, 2007, the date the respective accounts were converted to UBS FS. UBS FS has not independently verified this information nor do we make any representations or warranties as to the accuracy or completeness of that information and will not be liable to you if any such information is unavailable, delayed or inaccurate.

For insurance, annuities, and 529 Plans, UBS FS relies on information obtained from third party services it believes to be reliable. UBS FS does not independently verify or guarantee the accuracy or validity of any information provided by third parties. Information for insurance, annuities, and 529 Plans that has been provided by a third party service may not reflect the quantity and market value as of the previous business day. When

available, an "as of" date is included in the description.

Investors outside the U.S. are subject to securities and tax regulations within their applicable jurisdiction that are not addressed in this report. Nothing in this report shall be construed to be a solicitation to buy or offer to sell any security, product or service to any non-U.S. investor, nor shall any such security, product or service be solicited, offered or sold in any jurisdiction where such activity would be contrary to the securities laws or other local laws and regulations or would subject UBS to any registration requirement within such jurisdiction.

Performance History prior to the account's inception at UBS Financial Services, Inc. may have been included in this report and is based on data provided by third party sources. UBS Financial Services Inc. has not independently verified this information nor does UBS Financial Services Inc. guarantee the accuracy or validity of the information.

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City of Troy Option Recommendations November 2020

Calls

APPLE INC	13 Contracts (1300 shares) AAPL May 150 @ \$1.30
AECOM	9 Contracts (900 shares) ACM March 55 @ \$1.10
BRISTOL MYERS	10 Contracts (1000 shares) BMY June 70 @ \$1.30
COSTCO WHOLESALE CORP	5 Contracts (500 shares) COST March 450 @ \$3.30
DANAHER CORP	10 Contracts (1000 shares) DHR March 260 @ \$4.50
WALT DISNEY CO	18 Contracts (1800 shares) DIS April 160 @ \$1.70
GENL DYNAMICS CORP	12 Contracts (1200 shares) GD May 175 @ \$1.10
GENL MILLS INC	10 Contracts (1000 shares) GIS Apr 67.50 @ \$1.05
IDEX CORP	10 Contracts (1000 shares) IEX Apr 200 @ \$1.05
LINDE PLC EUR	10 Contracts (1000 shares) LIN Apr 280 @ \$1.25
MARSH & MCLENNAN COS INC	20 Contracts (2000 shares) MMC Apr 125 @ \$1.00
RIO TINTO PLC SPON ADR	10 Contracts (1000 shares) RIO Apr 67.50 @ \$1.00
YUM CHINA HLDGS INC	30 Contracts (3000 shares) YUMC Apr 65 @ \$1.05

All of the above option recommendations are within your investment policy statement guidelines.

Wealth Strategy Group
UBS Financial Services, Inc.

Rebecca Sorensen, CFP®, CIMA®
Sr. Vice President – Wealth Management
Institutional Consultant

Darin McBride, CRPC®
Sr. Vice President – Wealth Management
Sr. Portfolio Manager

Air Lease CorporationRecommendation [as of October 29, 2020]: **SELL**

Risk Evaluation: MODERATE Price: 27.24 [Oct 30, 2020 close] Trading Currency: USD Country: United States

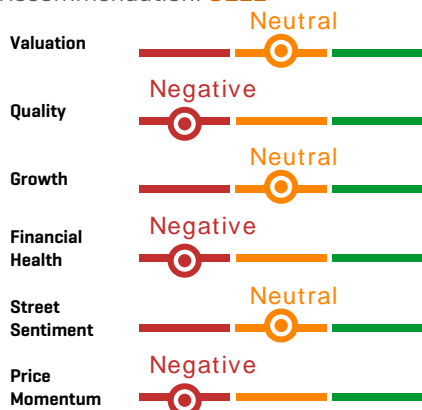
GICS Sector: Industrials

Sector Ranking: marketweight

SPGMI's Quality Ranking: NR

GICS Industry: Trading Companies & Distributors

Business Summary: Air Lease Corporation, an aircraft leasing company, engages in the purchase and leasing of commercial jet transport aircraft to airlines worldwide. The company also sells aircraft from its operating lease portfolio to third parties, including other leasing companies, financial services companies, and airlines. contd...

Quantitative Model Drivers [as of October 29, 2020]Recommendation: **SELL****Risk Evaluation :** **MODERATE**

Asset/Market Size Risk	Low
Financial Leverage Risk	High
Price Volatility Risk	Low
Liquidity Risk	Moderate

Model Ranking Commentary

- NYSE: AL's SELL recommendation is based on its score from CFRA's quantitative model for the United States.
- Quality and Valuation model sub-categories are the two largest drivers of NYSE: AL's SELL recommendation.
- Quality includes factors that consider profitability, cash flow generation, operating efficiency, and earnings quality.
- Valuation includes factors such as price to earnings, price to EBITDA, and price to cash flow.
- NYSE: AL's overall score ranked in the 80th percentile of all stocks in the model universe [1 = best and 100 = worst].

Key Statistics

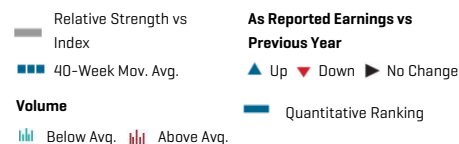
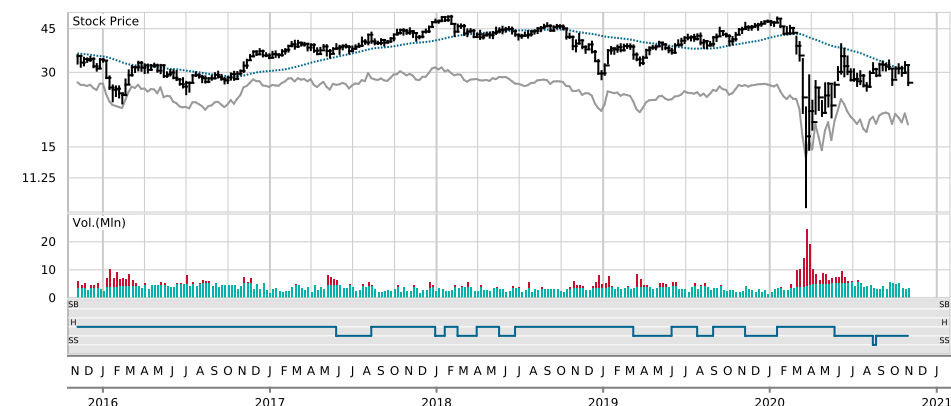
Market Cap [Mln of USD]	3,190
52-Wk Range [USD]	8.410 - 49.960
Value of - 10K Invested 5 Yrs ago	8,574
Beta vs S&P 500	-0.17
Common Shares Outstanding[Mln]	113.78
Average Daily Volume [Mln]	0.815
Insider Ownership[%]	NA

Compound Annual Growth Rates

Revenue - %CAGR	1Yr	3Yr	5Yr
Company	14.9	12.9	13.3
Peer Average	-4.1	10.4	13.0
S&P 500	-2.6	4.1	3.5

Operating EPS - %CAGR

	3.4	12.6	18.6
Company			
Peer Average	-18.7	7.1	29.5
S&P 500	-24.8	-2.6	1.5

Price Performance

Total Return[%CAGR]	YTD	1Yr	3Yr	5Yr
NYSE:AL	-47.2	-36.4	-13.0	-2.9
Peer Average	-43.3	-30.8	-9.4	.1
S&P 500	4.8	10.7	10.9	12.0

Quantitative Rankings: SB = Strong Buy, H = Hold, SS = Strong Sell
Past performance is not an indication of future performance and should not be relied upon as such.
Source: CFRA, S&P Global Market Intelligence [SPGMI]

Dividend Data

Currency: USD

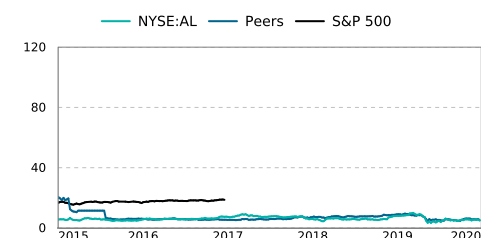
	5Yr Low	5Yr Hi
Indicated Rate/Share	0.6	
Yield [%]	2.2	.5
Payout Ratio [%]	11.6	5.3

Payment Details

Amount [USD]	Ex Div Date	Record Date	Payment Date
0.15	Sep 10	Sep 11	Oct 09, 2020
0.15	Jun 04	Jun 05	Jul 09, 2020
0.15	Mar 19	Mar 20	Apr 08, 2020
0.15	Dec 19	Dec 20	Jan 06, 2020

5 year P/E Ratio Comparisons [forward 12-month Diluted EPS estimates]

Current	
NYSE:AL	4.9
Peer Average	8
S&P 500	23.3
5-Year Average	
NYSE:AL	6.3
Peer Average	11.4
S&P 500	18.1





Air Lease Corporation

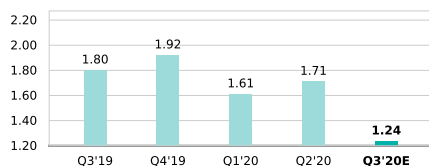
Recommendation [as of October 29, 2020]: **SELL**

Risk Evaluation: MODERATE Price: 27.24 [Oct 30, 2020 close] Trading Currency: USD Country: United States

EPS Per Share and Revenues [Millions USD, except per share]

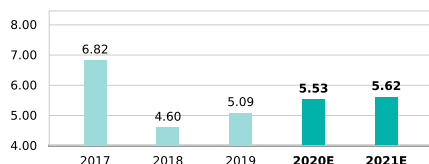
Fiscal year ends Dec 31

EPS Quarterly - Actual & Estimated



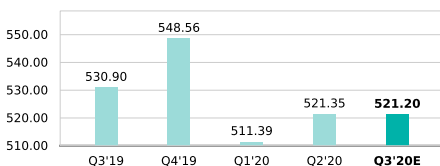
	Q3'19	Q4'19	Q1'20	Q2'20	Q3'20E
%Yr.-Yr. Chg.	4	16.4	-3.6	13.2	-31.4
% Surprise	28	30.6	4.4	41.3	-
No. of Analysts	1	1	2	3	2

EPS Annual - Actual & Estimated



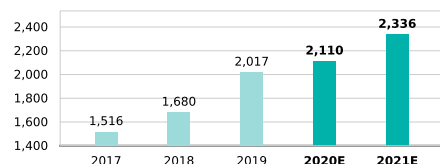
	2017	2018	2019	2020E	2021E
%Yr.-Yr. Chg.	98.6	-32.6	10.5	8.8	1.5
No. of Analysts	4	3	2	3	3

Revenues Quarterly - Actual & Estimated



	Q3'19	Q4'19	Q1'20	Q2'20	Q3'20E
%Yr.-Yr. Chg.	17.8	21.9	9.7	10.6	-1.8
No. of Analysts	7	7	6	6	6

Revenues Annual - Actual & Estimated



	2017	2018	2019	2020E	2021E
%Yr.-Yr. Chg.	6.9	10.8	20.1	4.6	10.7
No. of Analysts	8	9	8	8	7

Source: S&P Global Market Intelligence

Note: EPS & Revenues in graphs above may represent analyst-adjusted actuals and estimates and therefore may not match numbers in the financial data presentation below.

Key Profitability Ratios

	2015	2016	2017	2018	2019	LTM
% Operating Margin	59.8	61.1	59.1	58.5	58.0	57.6
Peer Average	37.3	33.9	38.3	41.7	44.5	44.7
% Net Margin	20.7	26.4	49.9	30.4	29.1	28.7
Peer Average	11.7	7.8	14.6	16.8	22.8	17.6
% Return on Capital	4.5	4.7	4.3	4.1	4.1	3.9
Peer Average	3.1	2.7	3.3	3.7	4.3	3.9
% Cash Flow to Sales	68.7	71.9	69.9	74.7	69.0	NA
Peer Average	58.6	52.3	57.9	56.7	55.9	NA

Key Valuation Ratios

	2015	2016	2017	2018	2019	Current
Fwd P/E - High	7.6	6.6	8.2	8.2	7.0	9.0
Fwd P/E - Low	6.8	5.0	6.4	6.6	5.5	5.4
Peer Average	48.1	8.7	56.2	63.4	33.3	NM
Avg EV/EBITDA	9.6	9.0	9.8	9.0	9.8	9.0
Peer Average	53.4	NM	64.9	39.5	31.7	55.4
Avg Price to Sales	NM	NM	NM	NM	NM	NM
Peer Average	NM	NM	NM	NM	NM	NM
Avg Price to Book	1.1	0.9	0.9	0.9	0.8	0.5
Peer Average	1.1	1.7	1.8	1.8	2.0	1.9

Income Statement, Cash Flow and Balance Sheet Data [Millions USD, except per share]

Fiscal Year Ending: Dec. 31

	2012	2013	2014	2015	2016	2017	2018	2019
Revenue	656	859	1,050	1,223	1,419	1,516	1,680	2,017
Operating Income	351	486	615	731	866	897	983	1,170
Net Income	132	190	256	253	375	756	511	587
Operating Cash Flow	491	654	769	840	1,020	1,060	1,254	1,392
Capital Expenditures	2,345	2,186	1,806	2,153	2,006	2,144	3,385	3,844
Earnings Per Share	1.28	1.80	2.38	2.34	3.44	6.82	4.60	5.09
Dividends Per Share	NA	0.10	0.13	0.17	0.23	0.35	0.46	0.56
Dividend Payout Ratio	Nil	6%	5%	7%	7%	5%	10%	11%
Free Cash Flow Per Share	-17.22	-14.06	-9.41	-11.87	-8.89	-9.71	-18.96	-21.78
Cash and Short Term Investments	230	270	283	157	275	292	300	317
Long Term Debt	4,385	5,853	6,631	7,712	8,714	9,699	11,539	13,579
Total Debt	4,385	5,853	6,631	7,712	8,714	9,699	11,539	13,643
Common Equity	2,333	2,523	2,772	3,020	3,382	4,127	4,807	5,623

Note: Data may be restated; before results of discontinued operations/special items. Per share data adjusted for stock dividends as of ex-dividend date.

NA = Not Available. NM = Not Meaningful.

Source: S&P Global Market Intelligence (SPGMI)



Air Lease Corporation

 Recommendation [as of October 29, 2020]: **SELL**

Risk Evaluation: MODERATE Price: 27.24 [Oct 30, 2020 close] Trading Currency: USD Country: United States

Peer Group Comparison

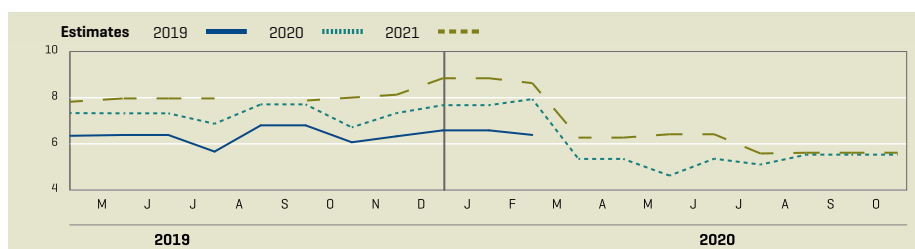
Peer Group	Stock Symbol	Stk.Mkt.Cap [Mln USD]	Beta	Recent Stock Price[USD]	52 Week Low/High[USD]	Dividend Yield[%]	Fwd P/E	P/B Ratio	Ranking ¹	Return On Revenue[%]	Return On Equity[%]	LTD to Cap[%]
Air Lease Corporation	NYSE:AL	3,190.36	-0.17	27.24	10.81/49.63	2.2	3.9	0.5	Sell	28.7	10.6	71.4
AerCap Holdings N.V.	NYSE:AER	3,230.46	-0.08	24.83	15.14/62.71	Nil	4.2	0.3	★★★★	22.8	11.8	75.6
American Express Company	NYSE:AXP	73,329.74	0.13	91.24	68.96/136.93	1.9	13.8	3.4	★★★	10.5	14.6	65.4
BOC Aviation Limited	SEHK:2588	4,282.32	0.67	6.17	4.58/10.45	Nil	5.2	0.9	Hold	37.4	15.8	69.5
Bohai Leasing Co., Ltd.	SZSE:000415	2,341.66	NA	0.38	0.38/0.57	Nil	0.9	0.1	NA	-6.5	-6.8	72.6
CAI International, Inc.	NYSE:CAI	462.60	0.12	26.35	10.68/30.98	3.8	6.2	0.8	Strong Buy	15.4	9.0	58.7
Fly Leasing Limited	NYSE:FLY	184.11	NA	5.93	4.01/22.0	Nil	2.0	0.2	NA	36.1	21.1	71.2
Fortress Transportation and Infrastructure Investors LLC	NYSE:FTAI	1,422.96	0.03	15.74	5.67/21.4	8.4	21.4	1.1	Strong Sell	14.2	5.9	60.8
Willis Lease Finance Corporation	NasdaqGM:WLFC	126.73	0.54	21.21	14.98/63.0	Nil	17.0	0.4	NA	10.6	10.4	78.9

¹ Quantitative Rankings : Strong Buy , Buy , Hold , Sell , Strong Sell ; Qualitative Rankings(STARS) : 5 = Strong Buy , 4 = Buy , 3 = Hold , 2 = Sell , 1 = Strong Sell

Rankings are not predictive of future performance. For full definitions of Rankings, see the glossary section of this report.

Note: Peer Group selection is performed using CFRA's proprietary peer ranking system. Peers are selected based on factors such as similarity of analyst coverage, industry, size, and region. The subject company is ranked against a universe of companies (the "Universe") which has been compiled by CFRA and consists of a list of companies with similar characteristics, but may not include all the companies within the same industry and/or that engage in the same line of business. The subject company and some of the companies in the Peer Group may be ranked by two different ranking systems. For the purpose of the overall ranking/recommendation, the subject company is ranked against all the companies in the Universe and not necessarily against the companies listed in the Peer Group.

Wall Street Consensus Estimates



Fiscal Years	Avg Est.	High Est.	Low Est.	# of Est.	Est. P/E
2021	5.62	6.58	4.33	3	4.9
2020	5.53	6.48	4.72	3	4.9
2021 vs. 2020	▲2%	▲2%	▼-8%	0%	0%

Source: S&P Global Market Intelligence (SPGMI)

Forecasts are not reliable indicator of future performance.

Note: A company's earnings outlook plays a major part in any investment decision. S&P Global Market Intelligence organizes the earnings estimates of over 2,300 Wall Street analysts, and provides their consensus of earnings over the next two years, as well as how those earnings estimates have changed over time. Note that the information provided in relation to consensus estimates is not intended to predict actual results and should not be taken as a reliable indicator of future performance.



Air Lease Corporation

Recommendation [as of October 29, 2020]: **SELL**

Risk Evaluation: MODERATE Price: 27.24 [Oct 30, 2020 close] Trading Currency: USD Country: United States

Business Summary

Air Lease Corporation, an aircraft leasing company, engages in the purchase and leasing of commercial jet transport aircraft to airlines worldwide. The company also sells aircraft from its operating lease portfolio to third parties, including other leasing companies, financial services companies, and airlines. In addition, it provides fleet management services to investors and owners of aircraft portfolios. As of December 31, 2019, the company owned a fleet of 275 aircraft, including 203 narrowbody jet aircraft and 89 widebody jet aircraft. Air Lease Corporation was founded in 2010 and is headquartered in Los Angeles, California.

Key Developments

Nov-09-2020	Earnings Calls	Air Lease Corporation, Q3 2020 Earnings Call, Nov 09, 2020
Oct-15-2020	Company Conference Presentations	Air Lease Corporation Presents at Airline Economics Growth Frontiers New York 2020, Oct-15-2020 10:15 AM
Oct-13-2020	Company Conference Presentations	Air Lease Corporation Presents at Aviation Week Network Webinar Series, Oct-13-2020 10:00 AM
Sep-15-2020	Company Conference Presentations	Air Lease Corporation Presents at Barclays Global Financial Services Conference, Sep-15-2020 11:15 AM
Sep-09-2020	Company Conference Presentations	Air Lease Corporation Presents at 10th Annual Deutsche Bank Aircraft Finance & Leasing Conference, Sep-09-2020 02:45 PM
Aug-10-2020	Fixed Income Offerings	Air Lease Corporation has completed a Fixed-Income Offering in the amount of \$692.804 million.
Aug-06-2020	Earnings Calls	Air Lease Corporation, Q2 2020 Earnings Call, Aug 06, 2020
Aug-06-2020	Announcements of Earnings	Air Lease Corporation Reports Earnings Results for the Second Quarter Ended June 30, 2020
Jun-26-2020	Index Constituent Drops	Air Lease Corporation[NYSE:AL] dropped from Russell Midcap Growth Index
Jun-26-2020	Index Constituent Drops	Air Lease Corporation[NYSE:AL] dropped from Russell 1000 Growth Index
Jun-26-2020	Index Constituent Drops	Air Lease Corporation[NYSE:AL] dropped from Russell Small Cap Comp Growth Index
Jun-26-2020	Index Constituent Drops	Air Lease Corporation[NYSE:AL] dropped from Russell 3000 Growth Index
Jun-26-2020	Index Constituent Drops	Air Lease Corporation[NYSE:AL] dropped from Russell 2500 Growth Index
Jun-17-2020	Fixed Income Offerings	Air Lease Corporation has completed a Fixed-Income Offering in the amount of \$841.2875 million.
May-07-2020	Earnings Calls	Air Lease Corporation, Q1 2020 Earnings Call, May 07, 2020
May-07-2020	Announcements of Earnings	Air Lease Corporation Reports Earnings Results for the First Quarter Ended March 31, 2020
May-06-2020	Annual General Meeting	Air Lease Corporation, Annual General Meeting, May 06, 2020
Feb-28-2020	Company Conference Presentations	Air Lease Corporation Presents at 21st Credit Suisse Annual Financial Services Forum, Feb-28-2020
Feb-14-2020	Earnings Calls	Air Lease Corporation, Q4 2019 Earnings Call, Feb 14, 2020

Corporate Information

Investor Contact
M. Liz DePalma [310-553-0555]

Office
2000 Avenue of the Stars
Suite 1000N
Los Angeles
California
90067
United States
Los Angeles , California 90067
United States

Telephone
310-553-0555

Web Site
www.airleasecorp.com

Key Officers
CEO, President & Director
J. L. Plueger
Executive Vice President of Aircraft Procurement & Specification
J. D. Poerschke
Executive Vice President
A. A. Khatibi
Executive VP, General Counsel, Corporate Secretary & Chief Compliance Officer
C. H. Forsyte
Executive Chairman of the Board
S. F. Udvar-Házy
Vice President of Human Resources
C. McKeown
Executive Vice President of Marketing & Commercial Affairs
G. A. Levy
Executive VP & CFO
G. B. Willis
Assistant Vice President of Finance
J. Arnold
Senior Vice President of Technical Asset Management
E. Hoogenkamp
VP of Marketing and Head of Aircraft Sales & Trading
D. Beker
Executive Vice President of Marketing
K. Korde
VP & Head of Management Business
S. Lu
Vice President of Investor Relations
M. Liz DePalma
Senior VP of Commercial Contracts & Insurance
S. Evans
Senior VP & Controller
S. Lemmens
VP & Treasurer
D. Verwholt
Executive VP & MD of Asia
J. Chen

Board Members
C. G. Krongard, I. M. Saines, J. L. Plueger, M. J. Hart, M. O. ...
... S. F. Udvar-Házy, C. D. McKeown

Glossary

Quantitative Model Overall Recommendation and drivers of the recommendation

CFRA's global quantitative stock reports provide a 5-tier recommendation assigning a Strong Buy, Buy, Hold, Sell, or Strong Sell recommendation based on a series of quantitative inputs from four separate regional models:

- United States
- Canada
- Developed Europe
- Developed Asia excluding Japan

Each of these regional models is based on between 25 and 40 different investment factors (financial ratios), selected from S&P Global Market Intelligence's Alpha Factor Library.

To provide its recommendation, CFRA ranks a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed.

Within these categories, factors are chosen based on their historical predictive strength [alpha] within the region and their correlation with other factors. Each regional model contains two separate sub-models; one that uses factors specific to financial companies and one that focuses on non-financial companies. Due to the large number of banks in the U.S., the U.S. model also has a third sub-model specifically for banks.

Each company within a region is grouped with a universe of stocks and receives a score on each of the five (or six in the U.S.) model categories. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five [six] model category scores are then weighted and rolled up into a single percentile ranking for that company. Rankings are then assigned investment labels, as follows:

Strong Buy: top 10% by model score

Buy: next 20%

Hold: next 40%

Sell: next 20%

Strong Sell: bottom 10%

Risk Evaluation

Risk Evaluation is a relative ranking, which represents an assessment of the risk of investing in a company's stock relative to the risk of investing in other companies' stocks in the same universe. To perform this assessment the following risk categories are evaluated:

Asset/Market Size Risk
Financial Leverage Risk
Price Volatility Risk
Liquidity Risk

Each company's stock is percentile ranked from 1 to 100 against the other companies within the universe on each of the four risk categories mentioned above, with 1 being low risk and 100 being

high risk. The overall risk evaluation represents the combined scores on these Risk categories, calculated as an equal-weighted average of percentile ranks of the 4 risk categories. The highest 40% of companies in each universe receive a high risk ranking, the next 35% receive a moderate risk ranking and, the lowest 25% receive a low risk ranking.

All investments carry some sort of risk and a low risk ranking represents a relative ranking of CFRA's assessment of the risk of investing in a company's stock versus the risk of investing in other companies that are part of that company's universe. Therefore, a low risk ranking should not be interpreted as an absolute risk evaluation, but as a relative measurement of the risk of investing in a company's stock.

Sector Ranking

CFRA's Investment Policy Committee (IPC) consists of a team of five seasoned investment professionals. It meets weekly to discuss market trends and projections, maintain an S&P 500 12-month forward price target, and make asset allocation/sector recommendations. The IPC establishes over, market, and underweight recommendations on the 10 sectors within the S&P 500. Overweight and underweight recommendations imply that the group expects these sectors to outperform or underperform the S&P 500 during the coming six-to-12 month period, respectively. A "marketweight" recommendation indicates that the sector is expected to be a market performer during this same timeframe. The IPC analyses economic projections, fundamental forecasts, technical considerations, and historical precedent when making such recommendations. Changes in recommendations can be made more frequently than every six-12 months as market conditions evolve. Sector rankings will only be made available for sectors in the S&P 500. If a ranking is not available, the value will be N/A.

Qualitative STARS Ranking system and definition:

★★★★★ 5-STARS (Strong Buy):

Total return is expected to outperform the total return of a relevant benchmark, by a wide margin over the coming 12 months, with shares rising in price on an absolute basis.

★★★★ 4-STARS (Buy):

Total return is expected to outperform the total return of a relevant benchmark over the coming 12 months, with shares rising in price on an absolute basis.

★★★ 3-STARS (Hold):

Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months, with shares generally rising in price on an absolute basis.

★★ 2-STARS (Sell):

Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months, and the share price not anticipated to show a gain.

★ 1-STAR (Strong Sell):

Total return is expected to underperform the total return of a relevant benchmark by a wide margin over the coming 12 months, with shares falling in price on an absolute basis.

S&P Global Market Intelligence's Quality Ranking

[also known as S&P Global Market Intelligence's Earnings & Dividend Rankings]- Growth and stability of earnings and dividends are deemed key elements in establishing S&P Global Market Intelligence's earnings and dividend rankings for common stocks, which are designed to encapsulate the nature of this record in a single symbol. It should be noted, however, that the process also takes into consideration certain adjustments and modifications deemed desirable in establishing such rankings. The final score for each stock is measured against a scoring matrix determined by analysis of the scores of a large and representative sample of stocks. The range of scores in the array of this sample has been aligned with the following ladder of rankings:

A+ Highest	B Below Average
A High	B- Lower
A- Above Average	C Lowest
B+ Average	D In Reorganization
NR Not Ranked	

S&P Capital IQ Consensus Estimates

S&P Capital IQ Consensus Estimates represent the aggregation of individual estimates provided by analysts that are covering a public company. A consensus number can be provided as either the mean or the median. The size of the company and the amount of analyst coverage will determine the size of the group from which the Consensus is derived. All of the available analysts' estimates may not necessarily be included in the Consensus. The Consensus will only include analysts' estimates that are based on the same methodology. Consensus Mean: The mathematical average of the detailed estimates after the appropriate exclusions have been applied. Consensus Median: This represents the midpoint of the range of estimates that are ranked from highest to lowest after the appropriate exclusions have been applied. If the number of estimates is even, then the average of the middle two figures is the median.

Global Industry Classification Standard (GICS)

An industry classification standard, developed by Standard and Poor's in collaboration with Morgan Stanley Capital International (MSCI). Under the GICS structure, companies are classified in one of 154 sub-industries, which are grouped into 68 industries, 24 industry groups, and 10 economic sectors [consumer discretionary, consumer staples, energy, financials, health care, industrials, information technology, materials, telecom services, and utilities]. This four-tier structure accommodates companies across the world and facilitates sector analysis and investing.

Glossary

Peer Group

A subset of a universe that groups companies by specific criteria, such as industry/across industry, lines of business, geography (local, regional, national, and international), size of business (e. g. in terms of revenue), performance criteria, etc.

Universe

A set of companies that shares a common feature such as the same market capitalization, industry or index.

Beta

Beta is a measurement of the sensitivity of a company's stock price to the overall fluctuation of a given benchmark index. The beta values used in this report are levered, unadjusted and derived from a least squares regression analysis using stock and benchmark index returns based on a monthly frequency. Beta is calculated using 60 monthly returns (each as of month end) but if the company's trading history is too short to provide such a sample, fewer than 60 but not fewer than 24 monthly returns are used to run the regression. Beta in this report uses five different benchmark indices to better estimate a stock's volatility against a respective market: the S&P 500 for all US stocks, the S&P/TSX index for all Canadian stocks, the S&P Europe 350 for all European stocks, the S&P/ASX 200 index for all Australian stocks, and the S&P Global 1200 for all other international stocks.

Free Cash Flow (FCF)

Operating Cash Flow minus Capital Expenditures over the past 12 months

Funds from Operations (FFO)

Funds from Operations (FFO) represents a REIT's net income, excluding gains or losses from sales of property, plus real estate depreciation.

Not Meaningful (NM)

Value is available but it is not meaningful. Examples are certain negative ratios such as P/E, as well as certain ratios that are over +/- 100%

Not Available (NA)

Value is not available for this data item

Return on Capital

$$\text{EBIT} / [\text{Total Equity} + \text{Total Debt} + \text{Deferred Tax Liability Non Current} + \text{Deferred Tax Liability Current}]$$
 Notes:

[1] If the denominator is less than or equal to zero then the ratio will be shown as NM

[2] If the return is less than (300%) then the value will be shown as NM

Return on Equity

$$\text{Earnings From Continuing Operations} / [(\text{Total Equity}[t] + \text{Total Equity}[t-1]) / 2]$$
 Notes:

[1] If both periods of data (t and t-1) are not available then the ratio will be shown as NM

[2] If the denominator is less than or equal to zero then the ratio will be shown as NM

Relative Strength vs Index

Relative Strength vs Index measures the stock performance of the company verse all other stocks in the benchmark index each week. Weekly readings are accumulated to form the cumulative Relative Strength line.

Relevant benchmarks:

Region	Country	Index
US	US	S&P 500 Index
Canada	Canada	S&P/TSX Composite Index
Europe	All	S&P Europe 350 Index
Asia ex Japan	Australia	S&P/ASX 200 Index
Asia ex Japan	All except Australia	S&P Global 1200

Abbreviations used in CFRA Equity Research Reports

CAGR	Compound Annual Growth Rate
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest Taxes Depreciation and Amortization
EPS	Earnings Per Share
EV	Enterprise Value
FCF	Free Cash Flow
FFO	Funds from Operations
LTD	Long Term Debt
NM	Not Meaningful [see definition above]
P/E	Price/Earnings

Dividends on American Depositary Receipts (ADRs) and American Depositary Shares (ADSs) are net of taxes (paid in the country of origin).



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Stocks are ranked in accordance with the following ranking methodologies:

STARS Stock Reports:

Qualitative STARS recommendations are determined and assigned by equity analysts. For reports containing STARS recommendations refer to the Glossary section of the report for detailed methodology and the definition of STARS rankings.

Quantitative Stock Reports:

Quantitative recommendations are determined by ranking a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. For reports containing quantitative recommendations refer to the Glossary section of the report for detailed methodology and the definition of Quantitative rankings.

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Dave & Buster's Entertainment, Inc.

Recommendation [as of October 29, 2020]:

**STRONG
SELL**

Risk Evaluation: HIGH Price: 17.16 [Oct 30, 2020 close] Trading Currency: USD Country: United States

GICS Sector: Consumer Discretionary

Sector Ranking: marketweight

SPGMI's Quality Ranking: B

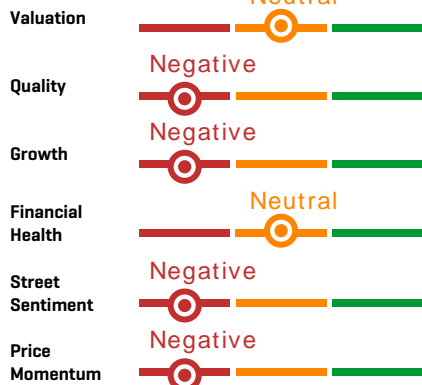
GICS Industry: Restaurants

Business Summary: Dave & Buster's Entertainment, Inc. owns and operates entertainment and dining venues for adults and families in North America. Its venues offer a menu of entrees and appetizers, as well as a selection of non-alcoholic and alcoholic beverages; and an assortment of entertainment attractions centered on playing contd...

Quantitative Model Drivers [as of October 29, 2020]

Recommendation: **STRONG SELL**

Neutral

Risk Evaluation : **HIGH**

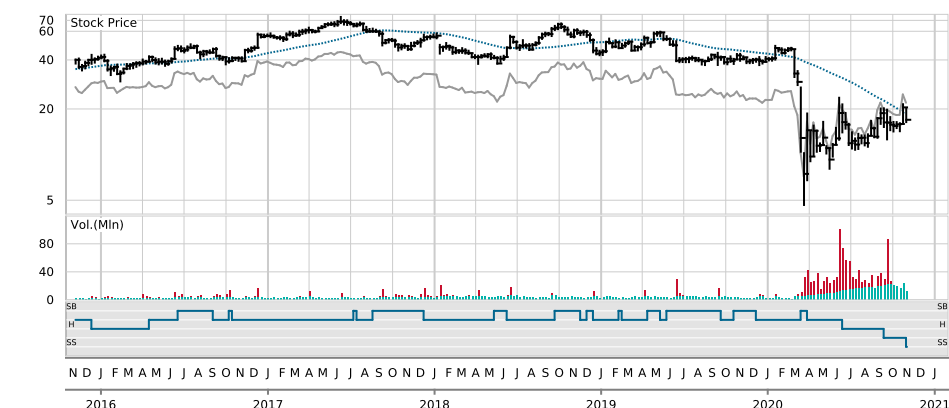
Asset/Market Size Risk Moderate

Financial Leverage Risk High

Price Volatility Risk High

Liquidity Risk Low

Price Performance



Relative Strength vs Index

40-Week Mov. Avg.

Volume

Below Avg. Above Avg.

As Reported Earnings vs Previous Year

▲ Up ▼ Down ► No Change

Quantitative Ranking

Total Return[%CAGR]

	YTD	1Yr	3Yr	5Yr
NasdaqGS:PLAY	-63.7	-56.7	-28.6	-14.6
Peer Average	-9.3	-12.1	2.0	3.5
S&P 500	4.8	10.7	10.9	12.0

Quantitative Rankings: SB = Strong Buy, H = Hold, SS = Strong Sell
Past performance is not an indication of future performance and should not be relied upon as such.
Source: CFRA, S&P Global Market Intelligence [SPGMI]

Model Ranking Commentary

- NasdaqGS: PLAY's STRONG SELL recommendation is based on its score from CFRA's quantitative model for the United States.
- Growth and Valuation model sub-categories are the two largest drivers of NasdaqGS: PLAY's STRONG SELL recommendation.
- Growth includes factors that measure EPS growth and stability and cash flow growth and stability.
- Valuation includes factors such as price to earnings, price to EBITDA, and price to cash flow.
- NasdaqGS: PLAY's overall score ranked in the 91st percentile of all stocks in the model universe [1 = best and 100 = worst].

Key Statistics

Market Cap [Mln of USD]	816.7
52-Wk Range [USD]	4.605 - 48.800
Value of - 10K Invested 5 Yrs ago	4,541
Beta vs S&P 500	0.51
Common Shares Outstanding[Mln]	47.6
Average Daily Volume [Mln]	5.974
Insider Ownership[%]	NA

Compound Annual Growth Rates

Revenue - %CAGR	1Yr	3Yr	5Yr
Company	-35.2	-7.5	1.1
Peer Average	-9.3	0.3	2.7
S&P 500	-2.6	4.1	3.5

Operating EPS - %CAGR

	1Yr	3Yr	5Yr
Company	-170.2	-43.3	0.9
Peer Average	209.4	-9.7	6.6
S&P 500	-24.8	-2.6	1.5

Dividend Data

Currency: USD

	5Yr Low	5Yr Hi
Indicated Rate/Share	0	
Yield [%]	Nil	0 13.1
Payout Ratio [%]	NM	NM 22

Payment Details

Amount [USD]	Ex Div Date	Record Date	Payment Date
0.16	Jan 09	Jan 10	Feb 10, 2020
0.16	Oct 10	Oct 11	Nov 11, 2019
0.15	Jun 24	Jun 25	Jul 10, 2019
0.15	Mar 25	Mar 26	Apr 10, 2019

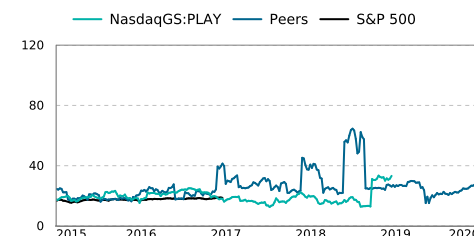
5 year P/E Ratio Comparisons [forward 12-month Diluted EPS estimates]

Current

NasdaqGS:PLAY	-439
Peer Average	27.1
S&P 500	23.3

5-Year Average

NasdaqGS:PLAY	19.5
Peer Average	27.1
S&P 500	18.1





Dave & Buster's Entertainment, Inc.

Recommendation [as of October 29, 2020]:

**STRONG
SELL**

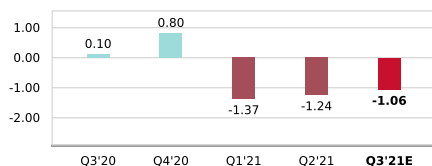


Risk Evaluation: HIGH **Price:** 17.16 [Oct 30, 2020 close] **Trading Currency:** USD **Country:** United States

EPS Per Share and Revenues [Millions USD, except per share]

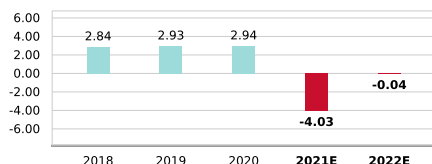
Fiscal year ends Feb 02

EPS Quarterly - Actual & Estimated



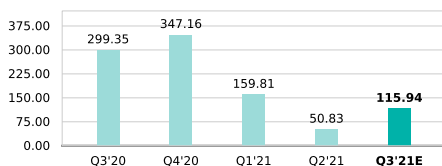
	Q3'20	Q4'20	Q1'21	Q2'21	Q3'21E
%Yr.-Yr. Chg.	-66.7	6.7	-221.2	-237.8	-1160
% Surprise	40.3	12.9	-61	11.7	-
No. of Analysts	9	12	9	10	11

EPS Annual - Actual & Estimated



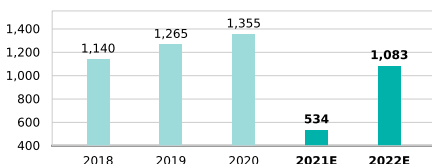
	2018	2019	2020	2021E	2022E
%Yr.-Yr. Chg.	35.2	3.2	0.3	-237.2	99
No. of Analysts	10	9	8	11	11

Revenues Quarterly - Actual & Estimated



	Q3'20	Q4'20	Q1'21	Q2'21	Q3'21E
%Yr.-Yr. Chg.	6.1	4.6	-56	-85.2	-61.3
No. of Analysts	13	12	12	12	12

Revenues Annual - Actual & Estimated



	2018	2019	2020	2021E	2022E
%Yr.-Yr. Chg.	13.4	11	7.1	-60.6	102.9
No. of Analysts	10	10	12	12	12

Source: S&P Global Market Intelligence

Note: EPS & Revenues in graphs above may represent analyst-adjusted actuals and estimates and therefore may not match numbers in the financial data presentation below.

Key Profitability Ratios

	2016	2017	2018	2019	2020	LTM
% Operating Margin	12.7	15.0	14.8	12.4	10.9	-9.9
Peer Average	14.0	13.6	13.6	12.9	3.7	6.8
% Net Margin	6.9	9.0	10.6	9.3	7.4	-8.9
Peer Average	7.6	3.1	10.3	7.6	-0.6	-1.5
% Return on Capital	10.0	13.6	14.1	12.5	6.4	-2.4
Peer Average	10.9	10.4	10.5	9.1	3.1	2.0
% Cash Flow to Sales	21.6	23.0	23.2	26.7	21.3	NA
Peer Average	14.4	14.5	14.8	14.4	9.1	NA

Key Valuation Ratios

	2015	2016	2017	2018	2019	Current
Fwd P/E - High	61.5	38.4	35.0	25.8	20.3	16.1
Fwd P/E - Low	55.5	27.7	27.4	19.1	15.2	6.6
Peer Average	45.1	44.1	49.1	47.5	43.0	47.3
Avg EV/EBITDA	NM	4.0	9.7	8.1	7.3	6.0
Peer Average	22.3	19.7	19.0	18.3	22.7	NM
Avg Price to Sales	0.1	NM	0.1	NM	NM	NM
Peer Average	NM	NM	NM	NM	NM	NM
Avg Price to Book	6.0	5.2	5.5	4.7	4.6	1.9
Peer Average	20.5	NM	69.8	0.7	0.6	0.6

Income Statement, Cash Flow and Balance Sheet Data [Millions USD, except per share]

Fiscal Year Ending: Feb. 2

	2013	2014	2015	2016	2017	2018	2019	2020
Revenue	NA	NA	NA	867	1,005	NA	NA	NA
Operating Income	NA	NA	NA	110	151	NA	NA	NA
Net Income	NA	NA	NA	59.6	90.8	NA	NA	NA
Operating Cash Flow	NA	NA	NA	187	231	NA	NA	NA
Capital Expenditures	NA	NA	NA	163	181	NA	NA	NA
Earnings Per Share	Nil	Nil	Nil	1.39	2.10	Nil	Nil	Nil
Dividends Per Share	NA	NA	NA	NA	NA	NA	NA	NA
Dividend Payout Ratio	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Free Cash Flow Per Share	NA	NA	NA	0.56	1.17	NA	NA	NA
Cash and Short Term Investments	NA	NA	NA	25.5	20.1	NA	NA	NA
Long Term Debt	NA	NA	NA	330	257	NA	NA	NA
Total Debt	NA	NA	NA	337	264	NA	NA	NA
Common Equity	NA	NA	NA	346	439	NA	NA	NA

Note: Data may be restated; before results of discontinued operations/special items. Per share data adjusted for stock dividends as of ex-dividend date.

NA = Not Available. NM = Not Meaningful.

Source: S&P Global Market Intelligence [SPGMI]



Dave & Buster's Entertainment, Inc.

Recommendation [as of October 29, 2020]:

**STRONG
SELL**


Risk Evaluation: HIGH Price: 17.16 [Oct 30, 2020 close] Trading Currency: USD Country: United States

Peer Group Comparison

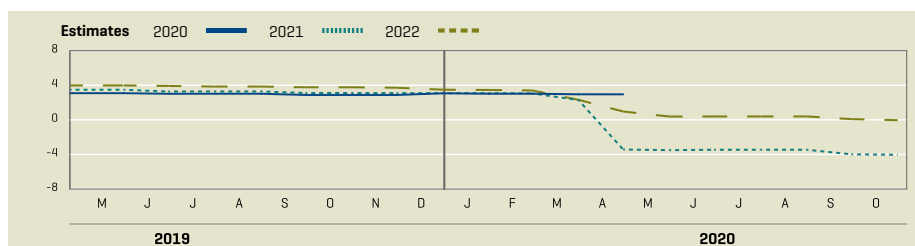
Peer Group	Stock Symbol	Stk.Mkt.Cap [Mln USD]	Beta	Recent Stock Price[USD]	52 Week Low/High[USD]	Dividend Yield[%]	Fwd P/E	P/B Ratio	Ranking ¹	Return On Revenue[%]	Return On Equity[%]	LTD to Cap[%]
Dave & Buster's Entertainment, Inc.	NasdaqGS:PLAY	816.73	0.51	17.16	4.87/47.37	Nil	NM	3.3	Strong Sell	-8.9	-30.7	86.1
BJ's Restaurants, Inc.	NasdaqGS:BJRI	628.52	0.06	28.21	6.54/43.71	Nil	NM	2.0	★★★★	-2.9	-8.4	-
Darden Restaurants, Inc.	NYSE:DRI	12,044.80	0.05	91.92	34.16/122.45	1.3	22.2	5.0	★★★★	-2.6	-7.7	68.7
Dine Brands Global, Inc.	NYSE:DIN	885.13	-0.06	51.45	17.0/97.84	Nil	22.1	NM	Sell	-10.4	25.6	115.0
Dunkin' Brands Group, Inc.	NasdaqGS:DNKN	8,216.77	-0.21	99.71	39.68/103.4	1.6	35.8	NM	★★★★	16.8	-38.2	116.0
Jack in the Box Inc.	NasdaqGS:JACK	1,815.59	-0.4	80.06	18.59/89.34	2	19.1	NM	Hold	7.5	-10.5	142.9
Red Robin Gourmet Burgers, Inc.	NasdaqGS:RRGB	187.11	-0.76	12.04	5.18/37.13	Nil	NM	1.2	Strong Sell	-22.6	-91.0	74.0
Shake Shack Inc.	NYSE:SHAK	2,637.21	-0.48	67.52	32.51/84.21	Nil	NM	6.1	★★★	-5.3	-7.0	-
Texas Roadhouse, Inc.	NasdaqGS:TXRH	4,860.36	-0.16	70.03	30.41/75.5	Nil	95.8	5.4	Hold	2.4	6.1	45.2
The Cheesecake Factory Incorporated	NasdaqGS:CAKE	1,351.14	-0.15	29.72	15.1/44.92	Nil	NM	3.8	★★★	-5.8	-31.8	70.5
The Wendy's Company	NasdaqGS:WEN	4,890.42	-0.23	21.85	7.47/24.71	.9	39.8	10.1	Sell	8.3	19.8	84.0

¹ Quantitative Rankings : Strong Buy , Buy , Hold , Sell , Strong Sell ; Qualitative Rankings[STARS] : 5 = Strong Buy , 4 = Buy , 3 = Hold , 2 = Sell , 1 = Strong Sell

Rankings are not predictive of future performance. For full definitions of Rankings, see the glossary section of this report.

Note: Peer Group selection is performed using CFRA's proprietary peer ranking system. Peers are selected based on factors such as similarity of analyst coverage, industry, size, and region. The subject company is ranked against a universe of companies (the "Universe") which has been compiled by CFRA and consists of a list of companies with similar characteristics, but may not include all the companies within the same industry and/or that engage in the same line of business. The subject company and some of the companies in the Peer Group may be ranked by two different ranking systems. For the purpose of the overall ranking/recommendation, the subject company is ranked against all the companies in the Universe and not necessarily against the companies listed in the Peer Group.

Wall Street Consensus Estimates



Fiscal Years	Avg Est.	High Est.	Low Est.	# of Est.	Est. P/E
2022	-0.04	0.79	-0.77	11	NM
2021	-4.03	-3.71	-4.51	11	NM
2022 vs. 2021	▲99%	▲121%	▲83%	0%	NA

Source: S&P Global Market Intelligence [SPGMI]

Forecasts are not reliable indicator of future performance.

Note: A company's earnings outlook plays a major part in any investment decision. S&P Global Market Intelligence organizes the earnings estimates of over 2,300 Wall Street analysts, and provides their consensus of earnings over the next two years, as well as how those earnings estimates have changed over time. Note that the information provided in relation to consensus estimates is not intended to predict actual results and should not be taken as a reliable indicator of future performance.



Dave & Buster's Entertainment, Inc.

Recommendation [as of October 29, 2020]:

**STRONG
SELL**



Risk Evaluation: HIGH **Price:** 17.16 [Oct 30, 2020 close] **Trading Currency:** USD **Country:** United States

Business Summary

Dave & Buster's Entertainment, Inc. owns and operates entertainment and dining venues for adults and families in North America. Its venues offer a menu of entrees and appetizers, as well as a selection of non-alcoholic and alcoholic beverages; and an assortment of entertainment attractions centered on playing games and watching live sports, and other televised events. The company operates its venues under the Dave & Buster's name. As of February 2, 2020, it owned and operated 136 stores located in 39 states, Puerto Rico, and one Canadian Province. The company was founded in 1982 and is headquartered in Dallas, Texas.

Key Developments

Sep-10-2020	Announcements of Earnings	Dave & Buster's Entertainment, Inc. Reports Consolidated Unaudited Earnings Results for the Thirteen Weeks and Twenty Six Weeks Ended August 2, 2020
Sep-10-2020	Earnings Calls	Dave & Buster's Entertainment, Inc., Q2 2021 Earnings Call, Sep 10, 2020
Sep-10-2020	Earnings Release Date	Dave & Buster's Entertainment, Inc. to Report Q2, 2021 Results on Sep 10, 2020
Jun-29-2020	Index Constituent Adds	Dave & Buster's Entertainment, Inc.[NasdaqGS:PLAY] added to Russell Small Cap Comp Value Index
Jun-29-2020	Index Constituent Adds	Dave & Buster's Entertainment, Inc.[NasdaqGS:PLAY] added to Russell 2000 Value Index
Jun-29-2020	Index Constituent Adds	Dave & Buster's Entertainment, Inc.[NasdaqGS:PLAY] added to Russell 2500 Value Index
Jun-29-2020	Index Constituent Drops	Dave & Buster's Entertainment, Inc.[NasdaqGS:PLAY] dropped from Russell 2000 Growth-Defensive Index
Jun-29-2020	Index Constituent Drops	Dave & Buster's Entertainment, Inc.[NasdaqGS:PLAY] dropped from Russell 2000 Defensive Index
Jun-29-2020	Index Constituent Adds	Dave & Buster's Entertainment, Inc.[NasdaqGS:PLAY] added to Russell 3000 Value Index
Jun-23-2020	Annual General Meeting	Dave & Buster's Entertainment, Inc., Annual General Meeting, Jun 23, 2020
Jun-19-2020	End of Lock-Up Period	Certain Common Stock of Dave & Buster's Entertainment, Inc. are subject to a Lock-Up Agreement Ending on 19-JUN-2020.
Jun-11-2020	Announcements of Earnings	Dave & Buster's Entertainment, Inc. Reports Earnings Results for the First Quarter Ended May 3, 2020
Jun-11-2020	Earnings Calls	Dave & Buster's Entertainment, Inc., Q1 2021 Earnings Call, Jun 11, 2020
Jun-11-2020	Earnings Release Date	Dave & Buster's Entertainment, Inc. to Report Q1, 2021 Results on Jun 11, 2020
May-04-2020	Follow-on Equity Offerings	Dave & Buster's Entertainment, Inc. has filed a Follow-on Equity Offering in the amount of \$100 million.
May-04-2020	Follow-on Equity Offerings	Dave & Buster's Entertainment, Inc. has completed a Follow-on Equity Offering in the amount of \$100.00001 million.

Corporate Information

Office

2481 MaNana Drive

Dallas

Texas

75220

United States

Dallas , Texas 75220

United States

Telephone

214 357 9588

Web Site

ir.daveandbusters.com

Key Officers

CEO & Director

B. A. Jenkins

Senior Vice President of Entertainment & Games Strategy

K. Bachus

Consultant

J. Jackman

COO & Senior VP

M. L. Manning

VP of Accounting & Controller

M. J. Metzinger

General Counsel, Secretary & Senior VP of HR

R. W. Edmund

Senior Vice President of Supply Chain & Business Development

J. B. DeProspero

Senior VP & CFO

S. J. Bowman

Senior Vice President of Real Estate & Development

J. B. Mulleady

Senior VP & Chief Marketing Officer

B. C. Coleman

Senior VP & Chief Information Officer

J. P. Hurtado

Board Members

B. A. Jenkins, H. A. Dodds, J. C. Hockin, J. S. Halkyard, J. Storms, K. M. Sheehan, M. J. Griffith, P. H. Mueller, S. M. King

State of Incorporation

Delaware

Employees

15,908

Glossary

Quantitative Model Overall Recommendation and drivers of the recommendation

CFRA's global quantitative stock reports provide a 5-tier recommendation assigning a Strong Buy, Buy, Hold, Sell, or Strong Sell recommendation based on a series of quantitative inputs from four separate regional models:

- United States
- Canada
- Developed Europe
- Developed Asia excluding Japan

Each of these regional models is based on between 25 and 40 different investment factors (financial ratios), selected from S&P Global Market Intelligence's Alpha Factor Library.

To provide its recommendation, CFRA ranks a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed.

Within these categories, factors are chosen based on their historical predictive strength [alpha] within the region and their correlation with other factors. Each regional model contains two separate sub-models; one that uses factors specific to financial companies and one that focuses on non-financial companies. Due to the large number of banks in the U.S., the U.S. model also has a third sub-model specifically for banks.

Each company within a region is grouped with a universe of stocks and receives a score on each of the five (or six in the U.S.) model categories. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five [six] model category scores are then weighted and rolled up into a single percentile ranking for that company. Rankings are then assigned investment labels, as follows:

Strong Buy: top 10% by model score

Buy: next 20%

Hold: next 40%

Sell: next 20%

Strong Sell: bottom 10%

Risk Evaluation

Risk Evaluation is a relative ranking, which represents an assessment of the risk of investing in a company's stock relative to the risk of investing in other companies' stocks in the same universe. To perform this assessment the following risk categories are evaluated:

Asset/Market Size Risk
Financial Leverage Risk
Price Volatility Risk
Liquidity Risk

Each company's stock is percentile ranked from 1 to 100 against the other companies within the universe on each of the four risk categories mentioned above, with 1 being low risk and 100 being

high risk. The overall risk evaluation represents the combined scores on these Risk categories, calculated as an equal-weighted average of percentile ranks of the 4 risk categories. The highest 40% of companies in each universe receive a high risk ranking, the next 35% receive a moderate risk ranking and, the lowest 25% receive a low risk ranking.

All investments carry some sort of risk and a low risk ranking represents a relative ranking of CFRA's assessment of the risk of investing in a company's stock versus the risk of investing in other companies that are part of that company's universe. Therefore, a low risk ranking should not be interpreted as an absolute risk evaluation, but as a relative measurement of the risk of investing in a company's stock.

Sector Ranking

CFRA's Investment Policy Committee (IPC) consists of a team of five seasoned investment professionals. It meets weekly to discuss market trends and projections, maintain an S&P 500 12-month forward price target, and make asset allocation/sector recommendations. The IPC establishes over, market, and underweight recommendations on the 10 sectors within the S&P 500. Overweight and underweight recommendations imply that the group expects these sectors to outperform or underperform the S&P 500 during the coming six-to-12 month period, respectively. A "marketweight" recommendation indicates that the sector is expected to be a market performer during this same timeframe. The IPC analyses economic projections, fundamental forecasts, technical considerations, and historical precedent when making such recommendations. Changes in recommendations can be made more frequently than every six-12 months as market conditions evolve. Sector rankings will only be made available for sectors in the S&P 500. If a ranking is not available, the value will be N/A.

Qualitative STARS Ranking system and definition:

★★★★★ 5-STARS (Strong Buy):

Total return is expected to outperform the total return of a relevant benchmark, by a wide margin over the coming 12 months, with shares rising in price on an absolute basis.

★★★★ 4-STARS (Buy):

Total return is expected to outperform the total return of a relevant benchmark over the coming 12 months, with shares rising in price on an absolute basis.

★★★ 3-STARS (Hold):

Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months, with shares generally rising in price on an absolute basis.

★★ 2-STARS (Sell):

Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months, and the share price not anticipated to show a gain.

★ 1-STAR (Strong Sell):

Total return is expected to underperform the total return of a relevant benchmark by a wide margin over the coming 12 months, with shares falling in price on an absolute basis.

S&P Global Market Intelligence's Quality Ranking

[also known as S&P Global Market Intelligence's Earnings & Dividend Rankings]- Growth and stability of earnings and dividends are deemed key elements in establishing S&P Global Market Intelligence's earnings and dividend rankings for common stocks, which are designed to encapsulate the nature of this record in a single symbol. It should be noted, however, that the process also takes into consideration certain adjustments and modifications deemed desirable in establishing such rankings. The final score for each stock is measured against a scoring matrix determined by analysis of the scores of a large and representative sample of stocks. The range of scores in the array of this sample has been aligned with the following ladder of rankings:

A+ Highest	B Below Average
A High	B- Lower
A- Above Average	C Lowest
B+ Average	D In Reorganization
NR Not Ranked	

S&P Capital IQ Consensus Estimates

S&P Capital IQ Consensus Estimates represent the aggregation of individual estimates provided by analysts that are covering a public company. A consensus number can be provided as either the mean or the median. The size of the company and the amount of analyst coverage will determine the size of the group from which the Consensus is derived. All of the available analysts' estimates may not necessarily be included in the Consensus. The Consensus will only include analysts' estimates that are based on the same methodology. Consensus Mean: The mathematical average of the detailed estimates after the appropriate exclusions have been applied. Consensus Median: This represents the midpoint of the range of estimates that are ranked from highest to lowest after the appropriate exclusions have been applied. If the number of estimates is even, then the average of the middle two figures is the median.

Global Industry Classification Standard (GICS)

An industry classification standard, developed by Standard and Poor's in collaboration with Morgan Stanley Capital International (MSCI). Under the GICS structure, companies are classified in one of 154 sub-industries, which are grouped into 68 industries, 24 industry groups, and 10 economic sectors [consumer discretionary, consumer staples, energy, financials, health care, industrials, information technology, materials, telecom services, and utilities]. This four-tier structure accommodates companies across the world and facilitates sector analysis and investing.

Glossary

Peer Group

A subset of a universe that groups companies by specific criteria, such as industry/across industry, lines of business, geography (local, regional, national, and international), size of business (e. g. in terms of revenue), performance criteria, etc.

Universe

A set of companies that shares a common feature such as the same market capitalization, industry or index.

Beta

Beta is a measurement of the sensitivity of a company's stock price to the overall fluctuation of a given benchmark index. The beta values used in this report are levered, unadjusted and derived from a least squares regression analysis using stock and benchmark index returns based on a monthly frequency. Beta is calculated using 60 monthly returns (each as of month end) but if the company's trading history is too short to provide such a sample, fewer than 60 but not fewer than 24 monthly returns are used to run the regression. Beta in this report uses five different benchmark indices to better estimate a stock's volatility against a respective market: the S&P 500 for all US stocks, the S&P/TSX index for all Canadian stocks, the S&P Europe 350 for all European stocks, the S&P/ASX 200 index for all Australian stocks, and the S&P Global 1200 for all other international stocks.

Free Cash Flow (FCF)

Operating Cash Flow minus Capital Expenditures over the past 12 months

Funds from Operations (FFO)

Funds from Operations (FFO) represents a REIT's net income, excluding gains or losses from sales of property, plus real estate depreciation.

Not Meaningful (NM)

Value is available but it is not meaningful. Examples are certain negative ratios such as P/E, as well as certain ratios that are over +/- 100%

Not Available (NA)

Value is not available for this data item

Return on Capital

$\text{EBIT} / [\text{Total Equity} + \text{Total Debt} + \text{Deferred Tax Liability Non Current} + \text{Deferred Tax Liability Current}]$ Notes:

[1] If the denominator is less than or equal to zero then the ratio will be shown as NM

[2] If the return is less than (300%) then the value will be shown as NM

Return on Equity

$\text{Earnings From Continuing Operations} / [(\text{Total Equity}[t] + \text{Total Equity}[t-1]) / 2]$ Notes:

[1] If both periods of data (t and t-1) are not available then the ratio will be shown as NM

[2] If the denominator is less than or equal to zero then the ratio will be shown as NM

Relative Strength vs Index

Relative Strength vs Index measures the stock performance of the company verse all other stocks in the benchmark index each week. Weekly readings are accumulated to form the cumulative Relative Strength line.

Relevant benchmarks:

Region	Country	Index
US	US	S&P 500 Index
Canada	Canada	S&P/TSX Composite Index
Europe	All	S&P Europe 350 Index
Asia ex Japan	Australia	S&P/ASX 200 Index
Asia ex Japan	All except Australia	S&P Global 1200

Abbreviations used in CFRA Equity Research Reports

CAGR	Compound Annual Growth Rate
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest Taxes Depreciation and Amortization
EPS	Earnings Per Share
EV	Enterprise Value
FCF	Free Cash Flow
FFO	Funds from Operations
LTD	Long Term Debt
NM	Not Meaningful [see definition above]
P/E	Price/Earnings

Dividends on American Depositary Receipts (ADRs) and American Depositary Shares (ADSs) are net of taxes (paid in the country of origin).



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Qualitative STARS recommendations are determined and assigned by equity analysts. For reports containing STARS recommendations refer to the Glossary section of the report for detailed methodology and the definition of STARS rankings.

Quantitative Stock Reports:

Quantitative recommendations are determined by ranking a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. For reports containing quantitative recommendations refer to the Glossary section of the report for detailed methodology and the definition of Quantitative rankings.

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Essent Group Ltd.

Recommendation [as of October 29, 2020]: **SELL**

Risk Evaluation: MODERATE Price: 39.85 [Oct 30, 2020 close] Trading Currency: USD Country: Bermuda

GICS Sector: Financials

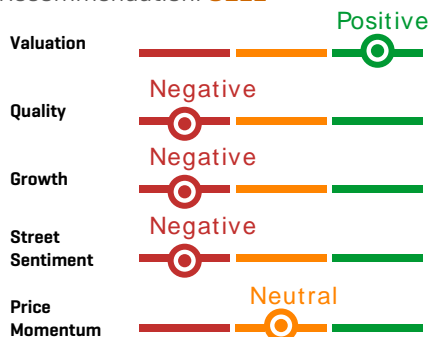
Sector Ranking: underweight

SPGMI's Quality Ranking: NR

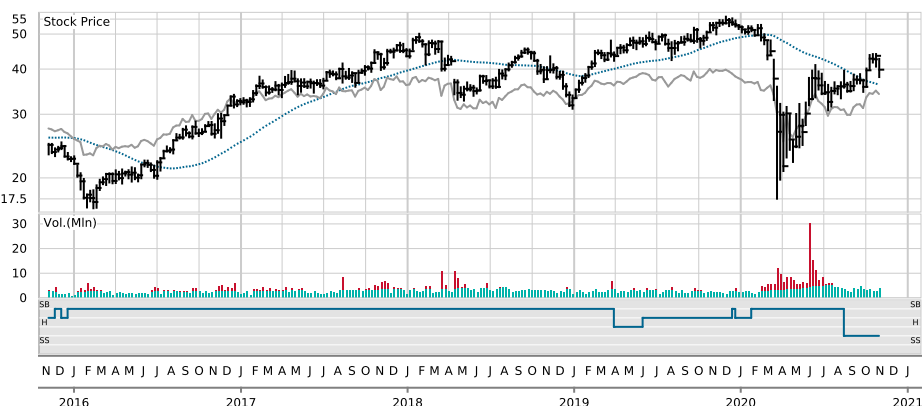
GICS Industry: Thrifts & Mortgage Finance

Business Summary: Essent Group Ltd., through its subsidiaries, provides private mortgage insurance and reinsurance for mortgages secured by residential properties located in the United States. Its mortgage insurance products include primary, pool, and master policy. The company also provides information technology maintenance contd...

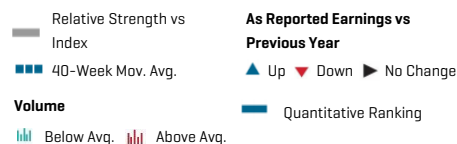
Quantitative Model Drivers [as of October 29, 2020]

Recommendation: **SELL**

Price Performance

Risk Evaluation : **MODERATE**

Asset/Market Size Risk	Low
Financial Leverage Risk	Low
Price Volatility Risk	High
Liquidity Risk	Moderate



Total Return[%CAGR]	YTD	1Yr	3Yr	5Yr
NYSE:ESNT	-26.1	-22.3	-1.6	11.0
Peer Average	-34.7	-26.1	-2	10.1
S&P 500	4.8	10.7	10.9	12.0

Quantitative Rankings: SB = Strong Buy, H = Hold, SS = Strong Sell
Past performance is not an indication of future performance and should not be relied upon as such.
Source: CFRA, S&P Global Market Intelligence [SPGMI]

Model Ranking Commentary

- NYSE: ESNT's SELL recommendation is based on its score from CFRA's quantitative model for the United States.
- Growth and Quality model sub-categories are the two largest drivers of NYSE: ESNT's SELL recommendation.
- Growth includes factors that measure EPS growth and stability and cash flow growth and stability.
- Quality includes factors that consider profitability, cash flow generation, operating efficiency, and earnings quality.
- NYSE: ESNT's overall score ranked in the 78th percentile of all stocks in the model universe [1 = best and 100 = worst].

Key Statistics

Market Cap [Mln of USD]	4,445
52-Wk Range [USD]	17.52 - 55.84
Value of - 10K Invested 5 Yrs ago	16,853
Beta vs S&P 500	0.59
Common Shares Outstanding[Mln]	112.42
Average Daily Volume [Mln]	0.671
Insider Ownership[%]	NA

Compound Annual Growth Rates

Revenue - %CAGR	1Yr	3Yr	5Yr
Company	16.4	21.5	25.0
Peer Average	13.6	17.6	25.0
S&P 500	-2.6	4.1	3.5

Operating EPS - %CAGR

Operating EPS - %CAGR	1Yr	3Yr	5Yr
Company	-11.6	17.2	26.2
Peer Average	-3.0	24.6	-6.4
S&P 500	-24.8	-2.6	1.5

Dividend Data

Currency: USD

	5Yr Low	5Yr Hi
Indicated Rate/Share	0.64	
Yield [%]	1.6	3.3
Payout Ratio [%]	13.9	13.9

Payment Details

Amount [USD]	Ex Div Date	Record Date	Payment Date
0.16	Aug 28	Aug 31	Sep 10, 2020
0.16	Jun 01	Jun 02	Jun 12, 2020
0.16	Mar 09	Mar 10	Mar 20, 2020
0.15	Dec 03	Dec 04	Dec 16, 2019

5 year P/E Ratio Comparisons [forward 12-month Diluted EPS estimates]

Current		
NYSE:ESNT	7.8	NOT AVAILABLE
Peer Average	7.5	Source: CFRA, S&P Global Market Intelligence [SPGMI]
S&P 500	23.3	
5-Year Average		
NYSE:ESNT	9.2	
Peer Average	9.4	
S&P 500	18.1	



Essent Group Ltd.

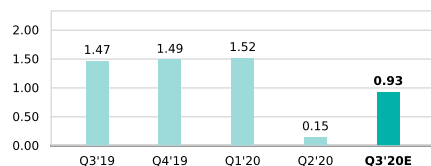
Recommendation [as of October 29, 2020]: **SELL**

Risk Evaluation: MODERATE Price: 39.85 [Oct 30, 2020 close] Trading Currency: USD Country: Bermuda

EPS Per Share and Revenues [Millions USD, except per share]

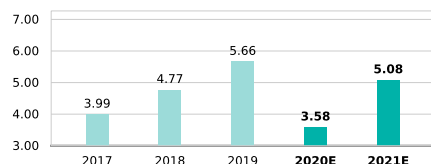
Fiscal year ends Dec 31

EPS Quarterly - Actual & Estimated



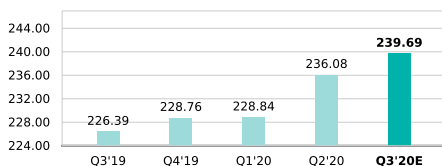
	Q3'19	Q4'19	Q1'20	Q2'20	Q3'20E
%Yr.-Yr. Chg.	24.6	13.7	16.9	-89.2	-36.6
% Surprise	6.7	4.6	10.9	-62	-
No. of Analysts	8	8	9	9	10

EPS Annual - Actual & Estimated



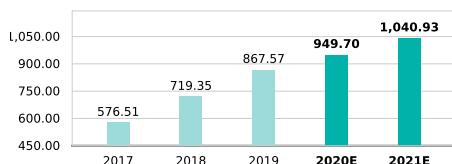
	2017	2018	2019	2020E	2021E
%Yr.-Yr. Chg.	65.6	19.5	18.7	-36.7	41.7
No. of Analysts	11	11	9	11	10

Revenues Quarterly - Actual & Estimated



	Q3'19	Q4'19	Q1'20	Q2'20	Q3'20E
%Yr.-Yr. Chg.	22.4	18.5	14.1	11.4	5.9
No. of Analysts	7	7	6	7	8

Revenues Annual - Actual & Estimated



	2017	2018	2019	2020E	2021E
%Yr.-Yr. Chg.	25.8	24.8	20.6	9.5	9.6
No. of Analysts	8	7	6	8	8

Source: S&P Global Market Intelligence

Note: EPS & Revenues in graphs above may represent analyst-adjusted actuals and estimates and therefore may not match numbers in the financial data presentation below.

Key Profitability Ratios

	2015	2016	2017	2018	2019	LTM
% Operating Margin	64.6	68.2	70.0	77.4	77.1	60.0
Peer Average	17.7	45.5	57.7	64.8	66.4	53.0
% Net Margin	44.5	48.6	65.9	65.0	64.1	49.6
Peer Average	27.3	36.3	18.4	48.8	48.3	38.8
% Return on Equity	15.2	18.1	23.1	21.7	20.8	14.4
Peer Average	25.7	13.5	7.0	18.8	18.7	13.9
% Return on Assets	10.8	11.6	11.1	12.0	11.9	8.2
Peer Average	3.1	5.5	7.2	9.1	10.2	7.3

Key Valuation Ratios

	2015	2016	2017	2018	2019	Current
Fwd P/E - High	14.6	14.1	15.1	10.5	9.9	14.8
Fwd P/E - Low	13.6	9.7	12.2	8.3	8.2	10.3
Peer Average	18.2	18.7	20.8	15.4	14.9	25.5
Prc/Tang Book - High	2.1	2.4	2.4	2.1	1.8	NA
Prc/Tang Book - Low	1.9	1.6	1.9	1.7	1.5	NA
Peer Average	1.2	0.9	1.3	1.1	1.0	0.7
Avg Prc/Revenue	0.1	0.1	0.1	0.1	0.1	NM
Peer Average	NM	NM	NM	NM	NM	NM

Income Statement and Balance Sheet Data [Millions USD, except per share]

Fiscal Year Ending: Dec. 31 .

	2012	2013	2014	2015	2016	2017	2018	2019
Premium/Annuity Revenue	42	123	223	326	423	530	649	777
Net Investment Income	2.3	4.1	12.3	19.9	27.9	40.2	64.1	83.5
Other Revenue	4.65	3.92	3.95	6.93	7.66	6.16	5.77	6.60
Total Revenue	49	131	239	353	458	577	719	868
Net Income	-14	65	88	157	223	380	467	556
Tangible Book Value Per Share	10.37	8.32	10.30	12.04	14.40	19.69	24.07	30.31
Earnings Per Share	-0.73	0.70	1.03	1.72	2.41	3.99	4.77	5.66
Dividends Per Share	NA	NA	NA	NA	NA	NA	NA	0.30
Dividend Payout Ratio	Nil	Nil	Nil	Nil	Nil	Nil	Nil	5%
Investment Assets: Bonds	240	318	847	1,191	1,483	1,992	2,606	3,035
Investment Assets: Stocks	NA	NA	NA	NA	NA	0.5	31.0	78.9
Investment Assets: Loans	NA	NA	NA	NA	NA	NA	NA	NA
Investment Assets: Other	NA	NA	NA	NA	NA	NA	NA	NA
Investment Assets: Total	247	333	1,058	1,277	1,615	2,306	2,791	3,430

Note: Data may be restated; before results of discontinued operations/special items. Per share data adjusted for stock dividends as of ex-dividend date.

NA = Not Available. NM = Not Meaningful.

Source: S&P Global Market Intelligence [SPGMI]



Essent Group Ltd.

 Recommendation [as of October 29, 2020]: **SELL**


Risk Evaluation: MODERATE Price: 39.85 [Oct 30, 2020 close] Trading Currency: USD Country: Bermuda

Peer Group Comparison

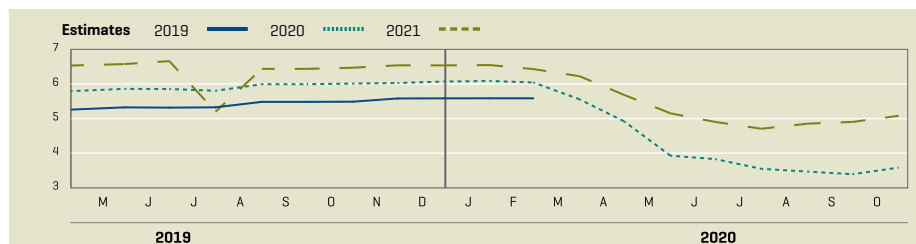
Peer Group	Stock Symbol	Stk.Mkt.Cap [Mln USD]	Beta	Recent Stock Price[USD]	52 Week Low/High[USD]	Dividend Yield[%]	Fwrd P/E	P/B Ratio	Ranking ¹	Return On Revenue[%]	Return On Equity[%]	LTD to Cap[%]
Essent Group Ltd.	NYSE:ESNT	4,445.22	0.59	39.85	19.54/55.73	1.6	11.1	1.2	Sell	49.6	14.4	10.7
MGIC Investment Corporation	NYSE:MTG	3,284.16	0.31	10.06	4.97/14.52	2.4	9.4	0.8	Hold	42.1	12.3	16.0
NMI Holdings, Inc.	NasdaqGM:NMIH	1,822.46	0.67	21.49	9.58/35.57	Nil	11.1	1.5	Buy	43.8	17.9	23.8
Radian Group Inc.	NYSE:RDN	3,327.29	0.12	17.95	9.7/26.21	2.8	12.2	0.9	Sell	30.4	11.5	27.5

¹ Quantitative Rankings : Strong Buy , Buy , Hold , Sell , Strong Sell ; Qualitative Rankings(STARS) : 5 = Strong Buy , 4 = Buy , 3 = Hold , 2 = Sell , 1 = Strong Sell

Rankings are not predictive of future performance. For full definitions of Rankings, see the glossary section of this report.

Note: Peer Group selection is performed using CFRA's proprietary peer ranking system. Peers are selected based on factors such as similarity of analyst coverage, industry, size, and region. The subject company is ranked against a universe of companies (the "Universe") which has been compiled by CFRA and consists of a list of companies with similar characteristics, but may not include all the companies within the same industry and/or that engage in the same line of business. The subject company and some of the companies in the Peer Group may be ranked by two different ranking systems. For the purpose of the overall ranking/recommendation, the subject company is ranked against all the companies in the Universe and not necessarily against the companies listed in the Peer Group.

Wall Street Consensus Estimates



Fiscal Years	Avg Est.	High Est	Low Est.	# of Est.	Est. P/E
2021	5.08	6.79	3.75	10	7.8
2020	3.58	4.21	2.10	11	11.1
2021 vs. 2020	▲42%	▲61%	▲79%	▼-9%	▼-30%

Source: S&P Global Market Intelligence (SPGMI)

Forecasts are not reliable indicator of future performance.

Note: A company's earnings outlook plays a major part in any investment decision. S&P Global Market Intelligence organizes the earnings estimates of over 2,300 Wall Street analysts, and provides their consensus of earnings over the next two years, as well as how those earnings estimates have changed over time. Note that the information provided in relation to consensus estimates is not intended to predict actual results and should not be taken as a reliable indicator of future performance.



Essent Group Ltd.

 Recommendation [as of October 29, 2020]: **SELL**

Risk Evaluation: MODERATE Price: 39.85 [Oct 30, 2020 close] Trading Currency: USD Country: Bermuda



Business Summary

Essent Group Ltd., through its subsidiaries, provides private mortgage insurance and reinsurance for mortgages secured by residential properties located in the United States. Its mortgage insurance products include primary, pool, and master policy. The company also provides information technology maintenance and development services; customer support-related services; and contract underwriting services. It serves the originators of residential mortgage loans, such as regulated depository institutions, mortgage banks, credit unions, and other lenders. The company was founded in 2008 and is based in Hamilton, Bermuda.

Key Developments

Nov-06-2020	Earnings Calls	Essent Group Ltd., Q3 2020 Earnings Call, Nov 06, 2020
Nov-06-2020	Earnings Release Date	Essent Group Ltd. to Report Q3, 2020 Results on Nov 06, 2020
Aug-07-2020	Earnings Calls	Essent Group Ltd., Q2 2020 Earnings Call, Aug 07, 2020
Aug-07-2020	Announcements of Earnings	Essent Group Ltd. Reports Earnings Results for the Second Quarter Ended June 30, 2020
Aug-07-2020	Earnings Release Date	Essent Group Ltd. to Report Q2, 2020 Results on Aug 07, 2020
Jul-28-2020	End of Lock-Up Period	Certain Restricted Share Units of Essent Group Ltd. are subject to a Lock-Up Agreement Ending on 28-JUL-2020.
Jul-28-2020	End of Lock-Up Period	Certain Common Shares of Essent Group Ltd. are subject to a Lock-Up Agreement Ending on 28-JUL-2020.
Jun-29-2020	Index Constituent Drops	Essent Group Ltd.[NYSE:ESNT] dropped from Russell 2000 Growth-Defensive Index
Jun-26-2020	Index Constituent Drops	Essent Group Ltd.[NYSE:ESNT] dropped from Russell 2000 Growth Index
Jun-26-2020	Index Constituent Drops	Essent Group Ltd.[NYSE:ESNT] dropped from Russell Small Cap Comp Growth Index
Jun-26-2020	Index Constituent Drops	Essent Group Ltd.[NYSE:ESNT] dropped from Russell 2500 Growth Index
Jun-26-2020	Index Constituent Drops	Essent Group Ltd.[NYSE:ESNT] dropped from Russell 3000 Growth Index
Jun-01-2020	Index Constituent Adds	Essent Group Ltd.[NYSE:ESNT] added to S&P 400
Jun-01-2020	Index Constituent Adds	Essent Group Ltd.[NYSE:ESNT] added to S&P Composite 1500
Jun-01-2020	Index Constituent Adds	Essent Group Ltd.[NYSE:ESNT] added to S&P 1000
Jun-01-2020	Index Constituent Adds	Essent Group Ltd.[NYSE:ESNT] added to S&P 400 Financials [Sector]
May-28-2020	Annual General Meeting	Essent Group Ltd., Annual General Meeting, May 28, 2020
May-28-2020	Follow-on Equity Offerings	Essent Group Ltd. has completed a Follow-on Equity Offering in the amount of \$399 million.
May-28-2020	Follow-on Equity Offerings	Essent Group Ltd. has filed a Follow-on Equity Offering.
May-08-2020	Earnings Calls	Essent Group Ltd., Q1 2020 Earnings Call, May 08, 2020
May-08-2020	Announcements of Earnings	Essent Group Ltd. Reports Earnings Results for the First Quarter Ended March 31, 2020

Corporate Information

Office

Clarendon House
2 Church Street
Hamilton
HM 11
Bermuda

Telephone

441-297-9901

Web Site

www.essentgroup.com

Key Officers

Secretary
D. Ferguson
Chief Underwriting Officer of Essent Reinsurance Ltd
P. C. Wollmann
Senior VP & CFO
L. E. McAlee
Chairman, CEO & President
M. A. Casale
Chief Risk Officer & Senior VP
V. Bhasin
Senior VP & Chief Information Officer
T. Gray
Senior Vice President of Strategic Initiatives
W. P. Higgins
Senior VP & Chief Operations Officer
W. D. Kaiser
Senior Vice President of Corporate Development
C. G. Curran
Senior VP & Chief Business Officer
J. R. Cashmer
Chief Accounting Officer & VP
D. B. Weinstock
Senior Vice President
J. G. Hissong
Senior VP & Chief Legal Officer
M. L. Gibbons

Board Members

A. K. Dutt, A. L. Heise, D. J. Pauls, J. P. Chwick, M. A. Casale, R. E. Glanville, R. J. Kasmar, W. L. Spiegel

Country of Incorporation

Bermuda

Employees

389

Glossary

Quantitative Model Overall Recommendation and drivers of the recommendation

CFRA's global quantitative stock reports provide a 5-tier recommendation assigning a Strong Buy, Buy, Hold, Sell, or Strong Sell recommendation based on a series of quantitative inputs from four separate regional models:

- United States
- Canada
- Developed Europe
- Developed Asia excluding Japan

Each of these regional models is based on between 25 and 40 different investment factors (financial ratios), selected from S&P Global Market Intelligence's Alpha Factor Library.

To provide its recommendation, CFRA ranks a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed.

Within these categories, factors are chosen based on their historical predictive strength [alpha] within the region and their correlation with other factors. Each regional model contains two separate sub-models; one that uses factors specific to financial companies and one that focuses on non-financial companies. Due to the large number of banks in the U.S., the U.S. model also has a third sub-model specifically for banks.

Each company within a region is grouped with a universe of stocks and receives a score on each of the five (or six in the U.S.) model categories. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five [six] model category scores are then weighted and rolled up into a single percentile ranking for that company. Rankings are then assigned investment labels, as follows:

Strong Buy: top 10% by model score

Buy: next 20%

Hold: next 40%

Sell: next 20%

Strong Sell: bottom 10%

Risk Evaluation

Risk Evaluation is a relative ranking, which represents an assessment of the risk of investing in a company's stock relative to the risk of investing in other companies' stocks in the same universe. To perform this assessment the following risk categories are evaluated:

Asset/Market Size Risk
Financial Leverage Risk
Price Volatility Risk
Liquidity Risk

Each company's stock is percentile ranked from 1 to 100 against the other companies within the universe on each of the four risk categories mentioned above, with 1 being low risk and 100 being

high risk. The overall risk evaluation represents the combined scores on these Risk categories, calculated as an equal-weighted average of percentile ranks of the 4 risk categories. The highest 40% of companies in each universe receive a high risk ranking, the next 35% receive a moderate risk ranking and, the lowest 25% receive a low risk ranking.

All investments carry some sort of risk and a low risk ranking represents a relative ranking of CFRA's assessment of the risk of investing in a company's stock versus the risk of investing in other companies that are part of that company's universe. Therefore, a low risk ranking should not be interpreted as an absolute risk evaluation, but as a relative measurement of the risk of investing in a company's stock.

Sector Ranking

CFRA's Investment Policy Committee (IPC) consists of a team of five seasoned investment professionals. It meets weekly to discuss market trends and projections, maintain an S&P 500 12-month forward price target, and make asset allocation/sector recommendations. The IPC establishes over, market, and underweight recommendations on the 10 sectors within the S&P 500. Overweight and underweight recommendations imply that the group expects these sectors to outperform or underperform the S&P 500 during the coming six-to-12 month period, respectively. A "marketweight" recommendation indicates that the sector is expected to be a market performer during this same timeframe. The IPC analyses economic projections, fundamental forecasts, technical considerations, and historical precedent when making such recommendations. Changes in recommendations can be made more frequently than every six-12 months as market conditions evolve. Sector rankings will only be made available for sectors in the S&P 500. If a ranking is not available, the value will be N/A.

Qualitative STARS Ranking system and definition:

★★★★★ 5-STARS (Strong Buy):

Total return is expected to outperform the total return of a relevant benchmark, by a wide margin over the coming 12 months, with shares rising in price on an absolute basis.

★★★★ 4-STARS (Buy):

Total return is expected to outperform the total return of a relevant benchmark over the coming 12 months, with shares rising in price on an absolute basis.

★★★ 3-STARS (Hold):

Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months, with shares generally rising in price on an absolute basis.

★★ 2-STARS (Sell):

Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months, and the share price not anticipated to show a gain.

★ 1-STAR (Strong Sell):

Total return is expected to underperform the total return of a relevant benchmark by a wide margin over the coming 12 months, with shares falling in price on an absolute basis.

S&P Global Market Intelligence's Quality Ranking

[also known as S&P Global Market Intelligence's Earnings & Dividend Rankings]- Growth and stability of earnings and dividends are deemed key elements in establishing S&P Global Market Intelligence's earnings and dividend rankings for common stocks, which are designed to encapsulate the nature of this record in a single symbol. It should be noted, however, that the process also takes into consideration certain adjustments and modifications deemed desirable in establishing such rankings. The final score for each stock is measured against a scoring matrix determined by analysis of the scores of a large and representative sample of stocks. The range of scores in the array of this sample has been aligned with the following ladder of rankings:

A+ Highest	B Below Average
A High	B- Lower
A- Above Average	C Lowest
B+ Average	D In Reorganization
NR Not Ranked	

S&P Capital IQ Consensus Estimates

S&P Capital IQ Consensus Estimates represent the aggregation of individual estimates provided by analysts that are covering a public company. A consensus number can be provided as either the mean or the median. The size of the company and the amount of analyst coverage will determine the size of the group from which the Consensus is derived. All of the available analysts' estimates may not necessarily be included in the Consensus. The Consensus will only include analysts' estimates that are based on the same methodology. Consensus Mean: The mathematical average of the detailed estimates after the appropriate exclusions have been applied. Consensus Median: This represents the midpoint of the range of estimates that are ranked from highest to lowest after the appropriate exclusions have been applied. If the number of estimates is even, then the average of the middle two figures is the median.

Global Industry Classification Standard (GICS)

An industry classification standard, developed by Standard and Poor's in collaboration with Morgan Stanley Capital International (MSCI). Under the GICS structure, companies are classified in one of 154 sub-industries, which are grouped into 68 industries, 24 industry groups, and 10 economic sectors [consumer discretionary, consumer staples, energy, financials, health care, industrials, information technology, materials, telecom services, and utilities]. This four-tier structure accommodates companies across the world and facilitates sector analysis and investing.

Glossary

Peer Group

A subset of a universe that groups companies by specific criteria, such as industry/across industry, lines of business, geography (local, regional, national, and international), size of business (e. g. in terms of revenue), performance criteria, etc.

Universe

A set of companies that shares a common feature such as the same market capitalization, industry or index.

Beta

Beta is a measurement of the sensitivity of a company's stock price to the overall fluctuation of a given benchmark index. The beta values used in this report are levered, unadjusted and derived from a least squares regression analysis using stock and benchmark index returns based on a monthly frequency. Beta is calculated using 60 monthly returns (each as of month end) but if the company's trading history is too short to provide such a sample, fewer than 60 but not fewer than 24 monthly returns are used to run the regression. Beta in this report uses five different benchmark indices to better estimate a stock's volatility against a respective market: the S&P 500 for all US stocks, the S&P/TSX index for all Canadian stocks, the S&P Europe 350 for all European stocks, the S&P/ASX 200 index for all Australian stocks, and the S&P Global 1200 for all other international stocks.

Free Cash Flow (FCF)

Operating Cash Flow minus Capital Expenditures over the past 12 months

Funds from Operations (FFO)

Funds from Operations (FFO) represents a REIT's net income, excluding gains or losses from sales of property, plus real estate depreciation.

Not Meaningful (NM)

Value is available but it is not meaningful. Examples are certain negative ratios such as P/E, as well as certain ratios that are over +/- 100%

Not Available (NA)

Value is not available for this data item

Return on Capital

$\text{EBIT} / [\text{Total Equity} + \text{Total Debt} + \text{Deferred Tax Liability Non Current} + \text{Deferred Tax Liability Current}]$ Notes:

[1] If the denominator is less than or equal to zero then the ratio will be shown as NM

[2] If the return is less than (300%) then the value will be shown as NM

Return on Equity

$\text{Earnings From Continuing Operations} / [(\text{Total Equity}[t] + \text{Total Equity}[t-1]) / 2]$ Notes:

[1] If both periods of data (t and t-1) are not available then the ratio will be shown as NM

[2] If the denominator is less than or equal to zero then the ratio will be shown as NM

Relative Strength vs Index

Relative Strength vs Index measures the stock performance of the company verse all other stocks in the benchmark index each week. Weekly readings are accumulated to form the cumulative Relative Strength line.

Relevant benchmarks:

Region	Country	Index
US	US	S&P 500 Index
Canada	Canada	S&P/TSX Composite Index
Europe	All	S&P Europe 350 Index
Asia ex Japan	Australia	S&P/ASX 200 Index
Asia ex Japan	All except Australia	S&P Global 1200

Abbreviations used in CFRA Equity Research Reports

CAGR	Compound Annual Growth Rate
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest Taxes Depreciation and Amortization
EPS	Earnings Per Share
EV	Enterprise Value
FCF	Free Cash Flow
FFO	Funds from Operations
LTD	Long Term Debt
NM	Not Meaningful [see definition above]
P/E	Price/Earnings

Dividends on American Depositary Receipts (ADRs) and American Depositary Shares (ADSs) are net of taxes (paid in the country of origin).



Disclosures

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Stocks are ranked in accordance with the following ranking methodologies:

STARS Stock Reports:

Qualitative STARS recommendations are determined and assigned by equity analysts. For reports containing STARS recommendations refer to the Glossary section of the report for detailed methodology and the definition of STARS rankings.

Quantitative Stock Reports:

Quantitative recommendations are determined by ranking a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. For reports containing quantitative recommendations refer to the Glossary section of the report for detailed methodology and the definition of Quantitative rankings.

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Old Dominion Freight Line, Inc.

Recommendation **SELL** ★ ★ ★ ★ ★

Price
 USD 198.41 [as of market close Oct 26, 2020] USD 149

12-Mo. Target Price
 USD 149

Report Currency
 USD

Investment Style
 Large-Cap Growth

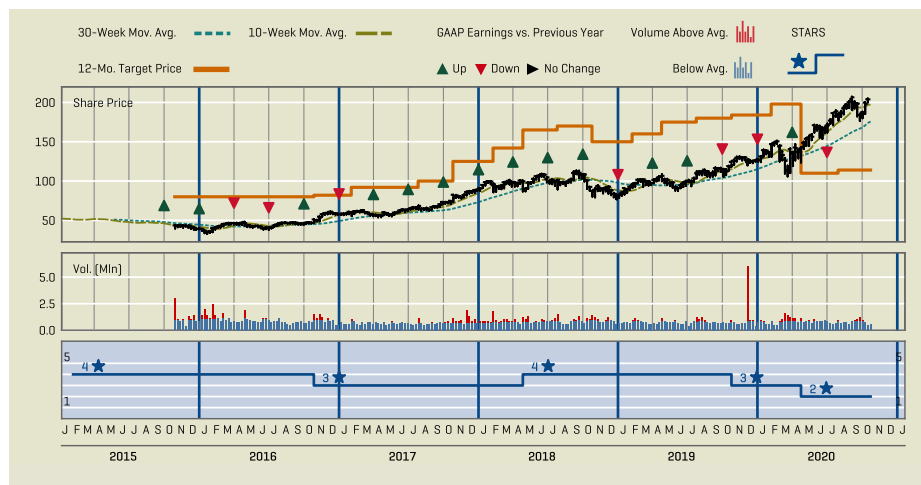
Equity Analyst Colin Scarola

GICS Sector Industrials
Sub-Industry Trucking

Summary This company provides regional, inter-regional, and national less-than-truckload (LTL) freight services through a national network of roughly 235 service centers.

Key Stock Statistics [Source: CFRA, S&P Global Market Intelligence (SPGMI), Company Reports]

52-Wk Range	USD 204.13 - 107.33	Oper.EPS2020E	USD 5.63	Market Capitalization[B]	USD 23.54	Beta	1.06
Trailing 12-Month EPS	USD 4.94	Oper.EPS2021E	USD 6.06	Yield [%]	0.3	3-yr Proj. EPS CAGR[%]	9
Trailing 12-Month P/E	40.18	P/E on Oper.EPS2020E	35.24	Dividend Rate/Share	USD 0.6	SPGMI's Quality Ranking	A-
\$10K Invested 5 Yrs Ago	\$ 47,094.0	Common Shares Outstg.[M]	117.00	Institutional Ownership [%]	75.0		

Price Performance

Source: CFRA, S&P Global Market Intelligence

Past performance is not an indication of future performance and should not be relied upon as such.

 Analysis prepared by **Colin Scarola** on Aug 19, 2020 01:08 PM ET, when the stock traded at **USD 197.00**.

Highlights

- The 12-month target price has recently been changed to USD 149 from USD 114.00. The Highlights section of this Stock Report will be updated accordingly.
- The Investment Rationale/Risk section of this Stock Report will be updated shortly. For the latest News story on ODFL from MarketScope, see aside.

Latest Analyst Research Notes
October 27, 2020

16:09 pm ET.. CFRA Keeps Sell Opinion on Shares of Old Dominion Freight Line, Inc. [ODFL 190**]
 We lift our target price to \$149, 22x our 2022 EPS estimate [started at \$6.78; 2021 raised to \$6.06 from \$5.37; 2020 to \$5.63 from \$5.00] -- in line with ODFL's 5-year forward P/E average. Q3 EPS of \$1.71 vs. \$1.37 (+25% YoY) beat consensus by \$0.20. ODFL's revenue quickly snapped back from the pandemic downturn, growing 1% YoY in Q3 vs. -16% in Q2. While shipment volume was still down 3% YoY in Q3, ODFL was able to offset the decline with a 4% pricing increase, by our estimate. Q3 performance was most impressive on the cost side, in our view, with an 8% YoY decrease in employee headcount and this year's drop in fuel prices propelling EBIT margin to a record 25.5%. However, we think ODFL's current valuation is too rich (31x forward P/E vs. peer-average 19x), and that consensus estimates for rapid EPS growth in 2021-2022 are at high risk of being missed; normalization of oil prices and volume recovery will make it difficult for ODFL to repeat the large cost savings it achieved this year, in our view.
 / Colin Scarola

Update: please see the analyst's latest research note in the research notes section
Analyst's Risk Assessment

LOW MEDIUM HIGH

Demand for ODFL's less-than-truckload (LTL) freight services is generally tied to industrial production, consumer activity, and the overall health of the U.S. economy. This presents cyclical risk for ODFL's revenue and earnings, as recessions can cause customers to sharply reduce LTL shipments, leaving its truck fleet and drivers underutilized. We think these risks are partially mitigated by ODFL's operating efficiency, with peer-leading expense margins allowing it to rapidly grow market share in recent years. ODFL also carries no debt, giving it strong financial flexibility to weather any severe downturns in freight demand.

Revenue/Earnings Data

Revenue (Million USD)					
	1Q	2Q	3Q	4Q	Year
2020	987.00	896.00	--	--	--
2019	991.00	1,061.00	1,048.00	1,009.00	4,109.00
2018	925.00	1,033.00	1,058.00	1,027.00	4,044.00
2017	754.00	840.00	873.00	891.00	3,358.00
2016	708.00	755.00	783.00	746.00	2,992.00
2015	696.00	762.00	779.00	735.00	2,972.00

Earnings Per Share (USD)					
	1Q	2Q	3Q	4Q	Year
2022	E 1.46	E 1.75	E 1.83	E 1.74	E 6.78
2021	E 1.30	E 1.58	E 1.64	E 1.54	E 6.06
2020	1.11	1.25	1.71	E 1.56	E 5.63
2019	1.10	1.44	1.37	1.20	5.11
2018	0.89	1.33	1.41	1.30	4.92
2017	0.53	0.79	0.83	1.60	3.75

Fiscal Year ended Dec 31. EPS Estimates based on CFRA's Operating Earnings; historical GAAP earnings are as reported in Company reports.

Dividend Data

Amount (USD)	Date Decl.	Ex-Div. Date	Stk. of Record	Payment Date
0.1500	Oct 23	Dec 01	Dec 02	Dec 16 '20
0.1500	Jul 23	Sep 01	Sep 02	Sep 16 '20
0.1500	May 21	Jun 02	Jun 03	Jun 17 '20
0.2300	Feb 06	Mar 03	Mar 04	Mar 18 '20

Dividends have been paid since 2017. Source: Company reports

Past performance is not an indication of future performance and should not be relied upon as such.

Forecasts are not reliable indicator of future performance.

Old Dominion Freight Line, Inc.

Business Summary August 19, 2020

CORPORATE OVERVIEW. Old Dominion Freight Line is among the largest U.S. providers of less-than-truckload (LTL) freight transportation, meaning it transports customer shipments requiring less than the full capacity of a typical highway tractor-trailer, with multiple customers' goods loaded into a given trailer. With origins in the Southeast, ODFL expanded its national network of service centers to 236 as of December 2019, and now provides direct service to 48 states. ODFL provides delivery in one to five days, depending on the distance, and offers next-day and two-day delivery within each of its six geographic regions.

LTL services accounted for over 97% of revenues, with truckload (TL), brokerage, logistics, warehousing, and container services providing the remainder. Revenue is generated primarily from customers throughout the U.S. and North America. In 2019, ODFL's largest customer accounted for approximately 4% of revenue.

LTL transportation services are generally priced based on weight, commodity, and distance. Revenue per hundredweight is a common industry metric that reflects pricing policies, market conditions, and growth objectives. Light, bulky freight typically is priced at higher revenue per hundredweight than dense, heavy freight.

ODFL considers lengths of haul less than 500 miles to be regional traffic, lengths of haul between 500 miles and 1,000 miles to be inter-regional traffic, and lengths of haul in excess of 1,000 miles to be national traffic. Changes in length of haul generally have a direct effect on revenue per hundredweight, as an increase in length of haul will typically cause an increase in revenue per hundredweight. During 2019, ODFL's average length of haul was about 917 miles.

MARKET PROFILE. We consider LTL freight delivery to be a mature industry, and we expect the amount of U.S. LTL tonnage shipped to achieve a compound annual growth rate (CAGR) of 2%-3% over the next five years, growing roughly in line with U.S. real GDP growth. We generally expect that pricing for LTL freight will rise in line with inflation over the full course of the business cycle. The LTL market, and freight delivery in general, are highly cyclical, and the growth rate can fluctuate considerably over short time periods, with recessions in industrial output often driving reductions in freight demand.

Conditions in the manufacturing and construction industries, as well as the level of imports, are some of the factors influencing freight volumes. Real U.S. manufacturing output began contracting in the second half of 2020, making lower LTL freight tonnage and pricing a possibility for 2020. Total U.S. construction spending saw a sharp recovery toward the end of 2019, however, which could offset some weakness in demand for LTL services related to manufacturing raw materials and finished products.

We think LTL carriers have a higher fixed cost base than truckload and brokerage providers. Building a network of service centers and breakbulk centers that facilitate the consolidation of small shipments into a larger, single shipment requires greater infrastructure investment. Generally, capital requirements increase as the coverage area and number of service centers expands. In addition, the tractors and trailers necessary to facilitate local pickup and delivery as well as transport between facilities are becoming increasingly expensive due to more stringent emissions rules. Some these increases in equipment costs could be mitigated by low growth in fuel prices, however, as the U.S. economy's emergence as a global leader in oil and gas production will allow for sustainably lower fuel prices, in our view.

COMPETITIVE LANDSCAPE. While we think high capital requirements represent moderate barriers to entry, we consider the LTL market to be highly competitive. In recent years, efficiency and speed advantages have led to regional, mostly non-unionized LTL carriers such as ODFL gaining market share from national, mostly unionized carriers. ODFL calculates that its market share is approaching 7% of the overall LTL market. Wages and benefits typically are a carrier's largest component of costs, generally ranging between 50% and 60% of operating expenses. LTL providers compete not only with other LTL carriers, but also with other modes of transportation, such as truckload, air cargo, and package delivery. In the past decade, major package delivery companies have expanded their presence in the LTL freight market through acquisitions.

ODFL's preferred growth strategy is to add freight lanes through the internal investment in adding service centers in target markets, and by increasing its pricing through high quality service and a reputation for on-time delivery. The company has not made any significant acquisitions in recent years, but has been rapidly investing in service center and fleet expansion. During 2015-2019, ODFL spent roughly \$2.3 billion in capital expenditures for its growth strategy, compared to \$1.4 billion in the 5-years ending with 2014. As of September 2019 ODFL operated 235 service centers nationwide, up from 222 at the end of 2014. At year-end 2018, the company had a fleet of 9,254 tractors, up 34% from the count at year-end 2014.

FINANCIAL TRENDS. Total revenue increased from \$3.0 billion in 2016 to \$4.1 billion in 2019, representing a 3-year compound annual growth rate (CAGR) of 11%, which we think has been among the fastest in the trucking industry over the time period. Adjusted pretax earnings per share, which exclude the impact of tax law changes, rose from \$5.77 in 2016 to \$10.26 in 2019, for a 3-year CAGR of 21%. ODFL's earnings per share have grown materially faster than revenues due to a significant increase in operating margin, which improved from 16.2% in 2016 to 19.9% in 2019. We think ODFL's strong operating margin performance was aided by increased pricing on shipments as its network has become more desirable of customers, and by strong compensation expense controls as these costs have grown at significantly slower rates than revenue since 2016.

Corporate information

Investor contact

N/A (336 889 5000)

Office

500 Old Dominion Way, Thomasville, North Carolina, 27360

Telephone

336 889 5000

Fax

N/A

Website

www.odfl.com

Officers

Principal Accounting Officer and VP of Accounting & Finance

K. S. Maready

Executive VP & COO

K. M. Freeman

President, CEO & Director

G. C. Gantt

Senior VP of Legal Affairs, General Counsel & Secretary

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Virginia

Auditor

Ernst & Young LLP

Founded

1934

Employees

18,930

Stockholders

105

Old Dominion Freight Line, Inc.

Quantitative Evaluations					
Fair Value Rank	1	2	3	4	5
	LOWEST		HIGHEST		
	Based on CFRA's proprietary quantitative model, stocks are ranked from most overvalued [1] to most undervalued [5].				
Fair Value Calculation	USD 178.86	Analysis of the stock's current worth, based on CFRA's proprietary quantitative model suggests that ODFL is overvalued by USD 19.55 or 9.85%			
Volatility	LOW		AVERAGE	HIGH	
Technical Evaluation	BULLISH	Since October, 2020, the technical indicators for ODFL have been BULLISH"			
Insider Activity	NA	UNFAVORABLE	NEUTRAL	FAVORABLE	

Expanded Ratio Analysis				
	2019	2018	2017	2016
Price/Sales	3.71	2.50	3.23	2.38
Price/EBITDA	14.23	9.67	13.87	10.59
Price/Pretax Income	18.52	12.42	18.83	14.94
P/E Ratio	24.78	16.73	23.37	24.11
Avg. Diluted Shares Outstg. [M]	120.61	123.03	123.61	124.73
Figures based on fiscal year-end price				

Key Growth Rates and Averages				
Past Growth Rate [%]	1 Year	3 Years	5 Years	
Net Income	1.63	27.67	18.14	
Sales	1.62	11.16	8.07	
Ratio Analysis [Annual Avg.]				
Net Margin [%]	14.98	14.59	12.78	
% LT Debt to Capitalization	3.17	2.24	3.60	
Return on Equity [%]	21.37	22.76	20.83	

Company Financials Fiscal year ending Dec 31										
Per Share Data [USD]	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Tangible Book Value	25.61	21.84	18.27	14.82	13.15	11.42	9.38	7.77	6.45	5.12
Free Cash Flow	4.19	2.54	1.25	1.18	0.72	0.19	0.43	-0.35	0.21	0.27
Earnings	5.11	4.92	3.75	2.37	2.38	2.07	1.59	1.31	1.08	0.60
Earnings [Normalized]	4.27	4.14	2.91	2.39	2.39	2.09	1.56	1.32	1.08	0.62
Dividends	0.45	0.35	0.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Payout Ratio [%]	9.00	7.00	7.00	NM	NM	NM	NM	NM	NM	NM
Prices: High	131.50	113.48	89.38	61.13	53.97	54.32	35.56	23.42	18.49	14.33
Prices: Low	78.66	76.67	53.71	32.61	37.87	33.17	22.68	17.03	12.18	7.80
P/E Ratio: High	25.80	23.10	23.80	25.80	22.70	26.30	22.30	17.90	17.00	23.90
P/E Ratio: Low	15.40	15.60	14.30	13.70	15.90	16.10	14.20	13.00	11.20	13.00
Income Statement Analysis [Million USD]										
Revenue	4,109	4,044	3,358	2,992	2,972	2,788	2,338	2,135	1,904	1,481
Operating Income	819.00	817.00	576.00	484.00	498.00	441.00	333.00	285.00	235.00	138.00
Depreciation + Amortization	254.00	230.00	206.00	190.00	165.00	146.00	127.00	111.00	91.00	80.00
Interest Expense	0.00	0.00	2.00	4.00	5.00	7.00	10.00	12.00	14.00	13.00
Pretax Income	824.00	816.00	576.00	478.00	490.00	433.00	329.00	273.00	220.00	124.00
Effective Tax Rate	25.30	25.70	19.50	38.10	37.80	38.10	37.30	38.00	36.60	39.20
Net Income	616.00	606.00	464.00	296.00	305.00	268.00	206.00	169.00	139.00	76.00
Net Income [Normalized]	515.00	509.70	359.90	298.50	306.30	270.30	201.80	170.70	138.30	77.80
Balance Sheet and Other Financial Data [Million USD]										
Cash	404.00	190.00	127.00	10.00	11.00	35.00	30.00	13.00	76.00	5.00
Current Assets	867.00	706.00	585.00	383.00	382.00	404.00	333.00	275.00	332.00	223.00
Total Assets	3,996	3,545	3,068	2,696	2,467	2,207	1,932	1,713	1,513	1,240
Current Liabilities	366.00	357.00	351.00	289.00	285.00	256.00	232.00	225.00	205.00	170.00
Long Term Debt	45.00	45.00	45.00	105.00	107.00	120.00	156.00	201.00	230.00	234.00
Total Capital	3,192	2,725	2,372	1,956	1,818	1,650	1,424	1,266	1,126	940.00
Capital Expenditures	479.00	588.00	382.00	418.00	462.00	368.00	296.00	373.00	251.00	106.00
Cash from Operations	984.00	900.00	536.00	566.00	554.00	392.00	351.00	328.00	278.00	141.00
Current Ratio	2.37	1.98	1.67	1.33	1.34	1.58	1.43	1.22	1.62	1.31
% Long Term Debt of Capitalization	3.20	1.70	1.90	5.40	5.90	7.30	10.90	15.90	20.40	24.90
% Net Income of Revenue	15.00	15.00	13.80	9.90	10.30	9.60	8.80	7.90	7.30	5.10
% Return on Assets	13.57	15.44	12.49	11.71	13.33	13.33	11.41	11.06	10.69	7.18
% Return on Equity	21.40	24.40	22.50	16.70	19.20	19.60	18.30	18.00	18.30	12.00

Source: S&P Global Market Intelligence. Data may be preliminary or restated; before results of discontinued operations/special items. Per share data adjusted for stock dividends; EPS diluted. E-Estimated. NA-Not Available. NM-Not Meaningful. NR-Not Ranked. UR-Under Review.

Old Dominion Freight Line, Inc.**Sub-Industry Outlook**

Our fundamental outlook for the Trucking sub-industry over the next 12 months is neutral. We think U.S. Trucking volumes will remain at least modestly below pre-pandemic levels until 2022, as restricted economic activity due to the virus, tapering Federal stimulus, and elevated unemployment are likely to weigh on consumer spending and the related need to transport tangible goods. However, we think Trucking firms can offset demand weakness with improvements on the cost side, managing to still deliver modest earnings growth in 2021. One cost benefit we think the sub-industry will see throughout the pandemic is alleviation of recent driver shortages due to elevated unemployment. Material cost savings should also continue from the pandemic driven slide in oil/fuel prices.

U.S. Trucking volumes nosedived in the early months of the pandemic, with the Cass Freight Index showing U.S. trucking volume down 23%-24% YoY during April and May. Trucking demand has since rebounded with the help of full or partial economic reopenings across all states, as well as record Federal stimulus for consumers. Yet, Trucking volume was still down 13% YoY in July, and we don't see a full recovery during the next year.

We expect the pandemic to keep economic activity somewhat restricted through H1 2021, after which we are optimistic that vaccine rollouts will have the economy operating normally again. But even after the pandemic ends, we think U.S. employment will need at least several more quarters to fully recover, during which time we think the supplemental Federal unemployment benefits that have boosted consumer spending will have tapered off. In our view, all of this points to consumer spending on tangible goods -- a key driver of Trucking demand -- remaining at least modestly below pre-pandemic levels through 2021. Accordingly, we don't expect a full recovery for Trucking volumes until 2022.

While we don't see a full recovery for Trucking volume next year, we think the sub-industry can offset revenue weakness with cost savings. The

most impactful savings will likely come through alleviation of driver shortages that have plagued the sub-industry in recent years. To illustrate, J.B. Hunt (JBHT), the largest U.S. trucking firm, saw employee compensation growth average 23% annually during 2017-2019, rapidly outpacing average annual revenue growth of 12% over the same period. We believe this dynamic was due to near-record low U.S. unemployment, making it difficult to recruit and retain drivers -- typically the largest cost item for Trucking. However, with U.S. unemployment up to a recession level 8.4% as of August, we think freed up labor capacity will alleviate driver shortages and help the sub-industry reduce compensation expenses.

In addition to compensation savings, we see sub-industry expenses benefitting from this year's downturn in crude oil and fuel prices. While no longer near the extreme lows of April and May, the average price of diesel fuel in August was still down 33% YoY. Further, we expect prices will remain sharply below pre-pandemic levels for much of the next year as crude oil, the key input for diesel, is likely to remain in a global demand rut until the pandemic ends, in our view. Considering the fuel intensive nature of Trucking, sharply lower diesel prices should deliver significant cost savings, further offsetting demand weakness.

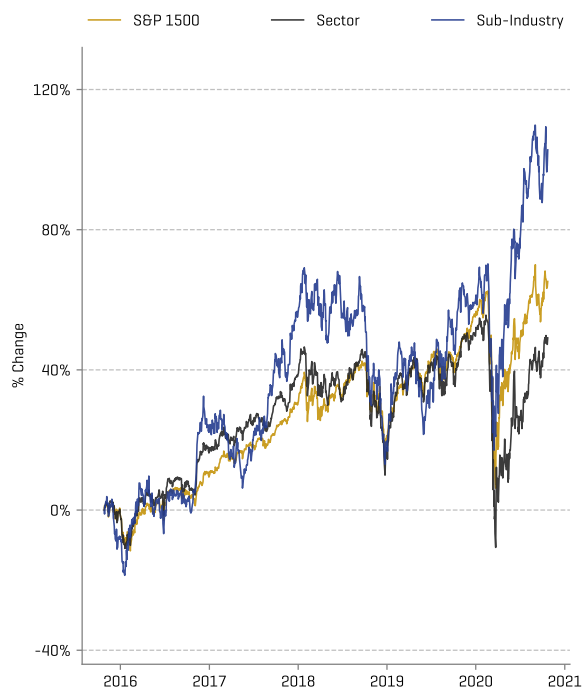
Year to date through September 10, the S&P Trucking Index increased 27% versus a 2% gain for the S&P Composite 1500.

/ Colin Scarola

Industry Performance**GICS Sector: Industrials****Sub-Industry: Trucking**

Based on S&P 1500 Indexes

Five-Year market price performance through Oct 24, 2020



NOTE: A sector chart appears when the sub-industry does not have sufficient historical index data.

All Sector & Sub-Industry information is based on the Global Industry Classification Standard (GICS).

Past performance is not an indication of future performance and should not be relied upon as such.

Source: CFRA, S&P Global Market Intelligence

Sub-Industry: Trucking Peer Group*: Trucking

Peer Group	Stock Symbol	Exchange	Currency	Recent Stock Price	Stk. Mkt. Cap. [M]	30-Day Price Chg. [%]	1-Year Price Chg. [%]	P/E Ratio	Fair Value Calc.	Yield [%]	Return on Equity [%]	LTD to Cap [%]
Old Dominion Freight Line, Inc.	ODFL	NasdaqGS	USD	200.62	23,539.0	10.1	63.7	39.0	178.86	0.3	21.4	3.2
AMERCO	UHAL	NasdaqGS	USD	368.79	7,231.0	3.1	-12.0	16.0	N/A	0.4	11.2	47.4
J.B. Hunt Transport Services, Inc.	JBHT	NasdaqGS	USD	128.97	13,629.0	-0.5	11.4	27.0	117.29	0.8	23.6	37.3
Knight-Swift Transportation Holdings Inc.	KNX	NYSE	USD	39.33	6,694.0	-4.2	4.3	22.0	60.62	0.8	5.6	9.4
Landstar System, Inc.	LSTR	NasdaqGS	USD	131.98	5,066.0	4.2	14.8	23.0	129.71	0.6	32.3	8.1
Localiza Rent a Car S.A.	LZREY	OTCPK	USD	10.90	8,350.0	4.5	11.2	55.0	N/A	N/A	19.5	63.1
Lyft, Inc.	LYFT	NasdaqGS	USD	26.02	8,120.0	-3.5	-40.5	NM	N/A	N/A	-101.4	11.5
Nippon Express Co., Ltd.	NPEX.Y	OTCPK	USD	10.94	5,217.0	N/A	2.6	6.0	N/A	N/A	3.3	33.8
Saia, Inc.	SAIA	NasdaqGS	USD	147.41	3,815.0	22.0	47.6	34.0	N/A	N/A	15.1	19.2
Schneider National, Inc.	SNDR	NYSE	USD	24.03	4,261.0	-4.8	6.1	29.0	N/A	1.1	6.7	13.5
TFI International Inc.	TFII	NYSE	USD	50.23	4,694.0	22.8	56.4	17.0	N/A	1.6	21.1	55.3

*For Peer Groups with more than 10 companies or stocks, selection of issues is based on market capitalization.

NA-Not Available; NM-Not Meaningful.

Note: Peers are selected based on Global Industry Classification Standards and market capitalization. The peer group list includes companies with similar characteristics, but may not include all the companies within the same industry and/or that engage in the same line of business.

Old Dominion Freight Line, Inc.

Previous Analyst Research Notes and Company News

July 30, 2020

03:26 PM ET... CFRA Keeps Sell Opinion on Shares of Old Dominion Freight Line, Inc. [ODFL 182.32**]:

We lift our 12-month target price \$4 to \$114, 21x our 2021 EPS estimate [maintained; 2020 lifted to \$5.00 from \$4.29] -- in line with ODFL's 5-year forward P/E average of 21x and well below its current valuation of 31x. Q2 EPS of \$1.25 vs. \$1.44 [-13% YoY] beat consensus by \$0.19. Q2 revenue and pretax income both fell 16% YoY, as unlike its share price [up 42% year-to-date], ODFL's actual business is not immune to recessions. Shipment volume dropped 17% YoY, as the Covid-19 reduces demand for consumer and industrial freight service. Through July, volume has recovered considerably from April lows. But we see the ongoing pandemic keeping ODFL's freight demand below 2019 levels through 2021, especially if Federal unemployment stimulus tapers, weakening consumer spending. This puts ODFL at material risk of missing rapid growth forecasts, in our view, as sell-side consensus indicates 2021 EPS up 12% vs. 2019, even with the trucking industry likely to still be in overcapacity with a high unemployment economy. / Colin Scarola

April 24, 2020

08:14 AM ET... CFRA Lowers Opinion on Shares of Old Dominion Freight Line to Sell from Hold [ODFL 128.25**]:

We cut our target price to \$110 from \$198, 20.4x our 2021 EPS estimate [cut to \$5.37 from \$8.98], in line with ODFL's 5-year forward P/E average. We drop our 2020 EPS estimate to \$4.29 from \$8.31. The revisions reflect Covid-19 impact as well as ODFL's recent 3-for-2 stock split. Q4 EPS of \$1.11 vs. \$1.10 missed consensus by \$0.01. Q1 revenue was flat YoY as a 2% YoY drop in tons shipped was offset by higher pricing. We don't expect this to be the case for the rest of 2020, though, as the Covid-19 shutdowns are now severely impacting ODFL's customers, with revenue per day so far in April down 20% YoY. We estimate total 2020 revenue down at least 9%. Further, given its high fixed costs from fleet and service center operations, we see 2020 EPS falling 16%. We like ODFL's lack of debt and expect a strong EPS recovery in 2021. But even so, we think the shares are overvalued at 24.7x the consensus 2021 EPS estimate, a 21% premium to historical average despite high risks for freight during the current recession. / Colin Scarola

February 06, 2020

11:20 AM ET... CFRA Maintains Hold Opinion on Shares of Old Dominion Freight Line [ODFL 206.95***]:

We raise our target \$14 to \$198, 22.0x our 2021 EPS estimate -- above ODFL's 5-year forward P/E average of 20.0x as we expect ongoing investments in service center expansions to increase market share through 2021. We drop our 2020 EPS estimate \$0.14 to \$8.31 and start 2021 at \$8.98. Q4 adjusted EPS of \$1.80 vs. \$1.95 [-8% YoY] missed consensus by \$0.01. Demand for ODFL's trucking services weakened throughout 2019, with Q4 revenue down 2% YoY vs. +7% in Q1. We think the weaker demand environment will likely persist through 2020, as the U.S. economy seems to be settling back toward a 2% GDP growth plane vs. the 3% clip it managed in 2018 and early 2019. This will coincide with a very tight U.S. labor market, likely resulting in ODFL's compensation expenses growing materially faster than revenues. Given the challenging environment we see ahead, we remain neutral on the shares, but think they deserve a premium valuation to peers given industry leading margins and growing market share. / Colin Scarola

October 24, 2019

08:00 PM ET... CFRA Lowers Opinion on Shares of Old Dominion Freight Line to Hold From Buy [ODFL 180.27***]:

We raise our 12-month target price by \$4 to \$184, 21.8x our '20 EPS estimate of \$8.45 [cut from \$8.57], about in line with ODFL's three-year average, but above peers due to superior operating margins. We cut our '19 EPS estimate to \$1.87 from \$1.98. Q3 adjusted EPS of \$2.05 versus \$2.12 missed our \$2.17 estimate and the consensus of \$2.12. Revenues fell slightly and missed our expectations; this was the first quarterly revenue decline for ODFL since Q2 of 2016. Tonnage fell 5.2% and was mostly offset by pricing gains of 4.4%. Comparisons were hurt by a lower fuel surcharge due to lower fuel prices [excluding fuel pricing rose 5.5%]. EBITDA fell 2% and was worse than we were expecting. ODFL's operating margins remain solidly above peer averages, which we expect to continue. However, given a more difficult operating environment, with industry overcapacity and falling volumes, we have become more cautious on the shares, which have risen about 45% year-to-date through 10/24. / Jim Corridore

July 25, 2019

02:04 PM ET... CFRA Keeps Buy Opinion on Shares of Old Dominion Freight Line [ODFL 161.90***]:

We raise our 12-month target to \$180 from \$175, valuing the shares at 21x our '20 EPS estimate of \$8.57 [trimmed from \$8.64], in line with ODFL's three-year average. We cut our '19 EPS estimate to \$7.95 from \$8.05. Second-quarter adjusted EPS of \$2.16 versus \$1.99 missed our \$2.19 estimate but beat the consensus of \$2.12, with revenues up 3%, about 1% below expectations. ODFL saw lower volumes and average shipment weights, offset by higher pricing. ODFL saw its operating ratio [the inverse of its operating margin] improve to 77.9% from 78.7%, which was a company record. While demand was somewhat worse in Q2 versus Q1, we are encouraged by ODFL's execution and ability to get pricing higher. We expect results to continue to benefit from a focus on higher-quality revenues, which should continue to drive the operating margin up over time. / Jim Corridore

April 25, 2019

12:55 PM ET... CFRA Keeps Buy Opinion On Shares Of Old Dominion Freight Line [ODFL 152.73***]:

We raise our 12-month target to \$175 from \$160, valuing the shares at 21.7x our '19 EPS estimate of \$8.05 [raised from \$7.82], in line with ODFL's three-year average. We raise our '20 EPS estimate to \$8.64 from \$8.31. First-quarter adjusted EPS of \$1.64 versus \$1.33 beat our \$1.57 estimate and the consensus of \$1.57, with revenues up 7%, about 1% below expectations. Revenues were hurt by one less operating day in the quarter, along with a reduction in average shipment weights, offset by increased shipments and higher pricing. ODFL saw its operating ratio [the inverse of its operating margin] improve to 82.0% from 83.9%, aided by well-controlled costs and higher quality revenues. ODFL did see higher depreciation charges as a percent of revenues as it added to its fleet in the quarter. Overall, ODFL forecasts a solid demand environment. We expect results to continue to benefit from a focus on higher-quality revenues, which should continue to drive the operating margin down over time. / Jim Corridore

February 07, 2019

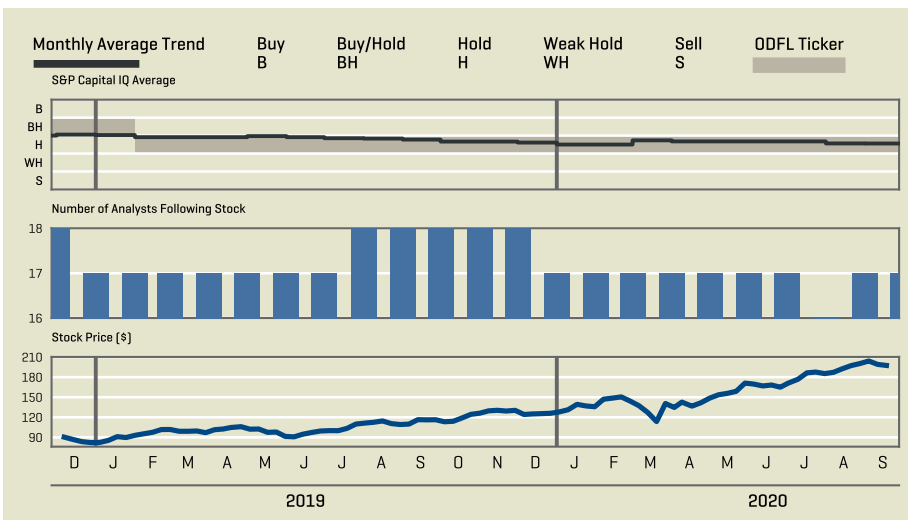
11:37 AM ET... CFRA Maintains Buy Opinion on Shares of Old Dominion Freight Line, Inc. [ODFL 141.45***]:

We raise our 12-month target price by \$10, to \$160, valuing the shares at 21x our '19 EPS estimate of \$7.82 [raised from \$7.77], in line with the company's three-year average, and a premium to the peer average of about 19x, warranted by likely faster revenue and EPS growth. We start our '20 EPS estimate at \$8.31. ODFL fourth-quarter adjusted EPS of \$1.95 versus \$1.20 beat our \$1.86 estimate and the consensus of \$1.75. Revenues grew 15% and were about 1% better than we were expecting, aided by a 13% increase in pricing and 3% increase in volumes. Operating margins rose sharply, and the company's operating ratio was below 80 for the third consecutive quarter, which we find very positive. We think operating margins should continue to be aided by efficiency improvements and high quality of revenues as the demand environment is allowing some cherry picking of freight with higher margins. Fixed cost leverage was very good in Q4 and we expect this to continue in 2019. / Jim Corridore

Note: Research notes reflect CFRA's published opinions and analysis on the stock at the time the note was published. The note reflects the views of the equity analyst as of the date and time indicated in the note, and may not reflect CFRA's current view on the company.

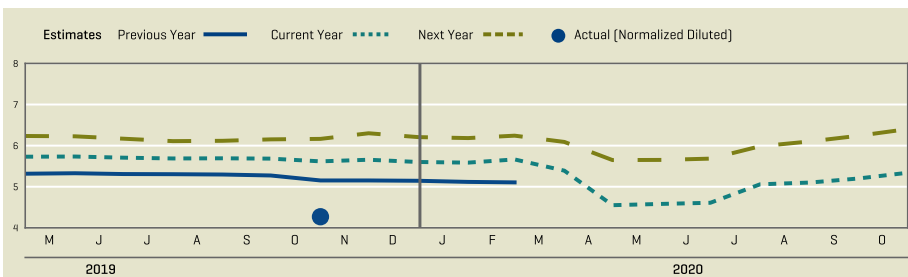
Old Dominion Freight Line, Inc.

Analysts Recommendations



	No. of Recommendations	% of Total	1 Mo.Prior	3 Mos.Prior
Buy	3	18	3	3
Buy/Hold	1	6	1	1
Hold	9	53	9	10
Weak hold	2	12	2	2
Sell	2	12	2	1
No Opinion	0	0	0	0
Total	17	100	17	17

Wall Street Consensus Estimates



Fiscal Year	Avg Est.	High Est.	Low Est.	# of Est.	Est. P/E
2021	6.40	7.07	5.83	16	31.33
2020	5.34	6.29	4.85	16	37.58
2021 vs. 2020	▲ 20%	▲ 12%	▲ 20%	N/A%	▼ -17%
Q3'21	1.72	1.82	1.64	6	116.75
Q3'20	1.51	1.68	1.31	14	132.55
Q3'21 vs. Q3'20	▲ 14%	▲ 8%	▲ 25%	▼ -57%	▼ -12%

Forecasts are not reliable indicator of future performance.

Note: A company's earnings outlook plays a major part in any investment decision. S&P Global Market Intelligence organizes the earnings estimates of over 2,300 Wall Street analysts, and provides their consensus of earnings over the next two years, as well as how those earnings estimates have changed over time. Note that the information provided in relation to consensus estimates is not intended to predict actual results and should not be taken as a reliable indicator of future performance.

Note: For all tables, graphs and charts in this report that do not cite any reference or source, the source is S&P Global Market Intelligence.

Wall Street Consensus Opinion

Hold

Wall Street Consensus vs. Performance

For fiscal year 2020, analysts estimate that ODFL will earn USD 5.34. For fiscal year 2021, analysts estimate that ODFL's earnings per share will grow by 19.96% to USD 6.40.

Old Dominion Freight Line, Inc.

Glossary

STARS

Since January 1, 1987, CFRA Equity and Fund Research Services, and its predecessor S&P Capital IQ Equity Research has ranked a universe of U.S. common stocks, ADRs [American Depositary Receipts], and ADSs [American Depositary Shares] based on a given equity's potential for future performance. Similarly, we have ranked Asian and European equities since June 30, 2002. Under proprietary STARS [Stock Appreciation Ranking System], equity analysts rank equities according to their individual forecast of an equity's future total return potential versus the expected total return of a relevant benchmark [e.g., a regional index [MSCI AC Asia Pacific Index, MSCI AC Europe Index or S&P 500® Index]], based on a 12-month time horizon. STARS was designed to meet the needs of investors looking to put their investment decisions in perspective. Data used to assist in determining the STARS ranking may be the result of the analyst's own models as well as internal proprietary models resulting from dynamic data inputs.

S&P Global Market Intelligence's Quality Ranking

[also known as **S&P Capital IQ Earnings & Dividend Rankings**] - Growth and S&P Capital IQ Earnings & Dividend Rankings stability of earnings and dividends are deemed key elements in establishing S&P Global Market Intelligence's earnings and dividend rankings for common stocks, which are designed to capsule the nature of this record in a single symbol. It should be noted, however, that the process also takes into consideration certain adjustments and modifications deemed desirable in establishing such rankings. The final score for each stock is measured against a scoring matrix determined by analysis of the scores of a large and representative sample of stocks. The range of scores in the array of this sample has been aligned with the following ladder of rankings:

A+ Highest	B Below Average
A High	B- Lower
A Above	C Lowest
B+ Average	D In Reorganization
NC Not Ranked	

EPS Estimates

CFRA's earnings per share (EPS) estimates reflect analyst projections of future EPS from continuing operations, and generally exclude various items that are viewed as special, non-recurring, or extraordinary. Also, EPS estimates reflect either forecasts of equity analysts; or, the consensus [average] EPS estimate, which are independently compiled by S&P Global Market Intelligence, a data provider to CFRA. Among the items typically excluded from EPS estimates are asset sale gains; impairment, restructuring or merger-related charges; legal and insurance settlements; in process research and development expenses; gains or losses on the extinguishment of debt; the cumulative effect of accounting changes; and earnings related to operations that have been classified by the company as discontinued. The inclusion of some items, such as stock option expense and recurring types of other charges, may vary, and depend on such factors as industry practice, analyst judgment, and the extent to which some types of data is disclosed by companies.

12-Month Target Price

The equity analyst's projection of the market price a given security will command 12 months hence, based on a combination of intrinsic, relative, and private market valuation metrics, including Fair Value.

CFRA Equity Research

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Abbreviations Used in Equity Research Reports

CAGR - Compound Annual Growth Rate
 CAPEX - Capital Expenditures
 CY - Calendar Year
 DCF - Discounted Cash Flow
 DDM - Dividend Discount Model
 EBIT - Earnings Before Interest and Taxes
 EBITDA - Earnings Before Interest, Taxes, Depreciation & Amortization
 EPS - Earnings Per Share
 EV - Enterprise Value
 FCF - Free Cash Flow
 FFO - Funds From Operations
 FY - Fiscal Year
 P/E - Price/Earnings
 P/NAV - Price to Net Asset Value
 PEG Ratio - P/E-to-Growth Ratio
 PV - Present Value
 R&D - Research & Development
 ROCE - Return on Capital Employed
 ROE Return on Equity
 ROI - Return on Investment
 ROIC - Return on Invested Capital
 ROA - Return on Assets
 SG&A - Selling, General & Administrative Expenses
 SOTP - Sum-of-The-Parts
 WACC - Weighted Average Cost of Capital

Dividends on American Depositary Receipts (ADRs) and American Depositary Shares (ADSs) are net of taxes [paid in the country of origin].

Qualitative Risk Assessment

Reflects an equity analyst's view of a given company's operational risk, or the risk of a firm's ability to continue as an ongoing concern. The Qualitative Risk Assessment is a relative ranking to the U.S. STARS universe, and should be reflective of risk factors related to a company's operations, as opposed to risk and volatility measures associated with share prices. For an ETF this reflects on a capitalization-weighted basis, the average qualitative risk assessment assigned to holdings of the fund.

STARS Ranking system and definition:

★★★★★ 5-STARS (Strong Buy):

Total return is expected to outperform the total return of a relevant benchmark, by a notable margin over the coming 12 months, with shares rising in price on an absolute basis.

★★★★★ 4-STARS (Buy):

Total return is expected to outperform the total return of a relevant benchmark over the coming 12 months, with shares rising in price on an absolute basis.

★★★★★ 3-STARS (Hold):

Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months, with shares generally rising in price on an absolute basis.

★★★★★ 2-STARS (Sell):

Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months, and the share price is not anticipated to show a gain.

★★★★★ 1-STAR (Strong Sell):

Total return is expected to underperform the total return of a relevant benchmark by a notable margin over the coming 12 months, with shares falling in price on an absolute basis.

Relevant benchmarks:

In North America, the relevant benchmark is the S&P 500 Index, in Europe and in Asia, the relevant benchmarks are the MSCI AC Europe Index and the MSCI AC Asia Pacific Index, respectively.

Old Dominion Freight Line, Inc.

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Quantitative Stock Reports:

Quantitative recommendations are determined by ranking a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. For reports containing quantitative recommendations refer to the Glossary section of the report for detailed methodology and the definition of Quantitative rankings.

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STARS Stock Reports:

Global STARS Distribution as of June 28, 2019

Ranking	North America	Europe	Asia	Global
Buy	34.4%	29.0%	41.1%	33.5%
Hold	56.1%	54.8%	46.4%	54.6%
Sell	10.5%	16.2%	12.5%	11.9%
Total	100.0%	100.0%	100.0%	100.0%

Analyst Certification:

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ElectionWatch

23 October 2020
Chief Investment Office GWM
Investment Research

Investment implications of the 2020 US elections

What are
the chances?

The UBS US Office of Public Policy
provided new probabilities for
each potential election outcome.
See page 4 for details about
this recent update.



State of the race

The home stretch



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The final weeks of a presidential campaign are akin to running the last mile of a marathon. The final sprint to the finish line is often made despite an overwhelming sense of physical and mental exhaustion. In the midst of a global pandemic and a disheartening absence of civility in public life, voters this year may welcome the end of a grueling campaign almost as much as the candidates.

The introduction of early voting options has altered the dynamics of US presidential contests. With less than two weeks to go before Election Day (see Fig. 1 on the next page), more than 50 million Americans have already cast their ballots, either in person or by mail. The early voter turnout was at one point running six times higher than the pace set four years ago. Based on available data from those states that report the party affiliation of returned ballots, Democrats are using the mail-in ballot op-

tion more often than Republicans. What remains to be seen is whether they are voting in higher numbers or just doing so earlier in the process to avoid the risk associated with postal service delays.

State of the race

Former Vice President Joe Biden now enjoys a bigger lead in national polls than any prior candidate facing an incumbent president. The key question is whether it will translate into victories in battleground states where the race is tighter, and where the election ultimately will be decided (see Fig. 2 on page 3). Secretary Clinton won the national popular vote by 2.1% but lost three critical contests in the Midwest by a narrow margin, costing her the election. Biden appears intent on avoiding a repeat of that dynamic, frequently stumping in

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the battleground states of Michigan, Pennsylvania, and Wisconsin. President Trump, meanwhile, has been obliged to defend his position in states that he won by relatively large margins four years ago.

This presidential election was bound to be contentious, but the onset of COVID-19 has triggered an unprecedented surge in litigation related to how, and when, votes will be counted. There are more than 350 lawsuits now underway in 44 states contesting the conduct of the election, ranging from the location of ballot drop boxes to the requirement of a witness signature in some jurisdictions. While a contested election cannot be completely discounted, the probability of it happening has declined in recent weeks, which has buoyed financial markets anxious to avoid the uncertainty associated with protracted litigation.

A referendum on COVID-19

The federal government's ongoing response to the global pandemic will be the first order of business, regardless of who wins the election. The immediate threat to public health transcends other consider-



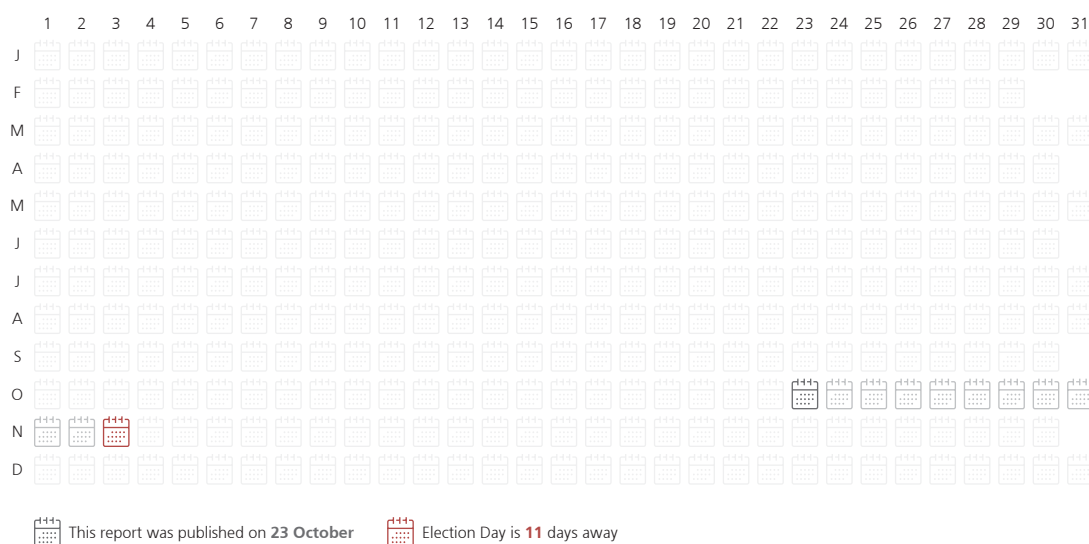
While a **contested election** cannot be completely discounted, the probability of it happening has declined in recent weeks, which has buoyed financial markets anxious to avoid the uncertainty associated with protracted litigation.

ations, but the adverse economic impact of COVID-19 is hard to overstate. The lapse in enhanced unemployment benefits resulted in an abrupt decline in aggregate personal income in August, while more layoffs are becoming permanent. In short, fiscal support is fading and the US economic recovery has begun to lose traction as we enter the home stretch of this year's election. The service sector, in particular, has been badly battered, and will require additional rounds of stimulus until a vaccine or more effective therapeutics are introduced.

Unfortunately, the two houses of Congress thus far have failed to agree on the size and scope of a fiscal package. Democrats in the House passed a bill that revives the enhanced federal unemployment

Figure 1

The 2020 countdown





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benefit and would send additional fiscal stimulus checks to many Americans. The House bill also provides more financial aid for states and local governments, a provision that holds less appeal for the GOP. Despite intermittent prodding from the president, a majority of Senate Republicans prefer a smaller fiscal stimulus package that includes enhanced unemployment benefits and liability protection for businesses, but excludes additional stimulus checks.

Financial markets have reacted in sync with the prospects of a deal between the White House and Congress. Equity prices have responded positively to optimistic statements that a deal might be struck, and have fallen on news of an impasse. That reaction function alone suggests that investors have begun to attach more importance to another round of fiscal stimulus than to the prospect of a higher tax bill in the future.

The composition of Congress will be just as important to the development of fiscal policy as the winner of the presidential election. To the extent that Democrats assume control of the Senate in January, which now appears likely, they will still have to negotiate with their GOP brethren. Parliamentary rules in the upper house of Congress require 60



Investors have begun to attach more importance to another round of **fiscal stimulus** than to the prospect of a higher tax bill in the future.

votes to suspend debate for most legislation. Whether or not the Democrats have enough votes in their own caucus to eliminate the filibuster is an open question that will not be resolved until early next year. Our colleagues in the UBS US Office of Public Policy believe that some moderate Democrats will oppose such an effort, but they might be willing to add limitations to the use of the parliamentary maneuver instead of eliminating it entirely.

The use of the filibuster is an arcane issue for many investors, but one that is likely to preoccupy financial markets in 2021. To the extent that it is retained in any meaningful form, tax legislation will be deferred until later in the calendar year and addressed through budget reconciliation. This will allow more time for an economic rebound on the heels of a fiscal stimulus package and the introduction of a vaccine. The net effect, we believe, will be better investor sentiment.

Figure 2

2020 battleground states

Trump is trailing in several states he won in 2016

State	Trump	Biden	Trump vs. Clinton in 2016	Trump vs. Biden in 2020
Wisconsin	43.5%	49.7%	+0.7	-6.2
Florida	47.3%	48.3%	+1.2	-1.0
Michigan	42.7%	50.0%	+0.3	-7.3
Pennsylvania	45.0%	48.8%	+0.7	-3.8
North Carolina	46.4%	48.4%	+3.7	-2.0
Arizona	46.2%	49.3%	+3.5	-3.1
Iowa	46.3%	47.5%	+9.5	-1.2
Ohio	46.6%	46.4%	+8.1	+0.2
Texas	49.2%	44.8%	+9.0	+4.4
Georgia	46.3%	47.5%	+5.1	-1.2
Minnesota	41.5%	47.8%	-0.3	-6.3
Nevada	43.8%	49.0%	-2.4	-5.2

Source: RealClearPolitics, UBS, as of 20 October 2020



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Revised probabilities

The UBS US Office of Public Policy has revised its forecast for the election. The new forecast assigns a 55% probability to a Blue Wave, where Democrats capture the White House and both chambers of Congress. A status quo result, with the president eking out narrow wins in battleground states and control of Congress remaining divided, is less likely than it was just four weeks ago but still the next most likely outcome. The probability of a

Biden victory with a Republican Senate is marginally higher than it was last month but remains unlikely because many GOP incumbents are facing difficult races. To the extent Biden does win, the ability of GOP candidates to fight the tide becomes more difficult. The prospects for a Red Wave have all but disappeared, a far cry from how we began the year before the pandemic scrambled the presidential campaigns.

Figure 3

Scenario probabilities from the UBS US Office of Public Policy

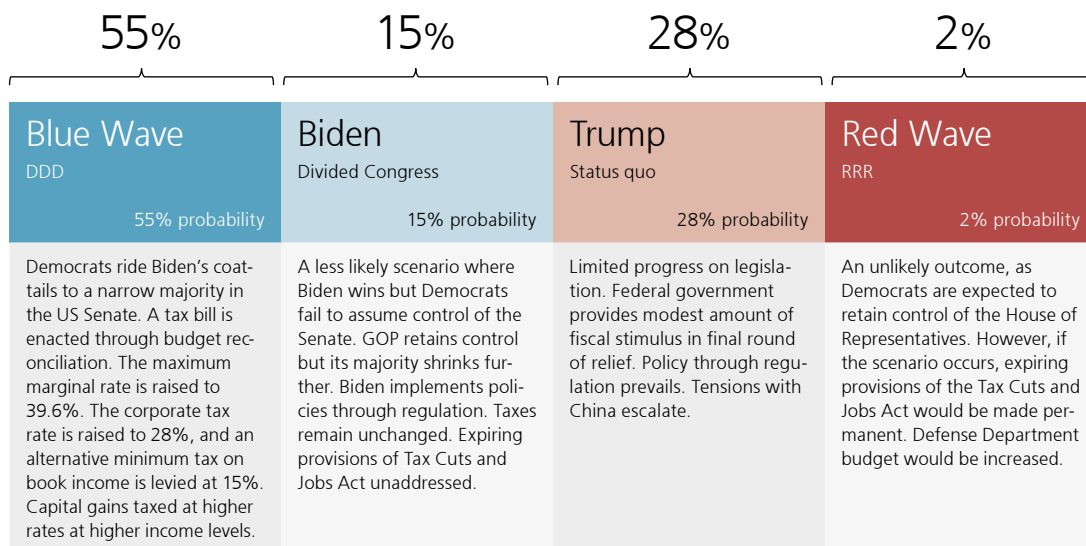
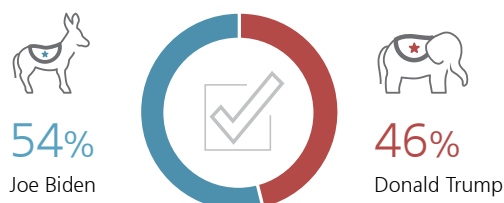


Figure 4

UBS Investor Sentiment spotlight

Globally, more investors want Biden to win



Preferred winner by region

	Biden	Trump
US	50%	50%
Asia	51%	49%
Latin America	56%	44%
Europe (except Switzerland)	62%	38%
Switzerland	66%	34%

Source: UBS Investor Sentiment, 3Q 2020

Note: Marketing material. A survey of global high net worth investors and business owners on their needs, goals, concerns, and sentiment. The views expressed may be different than those of UBS.



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Elections have consequences, but the defeat of the pandemic and subsequent economic recovery will continue to be one of the main market drivers in any election outcome, which bodes well for the equity market over time. That said, a Blue Wave or status quo outcome would likely be modestly better for stocks because it would lead to larger fiscal support relative to a Biden win with a divided Congress.

Blue Wave

A Biden administration would emphasize economic recovery with a focus on infrastructure, green initiatives, and potentially healthcare coverage expansion. Trade tensions could also cool, providing an additional boost. This should offset the impact of tighter regulation and higher taxes. We believe industrials, materials, and utilities sectors would benefit. The energy sector could lag due to green policies. Financial regulation would likely be fairly limited in scope. For healthcare, uncertainty about the impact of a potential “public option” health insurance plan and drug price cuts could weigh on the sector, but we think the most dire policy outcomes are already priced in and, ul-

timately, greater healthcare coverage would benefit the sector.

Biden (divided Congress)

In a Biden victory with a divided Congress, equities could have a modestly negative reaction. This constellation might produce the smallest fiscal package if the Senate Republicans opt to block most legislation. Still, industrials and materials could benefit from reduced trade tensions. On the regulatory front, utilities would benefit from green initiatives. However, energy, and, to a much lesser extent, financials, could see some regulatory headwinds. Healthcare stocks would likely react favorably to the prospect of more limited than expected policy changes.

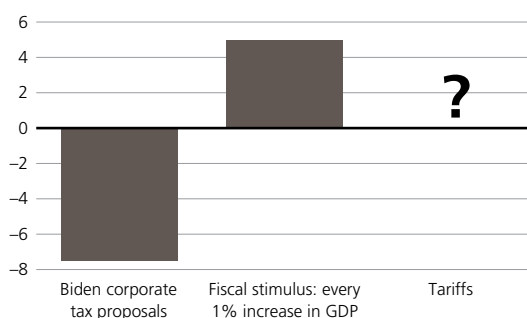
Trump (status quo)

In a status quo scenario, policy shifts would likely be fairly small. Fiscal stimulus that supports the recovery would likely come through, but it would be smaller than a Blue Wave outcome. Renewed trade tensions with China are a risk and would have a slightly negative impact on the industrials and materials sectors. Companies in the energy, financials, and healthcare sectors could benefit from a relief rally as some of the policy uncertainty associated with a Biden victory dissipates.

Figure 5

Faster GDP growth from fiscal stimulus and relaxed tariffs could offset tax impacts

Potential impact on S&P 500 earnings, CIO estimate (%)



Source: Bloomberg, UBS, as of 20 October 2020

Key takeaways

- Recovery from the pandemic will remain one of the key market drivers, therefore stocks should have upside in any election outcome as the pandemic begins to wind down next year.
- The Blue Wave and status quo outcomes would be more supportive for US stocks due to greater fiscal stimulus relative to a Biden win with a divided Congress.



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Energy policy has been a front-burner issue in the 2020 presidential election. Investor perception appears to have resolved that a Biden victory is negative for the US oil and gas industry, while a Trump victory is positive. We discuss the impact of the three most likely election outcomes below.

Blue Wave

US energy equities associated with fossil fuels have underperformed recently and appear to be discounting the risks of our Blue Wave scenario. While there are risks for the energy industry, we believe they may be tempered by practical limitations to making sweeping changes given the fragile state of the US economy. Economic stimulus and renewable energy would take top priority. But beyond a moratorium on new leases for fossil fuel exploration on federal lands, we expect most energy risks will stem from regulatory policy rather than congressional action.

Renewable energy including wind and solar is likely the biggest energy winner, though batteries, hydrogen, carbon capture, advanced nuclear, and other less developed technologies are likely to be promoted. We believe natural gas will remain an important bridge fuel and relatively cleaner alternative to coal for US power generation, which should limit risks. Further, US natural gas exports

(LNG) support cleaner energy policies in the developing world. Importantly, a legislative ban on fracking is not on the agenda.

We expect regulation of the oil and gas industry will increase, though this will take time. Many states rely on the significant revenues from oil and gas production—a reality that may make restrictions on the industry more difficult under current economic conditions.

For oil, a key macro risk is the potential restoration of the 2015 Joint Comprehensive Plan of Action (JCPOA) nuclear deal with Iran. If restored, Iran could increase global oil supply by 2–3% in a weak demand environment.

Biden (divided Congress)

The issues confronting the oil and gas industry would be similar to those in the Blue Wave scenario, though a divided Congress could alter the discussion and slow the pace of change. However, we expect most energy risks will stem from regulatory policy rather than congressional action, which limits the difference between the two blue scenarios.

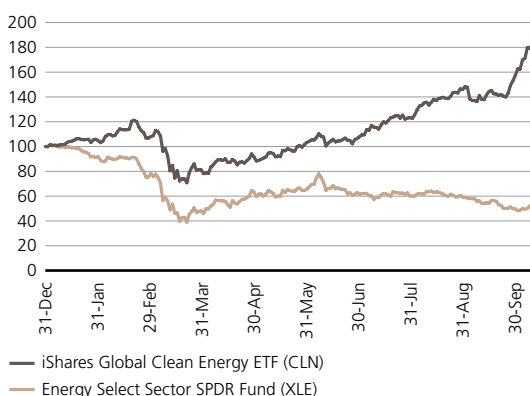
Trump (status quo)

While we do not expect any changes to the policies in place, this outcome would be seen as relatively supportive for the oil and gas sector, resulting in a relief rally. It could be viewed as negative for renewables, though we do not expect the rapid growth in renewable fuels and technologies to slow.

Figure 6

Clean energy has outperformed oil and gas

Clean Energy ETF vs. Energy select—values indexed to 100



Source: Factset, UBS, as of 12 October 2020

Key takeaways

- Renewable energy, including wind and solar, is likely the biggest energy winner in a Blue Wave scenario.
- Natural gas is an important bridge fuel, which suggests limited risks for this sub-sector in most scenarios.
- A key oil risk is the potential restoration of the JCPOA with Iran, which could increase global oil supply.



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Election implications for US financials can be framed along two main lines: legislative risk and regulatory risk. While the Dodd Frank Act (DFA) of 2010 will likely remain unchanged under any of the potential election outcomes, the interpretation and implementation of DFA provisions may vary according to the composition of the administration and Congress. Personnel is policy, and any leadership changes at the key regulatory agencies (the Fed, OCC, FDIC, and SEC) could have broad implications for compliance costs and capital/liquidity requirements going forward.

Blue Wave

Higher taxes, reregulation, and generally negative political rhetoric (headline risk) toward financial services companies would likely be offset by macroeconomic benefits from increased government spending. The threat of Democratic initiatives like a transaction tax, higher carried interest tax, and a strengthened Consumer Financial Protection Bureau (CFPB) could be negative for financials' fundamentals and valuation. Nevertheless, higher infla-

tion and potentially higher long-term interest rates would provide positive support for US financials' earnings growth and profitability.

Biden (divided Congress)

The benefits of fiscal expansion, limited somewhat by a Republican Senate, would likely be offset slightly by more regulation. Also, lower trade tensions and global macroeconomic stability may be dampened by higher compliance costs. While legislative changes to the DFA would be unlikely, regulatory leadership changes could lead to stricter interpretation of existing rules and regulations. US financials may be more challenged.

Trump (status quo)

More limited fiscal expansion along with sustained lower taxes and more lenient regulation should support somewhat higher earnings growth and profitability for US financials. Resistance from house Democrats would likely limit macroeconomic benefits; however, we would expect a degree of a relief rally in a status quo election.

Figure 7

Financials valuations appear very attractive

Financials vs. S&P 500, relative P/E based on next year's earnings



FactSet, UBS, as of 19 October 2020

Key takeaways

- Overall, US financials successfully weathered the economic shock of the COVID-19 pandemic with sufficient capital and liquidity to support the broader US recovery.
- Although higher taxes and tighter regulation in targeted areas like consumer finance are possible under a Blue Wave, the sector's current valuation multiple is quite low compared with history.
- Accordingly, we currently have a preferred view of US financials regardless of the election outcome.



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For healthcare, 2020 resembles the 2008 election cycle, after which a unified Democrat-led government undertook significant healthcare policy reform. In 2009, healthcare stocks hit valuation lows only recently matched during the current election uncertainty. Once clarity emerged on moderate healthcare legislation (the Affordable Care Act, or ACA), healthcare stocks outperformed through 2015. We are optimistic that 2020 could set up similarly for the sector.

Blue Wave

While we expect a Blue Wave scenario to carry continued near-term headline volatility for healthcare stocks, a Blue Wave also creates the potential for needed clarity on healthcare policy. We believe that meaningful legislation is more likely to occur under unified government. In particular, the composition of the US Senate is critical to determining viable health policy legislation in 2021.

A narrow Democratic majority likely cannot pass strong anti-industry legislation. We are optimistic that a narrow Democratic Senate majority would

instead pass moderate healthcare legislation that would provide needed long-term clarity for the sector without being overly punitive, and drive positive long-term stock performance.

Biden (divided Congress)

In a Biden win with a GOP-controlled Senate scenario, healthcare likely enjoys a strong initial relief rally. A split Congress likely accomplishes little on healthcare. In the absence of long-term clarity, however, healthcare will likely again be subject to policy uncertainty ahead of the 2022 midterm elections. But if bipartisanship could emerge on healthcare, any compromise on drug pricing would likely be even more moderate, and thus less negative for the pharmaceutical industry. While a low probability outcome, bipartisan legislative compromise on drug pricing would be the best outcome for pharmaceutical stocks.

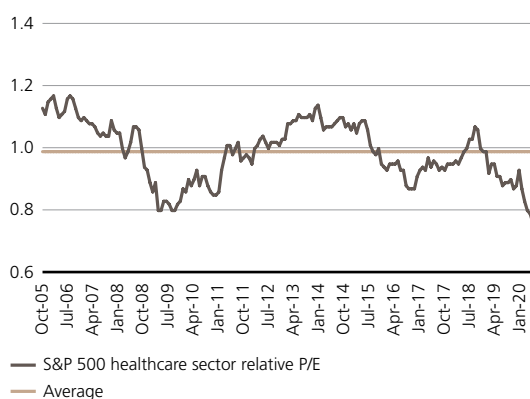
Trump (status quo)

In a status quo election scenario, we also expect an initial relief rally for the healthcare sector. However, we think the current administration's rhetoric has not been supportive of the healthcare sector, and that ongoing uncertainty around healthcare policy and the future of the ACA could quickly re-emerge in the next Congress, capping the upside to healthcare stocks.

Figure 8

Healthcare sector at multi-decade valuation lows

S&P 500 healthcare sector P/E relative to S&P 500, next year's earnings



Source: Factset, UBS, as of 12 October 2020

Key takeaways

- The election remains a key risk factor for healthcare stocks with the sector trading at multi-decade valuation lows relative to the market.
- Despite potential near-term election volatility, legislative clarity on moderate health policy reforms would be the best long-term outcome.
- The composition of the US Senate will be critical to determining viable health policy legislation in 2021.



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One outcome of the upcoming US elections will likely involve more infrastructure spending regardless of who wins this November. However, the end result could be materially different based on the possible election outcomes.

Blue Wave

We believe the recent gridlock to passing a large infrastructure bill is likely to be finally broken with a Democrat sweep as the party views it as a way to inject stimulus into the economy and address climate change. Under this scenario, we would see a wide array of winners as it would impact not only infrastructure, but green energy initiatives as well. Biden's announced plan is an ambitious USD 2 trillion climate and infrastructure plan that dramatically accelerates prior proposals. However, anything short of this outcome would be negative for the exposed stocks given their outperformance in recent months.

The main industries to benefit are machinery, engineering and construction, chemicals, electrical equipment, and construction materials. The focus on energy efficiency should also be a positive for the climate control and building solutions stocks as building and homes are upgraded for improved efficiency. The plan's focus on zero-emissions public

transportation options should boost spending on emission-free railroads, trucks, and buses. This likely would help companies exposed to hydrogen and fuel cells, electric charging, and battery materials.

Biden (divided Congress)

While we see a Biden victory as positive to increased infrastructure spending, a divided government likely reduces the size of any potential program. We would expect spending to be focused more on traditional infrastructure like roads, bridges, and overall construction. Biden's green initiatives are likely to face more opposition from a divided government and we believe will be scaled back—if they get funded at all. This scenario would be positive for machinery, building materials, and construction and engineering companies, but negative for areas exposed to climate, alternative energy, and green technologies given how well those stocks have done recently.

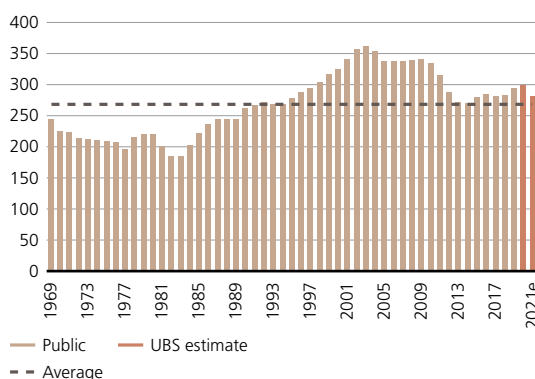
Trump (status quo)

We see this scenario outcome as the most negative relative to current expectations. The Democrats and President Trump have not been able to agree on the size and funding of an infrastructure bill over the last several years. Thus, we do not see a big change in this dynamic with the status quo, but still expect to see some infrastructure bill being passed as a form of stimulus. However, it will likely be much smaller in size and scope than under a Biden presidency. This scenario would be broadly negative for all the exposed names given that a larger and more encompassing plan is reflected in the stocks at this point.

Figure 9

A new administration could help breathe life into public infrastructure spending

Public non-residential spending (in real 2012 USD billions)



Source: Bureau of Economic Analysis, UBS

Key takeaways

- Infrastructure spending is likely to receive a boost regardless of who wins the election.
- A Blue Wave scenario should have the largest impact on future spending.
- Anything short of a Blue Wave would be negative for infrastructure-exposed stocks in the near term.



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Regulatory scrutiny of the mega-cap tech companies has ratcheted higher, and the push for greater oversight is somewhat shared by legislators from both sides of the aisle. Still, we believe regulatory risks are manageable. Any adverse antitrust rulings would likely result in modest remedies, such as fines and some behavioral modifications.

Ultimately, many of these matters may be decided in the courts, rather than by regulators or politicians. The Department of Justice just unveiled an antitrust case against Google. Likewise, the Federal Trade Commission is investigating Facebook on antitrust grounds. The judicial process will likely take years to reach resolution and is somewhat independent of the election outcome.

At the moment, we don't believe there is much appetite in Washington to pursue new antitrust or tech-specific legislation, regardless of the election outcome. Rather, it seems that politicians may be waiting to see how the ongoing antitrust investigations play out.

Blue Wave

Because regulation is somewhat independent of the election, we believe fiscal policy could be the bigger driver of tech stocks coming out of the election. If a Blue Wave leads to a large fiscal stimulus that pushes up long-term interest rates, valuations for some of the most expensive parts of the tech complex could come under pressure. While many tech companies derive a high percentage of income from overseas, limiting exposure to a higher domestic tax rate, Biden's proposal to institute a minimum tax and raise taxes on overseas income from intangible assets would negate the higher mix of domestic profits. Within the tech sector, semiconductors—the most cyclical segment of the tech sector—could get a modest boost from faster economic growth.

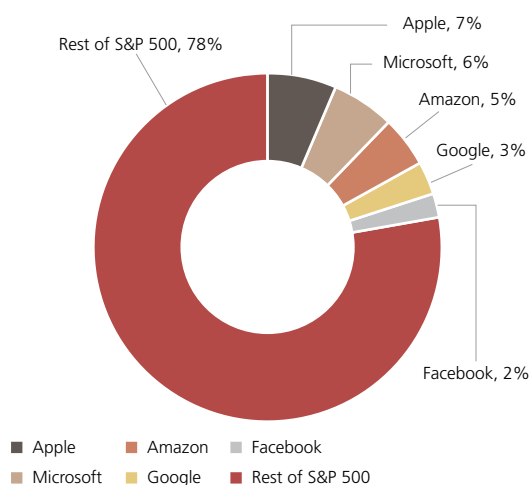
Divided government

In the two scenarios that result in divided government—a Biden or Trump victory but with a split Congress—the impact on the sector should be fairly modest. In both of these scenarios, fiscal stimulus would likely be smaller than in a Blue Wave, therefore the risk of lower valuations stemming from higher interest rates would be reduced. While broader trade tensions may cool in a Biden victory, US/China technology tensions will likely continue regardless of who is in the White House. These bipartisan concerns will likely only increase with the growth in 5G wireless deployments, artificial intelligence adoption, and other foundational technologies.

Figure 10

Massive size of tech behemoths attracts regulatory scrutiny

Percent of S&P 500 market value



Source: FactSet, UBS, as of 20 October 2020

Key takeaways

- Regulatory risks for big tech may continue to rise modestly in any election outcome, but we think they are manageable and will likely take years to play out.
- A large fiscal stimulus in a Blue Wave could prompt a rotation out of mega-cap tech.
- Divided government should have minimal impact on the sector.



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Sustainable investing: Gaining traction

Sustainable investing (SI) strategies have broadly shown equivalent or better performance as compared to conventional peers. Product development and AUM have steadily increased in the US and globally during the current US administration, reaching USD 12 trillion AUM in the US (out of USD 31 trillion globally) in 2018, and exhibiting further growth through 2020. For more on the global trends supporting SI, see "[A private investor perspective: Sustainability matters.](#)"

Depending on the outcome, we expect the US election to have a neutral-to-positive impact on SI. While a Blue Wave outcome could boost some sustainable themes and SI strategies, we believe that a status quo or split government result would not bring any significant headwinds to SI.



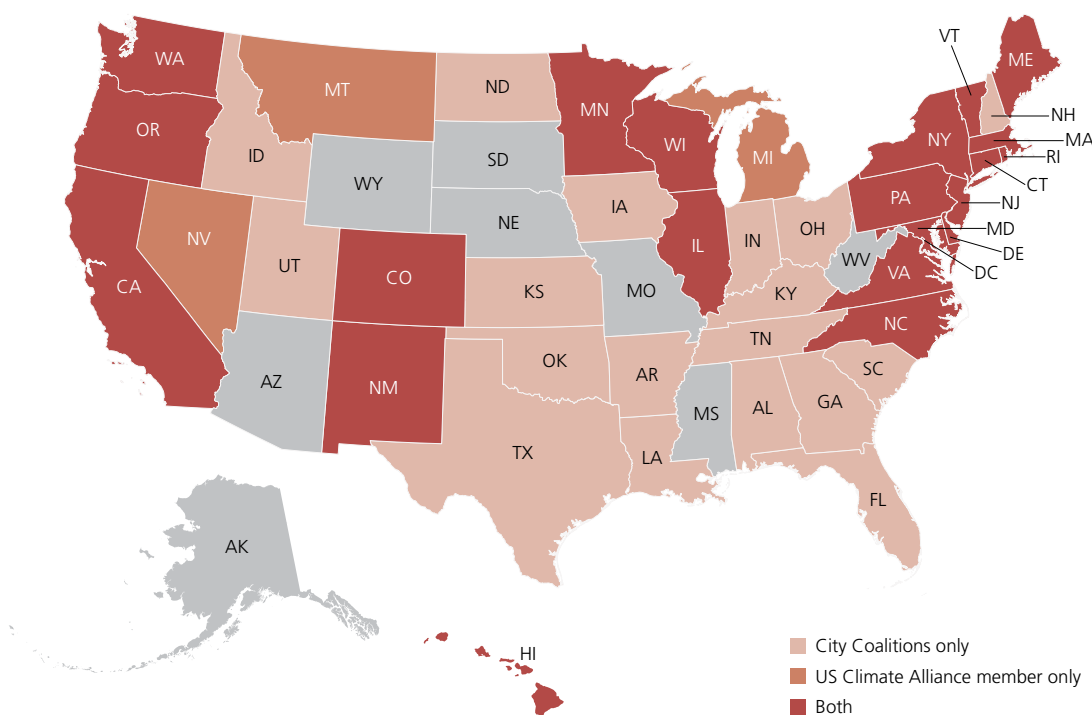
Depending on the outcome, we expect the US election to have a **neutral-to-positive impact** on sustainable investing.

An acceleration of **social policy and regulation** by a Biden administration could have a positive impact on ESG Leader strategies. For example, the Democratic campaign outlines plans to raise the federal minimum wage to USD 15/hour, pass legislation to mandate 12 weeks of paid family leave for serious health conditions, or ban the federal use of private prisons and incentivize states to do the same, among other proposals. Additionally, a

Figure 11

24 states have joined the US Climate Alliance

Hundreds of metropolitan areas across the country have formed City Coalitions to advance environmental objectives



Source: Clean Cities, US Climate Alliance, UBS



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potential higher emphasis on **human rights in trade negotiations**, as well as stronger implementation of the rule prohibiting the importation of goods made with prison, forced, and child labor in the Tariff Act of 1930, might bring further attention to how companies manage their supply chains. If enacted, these policies might bring higher adjustment risks for companies that are not managing some of these social issues in their operations, benefiting ESG Leaders. The Biden **USD 2 trillion climate change plan** would increase investment in infrastructure and boost green themes like “Renewable energy,” as we have detailed in [“Biden’s infrastructure plan—a look at the future.”](#)

We expect a status quo or split government result to have a neutral effect on SI. The Trump administration has **rolled back several environmental rules** in the past four years, but we believe that the effect of this type of policy on environmental themes has likely panned out. For more, see [“Green themes won’t sink without a blue wave.”](#) Regardless of federal intervention, states and cities are increasing their commitment to addressing the challenges of climate change, thus creating a favorable environment for climate-focused SI approaches. For example, California will phase out the sale of gas-powered vehicles by 2035, while

Michigan’s governor announced the state will aim to reach carbon neutrality by 2050. Twenty-four US states including California and New York have joined the US Climate Alliance, pledging to uphold the Paris Agreement commitments, while hundreds of metropolitan centers have joined nearly 100 Clean Cities Coalitions to advance renewable energy and energy efficiency objectives in their local transportation systems.

Key takeaways

- Depending on its outcome, we expect the US election to have a neutral-to-positive effect on SI strategies.
- Shifting consumer preferences, strong investor attention to ESG, state-led support, and favorable global policy underpin our view that a status quo result would have a neutral effect on SI strategies.
- A Blue Wave scenario could further bolster some sustainable themes or benefit ESG Leader strategies, with expected regulation on social issues and additional federal investment aligned with environmental topics and themes.



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Trade and geopolitics: The more things change...

Who exactly sits in the Oval Office in January 2021 is certainly relevant for the global economy, as US presidents need not rely on Congress to determine the direction of the country's trade and geopolitical agenda. Trump and Biden have been explicit about the approach they plan to take, and these look markedly different. Yet, despite their contrasting styles, **we are unlikely to observe drastic changes** in some key areas of America's external policy.

A Biden presidency looks set to reduce US external policy uncertainty, improving the visibility on the outlook for global markets. The former vice president may be more reluctant to use tariffs as a trade policy tool, and seems likely to take a more **globalist approach** where allies are brought together to address matters such as the future of NATO, the WTO, and the issue of digital tax. Partners with less sterling records on human rights and the environment can probably expect more criticism from Biden, though long-standing strategic ties are unlikely to be severed over infringements.

Trump, on the other hand, has highlighted he is willing to continue to use **tariffs and sanctions**

“

America's two political parties are now more **aligned on the issue of global trade** than is widely appreciated.

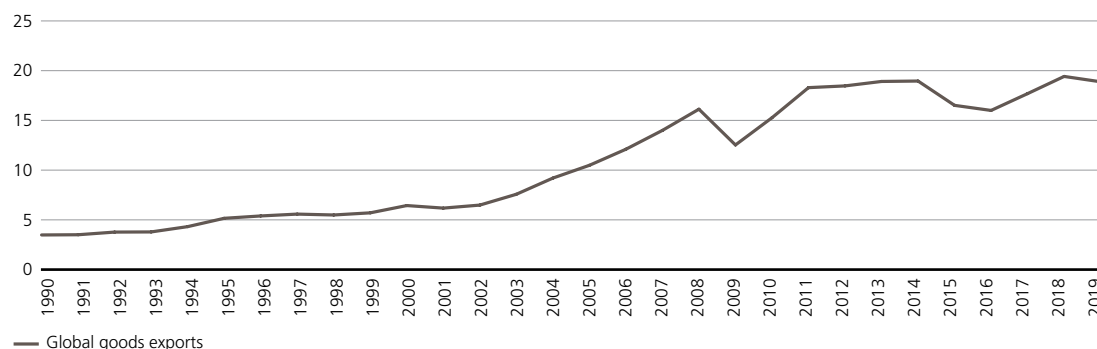
as tools of foreign policy in a second term. He has also threatened to selectively impose tariffs upon, and to strip government contracts from, companies that refuse to relocate their operations to the US. The administration's critical stance toward richer NATO members will likely continue, and incendiary rhetoric against China will likely remain the norm.

But even if there were a change in control of the White House, it seems unlikely the US will engage in an aggressive push for **global trade integration** and the signing of fresh major trade agreements. America's two political parties are now more aligned on the issue of global trade than is widely appreciated. In recent years, amid a shift in citizens' view on the topic of trade, they have grown skeptical of treaties that might jeopardize

Figure 12

Goods trade losing steam

Annual global goods exports, in trillions of USD



Source: WTO, UBS, as of October 2020



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American jobs, and have developed a taste for a Hamiltonian approach to protecting domestic manufacturers from foreign competition. In addition, with nearly 70% of Americans holding a negative view of China, there is little doubt **tensions between the US and China** will continue to exist. We therefore maintain a view that the post-crisis, post-election world will be less global than the one we have gotten accustomed to.

Investment implications

We think investors should build portfolios resilient enough to perform well in a wide range of scenarios, rather than take concentrated positions that would benefit in a particular election outcome. International assets should play a central role in such portfolios, as they help mitigate home bias, promote geographic diversification, and tend to contribute to higher returns than a portfolio without them. In our baseline scenario, we expect equity returns in international markets to surpass those of the US in the coming years. In a yield-starved

world, US dollar-denominated emerging market sovereign bonds remain as one of our most preferred asset classes six to 12 months out, as we expect countries to bring the virus under control and commodity prices trade higher.

Key takeaways

- While trade tactics will vary by candidate, we do not expect an aggressive push toward global trade integration in any outcome.
- Investors should build portfolios resilient enough to withstand a wide range of trade outcomes, with international assets playing a central role.
- Don't miss our recent reports on the implications of the US election for [Emerging markets](#), [Europe](#), and [Asia Pacific](#).

Figure 13

UBS Investor Sentiment spotlight

Global view

Short-term (next 6 months)

55%
optimistic
↑ 2%

24% neutral
21% pessimistic

Optimism by region

US

55%
optimistic
↑ 11%

Europe
(except
Switzerland)

55%
optimistic
↑ 2%

Switzerland

54%
optimistic
↑ 12%

Latin America

60%
optimistic
↑ 3%

Asia

54%
optimistic
↓ 6%

Source: UBS Investor Sentiment, 3Q 2020

Note: Marketing material. A survey of global high net worth investors and business owners on their needs, goals, concerns, and sentiment. The views expressed may be different than those of UBS.



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UBS Wealth Way: Keep calm and carry on

Advocacy groups are on track to spend about USD 10.8 billion on political advertising in the 2020 election, an increase of about 50% from the expenditures recorded four years ago.¹ Regardless of the political party or interest group behind them, the ads are all designed to pull on your heart strings, ramp up your anxiety, and drive home one central point: *This election matters.*

Of course, all elections do matter, and investors should review their financial plans periodically in light of **changes to tax policy** (see the next page). However, we are compelled to remind investors that the outcome of this election is unlikely to have a meaningful impact on your investment success over the longer term—unless you overreact to the results. We discussed the importance of **insulating your political views** from your efforts to construct a durable portfolio in "[Keep your politics out of your portfolio](#)," and it's worth revisiting the topic in the final weeks of this campaign.



The outcome of this election is **unlikely to have a meaningful impact** on your investment success over the longer term.

There is ample academic research to support the belief that political affiliation has a direct impact on one's level of optimism regarding the future direction of the economy. Investors who share an affiliation with the victorious political party are more likely to accept greater risk and earn correspondingly higher returns. They also are more likely to believe that financial assets are undervalued and respond accordingly by increasing their allocation to equities. Conversely, investors disappointed with the outcome of an election often adopt an abrupt risk-off strategy. This type of **partisan bias can suppress investment returns**.²

Figure 14

UBS Investor Sentiment spotlight

72% of investors globally are considering making portfolio changes **ahead of the election**



62% of investors globally are planning to make more changes **based on the result**



Source: UBS Investor Sentiment, 3Q 2020

Note: Marketing material. A survey of global high net worth investors and business owners on their needs, goals, concerns, and sentiment. The views expressed may be different than those of UBS.

¹Center for Responsive Politics "2020 election to near \$11 billion in total spending, smashing records," 1 October 2020. <https://www.opensecrets.org/news/2020/10/2020-election-to-near-11-billion-in-total-spending-smashing-records>

²ElectionWatch, "More clarity, more uncertainty," 25 March 2020, page 12. See Maarten Meeuwis and Jonathan Parker et al., "Belief Disagreement and Portfolio Choice," National Bureau of Economic Research, Working Paper 2510, September 2019; Yosef Bonaparte and Alok Kumar et al., "Political Climate, Optimism, and Investment Decisions," University of Miami, 26 February 2012; Marian Moszoro, "The Party Politics of Stock Market Investing," George Mason University, 25 March 2019; and Harrison Hong and Leonard Kostovetsky, "Red and Blue Investing," Princeton University, March 2010, and Babajide Wintoki and Yaoyi Xi, "Political Partisan Bias in Mutual Fund Portfolios," University of Kansas, May 2017.

UBS Wealth Way is an approach incorporating Liquidity. Longevity. Legacy. strategies that UBS Switzerland AG, UBS AG and UBS Financial Services Inc. and our advisors can use to assist clients in exploring and pursuing their wealth management needs and goals over different timeframes. This approach is not a promise or guarantee that wealth, or any financial results, can or will be achieved. All investments involve the risk of loss, including the risk of loss of the entire investment. Timeframes may vary. Strategies are subject to individual client goals, objectives and suitability.



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The balance of power within the US federal government is just one of many variables that affect the economy and global financial markets. Efforts to determine which political party is better for markets often runs aground on disagreements over what time series is appropriate. Do you start before or after the Great Depression? Do you include the nadir of the economic recession in 2008 or exclude it? Putting aside the fact that the sample set is too small to be statistically significant, such debates ignore the impact of broader forces in the economy such as digitization, climate change, and demographics. As we discuss in "[The \(flimsy\) link between US politics and market returns](#)," correlation is not causation. Elections matter, but their impact on markets is more muted than the political ads would have you believe.

That being said, there are some proposed policy changes that are worthy of close attention. To help put the election into an objective context—and ensure that you are well positioned regardless of the election outcome—we recommend thinking about your wealth through the UBS Wealth Way, which comprises three specific strategies: a **Liquidity** strategy, to help protect your lifestyle; a **Longevity** strategy, to help achieve your lifetime goals; and a **Legacy** strategy, to help impact the lives of others.

Segmenting your wealth into these strategies can help you align your financial resources with your goals, leading to the right balance between risk management and potential wealth accumulation for your family's objectives. Viewed through this lens, there are two steps that we advise you to discuss with your financial advisor in the coming weeks:

1. Secure your Liquidity strategy. The Liquidity strategy consists of resources earmarked to help you meet your short-term cash flow needs. By setting aside 3–5 years of cash flow needs in cash, bonds, and safe borrowing capacity, you can ensure that your spending needs can be met—and that your Longevity strategy assets can remain invested for long-term growth—even in the unlikely event of an extended bear market after the election.

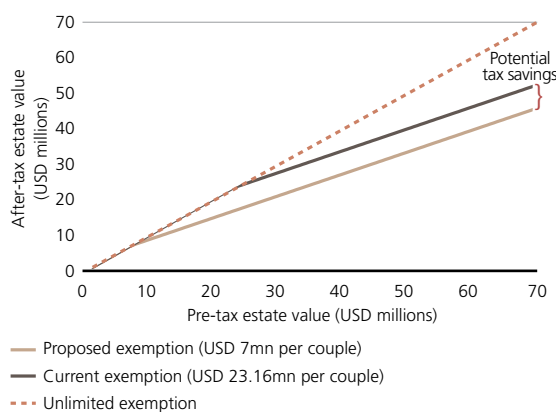
2. Fund your Legacy strategy. Today, a married couple can give away USD 23.16 million to others without triggering gift or estate taxes, which have a top tax rate of 40% for amounts over USD 1 million. In a Blue Wave scenario, this lifetime exemption amount is likely to fall significantly, perhaps as low as USD 7 million.

Such a policy change could become effective on 1 January 2021, and shave as much as USD 6.5 million off of a family's after-tax wealth (Fig. 15), leaving less capital for the next generation or for charitable purposes. Accelerating gifts into 2020 could increase the amount you can pass on, leaving more capital to devote to philanthropy. For more details, please see *Modern Retirement Monthly*, "[2020 tax planning for retirees](#)."

Figure 15

Accelerating gifts to 2020 could save families from a USD 6.5 million tax haircut

After-tax estate value (y-axis) and pre-tax value (x-axis) for current and proposed exemption amounts



Note: Assumes a 40% flat estate tax rate, does not incorporate state-level estate taxes. Timeframes may vary. Strategies are subject to individual client goals, objectives, and suitability. This approach is not a promise or guarantee that wealth, or any financial results, can or will be achieved. Source: IRS, UBS

Key takeaways

- The US election matters, but its impact is limited. The most important step is not to overreact, as we discussed in "[Keep your politics out of your portfolio](#)."
- If you are worried about election-related volatility, fund your Liquidity strategy—it is the first line of defense.
- Tax increases are likely under a Biden administration. Accelerating lifetime gifting into 2020 can help to manage the risk of higher estate taxes (see *Modern Retirement Monthly*, "[2020 tax planning for retirees](#).")



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Figure 16

Blue Wave stock list

Company name	Ticker	Sector	Price (USD)
Aon Plc+	AON	Financials	207.47
Aon operates as a global professional services firm. The company is domiciled outside the US and we believe would be relatively less impacted by higher US corporate tax rates.			
Humana	HUM	Healthcare	441.16
Humana engages in the provision of health insurance services. The company would likely benefit from expanded Medicare age eligibility.			
Medtronic	MDT	Healthcare	111.84
Medtronic is a medical technology company. The company is domiciled outside the US and in our view, would be relatively less impacted by higher US corporate tax rates.			
Thermo Fisher Scientific	TMO	Healthcare	481.99
Thermo Fisher engages in the provision of analytical instruments, equipment, reagents and consumables, software and services for research, analysis, discovery, and diagnostics. The company is expected to benefit from greater funding for National Institute of Health research.			
Zimmer Biomet Holdings+	ZBH	Healthcare	143.05
Zimmer Biomet is a leading orthopedic equipment supplier and would expected to benefit from expanded Medicare age eligibility.			
ABB Ltd. Sponsored ADR+	ABB	Industrials	26.75
ABB produces a variety of technological solutions to promote automation and energy efficiency, as well as electric vehicle charging infrastructure. We believe the company would benefit from plans to improve energy efficiency and promote electric vehicles.			
Caterpillar	CAT	Industrials	169.66
Caterpillar is a heavy equipment machinery manufacturer and would expect to be a beneficiary of proposed plans for infrastructure investment.			
Honeywell	HON	Industrials	176.85
Honeywell is a diverse industrial conglomerate with exposure to energy efficiency systems and should benefit from plans to reduce emissions through greater energy efficiency.			
Lennox International	LII	Industrials	288.62
Lennox provides climate control solutions and should benefit from plans to reduce emissions through greater energy efficiency.			
Rockwell Automation	ROK	Industrials	239.33
Rockwell Automation produces industrial automation products and should benefit from plans to reduce emissions through greater energy efficiency.			
Stanley Black & Decker	SWK	Industrials	178.01
Stanley Black & Decker is a provider of hand tools, power tools, and security solutions. The company should benefit from a reduction in trade tensions.			
Trane Technologies	TT	Industrials	130.46
Trane Technologies manufacturers energy efficiency climate control products and should benefit from plans to reduce carbon emissions through greater energy efficiency.			
United Rentals+	URI	Industrials	185.40
United Rentals provides equipment rental services for construction and industrial companies as well as utilities and government entities. The company should benefit from infrastructure spending.			



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Company name	Ticker	Sector	Price (USD)
Vestas Wind Systems+	VWDRY	Industrials	56.20
Vestas Wind Systems develops and markets wind turbines and should benefit from greater government incentives to promote renewables.			
Accenture	ACN	Information Technology	228.14
Accenture is a leading professional and IT services company. The company is domiciled outside the US and should be relatively less impacted by higher US corporate tax rates.			
Cisco Systems	CSCO	Information Technology	38.82
Cisco provides data switching and routing products and services and should benefit from government incentives to deploy 5G infrastructure.			
Ericsson+	ERIC	Information Technology	12.44
Ericsson provides 5G network solutions and should benefit from government incentives to deploy 5G infrastructure.			
First Solar+	FSLR	Information Technology	82.65
First Solar is the largest manufacturer of thin film solar modules globally, and one of the largest solar panel manufacturers in the US. The company should benefit from government incentives that promote renewable sources of energy, including solar.			
Intel	INTC	Information Technology	53.90
Intel chips are key components of 5G data networks and should benefit from government incentives to deploy 5G infrastructure.			
Juniper Networks	JNPR	Information Technology	22.42
Juniper provides data switching and routing products and services and should benefit from government incentives to deploy 5G infrastructure.			
Nokia+	NOK	Information Technology	4.27
Nokia provides 5G network solutions and should benefit from government incentives to deploy 5G infrastructure.			
TE Connectivity	TEL	Information Technology	106.29
TE Connectivity engages in the design and manufacture of connectivity and sensor solutions. TE is domiciled outside the US, should be relatively less impacted by higher US corporate tax rates, and should benefit from its exposure to hybrid and electric vehicle components.			
Texas Instruments	TXN	Information Technology	148.22
Texas Instruments engages in the manufacture, design, and sale of digital signal processors and analog semiconductors. The company should benefit from reduced trade tensions and also provides solutions for hybrid and electric vehicles.			
Albemarle+	ALB	Materials	94.96
Albemarle produces specialty chemicals and should benefit from increasing electric vehicle demand due to their lithium exposure.			
Eastman Chemical	EMN	Materials	86.10
Eastman Chemical engages in the production and distribution of a range of advanced materials, chemicals and fibers. The company should benefit from reduced trade tensions.			
Nucor+	NUE	Materials	49.90
Nucor is the largest steel recycler in North America and should benefit from proposed plans for infrastructure investment.			
Steel Dynamics	STLD	Materials	32.14
Steel Dynamics is a US steel manufacturer and metal recycler and should benefit from proposed plans for infrastructure investment.			
American Tower	AMT	Real Estate	235.77
American Tower is a leading independent owner, operator, and developer of wireless and broadcast communications real estate. As the eventual migration to 5G takes place, the company should benefit from the administration's positive stance on 5G adoption.			



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Company name	Ticker	Sector	Price (USD)
Crown Castle	CCI	Real Estate	156.25
Crown Castle engages in the provision of access to wireless infrastructure via long-term contracts. As the eventual migration to 5G takes place, the company should benefit from the administration's positive stance on 5G adoption.			
American Electric Power	AEP	Utilities	92.20
American Electric Power distributes and generates electricity and should benefit from increased transmission investment to deliver renewable power.			
Eversource Energy	ES	Utilities	92.92
Eversource Energy is a diverse utility with exposure to offshore wind development and should benefit from increased investment in renewable power.			
NextEra Energy	NEE	Utilities	302.27
NextEra Energy is the largest wind and solar developer in the US and is well positioned for increasing renewable power development.			

Source: FactSet, UBS, as of 22 October 2020

Note: Companies in the Blue Wave, Biden (divided Congress), and Trump (status quo) lists are Most Preferred or Bellwether rated by CIO.

+ Stocks that are only covered by UBS Investment Research. These stocks have a 12-month Buy or Neutral recommendation. UBS IR is part of the UBS Investment Bank (the UBS business group that includes, among others, UBS Securities LLC).

Figure 17

Biden (divided Congress) stock list

Company name	Ticker	Sector	Price (USD)
AbbVie	ABBV	Healthcare	84.31
AbbVie discovers, develops, manufactures, and sells pharmaceuticals worldwide. The company should benefit as the perceived risks related to drug pricing are mitigated.			
Anthem	ANTM	Healthcare	305.17
Anthem is a leading managed-care organization (MCO) that offers a wide range of insurance products and health services. The company should benefit from less risk of a major change to the health insurance market and payer mix.			
CVS	CVS	Healthcare	59.48
CVS provides health services and plans in the United States. The company should benefit from less risk of a major change to the health insurance market and payer mix.			
Merck	MRK	Healthcare	79.21
Merck is a global research-driven pharmaceutical and vaccines company and a leader in the emerging immuno-oncology therapeutic market. The company should benefit as the perceived risks related to drug pricing are mitigated.			
UnitedHealth Group	UNH	Healthcare	325.73
UnitedHealth is the largest US managed-care organization (MCO) offering a wide range of insurance products and health services. The company should benefit from less risk of a major change to the health insurance market and payer mix.			
Honeywell	HON	Industrials	176.85
Honeywell is a worldwide diversified technology and manufacturing company and should benefit from potential infrastructure investment, as well as reshoring.			
Lockheed Martin	LMT	Industrials	368.96
Lockheed Martin is a global security and aerospace company. The company could see a relief rally as the risk of large cuts to the defense budget are mitigated.			

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Company name	Ticker	Sector	Price (USD)
Northrop Grumman+	NOC	Industrials	302.99
Northrop Grumman is a global defense and security corporation. The company could see a relief rally as the risk of large cuts to the defense budget are mitigated.			
Rockwell Automation	ROK	Industrials	239.33
Rockwell Automation produces industrial automation products and should benefit from potential infrastructure investment, as well as reshoring.			
Stanley Black & Decker	SWK	Industrials	178.01
Stanley Black & Decker is a provider of hand tools, power tools, and security solutions. The company should benefit from a reduction in trade tensions.			
Eastman Chemical	EMN	Materials	86.10
Eastman Chemical engages in the production and distribution of a range of advanced materials, chemicals and fibers. The company should benefit from a reduction in trade tensions.			
American Tower	AMT	Real Estate	235.77
American Tower is a leading independent owner, operator, and developer of wireless and broadcast communications real estate globally. As the eventual migration to 5G takes place, the company should benefit from the administration's positive stance on 5G adoption.			
Crown Castle	CCI	Real Estate	156.25
Crown Castle engages in the provision of access to wireless infrastructure via long-term contracts. As the eventual migration to 5G takes place, the company should benefit from the administration's positive stance on 5G adoption.			
American Electric Power	AEP	Utilities	92.20
American Electric Power distributes and generates electricity and should benefit from increased transmission investment to deliver renewable power.			
NextEra Energy	NEE	Utilities	302.27
NextEra Energy is the largest wind and solar developer in the US and is well positioned for increasing renewable power development.			

Source: FactSet, UBS, as of 22 October 2020

Note: Companies in the Blue Wave, Biden (divided Congress), and Trump (status quo) lists are Most Preferred or Bellwether rated by CIO.

+ Stocks that are only covered by UBS Investment Research. These stocks have a 12-month Buy or Neutral recommendation. UBS IR is part of the UBS Investment Bank (the UBS business group that includes, among others, UBS Securities LLC).

Figure 18

Trump (status quo) stock list

Company name	Ticker	Sector	Price (USD)
Phillips 66	PSX	Energy	50.01
Phillips 66 is a diversified energy manufacturing and logistics company. The company should benefit from no change to environmental standards and oil and gas drilling policies.			
Cimarex Energy	XEC	Energy	27.41
Cimarex is an independent oil and gas exploration and production company. The company's exposure to drilling on federal land should be protected by the current administration.			
Devon Energy+	DVN	Energy	9.34
Devon is an independent oil and natural gas exploration company. The company's exposure to drilling on federal land should be protected by the current administration.			



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Company name	Ticker	Sector	Price (USD)
EOG Resources	EOG	Energy	36.93
EOG is one of the largest independent oil and natural gas companies in the US. The company has exposure to drilling on federal land and would likely benefit from the current administration's supportive policies.			
Ally Financial	ALLY	Financials	28.85
Ally is the leading independent auto finance and direct banking company. The company should benefit from less regulatory scrutiny of consumer finance activities.			
Bank of America	BAC	Financials	24.87
Bank of America is a universal bank that engages in the provision of financial products and services. The company should benefit from less regulatory scrutiny and the continuation of low corporate tax rates.			
Capital One	COF	Financials	76.75
Capital One is a financial holding company that offers a broad spectrum of financial products and services to consumers. The company should benefit from less regulatory scrutiny of consumer finance activities.			
Goldman Sachs	GS	Financials	205.40
Goldman Sachs is a leading global investment banking, securities, and investment management firm. The company should benefit from less regulatory scrutiny and continuation of low corporate tax rates.			
JPMorgan Chase	JPM	Financials	102.88
JPMorgan is a leading global financial services firm and the largest bank in the US. The company should benefit from less regulatory scrutiny and the continuation of low corporate tax rates.			
Anthem	ANTM	Healthcare	305.17
Anthem is a leading managed-care organization (MCO) that offers a wide range of insurance products and health services. The company should benefit from less risk of a major change to the health insurance market and payer mix.			
CVS	CVS	Healthcare	59.48
CVS provides health services and plans in the United States. The company should benefit from less risk of a major change to the health insurance market and payer mix.			
UnitedHealth Group	UNH	Healthcare	325.73
UnitedHealth is the largest US managed-care organization (MCO) offering a wide range of insurance products and health services. The company should benefit from less risk of a major change to the health insurance market and payer mix.			
L3Harris Technologies+	LHX	Industrials	169.60
L3Harris is a global aerospace and defense technology corporation. The company should benefit from a continued supportive environment for defense spending.			
Lockheed Martin	LMT	Industrials	368.96
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Energy Transfer is a MLP that owns one of the largest and most diverse portfolios of midstream energy assets in the US. The company should benefit from current federal policies that continue to promote the expansion of energy infrastructure.			

Source: FactSet, UBS, as of 22 October 2020

Note: Companies in the Blue Wave, Biden (divided Congress), and Trump (status quo) lists are Most Preferred or Bellwether rated by CIO.

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Publisher

UBS Financial Services Inc.
CIO Global Wealth Management
1285 Avenue of the Americas, 8th Floor
New York, NY 10019

Cover image

Getty Images

Authors

Solita Marcelli
Tom McLoughlin
David Lefkowitz
Bradley Ball
Alejo Czerwonko
Nicole Decker
Kevin Dennean
Jay Dobson
Andrew Lee
Amantia Muhedini
Eric Potoker
Brian Rose
Adam Scheiner
Matthew Tormey
Justin Waring

Contributors outside CIO

UBS US Office of Public Policy
John Savercool
John Nolan
Shane Lieberman

UBS Client Strategy Office
UBS Investor Sentiment, 3Q 2020

Editors

Mary Hahn
Barbara Rounds-Smith

Project management

John Collura
Matt Siegel
Hannah Reimer
Allie Gorin

Design

Cheryl Seligman

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For a complete set of required disclosures relating to the companies that are the subject of this report, please mail a request to UBS CIO Global Wealth Management Business Management, 1285 Avenue of the Americas, 8th Floor, Avenue of the Americas, New York, NY 10019.

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UBS House View

Investment Strategy Guide

November 2020

Chief Investment Office
Global Wealth Management
US edition




Roadmap to recovery



Solita Marcelli

Chief Investment Officer Americas,
Global Wealth Management

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Monthly House View
client call:

5 November 2020
1:00 PM ET



This month's conversation
will be available through
ubs.com/ciolive.

Dear reader,

After pulling back in September, the market rally gained steam again this month with the S&P 500 once again hovering around all-time highs. But the last few weeks have still been anything but a smooth ride, as investors have experienced market swings related to COVID-19, policy, politics, and more. From this point on, sustaining the rally will be contingent on signs that the economy is continuing to move toward normalization.

In our **Feature** article, we review our "roadmap for recovery," and outline why we believe there is still room for upside. We advise investors to look beyond near-term uncertainty surrounding the US election, a fiscal deal, and rising new cases of COVID-19, and to instead use short-term volatility as an opportunity to build long-term positions. We think current headwinds will start to fade over the medium term as the US election likely unlocks new stimulus, and successful vaccine trials continue to increase certainty about the economic outlook. We also point out that the central bank's current thinking around lower-for-longer rates, and a higher tolerance for inflation, makes the case for equities even more compelling.

In this month's **Asset allocation implementation** section, we highlight specific investment opportunities that exist in this environment of accommodative monetary policy. This includes real assets, such as TIPS, gold, and commodities, which we view as most preferred assets for their diversification attributes. Equity and credit remain preferred asset classes, although the opportunity set in the latter has diminished as spreads have tightened. Within US stocks, we continue to prefer more cyclically exposed sizes and sectors that have, for the most part, lagged the overall market recovery.

In this month's **Thematic Spotlight**, we review our outlook on the "red-hot" renewables space, following the sharp rally in clean energy on the back of global green financing initiatives and increasing odds of a Biden victory. While near-term risks remain within renewables, we think the long-term prospects are bright as the transition to clean energy looks set to continue.

We hope you enjoy this edition of the House View. For those seeking more information on the US election, we encourage you to check our [ElectionWatch hub](#).

Regards,

Solita Marcelli

CIO Preferences

	Least preferred	Neutral	Most preferred
Cash		=	
Fixed Income			
US Gov't FI	–		
TIPS			+
US Municipal		=	
US IG Corp FI			+
US HY Corp FI		=	
EM Hard Currency FI			+
EM Local Currency FI		=	
Equity			+
Global Equity			+
US Large Cap Growth	–		
US Large Cap Value	–		
US Mid Cap			+
US Small Cap		=	
Int'l Developed Markets		=	
Emerging Markets		=	

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Roadmap to recovery

Near-term uncertainty

The US election, stalled talks on a fiscal deal, and growing new cases of COVID-19 have heightened uncertainty around the near-term economic and market outlook.

Stimulus unlocked

Regardless of the election outcome, we expect fresh fiscal support to be unlocked after the vote. Successful vaccine trials would also improve medium-term visibility.

Broadening rally

We recommend investors look through near-term uncertainty and build long-term exposure. We expect the rally to broaden out and incorporate more cyclical areas of the market.


Asset allocation

Investors should diversify beyond US mega-cap tech. We see opportunities in US mid-caps, European small- and mid-caps, as well as European greentech.



Mark Haefele

Global Chief Investment Officer
Wealth Management

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Last month, I wrote that we expect markets to experience heightened volatility, notably around the US election, but that investors should use this time to position for higher stock prices over the medium term. We think this is still the right view to hold and plan to pursue. Although a recovery remains on track in China, US politics and the increase in COVID-19 cases in Europe have reduced the visibility around the economic and asset market outlook.

Some investors may be tempted to wait for more certainty before committing capital. But our view remains that it's better to look beyond the near-term uncertainty and start to build long-term positions now. Whatever the outcome of the US election, we think new stimulus will roll out after the vote and lift economic growth. Successful Phase 3 vaccine trials, or the approval of an effective treatment for COVID-19, would also improve visibility on the medium-term outlook. And with central banks around the world telling us that interest rates will remain close to zero for the foreseeable future, being invested is the only option for those who want to protect and grow real wealth over the long term.

Despite our conviction about rising asset prices, we recognize many investors can't ignore volatility. Downside risks make it more important to invest in a manner that is disciplined and diversified in the context of a robust financial plan. Investors should also remember that volatility can also create opportunities—to implement tactical positions, to improve portfolio yields, or to invest gradually at a deliberate pace.

Overall, we like equities, particularly the more cyclical parts of the market that we think have scope to drive the next leg of the rally. These areas include the UK, US mid-caps, and small- and mid-caps in the Eurozone. Heightened levels of volatility and skew in options markets are creating a window to reduce the cost of upside exposure to Eurozone equities. We also still see attractive opportunities in the credit space for yield-seekers.

Further fiscal support for the US economy is coming, regardless of who wins the election.

Why investing now makes sense

1. The US election will unlock new stimulus

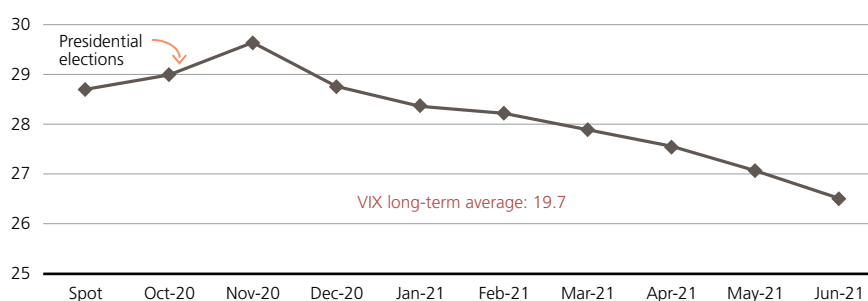
The shape of the VIX futures curve tells us that election-related volatility could last longer than usual this year. Given the above-normal number of votes cast by absentee ballot, and the possibility of President Donald Trump contesting the election outcome, we should prepare for the likelihood of political uncertainty beyond 3 November. The last time the result of the US presidential vote was contested—between George W. Bush and Al Gore in 2000—the S&P 500 fell almost 5% between Election Day and 13 December, when Gore conceded. Now that a preelection stimulus plan is in question, a prolonged period of uncertainty would be a further detriment to the US economy.

Yet the polling lead of former Vice President Joe Biden has reduced market fears of a chaotic transfer of power. Moreover, the Democrat-controlled House of Representatives has already passed a USD 2.2 trillion stimulus package, which is indicative of the path the US government would take if Republican opposition is overcome. Both factors have likely contributed to the recent rise in equity markets and 10-year Treasury yields. Although a Blue Wave victory by the Democrats would likely lead to higher taxes and tighter regulations over the medium term, in the near term, the indicated fiscal stimulus is leading to expectations for higher growth and inflation. Good nominal growth would reduce the risk that the Federal Reserve is forced to impose negative rates.

Figure 1

Markets anticipate volatility extending beyond Election Day

VIX Index futures curve



Source: Bloomberg, UBS, as of 14 October 2020

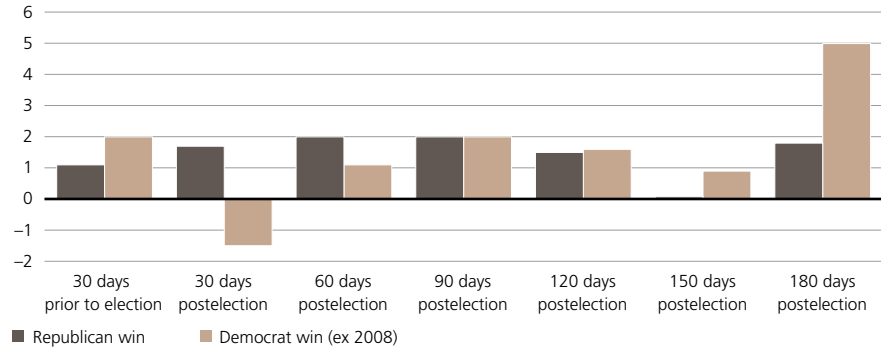
After a Blue Wave, the second most likely outcome is a split presidency and Congress. This scenario presents the risk of policy gridlock, which would further contribute to volatility. But even in this scenario, we would expect some stimulus measures to pass. The Senate Majority leader has not ruled it out, and President Trump now claims he is in favor of a large support package.

Finally, it's worth noting that while the polarization in US politics makes the election result "feel" like a major risk for markets, historical evidence speaks for looking past the voting outcome. Since 1932, excluding 2008, the S&P 500 has typically generated slightly positive returns one month prior to Election Day. And after some immediate postelection volatility, the returns have typically been positive regardless of a Democratic or Republican victory.

Figure 2

S&P 500 performance typically positive two months after election, irrespective of who the winner is

S&P 500 performance in election years (excluding 2008) since 1932, in %, by party win



Source: Bloomberg, UBS, as of 12 October 2020

2. Successful vaccine trials will increase certainty about the economic outlook

Recent developments in Europe show that, in the absence of COVID-19 vaccines or treatment advances, governments may choose to slow or reverse reopening economies to manage the spread of the virus. As long as this remains the case, uncertainty over the path of the economic recovery will persist, and volatility will remain elevated.

We think that markets will already start to price in the economic benefits of a vaccine as soon as there is positive news on its efficacy.

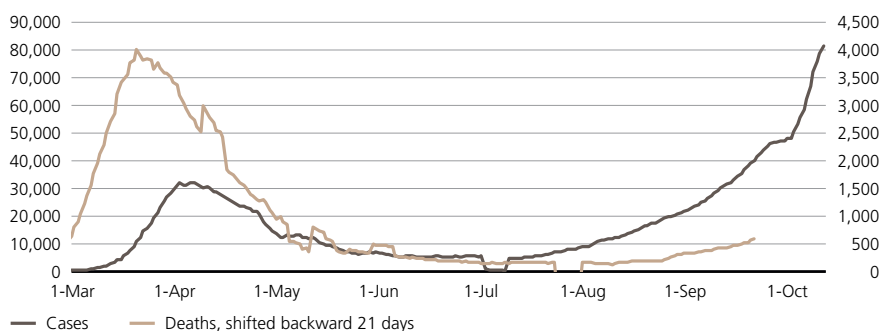
Critical Phase 3 efficacy data for the most advanced vaccines in development is likely this month or next. After allowing for additional time to gather more safety data and for regulatory review, we think either or both of Pfizer/BioNTech's and Moderna's vaccines could receive authorization for emergency use in December. It would likely take until the second quarter of 2021 to have sufficient doses to vaccinate half of the US population. But we think that markets will already start to price in the economic benefits of a vaccine as soon as positive results on its efficacy are published, as it will provide greater certainty that governments will not need to use lockdowns to manage the virus indefinitely.

Even in the absence of a vaccine being approved this year, improvements in the treatment and management of the virus, combined with the fact that recent case growth has been tilted toward younger people, have contributed to lower mortality rates in the US and Europe. Two companies, Regeneron and Eli Lilly, have shown early data demonstrating that antibody treatments can reduce viral load and may hasten the reduction of symptoms. While none of the new treatments, including remdesivir, constitute a definitive "cure," and progress in trials has been subject to some routine setbacks, a growing armory of drugs is reducing the burden on health systems and improving patient outcomes. In this light, amid the increasing resistance to the reimposition of restrictions in Europe, we think governments will continue to favor targeted, localized measures.

Figure 3

Fatalities have so far been much lower in Europe's second wave

Seven-day rolling averages in COVID-19 new cases and deaths for European Economic Area and UK



Source: Macrobond, UBS, as of 13 October 2020

3. Central bank policy is making the long-term case for equities over cash even clearer

With rates set to remain close to zero for the foreseeable future, it is important to be invested in growth assets.

Central banks have told us we should expect rates to remain close to zero for the foreseeable future: The Fed projects that rates will be on hold until at least the end of 2023. At the same time, the shift to average inflation targeting suggests policymakers may be willing to accept a period of moderately higher inflation. For investors looking to draw on their savings to fund their spending, this combination of factors makes it more important to be invested in growth assets.

Stocks can experience significant losses in a short time period but have consistently provided solid long-term returns. Since 1928, based on data from Bloomberg, stocks have outperformed cash in 69% of one-year periods, 84% of 10-year periods, and every single 20-plus-year investment horizon.

One can argue that, given aging populations and weak productivity growth, the best days for equities are behind us. But for stocks to underperform the safest assets over the next 15 years would require a truly unprecedented set of circumstances. US bond yields imply that investors would earn around 11% over the next decade-and-a-half in assets like cash or government bonds. Yet equity dividends alone (on the S&P 500) look to provide a 25% return over this period even assuming no dividend growth—something that hasn't happened since 1945. Taking this into account, the equity market would have to fall by more than 14% over the period to underperform. The worst-ever 15-year price performance for the S&P 500 was a 6% decline starting August 1929.

Scenario analysis

In our central scenario, we expect earnings growth and a slightly lower equity risk premium to drive the S&P 500 to 3,700 by June 2021.

In our central scenario, we think markets will move higher over the medium term. As conditions normalize into 2021, we expect earnings growth and a slightly lower equity risk premium to drive the S&P 500 to 3,700 by June 2021. In our upside scenario, prompt passage of a substantial fiscal stimulus and widespread availability of a vaccine in 1Q21 would accelerate the base-case recovery.

Of course, amid heightened uncertainty, we could be proven wrong. But, given the strength of the long-term case, in our view, a downside scenario would have to involve at least one of the following big events:

- An effective vaccine does not materialize before 2H21, meaning governments are forced to use restrictions on business activity or even full lockdowns in 1H21 to manage the virus.
- US lawmakers fail to agree on a fiscal stimulus and the Fed does not respond effectively.
- Tensions between the US and China take a decisive turn for the worse, leading to renewed tariffs or sanctions of major Chinese companies and financial institutions sufficient to derail growth.

Key scenarios and asset class impact

		Upside	Central	Downside
Investment ideas	<i>Top three ideas</i>	1. Diversify for the next leg (select value, cyclicals, and option strategies) 2. Buy into themes accelerated by COVID-19 (digital transformation, future of humans) 3. Position for US dollar weakness	1. Buy into sustainability 2. Hunt for yield (including dividends and credit) 3. Seek opportunities in nontraditional assets (commodities, private markets)	1. Gold 2. Take advantage of volatility 3. Navigate the US election with "campaign warriors"
Scenario	<i>Description</i>	Central banks stay accommodative, albeit edging toward a tightening bias in late 2021 to early 2022 Lower real rates and a weaker dollar boost global growth over the next 12 months Developed countries' GDP back to prepandemic levels by end-2021 Social activity fully normalizes by early 2021 A highly effective vaccine becomes widely available by 1Q21 Status quo in US-China trade and US election outcome don't hurt growth	COVID-19-related restrictions remain regional or focused on certain smaller sectors, allowing developed economies to recover to prepandemic GDP levels by 2022 An effective vaccine becomes widely available by 2Q21 Social activity fully normalizes by mid-2021 Toughening US-China rhetoric without impacting growth Central banks stay accommodative Real rates remain stable over the next 12 months Democrats win US election in a Blue Wave	Renewed wide-scale COVID-19-related restrictions of business activity postpone point of full recovery of developed countries' GDP to 2023 Social activity back to normal by late 2021 No effective vaccine widely available before 2H21 Growth hurt by renewed US-China tariffs or fiscal gridlock in US Congress Central banks inject more liquidity to limit economic damage Real rates higher in 12 months Credible challenge to US election result creating fiscal uncertainty in 1H21
Asset class impact (targets for June 2021)	<i>Spot*</i>			
	<i>S&P 500</i>	3,512	3,900	3,700
	<i>Euro Stoxx 50</i>	3,272	3,900	3,600
	<i>MSCI EM</i>	1,136	1,280	1,200
	<i>SMI</i>	10,338	11,500	11,000
	<i>USD IG spread**</i>	93	80bps (+1% t.r.)	100bps (+1% t.r.)
	<i>USD HY spread**</i>	492	400bps (+6% t.r.)	500bps (+3% t.r.)
	<i>EMBIG spread**</i>	407	280bps (+11% t.r.)	360bps (+7% t.r.)
	<i>EUR USD</i>	1.17	1.25	1.21
	<i>Gold</i>	1,899	USD 1,600–1,700/oz	USD 1,900/oz
				USD 2,200–2,300/oz

* Spot prices as of 14 October 2020.

** During periods of market stress, credit bid-offer spreads tend to widen and result in larger ranges. Percentage changes refer to expected total return (t.r.) for the indicated spread levels.

Note: Asset class targets above refer to the respective macro scenarios. Individual asset prices can be influenced by factors not reflected in the macro scenarios.

Source: UBS, as of 15 October 2020

If one or more of these events materialized, in our downside scenario we estimate that the S&P 500 could fall to 2,800 by June next year. In these circumstances, we would expect only a limited recovery in corporate earnings in 2021, rather than the 27% growth in our central scenario, and for the price-to-earnings (P/E) ratio to level off at 18x.

Based on the data we have, and for the reasons described above, each of these events currently appears unlikely. Evidence points to a vaccine being authorized in the US by the end of this year. Both Democrats and Republicans are in favor of further stimulus, and the politicization of the debate is short term driven by the election. Both the US and China have reaffirmed their support for the Phase 1 trade deal, signaling a desire to continue trade despite tensions.

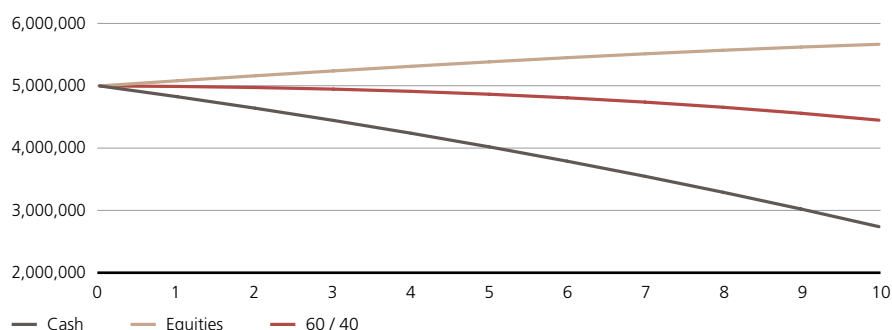
How to invest

Strategically, the most important action investors can take is to make sure they are invested, and diversified, with a robust financial plan. As Figure 4 shows, cash lump sums can deplete quickly when we consider the possibility that personal spending rises more rapidly than interest rates. Being invested purely in equities offers the possibility to grow wealth while making withdrawals, but does come with higher uncertainty. For most investors, a diversified portfolio offers a better balance of risk and reward.

Figure 4

Impact of cash withdrawals on a lump sum invested in cash vs. stocks and bonds

Initial USD 5mn lump sum, USD 250,000 withdrawn in year 1, growing 3% p.a. thereafter
Annual returns in USD of 1.6% cash, 2.2% bonds and 7% equities



Source: UBS, as of 12 October 2020

Tactically, we think investors need to put measures in place to take advantage of near-term volatility, and position for markets to rise over the medium term.

Diversify for the next leg

For the next leg of the rally, we think investors should diversify beyond mega-cap US tech.

As I wrote last month, the rally since March has been strongest in the stocks and sectors exposed to the “new normal,” like US mega-cap technology stocks. But going forward, we see greater potential to diversify into other stocks within and beyond technology that we think will drive the next leg of the rally.

Diversify within technology

5G. We see an opportunity for investors to diversify their technology exposure. Although US mega-caps have performed very strongly year-to-date, we think the next leg of the rally will fall to other areas within the growth and technology space. In particular, we think direct and platform beneficiaries of 5G could benefit from increased attention in light of the launch of the new iPhone.

With Europe on the cusp of history's biggest green stimulus program, we see multiyear opportunities in greentech.

Greentech. Europe is on the cusp of history's biggest green stimulus program. The EU has agreed to a fiscal stimulus package worth EUR 1.85 trillion over the next seven years, more than 30% of which will be used for climate investments and "green" economic growth. We see significant implications for most sectors, especially power generation, transport, industry, and building (heating and cooling), which account for about 80% of European greenhouse gas emissions. Greentech leaders offer multiyear opportunities across industries. While the European Green Deal is a longer-term plan, we also see investment potential in the short to medium term.

Diversify beyond technology

US mid-caps and European small- and mid-caps. Rather than make a call between growth and value, tilting toward mid-caps offers investors more cyclical exposure without necessarily underweighting growth. Economic uncertainty has disproportionately dragged down valuations of stocks outside of the mega-caps, and we expect them to recover as more confidence returns. We continue to expect small- and mid-cap earnings growth to outpace large-caps' over the next year, which should be a key driver of our conviction on this size segment.

Figure 5

Small- and mid-caps look cheap

MSCI EMU small- and mid-caps relative price-to-book value, average, and average – 2 standard deviations



Source: Datastream, UBS, as of 9 October 2020

Both US and European mid-caps trade at attractive valuations relative to long-term average levels.

In the US, based on next year's earnings estimates, the Russell Mid-Cap index trades at a P/E that is about 5% lower than for the Russell 1000 index. This looks attractive relative to the 5% average valuation premium in the 10 years before the pandemic. In Europe, while small- and mid-caps have traded at an average 5% premium versus large-caps over the last 15 years (based on trailing 12-month price-to-book), they are currently trading at a 17% discount. The return on equity for EMU small- and mid-caps is now 8.5% versus 9.2% for large-caps—a small gap that we believe does not justify such a large difference in valuations.

EM value. We think that after a decade of underperformance, value should catch up amid a cyclical recovery in emerging markets (EM). Value also offers attractive dividend yields in a low-rate world and is less exposed to concentration risk. Based on past episodes of value catch-up in 2016 and 2018, we think EM value has the potential to outperform the MSCI EM index by 10–15% in the next six to 12 months in up and down markets. In our baseline scenario, we expect the next leg of the EM recovery rally to be driven by high-dividend-yield value stocks in the financial, energy, materials, and real estate sectors that have lagged in the past. These sectors, especially financials, offer greater scope for earnings recovery at a cheaper valuation as economic growth reaccelerates.

The UK. The FTSE 100 is still 24% below its January high, making the UK one of our most preferred equity markets. It is trading at a 30% discount to the MSCI All Country World

index, compared with a 10-year average of 10%. We think the worst of the earnings contraction in the UK is behind us, favoring a significant earnings rebound in 2021. The UK's sector composition is also a favorable mix of defensives, such as healthcare, and cyclical value, such as energy and basic materials, which would benefit from a global recovery.

Figure 6

Undervalued UK equities have scope to rebound

FTSE 100 relative 12-month trailing P/E vs. MSCI AC World, in %



Source: Datastream, as of 9 October 2020

Take advantage of volatility

A period of heightened volatility can be unnerving for investors. But we also see it as an opportune time to enhance returns or build up positions for the long term. Specifically, investors can look for strategies in the options space to gain exposure to cyclical markets or use the elevated volatility in markets like commodities to enhance yield. For example, we think the skew in the options market is creating a window to reduce the cost of upside exposure to Eurozone equities.

Hunt for yield

Interest rates are likely to remain close to record lows for the foreseeable future, maintaining the appeal of income-generating assets. While spreads have tightened, we still see value in select segments of credit. In particular, we like USD-denominated emerging market sovereign bonds, European crossover bonds, green bonds, and Asian high yield bonds. We also think that ample government support is likely to limit corporate defaults in US high yield, allowing risk-tolerant investors to take advantage of low borrowing costs to leverage returns.

Position for dollar weakness

We also expect a weaker dollar. Fed policy is expansive and under no pressure to shift toward a neutral stance. Chair Jerome Powell said this month that the greater risk is not doing enough to help the economy, rather than too much. Also, while we do not believe the Fed will push rates into negative territory, any discussion that this is under consideration would likely further undermine the dollar. Finally, we think the Democrats' proposed policy mix of higher taxes, increased infrastructure spending, and greater regulation would weaken the USD relative to its current value against a broad range of currencies, in the event of a Blue Wave.

Mark Haefele
Chief Investment Officer
Global Wealth Management

Asset allocation implementation

The UBS House View is our current assessment of the global economy and financial markets, with corresponding investment recommendations. The asset allocation implementation of this view can vary based on the portfolio types and objectives.

Our tactical asset class preferences

+ Most preferred

- Treasury Inflation-Protected Securities (TIPS)
- US corporate investment grade fixed income
- Senior loans
- Emerging market dollar-denominated sovereign bonds
- Global equities
- US mid-cap equities
- UK equities
- India equities
- Commodities
- Gold
- Oil

– Least preferred

- US government bonds
- US large-cap growth equities
- US large-cap value equities

Implementation guidance

Risk assets should remain supported by a very accommodative Federal Reserve and other central banks, though volatility is likely to remain high until there is greater clarity on the US election outcome, additional fiscal stimulus, and a path to a vaccine. Economic activity continues to recover, although the pace has moderated as COVID-19 cases appear to be growing in a “second wave” in the US and Europe, and the benefits of US fiscal stimulus have waned. Equity and credit remain preferred asset classes, but the opportunity in the latter has become less attractive. The Fed’s adoption of an average inflation targeting policy framework is supportive of higher inflation in the medium to long term, and real assets, including TIPS, gold, and commodities, should continue to benefit. We view them as most preferred assets for their diversification attributes and additional upside due to the recovery and reflation.

Equities

While most equity markets are near all-time highs, the story this year has been the outperformance of US mega-cap tech and growth stocks. More recently, these stocks have been highly volatile, exacerbating the volatility of the market overall. While some of this price action over the summer has been the result of extreme call option positioning by certain investors, equity volatility

will likely remain high at least until there is further clarity on the US political situation and meaningful news on vaccine development. At this point, we think it’s more likely that other sectors and styles play catch-up rather than tech stocks catching down, as the global economy continues to recover on the back of normalizing activity. Thus, we maintain our preference for global equities, of which US equities account for a little over half. But we also maintain a neutral view on growth versus value. Growth stocks are relatively expensive, but value stocks are unlikely to sustainably outperform until there is a clear path to recovery and normalization.

Within US stocks, we continue to prefer more cyclically exposed sizes and sectors that have, for the most part, lagged the overall market recovery. Specifically, we continue to like mid-caps, which have underperformed large-caps by about 7% in 2020 and should be outsize beneficiaries of improving economic activity. Among US equity sectors, we continue to recommend a cyclical tilt. This month, we opened a preference for the financial sector, where we expect a sharp reversal from the weak 2020 earnings that were driven by collapsing interest rates. The view is supported by further fiscal stimulus and an approved vaccine, both of which we would expect to have by the middle of next year. Other than financials, we continue to favor consumer discretionary (key beneficiary of economic reopening), industrials (recovery in economic data points to out-performance historically), and healthcare (political risks priced in, cheaper valuations). Our least preferred sectors remain consumer staples (relatively expensive defensive sector), real estate (some segments will continue to face very challenging business conditions), and utilities (defensive sector likely to lose investor interest as the recovery continues).

Internationally, UK equities remain attractively positioned for the upside scenario. The UK market skews toward value and global cyclical stocks, and the valuation of UK equities is relatively low versus other regions. But near-term Brexit uncertainty is a temporary headwind. Within emerging market equities, we like India, which lagged the initial recovery in Asian markets but should continue to catch up as the economy more fully recovers.

Fixed income

We continue to prefer credit as a broad asset class, but after significant spread tightening, returns will be lower in the coming months. US investment grade (IG) corporate bond spreads have

tightened to around our June 2021 target level, which means returns over the next six to 12 months will be driven primarily by income, not price appreciation, in our view. On the other hand, we think USD-denominated emerging market sovereign bond spreads can still tighten further. These bonds have been the best performer within credit after adjusting for volatility. Ongoing Fed support remains a backstop for credit, as the central bank has barely used its lending facility programs.

US government bonds are expensive at current yields, though we don't expect rates to materially change over the coming months. As a result, we have a relatively neutral view on duration and do not favor any particular part of the Treasury curve.

We maintain a preference for Treasury Inflation-Protected Securities (TIPS). Market-implied inflation expectations have dramatically recovered from the sell-off in March, and in the near term, they may only increase 20–30 basis points for longer-maturity TIPS. But the risk of higher inflation in the medium to long term means TIPS still offer good diversification for that scenario. Longer-maturity TIPS (10+ years) are better for Aggressive portfolios because of their longer duration. In Conservative portfolios, shorter maturities (0–5 years) are recommended because they have lower rising rate risk.

Additionally, we maintain a preference for green bonds. Their spreads are comparable to investment grade corporate bonds, but have a more defensive tilt due to their sector composition. These defensive bonds have outperformed broad investment grade indexes this year in large part due to smaller drawdowns during the market sell-off in the first quarter.

For investors with portfolios skewed heavily toward fixed income, we recommend taking advantage of certain segments of the market that still have further potential for price appreciation. Specifically, we like senior loans and CMBS, which should be supported by lower-for-longer interest rates and should benefit as reduced risks become increasingly priced in.

Real assets

The commodity complex overall and gold and oil specifically are still most preferred assets. Gold's run to a record high in August was fueled by falling real interest rates. That tailwind has abated for now, and some of the speculation that also pushed the price to a record has eased. But gold should continue to benefit from the aggressive monetary stimulus of major central banks across the globe, ongoing US dollar weakness, and investor enthusiasm for the asset class. Gold is also a valuable insurance asset in the event that the recovery falters. But it should also do well if the monetary policy response remains aggressive even as the global recovery becomes more self-sustaining, potentially pushing gold up to USD 2,300/oz.

For other commodities, oil and industrial metals are the main drivers of the positive view. Both should benefit from the global recovery, and supply-demand fundamentals remain favorable. Oil demand is recovering while supply is being curbed by voluntary OPEC+ output and massive reductions in non-OPEC oil companies' capital expenditures. We maintain our positive outlook and expect Brent to trade near USD 45/bbl at the end of 2020 and at USD 55/bbl at end-2Q21. Commodities should also benefit from investor interest in real assets as an inflation hedge.

Our preferences

	Least preferred	Neutral	Most preferred
Cash		=	
Fixed Income			
US Gov't FI	–		
US Gov't Short		=	
US Gov't Intermediate		=	
US Gov't Long		=	
TIPS			+
US MBS		=	
US Municipal		=	
US IG Corp FI			+
US HY Corp FI		=	
Senior Loans			+
Preferreds		=	
CMBS		=	
EM Hard Currency FI			+
EM Local Currency FI		=	
Equity			+
Global Equity			+
US Equity		=	
US Large Cap Growth	–		
US Large Cap Value	–		
US Mid Cap			+
US Small Cap		=	
Int'l Developed Markets		=	
UK			+
Eurozone		=	
Emerging Markets		=	
Other			
Commodities			+
Gold			+
Oil			+
MLPs		=	
US REITs		=	

Note: See explanations about asset classes in the Appendix.

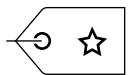
Bull Market Monitor

Equity markets have hit new record highs, confirming the bear market earlier this year as the shortest in history. Sustaining the rally from this point will be difficult without positive trends in the economy.



Current status

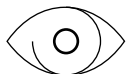
Economic conditions have improved, but activity remains far below normal levels in some sectors and unemployment is high. On the whole, social distancing restrictions are gradually being eased. Measures of mobility are mixed.



What's new?

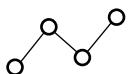
Recent data suggests that the economic recovery is continuing despite a high number of new COVID-19 cases, although growth is slowing toward a more normal pace and activity is still far below normal in some services sectors. Pent-up demand has emerged, helping the manufacturing and housing sectors, in particular. More than half of the job losses in March and April have been recovered. However, the pace of job growth appears to be slowing, and more layoffs are becoming permanent. Congress has been unable to pass another fiscal package and now appears unlikely to take action until after the elections in November. The Federal Reserve is indicating that it expects to keep rates near zero at least through the end of 2023.

Financial conditions remain easy. The yield curve is upward sloping with the short end near zero. Spreads on corporate debt narrowed slightly over the past month. Overall, we judge that mobility is roughly trending sideways.



What are we watching?

We are carefully monitoring the spread of the virus and its impact on the economy, as well as progress on vaccines and new treatments. If COVID-19 case counts continue to trend higher, it could lead to new restrictions. The failure to pass a fiscal package in a timely manner creates new downside risks for the economy. Many businesses continue to see revenues far below normal, and have exhausted the money they borrowed under the Paycheck Protection Program. More households that were surviving on enhanced unemployment benefits are becoming unable to pay their essential bills. Successfully reopening schools would be an important step in getting more people back to work. The announcement of a safe and effective vaccine would help to lift sentiment even if widespread distribution is months away.



What are the investment implications?

The outlook is highly uncertain, but global economic conditions continue to improve. We have a positive view on global equities, US investment grade corporate bonds, and emerging market bonds.

Key cycle indicators

The cycle indicators gauge whether the economy is overheating and if financial conditions are restricting growth. These determine our assessment of where we are in the cycle.

▼ Current ▼ Previous

Economic indicators

Growth (relative to potential)



Labor market



Mobility (relative to normal)



Inflation (relative to 2%)



Financial indicators

Monetary policy



Yield curve



Credit conditions



Each indicator is evaluated relative to a neutral level that is sustainable over time in order to determine whether the economy is at risk of overheating or if financial conditions will start to restrict growth.

Questions we're tracking

How can I benefit from long-term opportunities?

Faced with uncertainty from COVID-19, investors may find it challenging deciding where to invest. But in this environment, it is important to maintain a long-term focus and invest in structural trends that will not be constrained—and may even be accelerated—by the pandemic. We have identified several long-term investment themes that are expected to benefit from three secular trends and potentially disruptive forces, and should offer superior growth over time.

How can investors win from the US election?

The US election is just weeks away, and the stakes are high for investors, given the stark contrast between the policy platforms of President Donald Trump and Democratic nominee Joe Biden. A decisive swing toward either party would affect a range of sectors, from energy and finance to technology and healthcare. We favor equity baskets that reflect the impact of the major policy issues under different election outcomes.

Should I reduce my real estate exposure?

Despite the sharpest global economic downturn in more than 60 years, housing price increases have accelerated in the last 12 months, supported by fiscal and monetary stimulus. We don't believe this trend is sustainable. The upside for prices and rental income is limited in most markets, and those with multiple properties could consider profit-taking. But since housing is an illiquid, indivisible bulk asset with high transaction costs, we also recommend other adjustments to your financial portfolio to reflect an overexposure to property.

Can private markets offer yield as well as growth?

Investing in private equity can provide exposure to fast-growing, innovative businesses at a time when the supply of listed companies in developed markets is shrinking. Aside from adding such growth opportunities, private market funds can also add yield, through funds focused on credit or infrastructure. Overall, private market investments can enhance returns through illiquidity premiums and are good portfolio differentiators. We see opportunities in firms boosted by COVID-19, distressed debt and equity, and in operational value creation.

Can stocks rally higher from here?

Some turbulence for high-flying US mega-caps has refocused attention on market concentration concerns. Mega-cap tech valuations do not appear unjustified, but we think sustained gains will require more economic normalization. Setting aside vaccine and fiscal timing questions, we stay invested and rebalance into segments like value and cyclical.



Month in review

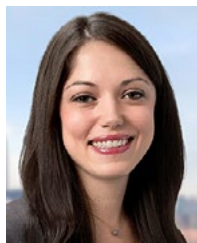
Volatility remained prominent through October. Several factors contributed to this ongoing choppiness, including stimulus negotiations, election uncertainty, developments in the technology sector, and COVID-19.

On the political front, the uncertainty surrounding the next stimulus package was a pervasive theme. President Trump's wavering support for various degrees of stimulus and action from Congress kept investors on their toes. Furthermore, attention remained on the Republicans' efforts to appoint nominee Amy Coney Barrett to the Supreme Court prior to the election, with confirmation hearings beginning on 12 October. In terms of the election outlook, former Vice President Joe Biden's lead continued to gain in the polls and prediction markets throughout the month. Biden's perceived lead widened following the first presidential debate, and amid news that President Trump had contracted COVID-19.

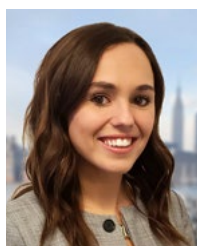
Big Tech experienced another month of volatility, and this time with additional controversy. A US House Judiciary Antitrust Subcommittee investigation released on 6 October claimed the four major tech firms—Alphabet, Amazon, Apple, and Facebook—engaged in anticompetitive behaviors, as content creators on the app stores of Google and Apple protested against unfair compensation arrangements. The four names fell 3.2% on average in response to the investigation, but quickly recovered.

Developments around COVID-19 vaccine trials and rising cases remained in the headlines this month. Cases continue to rise in parts of Europe and the US, leading to talks of tighter restrictions and expectations of continued volatility.

Red-hot renewables



Laura Kane, CFA, CPA
Head Thematic Research Americas



Michelle Laliberte, CFA
Thematic Investment Associate

Clean energy stocks have rallied since late June, on the back of global green financing initiatives and increasing odds of a Biden victory. Until earlier this week, that is, when President Trump announced the removal of a tariff exemption for bifacial solar modules and an increase in the safeguard tariff to 18% in 2021 from 15% previously discussed. Safeguard tariffs on solar imports were announced in 2018, and while this rhetoric is not new, it is a good reminder that the industry's election sensitivity bears monitoring as Election Day approaches. That said, we believe the long-term drivers for our *Renewables* theme remain intact regardless of the election outcome. The group's outperformance and high valuations have prompted investors to question how long the rally can last, but despite the potential for near-term policy setbacks, we believe renewables can continue to outperform in the years ahead.

Trading higher on outlook for investment

Biden's USD 2 trillion climate plan intends to increase the use of renewables in the US energy mix on the path to net zero, and specifically states the goal of doubling offshore wind by 2030. With the S&P Global Clean Energy Index up over 80% year-to-date, it's fair to acknowledge that valuations look high in the near term. While some of this could be attributed to the market pricing in higher odds of a blue wave, and therefore the passage of a robust climate plan, it's important to remember there are several other variables at play. The European Union (EU) and China have both announced climate plans of their own. The EU's Green Deal focuses on green technologies, such as renewables and green mobility, and at least 30% of the total EUR 1.85 trillion will be used specifically for climate investments. Further, China added an additional tailwind for the group, when President Xi announced the country's target to reach carbon neutrality by 2060.

In the US, state-led initiatives can accel-

erate the energy transition. The Trump administration has rolled back several environmental regulations in an effort to expand energy exports, but at the same time, 24 US states have joined the US Climate Alliance, and state-level regulation can help to offset the absence of federal incentives to expand renewables. Even so, the less stringent regulatory environment in the last four years has not had a significant impact on the competitive environment for renewable energy. Coal use in the energy mix has decreased steadily, while demand for natural gas and renewables has grown. Investment in renewables from the private sector should also help to support demand regardless of the election outcome, as corporations across sectors set sustainability targets and seek to reduce emissions.

Improving economics

Policy support is certainly a helpful catalyst in the green energy transition, but, in our view, it's not a prerequisite for outperformance either. The declining cost of renewable energy has helped make alternative energy more competitive with fossil fuels. The industry's operating and financing costs have broadly declined, and industry consolidation could further improve economics. At the same time, demand for renewables should continue to grow—the International Energy Agency estimates renewables to have been the only energy source to post growth in 2020.

Investing in renewables doesn't come without risk. In the event of a Trump victory, or a divided government outcome, it's possible clean energy stocks could retrace some of their recent performance as the market reacts to the policy outlook. While it's not our base case, a prolonged economic downturn would also be a negative driver for high-beta risk assets, and it could shift policy focus away from climate initiatives even in the event of a Biden victory. In our view, though, the energy transition looks set to continue, and the potential for near-term volatility shouldn't deter investors with a long time horizon.



Themes universe

For guidance on how to invest in each of the themes on this page, please contact your Financial Advisor.

Technology

Automation and robotics

A fourth industrial revolution is underway, which we believe will transform the future of manufacturing.

Digital data

Companies that both enable digital data and invest their infrastructure will likely continue strong earnings growth over the coming years.

E-commerce

E-commerce is altering the global retail landscape and omnichannel companies should lead the way forward.

Enabling technologies

We identify five enabling technologies that should offer solid long-term growth amid irreversible technological disruption.

Fintech

The global fintech industry is at an inflection point and set to drive a major digital transformation in the financial services industry.

Health Tech

Aging populations are straining global healthcare budgets, spurring healthcare providers to explore new technologies that could improve efficiency.

Medical devices

The medical device industry has matured but opportunities exist for increased penetration in emerging markets (EMs).

Oncology

Advances in cancer therapeutics will create new opportunities for successful drugs.

Security and safety

Growing trends such as urbanization, digital data growth, and increased regulation support demand for security and safety.

Smart Mobility

Global urbanization will call for structural changes in technology that will alter the way we "consume" mobility in the coming decades.

Space

Growing private sector investment and lower entry barriers to the space economy are causing an inflection point.

Resources

Agricultural yield

The world faces a growing food production crisis as the global population increases. Companies that help to boost agricultural yields stand to benefit.

Clean air and carbon reduction

Rising populations and urbanization are fueling the need for clean-air technologies.

Energy efficiency

Stricter regulation and corporate competition to improve product efficiency are driving demand for energy-efficiency solutions.

Energy transition

The world is facing relentless demand for energy, and several types of energy resources will be needed to satisfy that demand.

Food revolution

Greater technology utilization and investment throughout the food supply chain will be needed to create a health, sustainable food system.

Renewables

Increasing energy demand from urbanization and population growth will benefit renewable energy as lower costs drive competitiveness with fossil fuels.

Waste management and recycling

Low waste treatment rates in EMs offer big catch-up potential that could lead to extraordinary growth rates.

Water scarcity

Water scarcity is one of the biggest risks to mankind. If limited water resources can be better harnessed, the benefits could be enormous.

Society

Education services

With limits to many governments' education resources, there is increased opportunity for the private education market.

Emerging market healthcare

An aging EM population requires stepped-up investment in healthcare. We believe global healthcare companies can benefit.

Emerging market infrastructure

Growing urbanization and high economic growth rates will drive demand for infrastructure investment in EMs.

Genetic Therapies

Genetic therapies could revolutionize medicine by removing the fundamental causes of inherited genetic conditions.

Obesity

Urbanization and rising per-capita GDP in EMs will contribute to an ever-greater prevalence of global obesity.

Retirement homes

A larger population of seniors and evolving social trends support opportunity in retirement homes investment.

Retirement planning

Changing demographics are increasing demand for retirement planning.

Silver spending

As the global population ages, those 55 and older are expected to account for an ever-increasing proportion of consumer spending.

Fixed income

Beyond benchmark

By diversifying fixed-income exposure investors can avoid the shortcomings of heavily government-weighted taxable fixed-income benchmarks.

MLP bonds

Master limited partnership bonds offer attractive coupon income relative to other investment-grade sectors.

Yield opportunities in Latin America

A theme constructed around a basket of Latin American bonds that have the potential to outperform the ICE BofA Corporate IG index on a 6-12 month horizon.

Taxable munis

Taxable munis can be attractive to taxable fixed income buyers for three principal reasons.

US senior loans

Senior loans offer attractive floating-rate coupons with low correlation to other asset classes and lower volatility than high-yield bonds.

Yield for the short end

Short-end corporate bonds offer attractive current yield without taking on excessive credit or interest-rate risk.

Equity

5G infrastructure

5G creates an attractive opportunity and infrastructure companies should benefit before smartphone-focused companies.

Campaign warriors

We believe these companies are relatively less exposed to election-related volatility.

India profits and reforms reloaded

Promarket policy measures and relatively strong earnings growth should be supportive of equities.

Pricing power standouts

Companies with pricing power should be better insulated from the headwinds of slowing growth.

Reopening America

We identify companies well positioned for the economic recovery as well as long-term winners of a post-pandemic economy.

Equity-ESG

Sustainable value creation in EM

Incorporating ESG considerations into EM equity investment decisions may provide a competitive edge.

Gender lens

Evidence suggests that gender-diverse companies are more profitable and tend to outperform their less-diverse peers.

Alternatives

Event-driven strategies

Event-driven strategies can represent attractive ways to capitalize on companies' corporate actions.

Opportunities in dislocated credit markets

Stress in the credit market has expanded the opportunity for hedge fund and private managers to deploy capital toward dislocations.

KEY

- Sustainable longer-term investment theme
- Longer-term investments = Multi-business cycle
- Shorter-term investments = Current business cycle

Global economic outlook

The economic impact of the COVID-19 pandemic varies greatly by country and adds uncertainty to the outlook. Conditions in China continue to improve and have mostly returned to normal. The US recovery has made progress, but the number of new cases is high, and fading support from fiscal policy poses downside risks. Parts of Europe have reimposed social distancing restrictions. Weak demand should keep global inflation low in the near term despite central banks printing money on a vast scale.

Global growth in 2020 expected to be **-3.7%**

	Real GDP growth in %			Inflation in %		
	2019F	2020F	2021F	2019F	2020F	2021F
US	2.2	-4.0	3.8	1.8	1.3	1.8
Canada	1.6	-5.6	4.1	1.9	0.7	1.6
Brazil	1.1	-4.5	3.0	3.7	2.9	3.5
Japan	0.7	-5.1	4.0	0.5	0.0	-0.1
Australia	1.8	-3.9	3.0	1.6	0.8	1.7
China	6.1	2.5	7.6	2.9	2.5	2.1
India	4.2	-8.6	10.0	4.8	5.9	4.1
Eurozone	1.3	-7.7	6.1	1.2	0.2	1.0
Germany	0.6	-6.3	4.6	1.4	0.4	0.9
France	1.5	-10.0	7.7	1.3	0.5	0.9
Italy	0.3	-9.6	6.9	0.6	-0.2	0.3
Spain	2.0	-11.5	8.5	0.8	-0.4	0.6
UK	1.5	-10.1	7.0	1.8	0.8	1.5
Switzerland	1.1	-4.5	3.9	0.4	-0.6	0.2
Russia	1.3	-4.1	3.1	4.5	3.3	3.9
World*	3.0	-3.7	5.8	3.1	2.6	2.7

*Excluding Venezuela

Source: Reuters EcoWin, IMF, UBS, as of 14 October 2020

Note: In developing the CIO economic forecasts, CIO economists work in collaboration with economists employed by UBS Investment Research. Forecasts and estimates are current only as of the date of this publication and may change without notice.

Economic outlook summary

Brian Rose, PhD

Senior Economist Americas

House view

Probability: 65%*

Economic bounce-back continues

Consumer demand will remain relatively supportive, though the initial surge of deferred consumption is fading. The fact that labor markets strengthened faster and more significantly than had been expected will add some support to economic activity. While firms facing improving demand will likely complete the normalization of employment by early 4Q, the momentum of the labor market's improvement is likely to slow. Global trade remains strong as the goods sector continues to fare better than the services sector. Fiscal policy eases the economic damage of those sectors of the economy that are suffering from structural decline and should take a stronger role in driving growth in 2021. Central bank policy will provide liquidity as needed, signaling that rates will remain lower for longer.

Positive scenario

Probability: 15%*

Stronger bounce-back

Structural damage to the labor markets is less than expected, allowing a faster normalization of economic activity. Fiscal policy smooths the process of adjustment in the Fourth Industrial Revolution. Pandemic restrictions have limited economic consequences.

Negative scenario

Probability: 20%*

Fear or fiscal policy creates a new downturn

Fiscal policy in the US fails to reassure consumers about income security, causing them to increase savings and reduce consumption. Fear of the virus or of unemployment increases globally, limiting consumer spending.

*Scenario probabilities are based on qualitative assessment.

Equities

David Lefkowitz, CFA; Matt Tormey

Global equities have had a strong run since March. US elections, a coronavirus resurgence, or a breakdown in Brexit negotiations are risks, but we still think equities will continue to grind higher. Economies are running below potential, but data is improving. Progress on vaccine development and better testing and treatment capacities mean full lockdowns are unlikely to reoccur. Given high uncertainty, central banks and governments will have to stay in full stimulus mode. Earnings estimates have been cut dramatically, and now net earnings revisions have turned positive for global stocks.

Eurozone

⊖ Neutral

Eurozone equities had good relative performance in the early summer, but have rolled over again, as the rising euro, increased COVID-19 cases, and mixed 2Q results weighed on share prices. Europe's policy response is strong, with closer coordination and integration likely to help the medium-term activity outlook. Money supply is growing steadily, credit transmission is functioning, and bank lending is resilient, which should all help the recovery in growth. We expect the fall in Eurozone EPS this year to be around 39%. In 2021, we expect earnings to grow by 40%, versus the consensus view of 54%.

EURO STOXX (index points, current: 3,273)	June 2021 target
House view	3,600
➤ Positive scenario	3,900
➤ Negative scenario	2,800

Emerging markets

⊖ Neutral

EM equities are expensive based on the 14.5x price-to-earnings (P/E) and 1.7x price-to-book ratios. We think multiples will normalize closer to the recent average of 12.5x, on the back of an earnings rebound in the next 12 months. The corporate earnings outlook continues to recover as both one- and three-month forward earnings growth has turned positive. In addition, the China-led rebound along with abundant liquidity in capital markets should provide a benign fundamental outlook for companies. Risks remain a worsening of US-China tensions and failure to control the spread of COVID-19.

MSCI EM (index points, current: 1,136)	June 2021 target
House view	1,200
➤ Positive scenario	1,280
➤ Negative scenario	900

Japan

⊖ Neutral

The Japanese equity market has been resilient the last two months, while other developed markets faced some correction. While the Bank of Japan's asset purchases serve as downside protection, we believe the market is now fairly valued with its P/E ratio well above the historical average. We expect a 7% fall in corporate earnings this fiscal year, and a 42% rise next fiscal year, implying a stronger earnings rebound. Upcoming September quarter earnings are likely to be weak, but we continue to expect earnings growth starting from the December quarter.

TOPIX (index points, current: 1,644)	June 2021 target
House view	1,770
➤ Positive scenario	1,900
➤ Negative scenario	1,300

UK

⊕ Most preferred

While earnings growth for 2020 will be very negative, the momentum has troughed. We anticipate a significant rebound in earnings in 2021. A return of UK dividends will likely be supportive of the UK index in the coming months. Brexit negotiations continue to provide volatility. The market offers an attractive valuation at 16.3x 12-month trailing P/E, a premium to the 20-year historical average. Trailing relative valuations look undemanding, with MSCI UK trading at a 30% discount to MSCI All Country World. Its long-run average discount is 10%.

FTSE 100 (index points, current: 5,935)	June 2021 target
House view	7,000
➤ Positive scenario	7,500
➤ Negative scenario	5,000

Note: All current values as of 14 October 2020.

US Equities

US equities have scope for upside over the next several months, but markets could be choppy in the near term due to election-related uncertainty and the lack of additional government stimulus until after the election. There have been some setbacks on vaccine development, but we remain encouraged by the overall pace of progress and expect a successful vaccine could be identified before year-end. Once these uncertainties are resolved, markets should move higher, driven by a normalization in economic activity and a sharp rebound in S&P 500 profits in 2021.

US equities overview

Neutral

Third-quarter earnings season has started and we expect corporate profits to decline 15–17%, an improvement from the 32% decline in the second quarter. Early reports suggest analyst estimates are far too conservative, similar to trends from the second quarter. The consumer continues to be a key source of strength, bolstered by aggressive government support. With this in mind, we recently raised our 2020 S&P 500 EPS estimate to USD 130 (–21% y/y) and our 2021 estimate to USD 165 (+27% y/y). The election could be a source of volatility and create winners and losers within the market, but the recovery from the pandemic will likely remain the dominant market driver. Our S&P 500 price target for June 2021 is 3,700.

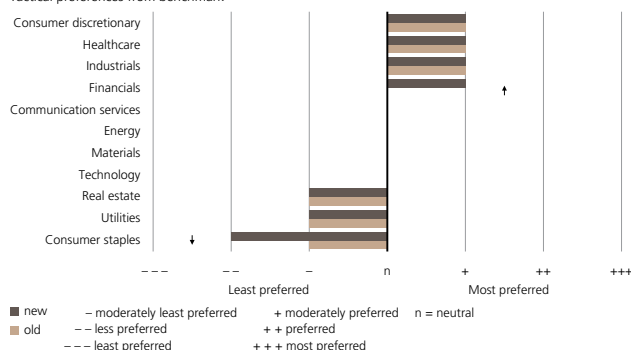
US equities – sectors

This month, we increased our preference for cyclicals by upgrading financials to moderately preferred and downgrading consumer staples to less preferred. As the economy recovers more completely next year, earnings for financials should snap back. Low mortgage rates, secular trends in e-commerce, and an improving labor market should benefit consumer discretionary, while industrials should benefit as global manufacturing ramps up. Healthcare appears to be pricing in quite dire political outcomes that appear unlikely. In a recovery, utilities and consumer staples are likely to lag. Real estate continues to face headwinds in office and retail segments.

Figure 1

Increased the cyclical tilt in our sector preferences

Tactical preferences from benchmark



Note: Scale represents degree of preference relative to the S&P 500 benchmark allocation. Source: UBS, sector changes as of 12 October 2020.

US equities – size

We continue to have a preference for mid-caps versus large-caps. Smaller-size segments continue to lag this year due to the uneven recovery that has benefited stay-at-home companies that are prevalent in the large-cap benchmark. However, mid-caps are more cyclical and have scope to recoup lost ground as social distancing measures ease and economic mobility picks up. These trends are likely to accelerate once a successful vaccine becomes widely available, which our base case assumes will happen by mid-2021. Finally, earnings expectations for mid-caps are improving relative to large-caps, and valuations appear attractive.

US equities – style

Growth has outperformed value by roughly 38% this year. The pandemic has boosted profits for some growth companies (e-commerce, cloud), while punishing them for value (banks, energy, aerospace, airlines). Still, growth stocks look very expensive and could be vulnerable if earnings snap back for value companies, perhaps on the heels of a successful vaccine. Interest rates could also rise as the economy more fully recovers, which would further support value stocks. However, given the fiscal and election uncertainties in the near term, we remain neutral on growth versus value.

S&P 500 (index points, current: 3,489) June 2021 target

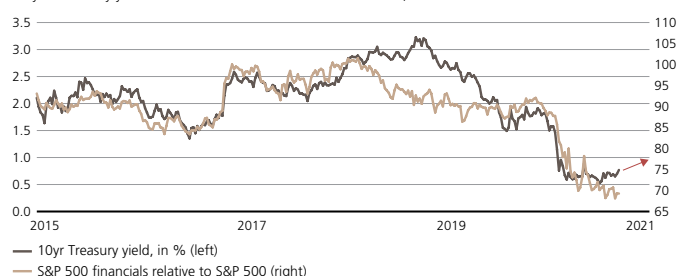
House view	3,700
Positive scenario	3,900
Negative scenario	2,800

Note: All current values as of 14 October 2020.

Figure 2

Financials could catch up to 10-year Treasury yield and benefit if rates rise

10-year Treasury yield and S&P 500 financials relative to S&P 500, indexed



Source: Bloomberg, UBS as of 14 October 2020.

Bonds

Leslie Falconio; Kathleen McNamara, CFA, CFP; Barry McAlinden, CFA; Frank Sileo, CFA

We keep our forecast for the 10-year Treasury. Even as economic growth resumes, we expect interest rates to stay low. The Fed is anchoring short-term rates close to zero, and we think they will remain there for years. While longer-term rates should move gently higher given ongoing recovery from the pandemic-induced slowdown, we believe any spikes would be short-lived in light of the Fed's active management of interest rates and its balance sheet.

Government bonds

⊖ Least preferred

After only a small move in interest rates in September, US 10-year yields moved higher in early October, reaching about 80bps, before retracting on rising COVID-19 fears and the upcoming election. We expect interest rates to rise into year-end, as the economy continues to recover.

US 10-YEAR YIELD (current: 0.7%)	June 2021 target
House view	0.9%
➤ Positive scenario	0.3%
➤ Negative scenario	1.3%

US high yield corporate bonds

⊖ Neutral

The search for yield will likely be a persistent supportive factor for the asset class, reinforced by accommodative global central bank policies. Primary market activity remains elevated in the US, with USD 47.1bn issued in September. CCC issuance has increased, suggesting easing capital market access for lower-rated issuers. The US HY issuer-weighted defaulted rate rose 40bps to 8.9% in September. Our forecast is for defaults to peak at 10–12% by year-end, and then default risks should abate next year.

USD HY SPREAD (current: 490bps)	June 2021 target
House view	500bps
➤ Positive scenario	400bps
➤ Negative scenario	700bps

US investment grade corporate bonds

⊕ Most preferred

IG bonds were resilient amid concerns about the timing of further fiscal stimulus in the US, rising COVID-19 cases in Europe, and US election outcome uncertainty. While further price upside is limited, in our view, there's still some carry versus higher-rated alternatives. Investor demand for the asset class should remain strong, given the ongoing search for yield amid accommodative central bank policy. The Fed's corporate credit facilities, which were extended until the year-end, remain a credible backstop to counter material spread widening and funding pressure.

US IG SPREAD (current: 133bps*)	June 2021 target
House view	140bps
➤ Positive scenario	110bps
➤ Negative scenario	250bps

*Data based on ICE BofA IG corporate index.

Emerging market bonds

⊕ Most preferred

USD-denominated EM bonds' spread compression has stalled over the last couple of months, although they remain inside their late March highs. Sizable monetary and fiscal stimulation globally, the easing of lockdown measures in many parts of the world, progress toward a COVID-19 vaccine, and higher commodity prices have all provided support. Economic and financial market outlooks remain uncertain, but we expect affected countries to bring the disease under control, a successfully developed vaccine, commodity prices to grind higher, and EM spreads to trade tighter in our forecast period. We maintain USD-denominated sovereign bonds as a most preferred bond segment on the back of ongoing search for yields by global investors.

EMBIG DIV. / CEMBI DIV. SPREAD (current: 410bps / 371bps)	June 2021 target
House view	360bps / 335bps
➤ Positive scenario	280bps / 280bps
➤ Negative scenario	550bps / 500bps

Note: Current values as of 14 October 2020.
Most preferred is to EM hard-currency sovereign bonds.

Municipal bonds

Neutral

In September, muni performance was muted (–0.1%), reflecting at least two headwinds for the sector. First, as expected, market technicals weakened after Labor Day. And, second, prospects for additional aid to state and local governments waned. Year-to-date, munis registered gains of 2.9%, despite witnessing steep losses in March and April. We continue to favor high-grade munis for the core of a muni portfolio. And, we see value in taxable municipal bonds amid increased issuance.

Current AAA 10-year muni-to-Treasury yield ratio: 131% (last publication: 120%).

Additional US taxable fixed income (TFI) segments

Agency bonds

The year-to-date total return for agency securities is about 5.5%, according to the ICE BofA index. Spreads have been essentially range bound after increased demand in the safe haven was witnessed during September's risk-off sentiment. We continue to view agency debt as a least preferred allocation. Given the amount of fiscal and monetary stimulus, there is much better value in either IG corporates or agency MBS.

Current spread is +16bps to the 5-year (versus +16bps last publication).

Mortgage-backed securities (MBS)

Treasury yields moved very little in September, but Agency MBS spreads widened on the view that heavy supply will continue for the remainder of the year. From a spread view at 87bps to the Treasury curve, current coupon MBS is well within our 70–100bps spread range, and we remain with a neutral outlook. For the first time, a 1.5% MBS coupon is now tradable but not incredibly liquid. We caution investors from taking on too much spread duration in these lower coupons, for they are at risk should interest rates rise. Maintain the barbell and look for continued support from the Fed until at least 2H21.

Current spread is +87bps to the 5-year and 10-year Treasury blend (versus +93bps last publication).

Figure 1

UBS CIO interest rate forecast

UST	14-10-2020	20-12-2020	31-03-2021	30-06-2021	01-09-2021
2-year	0.1	0.3	0.3	0.3	0.3
5-year	0.3	0.5	0.5	0.5	0.5
10-year	0.7	0.8	0.8	0.9	0.9
30-year	1.5	1.4	1.4	1.5	1.5

Source: Bloomberg, UBS, as of 14 October 2020

Non-US developed fixed income

Neutral

Over the past month, bond yields in non-US developed markets were mixed, moving mostly lower in the Eurozone but slightly higher in some other markets. On foreign exchange markets, the dollar was also mixed, with mostly small moves against other major currencies. On the whole, the asset class showed little change for the month. With yields negative on many bonds, non-US developed fixed income remains unattractive. We do not recommend a strategic asset allocation position on the asset class.

Preferred securities

Preferred stocks posted solid quarterly performance driven by a benign rate backdrop, spread compression, and supportive technicals. July's gains were among the sector's best-ever monthly returns, but the momentum petered out with a marginal loss in September. The fourth quarter is off to a good start driven by strong ETF flows. Yield spreads look reasonable, but the current Treasury curve paradigm makes historical comparisons less meaningful. The backdrop is challenging for floaters and fixed-to-floats (F2Fs) near first call date; intuitively coupons float lower for the foreseeable future, while investors may want higher yields in times of volatility. For these, higher reset spreads and more call protection are better traits (while being mindful of Libor fallback prospectus language). Strategically, we favor fixed rate coupons.

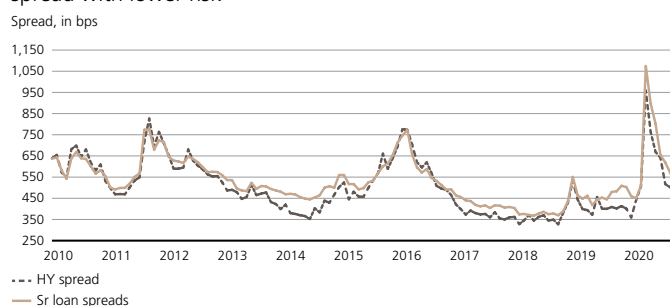
Treasury Inflation-Protected Securities (TIPS)

The TIPS market is recovering from a very difficult September as the delay of the fiscal stimulus package and vague implementation surrounding average inflation targeting from the Fed took its toll. Since the beginning of October, however, inflation expectations have recouped most of their September loss. We maintain a preferred weighting to 10-year TIPS versus nominal Treasuries for those who continue to look for more of a safe-haven hedge. At 1.74% for 10-year BEI, the market is trending toward the year-to-date high of 1.8%.

Current 5-year breakeven inflation rate of 1.52% (1.55% last month).

Figure 2

With HY spreads at pre-COVID-19 levels, senior loans offer higher spread with lower risk



Source: S&P LCD, ICE BofA, UBS as of 14 October 2020

Commodities and other asset classes

Dominic Schnider, CFA, CAIA; Giovanni Staunovo; Thomas Veraguth; Wayne Gordon

Commodity indexes had a rough month in September. Energy and precious metals endured setbacks, while agriculture and livestock managed to keep their heads above water. Overall, cyclical commodities were hurt by the risk-off environment, the stronger USD, and rising COVID-19 cases and the subsequent renewed restrictions in parts of Europe and Asia, which have raised concerns about the pace of the demand recovery. Precious metals were also pressured by USD strength, while mixed messages from Fed speakers undermined inflation expectations and caused real interest rates to rise. But we maintain our positive outlook for the asset class. Our take has been that this journey is unlikely to be smooth and straight. This does not mean activity will not expand, but growth from here will likely be more moderate and vulnerable in the absence of a vaccine.

Commodities

+ Most preferred

Precious metals Gold is waiting for the next leg in fiscal and monetary support, or the next step down in negative real interest rate expectations. We see a high likelihood that governments and central banks will raise their support for growth again, which would benefit precious metal prices. Also, the buildup of uncertainties ahead of the US election and the chance of a contested outcome boost the yellow metal's attractiveness as a diversifier in a portfolio context.

GOLD (current: USD 1,902/oz)	June 2021 target
House view	USD 1,900/oz
➤ Positive scenario	USD 2,200–2,300/oz
➤ Negative scenario	USD 1,600–1,700/oz

Crude oil We maintain our positive outlook on oil prices over the next 12 months. Falling oil inventories across the globe suggest that the oil market remains undersupplied. And, while the easiest gains on the oil demand recovery are behind us, we still expect demand to rise at a slower pace over the coming months. We also expect oil supply to stay in check, as we think crude prices need to trade above USD 50/bbl in order to entice stronger production beyond OPEC+. Against this backdrop, the Brent price should rise to USD 45/bbl by the end of the year and to USD 55/bbl by mid-2021.

BRENT (current: USD 43.32/bbl)	June 2021 target
House view	USD 55/bbl
➤ Positive scenario	USD 70–80/bbl
➤ Negative scenario	USD 30–40/bbl

Base metals Base metal prices have recovered strongly this year, particularly copper and zinc. But the supply challenges that gripped mine output in 1H are reversing. A stronger demand lift from the developed world and emerging economies (ex-China) is needed to trigger balanced or deficit markets across the sector and keep prices on an upward trajectory, in our view.

Agriculture Weather-related downgrades to grains and oilseed crops in the US and Western Europe and the subsequent liquidation of short positions in futures markets have supported prices. Beijing has also stepped up its purchases of agricultural products, which coincided with positive headlines on the US-China Phase 1 trade review. With or without the trade deal, given the suspected depletion of domestic reserves, China will likely accelerate its purchases from the US into the year-end, given seasonality is making US exports highly price competitive until Brazil's harvest begins in late January 2021. Finally, La Niña risks have risen in recent weeks, and Brazilian soybean planting has already been delayed due to dry conditions.

Other asset classes

Listed real estate We expect earnings to fall 4.2% in 2019–20 and grow 8.3% in 2020–21 (ex. emerging markets), driven by short-term poor rent collection and value impairment on the downside, but supported over the medium term by attractive development projects and high occupancy to the upside. Retail landlords need to deleverage, and their situation continues to deteriorate. Some companies' risk spreads have expanded amid sharper structural uncertainties in their specific markets (retail, lodging, healthcare), while others may enjoy very good refinancing conditions and increased tenant demand (industrial, residential, some offices). Occupancy is key.

RUGL Index (current: USD 4,842)	June 2021 target
House view	USD 5,200
➤ Positive scenario	USD 5,400
➤ Negative scenario	USD 4,600

Note: Current values as of 14 October 2020.

Foreign exchange

Thomas Flury, Strategist

Among G10 currencies, we remain bearish on the US dollar. Next year, the euro should benefit from an EU-wide recovery plan.

USD

⊖ Least preferred

Among G10 currencies, we remain bearish on the US dollar. US interest rates have collapsed, and the Federal Reserve has supplied markets with an unprecedented amount of USD cash to alleviate funding issues, easing its policy stance more proactively than other central banks globally. The US election is a risk factor for the USD. A Democratic sweep would, in our view, reinforce the USD's weakness.

EUR

⊖ Neutral

Next year, the euro should benefit from an EU-wide recovery plan. We think EURUSD will overcome resistance at 1.20 either at the end of this year or early next year, and then stay under appreciation pressure.

UBS CIO FX forecasts

	Dec 20	Mar 21	Jun 21	Sep 21
EURUSD	1.20	1.20	1.21	1.22
EURCHF	1.09	1.09	1.09	1.10
USDCHF	0.91	0.91	0.90	0.90
GBPUSD	1.35	1.36	1.39	1.40
EURGBP	0.89	0.88	0.87	0.87
GBPCHF	1.22	1.24	1.25	1.26
USDJPY	104	104	104	104
EURJPY	125	125	126	127
USDCAD	1.31	1.29	1.27	1.25
AUDCAD	0.71	0.72	0.73	0.74
NZDUSD	0.65	0.66	0.67	0.68
EURSEK	10.30	10.30	10.30	10.30
EURNOK	10.40	10.30	10.20	10.20

Source: UBS, as of 14 October 2020

Note: Past performance is not an indication of future returns.

GBP

⊖ Neutral

UK and EU negotiators see a good chance for an agreement to be found in time. We are confident that negotiations will eventually succeed and the pound will appreciate. However, the path may not be straight and the pandemic also weighs on the pound.

CHF

⊖ Neutral

We expect the USD to lose ground on a broad trade-weighted basis in the coming quarters, and this should take USDCHF lower. The SNB is looking at the trade-weighted impact when steering its intervention.

JPY

⊖ Neutral

The JPY should profit from investors becoming increasingly skeptical about the US current account and fiscal deficits, while at the same time the confidence of an Asia-Pacific growth rebound improves. We expect USDJPY to fluctuate around 104 in the coming year.

Other developed market currencies

⊖ Neutral

Global risk sentiment remains the key driver for USDCAD. Political uncertainty, not least from the US, and risks to the global recovery have hurt the loonie lately, but we expect those headwinds to progressively fade into 2021. Canada's economic rebound continues, with GDP now just 6% below the February high.

Weaker iron ore prices, a deteriorating current account, and the compressing spread between Australian and US government bond yields may pose challenges to the AUD, but the global economic recovery and availability of a vaccine in 2021, as well as broader USD weakness, should be supportive of the pair throughout 2021.

Key forecasts

+ Most preferred

= Neutral

- Least preferred

Asset class	Preference	Change this month	Benchmark	Value	m/m perf. in % ¹	Forecast (June 2021)		
						House View	Positive scenario	Negative scenario
EQUITIES								
US	=	-	S&P 500	3489	3.0%	3700	3900	2800
Eurozone	=	-	Euro Stoxx	3273	-2.0%	3600	3900	2800
UK	+	-	FTSE 100	5935	-2.4%	7000	7500	5000
Japan	=	-	Topix	1644	0.0%	1770	1900	1300
Switzerland	=	-	SMI	10293	-2.5%	11000	11500	9000
Emerging Markets	=	-	MSCI EM	1136	1.7%	1200	1280	900
BONDS								
US Government bonds	-	-	10yr Treasury yield	0.73%	-0.2%	0.85%	0.3%	1.3%
US Corporate bonds (IG)	+	-	ICE BofA IG spread	133	0.0%	140 bps	110 bps	250 bps
US High-yield bonds	=	-	ICE BofA US HY spread	489	0.6%	500 bps	400 bps	700 bps
EM Sovereign	+	-	EMBI Diversified spread	410	-0.4%	360 bps	280 bps	550 bps
EM Corporate	=	-	CEMBI Diversified spread	371	-0.3%	335 bps	280 bps	500 bps
OTHER ASSET CLASSES								
Gold	+	-	Spot price	1902 /oz.	-2.9%	1900	2200–2300	1600–1700
Brent crude oil	+	-	Spot price	43.32 /bbl.	2.6%	55	70–80	30–40
Listed real estate	=	-	RUGL Index	4842	-2.3%	5200	5400	4600
CURRENCIES								
			Currency pair					
USD	-	-	USD	NA	NA	NA	NA	NA
EUR	=	-	EURUSD	1.17	-0.6%	1.21	NA	NA
GBP	=	-	GBPUSD	1.30	0.3%	1.39	NA	NA
JPY	=	-	USDJPY	105	0.2%	104	NA	NA
CHF	=	-	USDCHF	0.91	0.5%	0.90	NA	NA

Source: Bloomberg, UBS. Current values as of 14 October 2020. Currency values as of 15 October 2020.

¹ Month over month.

Past performance is no indication of future performance. Forecasts are not a reliable indicator of future performance.

Investment committee

Global Investment Process and Committee description

The UBS investment process is designed to achieve replicable, high-quality results through applying intellectual rigor, strong process governance, clear responsibility, and a culture of challenge.

Based on the analyses and assessments conducted and vetted throughout the investment process, the Chief Investment Officer (CIO) formulates the UBS Wealth Management Investment House View at the Global Investment Committee (GIC). Senior investment professionals from across UBS, complemented by selected external experts, debate and rigorously challenge the investment strategy to ensure consistency and risk control.

Global Investment Committee composition

The GIC comprises top market and investment expertise from across all divisions of UBS:

- Mark Haefele (Chair)
- Solita Marcelli
- Paul Donovan
- Tan Min Lan
- Themis Themistocleous
- Bruno Marxer (*)
- Adrian Zuercher
- Mark Andersen

US Investment Strategy Committee description

We recognize that a globally derived house view is most effective when complemented by local perspective and application. As such, UBS has formed a Wealth Management Americas US Investment Strategy Committee.

US Investment Strategy Committee:

- Solita Marcelli
- Jason Draho (chair)
- Leslie Falconio
- David Lefkowitz
- Brian Rose
- Daniel Scansaroli

(*) Business area distinct from Chief Investment Office Global Wealth Management

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Publisher

UBS Financial Services Inc.
CIO Global Wealth Management
1285 Avenue of the Americas
8th Floor
New York, NY 10019

This report was published
on 16 October 2020

Lead authors

Mark Haefele
Solita Marcelli

Authors (in alphabetical order)

Jason Draho
Leslie Falconio
Thomas Flury
Wayne Gordon
Markus Inrgartinger
Laura Kane
Michelle Laliberte
David Lefkowitz
Barry McAlinden
Kathleen McNamara
Brian Rose
Dominic Schnider
Frank Sileo
Giovanni Staunovo
Thomas Veraguth
Justin Waring
Michelle Laliberte

Cover Image

Getty Images

Editor

Abe De Ramos
Barbara Rounds-Smith

Project Management

John Collura
Allie Gorin
Matt Siegel

Desktop Publishing

John Choi
Cheryl Seligman

Cognizant Group
Sunil Vedangi

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Appendix

Emerging Market Investments

Investors should be aware that Emerging Market assets are subject to, among others, potential risks linked to currency volatility, abrupt changes in the cost of capital and the economic growth outlook, as well as regulatory and socio-political risk, interest rate risk and higher credit risk. Assets can sometimes be very illiquid and liquidity conditions can abruptly worsen. CIO Americas, WM generally recommends only those securities it believes have been registered under Federal US registration rules (Section 12 of the Securities Exchange Act of 1934) and individual State registration rules (commonly known as "Blue Sky" laws). Prospective investors should be aware that to the extent permitted under US law, CIO Americas, WM may from time to time recommend bonds that are not registered under US or State securities laws. These bonds may be issued in jurisdictions where the level of required disclosures to be made by issuers is not as frequent or complete as that required by US laws.

For more background on emerging markets generally, see the CIO Americas, WM Education Notes "Investing in Emerging Markets (Part 1): Equities," 27 August 2007, "Emerging Market Bonds: Understanding Emerging Market Bonds," 12 August 2009 and "Emerging Markets Bonds: Understanding Sovereign Risk," 17 December 2009.

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Version B/2020. CIO82652744

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INVESTMENT COMMENTS

We have a long way to go, but so far the post-COVID economy looks surprisingly robust. If colder weather does not bring a resurgence of the virus, then it feels safe to say that we are firmly on the road to economic recovery.

From peak to trough, U.S. GDP contracted by 10%, the third largest decline since at least 1910. The second-quarter average was -9%. More recently, September's unemployment report published by the Bureau of Labor Statistics measured unemployment at 7.9%, down from a peak of 14.7% in April. This probably overstates the rebound slightly, as the labor force participation rate ticked down to 61.4% and is about 2% below its pre-pandemic levels. Some workers have stayed on the sidelines and aren't counted as unemployed.

Interest rates are pinned at zero. The Federal Reserve publishes its board members' expectations for future rates, and short-term rates are expected to remain near zero for at least three more years. This partly reflects the Fed's obsession with fighting deflation at all costs while preserving ample amounts of banking system liquidity. It also reflects the economic reality that recovering to previous levels of peak activity will probably take years. Don't hold your breath waiting for your savings account to pay interest again.

The Fed is determined not to tighten too quickly under any circumstances. In late August, Jerome Powell announced a new policy targeting *average* inflation of 2%, as opposed

to targeting *current* inflation of 2%. The difference is that the Fed plans to allow for catch-up inflation after periods of below-target inflation. The 2% inflation target, while widely recognized, is really a made-up number to begin with. The Fed's original mission of full employment and price stability implies that, if anything, it should aim for zero inflation, but monetary economists have gradually established a consensus opinion that 2% is just high enough to spur economic activity without unacceptably damaging the currency. By changing its 2% target to an average instead of a constant, the Fed pushes a little further out on the inflation limb. We note somewhat cynically that a wider variety of more inflationary interventions can be excused under a "2% average" policy than a "2% constant" policy.

This all sounds quite bearish for paper money, but currency markets do not seem bothered. In the wake of these two Fed announcements, the U.S. dollar briefly rallied, and gold fell, before both eased back closer to their recent averages. The market basically shrugged, and perhaps the best explanation why is that the Fed is simply articulating what everybody knows. Measured consumer price inflation is currently too low to justify higher interest rates, and higher inflation would probably be positive for the economy overall, at least to a point. We may be sowing the seeds of very high inflation long term, but we don't live in the long term. For now, consumer prices are mostly controlled.

Asset price inflation is another story, with the

S&P 500 up 6% through September and bonds also higher in 2020 due to falling interest rates. Gold has been quiet in recent months but remains up 27% on the year. Among major asset classes, only commercial real estate is struggling, with the real estate investment trust (REIT) sector down 12% through September.

Zooming in on U.S. equities, the two hottest sectors in 2020 are Consumer Cyclical and Technology, both up 33% through early October according to FinViz. The weakest are Financial stocks, down 15%, and Energy, down an eye-watering 47%. One has to wonder whether investors may be projecting the current state of affairs forward too far? We are not going to sit home on our computers spending stimulus checks forever. Eventually people will get out and travel by car, and even plane, again. Even the poor, beleaguered banking sector must eventually improve once the yield curve returns to a more normal shape.

Across sectors, growth has trounced value, with J.P. Morgan measuring growth's outperformance at 25% in small stocks, 27% in mid-cap stocks, and 36% for large stocks. This makes some sense, as the pandemic has accelerated trends that growth stocks benefit from. If value pays you now, and growth pays you later, then pulling the future forward favors growth under "discounted cash flow" valuation models. As with the sector performance extremes noted above, however, the huge magnitude of growth's outperformance feels overdone.

And within the hottest sectors, the hottest stocks seem to be gobbling up more than their natural share of investor dollars. JP Morgan's *Guide to the Financial Markets* from September 30 notes that the five largest S&P 500 stocks by market capitalization—namely Apple, Amazon, Microsoft, Alphabet, and Facebook—currently comprise 23% of the overall index value. The previous peak came in 2000 at 18%.

Lawmakers are noticing. Multiple news sources have stated that various government agencies will soon file complaints against Apple, Alphabet, Amazon, and Facebook. The

timing here just before the November election is no coincidence, as both parties are concerned about big tech's influence on voters. Challenging their competitive practices could help crimp them at this sensitive time.

Which brings us, finally, to the election itself. Betting markets currently give Donald Trump approximately a 33% chance of retaining his office, down from 50% in March. Polling data implies that Trump is way behind at the moment, but the betting markets seem to imply that a late surge is possible. The Senate is considered more of a tossup. If Joe Biden wins along with the Senate tipping into Democrat control, then the market will probably anticipate a combination of higher taxes and more rapid fiscal stimulus. It is a little early to speculate about the potential market impact of policy changes following a future election. We note there is a possibility that a mail-in voting surge overwhelms clerks' ability to count votes and delays election results. This frustrating and divisive possibility sounds a little unlikely, but the way 2020 has gone, we really should expect the unexpected.



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Published by ICLUBcentral Inc.

711 W. 13 Mile Rd., Madison Heights, MI 48071

1-248-654-3100 1-877-33-ICLUB

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EDITOR-IN-CHIEF Douglas Gerlach

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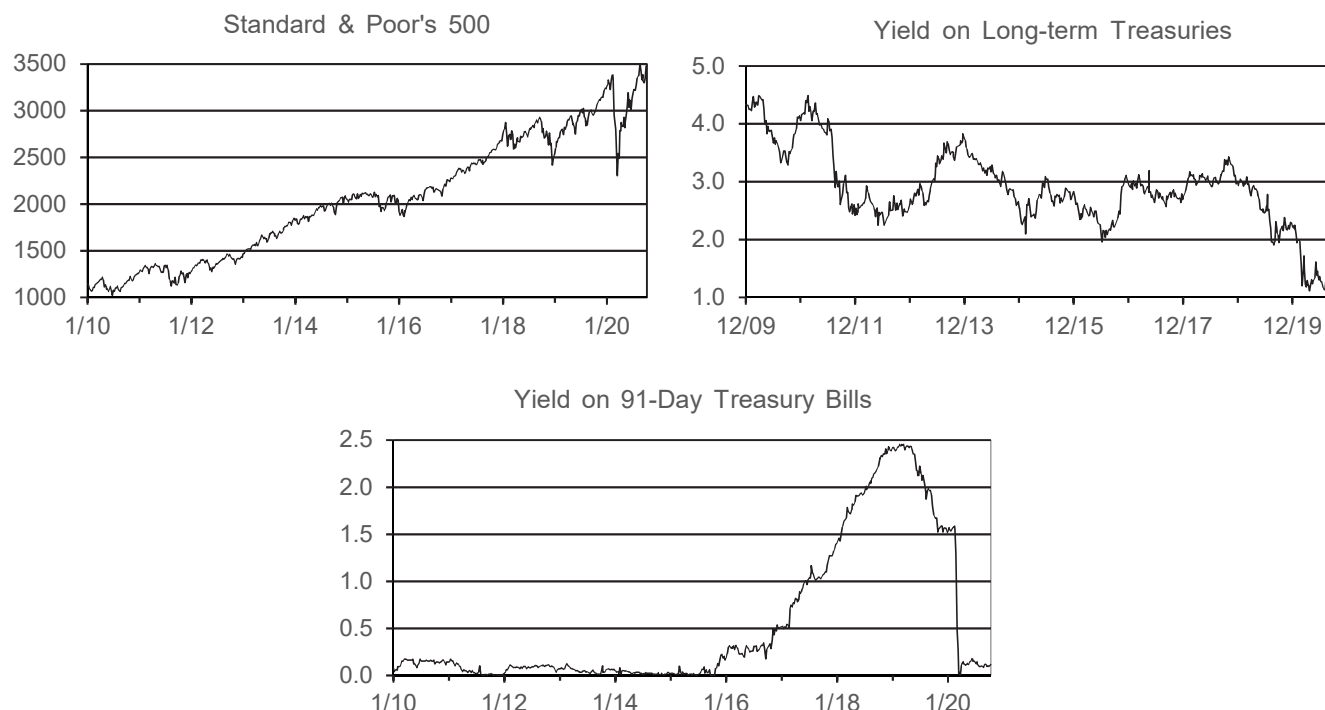
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Key Market Indicators (through October 14, 2020)



NEWS OF COMPANIES

BlackRock had a solid second quarter, but a range of infrequent items made earnings appear more favorable than they really were. Revenue increased 18%, but even this was impacted by significant performance-based fees that produced almost two-thirds of that growth. Performance fee income also resulted in performance bonus expense to employees, so we can't just reduce earnings by the amount of those fees. There were also expenses related to a new product launch and lower revenue from securities lending. EPS gained 24%. The strong structure **BlackRock** has put in place over the years fosters one of the few things under its control—new asset flow grew at a 7% annualized rate in the quarter and was strong across the board. This is the underpinning of its long-term earnings growth.

BLK (639.85) is a buy up to 565.

CarMax's Q2 results demonstrated substantial recovery versus last quarter with strength across all aspects of its business.

However, the results failed to meet high expectations and sent shares lower by 11%. Overall sales grew 3%, with used unit sales in comparable stores increasing just over 1% despite continued occupancy restrictions in approximately half its stores. Positive used unit comparable sales continued into Q3. Saleable inventory was below targeted levels during the quarter, serving as a headwind to results. Lower-than-targeted levels of inventory continued through quarter end, but as of the earnings release date inventory was again in a good position. Used vehicle gross profit per vehicle increased slightly despite an approximate 3% decline in average used vehicle selling prices. Wholesale unit sales grew over 5% helped by a higher buy rate, partly offset by lower appraisal traffic. Wholesale gross profit per unit increased, aided by robust market appreciation. CarMax Auto Finance income grew 29% due to a reduction in the provision for loan losses, an increase in net margin due to lower funding costs, and growth in managed receivables. EPS of \$1.79 was up nearly 28%.

The company announced the completion of its rollout of nationwide online car buying. Management continues to emphasize the omni-channel experience **CarMax** offers. The company plans to increase its marketing spend in the back half of the year to help drive more customers to its digital properties. This is in direct response to online-only competitors, like Carvana, which are growing rapidly. The advertising will highlight the advantages of **CarMax's** omni-channel model versus online-only and physical-only competitors. (► *Alert emailed to subscribers on September 25, 2020.*)

KMX (91.57) is a buy up to 87.

FactSet's fourth fiscal quarter results were initially received with enthusiasm by the market. Revenue grew 5%, about double the previous quarter's pace, but fairly consistent with the past year or so. EPS gained 16%; pretax profit growth of 4% was among the slowest quarters of the past three years, but its tax rate was 6% compared to 15.5% in last year's fourth quarter. Cost savings from reduced travel spending largely offset the drag from **FactSet's** ongoing three-year investment program. Organic growth in Annual Subscription Value plus services was 5.3% in the quarter and fiscal year. This growth rate is expected to be slightly lower next year. The company guides to adjusted EPS down 1% to up 3% in Fiscal 2021, although its guidance tends to be slightly conservative.

FDS (335.24) is a buy up to 250.

Fastenal continues to enjoy a tailwind from sales of pandemic-related safety products, helping offset softer demand in its traditional markets. Sales grew more than 2% with daily sales increasing 2.7%. Safety product sales grew 34% and represented nearly 25% of total sales. Fasteners, which accounted for 30% of sales, were down 7% reflecting softness in manufacturing and construction markets. Management noted a gradual sequential improvement in business activity each month of the quarter. Gross margin improved sequentially but declined versus a year ago as a result of

increased sales of safety products, which generally possess lower margins. Excellent operating expense control led to a year-over-year increase in operating margin with EPS of \$0.38, up over 3%.

Q3 signing activity for onsite locations and vending machines remained below pre-pandemic levels but improved through the quarter. The company signed 62 new on-site customers as total onsite locations increased nearly 15% versus a year ago. **Fastenal** also signed 4,680 vending devices with an installed base that increased nearly 7%. Though the company had previously pulled its guidance for vending and onsite signings this year, commentary was generally upbeat about the continued opportunity from these growth drivers.

FAST (44.95) is a buy up to 30.

Nike's fiscal Q1 results easily exceeded expectations. Revenue declined 1%, as strong digital traffic helped offset lower foot traffic at retail stores globally. Digital sales in the quarter grew 82%, as **Nike** is now achieving its goal for 30% of sales to come from digital nearly three years ahead of schedule. **Nike** expects 50% digital penetration in the foreseeable future and continues to invest to support its digital growth. Gross margin was significantly better than last quarter as higher promotions to reduce excess inventory were offset by the reversal of accruals associated with purchase order cancellations due to a stronger-than-anticipated rebound in demand. Inventory at quarter end was up 15% versus a year ago but is on track to normalize by the end of fiscal Q2. EPS grew 10% to \$0.95.

Nike has worked to restructure its operations, incurring costs of \$200-\$250 million in the first half of the year. Despite the uncertain environment, management expects full year revenue will increase high-single to low-double digits led by continued strong digital performance. This guidance represented an increase from prior expectations for "flat to up" full year revenue. Fiscal Q2 revenue is expected to be approximately flat, held back by supply limitations. Full year gross margin is expected to be flat

with SG&A dollars also flat including the restructuring costs.

NKE (127.66) is a buy up to 68.

Synnex is recovering nicely from COVID-19 business disruption. For the third quarter ended August 31st, sales grew 4%, 5% in constant currency. The Technology Services (TS) segment grew 5%, with strength from hardware offerings that support remote computing offset by some weakness from larger customers delaying office buys. Concentrix, its Business Process Outsourcing (BPO) segment, saw revenue flat, as weakness from travel, transportation, and tourism was offset by strong growth from technology, healthcare, financial services, and e-commerce. EPS grew 8%, to \$2.60, as excellent operating leverage, particularly from Concentrix, was offset by COVID-19 expenses.

Fiscal fourth quarter guidance anticipates sales of \$6.45-\$6.65 billion, a drop of 2% to growth of 1%, and EPS of \$2.95-\$3.20, down 13% to up 7%. Both segments of the business continue to be negatively impacted by COVID-19, with TS suffering from supply chain disruptions that delay hardware sales and Concentrix incurring inefficiencies as employees continue to provide services remotely.

Synnex is confident it will complete its spinoff of Concentrix as a stand-alone public company, targeting December 1st to coincide with the ending of fiscal year 2020. Stockholders will receive one Concentrix share for each **Synnex** share. Management anticipates capitalizing Concentrix with minimal cash and debt of \$1.1 billion, less than a 2.0x Debt/EBITDA multiple. This should provide both companies with sufficient capacity to invest in organic growth and acquisition opportunities.

SNX (145.14) is a buy up to 147.

UnitedHealth is winning market share in public healthcare plans, especially Medi-

care Advantage, while continuing to grow its private business through price increases. Third quarter revenue of \$65.1 billion represented 8% growth. Total plan revenue increased 5%. Optum, which includes prescription management and healthcare delivery, grew 21%.

After falling by as much as one-third in the second quarter, total customer healthcare visits rebounded to 95% of their normal seasonal pattern in the third quarter. Despite delivering a modestly lower volume of care overall, operating costs increased 9%, driven by consumer support measures and COVID-related direct medical costs. EPS of \$3.30 declined 10%. The company raised its full-year expectation for adjusted EPS by 5% at the midpoint, expecting adjusted earnings growth of 9% to 11%.

UNH (321.99) is a buy up to 324.

* * * * *

"Est. EPS" on the ranking tables found before this month's company write-ups were updated to reflect estimated earnings for the twelve months ending 12/31/2021. Other individual adjustments are made when circumstances deem it necessary. Any of these changes can affect the buy and sell prices. We typically forecast approximately twelve months into the future. However, the depth of the sudden economic crisis made 2020 earnings estimates unreliable, leaving them as an inappropriate springboard for growth projections. Instead of beginning with EPS approximately one year into the future (calendar 2020) and projecting four more years of growth at the long-term growth rate, we begin approximately two years out (calendar 2021) and project three more years at the long-term growth rate. Earnings should accelerate after a down year like 2020, and we felt that beginning with 2021 estimates would be the best way to smooth out that down-and-up effect.

Recent Earnings Reports for November 2020

Company	Qtr End	—Earnings—		% Change
		This Year	Last Year	
BlackRock	9/30	8.87	7.15	24.1%
CarMax	8/31	1.79	1.40	27.9%
FactSet *	8/31	2.71	2.34	15.8%
Fastenal	9/30	0.38	0.37	3.4%
Nike	8/31	0.95	0.86	10.3%
Synnex	8/31	2.60	2.40	8.3%
UnitedHealth Group	9/30	3.30	3.67	-10.1%

* Excludes the effects of nonrecurring items.

Dividend Changes

None

Stock Splits

None



James Skubik,
CFA

Scott Horsburgh,
CFA

Dan Boyle,
CFA

Miles Putnam,
CFA

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October 14, 2020

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L	Sym	Company Name	Price	Div	Yld	12/31/21	Ret	Grth	P/E	RV	Up to Y	At	Ratio	Grth	Cap	Rec
1	AAPL	Apple	121.19	3.28	2.7%	4.06	-0.5	10%	29.9	209%	58.00	121.00	1.0	299%	L	9/15
1	ABT	Abbott Labs	107.75	1.44	1.3%	2.72	4.9	12%	39.6	158%	66.00	82.00	0.1	330%	L	8/17
1	ADP	ADP	148.51	3.64	2.5%	5.53	12.5	8%	26.8	99%	133.00	176.00	1.6	335%	L	8/09
3	AKAM	Akami Technologies	113.33	0.00	0.0%	3.79	13.0	12%	29.9	98%	115.00	139.00	3.3	249%	M	7/20
4	AL	Air Lease Corp.	29.50	0.60	2.0%	5.15	32.6	16%	5.7	58%	39.00	62.00	7.0	36%	M	10/20
2	ALGN	Align Technology	333.10	0.00	0.0%	7.54	6.7	15%	44.2	158%	187.00	264.00	0.3	295%	L	05/20
3	ALGT	Allegiant Travel	128.97	0.00	0.0%	8.88	12.3	12%	14.5	104%	119.00	148.00	2.0	121%	M	12/19
2	AME	Ametek	107.90	0.72	0.7%	3.70	5.4	13%	29.1	143%	61.00	83.00	0.2	224%	M	3/17
2	ANET	Arista Networks	228.07	0.00	0.0%	8.45	14.2	15%	27.0	112%	204.00	283.00	3.3	180%	L	7/19
2	ANSS	Ansys	351.40	0.00	0.0%	6.91	1.3	12%	50.9	179%	194.00	241.00	-0.1	424%	M	7/14
3	ATH	Athene Holding Ltd.	35.70	0.00	0.0%	7.01	24.3	12%	5.1	59%	42.00	67.00	5.5	43%	M	11/19
3	AZPN	Aspen Technology	133.08	0.00	0.0%	4.53	13.7	12%	29.4	104%	115.00	160.00	1.7	245%	M	3/16
4	BEAT	BioTelemetry, Inc.	44.56	0.00	0.0%	2.12	24.7	16%	21.0	76%	46.00	75.00	3.2	131%	M	10/20
2	BKNG	Booking Holdings	1732.60	0.00	0.0%	71.06	15.2	12%	24.4	92%	1781.00	2232.00	3.5	203%	L	12/19
1	BLK	BlackRock	639.85	14.52	2.3%	32.10	11.1	10%	19.9	113%	565.00	700.00	1.9	199%	L	10/19
3	BOOT	Boot Barn Holdings	32.82	0.00	0.0%	1.73	19.0	16%	19.0	66%	24.00	43.00	1.5	119%	S	10/19
3	CACI	CACI International	217.19	0.00	0.0%	15.44	16.2	11%	14.1	88%	220.00	303.00	3.2	128%	M	11/20
2	CAKE	Cheesecake Factory	30.13	1.44	4.8%	1.79	16.5	10%	16.8	96%	30.00	36.00	2.9	168%	M	1/20
3	CASH	Meta Financial Group	21.99	0.20	0.9%	2.93	31.6	12%	7.5	50%	26.00	53.00	4.4	63%	S	3/20
2	CBOE	Cboe Global Mkts.	84.50	1.68	2.0%	4.15	18.6	10%	20.4	77%	95.00	125.00	6.5	204%	M	8/20
3	CCI	Crown Castle Int'l.	165.00	4.80	2.9%	6.71	5.0	7%	24.6	136%	113.00	140.00	0.1	351%	L	12/16
3	CENTA	Central Garden & Pet	38.32	0.00	0.0%	1.88	9.2	8%	20.4	111%	30.00	44.00	1.0	255%	S	3/20
3	CGNX	Cognex	67.36	0.22	0.3%	1.08	2.7	15%	62.2	187%	31.00	50.00	0.0	415%	S	6/11
2	CMCSA	Comcast	45.28	0.92	2.0%	2.85	15.4	12%	15.9	96%	51.00	56.00	3.5	133%	L	11/20
2	CMI	Cummins	221.77	5.24	2.4%	12.02	7.3	10%	18.5	145%	138.00	192.00	0.3	185%	L	9/18
2	CPRT	Copart	115.80	0.00	0.0%	3.01	1.9	15%	38.5	186%	62.00	81.00	-0.1	257%	M	11/16
2	DG	Dollar General	220.15	1.44	0.7%	9.76	7.4	10%	22.6	126%	118.00	208.00	0.4	226%	M	6/18
2	DHI	D.R. Horton, Inc.	78.28	0.70	0.9%	6.72	15.1	12%	11.6	97%	62.00	97.00	1.4	97%	L	6/20
2	DIS	Walt Disney	126.58	1.76	1.4%	5.58	9.8	12%	22.7	123%	103.00	135.00	1.7	189%	L	7/18
3	DORM	Dorman Products	91.17	0.00	0.0%	3.27	6.7	12%	27.9	140%	65.00	81.00	0.5	233%	S	8/18
3	ENSG	Ensign Group	59.82	0.20	0.3%	3.30	18.9	11%	18.1	80%	50.00	92.00	1.9	165%	S	8/20
3	EPAM	EPAM Systems	346.89	0.00	0.0%	6.33	3.6	17%	54.8	179%	189.00	244.00	0.0	322%	M	9/16
3	ESNT	Essent Group Ltd.	42.33	0.64	1.5%	4.78	14.1	12%	8.9	107%	39.00	49.00	2.1	74%	M	7/20
2	ESS	Essex Property Trust	206.89	8.31	4.0%	13.05	15.7	6%	15.9	81%	216.00	284.00	4.2	265%	L	9/20
3	EWBC	East West Bancorp	36.10	1.10	3.0%	3.74	22.3	10%	9.6	73%	41.00	60.00	6.0	96%	M	11/18
1	FAST	Fastenal	44.95	1.00	2.2%	1.56	11.0	12%	28.7	120%	30.00	44.00	0.7	239%	L	6/18
1	FB	Facebook, Inc.	271.82	0.00	0.0%	10.10	18.4	17%	26.9	99%	263.00	356.00	2.7	158%	L	1/20
2	FDS	FactSet Research	335.24	3.08	0.9%	10.25	4.3	6%	32.7	128%	250.00	314.00	0.3	545%	M	11/16
3	FFIV	F5 Networks	129.11	0.00	0.0%	6.13	12.2	10%	21.1	98%	132.00	159.00	3.9	211%	M	3/15
3	FIVE	Five Below, Inc.	136.09	0.00	0.0%	3.82	22.1	22%	35.6	104%	131.00	190.00	2.8	162%	M	9/20
2	FLT	FleetCor Technologies	250.19	0.00	0.0%	10.40	17.7	15%	24.1	93%	249.00	330.00	3.0	161%	L	6/20
3	FND	Floor & Décor Holdings	83.80	0.00	0.0%	1.54	0.6	17%	54.4	218%	34.00	47.00	-0.2	320%	S	1/19
3	FOX	Fox Factory Holding	87.34	0.00	0.0%	2.92	6.1	13%	29.9	142%	40.00	72.00	0.2	230%	S	8/16
2	FRC	First Republic Bank	121.14	0.80	0.7%	5.73	12.1	12%	21.1	107%	113.00	141.00	2.6	176%	M	6/18
2	GILD	Gilead Sciences	64.05	2.72	4.2%	6.97	17.9	11%	9.2	93%	71.00	84.00	7.5	84%	L	6/20

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November 2020

CACI INTERNATIONAL INCORPORATED (CACI)
Fiscal Year ends June 30

Recent Price	213.44	<u>ESTIMATES</u>	
Buy up to	220	Growth	11%
52 Week Price Range	156.15 to 288.59	Dividend Payout Ratio	0%
Quality	Average	<u>5 YEAR RISK REWARD ESTIMATE</u>	
Current Yield	None	Price Gain	95% to 416
Shares Outstanding	25.5 Mil.	Risk of Loss	27% to 155
Total Debt	\$1.8 Bil.	Potential Gain/Loss	3.5 to 1

EARNINGS PER SHARE & P/E RATIOS

<u>FISCAL YEAR</u>	<u>E/S</u>	<u>P/E RATIO</u>	<u>RV</u>	<u>P/E AS % GROWTH</u>
2020	12.61	16.9	106	154
2021 (Est.)	14.06	15.2	95	138
2022 (Est.)	15.44	13.8	87	125

CACI International Inc., founded in 1962, changed its name from California Analysis Center, Inc. in 1973. Founded as a simulation technology company, the name change reflected the evolution of the business as a technology and services provider, primarily to the U.S. government.

The firm segments its business by customer type and service offering. "Enterprise" customers represent government agencies implementing business systems, business processing, and enterprise Information Technology solutions supporting operations like finance, personnel, and procurement. "Mission" customers target military branches with capabilities like communications, intelligence gathering, electronic warfare, and cyber operations. "Enterprise" commonly refers to corporate customers, but **CACI** uses the term to refer to its government customers outside of the military.

As for service offerings, Expertise represents consultants and outsourced contract labor and Technology represents the development and implementation of business systems, enterprise applications, IT systems, signal intelligence, electronic warfare, and cyber operations.

Enterprise customers represent about 40% of total revenue, with 15% of total revenue from Expertise and 25% from Technology. Mission customers represent the other 60%, with 35% from Expertise and 25% from Technology.

Expertise business tends to be mostly outsourced labor services at lower profit margins while Technology carries higher margins due to the sale of proprietary software and high-value IT implementation services. When now-CEO John Mengucci joined **CACI** in 2012, the business was split about 80/20 between Expertise and Technology. Mr.

Mengucci has consciously focused on expanding Technology such that the current mix is roughly 50/50. Gross margin since 2012 reflects this strategy, moving from 31% to 35% today.

CACI has emphasized building long-term relationships through multi-year contracts. Its largest customer is the Department of Defense, representing about 70% of sales and led by the U.S. Army. Growing worldwide threats have created the need for advanced communications systems, greater intelligence, and security from cyber threats. **CACI** was recently awarded up-to a \$1.5 billion contract, the largest in its history, with a base period of five years and five one-year annual renewals to provide mission and cybersecurity to the National Geospatial-Intelligence Agency. The firm has a backlog of \$22 billion with contracts having an average duration of five years, up from 3.5 years in fiscal 2017.

Another strategy to protect and improve margins has been the movement toward more cost reimbursement contracts that allow **CACI** to bill at a consistent rate while implementing cost-saving initiatives over time. Cost reimbursement contracts represent 57% of Fiscal 2020 sales, up from 55% the year before, with the remaining 43% from fixed price and time and materials contracts.

As for top-line growth, **CACI** targets mid-single digit organic growth complemented by an aggressive acquisition strategy that looks to add emerging technology capabilities. **CACI** has completed more than 80 acquisitions in its long history and nine over the past three fiscal years. The recently announced Ascent Vision Technologies (AVT) acquisition is a good example. AVT brings advanced infrared imaging systems for airborne, ground, and maritime platforms for intelligence, surveillance, and reconnaissance for day and night operations.

CACI is coming off a record year for Fiscal 2019, but headwinds from the COVID-19

pandemic are hurting growth. Some of this has been alleviated by the CARES Act through additional reimbursement for providing stand-by labor should existing contract personnel get sick. Even so, guidance for Fiscal year 2021 is solid, with sales growth of 5%-8%, 5.5% from organic means at the midpoint, and EPS of \$13.50-\$14.28, up 7%-13%. **CACI** generates approximately \$500 million per year in operating cash flow and its leverage ratio after the AVT acquisition is a very manageable 2.8x Debt/EBITDA.

The obvious risk to owning **CACI** shares is the near total reliance on government customers, particularly the military. Earlier in the decade, growth in military spending was curtailed by the Budget Control Act. However, recent growth has accelerated in a bipartisan fashion as Washington responds to threats increasingly waged online. Defense appropriations are largely decided for the government's fiscal year 2021 ending next September and whomever is in the White House will have to contend with continued threats from abroad.

Analysts are projecting **CACI** can grow earnings 13% per year, but we will instead use roughly the past 10 years average growth rate of 11%. Five years of this growth and an average high P/E of 19.6 could generate a stock price as high as 416. We use a low price of 155, the product of fiscal year 2020 EPS of \$12.61 and the average low P/E of 12.3. The upside/downside ratio is 3.5 to 1.

CACI International Incorporated is listed on the NYSE under the symbol **CACI**.

Investor contact is:

Investor Relations
CACI International Incorporated
1100 North Glebe Road
Arlington, VA 22201

Telephone: 703/841-7666

Website: www.caci.com

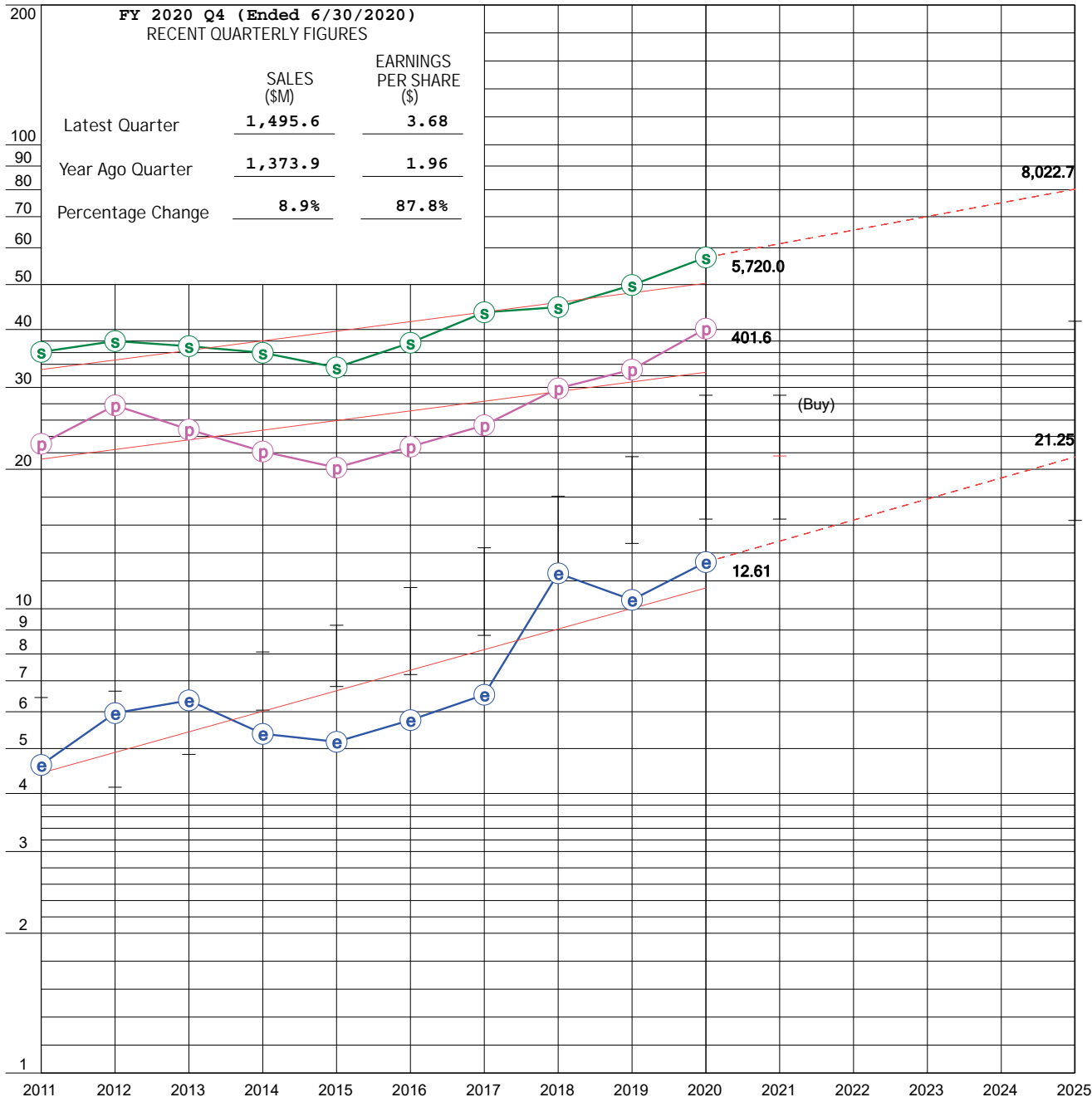


Stock Study

Company	CACT International In..	Price Date	10/09/20
Study by	IAS	Data Date	10/09/20
Sector	Technology	Last Judgment	10/09/20
Industry	Information Technology S	Data Source	StkCntrl
Preferred(\$M)	0.0	Reference	Morningsta
Diluted(M Shares)	25.5	% Insiders	2.2
Total Debt(\$M)	1,781.7	% Institutions	77.6
% Tot Debt to Tot Cap	41.0	Quality	3.0 (IAS)

1 Growth Analysis

NYS: CACT



(1) Historical Sales Growth	4.9 %	(3) Historical Earnings Per Share Growth	10.7 %
(2) Estimated Future Sales Growth	7.0 %	(4) Estimated Future Earnings Per Share Growth	11.0 %
(5) Sales Growth R ²	0.70	(6) Earnings Per Share Growth R ²	0.71

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2 QUALITY ANALYSIS

Company **CACI International Inc**

(CACI)

10/09/20

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	5 YEAR AVG.	TREND UP / DOWN
A % Pre-tax Profit on Sales	6.3	7.3	6.6	6.1	6.1	6.0	5.7	6.7	6.6	7.0	6.4	UP
B % ROE (Beginning Yr)		13.8	12.7	10.8	9.2	9.8	10.1	16.8	12.6	13.5	12.5	UP
C % LT Debt to Equity	29.7	37.7	25.2	87.9	71.6	87.5	66.1	48.3	68.0	64.0	66.8	DOWN

3 PRICE, PRICE/EARNINGS RATIO and DIVIDEND ANALYSIS

CURRENT PRICE (P/E)			213.44 (16.9)	52-WEEK HIGH (P/E)	288.59 (22.9)		52-WEEK LOW (P/E)	156.15 (12.4)		
	Fiscal Year	High Price	Low Price	EPS	High P/E	Low P/E	Dividend	% Payout	% High Yield	
1	2016	111.1	72.2	5.76	19.3	12.5	0.000	0.0	0.0	
2	2017	135.4	87.7	6.53	20.7	13.4	0.000	0.0	0.0	
3	2018	174.8	118.1	11.93	14.7	9.9	0.000	0.0	0.0	
4	2019	212.8	138.4	10.46	20.3	13.2	0.000	0.0	0.0	
5	2020	288.6	156.2	12.61	22.9	12.4	0.000	0.0	0.0	
6	AVERAGE		114.5		19.6	12.3		0.0		
AVERAGE P/E RATIO			16.0	PROJECTED P/E RATIO			15.2	TTM EPS		12.61
CURRENT P/E RATIO			16.9	PEG RATIO			1.4	FTM EPS		14.00
RELATIVE VALUE			106.0%	PROJ. RELATIVE VALUE			95.6%	AVG TTM + FTM EPS		13.30

4 EVALUATING REWARD and RISK over the next 5 years

A FUTURE HIGH PRICE ANALYSIS – NEXT 5 YEARS

Selected High P/E 19.6 X Estimated High Earnings/Share 21.25 = Forecast High Price \$ 416.5

B FUTURE LOW PRICE ANALYSIS – NEXT 5 YEARS

(a) Sel. Low P/E 12.3 X Estimated Low Earnings/Share 12.61 = \$ 155.1
(as adj.)

(b) Average 5-Year Low Price = 114.5

(c) Recent Severe Low Price = 138.4

(d) Price Dividend Will Support = Present Divd. + High Yield = 0.00 + 0.000 = 0.0

Selected Estimated Low Price = \$ 155.1

C PRICE RANGES

Forecast High Price 416.5 - Estimated Low Price 155.1 = Range 261.4 25% of Range = 65.3

BUY (Lower 25% of Range) = 155.1 to 220.4

MAYBE (Middle 50% of Range) = 220.4 to 351.2

SELL (Upper 25% of Range) = 351.2 to 416.5

Current Price 213.44 is in the Buy Range

D REWARD/RISK ANALYSIS (Potential Gain vs. Risk of Loss)

(Forecast High Price 416.5 - Current Price 213.44) ÷ (Current Price 213.44 - Estimated Low Price 155.1) = 3.5 To 1

5 TOTAL RETURN ANALYSIS

A CURRENT YIELD

Present Full Year's Dividend \$ 0.000 ÷ Current Price of Stock \$ 213.44 = 0.0 % Present Yield or % Returned on Purchase Price

B AVERAGE YIELD - USING FORECAST HIGH P/E

Avg. % Payout 0.0 ÷ Forecast High P/E 19.6 = Avg. Yield 0.0

C % COMPOUND ANNUAL TOTAL RETURN - USING FORECAST HIGH P/E

Average Yield 0.0 % + Annual Appreciation 14.3 % = Compound Annual Total Return 14.3 %

Guiding Investors to Success
Since 1973



November 2020

COMCAST CORPORATION (CMCSA)
Fiscal Year ends December 31

Recent Price	44.85	<u>ESTIMATES</u>	
Buy up to	51	Growth	12%
52 Week Price Range	31.71 to 47.74	Dividend Payout Ratio	30%
Quality	Above Average	<u>5 YEAR RISK REWARD ESTIMATE</u>	
Current Yield	2.1%	Price Gain	110% to 94
Shares Outstanding	4,607 Mil.	Risk of Loss	18% to 37
Total Debt	\$104.8 Bil.	Potential Gain/Loss	6.0 to 1

EARNINGS PER SHARE & P/E RATIOS

<u>FISCAL YEAR</u>	<u>E/S</u>	<u>P/E RATIO</u>	<u>RV</u>	<u>P/E AS % GROWTH</u>
2019	2.83	15.8	96	132
2020 (Est.)	2.00	22.4	136	187
2021 (Est.)	2.85	15.7	95	131

Comcast's businesses operate in environments undergoing meaningful transition. The company has faced headwinds in recent years in its largest business, cable, from cord-cutting. However, the company has done an admirable job of pivoting away from video and toward broadband as its featured product. We remain strong believers in the value of the broadband pipe into the home, which the pandemic has helped highlight. Driven by broadband strength, the cable business has grown customers at a low-single digit percentage rate in recent years. High-speed internet and business services are each growing revenue at nearly a 10% rate, while contributing most of the profitability within the cable segment.

Strong broadband net additions have continued this year, aided by COVID-19. Last year, **Comcast** added 1.4 million net new subscribers, growing total subscribers by more than 5%. In 2020, the company is on pace to meaningfully exceed last year's net subscriber growth, setting **Comcast** up for its 15th consecutive year with more than one million

net broadband customer additions. Importantly, **Comcast's** broadband penetration in its footprint is only approaching 50%, leaving plenty of room for continued growth as the company takes share from competitors. **Comcast** is well-positioned to continue offering the fastest speeds in its coverage areas, which should help broadband subscriber growth continue at a healthy rate. It is important to note that the broadband business has superior margins and lower capital intensity relative to video, leading to improved cash flow generation.

There is some concern the introduction of 5G fixed wireless broadband could threaten the high-speed internet business, but we expect this threat is farther out on the horizon. For broadly available 5G to become a reality, it is likely wireline will be required for backhaul given spectrum limitations. There is a reasonable chance 5G represents more of an opportunity than a threat for **Comcast**.

Another segment, NBCUniversal, includes

the news, entertainment, and sports cable networks; broadcast networks; Universal Pictures; and Universal Parks and Resorts. This business has been meaningfully impacted by the pandemic, depressing earnings in the near term. Parks were closed and new theatrical releases have been delayed. Prior to the pandemic, the Parks' business was a strength for the company, and it is expected to perform well on the other side of the pandemic. While two of its three parks are currently open, traffic is far below historical levels.

NBCUniversal saw results rebound from the depths seen earlier this year. Sports returned, which helped with advertising. Television and film production have ramped back up, and NBCU will see tailwinds over the next 18 months as it is scheduled to broadcast two Olympics and the Super Bowl.

With its nearly \$50 billion acquisition of Sky, it is clear that **Comcast** intends to position itself for the delivery of its own over-the-top (OTT) streaming content service. Sky boasted 23 million customer relationships, giving **Comcast** greater scale. Today the combined company has more than 55 million customer relationships and a strong position in both the U.S. and Europe.

Comcast released its OTT product, Peacock, to its cable customers in April, with a national debut of the product in July. Unlike Netflix and Disney+, Peacock is predominantly an ad-driven service that features original programming as well as exclusive access to classic shows like "The Office." To date, Peacock has achieved more than 15 million sign-ups. The company looks to continue to grow this number and has reached agreements with other pay-TV providers as well as manufacturers of streaming devices to help broaden distribution.

Investors will be closely watching the costs associated with both producing new content for Peacock and securing rights to shows it had previously sold to companies like Netflix. For example, **Comcast** paid \$500 million for exclusive rights to "The Office" when the show's deal with Netflix runs out in 2021. Investors are unlikely to respond favorably to ballooning content costs that signal an intention to go head-to-head with other, better positioned

OTT players like **Disney** or Netflix. Though the company has not yet formally broken out the required investment for Peacock, management has indicated it would not materially impact **Comcast's** earnings growth trajectory.

Comcast has two share classes. Class A shares are publicly traded and have two-thirds voting power. Class B shares are owned by the Roberts family and represent less than 1% economic ownership but one-third of total voting power. Brian Roberts, son of the company's co-founder, is Chairman and CEO. The dual-share structure gives Roberts great influence in steering the company's direction. This has led to questionable capital allocation in the past, such as the Sky acquisition at what appeared to be a very rich multiple.

We anticipate **Comcast** will grow revenue 5% a year over the next several years with EPS growth averaging 12%. Margins should be aided by trends in the cable business. Once target leverage is likely achieved in 2022 following debt paydown associated with the Sky acquisition, a resumption of buybacks will provide a boost to EPS growth. Projecting 12% EPS growth over the next five years and applying a high P/E of 18.9, we get a potential high price of 94. Applying a low price of 37 reflecting the price supported by its dividend results in an upside/downside ratio of 6.0 to 1 and projected high total return over 17% annually.

Comcast Corporation is listed on the NASDAQ under the symbol **CMCSA**.

Investor contact is:

Marci Ryvicker
Senior Vice President, Investor Relations
Comcast Corporation
One Comcast Center
Philadelphia, PA 19103

Telephone: 215/286-4781

Website: www.cmcsa.com

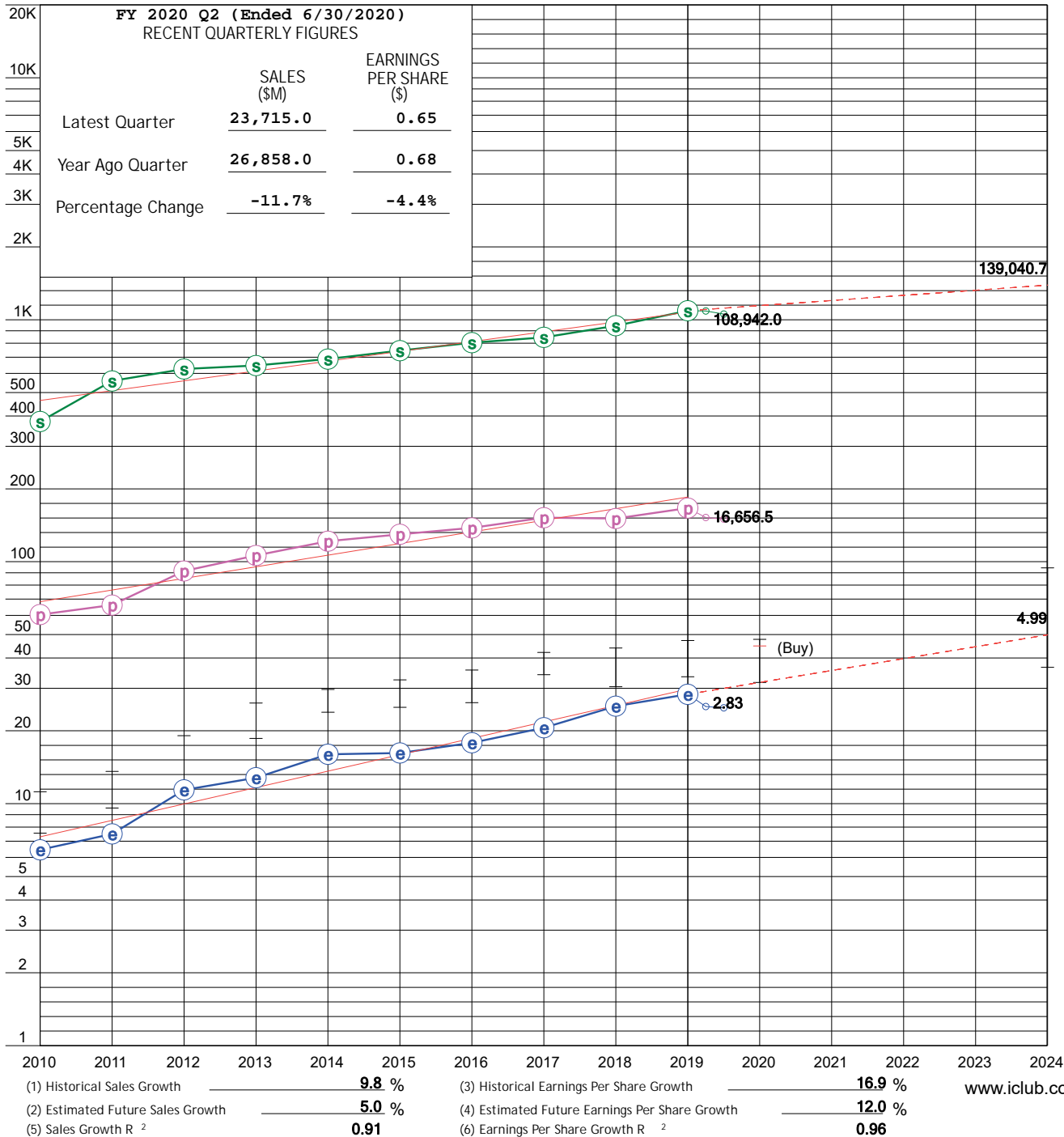


Stock Study

Company	Comcast Corp	Price Date	10/09/20
Study by	IAS	Data Date	10/09/20
Sector	Communication Services	Last Judgment	10/09/20
Industry	Entertainment	Data Source	StkCntrl
Preferred(\$M)	0.0	Reference	Morningsta
Diluted(M Shares)	4,607.0	% Insiders	0.2
Total Debt(\$M)	104,810.0	% Institutions	75.9
% Tot Debt to Tot Cap	57.2	Quality	2.0 (IAS)

1 Growth Analysis

NAS: CMCSA



2 QUALITY ANALYSIS

Company **Comcast Corp**

(CMCSA)

10/09/20

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	5 YEAR AVG.	TREND UP / DOWN
A % Pre-tax Profit on Sales	15.9	11.9	14.6	16.4	17.7	17.4	17.2	18.0	16.0	15.3	16.8	DOWN
B % ROE (Beginning Yr)		8.2	11.7	12.3	15.3	14.2	16.8	18.3	21.2	17.9	17.7	EVEN
C % LT Debt to Equity	57.4	70.2	67.6	79.8	73.6	91.7	101.0	104.0	146.4	123.6	113.4	UP

3 PRICE, PRICE/EARNINGS RATIO and DIVIDEND ANALYSIS

CURRENT PRICE (P/E)			44.85 (18.0)	52-WEEK HIGH (P/E)		47.74 (19.2)	52-WEEK LOW (P/E)		31.71 (12.7)	
	Fiscal Year	High Price	Low Price	EPS	High P/E	Low P/E	Dividend	% Payout	% High Yield	
1	2015	32.5	25.0	1.62	20.1	15.4	0.500	30.9	2.0	
2	2016	35.7	26.2	1.79	20.0	14.7	0.550	30.8	2.1	
3	2017	42.2	34.1	2.06	20.5	16.6	0.630	30.6	1.8	
4	2018	44.0	30.4	2.53	17.4	12.0	0.760	30.0	2.5	
5	2019	47.3	33.4	2.83	16.7	11.8	0.840	29.7	2.5	
6	AVERAGE		29.8		18.9	14.1		30.4		
AVERAGE P/E RATIO			16.5	PROJECTED P/E RATIO			16.1	TTM EPS		2.49
CURRENT P/E RATIO			18.0	PEG RATIO			1.3	FTM EPS		2.79
RELATIVE VALUE			109.1%	PROJ. RELATIVE VALUE			97.5%	AVG TTM + FTM EPS		2.64

4 EVALUATING REWARD and RISK over the next 5 years

A FUTURE HIGH PRICE ANALYSIS – NEXT 5 YEARS

Selected High P/E 18.9 X Estimated High Earnings/Share 4.99 = Forecast High Price \$ 94.3

B FUTURE LOW PRICE ANALYSIS – NEXT 5 YEARS

(a) Sel. Low P/E 14.1 X Estimated Low Earnings/Share 2.83 = \$ 39.9
(as adj.)

(b) Average 5-Year Low Price = 29.8

(c) Recent Severe Low Price = 30.4

(d) Price Dividend Will Support = Present Divd. + High Yield = 0.92 + 0.025 = 36.6

Selected Estimated Low Price = \$ 36.6

C PRICE RANGES

Forecast High Price 94.3 - Estimated Low Price 36.6 = Range 57.7 25% of Range = 14.4

BUY (Lower 25% of Range) = 36.6 to 51.0

MAYBE (Middle 50% of Range) = 51.0 to 79.9

SELL (Upper 25% of Range) = 79.9 to 94.3

Current Price 44.85 is in the Buy Range

D REWARD/RISK ANALYSIS (Potential Gain vs. Risk of Loss)

(Forecast High Price 94.3 - Current Price 44.85) ÷ (Current Price 44.85 - Estimated Low Price 36.6) = 6.0 To 1

5 TOTAL RETURN ANALYSIS

A CURRENT YIELD

Present Full Year's Dividend \$ 0.920 ÷ Current Price of Stock \$ 44.85 = 2.1 % Present Yield or % Returned on Purchase Price

B AVERAGE YIELD - USING FORECAST HIGH P/E

Avg. % Payout 30.4 ÷ Forecast High P/E 18.9 = Avg. Yield 1.6

C % COMPOUND ANNUAL TOTAL RETURN - USING FORECAST HIGH P/E

Average Yield 1.6 % + Annual Appreciation 16.0 % = Compound Annual Total Return 17.6 %

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Since 1973



November 2020

DOUGLAS DYNAMICS, INC. (PLOW)
Fiscal Year ends December 31

Recent Price	36.83	<u>ESTIMATES</u>	
Buy up to	38	Growth	10%
52 Week Price Range	24.12 to 56.89	Dividend Payout Ratio	53%
Quality	Average	<u>5 YEAR RISK REWARD ESTIMATE</u>	
Current Yield	3.0%	Price Gain	92% to 71
Shares Outstanding	22.9 Mil.	Risk of Loss	25% to 28
Total Debt	\$291 Mil.	Potential Gain/Loss	3.7 to 1

EARNINGS PER SHARE & P/E RATIOS

<u>FISCAL YEAR</u>	<u>E/S</u>	<u>P/E RATIO</u>	<u>RV</u>	<u>P/E AS % GROWTH</u>
2019	2.11	17.5	103	175
2020 (Est.)	(1.52)	(24.2)	N/A	N/A
2021 (Est.)	2.50	14.7	86	147

Headquartered in Milwaukee and with facilities throughout the Midwest and Northeast, **Douglas Dynamics** manufactures and installs snowplows and other work truck attachments.

The company enjoys a strong competitive position within its snow removal niche. Revenue can be lumpy, but the company's products serve a predictable need that is not going away. The snow removal market grows at about the pace of overall GDP, with incremental growth opportunities coming from acquisitions and product line extensions.

In a rich market, shares are priced reasonably. The company typically converts more than 100% of earnings to free cash flow and also returns about half its profits to shareholders through dividends.

Snow and ice removal accounts for more than 80% of revenue. A plow's useful life is

about 9-12 years. Snowfall can vary dramatically from year to year. A peak year in the company's market brings about twice as much snowfall as a trough year. More snowfall causes extra wear and tear on plows and also puts more money in customers' pockets, driving a replacement cycle. 2018 and 2019 were both average years, and 2020's snowfall season has not started yet.

A recent initiative to integrate vertically into installation has not been entirely successful. In 2014, **Douglas** paid \$95 million for Henderson, an Iowa company which makes heavy-duty snow and salt trucks. In 2016, **Douglas** paid \$206 million for Dejana, which installs truck equipment, mainly for utility companies.

In the second quarter of 2020, Douglas took a non-cash goodwill impairment charge of \$128 million related to these acquisitions, reducing overall balance sheet

goodwill by more than half. Taking the impairment should boost future GAAP earnings modestly, as goodwill and intangible amortization has cost the company about \$11 million per year since the Henderson acquisition. While disappointing, these acquisitions seem like mistakes the company can easily bounce back from. CEO Robert McCormick, who assumed the role at the beginning of 2019, talks about focusing on smaller tuck-in acquisitions in the future.

Douglas came public in 2010 and has performed similarly to the S&P 500 since then. It has done a little better than the Russell 2000, an index which tracks smaller-capitalization companies. **Douglas** shares have struggled over the past year, down 15%. The S&P 500 is up about 18% and the Russell 2000 is up about 11% in that time. As long as this year's snowfall is not too far below average, this could be a good time to acquire shares at a discount to the market.

One problem with industrial sector investments is that growth tends to require a lot of incremental capital. **Douglas** has been able to grow without significant capital investment. Free cash flow has consistently run about \$60 million per year over the past five years. That equates to a free cash flow yield of over 7% based on the current market capitalization.

The company's return on equity has fluctuated between the mid-teens and low twenties during this period. 2020 will be a challenging year, but the company expects free cash flow to cover its 3% dividend yield.

A 3% dividend yield is nothing to scoff at in a world where 30-year Treasuries pay 1.6%. A diversified portfolio of stocks like **Douglas** with modest debt, good market position, and negligible risk of obsolescence would seem like a slam dunk to outperform bonds over the intermediate to long term. Broad swaths of the market are so richly valued or rely on such speculative business models that it is impossible to say with confidence that they will earn any

return over time. Again, a portfolio of stocks like **Douglas** ought to at least keep up with the growth rate of nominal GDP. That sounds like a pretty good value proposition right now.

We model 10% compound EPS growth. This is similar to both its historical long-term trend when trough years are eliminated and the internal growth rate implied by its average return on equity (21.4%) and its earnings retention (one minus its 49.8% dividend payment rate).

If achieved, 10% growth would generate EPS of \$3.40 in five years. That figure, combined with a high P/E of 20.8, generates a high price of 71.

For a low price, we apply a low P/E of 13.1 to 2019 EPS of \$2.11 and get 28. On that basis, the upside/downside ratio is 3.7 to 1.

Douglas Dynamics, Inc. is listed on the NYSE under the symbol **PLOW**.

Investor contact is:

Nathan Elwell
Investor Relations
Douglas Dynamics, Inc.

Phone: 847/530-0249

Email: investorrelations@douglasdynamics.com

Website: www.douglasdynamics.com

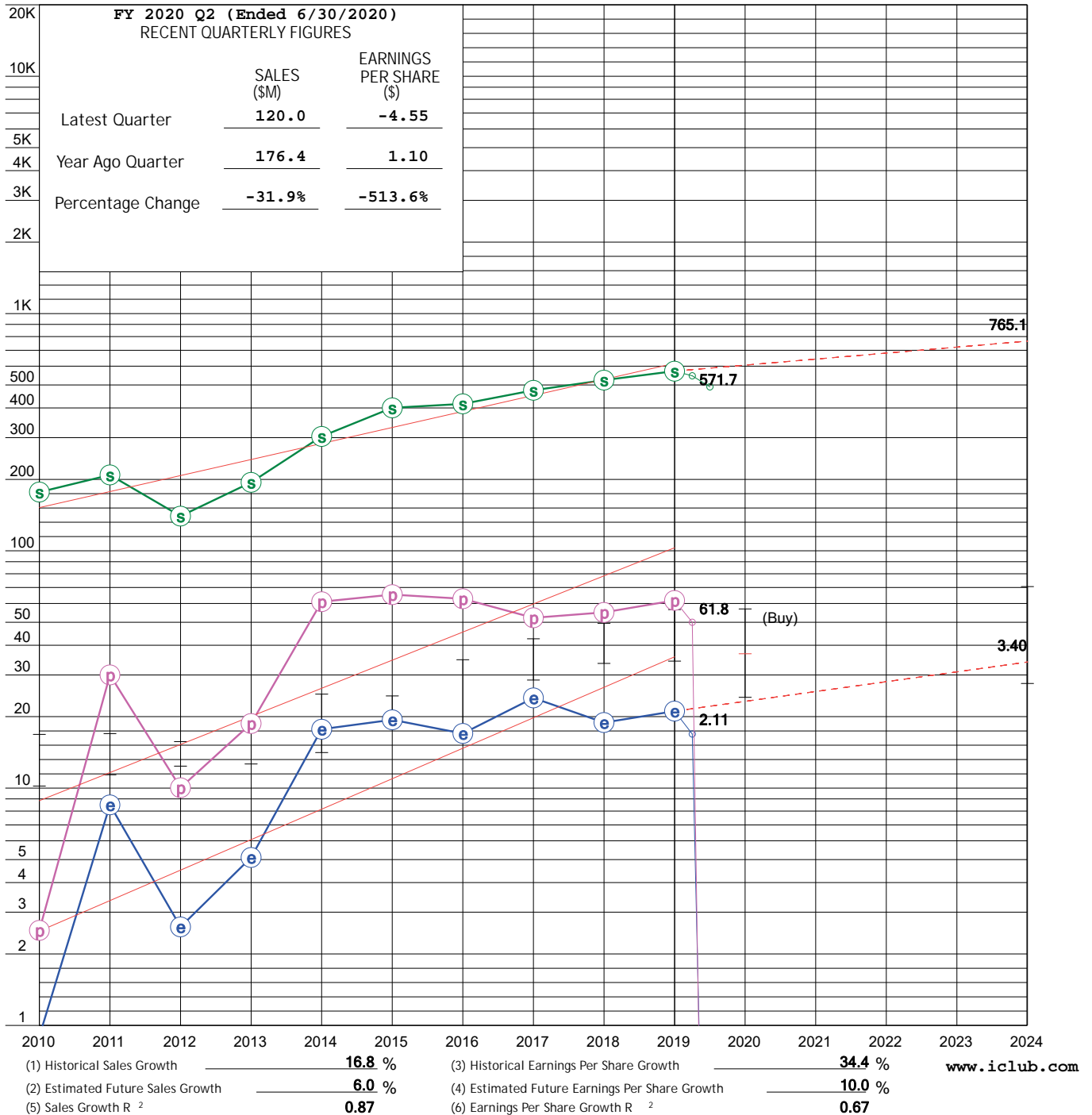


Stock Study

Company	Douglas Dynamics Inc	Price Date	10/09/20
Study by	IAS	Data Date	10/09/20
Sector	Consumer Cyclical	Last Judgment	10/09/20
Industry	Auto Parts	Data Source	StkCntrl
Preferred(\$M)	0.0	Reference	Morningsta
Diluted(M Shares)	22.9	% Insiders	2.3
Total Debt(\$M)	291.0	% Institutions	96.3
% Tot Debt to Tot Cap	49.2	Quality	3.0 (IAS)

1 Growth Analysis

NYS: PLOW



2 QUALITY ANALYSIS

Company **Douglas Dynamics Inc** (PLOW)

10/09/20

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	5 YEAR AVG.	TREND UP / DOWN
A % Pre-tax Profit on Sales	1.4	14.4	7.2	9.6	20.1	16.3	15.1	11.0	10.5	10.8	12.7	DOWN
B % ROE (Beginning Yr)		10.8	3.5	7.3	27.1	25.5	20.1	25.2	18.8	17.4	21.4	DOWN
C % LT Debt to Equity	79.2	69.0	72.8	76.2	110.4	97.9	143.4	121.3	88.4	80.3	106.3	DOWN

3 PRICE, PRICE/EARNINGS RATIO and DIVIDEND ANALYSIS

CURRENT PRICE (P/E) **36.83 (NMF)** 52-WEEK HIGH (P/E) **56.89 (NMF)** 52-WEEK LOW (P/E) **24.12 (NMF)**

	Fiscal Year	High Price	Low Price	EPS	High P/E	Low P/E	Dividend	% Payout	% High Yield
1	2015	24.5	18.7	1.94	12.6	9.6	0.890	45.9	4.8
2	2016	34.8	16.9	1.70	20.5	9.9	0.940	55.3	5.6
3	2017	42.6	28.6	2.40	17.7	11.9	0.960	40.0	3.4
4	2018	49.5	33.5	1.89	26.2	17.7	1.060	56.1	3.2
5	2019	56.6	34.3	2.11	26.8	16.3	1.090	51.7	3.2
6	AVERAGE		26.4		20.8	13.1		49.8	
AVERAGE P/E RATIO		17.0	PROJECTED P/E RATIO		-8.5	TTM EPS		-3.96	
CURRENT P/E RATIO		-9.3	PEG RATIO		-0.8	FTM EPS		-4.36	
RELATIVE VALUE		-54.9%	PROJ. RELATIVE VALUE		-49.9%	AVG TTM + FTM EPS		-4.16	

4 EVALUATING REWARD and RISK over the next 5 years

A FUTURE HIGH PRICE ANALYSIS – NEXT 5 YEARS

Selected High P/E **20.8** X Estimated High Earnings/Share **3.40** = Forecast High Price \$ **70.7**

B FUTURE LOW PRICE ANALYSIS – NEXT 5 YEARS

(a) Sel. Low P/E **13.1** X Estimated Low Earnings/Share **2.11** = \$ **27.6**
(as adj.)

(b) Average 5-Year Low Price = **26.4**

(c) Recent Severe Low Price = **24.1**

(d) Price Dividend Will Support = Present Divd. + High Yield = **1.12** + **0.056** = **20.1**

Selected Estimated Low Price = \$ **27.6**

C PRICE RANGES

Forecast High Price **70.7** - Estimated Low Price **27.6** = Range **43.1** 25% of Range = **10.8**

BUY (Lower 25% of Range) = **27.6** to **38.4**

MAYBE (Middle 50% of Range) = **38.4** to **59.9**

SELL (Upper 25% of Range) = **59.9** to **70.7**

Current Price **36.83** is in the **Buy** Range

D REWARD/RISK ANALYSIS (Potential Gain vs. Risk of Loss)

(Forecast High Price **70.7** - Current Price **36.83**) ÷ (Current Price **36.83** - Estimated Low Price **27.6**) = **3.7** To 1

5 TOTAL RETURN ANALYSIS

A CURRENT YIELD

Present Full Year's Dividend \$ **1.120** ÷ Current Price of Stock \$ **36.83** = **3.0 %** Present Yield or % Returned on Purchase Price

B AVERAGE YIELD - USING FORECAST HIGH P/E

Avg. % Payout **49.8** ÷ Forecast High P/E **20.8** = Avg. Yield **2.4**

C % COMPOUND ANNUAL TOTAL RETURN - USING FORECAST HIGH P/E

Average Yield **2.4** % + Annual Appreciation **13.9** % = Compound Annual Total Return **16.3** %