



500 West Big Beaver Troy, MI 48084 troymi.gov

# **Employees' Retirement System Board Meeting**

January 13<sup>th</sup>, 2021 at 12:00 PM Electronic Remote Participation via GoToMeeting (248) 524-3306 ERSPublicComments@troymi.gov

Roll Call

# Public Comment

# Minutes from the December 9th, 2020 Meeting

## **Retirement Requests**

Name	David Roberts	Patrick Creteau
Pension Program	DC	DC
Retirement Date	February 6, 2021	February 16, 2021
Department	Fire Department	Parks-Municipal Grounds
Service Time	40 years, 2 months	31 years, 8 months
	-	-

## **Regular Business**

- Election Results Peter Dungjen elected to serve as a member of the ERS and RHC Boards for a term ending December 31, 2023.
- MBC Consulting

# **Investments**

- Graystone Consulting Investment Review
  - o Market Review
  - Performance Report As of December 31<sup>st</sup>, 2020
  - Troy ERS Market Values and Rebalance 1/5/2021
  - o On the Markets January 2021
- UBS Financial Services Investment Review
  - o Market Review and discussion
  - o Performance and Asset Allocation Review December 2020
  - o Option Recommendations

## **Other Business**

## <u>Adjourn</u>

The next meeting is Wednesday, February 10<sup>th</sup>, 2021 at 12:00 PM.

## EMPLOYEES' RETIREMENT SYSTEM BOARD OF TRUSTEES MINUTES- DRAFT December 9th, 2020



500 West Big Beaver Troy, MI 48084 troymi.gov

# **Employees' Retirement System Board Meeting**

**MINUTES** 

December 9<sup>th</sup>, 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 **December 9<sup>th</sup>, 2020** with electronic remote participation via GoToMeeting.

The meeting was called to order at 12:01 PM by Administrator Maleszyk.

Thomas Gord Kurt Bovensi Justin Novak Mark F Miller David Hamilt Also Present: Mark Calice Mark Owczar Also Present: Tim Brice – O Rebecca Sor Darin McBrid Peter A Dung Lisa Burnhan	Robert C Maleszyk Thomas Gordon II Kurt Bovensiep Justin Novak Mark F Miller David Hamilton
Trustees Absent:	Mark Calice Mark Owczarzak
Also Present:	Tim Brice – Graystone Consulting Rebecca Sorensen - UBS Financial Management Darin McBride – UBS Financial Management Peter A Dungjen Lisa Burnham Shazia Fatima

# Public Comment

None

## EMPLOYEES' RETIREMENT SYSTEM BOARD OF TRUSTEES MINUTES- DRAFT December 9th, 2020

# Minutes from the November 11th, 2020 Meeting

# <u>Resolution # ER – 2020-12-34</u>

Moved by: Hamilton Seconded by: Miller

**RESOLVED**, that the Minutes of the November 11<sup>th</sup>, 2020 meeting be **APPROVED**. Yeas: - 6 – (Hamilton, Miller, Novak, Bovensiep, Gordon, Maleszyk) Nays: - 0 -Absent: - 1- (Calice) **Motion Passes** 

# **Retirement Requests**

NameNonePension ProgramRetirement DateDepartmentService Time		
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# **Regular Business**

• Administrator Maleszyk thanked Trustee Novak for his many years of service to the Board and welcomed Peter Dungjen to the Board starting January 2021.

# Investments

# **UBS Financial Presentation**

- Market Review Darin McBride
  - Darin gave a market overview noting that they continue to have a positive view on Equities but with added volatility due to current the COVID-19 wave which continues to threaten economic recovery and expansion.
  - They are optimistic and anticipate a return to pre-pandemic earnings by the end of year 2021.
  - He concluded that they favor mid-cap and global equities going forward and overall continue to favor a well-balanced high-quality portfolio offering the best way to meet our Long-term investment success.

# • Investment Review – Darin McBride

- The QTD Net Rate of Return Net of Fees as of November 30<sup>th</sup>, 2020 was as follows: Combined: 7.18%; ERS: 7.23% and NAIC: 7.02%
- The YTD Net Rate of Return Net of Fees as of November 30<sup>th</sup>, 2020 was as follows: Combined: 12.50%; ERS: 11.84% and NAIC: 14.79%
- Darin also reviewed the Asset Allocations for each portfolio.

# • Recommendations:

- ERS portfolio:
  - Covered Call Options were approved by Administrator Maleszyk
- NAIC Portfolio:
  - NAIC Portfolio:
    - NAIC holds more than \$6 million due to recent sales.
    - The NAIC portfolio holds the following stocks that are current buy and sell recommendations by Investor Advisory Service (CFRA).
    - Buy Recommendations:
      - o Akamai Technologies, Inc.
      - o Cboe Global Markets, Inc.
      - Fleetcor Technologies, Inc.
      - Huntington Ingalls Industries, Inc.
      - o Insperity, Inc.
      - Nexstar Media Group, Inc.
      - T. Rowe Price Group, Inc.
      - o UnitedHealth Group Incorporated
    - Sell Recommendations
      - Cognex Coporation
      - o Old Dominion Freight Line, Inc.
      - o Danaher Corporation
    - Administrator Maleszyk proposed to buy the stocks listed above at \$500,000 each using \$4 million in cash, and to hold on to the 3 sell recommendations.
    - Trustee Novak noted that contrary to his previous views of holding on to Danaher and Old Dominion he agrees with the NAIC report and recommended to buy and sell all the stocks listed above.
    - Trustee Hamilton recommended to sell the 3 stocks listed above and use the proceeds from the sale plus the \$4 million in cash divided equally to purchase the 8 buy recommendations listed above.

# <u>Resolution # ER – 2020-12-35</u> Moved by: Hamilton Seconded by: Novak

**RESOLVED**, that all positions held in Cognex, Old Dominion Freight Line, and Danaher be liquidated and the proceeds of approximately \$3 million plus \$4 million held in cash be used to purchase equal positions valued at approximately \$875,000 each in Akamai Technologies, Cboe Global Markets, Fleetcor Technologies, Huntington Ingalls Industries, Insperity, Nexstar Media Group, T. Rowe Price Group and UnitedHealth Group be **APPROVED**.

Yeas: - 6 - (Hamilton, Novak, Miller, Bovensiep, Gordon, Maleszyk) Nays: - 0 – Absent: - 1 – (Calice) **Motion Passes** 

# **Graystone Consulting Group Presentation**

- Market Review Tim Brice
  - Tim gave a market update discussing the effects of the elections and change in leadership.

# • Investment Review – Tim Brice

- o Tim presented the Performance Report as of November 30<sup>th</sup>, 2020 noting the
  - Net Return Net of Fees: QTD: 7.70% and YTD: 8.44%.
- o Tim gave the Updated Performance Report as of December 4<sup>th</sup>, 2020 noting
  - Net Return Net of Fees: QTD: 10.02% and YTD: 11.2%.
- He concluded that International Markets and Small Cap are performing better and has impacted our portfolio positively.

# • Recommendations: Rebalance the portfolio as of 11/30/2020

 To Rebalance the portfolio by reallocating from Winslow \$350,000, JP Morgan Equity Income \$200,000, Aristotle \$200,000, iShares S&P 500 \$250,000, Thompson Siegal \$250,000 and Vanguard Total Market \$750,000 to Reinhart Inter Gov / Credit \$500,000, to Western Core Plus \$1,000,000 and to Vanguard REIT \$500,000.

## • Resolution # ER – 2020-12-36

Moved by: Hamilton Seconded by: Gordon

**RESOLVED**, To Rebalance the portfolio by reallocating from Winslow \$350,000, JP Morgan Equity Income \$200,000, Aristotle \$200,000, iShares S&P 500 \$250,000, Thompson Siegal \$250,000 and Vanguard Total Market \$750,000 to Reinhart Inter Gov / Credit \$500,000, to Western Core Plus \$1,000,000 and to Vanguard REIT \$500,000 be **APPROVED**. Yeas: - 6 - (Hamilton, Gordon, Bovensiep, Novak, Miller, Maleszyk) Nays: - 0 – Absent: - 1 – (Calice) **Motion Passes** 

# **Other Business**

- Actuary Experience Study has not been done since 2006, the Actuary suggested it will be good to do one in June 2021.
- Trustee Hamilton thanked Trustee Novak for his time on the Board.

# <u>Adjourn</u>

The meeting adjourned at 12:47 PM.

The next meeting is Wednesday, January 13th, 2021 at 12:00 PM.

Thomas Gordon II, Vice Chairman

Robert C Maleszyk, Administrator



# EMPLOYEES RETIREMENT SYSTEM BOARD OF TRUSTEES ELECTION RESULTS Monday, December 7, 2020

# CANDIDATE & TERM EXPIRING:

# VOTES

Term Expiring: December 31, 2023

Peter Dungjen (unopposed) N/A

**Peter Dungjen**, having run **UNOPPOSED**, was elected to serve as a member of the Employees Retirement System Board of Trustees and the Retiree Health Care Benefits Plan & Trust Board. This term will end December 31, 2023.

M. Allen Dickson

M. Aileen Dickson, MMC City Clerk



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

# **Performance Update**

Prepared on January 05, 2021 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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Please review the disclosures and definitions throughout this Document. Various sub-sections of this Document may not contain information on all accounts/positions covered in this Document.

Prepared on January 05, 2021 Reporting Currency: USD

#### MORGAN STANLEY WEALTH MANAGEMENT

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Reporting Currency: USD

Account Name and Address	Account Type/ Manager Name	Advisory/ Brokerage	Account Number	Date Opened	Date Closed	Performance (%) Inception - 01/04/21	Total Value (\$) 01/04/21	% of Portfolio 01/04/21
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER RD TROY	Western Core Plus Fixed Income	Advisory	333-XXX474	03/17/20	-	11.55	9,349,169.59	9.16
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER RD TROY	JP Morgan Equity Income	Advisory	333-XXX475	03/17/20	-	51.24	4,488,126.30	4.40
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER RD TROY	Aristotle Value Equity	Advisory	333-XXX476	03/17/20	-	62.82	4,854,044.56	4.75
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY	ICS - ETF Completion Portfolio	Advisory	333-XXX421	02/15/08	-	9.49	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	-	8.17	48,002,564.54	47.00
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY	Reinhart Partners - Active Interm Duration	Advisory	333-XXX268	06/02/14	-	2.74	8,993,802.55	8.81
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY	Winslow Large Cap Growth	Advisory	333-XXX148	09/08/14	-	15.94	7,854,673.95	7.69
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		Advisory	333-XXX152	09/08/14	-	4.29	8,016,075.52	7.85
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY		Advisory	333-XXX153	09/08/14	-	2.30	4,856,229.46	4.76
CITY OF TROY EMPLOYEES RET SYS 500 W BIG BEAVER ROAD TROY		Advisory	333-XXX829	08/21/19	-	29.04	5,709,365.21	5.59
Morgan Stanley Wealth Managen	nent Total						102,124,149.37	100.00

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Reporting Currency: USD

Graystone Consulting<sup>SM</sup> A business of Morgan Stanley

MORGAN STANLEY WEALTH MANAGEMENT (Continued)										
Account Name and Address	Account Type/ Manager Name	Advisory/ Brokerage	Account Number	Date Opened	Date Closed	Performance (%) Inception - 01/04/21	Total Value (\$) 01/04/21	% of Portfolio 01/04/21		
Total Portfolio							102,124,149.37	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 December 31, 2020 | Reporting Currency: USD



	0%						
	Month to Date 11/30/20 - 12/31/20	Quarter to Date 09/30/20 - 12/31/20	Year to Date 12/31/19 - 12/31/20	Last 12 Months 12/31/19 - 12/31/20	Last 3 Years 12/31/17 - 12/31/20	Last 5 Years 12/31/15 - 12/31/20	Performance Inception Month End 02/29/08 - 12/31/20
Beginning Total Value (\$)	99,223,680.03	94,899,328.83	96,256,829.02	96,256,829.02	87,003,535.04	76,532,346.36	39,693,586.09
Net Contributions/Withdrawals (\$)	0.00	-2,957,003.89	-4,791,288.61	-4,791,288.61	-5,420,612.56	-11,211,293.72	7,483,859.91
Investment Earnings (\$)	3,636,891.44	10,918,246.53	11,395,031.06	11,395,031.06	21,277,648.99	37,539,518.83	55,683,125.48
Ending Total Value (\$)	102,860,571.47	102,860,571.47	102,860,571.47	102,860,571.47	102,860,571.47	102,860,571.47	102,860,571.47
Return % (Gross of Fees)	3.68	11.74	12.77	12.77	8.21	9.49	6.84
Return % (Net of Fees)	3.67	11.64	12.38	12.38	7.77	9.05	6.63
Troy ERS Policy (%)	3.12	10.01	12.32	12.32	8.81	9.57	6.90
S&P 500 Total Return (%)	3.84	12.15	18.40	18.40	14.18	15.22	10.73
MSCI EAFE Net (%)	4.65	16.05	7.82	7.82	4.28	7.45	3.17
MSCI EM Net (%)	7.35	19.70	18.31	18.31	6.17	12.81	3.24
Barclays Aggregate (%)	0.14	0.67	7.51	7.51	5.34	4.44	4.22
60% ACWI / 40% Citi WGBI (%)	3.33	9.91	14.53	14.53	8.41	9.51	5.42

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

15%

10%

5%

# **ASSET ALLOCATION**

CITY OF TROY EMPLOYEES RET SYS

### ASSET ALLOCATION - ASSET CLASS



ASSET ALLOCATION		
	Total Value (\$)	% of Portfolio
	12/31/2020	12/31/2020
Cash	740,512.15	0.7
Equities	71,989,386.94	70.0
Fixed Income & Preferreds	28,064,888.03	27.3
Alternatives	2,064,223.65	2.0
TOTAL PORTFOLIO	102,859,010.77	100.0



# TIME WEIGHTED PERFORMANCE DETAIL

#### CITY OF TROY EMPLOYEES RET SYS

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

Account Name/ Benchmark	Account Number	Performance Inception Date	Total Value (\$) 12/31/20	% Of Portfolio 12/31/20	Net/ Gross (Of Fees)	Month to Date (%) 11/30/20 - 12/31/20	Quarter to Date (%) 09/30/20 - 12/31/20	Year to Date (%) 12/31/19 - 12/31/20	Last 12 Months (%) 12/31/19 - 12/31/20	Last 3 Years (%) 12/31/17 - 12/31/20	Last 5 Years (%) 12/31/15 - 12/31/20	Performance Inception (%) to 12/31/20
ADVISORY		02/22/08	102,860,571.47	100.00		3.67	11.64	13.96	13.96	8.14	9.20	6.42
CITY OF TROY EMPLOYEES RET SYS (Consulting Group Advisor) - CG ADVISOR Troy CGA Index Blend	333-XXX267	06/03/14	48,362,991.06	47.02	NET GROSS	4.03 4.03 2.96	12.12 12.16 9.31	19.10 19.27 12.37	19.10 19.27 12.37	10.21 10.37 8.29	10.77 10.93 9.17	8.31 8.49 6.89
CITY OF TROY EMPLOYEES RET SYS (Western Core Plus Fixed Income) - WAMCO CPFI Barclays Aggregate	333-XXX474	03/23/20	9,362,181.01	9.10	NET GROSS	0.77 0.80 0.14	2.79 2.93 0.67	11.70 12.12 7.49	- -	- -	- - -	11.70 12.12 7.49
CITY OF TROY EMPLOYEES RET SYS (Reinhart Partners - Active Interm Duration) - REINHART - FIXED BC Gov/Cr Intm	333-XXX268	08/22/14	8,997,589.53	8.75	NET GROSS	0.03 0.03 0.21	0.03 0.13 0.48	5.54 5.96 6.43	5.54 5.96 6.43	4.08 4.50 4.67	2.89 3.30 3.64	2.75 3.14 3.11
CITY OF TROY EMPLOYEES RET SYS (Thompson Seigel SMid Val) - TSW - SMID VALUE Russell 2500 VL	333-XXX152	09/11/14	8,121,244.41	7.90	NET GROSS	6.55 6.58 6.95	28.28 28.43 28.51	2.11 2.81 4.88	2.11 2.81 4.88	2.57 3.42 4.34	6.12 6.97 9.43	4.51 5.31 6.61
CITY OF TROY EMPLOYEES RET SYS (Winslow Large Cap Growth) - WINSLOW - LARGE GROWTH Russell 1000 Gr	333-XXX148	09/11/14	7,974,849.07	7.75	NET GROSS	3.60 3.63 4.60	8.71 8.84 11.39	37.00 37.71 38.49	37.00 37.71 38.49	22.86 23.79 22.99	18.86 19.73 21.00	16.25 17.06 17.96
CITY OF TROY EMPLOYEES RET SYS (ClearBridge Intl Growth ADR) - Clearbridge - INTERNATIONAL MSCI EAFE Net	333-XXX829	08/27/19	5,709,584.61	5.55	NET GROSS	6.66 6.68 4.65	15.91 16.06 16.05	26.30 26.83 7.82	26.30 26.83 7.82	- -	- - -	29.31 29.94 15.71
CITY OF TROY EMPLOYEES RET SYS (Aristotle Value Equity) - Artistotle LCV Russell 1000 Value	333-XXX476	03/23/20	4,914,534.79	4.78	NET GROSS	4.81 4.83 3.83	15.41 15.55 16.25	64.85 65.34 57.40	- - -	- - -	- - -	64.85 65.34 57.40
CITY OF TROY EMPLOYEES RET SYS (Delaware/Mondrian Intl ADR) - Delaware - INTERNATIONAL MSCI EAFE Net	333-XXX153	09/10/14	4,857,474.64	4.72	NET GROSS	3.89 3.92 4.65	16.95 17.12 16.05	-2.79 -2.16 7.82	-2.79 -2.16 7.82	-1.63 -0.67 4.28	2.55 3.47 7.45	2.31 3.12 4.62
CITY OF TROY EMPLOYEES RET SYS (JP Morgan Equity Income) - JPMorgan LCV Russell 1000 Value	333-XXX475	03/23/20	4,560,024.67	4.43	NET GROSS	2.94 2.97 3.83	13.13 13.27 16.25	53.66 54.12 57.40	- - -	- - -	- - -	53.66 54.12 57.40

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.

PERFORMANCE

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As of December 31, 2020 | Reporting Currency: USD

# TIME WEIGHTED PERFORMANCE DETAIL

CITY OF TROY EMPLOYEES RET SYS

# As of December 31, 2020 | Reporting Currency: USD

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

Account Name/ Benchmark	Account Number	Performance Inception Date	Total Value (\$) 12/31/20	% Of Portfolio 12/31/20	Net/ Gross (Of Fees)	Month to Date (%) 11/30/20 - 12/31/20	Quarter to Date (%) 09/30/20 - 12/31/20	Year to Date (%) 12/31/19 - 12/31/20	Last 12 Months (%) 12/31/19 - 12/31/20	Last 3 Years (%) 12/31/17 - 12/31/20	Last 5 Years (%) 12/31/15 - 12/31/20	Performance Inception (%) to 12/31/20
CITY OF TROY EMPLOYEES RET SYS (ICS - ETF Completion Portfolio) - CIC ETF COMPLETION PORTF. FTSE Treasury Bill 3 Month	333-XXX421	02/22/08	97.70	0.00	NET GROSS	0.00 0.00 0.01	0.00 0.00 0.02	0.17 0.11 0.58	0.17 0.11 0.58	0.90 0.94 1.56	0.67 0.74 1.16	9.50 9.59 0.61

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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.

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#### **CITY OF TROY EMPLOYEES RET SYS**

Prepared on January 05, 2021 | Reporting Currency: USD

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. 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 brer 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 of ficial accounts of ficial accounts is on the custodian's official account statement and fair/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 t

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**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

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CITY OF TROY EMPLOYEES RET SYS

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



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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 Investment, 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 brokerdealers 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.

Graystone Consulting<sup>ss</sup>

#### **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, 40.00% Russell 3000, 19.00% MSCI ACWI Ex USA NR USD, 5.00% FTSE Treasury Bill 3 Month.

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

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 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.

**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 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.



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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 Value**: 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 1/5/2021

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%)		\$72,120,220.04	70.1%	59.0%	\$60,723,784.96	\$0	\$72,120,220.04	70.1%	11.1%	\$11,396,435.08
Domestic Equities (30% - 50%)		\$50,646,423.28	49.2%	40.0%	\$41,168,667.77	\$0	\$50,646,423.28	49.2%	9.2%	\$9,477,755.51
Winslow	Domestic Large Cap Growth Equity	\$7,900,833.02	7.7%			\$0	\$7,900,833.02	7.7%		
JP Morgan Equity Income	Domestic Large Cap Value Equity	\$4,519,148.94	4.4%			\$0	\$4,519,148.94	4.4%		
Aristotle	Domestic Large Cap Value Equity	\$4,891,954.02	4.8%			\$0	\$4,891,954.02	4.8%		
iShares S&P 500 (IVV)	Domestic Large Cap Core Equity	\$6,075,151.20	5.9%			\$0	\$6,075,151.20	5.9%		
Thompson Siegel	Domestic Smid Cap Value	\$8,150,001.55	7.9%			\$0	\$8,150,001.55	7.9%		
Vanguard Total Market (VTI)	Domestic Large Cap Equity	\$19,109,334.55	18.6%			\$0	\$19,109,334.55	18.6%		
International Equities (4% - 24%)		\$21,473,796.76	20.9%	19.0%	\$19,555,117.19	\$0	\$21,473,796.76	20.9%	1.9%	\$1,918,679.57
ClearBridge International Growth	International Equity	\$5,745,279.68	5.6%			\$0	\$5,745,279.68	5.6%		
Delaware International Value	International Equity	\$4,937,992.72	4.8%			\$0	\$4,937,992.72	4.8%		
iShares MSCI EAFE (EFA)	International Equity	\$5,201,378.90	5.1%			\$0	\$5,201,378.90	5.1%		
iShares Emerging Mkts. (EEM)	Emerging Markets Equity	\$5,589,145.46	5.4%			\$0	\$5,589,145.46	5.4%		
<b>Fixed Income</b> (25% - 50%)		\$28,052,367.23	27.3%	29.0%	\$29,847,284.13	\$0	\$28,052,367.23	27.3%	-1.7%	(\$1,794,916.90)
Reinhart Inter Gov / Credit	Domestic Fixed Income	\$8,993,802.54	8.7%			\$0	\$8,993,802.54	8.7%		
Western Core Plus	Domestic Fixed Income	\$9,349,169.59	9.1%			\$0	\$9,349,169.59	9.1%		
Loomis Sayles Bond (LSBDX)	Domestic Fixed Income	\$5,353,851.08	5.2%			\$0	\$5,353,851.08	5.2%		
PIMCO Real Return (PRLPX)	Domestic Fixed Income	\$4,355,544.02	4.2%			\$0	\$4,355,544.02	4.2%		
<b>Real Estate</b> (0% - 9%)		\$2,008,565.20	2.0%	7.0%	\$7,204,516.86	\$0	\$2,008,565.20	2.0%	-5.0%	(\$5,195,951.66)
Vanguard REIT (VNQ)	REIT	\$2,008,565.20	2.0%		- , ,	\$0	\$2,008,565.20	2.0%		
<b>Cash</b> (0% - 10%)		\$740,516.96	0.7%	5.0%	\$5,146,083.47	\$0	\$740,516.96	0.7%	-4.3%	(\$4,405,566.51)
Cash - Cont/ Distr	Cash	\$97.70	0.0%			\$0	\$97.70	0.0%		x · · · · · · · · · · · · · · · · · · ·
Cash -Managed & ETF / MF Accounts	Cash	\$740,419.26	0.7%			\$0	\$740,419.26	0.7%		
Combined Accounts	Cuon	\$102,921,669.43	100.0%	100.0%	\$102,921,669.43	\$0 \$0	\$102,921,669.43	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 WEALTH MANAGEMENT



Global Investment Committee | January 2021

# **On the Markets**

# **Turning the Page**

2020 will be a year to forget for many who struggled with the pandemic's devastating health and/or economic impact. Furthermore, human beings are social creatures and one could argue the isolation from family and friends was the worst part of last year. The impact on many businesses has been devastating, too, with normal activities having ground to a halt. As we enter 2021, the second wave of COVID-19 remains on the upswing with infection rates and deaths still rising in many locales. Offsetting these headwinds is the recent passage of another substantial fiscal stimulus and the distribution of several effective vaccines.

Unlike humans, financial markets don't have feelings. Instead, they look ahead and discount what humans often can't see. In fact, 2020 may go down as one of the best examples on record of such vision. In late February, markets quickly began to discount a brutal recession, with many stocks falling 50% or more in a month. Then, just as quickly, markets began to discount what would be the fastest recovery on record. The anticipation of this V-shaped recovery created what turned out to be one of the best years for equity markets and other financial assets, especially viewed from those dark days of March and April. Ironically, the risk/reward of investing is always greatest when fear is highest because valuation is cheapest.

So what will markets discount in 2021? Where could we be surprised and what investments are likely to offer the best opportunities? Unlike nine months ago, our V-shaped recovery for the economy and earnings is now a consensus view. As a result, many asset prices reflect this and our highest-conviction calls since early April—small caps, cyclicals and reopening beneficiaries—are looking pretty fair to fully valued. While growth stocks have underperformed during the past few months, they continue to do just fine, and look even more extended on valuation.

**CONTEXT MATTERS.** It's important to have the proper context at times like this. First, we remind readers that new bull markets born during a recession typically last for years, not months. In other words, this bull market has a long way to run both in time and price. Second, capturing the best returns of bull markets often requires a steady hand that doesn't overtrade. Finally, the best returns often come from former laggards, as new trends are established and momentum shifts.

#### Michael Wilson

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

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On this score, we have been vocal about a shifting paradigm that began in 2016; specifically, the populist wave and move away from globalization. The reality was that globalization had run too far, hollowing out parts of the economy and leaving many people and companies behind. Unsustainable income and wealth divides developed and, hence, the pushback. We have written a great deal about this in the past few years and even suggested in 2018 that the next US recession would be the catalyst for the policy regime shift that might change this dynamic. In particular, we thought there would be a focus on fiscal policy rather than just monetary policy as a means of redistributing income and wealth more equitably. In the 2020 outlook, we suggested a recession was likely in the next 12 months because the endof-cycle conditions were vulnerable to a shock. Of course, we did not expect a global pandemic to be that shock, but the public health nature of it almost assured a more aggressive transition to fiscal policy than we had expected.

HELICOPTER MONEY. Taking this a step further, one could argue we have officially moved into what was first described by Nobel-winning economist Milton Friedman in 1969 and subsequently by former Federal Reserve Chair Ben Bernanke in 2002 as "helicopter money." In short, this is effectively using the Fed's balance sheet to print money and send it directly to consumers who will spend it. This is quite different than the Quantitative Easing programs used after the financial crisis, which simply shored up damaged consumer and bank balance sheets. In other words, the money printed then was simply filling a hole left by the crisis. This time around, money is creating newfound spending that has led to the fastest economic recovery on record (see chart).

# Money Sent Directly to Consumers Led to the Fastest Economic Recovery on Record





While the policy reactions have not been as dramatic in other regions, we have seen a similarly organic rebound in China because it was able to fully reopen its economy during the second quarter of 2020. With the world's two largest

economies getting back on their feet so quickly, the rest of the world has been dragged along for the ride. This has been great for asset prices tied to accelerating economic growth, especially cyclically oriented equities (see chart).

# Since the Bear Market Low in March, Economically Sensitive Cyclical Stocks Have the Best Total Returns



**CHANGING LEADERSHIP.** Importantly, while almost all stocks have done well since the bear market lows in March, new leadership is emerging. This is natural after a recession, particularly one that was triggered by a health crisis and led to a generational shift from monetary to fiscal policy dominance. We have seen these new areas of leadership line up with what we have been recommending and allocating to since March—small caps, consumer discretionary, materials, financials, semiconductors and industrial stocks.

Looking forward, the question for investors needs to center around the unexpected consequences of this policy change and what it could mean for asset prices. We believe the big surprise of 2021 could be higher inflation than many, including the Fed, expect. Currently, the consensus is expecting a modest acceleration in prices as the economy continues to recover. However, with global GDP output already back to prepandemic levels and the economy not yet even close to fully reopened, we think the risk for more acute price spikes is greater than appreciated. That risk is likely to be in areas of the economy where supply may have been destroyed—in particular, restaurants, travel and other consumer/business services. The best inflation hedges are stocks and commodities, while inflation can be kryptonite for longer-duration bonds.

**OUTLIER ASSET CLASS.** As we peruse the financial markets today, we can't help but notice one major outlier to the constructive economic story line that has now been adopted by most investors: long-term bonds/interest rates. No asset is as mispriced for the outcome now expected. Based on some simple relationships with stocks, commodities and economic growth projections, the 10-year US Treasury yield appears to



Cyclical/Defensives Ratio Points to Economic Strength, Suggesting the 10-Year Treasury Yield Is Too Low

Copper/Gold Ratio Tells the Same Story: The Benchmark 10-Year Treasury Should Be Higher



Source: Bloomberg as of Dec. 29, 2020

be at least 100 basis points, or 1%, too low (see charts).

This is a crucial consideration for investors because every asset in the world is dependent on the 10-year US Treasury yield. It is the pricing mechanism for all long-duration financial and real assets—equities, credit, real estate and commodities. In other words, while better economic growth positively affects the value of these assets, low long-term Treasury yields play just as big of a role, if not bigger. Using the S&P 500 Index as an example, an increase of 1% in the 10-year US Treasury yield from current levels would lead to an 18% decrease in the price/earnings multiple (P/E), all else equal. For the Nasdaq 100 Index, such a rise would equate to a 22.5% decline in the P/E. While such an abrupt increase in interest rates is unlikely, we wouldn't rule it out. The point here is that asset prices are looking rich at the moment given the upside risk to interest rates and very low chance they fall further in the absence of some bad economic developments.

INTEREST RATE ADJUSTMENT. The calendar year is often a time when investors rebalance portfolios and look further ahead as they are no longer beholden to the whims of yearend performance pressures. We think it's obvious where the mispricings are greatest when one takes a longer-term view that is, inflation and longer-term interest rates. Therefore, our asset allocation advice remains consistent with where it has been the past several months: Overweight equities and commodities; underweight fixed income with a penchant for shorter-than-average duration; and favor equities with greater economic sensitivity and leverage to the reopening of the economy. In this context, one also needs to be cognizant that financial markets are more forward-thinking than most humans and have likely discounted most current positive headlines—vaccine distribution, the Fed on indefinite hold and buying \$120 billion in assets per month, additional fiscal stimulus/COVID aid and stubbornly low long-term interest rates.

While there is still very good upside for many of the assets we like in this new bull market, one should be prepared for a downward adjustment in valuations as interest rates catch up to what other asset markets have been saying for months. If this adjustment is gradual, then stocks and other assets will likely go sideways for a while until economic growth eventually takes them higher. However, should rates move upward rapidly, asset prices will most likely adjust downward. We suspect such an adjustment is more likely than most if we are right about growth and inflation surprising further on the upside. Therefore, be patient with any additional capital allocations early in the year while remaining fully invested in this still-nascent bull market.

Source: Bloomberg as of Dec. 29, 2020

# **CROSS-ASSET STRATEGY** How You Get There Matters

Andrew Sheets, Chief Cross-Asset Strategist, Morgan Stanley & Co.

The biggest debate about 2021 probably isn't where the market is going. It's how it gets there. We, and many others, are optimistic on the next 12 months, but there's less agreement among investors on how these gains will be achieved. With our economists still in the "V-shaped recovery" camp, we think returns will be powered by strong economic growth, driving an early cycle, postrecession pattern of returns.

Others disagree. They think our forecasts are too optimistic and expect COVID-19 to take longer to dissipate. They argue that the drawdown and recovery happened so fast that the economic cycle never truly reset, leaving both the corporate and sovereign sectors overleveraged. According to these investors, liquidity and low rates will be the principal drivers of market gains.

**GROWTH AND POLICY**. Both views can be valid. Morgan Stanley & Co.'s economists forecast both above-consensus global growth and \$3.4 trillion of G4 balance sheet expansion in 2021. We're bullish in part because we think that growth and monetary policy will be rowing in the same direction.

Our argument is simply that weak-but-improving growth and supportive liquidity are a normal postrecession backdrop. Meanwhile, market pricing often remains skeptical that economic "normalcy" will return any time soon. Better growth, supportive liquidity and attractive valuations are all reasons to adopt procyclical stances, such as preferences for small-cap over large-cap stocks, and high yield over investment grade bonds.

FAILURE TO RESET. What about that reset? The economic collapse and recovery were unusually fast, bypassing the large defaults of 2008-2010. There hasn't been a single significant bank failure in the wake of the world's largest economic drawdown on record and, more strikingly, there hasn't been a single significant capital raising. The US trailing 12-month speculative-grade default rate sits at 8.0%. In 2009, amid a milder recession, it peaked at 14.2%.

This failure to reset is often cited as a key reason why this can't be the start of a new economic cycle: Recessions, while painful, help to clear out weaker, less productive and undercapitalized businesses, making room for stronger, more dynamic ones. The historic levels of policy intervention in 2020 prevented this "creative destruction." Without that clearing out, a dynamic recovery is unlikely. With it, a wider run of corporate defaults is inevitable.

**NEW CYCLE.** Since we do think this is the start of a new economic cycle, we believe it will be dynamic and don't expect a surprisingly high wave of defaults. Recessions are

about more than defaults. Among other things, they're also about high unemployment, low inventories, high savings rates and low consumer confidence. Early cycle environments gain momentum from all these negatives becoming "less bad." In our forecasts, over the next 12 months, all of them do.

Pruning unproductive businesses from the market is painful but necessary. This argument assumes that the businesses in question are fundamentally broken—not "fine" but for a once-in-a-century pandemic. We don't see how letting scores of otherwise solvent firms default would result in a better long-run result for the economy or investors, especially as these firms would have been forced to reorganize, or liquidate, near the nadir of economic activity.

**EASY TERMS.** Ironically, for all the hand-wringing around "covenant-lite" lending, it was probably a blessing. Weak terms gave borrowers flexibility during the first half's downturn, when strict provisions would have forced more defaults. Neither owner, employee nor lender would have benefited from debt suddenly coming due in the depths of a recession.

Finally, it's also unfair to say that policy prevented any pain. Combine the trailing 12-month default rate of 8% with our credit strategists' forecast for the next 12 months of 6% and we get a 24-month default rate of about 14% (see chart). We can compare that two-year default rate to two-year changes in economic activity, taking a somewhat broader view of this unusual year. Viewed this way, things look more normal.

If you're constructive on the year ahead, the question of how you get there still matters. We remain in the procyclical, early cycle camp, and we don't believe that the absence of a larger corporate default wave nullifies this story.

# When Comparing High Yield Defaults and Economic Activity, 2020 Looks Fairly Normal



Note: Real GDP figures for 2020 and 2021 are based on forecasts by Morgan Stanley & Co. Research. The two-year default rate is the sum of the trailing 12-month default rates over the period. This is a simplification, and modestly overestimates the true default rate over this period. Source: Haver Analytics, Morgan Stanley Research as of Dec. 6, 2020

### SURVEY

# Managers Favor Stocks in 2021, but Prefer Non-US to US Equities

Asset managers collectively are bullish on global equities with emerging markets, international and US equities taking the top spots in terms of bullishness, according to a survey conducted by the Morgan Stanley Wealth Management Global Investment Office in December 2020. Here we summarize highlights from 72 respondents, which include their expectations for the S&P 500 Index, the yield on the 10year US Treasury bond, an economic recovery and the course of inflation.

# What Level Do You Think the S&P 500 Will Be at Year-End 2021?

More than 40% see the S&P 500 in the range of 3,900 to 4,099, which implies an upside of 4% to 9% for US equities in 2021 (based on the 2020 closing price of 3,756). MS & Co.'s base case target is 3,900.



# How Long Do You Expect It Will Take for the US Economy to Recover to the Pre-COVID-19 Level?

The consensus is that a full recovery—that is, GDP returns to the fourth quarter 2019 level—will happen in 2021's second half. MS & Co. economists are targeting this year's first half.



# What Do You Expect the 10-Yr. US Treasury Will Yield at Year-End 2021?

More than 70% of the respondents say the 10-year US Treasury yield, now just below 1.0%, will be between 1.0% and 1.50% at the end of 2021. The MS & Co. forecast is 1.45%.



# What Do You Expect the CPI to Average in 2021?

More than half the respondents expect the US Consumer Price Index to fall between 1.5% and 2.0% in 2021. MS & Co. economists forecast 1.8%.



# What Do You Expect the CPI to Average In the Next 10 Years?

The Fed Reserve's average inflation targeting framework aims to get the CPI above 2%. Nearly 40% expect the Fed will fall short. MS & Co.'s CPI forecast for 2022 is 2.5%.



### How Excited Are You for the Following Asset Classes in 2021?

On a scale of 1 to 5, with 5 being the most bullish, asset managers favor equities the most. In order, they like emerging market equities, international equities and US equities. In fixed income, their first and second preferences are emerging market debt and high yield.



### INVESTING

# In Search of a New Diversifier

Vibhor Dave, CFA, Investment Strategist, Morgan Stanley Wealth Management

Nick Lentini, CFA, Investment Strategist, Morgan Stanley Wealth Management

Jonah Silverman, Associate, Morgan Stanley Wealth Management

To hedge stocks, investors have historically turned to bonds based on the observation that the two asset classes typically move in opposite directions. Then, in the 1950s, Modern Portfolio Theory (MPT) showed that investors can maximize risk-adjusted returns by balancing equity and fixed income exposures within a portfolio. MPT also shows that this stock/bond diversification can minimize losses during downturns while not excessively limiting the upside potential.

One would therefore expect the relationship between stocks and bonds to be negatively correlated over time. However, on examination, we see that the correlation between stocks and bonds has fluctuated between positive and negative across the years (see chart). For example, from March 2020 through August, US stocks and bonds moved up in price and had a positive correlation. Since then, stocks have continued to climb, but bond prices decreased, resulting in a higher interest rate.

#### Stock-Bond Correlation Has Had Sharp Swings



Note: Prior to 1978, a US Total Bond Total Return Index is used in place of US Treasuries. The majority of the index is Treasuries. Source: Bloomberg, Morgan Stanley Wealth Management Global Investment Office as of Dec. 31, 2020

So, what about the stock/bond correlation in 2021? Morgan Stanley & Co.'s base case December 2021 price target for the S&P 500 Index is 3,900 versus the year-end price of 3,756. Conversely, MS & Co. expects bonds to sell off, with the benchmark strategists expecting 10-year US Treasury yields to rise to 1.45% by December from 0.91% at the end of 2020. If these forecasts prove to be on target, the inverse stock and bond relationship will be in play.

However, what if stocks decline? With interest rates

continuing to hold steady near record lows (see chart), there is not much income to be had currently, and the potential for capital appreciation is quite limited. Thus, investors are questioning whether long-duration bonds can perform their portfolio diversifier role if the economy sees another extraneous macro shock. Here we share other possible courses of action, given our belief that interest rates could stay lower for considerably longer.

#### Long Decline in Bond Yields Leaves Little Income



#### **Dividend Growth Strategies**

Dividend growth strategies reduce some of the risk that comes with equity investing by providing higher levels of current income. Dividend growth investors target companies that have raised dividends over a consecutive number of years, which are usually mature companies with stable cash flows and established business lines. In other words, they are companies with the wherewithal to increase their payouts.

Our analysis shows that such stocks have paced the broader market during expansionary times but provide downside protection during periods of falling earnings. Consider the S&P Dividend Aristocrats Index, an equal-weighted index of S&P 500 Index members that have increased their dividends annually for at least 25 years. Since 2000, the index posted an average total monthly return of -0.3% during periods of falling corporate earnings in contrast with the full S&P 500, which had a -1.6% average monthly return. Also since 2000, the Aristocrats Index delivered 1.3% during months with rising earnings while the S&P 500 was up only 1.2% on average. Furthermore, the current yield of 2.6% is attractive versus 1.6% for the S&P 500 and 1.7% for the 30-year Treasury bond. Overall, dividend growers can act as an alternative to bonds, but the strategy carries equity risk.

#### Investment Grade Credit

Investment grade credit offers another source of portfolio diversification with potentially better returns—but more risk —than US Treasuries. While Treasury yields have little room for further decline, investment grade credit could offer better returns as their credit spreads—the risk-related extra return they have relative to Treasuries—tighten because of recovering corporate earnings. In fact, MS & Co. equity strategists forecast 27% earnings-per-share growth for the S&P 500 in 2021. These conditions should be supportive. MS & Co. credit strategists expect tighter spreads on investment grade credit, about 10 basis points this year, which roughly translates to about 2.2% excess returns relative to Treasuries.

### Gold

Gold is commonly used as a portfolio hedge when inflation and volatility are spiking, but what is its usefulness as a hedge for equity risk? Looking at gold's correlation to the S&P 500 Index during a 10-year period we see that the correlation is close to 0% (see chart). This leads us to believe that there are extraneous factors that affect gold and equities and cause them to move together and apart, seemingly at random. In 2020, both gold and US equities rose together, reacting to easy monetary policy and negative real rates, which helps equity valuations and the carrying cost of gold, respectively. If inflation were to move upward, as Morgan Stanley & Co. economists expect, gold would benefit from a lower real interest rate, and equites may face decreased valuations, suggesting gold could be a short-term equity hedge.

### Gold Has Shown Little Correlation With US Equities



However, as pointed out by MS & Co. commodity strategists Susan Bates and Marius van Straaten, once the market begins to price in inflation and expects the Federal Reserve to raise rates, gold may face headwinds. In the long term, we expect gold to serve as a hedge against secular forces such as US dollar debasement and debt monetization.

For more on dollar debasement and debt monetization, see our Special Report, "Policymakers and the Pandemic: Defining a New Business Cycle," Nov. 6, 2020.

### THEMATIC INVESTING

# How Did Scientists Develop a Vaccine So Quickly, and What Does It Mean for the Future of Medicine?

Vijay Chandar, Investment Strategist, Morgan Stanley Wealth Management James Ferraioli, Associate, Morgan Stanley Wealth Management

As the COVID-19 pandemic swept across the globe, it became increasingly clear that the most likely path to normalization would begin with the development of a vaccine. However, historical precedent around vaccine discovery spurred many questions about how long it could take for a successful COVID-19 vaccine to come to market. Historically, it has taken several years, at a minimum, to develop a vaccine following an outbreak, with the mumps and measles vaccines the two quickest to be produced in history. What's more, past attempts to discover a successful coronavirus vaccine (SARS, MERS) had yet to yield a distributed treatment. Given this history, the progress made to date on the vaccine front has been remarkable, with what now looks like at least two vaccines approved for use that should soon be available at scale.

While questions over the pace of distribution, as well as how long immunity may last, need to be answered in the months ahead, Matthew Harrison, Morgan Stanley & Co. Research's lead biotech analyst, currently expects 15 million to 25 million vaccine doses to become available each month starting this month. What that means is the rate of new infections should fall dramatically over the summer as a larger proportion of the population develops immunity, either through exposure or vaccination, and this could effectively end the pandemic by next fall.

How were scientists able to produce a vaccine so quickly? The vast resources made available to scientists and the attention devoted to resolution of the pandemic from both the public and private sectors certainly played a large part in the endeavor. Operation Warp Speed in the US and similar efforts abroad catalyzed the financial support necessary for rapid development of the most efficacious vaccine candidates (see chart). Perhaps another important difference was provided by technology—or put differently, having a new tool in the toolkit: messenger RNA (mRNA) solutions. The two most effective vaccine candidates to date—the Pfizer/BioNTech and Moderna vaccines—employ an mRNA approach and have demonstrated strong initial results.

### How Is mRNA Different From Traditional Vaccine Development?

Traditional vaccine development starts with a form of a virus, either live, weakened, dead or isolated components. Such substance becomes the basis for a solution that could then be tested to gauge immune response, first in lab cultures and animals, and then in humans. The idea is to take a virus, make it less dangerous, and then introduce it into a subject to trigger an antibody-producing immune response that would safely prevent future infection with a measure of efficacy. With mRNA, geneticists first map a virus' genetic sequence, genetically engineer particular virus genes that capture its blueprint, and then embed this "information" into an RNA lipid that can then be transferred into the human body. Once the mRNA is inside the body, cells follow the instructions

#### 4,500 S&P 500 (left axis) US New Daily COVID-19 Cases\* (right axis) 160,000 Nov. 21: AstraZeneca vaccine has an efficacy of March 30: \$456 July 31: \$2 billion of 140.000 April 16: \$483 million of 70% funding for Sanofi million of funding funding for 4.000 and GlaxoSmithKline for Moderna Johnson & 120,000 July 22: \$1.95 billion vaccines vaccine Johnson vaccine of funding to Pfizer 100,000 for manufacturing 3,500 and distribution 80,000 3.000 60,000 Nov.18: May 21: \$1.2 40,000 Pfizer vaccine billion of 2,500 has an funding for Nov. 16: Moderna 20,000 efficacy of AstraZeneca vaccine has an 95% vaccine efficacy of 94.5% 2.000 n Feb '20 Mar '20 Apr '20 Sep '20 May '20 Jun '20 Jul '20 Aug '20 Oct '20 Nov '20

#### Operation Warp Speed and mRNA Technology Resulted in Developing a Vaccine in Record Time

\*Seven-day moving average Source: HHS, CDC, Bloomberg as of Nov. 30, 2020 embedded in the mRNA to produce a harmless piece of protein that resembles the virus—often referred to as the"spike protein." After this spike protein is created, the immune system recognizes that it doesn't belong there and begins an immune response by generating antibodies, essentially mirroring what would happen in a natural infection. Rather than have the body learn to fight a virus by confronting a version of it in the traditional vaccine process, mRNA-based solutions can be described as transferring the information needed to fight a virus directly to the human body.

What is the benefit of mRNA versus traditional vaccines? Given its reliance on genetic engineering, the time to produce an mRNA vaccine is much shorter than in traditional methods. Handling live viruses is difficult and generally a limiting factor in terms of producing a vaccine. With mRNA, once a gene's sequence is mapped, producing the mRNA blueprint can be done quickly. Moderna reportedly produced the mRNA vaccine "code" just two days after receiving the COVID-19 genetic information. This dramatically reduced discovery time, allowing mRNA-based vaccines to quickly move into testing, and may be the reason why we have an approved vaccine less than one year into the pandemic.

The mRNA approach has been around conceptually since the 1960s and has been used at various stages of development for vaccines and therapeutics during the past two decades. However, prior to COVID-19, no mRNA-based vaccine had been licensed for development. This technology is now on the precipice of delivering one of history's most important medical breakthroughs—and it may just be the beginning.

Some of the areas that mRNA programs were focused on in recent years included treatments for rare and genetic diseases, where few effective treatments existed, as well as cancer, both in terms of treatments and potential vaccines. The area that was always believed to have the most promise was vaccines, in part because the mRNA process would be faster than traditional methods in producing a large amount of vaccine in a crisis such as the pandemic. That promise now appears to have been fulfilled.

The question remains, with mRNA having delivered on the COVID-19 vaccine front, can it prove similarly effective in other areas and potentially further revolutionize medicine? While we caution extrapolating the COVID-19 success across platforms, as a result of this experience, more focus, attention and funding is likely to funnel toward mRNA-based solutions,

as well as more broadly genetic treatments. In turn, that could lead to similar breakthroughs relating to finding vaccines for other viruses and potential treatments for diseases. Last year, Moderna announced a new vaccine effort related to HIV, and both Moderna and BioNTech plan to offer more trial results on their respective cancer efforts this year. Expect to hear much more about mRNA in the months and years ahead, and the bull case, both for markets and mankind, could very well be mRNA discoveries that rival the progress made in biologics during the biotech boom of the past few decades.

### Where Can We Go From Here?

mRNA is just one example of how technology and health care have come together through the COVID-19 pandemic. More broadly, as it relates to drug discovery, data analysis and genomics have been speeding up the pace of research in recent years. We expect to see continued gains as a result of efficiencies and better use of data in the years ahead. Telehealth saw a big rise in popularity in 2020, as virtual consultations driven by the necessity of the pandemic will likely play a bigger role even in post-pandemic medicine.

Wearable technology and remote testing/diagnostics are another example of a pre-COVID-19 trend that has accelerated through the pandemic and likely will continue to in the years ahead. Over the long term, as a result of the increased attention to these areas from the COVID-19 pandemic, investors could be rewarded for exposure to themes such as data and analytics, medical and health technology, genomics and mRNA, and distributed health care/telehealth.

As when the world confronted past health crises, a flood of investment and attention is likely to drive significant progress toward medical breakthroughs in the years ahead, even after this pandemic is over. The validation of mRNA as a way to develop vaccines has important implications beyond COVID-19; it could bode well for vaccine development for other viruses or future outbreaks, and perhaps even for therapies for difficult-to-treat diseases. As investors look past the pandemic, we expect innovation in health care to generate opportunities.

*This article was excerpted from the Dec. 17, 2020 issue of* AlphaCurrents. *For a copy of the publication, contact your Financial Advisor.* 

# FIXED INCOME Munis May Face Headwinds in 2021

Daryl Helsing, CFA, Associate, Morgan Stanley Wealth Management Matthew Gastall, Investment Strategist, Morgan Stanley Wealth Management

Over the multidecade secular bull market in bonds, municipal bond investors fared quite well. Declining interest rates drove positive price performance and complemented the taxadvantaged income earned on municipals. All said, 2020 returns tell the same story: Municipal valuations have gradually normalized after experiencing historic volatility in the first quarter, while benchmark yields have followed the path of US Treasuries to record lows. This produced a 5.21% total return for the Bloomberg Municipal Bond Index (as of Dec. 31).

**NEW CHALLENGES.** However, Morgan Stanley & Co. expects higher yields in 2021. The forecast calls for the 10-year US Treasury yield, now less than 1.0%, to gradually rise to 1.30% by the third quarter—and 1.45% by the end of the year. This could pose a significant challenge to the muni market in the first half. History has shown that when yields increase, flows to muni bonds risk becoming negative. That creates technical pressure for the muni market that may eventually lead to wider credit spreads and higher relative-value ratios, or muni yields as a percentage of like-maturity Treasuries.

How did we get here? Benchmark relative-value yield ratios traded above their historical averages through last year's second and third quarters (see chart). This response emanated from the historic technical weakness that state and local government bonds experienced at the beginning of the pandemic. That situation gradually corrected itself due to the Federal Reserve's aggressive monetary policy, the CARES Act, establishment of the Municipal Liquidity Facility and the summer's constructive seasonal backdrop. Moving into autumn, this healing continued on the resolution of election uncertainty and the announcement of COVID-19 vaccines.

#### After a Jump in the Spring, the Muni/Treasury Relative-Value Ratio Settled Down



Source: Refinitiv as of Dec. 31, 2020

DIVERGENCE. While Treasury yields have risen to their highest levels since March, muni yields have declined. As a result of this divergence, the benchmark 10-year relativevalue ratio has traded below the long-term average. Simultaneously, credit spreads for lower-rated bonds, including those linked to the most damaged sectors of the economy, have tightened. While this outperformance is based on myriad fundamental and technical factors, continued upward momentum in Treasury yields and the possibility of pandemic-related credit challenges are headwinds.

In addition to the potential for upward pressure on rates, other near-term risks include a pause, or even reversal, in the economic recovery due to a pandemic-challenged winter period, as well as a potential acceleration in negative credit rating actions across the public finance sector. These factors, coupled with the negative headlines they would likely produce, may hinder sentiment among individual investors, in turn increasing the risk of heightened market volatility. Looking further ahead, uncertainty around tax and infrastructure public policy, as well as structural developments, such as interstate population migration and the work-from-home phenomenon, are all factors that need monitoring.

MARKET SUPPORTS. Of course, some key pillars of the muni market's rebound may continue to work. The infusion of liquidity by global central banks has renewed the search for yield, which has benefited valuations across asset classes, including municipals. The market should also benefit from another round of fiscal stimulus. The latest relief bill is indirect in its support of state and local governments, as it delivers assistance to households, businesses and some of hardest-hit spheres of the public sector such as transportation, health care and education. Overall, the measures may boost government revenues and thus, could assuage some budgetary stresses.

Even so, we expect COVID-19 will be a dominant credit theme that will have varying effects across the market. Considering how low absolute muni yields are and the notable tightening of lower-rated bonds of late, we suggest defensive positioning in terms of duration and credit quality, as current valuations do not appear to fully compensate investors for the near- and long-term risks. Our current recommended household investment strategy maintains a focus on highquality, premium-priced essential-structure bonds with lowto-neutral durations. We further believe investors should remain in close contact with their professional advisors to review the credit quality of their holdings. Furthermore, watch for opportunities to add exposure in the event that near-term headwinds increase volatility and, thus, provide more attractive valuations on high-quality essential-services bonds.

# Small Differences in Inequality Grow Into Significant Gaps

Allison Binns, PhD, Equity Strategist, Morgan Stanley & Co.

The COVID-19 pandemic and racial unrest in the US have brought racial and socioeconomic inequality into sharp relief. Stakeholders across the financial ecosystem are taking a closer look at systemic inequality. Notably, three Federal Reserve Banks have launched the "Racism and the Economy" speaker series. In response to increasing investor interest in the mechanisms of social inequality, we drill down into access to homeownership. Our collaborative effort includes contributions from sustainability strategists, economists, mortgage strategists, banking and real estate analysts and muni strategists.

RACIAL WEALTH GAP. The racial wealth gap stems in part from a gap in homeownership. The Black-White homeownership gap was more than 30 percentage points in 2018—the same level as in 1890, according to the National Fair Housing Alliance. Blacks and Hispanics are significantly more likely than Whites to have their mortgage applications rejected, and our work suggests race is a contributing factor in application denials (see chart). We believe that relative lack of access to banking services in Black and Hispanic communities may be driving this disparity, along with unconscious bias in mortgage origination.

#### Black Households Denied a Mortgage at Twice the Rate of White Households



Note: Restricted to primary, first lien, purchase loans with a loan/income ratio within the 10th-90th precentiles

Source: HMDA, Morgan Stanley Research as of Nov. 12, 2020

This situation is contributing to a rent affordability crisis in the US that disproportionately affects low-income earners. A report from Zillow, a real estate website, details that in highcost areas such as Los Angeles, New York City and San Jose the median lower-income household cannot realistically afford the median low-end rental. Even the markets that have been more affordable historically require a significant chunk of low-income renters' dollars for the most affordable rentals. The solution is developing more low-cost rental housing rather than regulating what we have, given unfilled gap of 7.5 million units for low-income households, according to the National Low Income Housing Coalition.

LOAN DENIALS. Higher loan denial rates among minority groups can dampen credit ratings for communities in which they make up a large share of the population, potentially compounding existing inequality. This can impact those communities' relative ability to make capital investments, risking a dynamic in which they lag on quality of life and economic viability. All else being equal, lower property values typically equate to lower credit ratings, higher borrowing costs and less money for capital investment.

We've attempted to calculate the economic cost of the homeownership gap. We estimate that some 4.9 million fewer ownership households have been created, equating to roughly six years of household formation. Knock-on effects include up to 784,000 fewer long-term jobs and the loss of as much as \$400 billion in tax revenue. The gap also may imply a drag on consumption, given Bureau of Labor Statistics data showing that household expenditures are, on average, 55% higher for homeowners than for renters.

**ELECTORAL IMPLICATIONS.** The final result of the 2020 election is likely to have significant implications for federal regulations and policies that address inequality in access to housing and credit. While the Trump administration pursued an agenda of deregulation across most housing and lending policy areas, the Biden-Harris platform advocates for increased regulation to address racial inequality. With a Democrat-controlled House and either a Republican-controlled or 50/50 Senate (pending the Jan. 5 Georgia runoff), the Biden administration may have to retool its proposed \$640 billion housing plan to appeal to moderate Democrats and Republicans.

The above article is an excerpt from "Entrenched Inequality: Racial Disparity in Access to Home Ownership," a report published by MS & Co. on Nov. 12, 2020. For a copy of the report, please contact your Financial Advisor.

#### WORK

# One in Five Corporate Meetings Could Go Virtual Long-Term

Jamie Rollo, Equity Analyst, Morgan Stanley & Co. International PLC+

In the fall of each year, Morgan Stanley & Co. Research surveys corporate travel managers about their budgets for the following year. In late 2019, for instance, the survey projected a 2.1% spending increase for 2020—but then came COVID-19, a global recession and, like all other forecasts ...

That said, this annual survey has historically been a reasonable guide to growth in "RevPAR," hotel shorthand for "revenue per available room." In turn, this number informs investments in the lodging sector. While we expect final spending decisions to be influenced heavily by the path of the pandemic, managers focused on the travel industry see firsthand how their companies are dealing with it.

Our key findings are:

### Significant Shift to Virtual Meetings

A weighted average of 200 managers who collectively account for \$8 billion in travel spending implies that they expect to shift 34% of travel volumes to virtual meetings in 2021—and 22% in 2022, which we consider to be a long-term forecast. These figures are slightly above the findings in our midyear survey of 31% and 19%, respectively. Essentially it suggests that around one in five corporate room nights could be permanently lost. Given that corporate travel is 50% to 70% of revenue for most hotel companies, this could mean a 10% to 14% drop in revenue relative to the prepandemic level. Importantly, there is much less uncertainty about how prevalent virtual meetings will be, with 23% unsure about 2022 versus 41% in our midyear survey.

#### Weak Budget Outlook for 2021

Some 84% of companies now allow their workers to travel, in comparison with 66% in July. However, after a likely 47% cut in 2020 travel budgets, 2021 travel budgets are expected to be down another 12%, implying a decline of 53% versus 2019. Only 39% of respondents expected their travel budgets to increase in 2021, the weakest in 14 years (see chart). That is significantly worse than our midyear survey, which showed 2021 budgets to be down 29% versus 2019. It is also worse than our 2021 RevPAR forecasts of 25% below 2019 in the US and 44% below in Europe, but in line with our long-term forecasts for a six- to seven-year cyclical recovery.

Survey expectations are lower than our headline RevPAR forecasts, given corporate demand has lagged leisure demand and will likely continue to do so. According to our survey results, corporate travel managers expect to reduce hotel room volumes by some 28% in 2021 versus 2019, with room

rates expected to be down 5% in 2021. Both volume and rate reductions are fairly uniform by region and by hotel company. Note that this average rate drop is much better than the 30% average rate drop in the US-Europe market data in recent weeks, but some of this decline reflects a changing sales mix, which would not show up in surveys. Leisure rates are holding up better.

# While Travel Budgets Are Likely to Increase, 2021 May Have the Weakest Gains in 14 Years



Note: Total budget includes hotel and airline spending. Source: AlphaWise, Morgan Stanley Research as of Nov. 6, 2020

## China Stronger Than US and Europe

China RevPAR recovered significantly in September/October, down 10% year over year, after being down 54% in the second quarter and 20% in the third quarter. RevPAR in the US and Europe fell more than 50% year over year in those months. While a second wave of COVID-19 infections is pushing RevPAR down everywhere, we expect overall China to recover such that 2021 is similar to 2019. We also think that China could see a smaller shift to virtual than expected by corporate managers, given the lower impact of the pandemic relative to other regions.

#### Less Pressure From Alternative Accommodations

In 2020, 32% of respondents used alternative accommodation providers in the preceding 12 months, compared with 33% in 2019 and 31% in 2018. This suggests little incremental pressure. Similarly, none of the respondents who did not use alternative accommodations in the last 12 months expect to use them in the next 12 months, citing safety concerns as the main reason.

*The above article is an excerpt from "Global Travel Survey," a report published by MS & Co. on Nov. 6, 2020. For a copy of the report, please contact your Financial Advisor.* 

# **Q&A** Of Market Bubbles and Climate Change

Jeremy Grantham, who co-founded GMO in 1977 and serves as the firm's long-term investment strategist, has built his reputation on a discourse of speculative market bubbles and an investment philosophy that theorizes asset classes meanrevert from both highs and lows. His more recent passion project is climate change. "Everything that goes into the greening or electrifying of America has got an enormous wind in its sail," he explains. In mid October, Grantham shared his thoughts on the state of markets, as well as the potential impact of climate change, with Lily Trager, director of Investing With Impact at Morgan Stanley Wealth Management. The following is an edited version of their conversation.

LILY TRAGER (LT): You've previously "called" big bubbles in the past, including Japan in the 1980s, tech in the 1990s and real estate and other risk assets in the 2000s. What are your thoughts on the market today?

JEREMY GRANTHAM (JG): I've been quite reluctant to accuse this 10-year rally of being a bubble. A few years ago, I debated some of my colleagues in public that we were in fact not in a bubble, even though the price/earnings ratio (P/E) seemed pretty high by historical standards. What I pointed out then and would today is that the real mark of a bubble is when psychological behavior is not in balance.

Some bubbles have peaked at very high P/Es. Japan peaked at 65 times earnings; in 1929, the US peaked at only 21 times earnings. They had one thing in common: The peaks were preceded by truly crazy behavior—and that has been lacking in the 10 years of the current bull market. The market has been climbing a wall of worry—plenty to complain about, plenty to be nervous about—and has still worked its way up.

However, more recently, and spectacularly so in the last six months, we have had a market in which companies that are bankrupt triple and quadruple in a week. We have had a market in which a handful of technology stocks carry the day and drag the entire market to new highs. This is exactly what you want to see if you're in the bubble-spotting business. You want to see crazier things every week. So we can check that off, finally. It's been a long way, but now we've gotten there.

The trouble with the end of a bubble is you can miss calling it by a month or two, and that month or two can have a 20% advance. There's nothing we can do about that, but I think that the end is not far off. It is not five years away. It's probably not five months away, but I would say this market is acting like all the topping-out processes that I've studied.

LT: What do you think about the argument that high equity

valuations can be justified by low interest rates?

JG: I think if you can move down the risk-free rate, adjusted for inflation, as we have done, then you begin to live in a world where the return on everything is lower. Instead of earning the historical return rate of 6% a year, you'll tend to make 4%. Or instead of making 5%, you'll make 3%. That is the effect that we've been rolling through. Not a rapid adjustment, it takes years of seeing these low rates before it finally embeds itself in all asset class prices.

It doesn't mean you make more money. It means that everything you invest in has a lower return, and what you're exposed to is that the world begins to rotate a little back to where it came from. When that happens, the whole machinery goes into reverse. For instance, the 3.0% bonds start to yield 4.5%—and that can be and is a very painful process.

The question is, will that happen? Will the rates go up? If you want to be a bull, you have to believe that low rates are here forever and that inflation is gone forever, and that's a big ask. Even if you believe it's true, you have to be reconciled to a fairly low return—substantially lower on average than the good old days.

LT: Is this time at all different from previous bubbles?

JG: All of the earlier bubbles that really mattered were accompanied by what you might call dazzling economic growth. That was the case in 1929, with spectacular doubledigit growth in industrial production. It was the same in 1989 when Japan was going to take over the world. It was certainly the same in the Nifty Fifty era of Coca-Cola and IBM, and it was true of the tech stocks at the recent turn of the century.

They were all characterized by a condition of almost near perfection in the economy—or it was believed by the market to be nearly perfect. The economy was strong and asset classes were strong, and all you had to do was extrapolate that and you could convince yourself the market was worth almost any P/E that came to mind.

The current situation is unique in that we can all agree that the economy is not in the top 10% or the top 5%, which it was in those previous four cases. The economy is in the bottom 10%.

The current environment is one of the biggest setbacks that the global economy has had to deal with. So there is a considerable amount of pain in the recent past, the present, and I suspect for at least the next couple of years before this is fully digested. Some of it may never be fully digested; the airline industry and tourism may never be quite the same.

Instead of extrapolating perfect economics, markets are showing a belief that government intervention is more powerful than a bad economy, that low rates will overwhelm
bad economic growth and high unemployment. That's a big ask of them and it takes a lot of faith.

What we have discovered over the years, particularly during this cycle, is that when governments all over the world decide to use stimulus, it is brilliant for the stock market and not so brilliant, it turns out, for the economies—some of which are okay, some of which are poor. But all the stock markets are good.

When you provide a lot of cheap money, you will have a better effect on the stock market than you will have on reality—and that is the very definition of a bubble. One should be scared that something about the future will change in an unpleasant direction and leave us hanging out here.

LT: You are particularly passionate about addressing the effects of climate change. For those who aren't currently incorporating climate risks and opportunities into their investment decisions, how would you suggest approaching this?

JG: I have been obsessing about climate change for well over 10 years. Actually about 20, but it took me until about 12 years ago to pluck off the courage to mention it in public and in financial circles. Even when I started a dozen years ago, my clients' heads would shake a little bit. They'd roll their eyes, and my colleagues were pretty good at doing the same.

Yet, when you look at the broad sweep—which is the point I was trying to sell—over a decade or two, how could the fossil fuel industry not hurt and how could the replacement industries, the greening industries, if you will, not benefit?

To get the job done, to save us from such a bad climate that it would destabilize global society, we will have to spend tens of trillions of dollars replacing the existing systems with a green, efficient, longer-lasting, more easily replaceable and sustainable system.

And what has happened in the last 10 years? Venture capital investors are finding great opportunities. In the past seven years, the venture capital money toward replacement industries has gone from \$420 million, a puny amount, to \$16 billion.

What has happened to the other side of the battle? The oil industry was 24% of the S&P 500 in 1982. It is less than 3% today—an 80% loss of its relative value in nearly 40 years. There have been 1,200 climate startups totaling \$60 billion in the last decade, but we need a whole lot more.

My point is that rather than thinking tactically, try and get the broad sweep of history. What stats like this say is that everything that goes into the greening or electrifying of America has got an enormous wind in its sail.

They are doing extremely well this year and the attitude of everybody is shifting. After 10 years of very disappointing,

slow growth in attitude, 75% of Americans—and, critically, 75% of everybody under 40 years old, regardless of political party affiliation—now believe climate change is important and it's man-made. This is critical mass.

Unlike the early years, now the green technologies are competitive. It is cheaper to use green electricity than it is to produce coal and gas electricity. You can actually be given a coal plant and still not produce, on a marginal cost basis, energy as cheaply as you can by building a wind farm or a solar farm and generating it.

LT: Much of what drives your perspective is data that you're reviewing on a regular basis, data which you've said often gets ignored. Are there other examples you can share?

**JG**: One issue is what the implications of climate change will mean for Africa and India.

Everybody worries about the flooding in Miami, but come 2070, big chunks of the Indian subcontinent will be basically uninhabitable. There will be two billion people on the Indian subcontinent, and the majority of it will be so humid and so hot that you will not be able to stay outside for more than three hours a day for many days a year. There's only 1.5% of the planet that meets that description today—and it will be 17% in 2070.

In Africa, you have this impossible situation in which the UN's median forecast for population is that it will go to 4 billion from 1.2 billion by the end of the century, but they simply can't sustain it. They're being hurt badly by climate change, and under that stress of population growth they will not be able to feed their people.

Those are the two biggest risks, and they are barely even classified as risks. They are certain. They may take an extra 10 or 15 years, but those two stress levels are unavoidable and they will cause the future to be a very strange place in terms of global insecurity.

#### LT: Any parting thoughts?

JG: I do have one last point and it's on time horizon. An individual really can decide to pick those ideas that may seem far-out. Institutions can never do that; companies feel too much of a commercial imperative to be focused on the next year or two or three—but individuals can focus on years three through 10. You can be the person getting out of an oil and gas company because you can see the writing on the wall. You can be the person orienting your portfolio to go green today. ■

Jeremy Grantham is not an employee of Morgan Stanley Wealth Management or its affiliates. Opinions express by him are his 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.



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

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Source: Morgan Stanley Wealth Management GIC as of Dec. 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 19 of this report. Source: Morgan Stanley Wealth Management GLC as of Dec. 31, 2020

### **Disclosure Section**

The **Global Investment Committee (GIC)** is a group of seasoned investment professionals from Morgan Stanley & Co. and Morgan Stanley Wealth Management who meet regularly to discuss the global economy and markets. The committee determines the investment outlook that guides our advice to clients. They continually monitor developing economic and market conditions, review tactical outlooks and recommend asset allocation model weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

Allison Binns, Vijay Chandar, Vibhor Dave, James Ferraioli, Matthew Gastall, Daryl Helsing, Nick Lentini, Jamie Rollo and Jonah Silverman are not members of the Global Investment Committee and any implementation strategies suggested have not been reviewed or approved by the Global Investment Committee.

#### Index Definitions

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

#### **Risk Considerations**

#### Alternative Investments

The sole purpose of this material is to inform, and it in no way is intended to be an offer or solicitation to purchase or sell any security, other investment or service, or to attract any funds or deposits. Investments mentioned may not be appropriate for all clients. Any product discussed herein may be purchased only after a client has carefully reviewed the offering memorandum and executed the subscription documents. Morgan Stanley Wealth Management has not considered the actual or desired investment objectives, goals, strategies, guidelines, or factual circumstances of any investor in any fund(s). Before making any investment, each investor should carefully consider the risks associated with the investment, as discussed in the applicable offering memorandum, and make a determination based upon their own particular circumstances, that the investment is consistent with their investment objectives and risk tolerance.

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.

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 economics. 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

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 longterm 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 state of residence and, if applicable, local 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 state of residence and if applicable, local 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 state 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 <u>www.fdic.gov</u>.

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

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

> Portfolio Review January 2021

> > 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



# City of Troy, ERS and NAIC January 2021

## Discussion:

- December Performance
- Option Recommendations

# **WBS** Sources of portfolio value

as of December 31, 2020



---- Market Value - Net amount you invested (net of fees)

	MTD	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	ITD
	11/30/2020 to	09/30/2020 to	12/31/2019 to	12/31/2017 to	12/31/2015 to	12/31/2013 to	12/31/2010 to	12/31/2002 to
	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2020
Opening value	118,532,996.21	113,370,846.37	110,129,350.62	118,195,991.98	114,448,472.86	83,448,295.34	73,835,266.56	52,625,899.06
Net deposits/withdrawals	-200.00	-3,000,225.00	-5,000,250.00	-35,110,100.00	-57,937,491.53	-34,113,254.07	-47,777,840.11	-61,113,294.04
Div./interest income	1,800,741.26	2,133,122.61	3,552,414.31	9,381,477.33	15,453,821.96	22,151,238.98	27,574,256.11	45,394,749.36
Change in accr. interest	2,344.14	-6,934.42	-6,566.56	-6,197.68	-45,446.23	-49,556.02	-115,469.96	-555,529.90
Change in value	2,059,004.63	9,898,076.68	13,719,937.88	29,933,714.62	50,475,529.18	50,958,162.01	68,878,673.63	86,043,061.76
Closing value	122,394,886.24	122,394,886.24	122,394,886.24	122,394,886.24	122,394,886.24	122,394,886.24	122,394,886.24	122,394,886.24
Gross Time-weighted ROR	3.31	10.81	16.40	12.72	12.76	9.92	10.14	8.81
Net Time-weighted ROR	3.26	10.71	16.21	12.54	12.60	9.78	10.03	8.74

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

#### Benchmarks - Annualized time-weighted returns

	<u> </u>							
Consolidated Blended Index	3.57	11.16	14.39	8.97	10.20	7.69	7.88	8.37
US Treasury Bill - 3 Mos	0.01	0.02	0.54	1.52	1.13	0.81	0.59	1.25
Barclays Agg Bond	0.14	0.67	7.51	5.34	4.43	4.08	3.84	4.34
MSCI Emerging Markets-PR	7.15	19.34	15.84	3.68	10.20	3.68	1.15	8.60
Russell 2000	8.65	31.37	19.96	10.24	13.24	9.33	11.19	11.00
S&P 500	3.84	12.15	18.40	14.17	15.20	12.90	13.87	10.61

**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.** 

# **\* UBS** Asset allocation review

as of December 31, 2020





Pooled investment cash allocation: \$833,376.47

Asset allocation review - as of December 31, 2020 (continued)

	Market value (\$)	% of Portfolio
Cash	3,881,131.75	3.17
<b>Cash</b> US	<b>3,881,131.75</b> 3,881,131.75	<b>3.17</b> 3.17
US Cash	3,881,131.75	3.17
Fixed Income	34,033,512.36	27.81
US	28,779,307.66	23.51
US Fixed Income	19,737,121.63	16.12
Short	5,875,582.47	4.80
Intermediate	13,750,068.16	11.23
Other	111,471.00	0.09
Government Other	4,312,527.60	3.52 3.52
Corporate IG Credit	4,312,527.60 351,170.24	3.52 0.29
Short	351,170.24	0.29
Corporate High Yield	4,378,488.19	3.58
Corporate High Yield	4,378,488.19	3.58
Global	4,036,474.98	3.30
Global	4,036,474.98	3.30
Global	4,036,474.98	3.30
International	1,217,729.72	1.00
International	136,019.01	0.12
International	136,019.01	0.12
Emerging Markets	1,081,710.71	0.88
Emerging Markets	, 1,081,710.71	0.88
Equity	84,480,242.13	69.02
US	72,434,185.12	59.18
US Equity	2,070.00	0.00
Other	2,070.00	0.00
Large Cap	42,810,616.19	34.98
Core	22,639,204.52	18.50
Growth	11,765,191.92	9.61
Value	8,181,759.75	6.68
Public Real Estate	224,460.00	0.19 16.88
Mid Cap Core	20,657,755.31 12,863,456.60	10.00
Growth	4,719,562.73	3.86
Value	2,763,885.98	2.26
Public Real Estate	310,850.00	0.25
Small Cap	8,963,743.62	7.32
Core	4,745,314.92	3.87

	Market value (\$)	% of Portfolio
Equity		
US		
Small Cap		
Growth	2,407,803.90	1.97
Value	1,810,624.80	1.48
Convertibles	0.00	0.00
Convertibles	0.00	0.00
International	12,046,057.01	9.84
International	2,791,718.50	2.28
Core	310,360.00	0.25
Other	2,481,358.50	2.03
Developed Markets	6,008,502.75	4.91
Core	712,898.10	0.58
Growth	4,929,254.65	4.03
Value	366,350.00	0.30
Emerging Markets	3,245,835.76	2.65
Growth	2,928,934.34	2.39
Other	316,901.42	0.26
Commodities	0.00	0.00
Non-Traditional	0.00	0.00
Other	0.00	0.00
Total Portfolio	\$122,394,886.24	100%

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



# Equity sector analysis

as of December 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	11.08% 11.19%		9,375,706.82	9,465,030.91	-89,324.09	11.08%	11.19%	-0.11%
Consumer Discretionary	15.30% 11.77%		12,939,657.98	9,955,622.32	2,984,035.66	15.30%	11.77%	3.53%
Consumer Staples	6.25% 7.36%		5,285,519.85	6,225,435.88	-939,916.03	6.25%	7.36%	-1.11%
Energy	2.02% 2.29%		1,710,225.41	1,936,990.24	-226,764.83	2.02%	2.29%	-0.27%
Financials	12.05% 10.32%		10,190,682.42	8,729,143.79	1,461,538.63	12.05%	10.32%	1.73%
Health Care	9.66%		8,171,057.86	11,089,057.66	-2,917,999.80	9.66%	13.11%	-3.45%
Industrials	10.17% 7.76%		8,600,801.27	6,563,774.79	2,037,026.48	10.17%	7.76%	2.41%
Information Technology		27.66% 27.77%	23,396,915.74	23,489,178.58	-92,262.84	27.66%	27.77%	-0.11%
Materials	2.75% 2.66%		2,323,879.28	2,249,953.73	73,925.55	2.75%	2.66%	0.09%
Real Estate	1.76% 2.43%		1,492,674.06	2,055,408.86	-562,734.80	1.76%	2.43%	-0.67%
Utilities	1.30% 2.71%		1,097,605.93	2,292,246.09	-1,194,640.16	1.30%	2.71%	-1.41%
Total classified equity			\$84,584,726.62					
Unclassified Securities			-\$104,484.49					

Rounding calculation may affect totals.

## Detail of equity sector analysis

	Number of shares	Price on 12/31/2020 (\$)	Value of equity (\$/%)	CIO GWM Recommendation	UBS Investment Research rating
Communication Services					
ALPHABET INC CL A			1,458,196.48	Most Preferred	Buy (Rating Exception)
CUSIP: 02079K305 Symbol: GOOGL	832.00	1,752.64	1.72%		
ALPHABET INC CL C			1,583,699.52	Most Preferred	Buy (Rating Exception)
CUSIP: 02079K107 Symbol: GOOG	904.00	1,751.88	1.87%		
AT&T INC			171,639.68	Most Preferred	Neutral (Rating Exception)
CUSIP: 00206R102 Symbol: T	5,968.00	28.76	0.20%		
COMCAST CORP NEW CL A	40.000.00	<b>Fa i a</b>	555,440.00	Most Preferred	Neutral
CUSIP: 20030N101 Symbol: CMCSA	10,600.00	52.40	0.66%		
FACEBOOK INC CL A			1,092,640.00	Most Preferred	Buy (Rating Exception)
CUSIP: 30303M102 Symbol: FB	4,000.00	273.16	1.29%		
NEXSTAR MEDIA GROUP INC CL A			880,071.40		
CUSIP: 65336K103 Symbol: NXST	8,060.00	109.19	1.04%		
WALT DISNEY CO (HOLDING CO) DISNEY COM			1,061,714.80	Bellwether	Neutral
CUSIP: 254687106 Symbol: DIS	5,860.00	181.18	1.26%		
MUTUAL FUNDS COMPONENT			2,572,304.94		
(for further details see last section of this report)			3.04%		
Total Communication Services			\$9,375,706.82		
			11.08%		
Consumer Discretionary					
AMAZON.COM INC			1,905,304.05	Most Preferred	Buy (Rating Exception)
CUSIP: 023135106 Symbol: AMZN	585.00	3,256.93	2.25%		
BOOKING HLDGS INC			445,454.00		Neutral (Rating Exception)
CUSIP: 09857L108 Symbol: BKNG	200.00	2,227.27	0.53%		
CARMAX INC			472,300.00		
CUSIP: 143130102 Symbol: KMX	5,000.00	94.46	0.56%		
D R HORTON INC			482,440.00	Bellwether	Buy (Rating Exception)
CUSIP: 23331A109 Symbol: DHI	7,000.00	68.92	0.57%		
GENTEX CORP			169,650.00		
CUSIP: 371901109 Symbol: GNTX	5,000.00	33.93	0.20%		
GENUINE PARTS CO			301,290.00		
CUSIP: 372460105 Symbol: GPC	3,000.00	100.43	0.36%		
LKQ CORP NEW			140,960.00		
CUSIP: 501889208 Symbol: LKQ	4,000.00	35.24	0.17%		
MCDONALDS CORP			225,309.00	Most Preferred	Buy
CUSIP: 580135101 Symbol: MCD	1,050.00	214.58	0.27%		
o reilly automotive inc			1,425,595.50		Buy
CUSIP: 67103H107 Symbol: ORLY	3,150.00	452.57	1.69%		
PATRICK INDUST INC			546,800.00		
CUSIP: 703343103 Symbol: PATK	8,000.00	68.35	0.65%		
STARBUCKS CORP			1,206,734.40	Bellwether	Neutral (Rating Exception)
CUSIP: 855244109 Symbol: SBUX	11,280.00	106.98	1.43%		

	Number of shares	Price on 12/31/2020 (\$)	Value of equity (\$/%)	CIO GWM Recommendation	UBS Investment Research rating
Consumer Discretionary					
TRACTOR SUPPLY COMPANY			1,686,960.00		Neutral
CUSIP: 892356106 Symbol: TSCO	12,000.00	140.58	1.99%		
ULTA BEAUTY, INC			287,160.00		Buy
CUSIP: 90384S303 Symbol: ULTA	1,000.00	287.16	0.34%		
VF CORP			119,574.00	Bellwether	Neutral (Rating Exception)
CUSIP: 918204108 Symbol: VFC	1,400.00	85.41	0.14%		
YUM CHINA HLDGS INC			970,530.00		Buy
CUSIP: 98850P109 Symbol: YUMC	17,000.00	57.09	1.15%		
YUM! BRANDS INC			551,484.80	Bellwether	Buy
CUSIP: 988498101 Symbol: YUM	5,080.00	108.56	0.63%		
MUTUAL FUNDS COMPONENT			2,002,112.23		
(for further details see last section of this report)			2.37%		
Total Consumer Discretionary			\$12,939,657.98		
			15.30%		
Consumer Staples					
CONAGRA BRANDS, INC.			108,780.00		
CUSIP: 205887102 Symbol: CAG	3,000.00	36.26	0.13%		
COSTCO WHOLESALE CORP			776,166.80		Buy (Rating Exception)
CUSIP: 22160K105 Symbol: COST	2,060.00	376.78	0.92%		
DIAGEO PLC NEW GB SPON ADR			158,810.00		Buy (Rating Exception)
CUSIP: 25243Q205 Symbol: DEO	1,000.00	158.81	0.19%		
GENL MILLS INC			235,200.00		
CUSIP: 370334104 Symbol: GIS	4,000.00	58.80	0.28%		
	F 000 00	1 40 20	741,500.00	Most Preferred	Neutral
CUSIP: 713448108 Symbol: PEP	5,000.00	148.30	0.88%	Marat Durafamaral	Neutral (Detie = Eusersticus)
PROCTER & GAMBLE CO CUSIP: 742718109 Symbol: PG	7,000.00	139.14	973,980.00 1.15%	Most Preferred	Neutral (Rating Exception)
SMUCKER J M CO NEW	7,000.00	139.14	346,800.00		
CUSIP: 832696405 Symbol: SJM	3,000.00	115.60	0.41%		
WALMART INC	5,000.00	115.00	151,357.50	Most Preferred	Buy (Rating Exception)
CUSIP: 931142103 Symbol: WMT	1,050.00	144.15	0.17%	mostriciencu	buy (naming Exception)
MUTUAL FUNDS COMPONENT	1,050.00	177.15	1,792,925.55		
(for further details see last section of this report)			2.12%		
Total Consumer Staples			\$5,285,519.85		
Total consumer supres			\$3,283,319.85 6.25%		
			0.25%		

Consolidated report prepared for CITY OF TROY TX XX595 ERS TX XX600 NAIC

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	Number of shares	Price on 12/31/2020 (\$)	Value of equity (\$/%)	CIO GWM Recommendation	UBS Investment Research rating
Energy					
CHEVRON CORP			735,559.50	Most Preferred	Neutral (Rating Exception)
CUSIP: 166764100 Symbol: CVX	8,710.00	84.45	0.87%		····· · · · · · · · · · · · · · · · ·
ONEOK INC NEW	0,, 10.00	01110	537,320.00		Buy (Rating Exception)
CUSIP: 682680103 Symbol: OKE	14,000.00	38.38	0.63%		
MUTUAL FUNDS COMPONENT	,		437,345.91		
(for further details see last section of this report)			0.52%		
Total Energy			\$1,710,225.41		
			2.02%		
Financials					
BANK OF AMER CORP			1,001,745.50	Most Preferred	Neutral (Rating Exception)
CUSIP: 060505104 Symbol: BAC	33,050.00	30.31	1.18%		····· · · · · · · · · · · · · · · · ·
BLACKROCK INC	,		988,509.80	Bellwether	Buy (Rating Exception)
CUSIP: 09247X101 Symbol: BLK	1,370.00	721.54	1.17%		
CBOE GLOBAL MARKETS INC	,		917,232.00	Bellwether	Neutral (Rating Exception)
CUSIP: 12503M108 Symbol: CBOE	9,850.00	93.12	1.08%		
CHUBB LTD CHF			153,920.00	Bellwether	Neutral (Rating Exception)
CUSIP: H1467J104 Symbol: CB	1,000.00	153.92	0.18%		
EAST WEST BANCORP INC			278,905.00		Neutral (Rating Exception)
CUSIP: 27579R104 Symbol: EWBC	5,500.00	50.71	0.33%		
HARTFORD FINCL SERVICES GROUP INC			195,920.00		Buy (Rating Exception)
CUSIP: 416515104 Symbol: HIG	4,000.00	48.98	0.23%		
JPMORGAN CHASE & CO			241,433.00	Bellwether	Neutral (Rating Exception)
CUSIP: 46625H100 Symbol: JPM	1,900.00	127.07	0.29%		
MARSH & MCLENNAN COS INC			822,510.00	Bellwether	Buy
CUSIP: 571748102 Symbol: MMC	7,030.00	117.00	0.97%		
META FINANCIAL GROUP INC			182,800.00		
CUSIP: 59100U108 Symbol: CASH	5,000.00	36.56	0.22%		
PRICE T ROWE GROUP INC			876,548.10	Bellwether	Neutral
CUSIP: 74144T108 Symbol: TROW	5,790.00	151.39	1.04%		
SIGNATURE BANK NEW YORK N Y			338,225.00		Buy (Rating Exception)
CUSIP: 82669G104 Symbol: SBNY	2,500.00	135.29	0.40%		
	E 000 05		185,100.00		Buy (Rating Exception)
CUSIP: 872307103 Symbol: TCF	5,000.00	37.02	0.22%		
MUTUAL FUNDS COMPONENT			4,007,834.02		
(for further details see last section of this report)			4.74%		
Total Financials			\$10,190,682.42		
			12.05%		

	Number of shares	Price on 12/31/2020 (\$)	Value of equity (\$/%)	CIO GWM Recommendation	UBS Investment Research rating
Health Care					
ABBOTT LABS			1,343,332.81	Most Preferred	Buy (Rating Exception)
CUSIP: 002824100 Symbol: ABT	12,269.00	109.49	1.59%		
BRISTOL MYERS SQUIBB CO			186,090.00	Most Preferred	Neutral
CUSIP: 110122108 Symbol: BMY	3,000.00	62.03	0.22%		
CENTENE CORP			284,061.96	Bellwether	
CUSIP: 15135B101 Symbol: CNC	4,732.00	60.03	0.34%		
CIGNA CORP			82,022.92	Bellwether	Buy
CUSIP: 125523100 Symbol: CI	394.00	208.18	0.10%		
DANAHER CORP			444,280.00	Most Preferred	Buy (Rating Exception)
CUSIP: 235851102 Symbol: DHR	2,000.00	222.14	0.53%		
GILEAD SCIENCES INC			815,640.00	Bellwether	Neutral (Rating Exception)
CUSIP: 375558103 Symbol: GILD	14,000.00	58.26	0.96%		2
MEDTRONIC PLC		447.44	136,468.10	Bellwether	Buy
CUSIP: G5960L103 Symbol: MDT	1,165.00	117.14	0.16%		
MERCK & CO INC NEW COM	1 170 00	01.00	120,246.00	Most Preferred	Buy
CUSIP: 58933Y105 Symbol: MRK	1,470.00	81.80	0.14%		NT I
PFIZER INC	10 000 00	26.04	368,100.00	Bellwether	Neutral
CUSIP: 717081103 Symbol: PFE	10,000.00	36.81	0.44%		
SUPERNUS PHARMACEUTICALS INC	7 500 00	25.16	188,700.00 0.22%		
CUSIP: 868459108 Symbol: SUPN	7,500.00	25.16		Mast Droforrad	Dury (Dating Exception)
THERMO FISHER SCIENTIFIC INC CUSIP: 883556102 Symbol: TMO	445.00	465.78	207,272.10 0.25%	Most Preferred	Buy (Rating Exception)
UNITEDHEALTH GROUP INC	445.00	405.70	1,088,861.40	Bellwether	Neutral (Rating Exception)
CUSIP: 91324P102 Symbol: UNH	3,105.00	350.68	1,088,801.40	Deliwether	Neutral (Rating Exception)
VIATRIS INC	5,105.00	550.00	23,237.60		
CUSIP: 92556V106 Symbol: VTRS	1,240.00	18.74	0.01%		
MUTUAL FUNDS COMPONENT	1,240.00	10.74	2,882,744.97		
(for further details see last section of this report)			3.41%		
Total Healthcare					
			\$8,171,057.86		
Industrials			9.66%		
AECOM			144,362.00		Run (Pating Exception)
CUSIP: 00766T100 Symbol: ACM	2,900.00	49.78	0.17%		Buy (Rating Exception)
AMETEK INC (NEW)	2,900.00	49.70	302,350.00		
CUSIP: 031100100 Symbol: AME	2,500.00	120.94	0.36%		
CARRIER GLOBAL CORP	2,500.00	120.94	35,079.60		Buy (Rating Exception)
CUSIP: 14448C104 Symbol: CARR	930.00	37.72	0.04%		buy (Nating Exception)
FASTENAL CO	00.00	51.12	1,416,070.00		Neutral (Rating Exception)
CUSIP: 311900104 Symbol: FAST	29,000.00	48.83	1.67%		Neural (Nating Exception)
GENL DYNAMICS CORP	25,000.00	+0.05	773,864.00	Bellwether	Neutral (Rating Exception)
CUSIP: 369550108 Symbol: GD	5,200.00	148.82	0.91%	Samether	Heatrai (Adding Exception)
HUNTINGTON INGALLS INDS INC	5,200.00	110.02	852,400.00	Bellwether	Buy
CUSIP: 446413106 Symbol: HII	5,000.00	170.48	1.01%		24,

	Number of shares	Price on 12/31/2020 (\$)	Value of equity (\$/%)	CIO GWM Recommendation	UBS Investment Research rating
Industrials					
IDEX CORP			398,400.00		
CUSIP: 45167R104 Symbol: IEX	2,000.00	199.20	0.47%		
INSPERITY INC COM			817,456.80		
CUSIP: 45778Q107 Symbol: NSP	10,040.00	81.42	0.97%		
KAR AUCTION SVCS INC			93,050.00		
CUSIP: 48238T109 Symbol: KAR	5,000.00	18.61	0.11%		
LOCKHEED MARTIN CORP			113,593.60	Most Preferred	Buy
CUSIP: 539830109 Symbol: LMT	320.00	354.98	0.13%		
OTIS WORLDWIDE CORP			31,410.75		
CUSIP: 68902V107 Symbol: OTIS	465.00	67.55	0.04%		
RAYTHEON TECHNOLOGIES CORP			66,504.30	Most Preferred	Buy
CUSIP: 75513E101 Symbol: RTX	930.00	71.51	0.08%		
SENSATA TECHNOLOGIES HLDG PLC EUR			263,700.00		
CUSIP: G8060N102 Symbol: ST	5,000.00	52.74	0.31%		
WATSCO INC		006 55	226,550.00		
CUSIP: 942622200 Symbol: WSO	1,000.00	226.55	0.28%		
MUTUAL FUNDS COMPONENT			3,066,010.22		
(for further details see last section of this report)			3.62%		
Total Industrials			\$8,600,801.27		
			10.17%		
Information Technology					
AKAMAI TECHNOLOGIES INC			881,916.00	Bellwether	
CUSIP: 00971T101 Symbol: AKAM	8,400.00	104.99	1.04%		
APPLE INC			4,285,887.00	Bellwether	Neutral (Rating Exception)
CUSIP: 037833100 Symbol: AAPL	32,300.00	132.69	5.07%		
AUTOMATIC DATA PROCESSNG INC			352,400.00		
CUSIP: 053015103 Symbol: ADP	2,000.00	176.20	0.42%		
F5 NETWORKS INC			1,020,452.00		
CUSIP: 315616102 Symbol: FFIV	5,800.00	175.94	1.21%		
FABRINET			310,360.00		
CUSIP: G3323L100 Symbol: FN	4,000.00	77.59	0.37%		
FLEETCOR TECHNOLOGIES INC			886,697.50		
CUSIP: 339041105 Symbol: FLT	3,250.00	272.83	1.05%		D
	F 000 00	215 42	1,077,100.00		Buy
CUSIP: 37940X102 Symbol: GPN	5,000.00	215.42	1.27%	Marat Durafanna d	Dury (Detine Freeding)
MICROSOFT CORP	900.00	222 42	200,178.00	Most Preferred	Buy (Rating Exception)
CUSIP: 594918104 Symbol: MSFT ORACLE CORP	900.00	222.42	0.24% 258,760.00	Most Preferred	Neutral (Dating Exception)
CUSIP: 68389X105 Symbol: ORCL	4,000.00	64.69	258,760.00	Most Preferred	Neutral (Rating Exception)
PALO ALTO NETWORKS INC	4,000.00	04.05	444,237.50	Most Preferred	Neutral
CUSIP: 697435105 Symbol: PANW	1,250.00	355.39	0.53%	MOSt FIEleneu	neutai
SAMSUNG ELECTRS LTD GDR (EACH REP 25 COM STK KRW100) REG.	1,20.00	55555	316,901.42		
S *GB LINE*	170.00	1,864.13	0.37%		
CUSIP: 7960509A2 Symbol:	170.00	1,004.15	0.5770		

	Number of shares	Price on 12/31/2020 (\$)	Value of equity (\$/%)	CIO GWM Recommendation	UBS Investment Research rating
Information Technology					
SKYWORKS SOLUTIONS INC			611,520.00		Neutral (Rating Exception)
CUSIP: 83088M102 Symbol: SWKS	4,000.00	152.88	0.72%		······································
VISA INC CL A			2,624,760.00	Most Preferred	Neutral
CUSIP: 92826C839 Symbol: V	12,000.00	218.73	3.09%		
MUTUAL FUNDS COMPONENT			10,125,746.32		
(for further details see last section of this report)			11.97%		
Total Information Technology			\$23,396,915.74		
			27.66%		
Materials					
LINDE PLC EUR			1,054,040.00	Most Preferred	Buy
CUSIP: G5494J103 Symbol: LIN	4,000.00	263.51	1.25%		
RIO TINTO PLC SPON ADR			376,100.00		Neutral
CUSIP: 767204100 Symbol: RIO	5,000.00	75.22	0.44%		
MUTUAL FUNDS COMPONENT			893,739.28		
(for further details see last section of this report)			1.06%		
Total Materials			\$2,323,879.28		
			2.75%		
Real Estate					
AMERICAN TOWER CORP REIT			224,460.00	Most Preferred	Buy
CUSIP: 03027X100 Symbol: AMT	1,000.00	224.46	0.27%		
CROWN CASTLE INTL CORP REIT			429,813.00	Bellwether	Neutral
CUSIP: 22822V101 Symbol: CCI	2,700.00	159.19	0.51%		
REALTY INCOME CORP MD SBI		60.4 <b>7</b>	310,850.00		Buy
CUSIP: 756109104 Symbol: O	5,000.00	62.17	0.36%		
MUTUAL FUNDS COMPONENT			527,551.06 0.62%		
(for further details see last section of this report)					
Total Real Estate			\$1,492,674.06		
Utilities			1.76%		
	2 0 4 1 0 0	01 50	278,433.96		Buy
CUSIP: 26441C204 Symbol: DUK	3,041.00	91.56	0.33%		
MUTUAL FUNDS COMPONENT (for further details see last section of this report)			819,171.97 0.97%		
Total Utilities			\$1,097,605.93		
			1.30%		
Total classified equity			\$84,584,726.62		

	Number of shares	Price on 12/31/2020 (\$)	Value of equity (\$/%)	CIO GWM Recommendation	UBS Investment Research rating
Unclassified Securities					
CALL ABBOTT LABS DUE 03/19/21 125.000 000132			-1,135.00	Most Preferred	Buy (Rating Exception)
CUSIP: 99UBAZT06 Symbol: ABT	-10.00	113.50	0.00%		
CALL AECOM DUE 03/19/21 55.000 2048J1			-1,327.50		Buy (Rating Exception)
CUSIP: 99UBBTP37 Symbol: ACM	-9.00	147.50	0.00%		
CALL APPLE INC DUE 03/19/21 150.000 030911			-4,498.00	Bellwether	Neutral (Rating Exception)
CUSIP: 99UBA3UT2 Symbol: AAPL	-13.00	346.00	-0.01%		
CALL BANK OF AMER CORP DUE 01/21/22 37.000			-4,800.00	Most Preferred	Neutral (Rating Exception)
052591 CUSIP: 99UBBPSE8 Symbol: BAC	-30.00	160.00	-0.01%		
CALL BRISTOL MYERS SQUIB DUE 06/18/21 70.000			-1,410.00	Most Preferred	Neutral
053082	-10.00	141.00	0.00%	Most Helened	Neutrai
CUSIP: 99UBAXPD7 Symbol: BMY	-10.00	141.00	0.0070		
CALL COMCAST CORP NEW CL DUE 06/18/21 50.000			-4,100.00	Most Preferred	Neutral
026263	-8.00	512.50	0.00%		
CUSIP: 99UBB0ID6 Symbol: CMCSA					
CALL COSTCO WHOLESALE CO DUE 03/19/21 440.000			-630.00		Buy (Rating Exception)
0929G5 CUSIP: 99UBA41K1 Symbol: COST	-5.00	126.00	0.00%		
COSIF: 9906A4TKT Symbol: COST CALL DANAHER CORP DUE 03/19/21 260.000 126250			-1,500.00	Most Preferred	Buy (Rating Exception)
CUSIP: 99UBAPLM8 Symbol: DHR	-10.00	150.00	0.00%	Most referred	
CALL DUKE ENERGY CORP NE DUE 01/15/21 105.000	10.00	150.00	-100.00		Buy
119MG4	-10.00	10.00	0.00%		bay
CUSIP: 99UBAL1G2 Symbol: DUK		10100	0.0070		
CALL FASTENAL CO DUE 05/21/21 52.100 167061			-6,075.00		Neutral (Rating Exception)
CUSIP: 99UBBUDS2 Symbol: FAST	-30.00	202.50	-0.01%		
CALL GENL DYNAMICS CORP DUE 05/21/21 175.000			-1,740.00	Bellwether	Neutral (Rating Exception)
174360	-12.00	145.00	0.00%		
CUSIP: 99UBBSYT2 Symbol: GD CALL GENL MILLS INC DUE 04/16/21 67.500 177105			-340.00		
CUSIP: 99UBBVKU7 Symbol: GIS	-10.00	34.00	0.00%		
CALL GENUINE PARTS CO DUE 02/19/21 110.000	-10.00	54.00	-850.00		
181455	-10.00	85.00	0.00%		
CUSIP: 99UBA2O95 Symbol: GPC	10.00	05.00	0.0070		
CALL GLOBAL PAYMENTS INC DUE 02/19/21 230.000			-7,480.00		Buy
1848N3	-20.00	374.00	-0.01%		
CUSIP: 99UBANL01 Symbol: GPN			100.00		
CALL HARTFORD FINCL SERV DUE 01/15/21 70.000 1988E4	10.00	10.00	-100.00		Buy (Rating Exception)
CUSIP: 99UBBAGZ7 Symbol: HIG	-10.00	10.00	0.00%		
CALL IDEX CORP DUE 04/16/21 200.000 223085			-10,900.00		
CUSIP: 99UBBV115 Symbol: IEX	-10.00	1,090.00	-0.01%		
CALL LINDE PLC EUR DUE 04/16/21 280.000 2621Y8		,	-8,150.00	Most Preferred	Buy
CUSIP: 99UBBV7M0 Symbol: LIN	-10.00	815.00	-0.01%		,
CALL MARSH & MCLENNAN CO DUE 04/16/21 125.000			-4,350.00	Bellwether	Buy
275603	-20.00	217.50	-0.01%		
CUSIP: 99UBBWM41 Symbol: MMC					

	Number of shares	Price on 12/31/2020 (\$)	Value of equity (\$/%)	CIO GWM Recommendation	UBS Investment Research rating
Unclassified Securities					
CALL MERCK & CO INC NEW DUE 07/16/21 95.000 2837Z7 CUSIP: 99UBBSVU2 Symbol: MRK	-4.00	123.50	-494.00 0.00%	Most Preferred	Buy
CALL O REILLY AUTOMOTIVE DUE 05/21/21 530.000 350B81 CUSIP: 99UBBUE69 Symbol: ORLY	-5.00	665.00	-3,325.00 0.00%		Buy
CALL ONEOK INC NEW DUE 01/15/21         42.500         3496G4           CUSIP: 99UBB0N65 Symbol: OKE         3496G4	-20.00	20.00	-400.00 0.00%		Buy (Rating Exception)
CALL PALO ALTO NETWORKS DUE 06/18/21 380.000 361DG0 CUSIP: 99UBBUE85 Symbol: PANW	-2.00	2,522.50	-5,045.00 -0.01%	Most Preferred	Neutral
CALL PFIZER INC DUE 06/18/21 40.000 +SPIN-OFF 370011 CUSIP: 99UBB3ZY5 Symbol: PFE1	-30.00	220.00	-6,600.00 -0.01%		
CALL PROCTER & GAMBLE CO DUE 01/15/21 145.000 383601 CUSIP: 99UBB1ZM5 Symbol: PG	-30.00	28.00	-840.00 0.00%	Most Preferred	Neutral (Rating Exception)
CALL RIO TINTO PLC SPON DUE 04/16/21 67.500 4005C0 CUSIP: 99UBBWPH9 Symbol: RIO	-10.00	975.00	-9,750.00 -0.01%		Neutral
CALL SMUCKER J M CO NEW DUE 01/15/21 130.000 4258Y5 CUSIP: 99UBBC569 Symbol: SJM	-10.00	7.50	-75.00 0.00%		
CALL STARBUCKS CORP DUE 06/18/21 105.000 509736 CUSIP: 99UBBHKL8 Symbol: SBUX	-12.00	902.50	-10,830.00 -0.01%	Bellwether	Neutral (Rating Exception)
CALL TRACTOR SUPPLY COMP DUE 04/16/21 165.000 4608B6 CUSIP: 99UBBUFE1 Symbol: TSCO	-10.00	140.00	-1,400.00 0.00%		Neutral
CALL VF CORP DUE 05/21/21 110.000 488984 CUSIP: 99UBBUF01 Symbol: VFC	-4.00	100.00	-400.00 0.00%	Bellwether	Neutral (Rating Exception)
CALL WALT DISNEY CO (HOL DUE 04/16/21 160.000 129488 CUSIP: 99UBBVAX2 Symbol: DIS	-18.00	2,670.00	-48,059.99 -0.06%	Bellwether	Neutral
CALL YUM CHINA HLDGS INC DUE 04/16/21 65.000 518NY1 CUSIP: 99UBAQTZ9 Symbol: YUMC	-30.00	110.00	-3,300.00 0.00%		Buy
ESCROW ALTABA INC CUSIP: 021ESC017 Symbol:	3,000.00	14.55	43,650.00 0.05%		
ESCROW GENERAL MTRS CORP 6.250% SER C DUE 07/15/33 CALLBL CONV CUSIP: 370ESC717 Symbol:	20,000.00	0.00	0.00 0.00%		
PUT TRACTOR SUPPLY COMP DUE 01/15/21 95.000 4608B6 CUSIP: 99UBBHQU2 Symbol: TSCO	-10.00	20.00	-200.00 0.00%		Neutral
RTS BRISTOL-MYERS SQUIBB CO EXP 03/31/21 CUSIP: 110122157 Symbol: BMYRT	3,000.00	0.69	2,070.00 0.00%		
Total Unclassified Securities			-\$104,484.49 -0.12%		

Consolidated report prepared for CITY OF TROY TX XX595 ERS TX XX600 NAIC

1	Number of	Price on	Value of	CIO GWM	UBS Investment
_	shares	12/31/2020 (\$)	equity (\$/%)	Recommendation	Research rating

#### **Unclassified Securities**

Total equity

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

Rounding calculation may affect totals.

\$84,480,242.13

# **Blended investments included in this report**

	Quantity	Price on 12/31/2020 (\$)	Market value on 12/31/2020 (\$)	Equity market value on 12/31/2020 (\$)	CIO GWM Recommendation	UBS Investment Research rating
AMER FUNDS CAPITAL WORLD GROWTH & INCOME FUND	27,697.01	59.39	1,644,925.25	1,572,384.04		
CUSIP: 140543109 Symbol: CWGIX (95.59% Equity) AMER FUNDS NEW WORLD FUND CLASS F2 CUSIP: 649280823 Symbol: NFFFX (91.47% Equity)	11,734.00	87.69	1,028,954.55	941,184.82		
AMERICAN FUNDS NEW WORLD FUND CL A CUSIP: 649280104 Symbol: NEWFX (91.47% Equity)	35,584.94	87.95	3,129,695.56	2,862,732.79		
CLEARBRIDGE INTERNATIONAL GROWTH FUND CLASS I CUSIP: 524686524 Symbol: LMGNX (98.23% Equity)	61,839.56	67.97	4,203,234.69	4,128,837.52		
COLUMBIA SELIGMAN COMMUNICATION AND INFORMATION FUND A CUSIP: 19766H429 Symbol: SLMCX (99.2% Equity)	62,237.52	104.34	6,493,862.32	6,441,911.36		
ISHARES RUSSELL 2000 ETF CUSIP: 464287655 Symbol: IWM (99.7% Equity)	8,845.00	196.06	1,734,150.70	1,728,948.25		
MFS NEW DISCOVERY VALUE FUND CLASS A CUSIP: 55278M100 Symbol: NDVAX (97.96% Equity)	96,515.87	16.71	1,612,780.15	1,579,879.44		
MFS VALUE FUND CLASS A CUSIP: 552983801 Symbol: MEIAX (98.51% Equity)	109,442.28	44.85	4,908,486.17	4,835,349.66		
SPDR S&P 500 ETF TR CUSIP: 78462F103 Symbol: SPY (99.87% Equity)	2,322.00	373.88	868,149.36	867,020.77		
VANGUARD MID-CAP VALUE ETF CUSIP: 922908512 Symbol: VOE (99.98% Equity)	7,580.00	118.96	901,716.80	901,536.46		
VIRTUS KAR SMALL-CAP GROWTH FUND CLASS A CUSIP: 92828N627 Symbol: PSGAX (91.09% Equity)	68,934.14	52.04	3,587,332.75	3,267,701.39		

# **WBS** Bond summary

as of December 31, 2020

#### **Bond overview**

Total quantity	412,000
Total market value	\$442,594.42
Total accrued interest	\$3,640.49
Total market value plus accrued interest	\$446,234.91
Total estimated annual bond interest	\$28,223.85
Average coupon	7.46%
Average current yield	6.38%
Average yield to maturity	0.26%
Average yield to worst	0.26%
Average modified duration	1.40
Average effective maturity	1.50

#### Investment type allocation

		Tax-exempt /		% of bond
Investment type	Taxable (\$)	deferred (\$)	Total (\$)	port.
Certificates of deposit	0.00	95,064.67	95,064.67	21.30
U.S. corporates	0.00	351,170.24	351,170.24	78.70
Total	\$0.00	\$446,234.91	\$446,234.91	100%

### Credit quality of bond holdings

			Value on	% of
Effe	ective credit rating	Issues	12/31/2020 (\$)	port.
Α	Aaa/AAA/AAA	0	0.00	0.00
В	Aa/AA/AA	0	0.00	0.00
С	A/A/A	1	351,170.24	78.53
D	Baa/BBB/BBB	0	0.00	0.00
E	Non-investment grade	0	0.00	0.00
F	Certificate of deposit	1	95,064.67	21.47
G	Not rated	1	0.00	0.00
Tot	al	3	\$446,234.91	100%



### Bond maturity schedule

\$ Thousands



Effective maturity schedule

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

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

# **WBS** Bond holdings

as of December 31, 2020

### Summary of bond holdings

Maturity Year	laguag	Quantity	Est. annual income (\$)	Current yield (%) m	Yield to	Yield to worst (%)	Modified	Adjusted cost basis (\$)	Unrealized gain/loss (\$)	Mitt value (¢)	% of bond portfolio matur
2020	lssues 0	Quantity	Income (\$)	yieiu (76) 11	NA	NA	NA	COST DASIS (\$)	gail/iOSS (\$)	Mkt. value (\$)	
2020	1	95,000	142.50	0.15%	0.05 %	0.05 %	0.13	95,000	12.35	95,064.67	21.47%
2022	1	297,000	28,081.35	8.08%	0.32 %	0.32 %	1.75	293,625	53,957.07	351,170.24	78.53%
2023	0	0		0.0070	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	3	412,000	\$28,223.85	6.38%	0.26 %	0.26 %	1.40	\$885,388.00	\$-442,793.58	\$446,234.91	

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

### Details of bond holdings

	Effective rating/ Underlying rating (Mdy/Fitch/S&P)	Quantity		Effective Call date/ maturity Call price (\$)		YTW (%) duration	Unreal. g/l (\$)	Market price (\$)	Mkt. value (\$)/ Accr. interest (\$)	% of bond port.
Total Bond Portfolio		412,000	7.46%	07/02/2022 NA	\$28,223.85 6.38%	0.26% 1.40 0.26%	\$885,388.00 \$-442,793.58	NA	\$442,594.42 \$3,640.49 \$446,234.91	100%
	Effective rating/ Underlying rating (Mdy/Fitch/S&P)	Quantity	Coupon	Effective Call date/ maturity Call price (\$)		YTM (%)/ Modified YTW (%) duration		Market price (\$)	Mkt. value (\$)/ Accr. interest (\$)	% of bond port.
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% 0.13 0.05%	95,000.00 12.35	100.013	95,012.35 52.32	21.47%
Total 2021		95,000	0.15%	02/17/2021	\$142.50 0.15%	0.05% 0.13 0.05%	\$95,000.00 \$12.35		\$95,012.35 \$52.32	21.47%
	Effective rating/ Underlying rating (Mdy/Fitch/S&P)	Quantity	Coupon	Effective Call date/ maturity Call price (\$)		YTM (%)/ Modified YTW (%) duratior		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 8.08%	0.32% 1.75 0.32%	293,625.00 53,957.07	117.031	347,582.07 3,588.17	78.53%
Total 2022		297,000	9.46%	11/15/2022	\$28,081.35 8.08%	0.32% 1.75 0.32%	\$293,625.00 \$53,957.07		\$347,582.07 \$3,588.17	78.53%
	Effective rating/ Underlying rating (Mdy/Fitch/S&P)	Quantity	Coupon	Effective Call date/ maturity Call price (\$)	Est. annual income (\$)/	YTM (%)/ Modified YTW (%) duration	Adjusted cost basis (\$)/	Market price (\$)	Mkt. value (\$)/ Accr. interest (\$)	% of bond port.
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	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%

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 December 31, 2020 (continued)

5				,							
	Effective rating/					Est. annual		Adjusted			% of
	Underlying rating			Effective	Call date/	income (\$)/	YTM (%)/ Modifie	cost basis (\$)/	Market	Mkt. value (\$)/	bond
	(Mdy/Fitch/S&P)	Quantity	Coupon	maturity	Call price (\$)	Curr. yield (%)	YTW (%) duration	u Unreal. g/l (\$)	price (\$)	Accr. interest (\$)	port.
		412,000	7.46%	07/02/2022	NA	\$28,223.85	0.26% 1.4	\$885,388.00	NA	\$442,594.42	100%
Total Bond Portfolio						6.38%	0.26%	\$-442,793.58		\$3,640.49	
										\$446,234.91	

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

# **UBS** Portfolio holdings

# as of December 31, 2020 Summary of Portfolio Holdings

		Value on	Unrealized	Unrealized	Est. annual	Current % of
	Cost basis (\$)	12/31/2020 (\$)	gain/loss (\$)	gain/loss (%)	income (\$)	yield (%) Portfolio
A Cash	3,047,755.28	3,047,755.28	0.00	0.00%	2,486.97	0.08% 2.49%
Cash	3,047,755.28	3,047,755.28	0.00	0.00%	2,486.97	0.08% 2.49%
US	3,047,755.28	3,047,755.28	0.00	0.00%	, 2,486.97	0.08% 2.49%
US Cash	3,047,755.28	3,047,755.28	0.00	0.00%	2,486.97	0.08% 2.49%
B Fixed Income	33,171,211.51	33,881,087.02	709,875.51	2.14%	878,606.90	2.59% 27.68%
US	28,140,033.78	28,762,901.33	622,867.55	2.21%	740,003.71	2.57% 23.50%
US Fixed Income	19,617,049.87	19,720,715.30	103,665.43	0.53%	443,079.56	2.25% 16.11%
Short	5,579,162.65	5,875,582.47	296,419.82	5.31%	111,224.57	1.89% 4.80%
Intermediate	13,942,887.22	13,750,068.16	-192,819.06	-1.38%	331,712.49	2.41% 11.23%
Other	95,000.00	95,064.67	64.67	0.07%	142.50	0.15% 0.08%
Government	3,870,229.97	4,312,527.60	442,297.63	11.43%	50,396.94	1.17% 3.52%
Other	3,870,229.97	4,312,527.60	442,297.63	11.43%	50,396.94	1.17% 3.52%
Corporate IG Credit	293,625.00	351,170.24	57,545.24	19.60%	28,081.36	8.08% 0.29%
Short	293,625.00	351,170.24	57,545.24	19.60%	28,081.36	8.08% 0.29%
Corporate High Yield	4,359,128.94	4,378,488.19	19,359.25	0.44%	218,445.85	4.99% 3.58%
Corporate High Yield	4,359,128.94	4,378,488.19	19,359.25	0.44%	218,445.85	4.99% 3.58%
Global	3,979,790.19	4,036,474.98	56,684.79	1.42%	97,817.37	2.42% 3.30%
Global	3,979,790.19	4,036,474.98	56,684.79	1.42%	97,817.37	2.42% 3.30%
Global	3,979,790.19	4,036,474.98	56,684.79	1.42%	97,817.37	2.42% 3.30%
International	1,051,387.54	1,081,710.71	30,323.17	2.88%	40,785.82	3.77% 0.88%
Emerging Markets	1,051,387.54	1,081,710.71	30,323.17	2.88%	40,785.82	3.77% 0.88%
Emerging Markets	1,051,387.54	1,081,710.71	30,323.17	2.88%	40,785.82	3.77% 0.88%
Equity	47,548,770.12	85,466,043.94	37,917,273.82	79.74%	985,686.87	1.15% 69.83%
US	34,807,075.94	66,212,972.06	31,405,896.12	90.23%	880,635.14	1.33% 54.10%
US Equity	6,900.00	2,070.00	-4,830.00	-70.00%	0.00	0.00% 0.00%
Other	6,900.00	2,070.00	-4,830.00	-70.00%	0.00	0.00% 0.00%
Large Cap	17,103,081.15	38,688,363.61	21,585,282.46	126.21%	525,171.94	1.36% 31.61%
Core	6,581,000.45	18,062,019.57	11,481,019.12	174.46%	211,286.56	1.17% 14.76%
Growth	2,674,480.83	9,338,241.05	6,663,760.22	249.16%	31,740.00	0.34% 7.63%
Value	7,783,981.70	11,063,642.99	3,279,661.29	42.13%	277,615.38	2.51% 9.04%
Public Real Estate	63,618.17	224,460.00	160,841.83	252.82%	4,530.00	2.02% 0.18%
Mid Cap	8,794,792.95	16,224,766.65	7,429,973.70	84.48%	242,940.18	1.50% 13.26%
Core	6,557,347.36	11,606,634.25	5,049,286.89	77.00%	129,722.80	1.12% 9.48%
Growth	222,089.98	1,861,463.00	1,639,373.02	738.16%	0.00	0.00% 1.52%
Value	1,779,403.69	2,445,819.40	666,415.71	37.45%	99,147.38	4.05% 2.00%
Public Real Estate	235,951.92	310,850.00	74,898.08	31.74%	14,070.00	4.53% 0.26%
I UDIIC NEal Estate	233,331.32	510,050.00	74,050.00			

# Portfolio holdings - as of December 31, 2020 (continued)

Total Portfolio Balanced mutual funds represented in m	\$83,767,736.91 \$ Nultiple asset classes based on M		\$38,627,149.33	46.11%	\$1,866,780.73	1.53%	100%
F Other	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%
D Commodities	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
Other	112,067.61	316,901.42	204,833.81	182.78%	0.00	0.00%	0.26%
Growth	2,786,374.61	4,158,650.11	1,372,275.50	49.25%	6,636.45	0.16%	3.40%
Emerging Markets	2,898,442.22	4,475,551.53	1,577,109.31	54.41%	6,636.45	0.15%	3.66%
Value	212,527.85	366,350.00	153,822.15	72.38%	19,300.00	5.27%	0.30%
Growth	4,269,150.85	5,249,124.69	979,973.84	22.95%	22,312.32	0.43%	4.29%
Core	530,227.55	712,898.10	182,670.55	34.45%	9,357.72	1.31%	0.58%
Developed Markets	5,011,906.25	6,328,372.79	1,316,466.54	26.27%	50,970.04	0.81%	5.17%
Core	84,933.90	310,360.00	225,426.10	265.41%	0.00	0.00%	0.25%
International	84,933.90	310,360.00	225,426.10	265.41%	0.00	0.00%	0.25%
International	7,995,282.37	11,114,284.32	3,119,001.95	39.01%	57,606.49	0.52%	9.08%
Growth	3,687,484.97	6,493,862.31	2,806,377.34	76.11%	27,226.42	0.42%	5.31%
Core	1,058,926.84	1,644,925.25	585,998.41	55.34%	20,218.82	1.23%	1.34%
Global	4,746,411.81	8,138,787.56	3,392,375.75	71.47%	47,445.24	0.58%	6.65%
Global	4,746,411.81	8,138,787.56	3,392,375.75	71.47%	47,445.24	0.58%	6.65%
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%
Value	2,077,387.39	2,229,155.15	151,767.76	7.31%	21,510.34	0.96%	1.82%
Growth	2,546,825.79	4,467,404.15	1,920,578.36	75.41%	18,054.41	0.40%	3.65%
Core	3,781,325.66	4,601,212.50	819,886.84	21.68%	72,958.27	1.59%	3.76%
	Cost basis (\$)	12/31/2020 (\$)	gain/loss (\$)	gain/loss (%)	income (\$)	yield (%)	Portfolio
-		Value on	Unrealized	Unrealized	Est. annual	Current	% of

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

## Details of portfolio holdings

				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)		Est. annual income (\$)		% of asset class	% of Portfolio
Total Portfolio				\$83,767,736.91	\$122,394,886.24	\$38,627,149.33	46.11%	\$1,866,780.73	1.53%	100%	100%
Cash	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)		% of Cash	% of Portfolio
Cash											
US											
US Cash											
LIQUID ASSETS GOVT FUND CUSIP: 90262Y307 Symbol: MMLIRA	3,047,755.28	1.00	1.00	3,047,755.28	3,047,755.28	0.00	0.00%	2,486.97	0.08%	100.00%	2.49%
Total US Cash				\$3,047,755.28	\$3,047,755.28	\$0.00	0.00%	\$2,486.97	0.08%	100.00%	2.49%
Total US				\$3,047,755.28	\$3,047,755.28	\$0.00	0.00%	\$2,486.97	0.08%	100.00%	2.49%
Total Cash				\$3,047,755.28	\$3,047,755.28	\$0.00	0.00%	\$2,486.97	0.08%	100.00%	2.49%
Total Cash				\$3,047,755.28	\$3,047,755.28	\$0.00	0.00%	\$2,486.97	0.08%	100.00%	2.49%
Fixed Income	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)		Est. annual income (\$)		% of Fixed Income	% of Portfolio
US											
US Fixed Income Short THORNBURG LIMITED TERM	418,190.92	13.34	14.05	5,579,162.65	5,875,582.47	296,419.82	5.31%	111,224.57	1.89%	17.34%	4.80%
INCOME FD CLASS A CUSIP: 885215509 Symbol: THIFX Initial purchase date: Mar 09, 2017 Client investment: \$5,020,625.28 Reinvested dividends: \$558,537.37 Investment return: \$854,957.19 (17.03%	%)							-			
Total Short				\$5,579,162.65	\$5,875,582.47	\$296,419.82	5.31%	\$111,224.57	1.89%	17.34%	4.80%
Intermediate											

Intermediate

Portfolio holdings - as of December 31, 2020 (continued)

		Purchase	Price on	/						% of	
e: 11	0		12/31/2020	Coot loo is (¢)	۸ <b>4</b>	Unrealized		Est. annual		Fixed	% of
Fixed Income	Quantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$) g	ain/ioss (%)	income (\$)	yield (%)	Income	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: \$2,322,177.70 Investment return: \$2,001,186.60 (28.2%	780,961.26	12.06	11.65	9,419,189.73	9,098,198.63	-320,991.10	-3.41%	249,439.03	2.74%	26.85%	7.43%
METROPOLITAN WEST TOTAL RETURN BOND FUND CUSIP: 592905103 Symbol: MWTRX Initial purchase date: Nov 14, 2014 Client investment: \$3,587,358.91 Reinvested dividends: \$936,338.58 Investment return: \$1,064,510.62 (29.674	416,088.51	10.87	11.18	4,523,697.49	4,651,869.53	128,172.04	2.83%	82,273.47	1.77%	13.73%	3.80%
Total Intermediate				\$13,942,887.22	\$13,750,068.16	\$-192,819.06	-1.38%	\$331,712.49	2.41%	40.58%	11.23%
Other											
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	100.01	95,000.00	95,064.67	64.67	0.07%	142.50	0.15%	0.28%	0.08%
Total Other				\$95,000.00	\$95,064.67	\$64.67	0.07%	\$142.50	0.15%	0.28%	0.08%
Total US Fixed Income				\$19,617,049.87	\$19,720,715.30	\$103,665.43	0.53%	\$443,079.56	2.25%	58.20%	16.11%
Government Other											
ISHARES TIPS BOND ETF CUSIP: 464287176 Symbol: TIP Initial purchase date: Feb 16, 2017 Client investment: \$3,689,182.34 Reinvested dividends: \$181,047.63 Investment return: \$623,345.26 (16.9%)	33,784.00	114.56	127.65	3,870,229.97	4,312,527.60	442,297.63	11.43%	50,396.94		12.73%	3.52%
Total Other				\$3,870,229.97	\$4,312,527.60	\$442,297.63	11.43%	\$50,396.94	1.17%	12.73%	3.52%
Total Government				\$3,870,229.97	\$4,312,527.60	\$442,297.63	11.43%	\$50,396.94	1.17%	12.73%	3.52%

Corporate IG Credit

Short



Consolidated report prepared for CITY OF TROY TX XX595 ERS TX XX600 NAIC

# Portfolio holdings - as of December 31, 2020 (continued)

		Purchase	Price on			l la sa aliana d	l la na aliana d		Comment	% of	0/ -f
Fixed Income	Quantity	price (\$) / Avg Price	12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g		Est. annual income (\$)		Fixed Income	% of Portfolio
US											
Short											
COMCAST CABLE 09.455% 111522 DTD111802 FC051503 COMMUNICATION CUSIP: 00209TAB1 Initial purchase date: Feb 13, 1992	297,000.00	98.86	117.03	293,625.00	351,170.24	57,545.24	19.60%	28,081.35	8.08%	1.04%	0.29%
Total Short				\$293,625.00	\$351,170.24	\$57,545.24	19.60%	\$28,081.36	8.08%	1.04%	0.29%
Total Corporate IG Credit				\$293,625.00	\$351,170.24	\$57,545.24	19.60%	\$28,081.36	8.08%	1.04%	0.29%
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: \$1,136,868.85 Investment return: \$1,094,177.90 (89.99 BLACKROCK HIGH YIELD BOND PORTFOLIOINSTITUTIONAL CUSIP: 09260B630 Symbol: BHYIX Initial purchase date: Aug 12, 2020 Client investment: \$1,976,775.79 Reinvested dividends: \$29,558.87 Investment return: \$91,609.06 (4.63%)	296,547.28 %) 265,517.95	7.93	7.79	2,352,794.28 2,006,334.66	2,310,103.33 2,068,384.86	-42,690.95 62,050.19	-1.81%	111,946.60 106,499.25	4.85%	6.82%	1.89% 1.69%
Total Corporate High Yield				\$4,359,128.94	\$4,378,488.19	\$19,359.25	0.44%	\$218,445.85	4.99%	12.92%	3.58%
Total Corporate High Yield				\$4,359,128.94	\$4,378,488.19	\$19,359.25	0.44%	\$218,445.85	4.99%	12.92%	3.58%
Total US				\$28,140,033.78	\$28,762,901.33	\$622,867.55	2.21%	\$740,003.71	2.57%	84.89%	23.50%
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: \$838,440.04 Investment return: \$895,124.83 (28.49%	389,245.42	10.22	10.37	3,979,790.19	4,036,474.98	56,684.79	1.42%	97,817.37	2.42%	11.91%	3.30%
Total Global				\$3,979,790.19	\$4,036,474.98	\$56,684.79	1.42%	\$97,817.37	2.42%	11.91%	3.30%

Consolidated report prepared for CITY OF TROY TX XX595 ERS TX XX600 NAIC

# Portfolio holdings - as of December 31, 2020 (continued)

Fixed Income	Quantity	Purchase	Price on 12/31/2020 (\$)	, Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) (		Est. annual income (\$)		% of Fixed Income	% of Portfolio
Total Global				\$3,979,790.19	\$4,036,474.98	\$56,684.79	1.42%	\$97,817.37	2.42%	11.91%	3.30%
Total Global				\$3,979,790.19	\$4,036,474.98	\$56,684.79	1.42%	\$97,817.37	2.42%	11.91%	3.30%
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: \$51,312.54 Investment return: \$81,635.71 (8.16%)	98,516.46	10.67	10.98	1,051,387.54	1,081,710.71	30,323.17	2.88%	40,785.81	3.77%	3.19%	0.88%
Total Emerging Markets				\$1,051,387.54	\$1,081,710.71	\$30,323.17	2.88%	\$40,785.82	3.77%	3.20%	0.88%
Total Emerging Markets				\$1,051,387.54	\$1,081,710.71	\$30,323.17	2.88%	\$40,785.82	3.77%	3.20%	0.88%
Total International				\$1,051,387.54	\$1,081,710.71	\$30,323.17	2.88%	\$40,785.82	3.77%	3.20%	0.88%
Total Fixed Income				\$33,171,211.51	\$33,881,087.02	\$709,875.51	2.14%	\$878,606.90	2.59%	100.00%	27.68%
Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) (	Unrealized gain/loss (%)	Est. annual income (\$)		% of Equity	% of Portfolio
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	0.69	6,900.00	2,070.00	-4,830.00	-70.00%	0.00	0.00%	0.00%	0.00%
Total Other				\$6,900.00	\$2,070.00	\$-4,830.00	-70.00%	\$0.00	0.00%	0.00%	0.00%
Total US Equity				\$6,900.00	\$2,070.00	\$-4,830.00	-70.00%	\$0.00	0.00%	0.00%	0.00%
Large Cap Core	12 200 00	22.04	100.10	404 070 00	1 242 222 0	020 252 64	224 7004		1 6 10(	1 5304	1 1004
ABBOTT LABS CUSIP: 002824100 Symbol: ABT Initial purchase date: May 11, 2016	12,269.00	33.01	109.49	404,979.90	1,343,332.81	938,352.91	231.70%	22,084.20	1.64%	1.57%	1.10%
Tortfolio Holdings as of De			,								
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Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g		Est. annual income (\$)		% of Equity	% of Portfolio
US											
Core											
APPLE INC CUSIP: 037833100 Symbol: AAPL Initial purchase date: Sep 15, 2011	32,300.00	19.73	132.69	637,380.77	4,285,887.00	3,648,506.23	572.42%	26,486.00	0.62%	5.01%	3.50%
AUTOMATIC DATA PROCESSNG INC CUSIP: 053015103 Symbol: ADP Initial purchase date: Aug 01, 2002	2,000.00	29.12	176.20	58,245.59	352,400.00	294,154.41	505.02%	7,440.00	2.11%	0.41%	0.29%
BLACKROCK INC CUSIP: 09247X101 Symbol: BLK Initial purchase date: Aug 10, 2016	1,370.00	387.24	721.54	530,515.29	988,509.80	457,994.51	86.33%	19,892.40	2.01%	1.16%	0.81%
BOOKING HLDGS INC CUSIP: 09857L108 Symbol: BKNG Initial purchase date: Feb 26, 2019	200.00	1,908.50	2,227.27	381,699.89	445,454.00	63,754.11	16.70%	0.00	0.00%	0.52%	0.36%
CALL ABBOTT LABS DUE 03/19/21 125.000 000132 CUSIP: 99UBAZT06 Symbol: ABT Initial purchase date: Dec 14, 2020	-10.00	11,126.2	113.50	-1,112.62	-1,135.00	-22.38	-2.01%	0.00	0.00%	0.00%	0.00%
CALL APPLE INC DUE 03/19/21 150.000 030911 CUSIP: 99UBA3UT2 Symbol: AAPL Initial purchase date: Nov 11, 2020	-13.00	15,082.4	346.00	-1,960.72	-4,498.00	-2,537.28	-129.41%	0.00	0.00%	-0.01%	0.00%
CALL COSTCO WHOLESALE CO DUE 03/19/21 440.000 0929G5 CUSIP: 99UBA41K1 Symbol: COST Initial purchase date: Nov 16, 2020	-5.00	30,708.2	126.00	-1,535.41	-630.00	905.41	58.97%	0.00	0.00%	0.00%	0.00%
CALL DANAHER CORP DUE 03/19/21 260.000 126250 CUSIP: 99UBAPLM8 Symbol: DHR Initial purchase date: Nov 11, 2020	-10.00	43,080.5	150.00	-4,308.05	-1,500.00	2,808.05	65.18%	0.00	0.00%	0.00%	0.00%
CALL GLOBAL PAYMENTS INC DUE 02/19/21 230.000 1848N3 CUSIP: 99UBANL01 Symbol: GPN Initial purchase date: Dec 09, 2020	-20.00	15,336.4	374.00	-3,067.28	-7,480.00	-4,412.72	-143.86%	0.00	0.00%	-0.01%	-0.01%
CALL MARSH & MCLENNAN CO DUE 04/16/21 125.000 275603 CUSIP: 99UBBWM41 Symbol: MMC Initial purchase date: Nov 11, 2020	-20.00	18,780.3	217.50	-3,756.06	-4,350.00	-593.94	-15.81%	0.00	0.00%	-0.01%	0.00%
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	28.00	-3,686.22	-840.00	2,846.22	77.21%	0.00	0.00%	0.00%	0.00%

		Purchase	Price on								
		price (\$) /	12/31/2020			Unrealized		Est. annual		% of	% of
Equity	Quantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$) g	ain/loss (%)	income (\$)	yield (%)	Equity	Portfolio
US											
Core											
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	902.50	-1,475.73	-10,830.00	-9,354.27	-633.87%	0.00	0.00%	-0.01%	-0.01%
CALL WALT DISNEY CO (HOL DUE 04/16/21 160.000 129488 CUSIP: 99UBBVAX2 Symbol: DIS Initial purchase date: Nov 11, 2020	-18.00	35,000.1	2,670.00	-6,300.02	-48,060.00	-41,759.98	-662.85%	0.00	0.00%	-0.06%	-0.04%
CALL YUM CHINA HLDGS INC DUE 04/16/21 65.000 518NY1 CUSIP: 99UBAQTZ9 Symbol: YUMC Initial purchase date: Nov 11, 2020	-30.00	19,379.7	110.00	-5,813.91	-3,300.00	2,513.91	43.24%	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	376.78	206,030.16	776,166.80	570,136.64	276.72%	5,768.00	0.74%	0.91%	0.63%
DANAHER CORP CUSIP: 235851102 Symbol: DHR Initial purchase date: Jun 09, 2005	2,000.00	20.72	222.14	41,434.65	444,280.00	402,845.35	972.24%	1,440.00	0.32%	0.52%	0.36%
GLOBAL PAYMENTS INC CUSIP: 37940X102 Symbol: GPN Initial purchase date: Dec 10, 2009	5,000.00	25.78	215.42	128,889.82	1,077,100.00	948,210.18	735.67%	3,900.00	0.36%	1.26%	0.88%
LOCKHEED MARTIN CORP CUSIP: 539830109 Symbol: LMT Initial purchase date: Oct 09, 2019	320.00	388.31	354.98	124,260.66	113,593.60	-10,667.06	-8.58%	3,328.00	2.93%	0.13%	0.09%
MARSH & MCLENNAN COS INC CUSIP: 571748102 Symbol: MMC Initial purchase date: Jan 13, 2016	7,030.00	53.01	117.00	372,652.52	822,510.00	449,857.48	120.72%	13,075.80	1.59%	0.96%	0.67%
MCDONALDS CORP CUSIP: 580135101 Symbol: MCD Initial purchase date: Jan 14, 2010	1,050.00	62.64	214.58	65,769.03	225,309.00	159,539.97	242.58%	5,418.00	2.40%	0.26%	0.18%
PEPSICO INC CUSIP: 713448108 Symbol: PEP Initial purchase date: Oct 17, 2011	5,000.00	62.54	148.30	312,687.24	741,500.00	428,812.76	137.14%	20,450.00	2.76%	0.87%	0.61%
PROCTER & GAMBLE CO CUSIP: 742718109 Symbol: PG Initial purchase date: Feb 15, 1996	7,000.00	35.00	139.14	245,024.26	973,980.00	728,955.74	297.50%	22,141.00	2.27%	1.14%	0.80%

Purchase

Price on

		price (\$) /	12/31/2020			Unrealized	Unrealized	Est. annual	Current	% of	% of
Equity	Ouantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$) g		income (\$)			Portfolio
US	<b>L</b>		(47)	(4)		9 (+/ 9			,		
Core											
SPDR S&P 500 ETF TR	2,322.00	234.46	373.88	544,405.91	868,149.36	323,743.45	59.47%	13,214.56	1.52%	1.02%	0.71%
CUSIP: 78462F103 Symbol: SPY											
Initial purchase date: Feb 08, 2017 Client investment: \$502,534.43											
Reinvested dividends: \$41,871.48											
Investment return: \$365,614.93 (72.75%)											
STARBUCKS CORP	11,280.00	52.24	106.98	589,287.75	1,206,734.40	617,446.65	104.78%	20,304.00	1.68%	1.41%	0.99%
CUSIP: 855244109 Symbol: SBUX											
Initial purchase date: May 10, 2012											
THERMO FISHER SCIENTIFIC INC	445.00	280.04	465.78	124,616.33	207,272.10	82,655.77	66.33%	391.60	0.19%	0.24%	0.17%
CUSIP: 883556102 Symbol: TMO											
Initial purchase date: Oct 09, 2019	2 105 00	222.02		1 002 005 00	1 000 061 40	05 076 01			1 420/	1 2 7 0/	0.000/
UNITEDHEALTH GROUP INC CUSIP: 91324P102 Symbol: UNH	3,105.00	323.02	350.68	1,002,985.09	1,088,861.40	85,876.31	8.56%	15,525.00	1.43%	1.27%	0.89%
Initial purchase date: Oct 09, 2019											
WALMART INC	1,050.00	120.26	144.15	126,275.03	151,357.50	25,082.47	19.86%	2,268.00	1.50%	0.18%	0.12%
CUSIP: 931142103 Symbol: WMT	.,	120120		.20,270.00		20,002,	1910070	2,200.00	1.5070	0.1070	0.1270
Initial purchase date: Oct 09, 2019											
WALT DISNEY CO (HOLDING CO)	5,860.00	104.21	181.18	610,699.80	1,061,714.80	451,015.00	73.85%	0.00	0.00%	1.24%	0.87%
DISNEY COM											
CUSIP: 254687106 Symbol: DIS											
Initial purchase date: Dec 09, 2015 YUM CHINA HLDGS INC	17,000.00	6.25	57.09	106,176.78	970,530.00	864,353.22	814.07%	8,160.00	0.84%	1.14%	0.79%
CUSIP: 98850P109 Symbol: YUMC	17,000.00	0.25	57.09	100,170.76	970,550.00	004,555.22	014.07 70	8,100.00	0.04 70	1.1470	0.79%
Initial purchase date: Sep 09, 2004											
Total Core				\$6,581,000.45	\$18,062,019.57	\$11,481,019.12	174.46%	\$211,286.56	1.17%	21.13%	14.76%
Growth											
	072.00	452.75	1 752 64	276 696 20	1 450 100 40	1 001 510 20	207 110/	0.00	0.000/	1 710/	1 100/
ALPHABET INC CL A CUSIP: 02079K305 Symbol: GOOGL	832.00	452.75	1,752.64	376,686.20	1,458,196.48	1,081,510.28	287.11%	0.00	0.00%	1.71%	1.19%
Initial purchase date: Nov 12, 2009											
ALPHABET INC CL C	904.00	433.82	1,751.88	392,177.01	1,583,699.52	1,191,522.51	303.82%	0.00	0.00%	1.85%	1.29%
CUSIP: 02079K107 Symbol: GOOG	501.00	133.02	1,751.00	552,177.01	1,505,055.52	1,151,522.51	565.6270	0.00	0.0070	1.00 /0	1.2370
Initial purchase date: Nov 12, 2009											
AMAZON.COM INC	585.00	769.36	3,256.93	450,073.08	1,905,304.05	1,455,230.97	323.33%	0.00	0.00%	2.23%	1.56%
CUSIP: 023135106 Symbol: AMZN											
Initial purchase date: Sep 14, 2016											
CROWN CASTLE INTL CORP REIT	2,700.00	85.14	159.19	229,878.93	429,813.00	199,934.07	86.97%	14,364.00	3.34%	0.50%	0.35%
CUSIP: 22822V101 Symbol: CCI											
Initial purchase date: Nov 28, 2016	2 000 00							0.00	0.000/		
ESCROW ALTABA INC CUSIP: 021ESC017	3,000.00	36.85	14.55	110,545.88	43,650.00	-66,895.88	-60.51%	0.00	0.00%	0.05%	0.05%
Initial purchase date: Jun 12, 2014											
,											

Equity	Quantity	Purchase	, Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g		Est. annual income (\$)		% of Equity	% of Portfolio
US	-	-					-				
Growth											
FACEBOOK INC CL A CUSIP: 30303M102 Symbol: FB Initial purchase date: May 29, 2019	4,000.00	185.11	273.16	740,424.45	1,092,640.00	352,215.55	47.57%	0.00	0.00%	1.28%	0.89%
MICROSOFT CORP CUSIP: 594918104 Symbol: MSFT Initial purchase date: Oct 09, 2019	900.00	139.79	222.42	125,813.00	200,178.00	74,365.00	59.11%	2,016.00	1.01%	0.23%	0.16%
VISA INC CL A CUSIP: 92826C839 Symbol: V Initial purchase date: Oct 17, 2011	12,000.00	20.74	218.73	248,882.28	2,624,760.00	2,375,877.72	954.62%	15,360.00	0.59%	3.07%	2.14%
Total Growth				\$2,674,480.83	\$9,338,241.05	\$6,663,760.22	249.16%	\$31,740.00	0.34%	10.93%	7.63%
Value											
AT&T INC CUSIP: 00206R102 Symbol: T Initial purchase date: Jun 09, 2011	5,968.00	31.24	28.76	186,443.46	171,639.68	-14,803.78	-7.94%	12,413.44	7.23%	0.20%	0.14%
BANK OF AMER CORP CUSIP: 060505104 Symbol: BAC Initial purchase date: Jan 13, 2016	33,050.00	15.11	30.31	499,349.09	1,001,745.50	502,396.41	100.61%	23,796.00	2.38%	1.17%	0.82%
BRISTOL MYERS SQUIBB CO CUSIP: 110122108 Symbol: BMY Initial purchase date: Nov 21, 2019	3,000.00	56.41	62.03	169,230.00	186,090.00	16,860.00	9.96%	5,880.00	3.16%	0.22%	0.15%
CALL BANK OF AMER CORP DUE 01/21/22 37.000 052591 CUSIP: 99UBBPSE8 Symbol: BAC Initial purchase date: Dec 09, 2020	-30.00	12,287.4	160.00	-3,686.22	-4,800.00	-1,113.78	-30.21%	0.00	0.00%	-0.01%	0.00%
CALL BRISTOL MYERS SQUIB DUE 06/18/21 70.000 053082 CUSIP: 99UBAXPD7 Symbol: BMY Initial purchase date: Nov 11, 2020	-10.00	19,178.4	141.00	-1,917.84	-1,410.00	507.84	26.48%	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	512.50	-1,099.09	-4,100.00	-3,000.91	-273.04%	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	10.00	-3,245.35	-100.00	3,145.35	96.92%	0.00	0.00%	0.00%	0.00%

Consolidated report prepared for CITY OF TROY TX XX595 ERS TX XX600 NAIC

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized ain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Value CALL GENL DYNAMICS CORP DUE 05/21/21 175.000 174360 CLICID: 00LIPDS/T22 Symptotic CD	-12.00	26,354.2	145.00	-3,162.51	-1,740.00	1,422.51	44.98%	0.00	0.00%	0.00%	0.00%
CUSIP: 99UBBSYT2 Symbol: GD Initial purchase date: Nov 11, 2020											
CALL GENL MILLS INC DUE 04/16/21 67.500 177105 CUSIP: 99UBBVKU7 Symbol: GIS Initial purchase date: Nov 13, 2020	-10.00	9,162.30	34.00	-916.23	-340.00	576.23	62.89%	0.00	0.00%	0.00%	0.00%
CALL MERCK & CO INC NEW DUE 07/16/21 95.000 2837Z7 CUSIP: 99UBBSVU2 Symbol: MRK Initial purchase date: Dec 09, 2020	-4.00	12,396.5	123.50	-495.86	-494.00	1.86	0.38%	0.00	0.00%	0.00%	0.00%
CALL PFIZER INC DUE 06/18/21 40.000 +SPIN-OFF 370011 CUSIP: 99UBB3ZY5 Symbol: PFE1 Initial purchase date: Jul 21, 2020	-30.00	18,886.7	220.00	-5,666.02	-6,600.00	-933.98	-16.48%	0.00	0.00%	-0.01%	-0.01%
CENTENE CORP CUSIP: 15135B101 Symbol: CNC Initial purchase date: Mar 25, 2019	4,732.00	66.76	60.03	315,908.32	284,061.96	-31,846.36	-10.08%	0.00	0.00%	0.33%	0.23%
CHEVRON CORP CUSIP: 166764100 Symbol: CVX Initial purchase date: Feb 12, 2009	8,710.00	79.26	84.45	690,314.19	735,559.50	45,245.31	6.55%	44,943.60	6.11%	0.86%	0.60%
CIGNA CORP CUSIP: 125523100 Symbol: CI Initial purchase date: Jun 07, 2011	394.00	182.19	208.18	71,780.89	82,022.92	10,242.03	14.27%	15.76	0.02%	0.10%	0.07%
COMCAST CORP NEW CL A CUSIP: 20030N101 Symbol: CMCSA Initial purchase date: Oct 09, 2019	10,600.00	38.43	52.40	407,316.21	555,440.00	148,123.79	36.37%	9,752.00	1.76%	0.65%	0.45%
DUKE ENERGY CORP NEW CUSIP: 26441C204 Symbol: DUK Initial purchase date: Apr 09, 2009	3,041.00	40.54	91.56	123,267.64	278,433.96	155,166.32	125.88%	11,738.26	4.22%	0.33%	0.23%
GENL DYNAMICS CORP CUSIP: 369550108 Symbol: GD Initial purchase date: Jan 13, 2000	5,200.00	26.43	148.82	137,455.71	773,864.00	636,408.29	462.99%	22,880.00	2.96%	0.91%	0.63%
GENL MILLS INC CUSIP: 370334104 Symbol: GIS Initial purchase date: Jun 10, 2010	4,000.00	38.13	58.80	152,506.12	235,200.00	82,693.88	54.22%	8,160.00	3.47%	0.28%	0.19%
GILEAD SCIENCES INC CUSIP: 375558103 Symbol: GILD Initial purchase date: Dec 16, 2008	14,000.00	22.05	58.26	308,721.43	815,640.00	506,918.57	164.20%	38,080.00	4.67%	0.95%	0.67%

		Purchase	Price on	/							
			12/31/2020			Unrealized	Unrealized	Est. annual	Current	% of	% of
Equity	Quantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$)	gain/loss (%)	income (\$)	yield (%)	Equity	Portfolio
US											
Value											
JPMORGAN CHASE & CO	1,900.00	37.85	127.07	71,919.41	241,433.00	169,513.59	235.70%	6,840.00	2.83%	0.28%	0.20%
CUSIP: 46625H100 Symbol: JPM	.,= = = = =			,	,			-,			
Initial purchase date: Aug 14, 1997											
MERCK & CO INC NEW COM	1,470.00	85.01	81.80	124,962.07	120,246.00	-4,716.07	-3.77%	3,822.00	3.18%	0.14%	0.10%
CUSIP: 58933Y105 Symbol: MRK											
Initial purchase date: Oct 09, 2019 MFS VALUE FUND CLASS A	109,442.28	40.22	44.85	4,401,748.14	4,908,486.17	506,738.03	11.51%	68,087.32	1.39%	5.74%	4.01%
CUSIP: 552983801 Symbol: MEIAX	109,442.20	40.22	44.00	4,401,740.14	4,900,400.17	500,756.05	11.5170	00,007.52	1.59%	5.7470	4.0170
Initial purchase date: Oct 11, 2017											
Client investment: \$3,950,015.75											
Reinvested dividends: \$451,732.39											
Investment return: \$958,470.42 (24.26%) ORACLE CORP	4,000.00	13.18	64.69	52,708.87	258,760.00	206,051.13	390.92%	3,840.00	1.48%	0.30%	0.21%
CUSIP: 68389X105 Symbol: ORCL	4,000.00	15.10	04.09	52,708.87	236,700.00	200,051.15	550.52 /0	5,640.00	1.40 /0	0.30 /0	0.2170
Initial purchase date: Feb 10, 2005											
PFIZER INC	10,000.00	2.20	36.81	22,032.41	368,100.00	346,067.59	1,570.72%	15,600.00	4.24%	0.43%	0.30%
CUSIP: 717081103 Symbol: PFE											
Initial purchase date: Jun 16, 2008							/				/
RAYTHEON TECHNOLOGIES CORP	930.00	73.66	71.51	68,506.86	66,504.30	-2,002.56	-2.92%	1,767.00	2.66%	0.08%	0.05%
CUSIP: 75513E101 Symbol: RTX Initial purchase date: Oct 09, 2019											
Total Value				\$7,783,981.70	\$11,063,642.99	\$3,279,661.29	42.13%	\$277,615.38	2.51%	12.95%	9.04%
Public Real Estate											
AMERICAN TOWER CORP REIT	1,000.00	63.62	224.46	63,618.17	224,460.00	160,841.83	252.82%	4,530.00	2.02%	0.26%	0.18%
CUSIP: 03027X100 Symbol: AMT	1,000.00	05.02	224.40	05,018.17	224,400.00	100,641.65	232.82 /0	4,550.00	2.02 /0	0.2070	0.10 /0
Initial purchase date: Apr 13, 2012											
Total Public Real Estate				\$63,618.17	\$224,460.00	\$160,841.83	252.82%	\$4,530.00	2.02%	0.26%	0.18%
Total Large Cap				\$17,103,081.15	\$38,688,363.61	\$21,585,282.46	126.21%	\$525,171.94	1.36%	45.27%	31.61%
Mid Cap											
Core											
AECOM	2,900.00	25.19	49.78	73,045.33	144,362.00	71,316.67	97.63%	0.00	0.00%	0.17%	0.12%
CUSIP: 00766T100 Symbol: ACM											
Initial purchase date: Feb 05, 2010	0.400.05	404.44	46.1.65	077 056 4-	0010100	1050 5	0 == 0/		0.000	4.650	0.700/
AKAMAI TECHNOLOGIES INC	8,400.00	104.41	104.99	877,056.19	881,916.00	4,859.81	0.55%	0.00	0.00%	1.03%	0.72%
CUSIP: 00971T101 Symbol: AKAM Initial purchase date: Dec 09, 2020											
AMETEK INC (NEW)	2,500.00	55.08	120.94	137,689.36	302,350.00	164,660.64	119.59%	1,800.00	0.60%	0.35%	0.25%
CUSIP: 031100100 Symbol: AME	_,_ 00.00	19.00		,	_ 52,555.50	,		.,			
Initial purchase date: Mar 06, 2017											

Consolidated report prepared for CITY OF TROY TX XX595 ERS TX XX600 NAIC

Portfolio holdings - as of December 31, 2020 (continued)

Purchase

Price on

Equity	Ouantity	price (\$) / Avg Price	12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) c	Unrealized	Est. annual income (\$)		% of Fauity	% of Portfolio
US	quantity	, ag mee	(4)		market value (\$)	gui 1000 (\$) g		income (\$)	Jiela (70)	Equity	Tortiono
Core											
CALL AECOM DUE 03/19/21	-9.00	13,520.2	147.50	-1,216.82	-1,327.50	-110.68	-9.10%	0.00	0.00%	0.00%	0.00%
55.000 2048J1											
CUSIP: 99UBBTP37 Symbol: ACM Initial purchase date: Nov 11, 2020											
CALL FASTENAL CO DUE 05/21/21	20.00				C 075 00	1 512 67	10.05%	0.00	0.000/	0.010/	0.000/
52.100 167061	-30.00	25,295.5	202.50	-7,588.67	-6,075.00	1,513.67	19.95%	0.00	0.00%	-0.01%	0.00%
CUSIP: 99UBBUDS2 Symbol: FAST											
Initial purchase date: Dec 09, 2020											
CALL IDEX CORP DUE 04/16/21	-10.00	99,961.4	1,090.00	-9,996.14	-10,900.00	-903.86	-9.04%	0.00	0.00%	-0.01%	-0.01%
200.000 223085	10.00	55,501.1	1,050.00	5,550.11	10,500.00	505.00	5.0170	0.00	0.0070	0.0170	0.0170
CUSIP: 99UBBV115 Symbol: IEX											
Initial purchase date: Nov 11, 2020											
CALL TRACTOR SUPPLY COMP DUE	-10.00	13,581.2	140.00	-1,358.12	-1,400.00	-41.88	-3.08%	0.00	0.00%	0.00%	0.00%
04/16/21 165.000											
4608B6											
CUSIP: 99UBBUFE1 Symbol: TSCO											
Initial purchase date: Dec 09, 2020											/
CALL VF CORP DUE 05/21/21	-4.00	16,195.2	100.00	-647.81	-400.00	247.81	38.25%	0.00	0.00%	0.00%	0.00%
110.000 488984											
CUSIP: 99UBBUF01 Symbol: VFC Initial purchase date: Dec 09, 2020											
CARMAX INC	5,000.00	44.47	94.46	222,371.77	472,300.00	249,928.23	112.39%	0.00	0.00%	0.55%	0.39%
CUSIP: 143130102 Symbol: KMX	5,000.00	44.47	94.40	222,571.77	472,500.00	249,920.25	112.59%	0.00	0.00 %	0.55%	0.59%
Initial purchase date: Jun 12, 2014											
CARRIER GLOBAL CORP	930.00	24.96	37.72	23,215.22	35,079.60	11,864.38	51.11%	446.40	1.27%	0.04%	0.03%
CUSIP: 14448C104 Symbol: CARR	950.00	24.90	57.72	23,213.22	55,075.00	11,004.50	51.1170	440.40	1.27 /0	0.04 /0	0.0570
Initial purchase date: Oct 09, 2019											
CBOE GLOBAL MARKETS INC	9,850.00	88.83	93.12	874,966.50	917,232.00	42,265.50	4.83%	15,366.00	1.68%	1.07%	0.75%
CUSIP: 12503M108 Symbol: CBOE	5,050.00	00.05	55.12	074,500.50	517,252.00	42,205.50	4.0570	15,500.00	1.00 /0	1.07 /0	0.7570
Initial purchase date: Dec 09, 2020											
CONAGRA BRANDS, INC.	3,000.00	28.43	36.26	85,290.85	108,780.00	23,489.15	27.54%	3,300.00	3.03%	0.13%	0.09%
CUSIP: 205887102 Symbol: CAG	5,000.00	20110	50.20	00,200.00	,	20,100110	27.0170	5,500.00	0.00 /0	00 /0	0.00070
Initial purchase date: Oct 09, 2019											
D R HORTON INC	7,000.00	40.09	68.92	280,621.20	482,440.00	201,818.80	71.92%	5,600.00	1.16%	0.56%	0.39%
CUSIP: 23331A109 Symbol: DHI	,			,	,	,		,			
Initial purchase date: Jan 09, 2019											
F5 NETWORKS INC	5,800.00	118.85	175.94	689,354.72	1,020,452.00	331,097.28	48.03%	0.00	0.00%	1.19%	0.83%
CUSIP: 315616102 Symbol: FFIV	-			·							
Initial purchase date: Mar 02, 2015											
FASTENAL CO	29,000.00	14.12	48.83	409,589.42	1,416,070.00	1,006,480.58	245.73%	29,000.00	2.05%	1.66%	1.16%
CUSIP: 311900104 Symbol: FAST											
Initial purchase date: May 21, 2018											

Equity         Quantity         Árg Price         (3)         Cast basis (3)         Market value (3)         gain/doss (3) gain/doss (4)         income (3) yield (40)         Equity         Pertified (40)           US         Core         Image: Construction (1000)         3,250.00         268.85         272.83         873,757.30         886,697.50         12,940.20         1.48%         0.00         0.00%         1.04%         0.72           CUSP: 333001105         Symbol: CMTX         1         33.93         890,080.35         169,650.00         80,569.65         90.45%         2.400.00         1.41%         0.20%         0.44           CUSP: 371901105         Symbol: CMTX         1			Purchase price (\$) /	Price on 12/31/2020			Unrealized	Unrealized	Est. annual	Current	% of	% of
Core         PLEETCON TECHNOLOGIES INC CUSP. 37300105 Symbol: RTT Initial purchase date. Dec 99, 2020         3,250.00         268.85         272.83         873,757.30         886,697.50         12,940.20         1.48%         0.00         0.0%         1.41%         0.20         0.14           CUSP. 373001105         Symbol: RTT Initial purchase date. Med 20, 2001         5,000.00         17.82         33.93         89,080.35         169,650.00         80,569.65         90.45%         2,400.00         1.41%         0.20%         0.14           CUSP. 37150105         Symbol: RTT Initial purchase date. Mar 02, 200.00         20.50         199.20         41,001.00         398,400.00         357,399.00         871.68%         4,000.00         0.0%         0.4%         0.3           CUSP. 45187105         Symbol: RTT Initial purchase date. Che 0, 2001         465.00         69.81         67.55         32,462.90         31,410.75         -1,052.15         -3.24%         372.00         1.8%         0.0%	Equity	Quantity			Cost basis (\$)	Market value (\$)						
IEEETCOR TECHNOLOGES INC. USIP 33901103 Symbol: CORP GeNIEX CORP (USIP 31901103 Symbol: GNIX Initial purchase date bee 09, 2020         268.85         272.83         873.757.30         886.697.50         12.940.20         1.48%         0.00         0.0%         1.04%         0.72           GENIEX CORP GENIEX CORP CUSIP 31901103 Symbol: GNIX Initial purchase date Mar 02, 2015         5,000.00         17.82         33.93         89.080.35         169.650.00         880,569.55         90.45%         2.400.00         1.41%         0.20%         0.14           Initial purchase date Mar 02, 2015         0.00.00         2.05         199.20         41.001.00         398,400.00         357,399.00         871.68%         4,000.00         1.0%         0.47%         0.33           Initial purchase date Mar 11, 2004         0.00         69.81         67.55         32.462.90         31,410.75         -1.052.15         -3.24%         372.00         1.18%         0.04%         0.03           USIP 68902/UTS Symbol: CITS Initial purchase date Mar 04,020.20         -         -         -         -         -         0.00         0.05%         0.02           VICLS F 6902/UTS Symbol: CITS Initial purchase date De 0,9203         -         -         -         -         0.00         0.00%         0.00         0.00%         0.00         0.00	US											
CUSP. 33041105       Symbol: ILT         Initial purchase date: Dic 09, 2020       5,000.00       17.82       33.93       89,080.35       169,650.00       80,569.65       90.45%       2,400.00       1.41%       0.20%       0.14         CUSP: 371001109       Symbol: CNTX       100       398,400.00       357,399.00       871.68%       4,000.00       1.00%       0.47%       0.33         DEX CORP       2,000.00       20.50       199.20       41,001.00       398,400.00       357,399.00       871.68%       4,000.00       1.00%       0.47%       0.33         USP 6370107       Symbol: CNTS       1151.72       151.39       878,467.87       876,548.10       -1,019.77       -0.22%       20,844.00       2.38%       1.03%       0.72         USP 636201707       Symbol: INCW       5,790.00       151.72       151.39       878,467.87       876,548.10       -1,019.77       -0.22%       20,844.00       2.38%       1.03%       0.72         PUT TRACTOR SUPPLY COMP DUE       -10.00       10,63.52       20.00       -1,063.52       -200.00       863.52       81.19%       0.00       0.00%       0.00%       0.00%       0.00%       0.00%       0.00%       0.00%       0.00%       0.00%       0.00% <t< th=""><td>Core</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Core											
CUSP: 371901109         Symbol: GMTX           Initial purchase date: Mar 02, 2015         2,000.00         20.50         199.20         41,001.00         398,400.00         357,399.00         871.68%         4,000.00         1.0%         0.47%         0.33           Initial purchase date: Mar 01, 2004         015         455.07         69.81         67.55         32,462.90         31,410.75         -1,052.15         -3.24%         372.00         1.18%         0.04%         0.03           USIN: 68020170         Symbol: OIS Initial purchase date: Cot 09, 2019         5,790.00         151.72         151.39         878,467.87         876,548.10         -1,191.77         -0.22%         20,844.00         2.38%         1.03%         0.72           PUT TRACTOR SUPPLY COMP DUE CUSIP 59000         -10.00         10,635.2         20.00         -1,063.52         -200.00         863.52         81.19%         0.00         0.00%	CUSIP: 339041105 Symbol: FLT	3,250.00	268.85	272.83	873,757.30	886,697.50	12,940.20	1.48%	0.00	0.00%	1.04%	0.72%
IDEX CORP Initial purchase date: Aug 11, 2004         2,00.00         20.50         199.20         41,001.00         398,400.00         377,399.00         871.68%         4,000.00         1.0%         0.33           ULSIP: 616704 Symbol: ICX Initial purchase date: Aug 11, 2004         465.00         69.81         67.55         32,462.90         31,410.75         -1,052.15         -3.24%         372.00         1.1%         0.04%         0.03           PIRC F ROWE KORUPINC ULSIP: 63502V107 Symbol: OTS Initial purchase date: 0c1 09, 2019         5,790.00         151.72         151.39         878,467.87         876,548.10         -1,919.77         -0.22%         20,844.00         2.38%         1.03%         0.02           PUT FACTOR SUPPLY COMP DUE CUSIP: 920004         5,790.00         151.72         20.00         332,628.80         611,520.00         883.52         81.19%         0.00         0.00%	CUSIP: 371901109 Symbol: GNTX	5,000.00	17.82	33.93	89,080.35	169,650.00	80,569.65	90.45%	2,400.00	1.41%	0.20%	0.14%
CUSIP: 68902V107 Symbol: OTIS         Initial purchase date: Oct 09, 2019         PPICE T ROWE GROUP INC         CUSIP: 741441108         Symbol: TRACTOR SUPPLY COMP DUE         -10.00         10/135/21         95.000         460.08F         CUSIP: 900.08H102         900.08         CUSIP: 900.08H102         900.08         CUSIP: 900.08.01 SKY         12,000.00         94.1         1000.00         94.1         1000.00         94.2         1000.00         94.3         113,653.50         1,686,960.00         1,573,306.50         1,384.30%         1,000.00         283.02         287.16	IDEX CORP CUSIP: 45167R104 Symbol: IEX	2,000.00	20.50	199.20	41,001.00	398,400.00	357,399.00	871.68%	4,000.00	1.00%	0.47%	0.33%
CUSIP: 74144T108       Symbol: TROW         Initial purchase date: Dec 09, 2020       -10.00       10,635.2       20.00       -1,063.52       -200.00       863.52       81.19%       0.00       0.00%       0.00%       0.00         01/15/21       95.000       46086       -10.00       10,635.2       20.00       -1,063.52       -200.00       863.52       81.19%       0.00       0.00%	CUSIP: 68902V107 Symbol: OTIS	465.00	69.81	67.55	32,462.90	31,410.75	-1,052.15	-3.24%	372.00	1.18%	0.04%	0.03%
01/15/21       95.000       400806	CUSIP: 74144T108 Symbol: TROW	5,790.00	151.72	151.39	878,467.87	876,548.10	-1,919.77	-0.22%	20,844.00	2.38%	1.03%	0.72%
CUSIP: 83088M102_Symbol: SWKS Initial purchase date: Feb 26, 2019       12,000.00       9.47       140.58       113,653.50       1,686,960.00       1,573,306.50       1,384.30%       19,200.00       1.14%       1.97%       1.35         CUSIP: 892356106_Symbol: TSCO Initial purchase date: Dec 10, 2008       1,000.00       283.02       287.16       283,023.95       287,160.00       4,136.05       1.46%       0.00       0.00%       0.34%       0.23         ULTA BEAUTY, INC CUSIP: 90384S303_Symbol: ULTA Initial purchase date: Jan 09, 2019       1,400.00       89.32       85.41       125,044.79       119,574.00       -5,470.79       -4.38%       2,744.00       2.29%       0.14%       0.10         VF CORP CUSIP: 918204108_Symbol: VFC Initial purchase date: Oct 09, 2019       1,000.00       61.20       226.55       61,202.82       226,550.00       165,347.18       270.16%       7,100.00       3.13%       0.27%       0.19         VLSIP: 942622200       Symbol: WSO Initial purchase date: Apr 15, 2010       1,000.00       61.20       226.55       61,202.82       226,550.00       165,347.18       270.16%       7,100.00       3.13%       0.27%       0.19         VUMI BRANDS INC       5,080.00       14.90       108.56       75,694.60       551,484.80       475,790.20       628.57%       9,550.40	01/15/21 95.000 4608B6 CUSIP: 99UBBHQU2 Symbol: TSCO	-10.00	10,635.2	20.00	-1,063.52	-200.00	863.52	81.19%	0.00	0.00%	0.00%	0.00%
CUSIP: 892356106       Symbol: TSCO Initial purchase date: Dec 10, 2008         ULTA BEAUTY, INC CUSIP: 903845303       1,000.00       283.02       287.16       283,023.95       287,160.00       4,136.05       1.46%       0.00       0.00%       0.34%       0.23         CUSIP: 903845303       Symbol: ULTA Initial purchase date: Jan 09, 2019       1,400.00       89.32       85.41       125,044.79       119,574.00       -5,470.79       -4.38%       2,744.00       2.29%       0.14%       0.10         CUSIP: 918204108       Symbol: VFC Initial purchase date: Oct 09, 2019       1,000.00       61.20       226.55       61,202.82       226,550.00       165,347.18       270.16%       7,100.00       3.13%       0.27%       0.19         VLSIP: 942622200       Symbol: WSO Initial purchase date: Apr 15, 2010       14.90       108.56       75,694.60       551,484.80       475,790.20       628.57%       9,550.40       1.73%       0.65%       0.45         VUSIP: 988498101       Symbol: YUM       5,080.00       14.90       108.56       75,694.60       551,484.80       475,790.20       628.57%       9,550.40       1.73%       0.65%       0.45	CUSIP: 83088M102 Symbol: SWKS	4,000.00	83.16	152.88	332,628.80	611,520.00	278,891.20	83.84%	8,000.00	1.31%	0.72%	0.50%
CUSIP: 90384\$303       Symbol: ULTA Initial purchase date: Jan 09, 2019       1,400.00       89.32       85.41       125,044.79       119,574.00       -5,470.79       -4.38%       2,744.00       2.29%       0.14%       0.10         CUSIP: 918204108       Symbol: VFC Initial purchase date: Oct 09, 2019       1,000.00       61.20       226.55       61,202.82       226,550.00       165,347.18       270.16%       7,100.00       3.13%       0.27%       0.19         WATSCO INC CUSIP: 942622200       Symbol: WSO Initial purchase date: Apr 15, 2010       1,000.00       61.20       226.55       61,202.82       226,550.00       165,347.18       270.16%       7,100.00       3.13%       0.27%       0.19         YUM! BRANDS INC CUSIP: 988498101       5,080.00       14.90       108.56       75,694.60       551,484.80       475,790.20       628.57%       9,550.40       1.73%       0.65%       0.45	CUSIP: 892356106 Symbol: TSCO	12,000.00	9.47	140.58	113,653.50	1,686,960.00	1,573,306.50	1,384.30%	19,200.00	1.14%	1.97%	1.35%
CUSIP: 918204108       Symbol: VFC Initial purchase date: Oct 09, 2019         WATSCO INC       1,000.00       61.20       226.55       61,202.82       226,550.00       165,347.18       270.16%       7,100.00       3.13%       0.27%       0.19         CUSIP: 942622200       Symbol: WSO Initial purchase date: Apr 15, 2010       5,080.00       14.90       108.56       75,694.60       551,484.80       475,790.20       628.57%       9,550.40       1.73%       0.65%       0.45         CUSIP: 988498101       Symbol: YUM       5,080.00       14.90       108.56       75,694.60       551,484.80       475,790.20       628.57%       9,550.40       1.73%       0.65%       0.45	CUSIP: 90384S303 Symbol: ULTA	1,000.00	283.02	287.16	283,023.95	287,160.00	4,136.05	1.46%	0.00	0.00%	0.34%	0.23%
CUSIP: 942622200 Symbol: WSO Initial purchase date: Apr 15, 2010 YUM! BRANDS INC 5,080.00 14.90 108.56 75,694.60 551,484.80 475,790.20 628.57% 9,550.40 1.73% 0.65% 0.45 CUSIP: 988498101 Symbol: YUM	CUSIP: 918204108 Symbol: VFC	1,400.00	89.32	85.41	125,044.79	119,574.00	-5,470.79	-4.38%	2,744.00	2.29%	0.14%	0.10%
CUSIP: 988498101 Symbol: YUM	CUSIP: 942622200 Symbol: WSO	1,000.00	61.20	226.55	61,202.82	226,550.00	165,347.18	270.16%	7,100.00	3.13%	0.27%	0.19%
	CUSIP: 988498101 Symbol: YUM Initial purchase date: Sep 09, 2004	5,080.00	14.90	108.56	·		·		,	·		0.45%
Total Core         \$6,557,347.36         \$11,606,634.25         \$5,049,286.89         77.00%         \$129,722.80         1.12%         13.58%         9.48					\$6,557,347.36	\$11,606,634.25	\$5,049,286.89	77.00%	\$129,722.80	1.12%	13.58%	9.48%

Growth

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)		Est. annual income (\$)		% of Equity	% of Portfolio
US											
Growth CALL O REILLY AUTOMOTIVE DUE 05/21/21 530.000 350B81 CUSIP: 99UBBUE69 Symbol: ORLY Initial purchase date: Dec 09, 2020	-5.00	19,415.6	665.00	-970.78	-3,325.00	-2,354.22	-242.51%	0.00	0.00%	0.00%	0.00%
CALL PALO ALTO NETWORKS DUE 06/18/21 380.000 361DG0 CUSIP: 99UBBUE85 Symbol: PANW Initial purchase date: Dec 09, 2020	-2.00	62,450.0	2,522.50	-1,249.00	-5,045.00	-3,796.00	-303.92%	0.00	0.00%	-0.01%	0.00%
O REILLY AUTOMOTIVE INC CUSIP: 67103H107 Symbol: ORLY Initial purchase date: Jul 01, 2003	3,150.00	17.68	452.57	55,702.33	1,425,595.50	1,369,893.17	2,459.31%	0.00	0.00%	1.67%	1.16%
PALO ALTO NETWORKS INC CUSIP: 697435105 Symbol: PANW Initial purchase date: Feb 12, 2015	1,250.00	134.89	355.39	168,607.43	444,237.50	275,630.07	163.47%	0.00	0.00%	0.52%	0.36%
Total Growth				\$222,089.98	\$1,861,463.00	\$1,639,373.02	738.16%	\$0.00	0.00%	2.18%	1.52%
Value CALL GENUINE PARTS CO DUE 02/19/21 110.000 181455 CUSIP: 99UBA2O95 Symbol: GPC Initial purchase date: Dec 09, 2020	-10.00	9,653.30	85.00	-965.33	-850.00	115.33	11.95%	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	10.00	-1,947.31	-100.00	1,847.31	94.86%	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	7.50	-1,564.33	-75.00	1,489.33	95.21%	0.00	0.00%	0.00%	0.00%
GENUINE PARTS CO CUSIP: 372460105 Symbol: GPC Initial purchase date: Apr 13, 2012	3,000.00	63.29	100.43	189,860.40	301,290.00	111,429.60	58.69%	9,480.00	3.15%	0.35%	0.25%

		Purchase	Price on 12/31/2020			Uproplized	Unrealized	Est. annual	Curront	% of	% of
Equity	Quantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$)		income (\$)			Portfolio
US							•				
Value											
HARTFORD FINCL SERVICES GROUP INC CUSIP: 416515104 Symbol: HIG Initial purchase date: Jan 13, 2005	4,000.00	67.53	48.98	270,129.76	195,920.00	-74,209.76	-27.47%	5,200.00	2.65%	0.23%	0.16%
LKQ CORP NEW CUSIP: 501889208 Symbol: LKQ Initial purchase date: Dec 10, 2009	4,000.00	9.25	35.24	36,990.75	140,960.00	103,969.25	281.07%	0.00	0.00%	0.16%	0.12%
ONEOK INC NEW CUSIP: 682680103 Symbol: OKE Initial purchase date: May 14, 2009	14,000.00	14.25	38.38	199,490.58	537,320.00	337,829.42	169.35%	52,360.00	9.74%	0.63%	0.44%
SMUCKER J M CO NEW CUSIP: 832696405 Symbol: SJM Initial purchase date: Jan 14, 2010	3,000.00	62.32	115.60	186,962.73	346,800.00	159,837.27	85.49%	10,800.00	3.11%	0.41%	0.28%
VANGUARD MID-CAP VALUE ETF CUSIP: 922908512 Symbol: VOE Initial purchase date: Dec 12, 2019	7,580.00	118.87	118.96	901,026.53	901,716.80	690.27	0.08%	21,307.38	2.36%	1.06%	0.73%
VIATRIS INC CUSIP: 92556V106 Symbol: VTRS Initial purchase date: Jun 16, 2008	1,240.00	0.98	18.74	1,209.02	23,237.60	22,028.58	1,822.02%	0.00	0.00%	0.03%	0.02%
Total Value				\$1,779,403.69	\$2,445,819.40	\$666,415.71	37.45%	\$99,147.38	4.05%	2.86%	2.00%
Public Real Estate											
REALTY INCOME CORP MD SBI CUSIP: 756109104 Symbol: O Initial purchase date: May 26, 2015	5,000.00	47.19	62.17	235,951.92	310,850.00	74,898.08	31.74%	14,070.00	4.53%	0.36%	0.26%
Total Public Real Estate				\$235,951.92	\$310,850.00	\$74,898.08	31.74%	\$14,070.00	4.53%	0.36%	0.26%
Total Mid Cap				\$8,794,792.95	\$16,224,766.65	\$7,429,973.70	84.48%	\$242,940.18	1.50%	18.98%	13.26%
Small Cap Core											
EAST WEST BANCORP INC CUSIP: 27579R104 Symbol: EWBC Initial purchase date: Jan 09, 2019	5,500.00	47.90	50.71	263,460.51	278,905.00	15,444.49	5.86%	6,050.00	2.17%	0.33%	0.23%
HUNTINGTON INGALLS INDS INC CUSIP: 446413106 Symbol: HII Initial purchase date: Dec 09, 2020	5,000.00	175.81	170.48	879,062.02	852,400.00	-26,662.02	-3.03%	22,800.00	2.67%	1.00%	0.70%
INSPERITY INC COM CUSIP: 45778Q107 Symbol: NSP Initial purchase date: Dec 09, 2020	10,040.00	87.99	81.42	883,396.51	817,456.80	-65,939.71	-7.46%	16,064.00	1.97%	0.96%	0.67%

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		Purchase	Price on 12/31/2020			Uproalized	Unrealized	Est. annual	Curront	% of	% of
Equity	Quantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$)		income (\$)			Portfolio
US	quantity	7 tig Thee	(4)	0000 00010 (\$)	Market Value (\$)	guin (055 (4)	guill/1035 (70)	income (\$)	Jiela (70)	Equity	
03											
Core											
ISHARES RUSSELL 2000 ETF CUSIP: 464287655 Symbol: IWM Initial purchase date: Jun 13, 2014 Client investment: \$999,013.13 Reinvested dividends: \$67,185.11 Investment return: \$735,137.57 (73.59%)	8,845.00	120.54	196.06	1,066,198.24	1,734,150.70	667,952.46	62.65%	18,084.27	1.04%	2.03%	1.41%
META FINANCIAL GROUP INC CUSIP: 59100U108 Symbol: CASH Initial purchase date: Feb 19, 2019	5,000.00	25.65	36.56	128,234.81	182,800.00	54,565.19	42.55%	1,000.00	0.55%	0.21%	0.15%
PATRICK INDUST INC CUSIP: 703343103 Symbol: PATK Initial purchase date: Jan 09, 2019	8,000.00	35.72	68.35	285,733.51	546,800.00	261,066.49	91.37%	8,960.00	1.64%	0.64%	0.45%
SUPERNUS PHARMACEUTICALS INC CUSIP: 868459108 Symbol: SUPN Initial purchase date: Jan 09, 2019	7,500.00	36.70	25.16	275,240.06	188,700.00	-86,540.06	-31.44%	0.00	0.00%	0.22%	0.15%
Total Core				\$3,781,325.66	\$4,601,212.50	\$819,886.84	21.68%	\$72,958.27	1.59%	5.38%	3.76%
Currenth											
	0.000.00	400 50	100.10		000.074.40	2 676 07	0.000/	10.054.40	2.050/	1.020/	0 700/
NEXSTAR MEDIA GROUP INC CL A CUSIP: 65336K103 Symbol: NXST Initial purchase date: Dec 09, 2020	8,060.00	109.52	109.19	882,748.27	880,071.40	-2,676.87	-0.30%	18,054.40	2.05%	1.03%	0.72%
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: \$404,067.02 Investment return: \$2,327,322.25 (184.71%)	68,934.14 %)	24.14	52.04	1,664,077.52	3,587,332.75	1,923,255.23	115.57%	0.00	0.00%	4.20%	2.93%
Total Growth				\$2,546,825.79	\$4,467,404.15	\$1,920,578.36	75.41%	\$18,054.41	0.40%	5.23%	3.65%
Value											
KAR AUCTION SVCS INC CUSIP: 48238T109 Symbol: KAR Initial purchase date: Nov 30, 2015	5,000.00	14.97	18.61	74,834.68	93,050.00	18,215.32	24.34%	0.00	0.00%	0.11%	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: \$348,592.80 (27.57%) SIGNATURE BANK NEW YORK N Y	96,515.87	15.42	16.71	1,488,282.99	1,612,780.15	58,447.18	8.37%	8,910.34	0.55%	0.40%	0.28%
CUSIP: 82669G104 Symbol: SBNY Initial purchase date: Jan 09, 2019	2,500.00	111.91	133.29	219,111.02	536,225.00	50,447.18	20.89%	5,600.00	1.0070	0.4070	0.2070

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-		Purchase price (\$) /				Unrealized		Est. annual	Current	% of	% of
Equity	Quantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$) g	gain/loss (%)	income (\$)	yield (%)	Equity	Portfolio
US											
Value											
TCF FINL CORP NEW CUSIP: 872307103 Symbol: TCF Initial purchase date: Feb 26, 2019	5,000.00	46.90	37.02	234,491.90	185,100.00	-49,391.90	-21.06%	7,000.00	3.78%	0.22%	0.15%
Total Value				\$2,077,387.39	\$2,229,155.15	\$151,767.76	7.31%	\$21,510.34	0.96%	2.61%	1.82%
Total Small Cap				\$8,405,538.84	\$11,297,771.80	\$2,892,232.96	34.41%	\$112,523.02	1.00%	13.22%	9.23%
Convertibles											
Convertibles ESCROW GENERAL MTRS CORP	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%
6.250% SER C DUE 07/15/33 CALLBL CONV CUSIP: 370ESC717 Initial purchase date: Jul 10, 2003						·					
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				\$34,807,075.94	\$66,212,972.06	\$31,405,896.12	90.23%	\$880,635.14	1.33%	77.47%	54.10%
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: \$387,946.59 Investment return: \$973,945.00 (145.15%	27,697.01 )	38.23	59.39	1,058,926.84	1,644,925.25	585,998.41	55.34%	20,218.82	1.23%	1.92%	1.34%
Total Core				\$1,058,926.84	\$1,644,925.25	\$585,998.41	55.34%	\$20,218.82	1.23%	1.93%	1.34%
Growth											
COLUMBIA SELIGMAN COMMUNICATION AND INFORMATION FUND A CUSIP: 19766H429 Symbol: SLMCX Initial purchase date: Oct 19, 2001 Client investment: \$165,000.00 Reinvested dividends: \$3,522,484.97 Investment return: \$6,328,862.32 (3835.6	62,237.52 7%)	59.25	104.34	3,687,484.97	6,493,862.31	2,806,377.35	76.11%	27,226.42	0.42%	7.60%	5.31%
Total Growth				\$3,687,484.97	\$6,493,862.31	\$2,806,377.34	76.11%	\$27,226.42	0.42%	7.60%	5.31%

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized Jain/loss (%)	Est. annual income (\$)		% of Equity	% of Portfolio
Total Global				\$4,746,411.81	\$8,138,787.56	\$3,392,375.75	71.47%	\$47,445.24	0.58%	9.53%	6.65%
Total Global				\$4,746,411.81	\$8,138,787.56	\$3,392,375.75	71.47%	\$47,445.24	0.58%	9.53%	6.65%
International											
International											
Core											
FABRINET CUSIP: G3323L100 Symbol: FN Initial purchase date: Mar 30, 2011	4,000.00	21.23	77.59	84,933.90	310,360.00	225,426.10	265.41%	0.00	0.00%	0.36%	0.25%
Total Core				\$84,933.90	\$310,360.00	\$225,426.10	265.41%	\$0.00	0.00%	0.36%	0.25%
Total International				\$84,933.90	\$310,360.00	\$225,426.10	265.41%	\$0.00	0.00%	0.36%	0.25%
Developed Markets Core											
CHUBB LTD CHF CUSIP: H1467J104 Symbol: CB Initial purchase date: Apr 13, 2016	1,000.00	121.66	153.92	121,658.43	153,920.00	32,261.57	26.52%	3,120.00	2.03%	0.18%	0.13%
DIAGEO PLC NEW GB SPON ADR CUSIP: 25243Q205 Symbol: DEO Initial purchase date: Feb 11, 2010	1,000.00	64.02	158.81	64,017.37	158,810.00	94,792.63	148.07%	3,534.92	2.23%	0.19%	0.13%
MEDTRONIC PLC CUSIP: G5960L103 Symbol: MDT Initial purchase date: Oct 09, 2019	1,165.00	107.77	117.14	125,550.50	136,468.10	10,917.60	8.70%	2,702.80	1.98%	0.16%	0.11%
SENSATA TECHNOLOGIES HLDG PLC EUR CUSIP: G8060N102 Symbol: ST Initial purchase date: May 29, 2019	5,000.00	43.80	52.74	219,001.25	263,700.00	44,698.75	20.41%	0.00	0.00%	0.31%	0.21%
Total Core				\$530,227.55	\$712,898.10	\$182,670.55	34.45%	\$9,357.72	1.31%	0.83%	0.58%
Growth											
CALL LINDE PLC EUR DUE 04/16/21 280.000 2621Y8 CUSIP: 99UBBV7M0 Symbol: LIN Initial purchase date: Nov 11, 2020	-10.00	84,481.6	815.00	-8,448.16	-8,150.00	298.16	3.53%	0.00	0.00%	-0.01%	0.00%

		Purchase price (\$) /	Price on 12/31/2020			Unrealized	Unrealized	Est. annual	Current	% of	% of
Equity	Quantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$) g	gain/loss (%)	income (\$)	yield (%)	Equity	Portfolio
International											
Growth											
CLEARBRIDGE INTERNATIONAL GROWTH FUND CLASS I CUSIP: 524686524 Symbol: LMGNX Initial purchase date: Aug 12, 2020 Client investment: \$3,616,886.15 Reinvested dividends: \$6,892.86 Investment return: \$586,348.54 (16.21%)	61,839.56	58.60	67.97	3,623,779.01	4,203,234.69	579,455.68	15.99%	6,904.32	0.16%	4.92%	3.43%
LINDE PLC EUR CUSIP: G5494J103 Symbol: LIN Initial purchase date: Sep 09, 2004	4,000.00	163.46	263.51	653,820.00	1,054,040.00	400,220.00	61.21%	15,408.00	1.46%	1.23%	0.86%
Total Growth				\$4,269,150.85	\$5,249,124.69	\$979,973.84	22.95%	\$22,312.32	0.43%	6.14%	4.29%
Value											
CALL RIO TINTO PLC SPON DUE 04/16/21 67.500 4005C0 CUSIP: 99UBBWPH9 Symbol: RIO	-10.00	22,713.6	975.00	-2,271.36	-9,750.00	-7,478.64	-329.26%	0.00	0.00%	-0.01%	-0.01%
Initial purchase date: Nov 11, 2020											
RIO TINTO PLC SPON ADR CUSIP: 767204100 Symbol: RIO Initial purchase date: Sep 10, 2009	5,000.00	42.96	75.22	214,799.21	376,100.00	161,300.79	75.09%	19,300.00	5.13%	0.44%	0.31%
Total Value				\$212,527.85	\$366,350.00	\$153,822.15	72.38%	\$19,300.00	5.27%	0.43%	0.30%
Total Developed Markets				\$5,011,906.25	\$6,328,372.79	\$1,316,466.54	26.27%	\$50,970.04	0.81%	7.40%	5.17%
Emerging Markets Growth AMER FUNDS NEW WORLD FUND CLASS F2 CUSIP: 649280823 Symbol: NFFFX	11,734.00	71.97	87.69	844,474.10	1,028,954.55	184,480.45	21.85%	3,611.73	0.35%	1.20%	0.84%
Initial purchase date: Feb 13, 2020 Client investment: \$840,875.15 Reinvested dividends: \$3,598.95 Investment return: \$188,079.40 (22.37%)											
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: \$191,879.51 Investment return: \$1,379,674.56 (78.84%	35,584.94 )	54.57	87.95	1,941,900.51	3,129,695.56	1,187,795.05	61.17%	3,024.72	0.10%	3.66%	2.56%
Total Growth				\$2,786,374.61	\$4,158,650.11	\$1,372,275.50	49.25%	\$6,636.45	0.16%	4.87%	3.40%



Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
International											
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	1,864.13	112,067.61	316,901.42	204,833.81	182.78%	0.00	0.00%	0.37%	0.26%
Total Other				\$112,067.61	\$316,901.42	\$204,833.81	182.78%	\$0.00	0.00%	0.37%	0.26%
Total Emerging Markets				\$2,898,442.22	\$4,475,551.53	\$1,577,109.31	54.41%	\$6,636.45	0.15%	5.24%	3.66%
Total International				\$7,995,282.37	\$11,114,284.32	\$3,119,001.95	39.01%	\$57,606.49	0.52%	13.00%	9.08%
Total Equity				\$47,548,770.12	\$85,466,043.94	\$37,917,273.82	79.74%	\$985,686.87	1.15%	100.00%	69.83%
										% of	
				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	asset class	% of Portfolio
Total Portfolio				\$83,767,736.91	\$122,394,886.24	\$38,627,149.33	46.11%	\$1,866,780.73	1.53%	100%	100%
Total accrued interest (included in ma	rket values): \$	53,640.49									

Total accrued interest (included in market values): \$3,640.49 \* Balanced mutual funds are displayed in unbundled view



# **WBS** Additional information about your portfolio

as of December 31, 2020

## **Benchmark composition**

Consolidated

#### Blended Index

Start - Current: 30% Barclays Govt/Credit Int; 70% MSCI AC World IMI - GR

## **UBS** 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 feebased 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 weighs 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 '^' 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 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. Â 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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# TX XX595 • ERS • Defined Benefit Prepared for CITY OF TROY Risk profile: Moderate Return Objective: Current Income and Capital Appreciation

# **WBS** Sources of portfolio value

as of December 31, 2020



	MTD	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	ITD
	11/30/2020 to	09/30/2020 to	12/31/2019 to	12/31/2017 to	12/31/2015 to	12/31/2013 to	12/31/2010 to	12/31/2002 to
	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2020
Opening value	91,332,317.97	87,415,944.25	85,204,028.21	95,102,507.04	95,980,848.65	68,216,436.36	64,005,212.92	48,080,148.50
Net deposits/withdrawals	-100.00	-2,422,245.00	-3,738,868.33	-29,116,799.33	-51,906,190.86	-28,081,953.40	-41,138,657.77	-55,487,215.02
Div./interest income	1,757,719.70	2,056,551.98	3,268,647.00	8,540,591.13	14,152,645.40	20,496,522.91	25,544,122.52	42,704,192.11
Change in accr. interest	2,344.14	-6,934.42	-6,566.56	-6,197.68	-45,446.23	-49,556.02	-115,469.96	-555,529.90
Change in value	1,330,098.00	7,379,063.00	9,695,139.50	19,902,278.66	36,240,522.85	33,840,929.96	46,127,172.09	59,680,784.12
Closing value	94,422,379.81	94,422,379.81	94,422,379.81	94,422,379.81	94,422,379.81	94,422,379.81	94,422,379.81	94,422,379.81
Gross Time-weighted ROR	3.39	10.93	15.79	11.66	12.18	9.16	9.22	8.30
Net Time-weighted ROR	3.38	10.91	15.68	11.53	12.05	9.05	9.12	8.24

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

#### Benchmarks - Annualized time-weighted returns

Blended Index	3.57	11.16	14.39	8.97	10.20	7.69	7.88	8.37
US Treasury Bill - 3 Mos	0.01	0.02	0.54	1.52	1.13	0.81	0.59	1.25
Barclays Agg Bond	0.14	0.67	7.51	5.34	4.43	4.08	3.84	4.34
MSCI Emerging Markets-PR	7.15	19.34	15.84	3.68	10.20	3.68	1.15	8.60
Russell 2000	8.65	31.37	19.96	10.24	13.24	9.33	11.19	11.00
S&P 500	3.84	12.15	18.40	14.17	15.20	12.90	13.87	10.61

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.

# **WBS** Portfolio holdings

# as of December 31, 2020 Summary of Portfolio Holdings

		Value on	Unrealized	Unrealized	Est. annual	Current % of
	Cost basis (\$)	12/31/2020 (\$)	gain/loss (\$)	gain/loss (%)	income (\$)	yield (%) Portfolio
A Cash	966,169.39	966,169.39	0.00	0.00%	788.39	0.08% 1.03%
Cash	966,169.39	966,169.39	0.00	0.00%	788.39	0.08% 1.03%
US	966,169.39	966,169.39	0.00	0.00%	788.39	0.08% 1.03%
US Cash	966,169.39	966,169.39	0.00	0.00%	788.39	0.08% 1.03%
B Fixed Income	33,171,211.51	33,881,087.02	709,875.51	2.14%	878,606.90	2.59% 35.88%
US	28,140,033.78	28,762,901.33	622,867.55	2.21%	740,003.71	2.57% 30.46%
US Fixed Income	19,617,049.87	19,720,715.30	103,665.43	0.53%	443,079.56	2.25% 20.88%
Short	5,579,162.65	5,875,582.47	296,419.82	5.31%	111,224.57	1.89% 6.22%
Intermediate	13,942,887.22	13,750,068.16	-192,819.06	-1.38%	331,712.49	2.41% 14.56%
Other	95,000.00	95,064.67	64.67	0.07%	142.50	0.15% 0.10%
Government	3,870,229.97	4,312,527.60	442,297.63	11.43%	50,396.94	1.17% 4.57%
Other	3,870,229.97	4,312,527.60	442,297.63	11.43%	50,396.94	1.17% 4.57%
Corporate IG Credit	293,625.00	351,170.24	57,545.24	19.60%	28,081.36	8.08% 0.37%
Short	293,625.00	351,170.24	57,545.24	19.60%	28,081.36	8.08% 0.37%
Corporate High Yield	4,359,128.94	4,378,488.19	19,359.25	0.44%	218,445.85	4.99% 4.64%
Corporate High Yield	4,359,128.94	4,378,488.19	19,359.25	0.44%	218,445.85	4.99% 4.64%
Global	3,979,790.19	4,036,474.98	56,684.79	1.42%	97,817.37	2.42% 4.27%
Global	3,979,790.19	4,036,474.98	56,684.79	1.42%	97,817.37	2.42% 4.27%
Global	3,979,790.19	4,036,474.98	56,684.79	1.42%	97,817.37	2.42% 4.27%
International	1,051,387.54	1,081,710.71	30,323.17	2.88%	40,785.82	3.77% 1.15%
Emerging Markets	1,051,387.54	1,081,710.71	30,323.17	2.88%	40,785.82	3.77% 1.15%
Emerging Markets	1,051,387.54	1,081,710.71	30,323.17	2.88%	40,785.82	3.77% 1.15%
Equity	32,604,909.24	59,575,123.40	26,970,214.16	82.72%	668,790.51	1.12% 63.09%
US	20,167,150.21	40,896,111.52	20,728,961.31	102.79%	563,738.78	1.38% 43.31%
US Equity	6,900.00	2,070.00	-4,830.00	-70.00%	0.00	0.00% 0.00%
Other	6,900.00	2,070.00	-4,830.00	-70.00%	0.00	0.00% 0.00%
Large Cap	12,623,522.50	27,747,747.37	15,124,224.87	119.81%	390,683.98	1.41% 29.39%
Core	4,228,210.81	12,202,871.21	7,974,660.40	188.61%	147,954.36	1.21% 12.92%
Growth	1,525,987.74	5,847,218.05	4,321,230.31	283.18%	5,856.00	0.10% 6.19%
Value	6,805,705.78	9,473,198.11	2,667,492.33	39.19%	232,343.62	2.45% 10.03%
Public Real Estate	63,618.17	224,460.00	160,841.83	252.82%	4,530.00	2.02% 0.25%
Mid Cap	2,821,405.96	6,212,030.55	3,390,624.59	120.17%	146,060.18	2.35% 6.58%
Core	887,238.50	2,792,448.65	1,905,210.15	214.73%	46,912.80	1.68% 2.96%
Growth	191,754.52	1,114,722.50	922,967.98	481.33%	0.00	0.00% 1.18%
Value	1,742,412.94	2,304,859.40	562,446.46	32.28%	99,147.38	4.30% 2.44%
Small Cap	4,218,558.75	6,934,263.60	2,715,704.85	64.38%	26,994.62	0.39% 7.34%
Core	1,066,198.24	1,734,150.70	667,952.46	62.65%	18,084.27	1.04% 1.84%
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 TX XX595 • ERS • Defined Benefit

 Prepared for
 CITY OF TROY

 Risk profile:
 Moderate

 Return Objective:
 Current Income and Capital Appreciation

#### Portfolio holdings - as of December 31, 2020 (continued)

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Prepared for Risk profile:

 Risk profile:
 Moderate

 Return Objective:
 Current Income and Capital Appreciation

otal Portfolio alanced mutual funds represented in multi	\$66,742,290.14		\$27,680,089.67	41.47%	\$1,548,185.80	1.64%	100%
- Other	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%
D Commodities	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00%
Other	112,067.61	316,901.42	204,833.81	182.78%	0.00	0.00%	0.34%
Growth	2,786,374.61	4,158,650.11	1,372,275.50	49.25%	6,636.45	0.16%	4.40%
Emerging Markets	2,898,442.22	4,475,551.53	1,577,109.31	54.41%	6,636.45	0.15%	4.74%
Value	212,527.85	366,350.00	153,822.15	72.38%	19,300.00	5.27%	0.39%
Growth	4,269,150.85	5,249,124.69	979,973.84	22.95%	22,312.32	0.43%	5.55%
Core	311,226.30	449,198.10	137,971.80	44.33%	9,357.72	2.08%	0.48%
Developed Markets	4,792,905.00	6,064,672.79	1,271,767.79	26.53%	50,970.04	0.84%	
International	7,691,347.22	10,540,224.32	2,848,877.10	37.04%	57,606.49		11.16%
Growth	3,687,484.97	6,493,862.31	2,806,377.34	76.11%	27,226.42	0.42%	
Core	1,058,926.84	1,644,925.25	585,998.41	55.34%	20,218.82	1.23%	1.74%
Global	4,746,411.81	8,138,787.56	3,392,375.75	71.47%	47,445.24	0.58%	8.62%
Global	4,746,411.81	8,138,787.56	3,392,375.75	71.47%	47,445.24	0.58%	8.62%
Convertibles	496,763.00	0.00	-496,763.00	-100.00%	0.00	0.00%	0.00%
Convertibles	1,488,282.99 496,763.00	1,612,780.15 0.00	124,497.16 -496,763.00	-100.00%	0.00	0.00%	0.00%
Growth Value	1,664,077.52	3,587,332.75	1,923,255.23	115.57% 8.37%	0.00 8,910.35	0.00% 0.55%	3.79% 1.71%
	Cost basis (\$)	12/31/2020 (\$)	gain/loss (\$)	gain/loss (%)	income (\$)	yield (%)	
		Value on	Unrealized	Unrealized	Est. annual	Current	% of

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

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TX XX595 • ERS • Defined BenefitPrepared forCITY OF TROYRisk profile:ModerateReturn Objective:Current Income and Capital Appreciation

Portfolio holdings - as of December 31, 2020 (continued)

## Details of portfolio holdings

				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)		Est. annual income (\$)		% of asset	% of Portfolio
Total Portfolio				\$66,742,290.14	\$94,422,379.81	\$27,680,089.67	41.47%	\$1,548,185.80	<b>1.64%</b>	100%	100%
		Purchase	Price on								
		price (\$) /	12/31/2020			Unrealized		Est. annual			% of
Cash	Quantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$)	gain/loss (%)	income (\$)	yield (%)	Cash	Portfolio
Cash											
US											
US Cash											
LIQUID ASSETS GOVT FUND CUSIP: 90262Y307 Symbol: MMLIRA	966,169.39	1.00	1.00	966,169.39	966,169.39	0.00	0.00%	788.39	0.08%	100.00%	1.03%
Total US Cash				\$966,169.39	\$966,169.39	\$0.00	0.00%	\$788.39	0.08%	100.00%	1.03%
Total US				\$966,169.39	\$966,169.39	\$0.00	0.00%	\$788.39	0.08%	100.00%	1.03%
Total Cash				\$966,169.39	\$966,169.39	\$0.00	0.00%	\$788.39	0.08%	100.00%	1.03%
Total Cash				\$966,169.39	\$966,169.39	\$0.00	0.00%	\$788.39	0.08%	100.00%	1.03%
Fixed Income	Quantity	Purchase price (\$) /	Price on 12/31/2020	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized	Est. annual			% of Portfolio
Fixed Income	Quantity	Avg Price	(\$)	Cost dasis (\$)	Market Value (\$)	gain/loss (\$)	gain/loss (%)	income (\$)	yield (%)	Income	Portiolio
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: \$558,537.37 Investment return: \$854,957.19 (17.03%)	418,190.92 )	13.34	14.05	5,579,162.65	5,875,582.47	296,419.82	5.31%	111,224.57		17.34%	6.22%
Total Short				\$5,579,162.65	\$5,875,582.47	\$296,419.82	5.31%	\$111,224.57	1.89%	17.34%	6.22%
Intermediate											

#### TX XX595 • ERS • Defined Benefit

Prepared for CITY OF TROY Risk profile: Moderate

#### Return Objective: Current Income and Capital Appreciation

## Portfolio holdings - as of December 31, 2020 (continued)

Fixed Income	Quantity	, Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	, Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized gain/loss (%)	Est. annual income (\$)		% 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: \$2,322,177.70 Investment return: \$2,001,186.60 (28.2%)	780,961.26	12.06	11.65	9,419,189.73	9,098,198.63	-320,991.10	-3.41%	249,439.03	2.74%	26.85%	9.63%
METROPOLITAN WEST TOTAL RETURN BOND FUND CUSIP: 592905103 Symbol: MWTRX Initial purchase date: Nov 14, 2014 Client investment: \$3,587,358.91 Reinvested dividends: \$936,338.58 Investment return: \$1,064,510.62 (29.67%	416,088.51	10.87	11.18	4,523,697.49	4,651,869.53	128,172.04	2.83%	82,273.47	1.77%	13.73%	4.93%
Total Intermediate				\$13,942,887.22	\$13,750,068.16	\$-192,819.06	-1.38%	\$331,712.49	2.41%	40.58%	14.56%
Other											
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	100.01	95,000.00	95,064.67	64.67	0.07%	142.50	0.15%	0.28%	0.10%
Total Other				\$95,000.00	\$95,064.67	\$64.67	0.07%	\$142.50	0.15%	0.28%	0.10%
Total US Fixed Income				\$19,617,049.87	\$19,720,715.30	\$103,665.43	0.53%	\$443,079.56	2.25%	58.20%	20.88%
Government Other ISHARES TIPS BOND ETF CUSIP: 464287176 Symbol: TIP Initial purchase date: Feb 16, 2017 Client investment: \$3,689,182.34 Reinvested dividends: \$181,047.63 Investment return: \$623,345.26 (16.9%)	33,784.00	114.56	127.65	3,870,229.97	4,312,527.60	442,297.63	11.43%	50,396.94	1.17%	12.73%	4.57%
Total Other				\$3,870,229.97	\$4,312,527.60	\$442,297.63	11.43%	\$50,396.94	1.17%	12.73%	4.57%
Total Government				\$3,870,229.97	\$4,312,527.60	\$442,297.63	11.43%	\$50,396.94	1.17%	12.73%	4.57%

#### Corporate IG Credit

Short

#### TX XX595 • ERS • Defined Benefit

Prepared forCITY OF TROYRisk profile:Moderate

#### Return Objective: Current Income and Capital Appreciation

Fixed Income	Quantity	Purchase	Price on 12/31/2020 (\$)	, Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g		Est. annual income (\$)		% of Fixed Income	% of Portfolio
 US											
Short											
COMCAST CABLE 09.455% 111522 DTD111802 FC051503 COMMUNICATION CUSIP: 00209TAB1 Initial purchase date: Feb 13, 1992	297,000.00	98.86	117.03	293,625.00	351,170.24	57,545.24	19.60%	28,081.35	8.08%	1.04%	0.37%
Total Short				\$293,625.00	\$351,170.24	\$57,545.24	19.60%	\$28,081.36	8.08%	1.04%	0.37%
Total Corporate IG Credit				\$293,625.00	\$351,170.24	\$57,545.24	19.60%	\$28,081.36	8.08%	1.04%	0.37%
Corporate High Yield											
Corporate High Yield											
BLACKROCK HIGH YIELD BOND PORTFOLIOA CUSIP: 09260B663 Symbol: BHYAX	296,547.28	7.93	7.79	2,352,794.28	2,310,103.33	-42,690.95	-1.81%	111,946.60	4.85%	6.82%	2.45%
Initial purchase date: Nov 16, 2012 Client investment: \$1,215,925.43 Reinvested dividends: \$1,136,868.85 Investment return: \$1,094,177.90 (89.99	9%)										
BLACKROCK HIGH YIELD BOND PORTFOLIOINSTITUTIONAL CUSIP: 09260B630 Symbol: BHYIX Initial purchase date: Aug 12, 2020 Client investment: \$1,976,775.79 Reinvested dividends: \$29,558.87 Investment return: \$91,609.06 (4.63%)	265,517.95	7.56	7.79	2,006,334.66	2,068,384.86	62,050.19	3.09%	106,499.25	5.15%	6.10%	2.19%
Total Corporate High Yield				\$4,359,128.94	\$4,378,488.19	\$19,359.25	0.44%	\$218,445.85	4.99%	12.92%	4.64%
Total Corporate High Yield				\$4,359,128.94	\$4,378,488.19	\$19,359.25	0.44%	\$218,445.85	4.99%	12.92%	4.64%
Total US				\$28,140,033.78	\$28,762,901.33	\$622,867.55	2.21%	\$740,003.71	2.57%	84.89%	30.46%
						+ <b>,</b>					
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: \$838,440.04 Investment return: \$895,124.83 (28.49%	389,245.42	10.22	10.37	3,979,790.19	4,036,474.98	56,684.79	1.42%	97,817.37	2.42%	11.91%	4.27%

TX XX595 • ERS • Defined Benefit Prepared for CITY OF TROY

Risk profile: Moderate Return Objective: Current Income and Capital Appreciation

Fixed Income	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	, Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized ain/loss (%)	Est. annual income (\$)		% of Fixed Income	% of Portfolio
Global											
Total Global				\$3,979,790.19	\$4,036,474.98	\$56,684.79	1.42%	\$97,817.37	2.42%	11.91%	4.27%
Total Global				\$3,979,790.19	\$4,036,474.98	\$56,684.79	1.42%	\$97,817.37		11.91%	4.27%
				\$3,575,750.15	94,030,474.30	\$30,004.75	1.42 %	\$57,017.57	2.42 /0	11.5170	4.27 /0
Total Global				\$3,979,790.19	\$4,036,474.98	\$56,684.79	1.42%	\$97,817.37	2.42%	11.91%	4.27%
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: \$51,312.54 Investment return: \$81,635.71 (8.16%)	98,516.46	10.67	10.98	1,051,387.54	1,081,710.71	30,323.17	2.88%	40,785.81	3.77%	3.19%	1.15%
Total Emerging Markets				\$1,051,387.54	\$1,081,710.71	\$30,323.17	2.88%	\$40,785.82	3.77%	3.20%	1.15%
Total Emerging Markets				\$1,051,387.54	\$1,081,710.71	\$30,323.17	2.88%	\$40,785.82	3.77%	3.20%	1.15%
Total International				\$1,051,387.54	\$1,081,710.71	\$30,323.17	2.88%	\$40,785.82	3.77%	3.20%	1.15%
Total Fixed Income				\$33,171,211.51	\$33,881,087.02	\$709,875.51	2.14%	\$878,606.90	2.59%	100.00%	35.88%
Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized ain/loss (%)	Est. annual income (\$)		% of Equity	% of Portfolio
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	0.69	6,900.00	2,070.00	-4,830.00	-70.00%	0.00	0.00%	0.00%	0.00%
Total Other				\$6,900.00	\$2,070.00	\$-4,830.00	-70.00%	\$0.00	0.00%	0.00%	0.00%
Total US Equity				\$6,900.00	\$2,070.00	\$-4,830.00	-70.00%	\$0.00	0.00%	0.00%	0.00%

#### TX XX595 • ERS • Defined Benefit

Prepared for **CITY OF TROY** Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) c	Unrealized	Est. annual income (\$)	Current	% of	% of Portfolio
US	Quantity	Avgriee	(4)	031 00313 (4)		gan //033 (‡) g	Jan 1/1033 ( 70)	income (\$)		Lquity	
Large Cap											
Core											
ABBOTT LABS CUSIP: 002824100 Symbol: ABT Initial purchase date: May 11, 2016	3,045.00	38.39	109.49	116,912.23	333,397.05	216,484.82	185.17%	5,481.00	1.64%	0.56%	0.35%
APPLE INC CUSIP: 037833100 Symbol: AAPL Initial purchase date: Sep 15, 2011	12,300.00	14.01	132.69	172,382.83	1,632,087.00	1,459,704.17	846.78%	10,086.00	0.62%	2.74%	1.71%
BLACKROCK INC CUSIP: 09247X101 Symbol: BLK Initial purchase date: Aug 10, 2016	670.00	370.32	721.54	248,115.95	483,431.80	235,315.85	94.84%	9,728.40	2.01%	0.81%	0.51%
CALL ABBOTT LABS DUE 03/19/21 125.000 000132 CUSIP: 99UBAZT06 Symbol: ABT Initial purchase date: Dec 14, 2020	-10.00	11,126.2	113.50	-1,112.62	-1,135.00	-22.38	-2.01%	0.00	0.00%	0.00%	0.00%
CALL APPLE INC DUE 03/19/21 150.000 030911 CUSIP: 99UBA3UT2 Symbol: AAPL Initial purchase date: Nov 11, 2020	-13.00	15,082.4	346.00	-1,960.72	-4,498.00	-2,537.28	-129.41%	0.00	0.00%	-0.01%	0.00%
CALL COSTCO WHOLESALE CO DUE 03/19/21 440.000 0929G5 CUSIP: 99UBA41K1 Symbol: COST Initial purchase date: Nov 16, 2020	-5.00	30,708.2	126.00	-1,535.41	-630.00	905.41	58.97%	0.00	0.00%	0.00%	0.00%
CALL DANAHER CORP DUE 03/19/21 260.000 126250 CUSIP: 99UBAPLM8 Symbol: DHR Initial purchase date: Nov 11, 2020	-10.00	43,080.5	150.00	-4,308.05	-1,500.00	2,808.05	65.18%	0.00	0.00%	0.00%	0.00%
CALL GLOBAL PAYMENTS INC DUE 02/19/21 230.000 1848N3 CUSIP: 99UBANL01 Symbol: GPN Initial purchase date: Dec 09, 2020	-20.00	15,336.4	374.00	-3,067.28	-7,480.00	-4,412.72	-143.86%	0.00	0.00%	-0.01%	-0.01%
CALL MARSH & MCLENNAN CO DUE 04/16/21 125.000 275603 CUSIP: 99UBBWM41 Symbol: MMC Initial purchase date: Nov 11, 2020	-20.00	18,780.3	217.50	-3,756.06	-4,350.00	-593.94	-15.81%	0.00	0.00%	-0.01%	0.00%
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	28.00	-3,686.22	-840.00	2,846.22	77.21%	0.00	0.00%	0.00%	0.00%

#### TX XX595 • ERS • Defined Benefit

Prepared for **CITY OF TROY** Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized ain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Core											
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	902.50	-1,475.73	-10,830.00	-9,354.27	-633.87%	0.00	0.00%	-0.02%	-0.01%
CALL WALT DISNEY CO (HOL DUE 04/16/21 160.000 129488 CUSIP: 99UBBVAX2 Symbol: DIS Initial purchase date: Nov 11, 2020	-18.00	35,000.1	2,670.00	-6,300.02	-48,060.00	-41,759.98	-662.85%	0.00	0.00%	-0.08%	-0.05%
CALL YUM CHINA HLDGS INC DUE 04/16/21 65.000 518NY1 CUSIP: 99UBAQTZ9 Symbol: YUMC Initial purchase date: Nov 11, 2020	-30.00	19,379.7	110.00	-5,813.91	-3,300.00	2,513.91	43.24%	0.00	0.00%	-0.01%	0.00%
COSTCO WHOLESALE CORP CUSIP: 22160K105 Symbol: COST Initial purchase date: May 10, 2012	2,060.00	100.01	376.78	206,030.16	776,166.80	570,136.64	276.72%	5,768.00	0.74%	1.30%	0.82%
DANAHER CORP CUSIP: 235851102 Symbol: DHR Initial purchase date: Jun 09, 2005	2,000.00	20.72	222.14	41,434.65	444,280.00	402,845.35	972.24%	1,440.00	0.32%	0.75%	0.47%
GLOBAL PAYMENTS INC CUSIP: 37940X102 Symbol: GPN Initial purchase date: Dec 10, 2009	5,000.00	25.78	215.42	128,889.82	1,077,100.00	948,210.18	735.67%	3,900.00	0.36%	1.81%	1.14%
LOCKHEED MARTIN CORP CUSIP: 539830109 Symbol: LMT Initial purchase date: Oct 09, 2019	320.00	388.31	354.98	124,260.66	113,593.60	-10,667.06	-8.58%	3,328.00	2.93%	0.19%	0.12%
MARSH & MCLENNAN COS INC CUSIP: 571748102 Symbol: MMC Initial purchase date: Jan 13, 2016	7,030.00	53.01	117.00	372,652.52	822,510.00	449,857.48	120.72%	13,075.80	1.59%	1.38%	0.87%
MCDONALDS CORP CUSIP: 580135101 Symbol: MCD Initial purchase date: Jan 14, 2010	1,050.00	62.64	214.58	65,769.03	225,309.00	159,539.97	242.58%	5,418.00	2.40%	0.38%	0.24%
PEPSICO INC CUSIP: 713448108 Symbol: PEP Initial purchase date: Oct 17, 2011	5,000.00	62.54	148.30	312,687.24	741,500.00	428,812.76	137.14%	20,450.00	2.76%	1.24%	0.79%
PROCTER & GAMBLE CO CUSIP: 742718109 Symbol: PG Initial purchase date: Feb 15, 1996	7,000.00	35.00	139.14	245,024.26	973,980.00	728,955.74	297.50%	22,141.00	2.27%	1.63%	1.03%

#### TX XX595 • ERS • Defined Benefit

Prepared for **CITY OF TROY** Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

Equity Us	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized Jain/loss (%)	Est. annual income (\$)		% of Equity	% of Portfolio
Core 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: \$365,614.93 (72.75%)	2,322.00	234.46	373.88	544,405.91	868,149.36	323,743.45	59.47%	13,214.56	1.52%	1.46%	0.92%
STARBUCKS CORP CUSIP: 855244109 Symbol: SBUX Initial purchase date: May 10, 2012	11,280.00	52.24	106.98	589,287.75	1,206,734.40	617,446.65	104.78%	20,304.00	1.68%	2.03%	1.28%
THERMO FISHER SCIENTIFIC INC CUSIP: 883556102 Symbol: TMO Initial purchase date: Oct 09, 2019	445.00	280.04	465.78	124,616.33	207,272.10	82,655.77	66.33%	391.60	0.19%	0.35%	0.22%
UNITEDHEALTH GROUP INC CUSIP: 91324P102 Symbol: UNH Initial purchase date: Oct 09, 2019	560.00	224.30	350.68	125,605.88	196,380.80	70,774.92	56.35%	2,800.00	1.43%	0.33%	0.21%
WALMART INC CUSIP: 931142103 Symbol: WMT Initial purchase date: Oct 09, 2019	1,050.00	120.26	144.15	126,275.03	151,357.50	25,082.47	19.86%	2,268.00	1.50%	0.25%	0.16%
WALT DISNEY CO (HOLDING CO) DISNEY COM CUSIP: 254687106 Symbol: DIS Initial purchase date: Dec 09, 2015	5,860.00	104.21	181.18	610,699.80	1,061,714.80	451,015.00	73.85%	0.00	0.00%	1.78%	1.12%
YUM CHINA HLDGS INC CUSIP: 98850P109 Symbol: YUMC Initial purchase date: Sep 09, 2004	17,000.00	6.25	57.09	106,176.78	970,530.00	864,353.22	814.07%	8,160.00	0.84%	1.63%	1.03%
Total Core				\$4,228,210.81	\$12,202,871.21	\$7,974,660.40	188.61%	\$147,954.36	1.21%	20.48%	12.92%
Growth ALPHABET INC CL A CUSIP: 02079K305 Symbol: GOOGL Initial purchase date: Nov 12, 2009	832.00	452.75	1,752.64	376,686.20	1,458,196.48	1,081,510.28	287.11%	0.00	0.00%	2.45%	1.54%
ALPHABET INC CL C CUSIP: 02079K107 Symbol: GOOG Initial purchase date: Nov 12, 2009	904.00	433.82	1,751.88	392,177.01	1,583,699.52	1,191,522.51	303.82%	0.00	0.00%	2.66%	1.68%
AMAZON.COM INC CUSIP: 023135106 Symbol: AMZN Initial purchase date: Sep 14, 2016	585.00	769.36	3,256.93	450,073.08	1,905,304.05	1,455,230.97	323.33%	0.00	0.00%	3.20%	2.02%
ESCROW ALTABA INC CUSIP: 021ESC017 Initial purchase date: Jun 12, 2014	3,000.00	36.85	14.55	110,545.88	43,650.00	-66,895.88	-60.51%	0.00	0.00%	0.07%	0.05%

#### TX XX595 • ERS • Defined Benefit

Prepared for **CITY OF TROY** Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

Growth			
MICROSOFT CORP 900.00 139.79 222.42 125,813.00 200,178.00 74,365.00 59.11% 2,01 CUSIP: 594918104 Symbol: MSFT Initial purchase date: Oct 09, 2019	6.00 1.01%	0.34%	0.21%
VISA INC CL A 3,000.00 23.56 218.73 70,692.57 656,190.00 585,497.43 828.23% 3,84 CUSIP: 92826C839 Symbol: V Initial purchase date: Oct 17, 2011			0.69%
Total Growth \$1,525,987.74 \$5,847,218.05 \$4,321,230.31 283.18% \$5,85	6.00 0.10%	<b>9.81%</b>	6.19%
Value			
AT&T INC 5,968.00 31.24 28.76 186,443.46 171,639.68 -14,803.78 -7.94% 12,41 CUSIP: 00206R102 Symbol: T Initial purchase date: Jun 09, 2011	3.44 7.23%	0.29%	0.18%
BANK OF AMER CORP 33,050.00 15.11 30.31 499,349.09 1,001,745.50 502,396.41 100.61% 23,79 CUSIP: 060505104 Symbol: BAC Initial purchase date: Jan 13, 2016	6.00 2.38%	5 1.68%	1.06%
BRISTOL MYERS SQUIBB CO 3,000.00 56.41 62.03 169,230.00 186,090.00 16,860.00 9.96% 5,88 CUSIP: 110122108 Symbol: BMY Initial purchase date: Nov 21, 2019	0.00 3.16%	0.31%	0.20%
CALL BANK OF AMER CORP DUE -30.00 12,287.4 160.00 -3,686.22 -4,800.00 -1,113.78 -30.21% 01/21/22 37.000 052591 CUSIP: 99UBBPSE8 Symbol: BAC Initial purchase date: Dec 09, 2020	0.00 0.00%	5 -0.01%	-0.01%
CALL BRISTOL MYERS SQUIB DUE -10.00 19,178.4 141.00 -1,917.84 -1,410.00 507.84 26.48% 06/18/21 70.000 053082 CUSIP: 99UBAXPD7 Symbol: BMY Initial purchase date: Nov 11, 2020	0.00 0.00%	6 0.00%	0.00%
CALL COMCAST CORP NEW CL DUE -8.00 13,738.6 512.50 -1,099.09 -4,100.00 -3,000.91 -273.04% 06/18/21 50.000 026263 CUSIP: 99UBB0ID6 Symbol: CMCSA Initial purchase date: Jul 20, 2020	0.00 0.00%	6 -0.01%	0.00%
CALL DUKE ENERGY CORP NE DUE -10.00 32,453.5 10.00 -3,245.35 -100.00 3,145.35 96.92% 01/15/21 105.000 119MG4 CUSIP: 99UBAL1G2 Symbol: DUK Initial purchase date: Feb 14, 2020	0.00 0.00%	6 0.00%	0.00%

## Portfolio holdings - as of December 31, 2020 (continued)

TX XX595 • ERS • Defined Benefit

 
 Prepared for Risk profile:
 CITY OF TROY

 Return Objective:
 Moderate

 Current Income and Capital Appreciation

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g		Est. annual income (\$)	Current vield (%)	% of Equity	% of Portfolio
Value CALL GENL DYNAMICS CORP DUE 05/21/21 175.000 174360 CUSIP: 99UBBSYT2 Symbol: GD Initial purchase date: Nov 11, 2020	-12.00	26,354.2	145.00	-3,162.51	-1,740.00	1,422.51	44.98%	0.00	0.00%	0.00%	0.00%
CALL GENL MILLS INC DUE 04/16/21 67.500 177105 CUSIP: 99UBBVKU7 Symbol: GIS Initial purchase date: Nov 13, 2020	-10.00	9,162.30	34.00	-916.23	-340.00	576.23	62.89%	0.00	0.00%	0.00%	0.00%
CALL MERCK & CO INC NEW DUE 07/16/21 95.000 2837Z7 CUSIP: 99UBBSVU2 Symbol: MRK Initial purchase date: Dec 09, 2020	-4.00	12,396.5	123.50	-495.86	-494.00	1.86	0.38%	0.00	0.00%	0.00%	0.00%
ALL PFIZER INC DUE 06/18/2020 40.000 +SPIN-OFF 370011 CUSIP: 99UBB3ZY5 Symbol: PFE1 Initial purchase date: Jul 21, 2020	-30.00	18,886.7	220.00	-5,666.02	-6,600.00	-933.98	-16.48%	0.00	0.00%	-0.01%	-0.01%
CHEVRON CORP CUSIP: 166764100 Symbol: CVX Initial purchase date: Feb 12, 2009	8,710.00	79.26	84.45	690,314.19	735,559.50	45,245.31	6.55%	44,943.60	6.11%	1.23%	0.78%
COMCAST CORP NEW CL A CUSIP: 20030N101 Symbol: CMCSA Initial purchase date: Oct 09, 2019	2,800.00	44.80	52.40	125,450.93	146,720.00	21,269.07	16.95%	2,576.00	1.76%	0.25%	0.16%
DUKE ENERGY CORP NEW CUSIP: 26441C204 Symbol: DUK Initial purchase date: Apr 09, 2009	3,041.00	40.54	91.56	123,267.64	278,433.96	155,166.32	125.88%	11,738.26	4.22%	0.47%	0.29%
GENL DYNAMICS CORP CUSIP: 369550108 Symbol: GD Initial purchase date: Jan 13, 2000	5,200.00	26.43	148.82	137,455.71	773,864.00	636,408.29	462.99%	22,880.00	2.96%	1.30%	0.82%
GENL MILLS INC CUSIP: 370334104 Symbol: GIS Initial purchase date: Jun 10, 2010	4,000.00	38.13	58.80	152,506.12	235,200.00	82,693.88	54.22%	8,160.00	3.47%	0.39%	0.25%
JPMORGAN CHASE & CO CUSIP: 46625H100 Symbol: JPM Initial purchase date: Aug 14, 1997	1,900.00	37.85	127.07	71,919.41	241,433.00	169,513.59	235.70%	6,840.00	2.83%	0.41%	0.26%
MERCK & CO INC NEW COM CUSIP: 58933Y105 Symbol: MRK Initial purchase date: Oct 09, 2019	1,470.00	85.01	81.80	124,962.07	120,246.00	-4,716.07	-3.77%	3,822.00	3.18%	0.20%	0.13%

#### TX XX595 • ERS • Defined Benefit

Prepared for **CITY OF TROY** Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Value											
MFS VALUE FUND CLASS A CUSIP: 552983801 Symbol: MEIAX Initial purchase date: Oct 11, 2017 Client investment: \$3,950,015.75 Reinvested dividends: \$451,732.39 Investment return: \$958,470.42 (24.26%	109,442.28	40.22	44.85	4,401,748.14	4,908,486.17	506,738.03	11.51%	68,087.32	1.39%	8.24%	5.19%
ORACLE CORP CUSIP: 68389X105 Symbol: ORCL Initial purchase date: Feb 10, 2005	4,000.00	13.18	64.69	52,708.87	258,760.00	206,051.13	390.92%	3,840.00	1.48%	0.43%	0.27%
PFIZER INC CUSIP: 717081103 Symbol: PFE Initial purchase date: Jun 16, 2008	10,000.00	2.20	36.81	22,032.41	368,100.00	346,067.59	1,570.72%	15,600.00	4.24%	0.62%	0.39%
RAYTHEON TECHNOLOGIES CORP CUSIP: 75513E101 Symbol: RTX Initial purchase date: Oct 09, 2019	930.00	73.66	71.51	68,506.86	66,504.30	-2,002.56	-2.92%	1,767.00	2.66%	0.11%	0.07%
Total Value				\$6,805,705.78	\$9,473,198.11	\$2,667,492.33	39.19%	\$232,343.62	2.45%	15.90%	10.03%
Public Real Estate											
AMERICAN TOWER CORP REIT CUSIP: 03027X100 Symbol: AMT Initial purchase date: Apr 13, 2012	1,000.00	63.62	224.46	63,618.17	224,460.00	160,841.83	252.82%	4,530.00	2.02%	0.38%	0.25%
Total Public Real Estate				\$63,618.17	\$224,460.00	\$160,841.83	252.82%	\$4,530.00	2.02%	0.39%	0.25%
Total Large Cap				\$12,623,522.50	\$27,747,747.37	\$15,124,224.87	119.81%	\$390,683.98	1.41%	46.58%	29.39%
Mid Cap Core											
AECOM CUSIP: 00766T100 Symbol: ACM Initial purchase date: Feb 05, 2010	2,900.00	25.19	49.78	73,045.33	144,362.00	71,316.67	97.63%	0.00	0.00%	0.24%	0.15%
CALL AECOM DUE 03/19/21 55.000 2048J1 CUSIP: 99UBBTP37 Symbol: ACM Initial purchase date: Nov 11, 2020	-9.00	13,520.2	147.50	-1,216.82	-1,327.50	-110.68	-9.10%	0.00	0.00%	0.00%	0.00%
CALL FASTENAL CO DUE 05/21/21 52.100 167061 CUSIP: 99UBBUDS2 Symbol: FAST Initial purchase date: Dec 09, 2020	-30.00	25,295.5	202.50	-7,588.67	-6,075.00	1,513.67	19.95%	0.00	0.00%	-0.01%	-0.01%
CALL IDEX CORP DUE 04/16/21 200.000 223085 CUSIP: 99UBBV115 Symbol: IEX Initial purchase date: Nov 11, 2020	-10.00	99,961.4	1,090.00	-9,996.14	-10,900.00	-903.86	-9.04%	0.00	0.00%	-0.02%	-0.01%

## Portfolio holdings - as of December 31, 2020 (continued)

TX XX595 • ERS • Defined Benefit

Prepared for **CITY OF TROY** Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized gain/loss (%)	Est. annual income (\$)		% of Equity	% of Portfolio
Core											
CALL TRACTOR SUPPLY COMP DUE 04/16/21 165.000 4608B6 CUSIP: 99UBBUFE1 Symbol: TSCO Initial purchase date: Dec 09, 2020	-10.00	13,581.2	140.00	-1,358.12	-1,400.00	-41.88	-3.08%	0.00	0.00%	0.00%	0.00%
CALL VF CORP DUE 05/21/21 110.000 488984 CUSIP: 99UBBUF01 Symbol: VFC Initial purchase date: Dec 09, 2020	-4.00	16,195.2	100.00	-647.81	-400.00	247.81	38.25%	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	37.72	23,215.22	35,079.60	11,864.38	51.11%	446.40	1.27%	0.06%	0.04%
CONAGRA BRANDS, INC. CUSIP: 205887102 Symbol: CAG Initial purchase date: Oct 09, 2019	3,000.00	28.43	36.26	85,290.85	108,780.00	23,489.15	27.54%	3,300.00	3.03%	0.18%	0.12%
FASTENAL CO CUSIP: 311900104 Symbol: FAST Initial purchase date: May 21, 2018	13,000.00	27.04	48.83	351,464.42	634,790.00	283,325.58	80.61%	13,000.00	2.05%	1.07%	0.67%
IDEX CORP CUSIP: 45167R104 Symbol: IEX Initial purchase date: Aug 11, 2004	2,000.00	20.50	199.20	41,001.00	398,400.00	357,399.00	871.68%	4,000.00	1.00%	0.67%	0.42%
OTIS WORLDWIDE CORP CUSIP: 68902V107 Symbol: OTIS Initial purchase date: Oct 09, 2019	465.00	69.81	67.55	32,462.90	31,410.75	-1,052.15	-3.24%	372.00	1.18%	0.05%	0.03%
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	20.00	-1,063.52	-200.00	863.52	81.19%	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	140.58	40,687.65	562,320.00	521,632.35	1,282.04%	6,400.00	1.14%	0.94%	0.60%
VF CORP CUSIP: 918204108 Symbol: VFC Initial purchase date: Oct 09, 2019	1,400.00	89.32	85.41	125,044.79	119,574.00	-5,470.79	-4.38%	2,744.00	2.29%	0.20%	0.13%
WATSCO INC CUSIP: 942622200 Symbol: WSO Initial purchase date: Apr 15, 2010	1,000.00	61.20	226.55	61,202.82	226,550.00	165,347.18	270.16%	7,100.00	3.13%	0.38%	0.24%
YUM! BRANDS INC CUSIP: 988498101 Symbol: YUM Initial purchase date: Sep 09, 2004	5,080.00	14.90	108.56	75,694.60	551,484.80	475,790.20	628.57%	9,550.40	1.73%	0.93%	0.58%

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TX XX595 • ERS • Defined Benefit

 
 Prepared for Risk profile:
 CITY OF TROY

 Return Objective:
 Moderate

 Current Income and Capital Appreciation

Equity Us	Quantity	, Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)		% of Equity	% of Portfolio
Core						** * - *-					
Total Core				\$887,238.50	\$2,792,448.65	\$1,905,210.15	214.73%	\$46,912.80	1.68%	4.69%	2.96%
Growth CALL O REILLY AUTOMOTIVE DUE 05/21/21 530.000 350B81 CUSIP: 99UBBUE69 Symbol: ORLY Initial purchase date: Dec 09, 2020	-5.00	19,415.6	665.00	-970.78	-3,325.00	-2,354.22	-242.51%	0.00	0.00%	-0.01%	0.00%
CALL PALO ALTO NETWORKS DUE 06/18/21 380.000 361DG0 CUSIP: 99UBBUE85 Symbol: PANW Initial purchase date: Dec 09, 2020	-2.00	62,450.0	2,522.50	-1,249.00	-5,045.00	-3,796.00	-303.92%	0.00	0.00%	-0.01%	-0.01%
O REILLY AUTOMOTIVE INC CUSIP: 67103H107 Symbol: ORLY Initial purchase date: Jul 01, 2003	1,500.00	16.91	452.57	25,366.87	678,855.00	653,488.13	2,576.15%	0.00	0.00%	1.14%	0.72%
PALO ALTO NETWORKS INC CUSIP: 697435105 Symbol: PANW Initial purchase date: Feb 12, 2015	1,250.00	134.89	355.39	168,607.43	444,237.50	275,630.07	163.47%	0.00	0.00%	0.75%	0.47%
Total Growth				\$191,754.52	\$1,114,722.50	\$922,967.98	481.33%	\$0.00	0.00%	1.87%	1.18%
Value CALL GENUINE PARTS CO DUE 02/19/21 110.000 181455 CUSIP: 99UBA2O95 Symbol: GPC Initial purchase date: Dec 09, 2020	-10.00	9,653.30	85.00	-965.33	-850.00	115.33	11.95%	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	10.00	-1,947.31	-100.00	1,847.31	94.86%	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	7.50	-1,564.33	-75.00	1,489.33	95.21%	0.00	0.00%	0.00%	0.00%

#### TX XX595 • ERS • Defined Benefit

Prepared for **CITY OF TROY** Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

Equity US	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)		Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
Value GENUINE PARTS CO CUSIP: 372460105 Symbol: GPC Initial purchase date: Apr 13, 2012	3,000.00	63.29	100.43	189,860.40	301,290.00	111,429.60	58.69%	9,480.00	3.15%	0.51%	0.32%
HARTFORD FINCL SERVICES GROUP INC CUSIP: 416515104 Symbol: HIG Initial purchase date: Jan 13, 2005	4,000.00	67.53	48.98	270,129.76	195,920.00	-74,209.76	-27.47%	5,200.00	2.65%	0.33%	0.21%
ONEOK INC NEW CUSIP: 682680103 Symbol: OKE Initial purchase date: May 14, 2009	14,000.00	14.25	38.38	199,490.58	537,320.00	337,829.42	169.35%	52,360.00	9.74%	0.90%	0.57%
SMUCKER J M CO NEW CUSIP: 832696405 Symbol: SJM Initial purchase date: Jan 14, 2010	3,000.00	62.32	115.60	186,962.73	346,800.00	159,837.27	85.49%	10,800.00	3.11%	0.58%	0.37%
VANGUARD MID-CAP VALUE ETF CUSIP: 922908512 Symbol: VOE Initial purchase date: Dec 12, 2019	7,580.00	118.87	118.96	901,026.53	901,716.80	690.27	0.08%	21,307.38	2.36%	1.51%	0.95%
VIATRIS INC CUSIP: 92556V106 Symbol: VTRS	1,240.00	0.98	18.74	1,209.02	23,237.60	22,028.58	1,822.02%	0.00	0.00%	0.04%	0.02%
Initial purchase date: Jun 16, 2008											
Initial purchase date: Jun 16, 2008 Total Value				\$1,742,412.94	\$2,304,859.40	\$562,446.46	32.28%	\$99,147.38	4.30%	3.87%	2.44%
				\$1,742,412.94 \$2,821,405.96	\$2,304,859.40 \$6,212,030.55	\$562,446.46 \$3,390,624.59	32.28% 120.17%	\$99,147.38 \$146,060.18		3.87% 10.43%	2.44% 6.58%
Total Value	8,845.00	120.54	196.06								
Total Value Total Mid Cap Small Cap Core ISHARES RUSSELL 2000 ETF CUSIP: 464287655 Symbol: IWM Initial purchase date: Jun 13, 2014 Client investment: \$999,013.13 Reinvested dividends: \$67,185.11		120.54	196.06	\$2,821,405.96	\$6,212,030.55	\$3,390,624.59	120.17%	\$146,060.18	2.35%	10.43%	6.58%
Total Value Total Mid Cap Small Cap Core ISHARES RUSSELL 2000 ETF CUSIP: 464287655 Symbol: IWM Initial purchase date: Jun 13, 2014 Client investment: \$999,013.13 Reinvested dividends: \$67,185.11 Investment return: \$735,137.57 (73.59%)		120.54	196.06	<b>\$2,821,405.96</b> 1,066,198.24	<b>\$6,212,030.55</b> 1,734,150.70	<b>\$3,390,624.59</b> 667,952.46	<b>120.17%</b> 62.65%	<b>\$146,060.18</b> 18,084.27	<b>2.35%</b> 1.04%	<b>10.43%</b> 2.91%	<b>6.58%</b> 1.84%
TX XX595 • ERS • Defined BenefitPrepared forCITY OF TROYRisk profile:ModerateReturn Objective:Current Income and Capital Appreciation

5		, Purchase	Price on	/							
Funite	Quantity	price (\$) /	12/31/2020	Cast basis (¢)	Market value (¢)	Unrealized		Est. annual		% of	% of
Equity	Quantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$) g	Jain/Ioss (%)	income (\$)	yield (%)	Equity	Portfolio
US											
Growth											
Total Growth				\$1,664,077.52	\$3,587,332.75	\$1,923,255.23	115.57%	\$0.00	0.00%	6.02%	3.79%
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	96,515.87	15.42	16.71	1,488,282.99	1,612,780.15	124,497.16	8.37%	8,910.34	0.55%	2.71%	1.71%
Investment return: \$348,592.80 (27.57%)				** *** ***	** *** 700 45	****	0.070/	<u> </u>		0 740/	4 740/
Total Value				\$1,488,282.99	\$1,612,780.15	\$124,497.16	8.37%	\$8,910.35	0.55%	2.71%	1.71%
Total Small Cap				\$4,218,558.75	\$6,934,263.60	\$2,715,704.85	64.38%	\$26,994.62	0.39%	11.64%	7.34%
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				\$20,167,150.21	\$40,896,111.52	\$20,728,961.31	102.79%	\$563,738.78	1.38%	68.65%	43.31%
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: \$387,946.59 Investment return: \$973,945.00 (145.15%)	27,697.01	38.23	59.39	1,058,926.84	1,644,925.25	585,998.41	55.34%	20,218.82	1.23%	2.76%	1.74%
Total Core				\$1,058,926.84	\$1,644,925.25	\$585,998.41	55.34%	\$20,218.82	1.23%	2.76%	1.74%

#### TX XX595 • ERS • Defined Benefit

Prepared for **CITY OF TROY** Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized	Est. annual income (\$)		% of Fauity	% of Portfolio
Global	quantity	,	(4)	2057 5055 (4)	market falae (\$)	gan (1000 (4) g			<u>jiela (70)</u>	Equity	
Growth											
COLUMBIA SELIGMAN COMMUNICATION AND INFORMATION FUND A CUSIP: 19766H429 Symbol: SLMCX Initial purchase date: Oct 19, 2001 Client investment: \$165,000.00 Reinvested dividends: \$3,522,484.97 Investment return: \$6,328,862.32 (3835.6	62,237.52 7%)	59.25	104.34	3,687,484.97	6,493,862.31	2,806,377.35	76.11%	27,226.42		10.90%	6.88%
Total Growth				\$3,687,484.97	\$6,493,862.31	\$2,806,377.34	76.11%	\$27,226.42		10.90%	6.88%
Total Global				\$4,746,411.81	\$8,138,787.56	\$3,392,375.75	71.47%	\$47,445.24	0.58%	13.66%	8.62%
Total Global				\$4,746,411.81	\$8,138,787.56	\$3,392,375.75	71.47%	\$47,445.24	0.58%	13.66%	8.62%
International											
Developed Markets											
Core											
CHUBB LTD CHF CUSIP: H1467J104 Symbol: CB Initial purchase date: Apr 13, 2016	1,000.00	121.66	153.92	121,658.43	153,920.00	32,261.57	26.52%	3,120.00	2.03%	0.26%	0.16%
DIAGEO PLC NEW GB SPON ADR CUSIP: 25243Q205 Symbol: DEO Initial purchase date: Feb 11, 2010	1,000.00	64.02	158.81	64,017.37	158,810.00	94,792.63	148.07%	3,534.92	2.23%	0.27%	0.17%
MEDTRONIC PLC CUSIP: G5960L103 Symbol: MDT Initial purchase date: Oct 09, 2019	1,165.00	107.77	117.14	125,550.50	136,468.10	10,917.60	8.70%	2,702.80	1.98%	0.23%	0.15%
Total Core				\$311,226.30	\$449,198.10	\$137,971.80	44.33%	\$9,357.72	2.08%	0.75%	0.48%
Growth											
CALL LINDE PLC EUR DUE 04/16/21 280.000 2621Y8 CUSIP: 99UBBV7M0 Symbol: LIN Initial purchase date: Nov 11, 2020	-10.00	84,481.6	815.00	-8,448.16	-8,150.00	298.16	3.53%	0.00	0.00%	-0.01%	-0.01%
CLEARBRIDGE INTERNATIONAL GROWTH FUND CLASS I CUSIP: 524686524 Symbol: LMGNX Initial purchase date: Aug 12, 2020 Client investment: \$3,616,886.15 Reinvested dividends: \$6,892.86 Investment return: \$586,348.54 (16.21%)	61,839.56	58.60	67.97	3,623,779.01	4,203,234.69	579,455.68	15.99%	6,904.32	0.16%	7.06%	4.44%

### **WBS**

#### TX XX595 • ERS • Defined Benefit

Prepared for **CITY OF TROY** Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

#### Portfolio holdings - as of December 31, 2020 (continued)

5		, ,		/							
Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
International											
Growth											
LINDE PLC EUR CUSIP: G5494J103 Symbol: LIN Initial purchase date: Sep 09, 2004	4,000.00	163.46	263.51	653,820.00	1,054,040.00	400,220.00	61.21%	15,408.00	1.46%	1.77%	1.12%
Total Growth				\$4,269,150.85	\$5,249,124.69	\$979,973.84	22.95%	\$22,312.32	0.43%	8.81%	5.55%
Value											
CALL RIO TINTO PLC SPON DUE 04/16/21 67.500 4005C0 CUSIP: 99UBBWPH9 Symbol: RIO Initial purchase date: Nov 11, 2020	-10.00	22,713.6	975.00	-2,271.36	-9,750.00	-7,478.64	-329.26%	0.00	0.00%	-0.02%	-0.01%
RIO TINTO PLC SPON ADR CUSIP: 767204100 Symbol: RIO Initial purchase date: Sep 10, 2009	5,000.00	42.96	75.22	214,799.21	376,100.00	161,300.79	75.09%	19,300.00	5.13%	0.63%	0.40%
Total Value				\$212,527.85	\$366,350.00	\$153,822.15	72.38%	\$19,300.00	5.27%	0.62%	0.39%
Total Developed Markets				\$4,792,905.00	\$6,064,672.79	\$1,271,767.79	26.53%	\$50,970.04	0.84%	10.18%	6.42%
Emerging Markets Growth AMER FUNDS NEW WORLD FUND CLASS F2 CUSIP: 649280823 Symbol: NFFFX Initial purchase date: Feb 13, 2020 Client investment: \$840,875.15 Reinvested dividends: \$3,598.95 Investment return: \$188,079.40 (22.37%) AMERICAN FUNDS NEW WORLD FUND CL A CUSIP: 649280104 Symbol: NEWFX Initial purchase date: Nov 12, 2015	11,734.00 35,584.94	71.97 54.57	87.69 87.95	844,474.10 1,941,900.51	1,028,954.55 3,129,695.56	184,480.45 1,187,795.05	21.85% 61.17%	3,611.73 3,024.72	0.35%	1.73% 5.25%	1.09% 3.31%
Client investment: \$1,750,021.00 Reinvested dividends: \$191,879.51 Investment return: \$1,379,674.56 (78.84% Total Growth	)			\$2,786,374.61	\$4,158,650.11	\$1,372,275.50	49.25%	\$6,636.45	0.16%	6.98%	4.40%
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	1,864.13	112,067.61	316,901.42	204,833.81	182.78%	0.00	0.00%	0.53%	0.34%

 TX XX595 • ERS • Defined Benefit

 Prepared for
 CITY OF TROY

 Risk profile:
 Moderate

 Return Objective:
 Current Income and Capital Appreciation

Portfolio holdings - as of December 31, 2020 (continued)

Total Portfolio Total accrued interest (included in				\$66,742,290.14	\$94,422,379.81	\$27,680,089.67	41.47%	\$1,548,185.80	1.64%	100%	100%
				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)		
Total Equity				\$32,604,909.24	\$59,575,123.40	\$26,970,214.16	82.72%	\$668,790.51	1.12%	100.00%	63.09%
Total International				\$7,691,347.22	\$10,540,224.32	\$2,848,877.10	37.04%	\$57,606.49	0.55%	17.69%	11.16%
Total Emerging Markets				\$2,898,442.22	\$4,475,551.53	\$1,577,109.31	54.41%	\$6,636.45	0.15%	7.51%	4.74%
Other Total Other				\$112,067.61	\$316,901.42	\$204,833.81	182.78%	\$0.00	0.00%	0.53%	0.34%
Equity International	Quantity	price (\$) / Avg Price	12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)		
		Purchase	Price on								

Total accrued interest (included in market values): \$3,640.49

\* Balanced mutual funds are displayed in unbundled view



#### TX XX595 • ERS • Defined Benefit Prepared for CITY OF TROY

Risk profile: Moderate Return Objective: Current Income and Capital Appreciation

### Additional information about your portfolio

as of December 31, 2020

### **Benchmark composition**

Account TX XX595

#### <u>Blended Index</u>

Start - Current: 30% Barclays Govt/Credit Int; 70% MSCI AC World IMI - GR

### **UBS** 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 feebased 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 weighs 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 guotation 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.

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## TX XX600 • NAIC • Defined Benefit Prepared for CITY OF TROY Risk profile: Moderate Return Objective: Current Income and Capital Appreciation

# **WBS** Sources of portfolio value

as of December 31, 2020 \$ Millions



---- Market Value - Net amount you invested (net of fees)

	MTD 11/30/2020 to	QTD 09/30/2020 to	1 Year 12/31/2019 to	3 Years 12/31/2017 to	5 Years 12/31/2015 to	7 Years 12/31/2013 to	10 Years 12/31/2010 to	ITD 12/31/2002 to
	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2020	12/31/2022
Opening value	27,200,678.24	25,954,902.12	24,925,322.41	23,093,484.94	18,467,624.21	15,231,858.98	9,830,053.64	4,545,750.56
Net deposits/withdrawals	-100.00	-577,980.00	-1,261,381.67	-5,993,300.67	-6,031,300.67	-6,031,300.67	-6,639,182.34	-5,626,079.02
Div./interest income	43,021.56	76,570.63	283,767.31	840,886.20	1,301,176.56	1,654,716.07	2,030,133.59	2,690,557.25
Change in accr. interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change in value	728,906.63	2,519,013.68	4,024,798.38	10,031,435.96	14,235,006.33	17,117,232.05	22,751,501.54	26,362,277.64
Closing value	27,972,506.43	27,972,506.43	27,972,506.43	27,972,506.43	27,972,506.43	27,972,506.43	27,972,506.43	27,972,506.43
Gross Time-weighted ROR	3.05	10.40	18.49	16.74	14.82	13.49	14.81	11.72
Net Time-weighted ROR	2.84	10.06	18.05	16.34	14.57	13.28	14.65	11.63

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

#### **Benchmarks - Annualized time-weighted returns**

Blended Index	3.57	11.16	14.39	8.97	10.20	7.69	7.88	8.37
US Treasury Bill - 3 Mos	0.01	0.02	0.54	1.52	1.13	0.81	0.59	1.25
Barclays Agg Bond	0.14	0.67	7.51	5.34	4.43	4.08	3.84	4.34
MSCI Emerging Markets-PR	7.15	19.34	15.84	3.68	10.20	3.68	1.15	8.60
Russell 2000	8.65	31.37	19.96	10.24	13.24	9.33	11.19	11.00
S&P 500	3.84	12.15	18.40	14.17	15.20	12.90	13.87	10.61

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.

### **WBS** Portfolio holdings

## as of December 31, 2020 Summary of Portfolio Holdings

Total Portfolio	\$17,025,446.77	\$27,972,506.43	\$10,947,059.66	64.30%	\$318,594.93	1.14% 100%
- Other	0.00	0.00	0.00	0.00%	0.00	0.00% 0.00%
Non-Traditional	0.00	0.00	0.00	0.00%	0.00	0.00% 0.00%
O Commodities	0.00	0.00	0.00	0.00%	0.00	0.00% 0.00%
Core	219,001.25	263,700.00	44,698.75	20.41%	0.00	0.00% 0.94%
Developed Markets	219,001.25	263,700.00	44,698.75	20.41%	0.00	0.00% 0.94%
Core	84,933.90	310,360.00	225,426.10	265.41%	0.00	0.00% 1.11%
International	84,933.90	310,360.00	225,426.10	265.41%	0.00	0.00% 1.11%
International	303,935.15	574,060.00	270,124.85	88.88%	0.00	0.00% 2.05%
Value	589,104.40	616,375.00	27,270.60	4.63%	12,600.00	2.04% 2.21%
Growth	882,748.27	880,071.40	-2,676.87	-0.30%	18,054.40	2.05% 3.15%
Core	2,715,127.42	2,867,061.80	151,934.38	5.60%	54,874.00	1.91% 10.25%
Small Cap	4,186,980.09	4,363,508.20	176,528.11	4.22%	85,528.40	1.96% 15.61%
Public Real Estate	235,951.92	310,850.00	74,898.08	31.74%	14,070.00	4.53% 1.11%
Value	36,990.75	140,960.00	103,969.25	2,301.01%	0.00	0.00% 0.50%
Growth	30,335.46	746,740.50	716,405.04	2,361.61%	0.00	0.94% 51.51%
Mid Cap Core	5,973,386.99 5,670,108.86	10,012,736.10 8,814,185.60	4,039,349.11 3,144,076.74	67.62% 55.45%	96,880.00 82,810.00	0.97% 35.79% 0.94% 31.51%
Value	978,275.92	1,590,444.88	612,168.96	62.58%	45,271.76	2.85% 5.69%
Growth	1,148,493.09	3,491,023.00	2,342,529.91	203.97%	25,884.00	0.74% 12.48%
Core	2,352,789.64	5,859,148.36	3,506,358.72	149.03%	63,332.20	1.08% 20.94%
Large Cap	4,479,558.65	10,940,616.24	6,461,057.59	144.23%	134,487.96	1.23% 39.11%
US	14,639,925.73	25,316,860.54	10,676,934.81	72.93%	316,896.36	1.25% 90.51%
Equity	14,943,860.88	25,890,920.54	10,947,059.66	73.25%	316,896.36	1.22% 92.56%
Fixed Income	0.00	0.00	0.00	0.00%	0.00	0.00% 0.00%
US Cash	2,081,585.89	2,081,585.89	0.00	0.00%	1,698.57	0.08% 7.44%
US	2,081,585.89	2,081,585.89	0.00	0.00%	1,698.57	0.08% 7.44%
Cash	2,081,585.89	2,081,585.89	0.00	0.00%	1,698.57	0.08% 7.44%
Cash	2,081,585.89	2,081,585.89	0.00	0.00%	1,698.57	0.08% 7.44%
	Cost basis (\$)	12/31/2020 (\$)	gain/loss (\$)	gain/loss (%)	income (\$)	yield (%) Portfolio
		Value on	Unrealized	Unrealized	Est. annual	Current % of

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

### 

 TX XX600 • NAIC • Defined Benefit

 Prepared for
 CITY OF TROY

 Risk profile:
 Moderate

 Return Objective:
 Current Income and Capital Appreciation

Portfolio holdings - as of December 31, 2020 (continued)

### Details of portfolio holdings

					Mariliant under (Å)	Unrealized	Unrealized	Est. annual	Current	% of asset	% of
Total Portfolio				Cost basis (\$) \$17,025,446.77	Market value (\$) \$27,972,506.43	gain/loss (\$) \$10,947,059.66	64.30%	income (\$) <b>\$318,594.93</b>	<b>1.14%</b>	100%	Portfolio 100%
				\$17,023,440.77	\$27,572,500.45	\$10,947,039.00	04.30 /0	\$310,394.95	1.14 /0	100 /6	100 /8
Cash	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)		Est. annual income (\$)		% of Cash	% of Portfolio
Cash											
US											
US Cash LIQUID ASSETS GOVT FUND		1.00	1.00			0.00	0.00%	1 000 57	0.000/	100.000/	7 4 4 0/
CUSIP: 90262Y307 Symbol: MMLIRA	2,081,585.89	1.00	1.00	2,081,585.89	2,081,585.89	0.00	0.00%	1,698.57	0.08%	100.00%	7.44%
Total US Cash				\$2,081,585.89	\$2,081,585.89	\$0.00	0.00%	\$1,698.57	0.08%	100.00%	7.44%
Total US				\$2,081,585.89	\$2,081,585.89	\$0.00	0.00%	\$1,698.57	0.08%	100.00%	7.44%
Total Cash				\$2,081,585.89	\$2,081,585.89	\$0.00	0.00%	\$1,698.57	0.08%	100.00%	7.44%
Total Cash				\$2,081,585.89	\$2,081,585.89	\$0.00	0.00%	\$1,698.57	0.08%	100.00%	7.44%
Fault		Purchase price (\$) /	Price on								0/ (
Equity US	Quantity	Avg Price	12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)		Est. annual income (\$)			% of Portfolio
	Quantity			Cost basis (\$)	Market value (\$)						
US	Quantity 9,224.00			Cost basis (\$) 288,067.67	Market value (\$) 1,009,935.76					Equity	
US Large Cap Core ABBOTT LABS CUSIP: 002824100 Symbol: ABT		Avg Price	(\$)			gain/loss (\$)	gain/loss (%)	income (\$)	<u>yield (%)</u> 1.64%	Equity	Portfolio
US Large Cap Core ABBOTT LABS CUSIP: 002824100 Symbol: ABT Initial purchase date: Sep 12, 2002 APPLE INC CUSIP: 037833100 Symbol: AAPL	9,224.00	Avg Price 31.23	(\$)	288,067.67	1,009,935.76	gain/loss (\$) 721,868.09	gain/loss (%) 250.59%	income (\$) 16,603.20	<u>yield (%)</u> 1.64%	Equity 3.90% 10.25%	Portfolio 3.61%

#### TX XX600 • NAIC • Defined Benefit

Prepared for **CITY OF TROY** Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

#### Portfolio holdings - as of December 31, 2020 (continued)

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
<b>Core</b> BOOKING HLDGS INC CUSIP: 09857L108 Symbol: BKNG Initial purchase date: Feb 26, 2019	200.00	1,908.50	2,227.27	381,699.89	445,454.00	63,754.11	16.70%	0.00	0.00%	1.72%	1.59%
UNITEDHEALTH GROUP INC CUSIP: 91324P102 Symbol: UNH Initial purchase date: Dec 09, 2020	2,545.00	344.75	350.68	877,379.21	892,480.60	15,101.39	1.72%	12,725.00	1.43%	3.45%	3.19%
Total Core				\$2,352,789.64	\$5,859,148.36	\$3,506,358.72	149.03%	\$63,332.20	1.08%	22.63%	20.94%
Growth CROWN CASTLE INTL CORP REIT CUSIP: 22822V101 Symbol: CCI Initial purchase date: Nov 28, 2016	2,700.00	85.14	159.19	229,878.93	429,813.00	199,934.07	86.97%	14,364.00	3.34%	1.66%	1.54%
FACEBOOK INC CL A CUSIP: 30303M102 Symbol: FB Initial purchase date: May 29, 2019	4,000.00	185.11	273.16	740,424.45	1,092,640.00	352,215.55	47.57%	0.00	0.00%	4.22%	3.91%
VISA INC CL A CUSIP: 92826C839 Symbol: V Initial purchase date: Mar 30, 2011	9,000.00	19.80	218.73	178,189.71	1,968,570.00	1,790,380.29	1,004.76%	11,520.00	0.59%	7.60%	7.03%
Total Growth				\$1,148,493.09	\$3,491,023.00	\$2,342,529.91	203.97%	\$25,884.00	0.74%	13.48%	12.48%
Value											
CENTENE CORP CUSIP: 15135B101 Symbol: CNC Initial purchase date: Mar 25, 2019	4,732.00	66.76	60.03	315,908.32	284,061.96	-31,846.36	-10.08%	0.00	0.00%	1.10%	1.02%
CIGNA CORP CUSIP: 125523100 Symbol: CI Initial purchase date: Jun 07, 2011	394.00	182.19	208.18	71,780.89	82,022.92	10,242.03	14.27%	15.76	0.02%	0.32%	0.29%
COMCAST CORP NEW CL A CUSIP: 20030N101 Symbol: CMCSA Initial purchase date: Jan 09, 2019	7,800.00	36.14	52.40	281,865.28	408,720.00	126,854.72	45.01%	7,176.00	1.76%	1.58%	1.46%
GILEAD SCIENCES INC CUSIP: 375558103 Symbol: GILD Initial purchase date: Dec 16, 2008	14,000.00	22.05	58.26	308,721.43	815,640.00	506,918.57	164.20%	38,080.00	4.67%	3.15%	2.92%
Total Value				\$978,275.92	\$1,590,444.88	\$612,168.96	62.58%	\$45,271.76	2.85%	6.15%	5.69%
Total Large Cap				\$4,479,558.65	\$10,940,616.24	\$6,461,057.59	144.23%	\$134,487.96	1.23%	42.26%	39.11%

Mid Cap

Core

#### TX XX600 • NAIC • Defined Benefit

Prepared for **CITY OF TROY** Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)		Est. annual income (\$)	Current vield (%)	% of Equity	% of Portfolio
 US							<u> </u>		<u>, , , , , , , , , , , , , , , , , , , </u>		
Core											
AKAMAI TECHNOLOGIES INC CUSIP: 00971T101 Symbol: AKAM Initial purchase date: Dec 09, 2020	8,400.00	104.41	104.99	877,056.19	881,916.00	4,859.81	0.55%	0.00	0.00%	3.41%	3.15%
AMETEK INC (NEW) CUSIP: 031100100 Symbol: AME Initial purchase date: Mar 06, 2017	2,500.00	55.08	120.94	137,689.36	302,350.00	164,660.64	119.59%	1,800.00	0.60%	1.17%	1.08%
CARMAX INC CUSIP: 143130102 Symbol: KMX Initial purchase date: Jun 12, 2014	5,000.00	44.47	94.46	222,371.77	472,300.00	249,928.23	112.39%	0.00	0.00%	1.82%	1.69%
CBOE GLOBAL MARKETS INC CUSIP: 12503M108 Symbol: CBOE Initial purchase date: Dec 09, 2020	9,850.00	88.83	93.12	874,966.50	917,232.00	42,265.50	4.83%	15,366.00	1.68%	3.54%	3.28%
D R HORTON INC CUSIP: 23331A109 Symbol: DHI Initial purchase date: Jan 09, 2019	7,000.00	40.09	68.92	280,621.20	482,440.00	201,818.80	71.92%	5,600.00	1.16%	1.86%	1.72%
F5 NETWORKS INC CUSIP: 315616102 Symbol: FFIV Initial purchase date: Mar 02, 2015	5,800.00	118.85	175.94	689,354.72	1,020,452.00	331,097.28	48.03%	0.00	0.00%	3.94%	3.65%
FASTENAL CO CUSIP: 311900104 Symbol: FAST Initial purchase date: Sep 27, 2000	16,000.00	3.63	48.83	58,125.00	781,280.00	723,155.00	1,244.14%	16,000.00	2.05%	3.02%	2.79%
FLEETCOR TECHNOLOGIES INC CUSIP: 339041105 Symbol: FLT Initial purchase date: Dec 09, 2020	3,250.00	268.85	272.83	873,757.30	886,697.50	12,940.20	1.48%	0.00	0.00%	3.42%	3.17%
GENTEX CORP CUSIP: 371901109 Symbol: GNTX Initial purchase date: Mar 02, 2015	5,000.00	17.82	33.93	89,080.35	169,650.00	80,569.65	90.45%	2,400.00	1.41%	0.66%	0.61%
PRICE T ROWE GROUP INC CUSIP: 74144T108 Symbol: TROW Initial purchase date: Dec 09, 2020	5,790.00	151.72	151.39	878,467.87	876,548.10	-1,919.77	-0.22%	20,844.00	2.38%	3.39%	3.13%
SKYWORKS SOLUTIONS INC CUSIP: 83088M102 Symbol: SWKS Initial purchase date: Feb 26, 2019	4,000.00	83.16	152.88	332,628.80	611,520.00	278,891.20	83.84%	8,000.00	1.31%	2.36%	2.19%
TRACTOR SUPPLY COMPANY CUSIP: 892356106 Symbol: TSCO Initial purchase date: Apr 14, 2008	8,000.00	9.12	140.58	72,965.85	1,124,640.00	1,051,674.15	1,441.32%	12,800.00	1.14%	4.34%	4.02%
ULTA BEAUTY, INC CUSIP: 90384S303 Symbol: ULTA Initial purchase date: Jan 09, 2019	1,000.00	283.02	287.16	283,023.95	287,160.00	4,136.05	1.46%	0.00	0.00%	1.11%	1.03%
Total Core				\$5,670,108.86	\$8,814,185.60	\$3,144,076.74	55.45%	\$82,810.00	0.94%	34.04%	31.51%

#### TX XX600 • NAIC • Defined Benefit

Prepared for CITY OF TROY Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

		1	Price on 12/31/2020	- · · · · · / · ·	••• · · · · · · · · · · · · · · · · · ·	Unrealized		Est. annual		_% of	% of
Equity	Quantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$)	gain/loss (%)	income (\$)	yield (%)	Equity	Portfolio
US											
Growth											
O REILLY AUTOMOTIVE INC CUSIP: 67103H107 Symbol: ORLY Initial purchase date: Jan 09, 2004	1,650.00	18.39	452.57	30,335.46	746,740.50	716,405.04	2,361.61%	0.00	0.00%	2.88%	2.67%
Total Growth				\$30,335.46	\$746,740.50	\$716,405.04	2,361.61%	\$0.00	0.00%	2.88%	2.67%
Value											
LKQ CORP NEW CUSIP: 501889208 Symbol: LKQ Initial purchase date: Dec 10, 2009	4,000.00	9.25	35.24	36,990.75	140,960.00	103,969.25	281.07%	0.00	0.00%	0.54%	0.50%
Total Value				\$36,990.75	\$140,960.00	\$103,969.25	281.07%	\$0.00	0.00%	0.55%	0.50%
Public Real Estate											
REALTY INCOME CORP MD SBI CUSIP: 756109104 Symbol: O Initial purchase date: May 26, 2015	5,000.00	47.19	62.17	235,951.92	310,850.00	74,898.08	31.74%	14,070.00	4.53%	1.20%	1.11%
Total Public Real Estate				\$235,951.92	\$310,850.00	\$74,898.08	31.74%	\$14,070.00	4.53%	1.20%	1.11%
Total Mid Cap				\$5,973,386.99	\$10,012,736.10	\$4,039,349.11	67.62%	\$96,880.00	0.97%	38.67%	35.79%
Small Cap											
Core		17.00	50.74				= = = = = = = = = = = = = = = = = = = =	6 959 99	a . = a/	1	4
EAST WEST BANCORP INC CUSIP: 27579R104 Symbol: EWBC Initial purchase date: Jan 09, 2019	5,500.00	47.90	50.71	263,460.51	278,905.00	15,444.49	5.86%	6,050.00	2.17%	1.08%	1.00%
HUNTINGTON INGALLS INDS INC CUSIP: 446413106 Symbol: HII Initial purchase date: Dec 09, 2020	5,000.00	175.81	170.48	879,062.02	852,400.00	-26,662.02	-3.03%	22,800.00	2.67%	3.29%	3.05%
INSPERITY INC COM CUSIP: 45778Q107 Symbol: NSP Initial purchase date: Dec 09, 2020	10,040.00	87.99	81.42	883,396.51	817,456.80	-65,939.71	-7.46%	16,064.00	1.97%	3.16%	2.92%
META FINANCIAL GROUP INC CUSIP: 59100U108 Symbol: CASH											
Initial purchase date: Feb 19, 2019	5,000.00	25.65	36.56	128,234.81	182,800.00	54,565.19	42.55%	1,000.00	0.55%	0.71%	0.66%
Initial purchase date: Feb 19, 2019 PATRICK INDUST INC CUSIP: 703343103 Symbol: PATK Initial purchase date: Jan 09, 2019	5,000.00 8,000.00	25.65 35.72	36.56 68.35	128,234.81 285,733.51	182,800.00 546,800.00	54,565.19 261,066.49	42.55% 91.37%	1,000.00 8,960.00	0.55%	0.71%	0.66%
PATRICK INDUST INC CUSIP: 703343103 Symbol: PATK											

#### TX XX600 • NAIC • Defined Benefit

Prepared for CITY OF TROY Risk profile: Moderate

Return Objective: Current Income and Capital Appreciation

Equity	Quantity	Purchase price (\$) / Avg Price	Price on 12/31/2020 (\$)	Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$) g	Unrealized Jain/loss (%)	Est. annual income (\$)	Current yield (%)	% of Equity	% of Portfolio
US											
Growth											
NEXSTAR MEDIA GROUP INC CL A CUSIP: 65336K103 Symbol: NXST Initial purchase date: Dec 09, 2020	8,060.00	109.52	109.19	882,748.27	880,071.40	-2,676.87	-0.30%	18,054.40	2.05%	3.40%	3.15%
Total Growth				\$882,748.27	\$880,071.40	\$-2,676.87	-0.30%	\$18,054.40	2.05%	3.40%	3.15%
Value											
KAR AUCTION SVCS INC CUSIP: 48238T109 Symbol: KAR Initial purchase date: Nov 30, 2015	5,000.00	14.97	18.61	74,834.68	93,050.00	18,215.32	24.34%	0.00	0.00%	0.36%	0.34%
SIGNATURE BANK NEW YORK N Y CUSIP: 82669G104 Symbol: SBNY Initial purchase date: Jan 09, 2019	2,500.00	111.91	135.29	279,777.82	338,225.00	58,447.18	20.89%	5,600.00	1.66%	1.31%	1.21%
TCF FINL CORP NEW CUSIP: 872307103 Symbol: TCF Initial purchase date: Feb 26, 2019	5,000.00	46.90	37.02	234,491.90	185,100.00	-49,391.90	-21.06%	7,000.00	3.78%	0.71%	0.66%
Total Value				\$589,104.40	\$616,375.00	\$27,270.60	4.63%	\$12,600.00	2.04%	2.38%	2.21%
				¢ 4 400 000 00	CA 202 500 20	6476 500 44	/	COE E20 40	1 0 0 0/	40.000/	45 640/
Total Small Cap				\$4,186,980.09	\$4,363,508.20	\$176,528.11	4.22%	\$85,528.40	1.96%	16.85%	15.01%
Total US				\$4,186,980.09	\$4,363,508.20	\$176,528.11	4.22% 72.93%	\$85,528.40			90.51%
Total US											
Total US International											
Total US International International	4,000.00	21.23	77.59								
Total US International International Core FABRINET CUSIP: G3323L100 Symbol: FN	4,000.00	21.23	77.59	\$14,639,925.73	\$25,316,860.54	\$10,676,934.81	72.93%	\$316,896.36	1.25%	97.78%	90.51%
Total US International International Core FABRINET CUSIP: G3323L100 Symbol: FN Initial purchase date: Mar 30, 2011	4,000.00	21.23	77.59	<b>\$14,639,925.73</b> 84,933.90	<b>\$25,316,860.54</b> 310,360.00	<b>\$10,676,934.81</b> 225,426.10	<b>72.93%</b> 265.41%	<b>\$316,896.36</b> 0.00	<b>1.25%</b> 0.00%	<b>97.78%</b> 1.20%	<b>90.51%</b> 1.11% <b>1.11%</b>
Total US International International Core FABRINET CUSIP: G3323L100 Symbol: FN Initial purchase date: Mar 30, 2011 Total Core	4,000.00	21.23	77.59	\$14,639,925.73 84,933.90 \$84,933.90	\$25,316,860.54 310,360.00 \$310,360.00	\$10,676,934.81 225,426.10 \$225,426.10	<b>72.93%</b> 265.41% <b>265.41%</b>	\$316,896.36 0.00 \$0.00	<b>1.25%</b> 0.00% <b>0.00%</b>	<b>97.78%</b> 1.20% <b>1.20%</b>	<b>90.51%</b> 1.11% <b>1.11%</b>
Total US International International Core FABRINET CUSIP: G3323L100 Symbol: FN Initial purchase date: Mar 30, 2011 Total Core Total International Developed Markets Core				\$14,639,925.73 84,933.90 \$84,933.90 \$84,933.90 \$84,933.90	\$25,316,860.54 310,360.00 \$310,360.00 \$310,360.00	\$10,676,934.81 225,426.10 \$225,426.10 \$225,426.10	72.93% 265.41% 265.41% 265.41%	\$316,896.36 0.00 \$0.00 \$0.00	1.25% 0.00% 0.00% 0.00%	97.78% 1.20% 1.20% 1.20%	<b>90.51%</b> 1.11% <b>1.11%</b> 0.94%

TX XX600 • NAIC • Defined BenefitPrepared forCITY OF TROY

 
 Prepared for Risk profile:
 CITY OF TROY

 Return Objective:
 Moderate

 Current Income and Capital Appreciation

#### Portfolio holdings - as of December 31, 2020 (continued)

		Purchase price (\$) /	Price on 12/31/2020			Unrealized	Unrealized	Est. annual	Current	, = = -	
Equity	Quantity	Avg Price	(\$)	Cost basis (\$)	Market value (\$)	gain/loss (\$)	gain/loss (%)	income (\$)	yield (%)	Equity	Portfolio
International											
Total Developed Markets				\$219,001.25	\$263,700.00	\$44,698.75	20.41%	\$0.00	0.00%	1.02%	0.94%
Total International				\$303.935.15	\$574.060.00	\$270,124.85	88.88%	\$0.00	0.00%	2.22%	2.05%
				\$303,333.13	\$374,000.00	\$270,124.05	00.0070	\$0.00	0.00 /0	2.22 /0	2.03 /0
Total Equity				\$14,943,860.88	\$25,890,920.54	\$10,947,059.66	73.25%	\$316,896.36	1.22%	100.00%	92.56%
										% of	
				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized gain/loss (%)	Est. annual income (\$)	Current yield (%)	asset	% of
Total Portfolio				\$17,025,446.77	\$27,972,506.43	\$10,947,059.66	64.30%	\$318,594.93	1.14%	100%	100%
Total accrued interest (included in	n market values): S	\$0.00									

Total accrued interest (included in market values): \$0.00

\* Balanced mutual funds are displayed in unbundled view



#### TX XX600 • NAIC • Defined Benefit Prepared for CITY OF TROY

Risk profile: Moderate Return Objective: Current Income and Capital Appreciation

### Additional information about your portfolio

as of December 31, 2020

### **Benchmark composition**

Account TX XX600

#### <u>Blended Index</u>

Start - Current: 30% Barclays Govt/Credit Int; 70% MSCI AC World IMI - GR

### **UBS** 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 feebased 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 weighs 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 guotation 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** January 2021

#### Calls

CONAGRA BRANDS INC CHEVRON CORP JPMORGAN CHASE & CO ORACLE CORPORATION **PEPSICO INC VISA INC** YUM BRANDS INC

10 contracts (1000 shares) CAG Jun 40 @ \$1.05 17 contracts (1700 shares) CVX Sep 120 @ \$1.15 9 contracts (900 shares) JPM Jun 160 @ \$1.25 20 contracts (2000 shares) ORCL Mar 67.50 @ \$1.80 20 contracts (2000 shares) PEP Mar 155 @ \$2.25 10 contracts (1000 shares) V Jun 250 @ \$5.20 20 contracts (2000 shares) YUM Apr 120 @ \$1.40

#### **Puts (with rationale)**

#### AT&T INC

10 contracts (1000 shares) T Sep 25 @ \$1.30 Previously Sold 1,600 last Jan @ \$36.63 including premium. Obligating to buy back 1,000 shares at \$25 (approximately 15% below current level). If exercised and if dividend remains the same, expected yield will be 8.32% at the \$25 cost basis

#### **DANAHER CORP**

5 contracts (500 shares) DHR Jun 150 @ \$2.00 Previously Sold 1,000 in September at \$203.02 including premium. Obligating to buy back 500 shares at \$150 (approximately 32% below current level)

#### MCDONALDS CORP

5 contracts (500 shares) MCD Jun 150 @ \$1.05 Previously Sold 1,000 in September at \$209.94 including premium. Obligating to buy back 500 shares at \$150 (approximately 30% below current level)

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

# Year Ahead 2021

### **UBS House View**

**US** Chief Investment Office GWM Investment Research



### A Year of Renewal



This report has been prepared by UBS AG, and UBS AG London Branch. Please see important disclaimer at the end of the document.



### Foreword

Welcome to the Year Ahead 2021.

In a "Year of Renewal" we will see a world that is steadily returning to normal, despite continued uncertainty, while also rapidly accelerating into a transformed future.

If investing in 2020 was about going resilient, large, and American, we think 2021 will be about going cyclical, small, and global as the sectors and markets most heavily affected by lockdowns start to revive.

At the same time, as the economy accelerates into the future, investors with an eye on the long term will need to add exposure to the disruptors making our world more digital and sustainable, most notably in greentech, fintech, and healthtech, and among the beneficiaries of 5G rollouts.

We hope that this *Year Ahead 2021* provides greater perspective on the investment implications of our fast-changing world. We look forward to working together to help shape your portfolio for the future.



Iqbal Khan



Pau Mantel

Tom Naratil





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To find out more about the Year Ahead 2021, visit ubs.com/year-ahead



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### Summary

Our view and investment ideas

### The recovery

#### Our view

We expect the wide-scale rollout of a vaccine in the first half of 2021 to enable global output and corporate earnings to return to prepandemic highs by the end of the year.

#### Investment ideas

- Diversify for the next leg with exposure to global equities, cyclicals with catch-up potential, and long-term winners.
- Rebalance out of US large-caps and global consumer staples.

#### Interest rates

#### Our view

We anticipate few inflationary threats in 2021, and expect interest rates to remain low for the foreseeable future.

#### Investment ideas

- Hunt for yield in select crossover bonds, emerging market USD-denominated sovereign bonds, and Asia high yield. Alternative means of income include selling volatility and employing leverage.
- Diversify out of low-yielding cash and bonds.

### The US

#### Our view

We think new political leadership will mean additional fiscal stimulus and more predictable policymaking, shifting market leadership accordingly.

#### **Investment ideas**

- US mid-caps and industrials should see higher earnings growth than US large-caps.
- Position for a weaker dollar by diversifying exposure across G10 currencies.

### Long-term investing

#### Our view

Future returns are likely to be lower than in recent years across all major financial assets. But the outlook for equities and other real assets is more favorable than for government bonds and cash.

#### Investment ideas

- Invest in "The Next Big Thing," reallocating existing technology exposure into 5G, fintech, healthtech, and greentech.
- Diversify into private equity by switching up to 20% of the public equity exposure in your portfolio to private equity.



## A Year of Renewal

2020 featured unprecedented shutdowns of economic activity, a fusion of monetary and fiscal policymaking, and a vote for new leadership in the US. 2021 will see us start to shift back to pre-pandemic norms while simultaneously accelerating forward into the post-pandemic future.



Mark Haefele Chief Investment Officer Global Wealth Management

#### Renewed growth.

We think the approval and rollout of a coronavirus vaccine by the second quarter, fiscal policymaking, and US voters choosing legislative gridlock will enable corporate earnings in most regions to recover to pre-pandemic levels by the end of the year. We expect the more economically sensitive markets and sectors, many of which underperformed in 2020, to outperform in 2021. Our preferred areas include small- and mid-caps, select financial and energy names, and the industrial and consumer discretionary sectors.

#### For more:

- Our views on the recovery; page 14
- Ideas for the next leg; page 23

#### A renewed hunt for yield.

Low interest rates and high government spending will persist, in our view, as policymakers attempt to mitigate the economic effects of pandemic control measures. In the near term, with the threat of inflation low, we think investors can still find positive real returns in emerging market (EM) USD-denominated sovereign bonds, Asia high yield, and select "crossover bonds" with BBB and BB credit ratings. In the longer term, the combined threat of government spending going too far, or not far enough, means investors may need to prepare for heightened inflationary and disinflationary risks across regions.

#### For more:

- Where is economic policy headed; page 16
- Our views on hunting for yield; page 27

#### New leadership.

2021 will bring a different mix of US political leadership, and we think new market leadership will follow. We expect fiscal stimulus and more predictable foreign relations to support cyclicals, including industrials and mid-caps. Meanwhile, we also expect higher deficits to weaken the US dollar.

#### For more:

- What's next for the US; page 19
- How to position for a weaker dollar; page 30

#### A new, and renewable, future.

The coronavirus pandemic has accelerated, rather than halted, most of the long-term trends already underway. We expect a world that is more indebted, more unequal, and more local to result in below-average longterm returns across traditional asset classes. But we believe investors do have the opportunity to earn higher returns by positioning for a more digital future across 5G, fintech, and healthtech, and for a more sustainable one in greentech.

#### For more:

- Long-term outlook; page 34
- Our views on what could be "The Next Big Thing"; page 41

### Scenario analysis

Upside scenario	Central scenario	Downside scenario		
Investment view				
Diversify for the next leg (page 23)	Hunt for yield (page 27)	A diversified hedging strategy, including gold,		
Position for a weaker dollar (page 30)	Buy into sustainability (page 51)	dynamic allocation strategies, long duration,		
Invest in "The Next Big Thing" (page 41)	Diversify into private markets (page 53)	and option structures (page 26)		
Pandemic recovery				
A highly effective vaccine becomes widely available by 1Q21 in leading economies.	An effective vaccine becomes widely available by 2Q21 in leading economies.	Vaccine availability delayed, or with a lower efficacy than initially thought.		
Social activity normalizes by 2Q21.	COVID-19 waves recur in the first half, but short-term restrictions and limited public fear allow social activity to normalize alongside a vaccine rollout by 3Q21.	Public fear of COVID-19 is elevated, and restrictions on business activity recur throughout 2021, causing social activity to return to normal only by late-2021.		
GDP in developed countries returns to pre-pandemic levels by end-2021.	GDP in developed countries returns to pre-pandemic levels by 2022.	GDP in developed countries returns to pre-pandemic levels by 2023.		
Economic policy				
Central bank policy stays accommodative, albeit edging toward a tightening bias later in the year.	Central banks maintain accommodative policy.	Monetary policy support is increased to offset the effects of weak growth, but may be tapered if inflation rises unexpectedly.		
Low real rates and a weaker dollar boost global growth.	Real interest rates remain low and stable.	Real rates rise initially, but subsequently trend down.		
Geopolitics				
The US government is able to agree on a larger-than-expected fiscal deal, closer to USD 2tr.	The US government agrees on a fiscal deal worth USD 500–1,000bn, and does not increase tax rates.	Ongoing legal challenges to the US election result or partisan political disagreements create uncertainty about fiscal policy.		
The Biden administration begins a partial rollback of existing tariffs on China exports, supporting global growth.	US-China relations remain a long-term issue, but President-elect Joe Biden's foreign policy is more predictable than that of his predecessor.	US-China trade tensions re-escalate, with the fundamental geostrategic rivalry between the US and China not tempered by the new US administration.		
Asset class targets for June 2021				
<b>S&amp;P 500</b> (current: 3,532) 4,000	3,800	2,900		
Euro Stoxx 50 (current: 3,443) 3,900	3,600	2,800		
MSCI EM (current: 1,192)				
1,390	1,280	900		
<b>SMI</b> (current: 10,361) 11,500	11,000	8,800		
USD IG spread (current: 82bps) 60bps	80bps	200bps		
USD HY spread (current: 422bps) 350bps	400bps	700bps		
EMBIG spread (current: 375bps) 280bps	340bps	550bps		
EURUSD (current: 1.18) 1.25	1.22	1.12		
<b>Gold</b> (current: USD 1,875/oz) USD 1,600–1,700/oz	USD 1,950/oz	USD 2,200–2,300/oz		

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 12 November 2020



# How quickly will the world recover?

We expect global economic output and corporate earnings to reach pre-pandemic levels by the end of 2021, enabling economically sensitive markets and sectors to outperform. But accelerated change means it is also important to retain exposure to structural growth.

2020 is set to be among the worst years for the global economy in more than 70 years. We think China will be the only large economy to record any growth, and estimate the US economy will have shrunk by roughly 4%, with developed markets as a whole and emerging markets ex-China contracting by 5%–6%.

#### Overall earnings should return to pre-crisis levels in 2021

Earnings, rebased	2019	2020	2021	2022	Share price performance year-to-date
US	100	84.5	103.3	120.5	9.7%
Asia ex-Japan	100	98.7	118.4	137.3	9.9%
Euro area	100	58.4	85.7	102.1	-6.8%
UK	100	55.0	75.9	89.9	-16.5%
Switzerland	100	91.0	101.9	112.5	-2.4%
EM	100	93.4	114.5	132.7	5.9%
Developed markets	100	83.1	103.8	119.8	6.3%
Global	100	84.4	105.2	121.9	6.3%

CIO estimate for earnings, rebased to 2019 = 100

Note: Consensus estimates for 2022

Source: Refinitiv Datastream, UBS, as of 11 November 2020

#### 48%

of investors are very or somewhat optimistic about the outlook for the global economy over the next 12 months, but that figure rises to 66% on a five-year view.

Source: 3Q20 UBS Investor Sentiment survey

But we expect 2021 to be a Year of Renewal. Economic activity in China has already largely normalized. And following encouraging early vaccine efficacy data, we remain confident that vaccines will be widely available by the second quarter of 2021. This should help put Europe and the US on the path to a sustained recovery.

If we are right, we expect corporate earnings to rebound quickly. We think developed market earnings will roughly match 2019 levels in 2021. Meanwhile, we anticipate emerging market companies will earn around 15% more in 2021 than in 2019, powered by robust earnings growth in Asia.

Revived economic and corporate earnings growth should also mean renewed outperformance from those cyclical companies and markets that underperformed in 2020. We see particular catch-up opportunity in smalland mid-caps, select cyclicals, particularly in the industrial and consumer discretionary sectors, and in markets outside the US. For more, see page 23.

### How will the world be different after the recovery?

The pandemic has made our world both more digital and more local, and not all companies and individuals will be able to adapt. So while we think that in the short term investors can profit by investing in companies exposed to a cyclical recovery, this needs to be combined with exposure to the disruptors set to drive technological transformation over the decade ahead, including 5G, fintech, healthtech, and greentech. For more on how the pandemic has changed our world, see page 34, and for more on our top ideas for the decade ahead, see page 41.

Related investment ideas	page
<b>Diversify for the next leg</b> in global equities, especially in cyclicals with catch-up potential.	23
<b>Invest in "The Next Big Thing"</b> with exposure to themes like 5G, fintech, healthtech, and greentech.	41
# Where is economic policy headed?

In 2021, we expect interest rates to remain low and fiscal spending to stay high. We believe this combination will prove supportive of equities and credit, and contribute to a weaker US dollar.

2020 brought an unprecedented fusion of fiscal and monetary policy: To fund social support packages, governments ran an aggregate deficit of over 11% of global GDP in 2020, while the world's top five central banks printed an aggregate of USD 5tr. In 2021, we think governments in general will continue to "bridge the gap" until a vaccine enables a return to normal economic functioning. We also expect central banks to keep interest rates low to support growth and inflation.



Source: Fed, BoJ, BoE, ECB, SNB, UBS, as of 20 October 2020

# Just 38% of surveyed investors are worried about the impact of inflation on meeting their financial goals or objectives.

Source: 3Q20 UBS Investor Sentiment survey

But the longer-term path is less predictable.

One possibility is that governments recoil at the risk of higher debt and inflation, and pull back fiscal spending programs too far or too fast. Monetary policy alone is unlikely to be sufficient to support the economic recovery, so this outcome would likely mean an extended period of disinflation and low growth.

A more likely possibility is that governments are reluctant to enact austerity policies, having so far run much higher deficits without suffering higher inflation or borrowing costs. In this scenario, governments continue to run large deficits and loose monetary policy persists even if inflation moves moderately higher.

Although neither scenario is likely to materialize in 2021, they could begin to shape a longer-term investor narrative, and therefore start to impact asset prices. To prepare for a scenario of higher inflation and negative real interest rates, we recommend investors seek out long-term secular growth, both in public (page 41) and in private markets (page 53). To prepare for disinflation and low or negative rates, investors should lock in available yield (page 27).

# Government debt-to-GDP rose

#### by 20ppts in 2020

Median government debt-to-GDP for advanced economies, in %



# How should I plan for inflation?

When it comes to building a financial plan, we have to account for the fact that goods and services tend to rise in cost each year. Inflation can have a meaningful impact on how much investors must save in order to successfully fund their future goals. Even with just 2% inflation, prices would be 80% higher over a 30-year time span. Preparing for inflation requires that investors ensure their portfolios have sufficient exposure to growth and "real" assets, like stocks and real estate, and it demands a careful awareness of withdrawal rates. The table below shows that higher inflation expectations generally mean investors either have to reduce spending, or try to increase portfolio returns.

For example, an investor with USD 1mn who wants a less than 20% chance of having less than USD 500,000 left in 30 years, and expects their assets to return 6.4% per year with 8.8% volatility, could withdraw approximately USD 45,000 in the first year, and then 2% more in each subsequent year.

		All Fixed Income	<b>Balance Portfolio</b>	All Equity
		Exp. return: 4.3%	Exp. return: 6.4%	Exp. return: 8.3%
		Volatility: 4.2%	Volatility: 8.8%	Volatility: 15.0%
Annual nominal	1%	USD 41,000	USD 50,000	USD 54,000
spending growth	2%	USD 36,000	USD 45,000	USD 48,000
	3%	USD 32,000	USD 40,000	USD 43,000

"Safe" initial spending rate, assuming USD 1,000,000 of invested capital\*

Source: UBS

\* We define "safe" as a <20% probability that the investor would end a 30-year period with <50% of their initial capital. Greater certainty or desire for higher capital retention would generally imply a lower required spending level. Volatility and Return assumptions are based on our Capital Market Assumptions for each multi-asset portfolio. Estimates calculated to the nearest USD 1,000, using a 5,000-trial Monte Carlo model, assuming normally distributed annual returns over 30 years. No taxes on dividends or capital gians are assumed in this illustration. Considering taxes would generally lower "safe" spending rates in all scenarios.

Related investment ideas	page
Hunt for yield in EM USD-denominated sovereign bonds, Asian high yield, and crossover bonds.	27
Diversifying into <b>private markets</b> or investing in areas that could be <b>"The Next Big Thing"</b> could help improve long-term	53 41
portfolio growth potential.	

# What's next for the US?

We expect fiscal stimulus and the rollout of a vaccine to drive the economic recovery and outperformance for mid-caps and select cyclical sectors, relative to large-caps. The US dollar will depreciate, in our view.

## Over 50%

of investors are planning to make changes to their portfolio in light of the US election result.

Source: UBS Investor Watch Pulse, as of 29 October 2020

At the time of writing, it looks likely that we will see a divided government, with a Democratic President and House along with a Republican-led Senate. This is likely to mean a smaller-than-anticipated, but still sizable, fiscal stimulus package. Political gridlock could also have some positive effects. Republican control of the Senate would make significant tax increases on businesses or individuals unlikely in the coming years. It would also reduce the probability of aggressive new regulation on healthcare or fossil fuel companies. More broadly, divided government lowers the potential for significant policy changes, reducing the potential for policy-induced market volatility.

We identify three key effects:

- Stimulus to boost mid-caps. We think the new administration will be able to enact another coronavirus aid package worth between USD 500bn and 1tr, or roughly 2.5%–5% of GDP, which should bode well for consumer spending and business confidence, and help drive a shift in market leadership away from large-caps and toward mid-caps. Mid-cap earnings are more leveraged to an economic recovery, and we expect them to grow at around twice the pace of large-cap earnings in 2021.
- A higher deficit to weaken the US dollar. We expect higher fiscal spending to be funded by a rising deficit, rather than additional taxes. Although spending can largely be funded by private domestic savings in the near term, as the economy begins to recover in 2021, we expect the private sector to increase spending, widening the current account deficit and requiring a weaker dollar to attract external funding.

A more predictable China rivalry to emerge. We think the Biden administration will renew the US's approach to foreign relations, a tack that should improve relations with Europe in particular. Although the fundamental US-China geostrategic rivalry won't change, we do think the new administration will be less likely to use tariffs as a tool of foreign policy. Reduced trade tensions should support the economic recovery, reinforcing our preference for cyclicals such as industrials.

#### What's next for US tech?

After a rally of over 50% in 2020, the top five US technology firms alone now represent around one-eighth of the MSCI AC World

equity index, more than China, the UK, and Switzerland combined. We expect the technology sector to continue to benefit from strong secular growth in digital advertising, e-commerce, cloud computing, and the 5G rollout.

However, valuations have increased, and we think other segments of the market will see stronger earnings growth in 2021 as they recover from depressed levels. Anti-trust scrutiny also bears monitoring, although a divided government would reduce the probability of new regulations, and in any case we would expect judicial proceedings to take years to reach resolution.

Cyclicals should see higher earnings growth than defensives and technology

2.3



Consensus earnings per share growth in 2021, in %

Source: FactSet, UBS as of 12 October 2020

# How should I think about my country allocation?

The US equity market now represents 58% of the MSCI AC World equity index, up from 51% five years ago. Even though the US market has outperformed global stocks in 10 of the past 11 years, outperformance doesn't last forever.

For US-based investors, home bias is another important factor. If the US stock market does poorly, this may be coincident with other financial challenges, such as higher unemployment, lower wage gains, or less home price appreciation. The equity allocation should take into account these other assets and future liabilities. Investing globally can help to diversify portfolios and protect investors against the inherent risks of such correlations.

As described on page 24, we expect the US to start to underperform ex-US stocks at some stage in 2021, and, as we show on page 37, over the long run. In general, we don't recommend that investors allocate more than 58% of their equity allocation to US stocks in their public market portfolios, and would also encourage investors to allocate more to other regions in their private equity allocations.

Related investment ideas	page
<b>Position for a weaker dollar,</b> as we expect twin deficits and a diminished interest rate differential to weaken the greenback.	30
<b>Diversify for the next leg</b> in US mid-caps and cyclical sectors as the economic recovery drives a change in market leadership.	23

# Investment views

# Diversify for the next leg

We expect equity markets to move higher in 2021. In a Year of Renewal, we also believe some of 2020's laggards will catch up. Investors need to think global, look for catch-up potential, and seek long-term winners.

Profits underlying major equity indexes have proven surprisingly resilient through the pandemic when compared with the broader economy. This is because listed companies have a high exposure to digital, multinationals, and goods relative to services. Looking ahead, monetary and fiscal stimulus should continue to provide a tailwind for stocks, and we anticipate significant earnings growth as the global economy recovers. Low interest rates also continue to make equity valuations look attractive relative to bonds and cash.



Earnings per share growth in 2019 vs. 2021 (consensus estimates), including year-to-date performance, in %

3.1



Source: Refinitiv Datastream, UBS, as of 11 November 2020

# 37%

of surveyed investors plan to increase investments in the stock market over the next year. Just 11% plan to decrease investments.

Source: 3Q20 UBS Investor Sentiment survey

In 2021, we think investors should diversify for the next leg higher in equities by thinking global, looking for catch-up potential, and seeking long-term winners:

 Think global. Robust corporate earnings and exposure to secular trends still speak in favor of the US market at the time of writing. However, amid relatively high valuations and after outperforming global stocks in 10 of the past 11 years, US stocks will start to underperform other markets at some stage in the coming year, in our view. We expect the post-pandemic recovery in corporate earnings to be stronger in the more cyclically exposed Eurozone and UK markets, while valuations are more favorable in emerging markets, and Asia retains a combination of reasonable valuations, robust earnings, and secular growth. Investors should prepare for the year ahead by ensuring they are not overexposed to US stocks, and we recommend considering implementing hedges to US equity exposure



Source: UBS, as of 20 October 2020

and diversifying into markets and sectors that have potential to catch up. Investors can retain exposure to secular growth by seeking out companies outside of the US, especially in Asia, which are exposed to key long-term trends (see page 34).

 Catch-up 2021. As economic normality starts to return, we expect some of the relative laggards in 2020 to become outperformers in 2021. Areas with the most catch-up potential, in our view, are US midcaps, EMU small- and mid-caps, select financial and energy stocks, and the industrial and consumer discretionary sectors. By contrast, we expect the earnings growth and performance of global consumer staples companies to lag in 2021, while some of the primary stay-at-home beneficiaries could also begin to underperform as conditions normalize.

Seek long-term winners. Given the significant structural changes afoot in the Decade of Transformation, it is important that investors complement cyclical exposure with exposure to secular growth. However, we should note that sectors that lead the way in one decade rarely continue to do so in the next. We think the Decade of Transformation will be more about the sectors transformed by technology than the technology sector itself. Our picks as "The Next Big Thing" include 5G, fintech, healthtech, and greentech.

# Is it too late to buy?

Our forecasts suggest that the world economy and corporate earnings will return to pre-pandemic levels in 2021. But with many broad market indexes already surpassing pre-pandemic highs in 2020, many investors are asking whether it's too late to buy.

Tactically, we still think there is plenty of opportunity both in catch-up plays, and in structural winners that can continue reaching new highs. But strategically, investors should pay less attention to market timing and more to the long-term picture. So in times of uncertainty, investors should take advantage of volatility to enter markets.

Assuming 6% annual earnings growth, earnings can be expected to be 5.7x higher over a 30-year horizon; market valuations may change over time, but rarely change by a factor of more than 5x. Given the choice between investing immediately or waiting for stocks to get cheaper, putting money to work for the long term is usually the best choice.

# How can I protect against downside risks?

Using bonds alone as a hedge for falling equity markets is more costly and potentially less effective than in the past, due to low yields. We think investors looking for protection should instead consider a diversified set of hedging approaches.

First, investors can consider reducing their overall fixed income allocation and concentrating a greater allocation in longerdated bonds to benefit from their greater interest rate sensitivity. Second, investors should consider incorporating dynamic asset allocation strategies, which can adjust their exposure to risk assets based on market conditions.

Third, investors can incorporate equity replacement strategies—such as structured solutions with downside protection—to sacrifice some upside potential in exchange for investments that give an asymmetric return profile.

Finally, we continue to see gold as an attractive hedge in a portfolio context, particularly in a low real interest rate environment.

# Hunt for yield

We expect interest rates on cash and bond yields to stay at very low levels for the foreseeable future. The renewed hunt for yield means investors need to take a look at the role of cash and bonds in portfolios and consider being more active, increasing exposure to emerging markets and Asia, or finding alternative means of earning income.

Excess capacity and accommodative central bank policy mean we do not expect rates or government bond yields to move significantly higher in 2021. While this makes it challenging for investors to find yield in cash and high quality bonds, we think the investment environment is conducive to credit, with economic output steadily recovering, and fiscal and monetary policy helping keep defaults in check. Investors looking to enhance portfolio income can consider the following options:

Being more active. With earnings recovering in 2021, we think credit fundamentals and credit ratings will also start to improve. Yet the disruption caused by the pandemic will have divergent effects, which could boost returns for more active investors. For example, risk-tolerant investors can earn potentially significant returns

Stock of negative-yielding debt at a new record high

Outstanding level of bonds with negative yields, in USD tr



3.3

Source: Bloomberg, UBS, as of 6 November 2020

# 49%

of surveyed investors said that "getting more yield" was their "portfolio priority" for the next six months. Equities (50%), structured solutions (38%), and bonds (35%) were among the most cited means of achieving this goal.

Source: 3Q20 UBS Investor Sentiment survey

by anticipating key rating agency action, and investing in select euro- or US dollardenominated bonds in the crossover zone (hence the name "crossover bonds") between investment grade and subinvestment grade.

 Looking to emerging markets and Asia.
With yields of near 5% (or 400bps spreads over US Treasuries), emerging market USD-denominated sovereign bonds compensate well for their risks, in our view. We think spreads could tighten to 340bps as global demand returns and oil prices recover. Meanwhile, Asia HY offers some of the most attractive yields in the credit space, at near 8%. The asset class is backed by a positive outlook for Chinese property bonds that benefit from easy domestic liquidity conditions.



**Finding alternative income.** Other means of boosting yield in the current elevated volatility environment include strategies like put writing, for those who can implement options, or structured solutions that offer a fixed coupon payment until maturity based on movements in underlying equity or commodity markets. We also view direct lending and core real asset strategies as attractive long-term income generating instruments. Finally, with the yield gap between US high yield credit and short-term rates at a multiyear high, and the Fed projecting that borrowing costs will not rise until 2023, investors should also consider whether adding leverage to their financial plan could boost their probability of success.

Currency	12m forecast vs. USD	Forward rate	Forecast appreciation relative to USD forward rate	Worth hedging USD exposure?
EUR	1.23	1.19	3.4%	Yes
CHF	0.89	0.91	2.2%	Provided implementation costs are <2.2%
GBP	1.37	1.33	3.0%	Yes
CNY	6.30	6.80	7.4%	Yes
SGD	1.30	1.35	3.7%	Yes

Investors in USD-denominated bonds should note we expect a weaker dollar in 2021, so hedging this currency exposure may be beneficial, depending on an investor's base currency:

Source: UBS, as of 11 November 2020

# What role should bonds play in my portfolio?

Traditionally, holding a combination of equities and bonds in portfolios has enabled investors to make portfolio withdrawals during crises without needing to sell stocks at depressed prices. But with bond yields now close to zero, the drag of holding bonds in portfolios is getting bigger. As a result, we think investors need to shift excessive high quality bond allocations toward credit, hedge funds, and private debt to meet return objectives.

# Position for a weaker dollar

We expect the US dollar to weaken in 2021 due to a recovering global economy and a diminished interest rate differential. To position for this, we think investors should diversify across G10 currencies or into select emerging market currencies and gold.

The US dollar index has already dropped close to 10% from its highs in March 2020, and we anticipate renewed weakness in 2021. We expect continued large US fiscal deficits at the same time as US private sector savings are starting to fall, exacerbating external funding requirements. In addition, a recovering global economy and heightened focus on US indebtedness are likely to reduce safe-haven demand for the currency. And the interest rate advantage the US dollar previously held over other currencies in recent years has now eroded.



Source: Macrobond, UBS, as of 1 November 2020

# Here are our top three ways to position for a weaker dollar:

#### A diversified set of G10 currencies.

We see medium- to long-term upside potential in the EUR, GBP, CHF, and AUD against the US dollar. The euro is well placed to benefit from a recovery in global export demand as the pandemic fades and US stimulus boosts growth. We forecast EURUSD to rise into the 1.20–1.25 range by end-2021. We also view the Swiss franc and the Japanese yen as superior safe havens to the US dollar, given that investors could become more concerned about the US's indebtedness at the same time as the Swiss National Bank relaxes its interventions, and as growth in Asia rebounds.

For our currency forecast table, see page 59.

## An equal-weighted FX basket has historically outperformed the USD

3.6

Rolling investment in one-month USD cash deposits vs. a basket of five currencies (EUR, JPY, GBP, AUD and CHF)



Source: Macrobond, UBS, as of 7 October 2020

Performance figures refer to the past and past performance is not a reliable indicator of future performance/results.

## Emerging market and APAC currencies.

We like Asian currencies with a high yield, such as the Indian rupee and Indonesian rupiah, and those with cyclical exposure, such as the Singapore dollar and Chinese yuan. The yuan could additionally benefit from capital inflows as access to Chinese capital markets eases further. The low-yielding Taiwan dollar is our least preferred currency in Asia. Elsewhere, we think the Russian ruble will benefit from a global economic recovery, especially if oil prices increase, as we forecast.

#### Gold.

Gold was one of the best-performing assets in 2020, rallying over 25%. In an environment of higher growth, we don't expect last year's gains to be repeated in 2021. But the precious metal can still act as a hedge against geopolitical uncertainty, while low rates keep the opportunity cost of holding it low.

# How do currencies fit in a portfolio?

As a general principle, we think investors should own the currencies in which they have liabilities or spending plans. For instance, a Eurozone-based investor whose family spends most of their time and money in Europe should generally keep the majority of their wealth in euros or hedged into euros. For other investors, however, a wider mix of currencies may be more suitable. For example, some investors may find that they have assets in excess of future liabilities or spending needs, in which case return maximization becomes a primary goal. Historical analysis suggests that an equal-weighted basket of currencies has provided higher returns than the USD over the long term.

# The Decade of Transformation

Plainpicture



To explore the digital experience of the Year Ahead 2021, visit ubs.com/year-ahead

# The Decade of Transformation

The global coronavirus pandemic has accelerated many of the trends already in evidence when we entered this Decade of Transformation. We think the post-crisis world will be more indebted, more unequal, and more local—but also more digital, and more sustainable.

## More indebted.

We forecast that advanced economies' debtto-GDP ratios will be over 20 ppts higher by the end of 2021 than at the end of 2019. And, given aging populations, minimal societal appetite for fiscal austerity, and low debtservicing costs, we expect government spending to remain elevated by historical standards. Excess savings should enable relatively comfortable debt financing in the near term. But in the medium term, we think that debt financing will require some combination of higher taxation, regulation to encourage greater institutional investment in government bonds, or moderately higher inflation (see page 16), underscoring the importance of owning "real" assets such as equities.

## Post-COVID-19 debt levels are forecast to increase

US Federal debt held by the public, 2000 to 2050, in % of GDP



Source: US Congressional Budget Office (CBO), UBS, as of 30 September 2020



## Higher-paid workers are likelier to be able to work from home

% of US respondents who worked from home or stayed home from work and were unable to work



Stayed home from work and unable to work

Source: Sample of 8,572 randomly selected adults from the GALLUP panel, interviewed over the phone from 16 March to 22 March 2020

#### More unequal.

The pandemic has had a negative effect on employment for lower-skilled workers, while the nature of knowledge work, which can largely be performed from home, and the financial markets' good performance have favored high-income and high-wealth individuals. In the future, technological disruption could widen the wealth gap even further. Whether wealth inequality reaches its political limits in the coming years remains to be seen, though we should expect to see more political leaders running on platforms that include some element of wealth redistribution. The resulting potential regional variations in economic policy make global diversification particularly important.

## 68%

of business owners say they expect digitalization to have a positive effect on their business. 61% say they expect sustainability to have a positive effect.

Source: 3Q20 UBS Investor Sentiment survey

### More local.

Political considerations in an increasingly multipolar world, security concerns in light of the pandemic, consumer preferences tilting toward sustainability, and new technologies enabling localized production are all contributing to the world becoming more local. The aggregate effect on growth and inflation is unclear. But these factors can be expected to favor companies exposed to automation and robotics, companies already factoring sustainability into their supply chains, and companies based in ASEAN and India that could benefit from supply chain diversification out of China.

#### More digital.

The COVID-19 pandemic has forced much faster digital adoption and disrupted established norms. This could transform various industries (see page 41), and, combined with the unfolding impact of the fourth industrial revolution, could boost medium-term productivity. The crisis could also have the effect of suppressing real interest rates because the more efficient use of capital stock and a shift from tangibles to intangibles lower the demand for investment capital. On the flip side, a more digital world will produce its fair share of losers too. We see particular risks for physical retail and traditional energy over the course of the next decade.

#### More sustainable.

Demand for carbon is still rising, but in 2020 the EU and Japan pledged to go carbon neutral by 2050, and China promised to do the same by 2060. Stricter environmental regulations could mean higher costs for some

# The pandemic has triggered more corporate conversations about localization

Number of mentions of keywords related to supply chain diversification in transcripts

4.3



Source: UBS Evidence Lab, as of 12 October 2020

businesses. But companies that are well positioned for the transition, such as those providing greentech solutions, stand to benefit from a more sustainable world.



Source: BP Statistical Review of World Energy, UBS, as of October 2020

# Investing in the Decade Ahead

In the next decade, investors will likely need to take on more risk to achieve the same returns as in the past decade. Cash and the safest bonds are likely to deliver negative real returns for the foreseeable future, while credit and equity still offer attractive risk premiums, in our view. We also see private market and sustainable assets as valuable in a portfolio context.

# Asset class forecast

## Cash and bonds

High government debt levels, societal calls for higher government spending, and reduced demand for capital in a digital world mean real interest rates are likely to remain at very low levels for the foreseeable future, in our view. Moreover, the move to average inflation targeting frameworks indicates that central banks will tolerate moderately higher levels of inflation. As a result, we think cash and high quality bonds will deliver a negative real return over the long term. We expect returns over the coming business cycle to average less than 1% for US Treasuries, which would likely lead to negative returns after inflation. Such low potential returns, as well as the reduced ability of high quality bonds to provide meaningful positive returns during equity drawdowns, suggest that investors should instead look to credit and alternative assets.

## Credit

Total returns in credit are likely to be lower than in the previous decade. But, given that many central banks have added credit to their purchase lists, and in light of the very low yields in government bonds, we think credit should continue to play an important role in portfolios. We anticipate default rates and spreads both will decline below past averages as a result of low yields globally. We expect annual returns of less than 4% for USD high yield credit and about 5% for emerging market sovereign bonds in USD. We expect US investment grade credit to return around 1.5%.

#### Equities

The anticipated bounceback from the coronavirus crisis notwithstanding, we expect muted long-term economic growth in developed markets due to aging populations and high debt levels. Corporate net margins also face pressure from potentially higher taxation and minimum wages, political and security considerations, and tighter environmental regulations. That said, we think multiples should be well supported due to low interest rates, and we note risk premiums are higher than historical norms. The increased use of technology and changes to established working practices driven by the pandemic could also lead to higher worker productivity.

Overall, we expect nominal returns to average a little under 6% in the US annually over the coming business cycle, though we foresee higher returns for smaller size segments than we do for US large-caps. In developed markets outside the US, we expect returns to be closer to 8% after underperforming US stocks over the past few years. Regionally, we think the long-term outlook is most promising for emerging market stocks, which we expect to average over 9% annual return (versus 4% over the past 15 years) thanks to lower initial valuations, a more favorable overall demographic profile, and greater potential for productivity gains. Investors seeking higher returns can also consider specific themes and sectors that we think have higher growth potential (see page 41).

#### Alternatives

Amid lower returns in developed market equities, and given the increased opportunity cost of using bonds to stabilize portfolios, investors will need to search for alternative sources of returns and diversification such as private markets and hedge funds. Private markets require long capital commitments, but we expect returns near 9% per year in private equity, around 3ppts higher than public equity, and 8% per year in private debt. For more on this topic, please see page 53. Meanwhile, we expect funds of hedge funds overall to return approximately 3% (in USD) per year, over the long term. We see particular hedge fund opportunities in the thematic and equity selection space due to the structural changes set in motion by the pandemic.

### Commodities

Prices are currently cyclically depressed, and energy prices in particular have ample room to recover in the wake of the pandemic. Overall, we think broad commodities indexes will return roughly 4% annualized over the coming business cycle, driven by strong expected returns in energy. We expect gold to return 4% a year.

### Currencies

We expect the US dollar to weaken in the years ahead, so it is important to review dollar exposure and implement hedges if necessary (see page 29 for guidance). On the other hand, we think broad emerging market currencies, as well as the Japanese yen and the British pound, offer the most upside potential over the long term. International investors who hold assets in these markets should keep the currency exposure to benefit from this expected appreciation, in our view.

#### **Real estate**

In a low interest rate environment, real estate remains an attractive investment for income generation in our view, particularly when compared with cash or government bonds. Real estate's inflation protection characteristics may prove beneficial in a more indebted world. While we do not think that either city living or the office market has been permanently impaired due to the pandemic, active private real estate strategies should provide better returns compared with low yield buyand-hold strategies. We still expect nominal returns to average about 6% annually in private real estate (in USD), compared to the average of 8.5% over the past two decades.

The return assumptions above are taken from the UBS WM USA Asset Allocation Committee Capital Market Assumptions published on April 27, 2020.

# Investment ideas

# Invest in "The Next Big Thing"

We think the next decade will reward investing in the companies using technology to disrupt other sectors. We expect "The Next Big Thing" to materialize within the fintech, healthtech, or greentech spaces, or to be enabled and accelerated by the global rollout of 5G technology.





Green recoverv

were cited as the thematic investment strategies surveyed investors would most seriously consider implementing over the next six months.

Source: 3Q20 UBS Investor Sentiment survey

Since 1973, if a US equity sector was a top two performer over the previous 10 years, it had only an 8% chance of staying there over the next 10 years, and a 25% chance of falling into the bottom two. This pattern suggests that "The Next Big Thing" probably won't come from the top two sectors of the last decade: technology and consumer discretionary.

We've worked to identify market segments containing stocks that could see earnings more than triple over the next ten years thanks to a large potential market (over USD 200bn), a disruptive catalyst to spur

growth for the decade ahead, and a cyclical catalyst to kick-start things in 2021.

Our conclusion: If the last decade was about investing in the technology sector itself, we think the next decade will reward investing in the disruptors in sectors undergoing technological transformation. We expect "The Next Big Thing" to materialize within the fintech, healthtech, or greentech spaces, or to be enabled and accelerated by the global rollout of 5G technology.





## Why now?

Following the 2020 launch of Apple's first 5G phone, the iPhone 12, we expect a wave of interest in 5G technology and its potential applications, a trend likely to persist for at least the next decade.

## Why could 5G be "The Next Big Thing"?

5G enables myriad business models and could spur the growth of a new generation

of platform leaders capable of harnessing 5G technology. A study conducted by IHS Markit revealed that about USD 13.2tr worth of economic value could be generated from 5G applications by 2035.

That sinking feeling when the "4G" icon on your smartphone switches to "3G" is all too familiar. Streaming high-quality videos or making video calls, browsing without interruption, and playing real-time mobile games were only made possible with 4G. The technology has played a key role in boosting the growth of the smartphone industry, social media platforms, and streaming services.

We now expect 5G connections, with download speeds of 20GB/s and latency of just 1–4ms (versus 1GB/s and 40–60ms for 4G), to drive a potentially even bigger change, enabling whole new series of applications that will transform the decade ahead.

# \_\_\_\_\_ (5.1) ---

## 5G creates opportunities in a number of industries

Annual revenue potential, in USD bn



Source: Ericsson, UBS, as of 20 October 2020

The first set of beneficiaries will be the enablers:

1. companies that manufacture, install, and maintain the equipment involved in the expected 20x rise in annual 5G capex spending from 2019 (USD 7.5bn) to 2025 (USD 150bn); and

2. smartphone manufacturers, which should benefit from the more than one billion 5G connections we anticipate will be added in the next three years. But just as cloud technology favors platform companies over hardware companies, we anticipate "The Next Big Thing" will be found among the platform leaders capable of successfully building 5G use cases. Potential applications enabled by 5G's high speeds and low latency include fixed wireless access, autonomous driving, immersive augmented and virtual reality (AR/VR) technologies, telesurgery, Industrial Internet of Things (IIoT), distributed "edge" computing, artificial intelligence, data-driven agritech, and highly connected smart cities.



# Fintech

### Why now?

The pandemic has triggered a dramatic shift toward contactless and mobile payments, and e-commerce. Improvements in customer acquisition are allowing fintech firms to crosssell across different products and services.

# Why could fintech be "The Next Big Thing"?

Technological innovation is facilitating banking and financial services, spurring significant growth of fintech firms. We see scope for continued growth in digital payments, driven both by increased use of contactless and mobile payment systems, and by higher online spending. In addition, enabling technologies like artificial intelligence are helping fintech expand into other areas like insurance (insurtech), property (proptech), lending, and investments. Overall, we expect fintech firms to enjoy earnings growth rates in the mid-tohigh teens over the next decade, making the industry one of the fastest-growing globally. We think the industry has the potential to expand to USD 500bn by 2030 from USD 150bn in 2018.

 Digital payments. We still see significant scope for growth in contactless and mobile payments, and e-commerce. Cash and checks still accounted for 39% of the USD 225tr global consumer and commercial payment flow as we entered 2020, according to Mastercard. With the COVID-19 pandemic boosting e-commerce and reducing the use of cash, fintech payment firms have seen rapid growth in volumes and customer acquisition in 2020. Once consumers have grown accustomed to using primarily digital payments, many will not revert to traditional means. We expect digital payments to post growth rates in the low teens over the coming decade.

- Additional services. The next leg of growth for fintech companies will be generated by cross-selling other fintech services like insurtech, online lending, investment services, or proptech, all areas where not only growth rates are stronger, but also margins are higher. In each field, the use of artificial intelligence and blockchain technology is enabling new business models that are lower cost and easier to scale.
- Central bank digital currencies. Further growth could come from the launch of central bank digital currencies (CBDCs), with the People's Bank of China and the European Central Bank both working on launches. Such currencies could prompt higher fintech adoption, particularly among late adopters, if governments start to use them. Through the data generated, they may also enable broader application of artificial intelligence in the fintech space.

Fintech addressable market growth in the medium term (CAGR, 2020–25)

Payments	12%
Insurtech	25%
Online lending	16%
Proptech	30%
Others	12%
Total fintech	15%

Source: UBS



Fintech revenues expected to post 10.5% CAGR during 2018–2030 <sup>USD bn</sup>



Source: UBS estimates, as of September 2019



# Healthtech

## Why now?

The pandemic has simultaneously increased patient focus on health outcomes and reduced people's ability to access care and governments' capacity to pay for that care. We think health technology will play a critical role in improving the efficiency and quality of healthcare in the decade ahead. Meanwhile, the result of the US election should prove supportive for the healthcare sector as a whole.

# Why could healthtech be "The Next Big Thing"?

Global healthcare spending reached USD 7.8tr (10% of GDP) in 2017, according to the World Health Organization. Yet a significant proportion of this—up to 25% in the US, according to the JAMA Network—was wasted in 2019 due to failures of coordination, pricing, or delivery, or overly complicated processes and treatments.

Against this backdrop, and with the global over-65 population set to grow 60% to one billion by 2030, we see significant growth potential if emergent technologies can help providers create a more efficient and holistic healthcare system.



Source: Frost & Sullivan, Statista, Bloomberg Intelligence, UBS, as of February 2020

We're focused on three main areas of potential growth:

- Telemedicine. The use of telemedicine has exploded since the onset of the pandemic, and we expect these higher utilization levels to persist even if a near-term slowdown is possible as economies reopen. Over time, we think that healthcare will be transformed from an episodic service into a lifelong process of managing and maintaining health, driven by technologically savvy health consumers. According to one estimate, the total US telemedicine market could grow by roughly 17% a year from 2019 to 2024 to USD 35bn, while the currently smaller Chinese market could grow by nearly 50% a year, overtaking the US market in size by 2023.
- Transformative treatments. We also expect significant developments in transformative treatment technologies. Drugs to treat cancer, for example, are now one of the fastest-growing segments of the drug market, exceeding USD 150bn in sales.
  We anticipate this figure will jump to USD 250bn by 2025, driven by pipeline development and new treatment modalities. Else-

where, the promise of gene editing, genetic therapies for common diseases, regenerative medicine, and 3D bioprinting could improve patient outcomes and spur growth for the firms developing these technologies. 5G technology could even allow robotic surgery to go "remote," making medical expertise available on a bigger scale and from a greater distance.

 Advanced diagnostics. Technologies could also enable enhanced diagnostics, boosting efficiency and improving patient outcomes. Liquid biopsies are under development for cancer detection, while combining connected sensors that gather data at the point of care with artificial intelligence could allow for quicker and more accurate diagnoses.



# Greentech

## Why now?

2020 has been a watershed year for global climate policy. The EU and Japan pledged to go carbon neutral by 2050 and China promised to do the same by 2060. Although these are long-term targets, we expect governments to start acting in 2021 to stimulate job growth and economic activity, aiding the recovery from the pandemic.

# Why could greentech be "The Next Big Thing"?

The green transformation of some of the world's biggest industries could be just beginning. To hit carbon neutral targets, government regulations, investment, and subsidies will be geared toward incentivizing four main goals:

- replacing fossil-fueled power generation and building heating and cooling (37% of CO<sub>2</sub> emissions) with renewable energy;
- swapping fossil-fueled transport (22% of CO<sub>2</sub> emissions) for (battery) electric vehicles;
- switching from industrial applications using gas (19% of CO<sub>2</sub> emissions) to ones powered by green hydrogen; and
- 4. using digital solutions to improve efficiency.

# What will this mean in terms of investment opportunities?

 Renewable energy. Today, only around 8% of global electrical power is generated using solar and wind. According to the IEA, to meet sustainable development goals, that figure would need to rise to around 30% by 2030, and 40%–45% by 2040.

Greenhouse gas emissions concentrated mostly in four sectors

Share of EU-28 greenhouse gas emissions, by sector (in %)



Source: Eurostat, European Environmental Agency, UBS

Greentech creates short- and long-term investment opportunities

	<b>Short term</b> < 1 year	<b>Medium term</b> 1–5 years	Long term > 5 years	
Renewables	Renewable power generation			
4		Storage		
T	Grid			
Batteries	Autos			
			Households	
<u>4</u>		Renewables		
	Semiconductors, chemicals, and oth	ner suppliers		
Hydrogen		Industrial gases		
<b>۲</b>			Fuel cell autos	
		Fuel cell trucks		
		Electrolyser manufacturers		
Digitalization	Smart buildings – building automat	ion		
_لُدرہ	Smart manufacturing, e.g. Industria	I Internet of Things (IIoT), digital twi	ns	

(5.5) -

Source: UBS

Considering that electricity consumption will also increase due to economic growth and increased electric vehicle penetration, this would require 10% CAGR in annual wind and 16% CAGR in annual solar capacity. That shift would favor developers and manufacturers across the renewable value chain.

 Batteries. Currently, just 4% of the newly sold global light-vehicles are electrified (plug-in hybrids and battery-powered). We think that figure will rise to nearly 40% by 2030, at the same time as the number of cars and light trucks is expected to climb only back to 2019 levels. Accordingly, we expect growth in pure battery electric vehicle sales to reach a 30% CAGR, rising from USD 60bn today to USD 800–1,000bn annually by 2030. This development should benefit select automobile companies and their suppliers; battery, semiconductor, and chemical manufacturers; and those supplying auxiliary technology like charging points, of which more than one million will be required in Europe alone.

 Hydrogen. Industrial applications using natural gas cannot be readily electrified due to the significant energy density required. Hydrogen could provide a solution, but producing it requires a lot of electricity, and 95% of global hydrogen is produced today using fossil fuels. The EU's hydrogen strategy aspires to add 500 GW of electrolysers by 2050. This would imply more than 1,000 GW of additional wind and solar capacity – almost four times more than today's EU capacity – and a more than EUR 1tr of additional investment in renewable capacity in Europe alone.

# Significant growth in renewables capacity required in IEA Sustainable Growth Scenario

	Electricity ca	pacity (GW)	CAAGR (%)		
	2019	2030	2040	2019–2030	2019–2040
Total capacity	7,484	11,650	16,550	4.1	3.9
Coal	2,124	1,603	1,053	-2.5	-3.3
Oil	440	276	229	-4.1	-3.1
Natural gas	1,788	2,022	2,121	1.1	0.8
Nuclear	415	488	599	1.5	1.8
Hydro	1,306	1,606	2,029	2.4	2.1
Renewables ex-hydro	1,401	5,431	9,735	13.1	9.7

Projected electricity capacity by source

Source: Based on IEA data from the IEA (2020) World Energy Outlook 2020, www.iea.org/statistics. All rights reserved; as modified by UBS AG



# What does the future look like?

Our flagship report series "Future of..." provides a deep dive into some of the major issues that we think will drive society, the economy, and financial markets in the Decade of Transformation.

#### Future of waste

From food and energy waste to the proliferation of plastic packaging, waste reduction is a key issue for consumers, companies, and the environment. Our report shows how investors can capture long-term returns by investing in waste reduction, waste management, and recycling.

#### **Future of humans**

The application of technology will transform the future of healthcare and education, and underpin changing consumer preferences, particularly in the context of an aging and growing global population.

#### Future of the tech economy

The fourth industrial revolution, where technology meets economic forces, is just beginning. Yet it has already reshaped entire industries. Meanwhile, the COVID-19 pandemic has accelerated key trends including e-commerce and digital data penetration, with ramifications for enabling technologies such as 5G and disruptive technologies like fintech.

### Future of Earth

This report, coming in 2021, will focus on the investments that need to be made to balance planetary sustainability, economic development, corporate profitability, and human needs, while addressing the impact of limited resources and the changing natural environment on our economies, livelihoods, and communities.



# Buy into sustainability

Sustainable investing considers all relevant social and environmental factors in order to better mitigate risks and identify opportunities. Increased government, business, and consumer emphasis on sustainability, combined with a growing investable opportunity set, means sustainable investing is now our preferred approach for investing globally.

Social and environmental issues can impact the economy and financial performance, as illustrated by numerous crises in recent years including wildfires and the coronavirus pandemic. Governments and businesses alike will place an increased emphasis on sustainability over the coming decade and beyond. The EU and Japan have announced pledges to be carbon neutral by 2050, and China by 2060. Meanwhile, plenty of businesses are changing their models to adapt to social and environmental challenges, as well as rapidly evolving consumer preferences.

All this has contributed to our decision to make sustainable investing our preferred approach for investing globally. Systematic consideration of all relevant environmental, social, and governance factors can help investors navigate uncertainty and position for the long term. Having already outperformed conventional investment strategies this year, sustainable strategies across all asset classes will play an even bigger role in a Decade of Transformation, in our view:

- A source of growth. With the world shifting toward sustainability, many of the highest-growth opportunities in the decade ahead are set to be sustainability-related. For example, as we highlight in "The Next Big Thing" (page 41), companies in the greentech space, ranging from battery electric vehicles to renewable energy, should benefit strongly from government regulation, recovery spending, and investment aimed at propelling a transformation from high- to low-carbon economies, and from improved marginal economics.
- Ahead of the curve. The pandemic has accelerated the shift toward a more local and resilient world, which could favor those environmental, social, and governance (ESG) leaders that have already taken steps to reduce their environmental footprint and strengthen their supply chain relationships. Companies that have openly embraced diversity and remote working are likelier to boost employee retention and attract talent in a post-pandemic world. Better ESG data
means investors can increasingly customize portfolios by targeting the thematic or topic exposures that match their sustainability preferences.

- Bonds with a future. Bond investors typically hold onto investments for many years, so sustainability is a critical consideration. Green bonds have shown more defensive characteristics and higher average credit ratings than the corporate investment grade index as a whole, reflecting a lower share of cyclical industrials. Separately, bonds issued by multilateral development banks (MDBs) support developing nations in improving social and physical infrastructure, and social and environmental standards. They currently offer a yield pickup of 15bps over US Treasuries, while having comparable credit ratings and exhibiting similar long-term return behavior.
- Making an impact. Impact investing strategies target measurable positive social and environmental impact alongside marketrate financial returns. Investors have multiple options to add impact to their portfolios, including investing in private equity funds with an explicit sustainable development focus, such as the environment, healthcare, or renewables, or in engagement funds that help public companies achieve key sustainable outcomes, while benefiting commercially.

# Diversify into private markets

With returns on traditional investments likely to be lower in the future, allocations to private equity and private debt may help enhance returns and diversify portfolios. Private markets have historically provided above-average returns following dislocations, and they can offer investors unique access to growth industries.

Returns on traditional assets are likely to be lower in the Decade of Transformation. In this context, private markets may offer an effective way to enhance portfolio return and diversification. The asset class has historically generated higher returns than listed markets, although it requires committing over a longer-term investment horizon. Part of private markets' return is attributed to an illiquidity premium, which is estimated to be 1–3 percentage points per year.

Private equity valuations overall are not stretched, in our view, either on an absolute or a relative basis. Companies in sectors that have demonstrated growth and recession resilience are trading at a premium, but we think this is justifiable. Meanwhile, the enterprise value-to-EBITDA ratio for US private equity-owned companies, based on S&P LCD deal data, is 10.9x, compared with 13.3x for the Russell 2000 small-cap index. We think the current economic environment, one shaped by the negative economic fallout of the pandemic, low interest rates, and rapid technological change, offers a broad range of opportunities for private market managers, including:

 Investing in dislocations. The economic impact of the pandemic has left many businesses facing revenue losses or risk of closure. We expect a sizable supply of stressed, distressed, and default situations, as well as corporate carve-outs, across public and private markets in the coming quarters. Post-recession vintages have generally outperformed pre-recession

# vintages

20 15 10 5 2 years before 1 year before Year of peak 1 year after market peak 1 year after market peak

Vintage year Internal Rate of Return (IRR), in %

CA global buyout growth equity pooled IRR MSCI ACWI PME

Source: Cambridge Associates, UBS, based on data compiled from 1,357 US private equity funds (buyout, growth equity, private equity energy, and mezzanine funds), including fully liquidated partnerships, formed between 1986 and 2016. Above graph references pre/post 2000, 2007 equity peaks. Public market equivalent (PME) is an estimate designed to provide a like-for-like comparison to private market returns.

Performance figures refer to the past and past performance is not a reliable indicator of future performance/results.

- Enhanced yield. With rates at historic lows, investors focused on yield may find it challenging to generate income. For investors willing to take on additional illiquidity and credit risk, private markets can provide enhanced yield opportunities through direct lending, core real estate, or infrastructure strategies.
- Long-term growth. Private equity is a key source of capital for innovative companies and so is well placed to provide investors with access to a broad range of growth thematics including 5G, fintech, healthtech, and greentech. Private equity can sometimes be a more effective means of gaining exposure to growth companies, since pure exposure to earlier-stage businesses can be hard to achieve in public markets.

A growing number of funds are now also available for investors with varying levels of wealth. But investors do need to be tolerant of the additional risks associated with private market investing, which include locking up capital for extended periods of time. Private equity funds may also require investors to commit funds on a predetermined schedule, making cash flow planning critical. Private equity investing typically incurs higher fees and transaction costs than public investments demand.

# How do private markets fit in a portfolio?

Illiquid asset classes, such as private equity and private real estate, can help investors to further enhance long-term growth potential. To fully harness the potential benefits from investing in private markets, it's important to fully diversify across strategies and fund vintages.

Even though private equity is different from listed equity in a number of important ways, it is still fundamentally an equity investment. Therefore, to preserve the risk characteristics of an overall portfolio, we recommend that investors who are buying private equity funds exchange one unit of listed equity for one unit of private equity.

Investors need to ensure that the funds invested, as well as commitments made, are not required for other purposes over the next 10–15 years, since sufficient liquid funds to meet capital calls will be needed. We estimate that private equity allocations, as a percentage of an overall portfolio, of up to 10% for investors with a balanced risk profile or up to 20% for the most risk-tolerant investors are appropriate, in our view.



# 2020 in review

In 2020, choices in one sphere of policymaking had unprecedented consequences in others. Health and economic policies melded, fiscal and monetary authorities moved as one, and humans and machines were forced closer together, even as social distancing pushed people farther apart.

# Here is what happened as a result:

# Growth

For the first time since 2009, the global economy looks set to contract, with GDP estimated to shrink by 3.8%. Policymakers mandated unprecedented mobility restrictions in an attempt to slow the spread of COVID-19, but also approved over USD 12tr in fiscal stimulus measures to help cushion the blow to individuals and businesses.

# Rates

Monetary policy played a supporting role too, with over 30 major central banks cutting rates and some reintroducing quantitative easing measures.

# Bonds

Accommodative monetary policy contributed to record-low yields. The 10-year US Treasury yield hit an all-time low in March, and over USD 17tr of bonds now have negative yields. After widening to 1,087bps and 373bps on liquidity and default concerns, US high yield and US investment grade credit spreads tightened to below 500bps and 130bps, respectively, on the back of a rapid recovery.

# Stocks

We witnessed historically volatile markets and the fastest bear market on record. The combination of monetary and fiscal stimulus helped mitigate the initial shock of the pandemic, and led to a record-breaking market rebound. At the time of writing, year-to-date global stocks have returned 6.3%, the S&P 500 9.7%, the Euro Stoxx 50 fell 6.8%, and the SMI is down 2.4%. Growth stocks have outperformed value stocks by 29ppts, large-caps have outperformed mid-caps by 5ppts, and US defensives have outperformed cyclicals by almost 30 ppts.

#### Currencies

Safe-haven flows supported the US dollar in mid-March, helping it reach multi-year highs versus the euro. But while central banks around the world eased policy in the wake of the crisis, the Fed's easing program was more comprehensive than many other nations'. The US dollar index now trades 10% lower than the March peak.

#### Commodities

WTI oil contracts briefly traded in negative territory in April, reaching as low as USD –40/bbl when investors wanted to avoid taking physical delivery, before rebounding later in the year. Meanwhile, gold was one of the best-performing assets of the year, briefly climbing above USD 2,000/oz at its peak as real rates fell and the US dollar declined.

## Hedge funds

Survey data indicates that hedge funds lived up to investor expectations in 2020 triggering renewed interest in the asset class. Managers successfully mitigated downside risk in March/ April and subsequently took advantage of temporary dislocations to generate returns. Performance across strategies, however, varies. Top performing strategies included tech, healthcare, equity long/short, discretionary macro, and multistrategy funds. Meanwhile CTAs, structured credit, and other event-driven funds lagged other strategies.

Throughout the year we held a pro-risk stance, looking for opportunities across credit and equities as they arose, given our view that fiscal and monetary policy would prove sufficient to prevent the health and economic crisis tipping into a financial one. We also sought exposure to secular themes, including technology, sustainability, and healthcare, which we view as long-term beneficiaries as we transition to a more indebted, more local, and more digital world.

# Asset class forecasts

# Commodities

	Spot	Jun 21	Dec 21
Brent crude oil (USD/bbl)	44.4	52.0	60.0
WTI crude oil (USD/bbl)	42.2	50.0	57.0
Gold (USD/oz)	1,875	1,950	1,850
Silver (USD/oz)	24.2	25.0	23.0
Copper (USD/mt)	6,932	7,000	6,700

Source: UBS, as of 11 November 2020

# Currencies

## **Developed markets**

	Spot	Jun 21	Dec 21	PPP
EURUSD	1.18	1.21	1.23	1.29
USDJPY	106	105	107	76
GBPUSD	1.32	1.34	1.37	1.54
USDCHF	0.92	0.89	0.89	0.93
EURCHF	1.08	1.09	1.10	1.19
EURGBP	0.89	0.90	0.90	0.83
AUDUSD	0.73	0.75	0.77	0.66
USDCAD	1.31	1.26	1.24	1.21
EURSEK	10.18	10.20	10.10	9.66
EURNOK	10.68	10.40	10.30	10.83

Source: UBS, as of 11 November 2020

## **Emerging markets**

	Spot	Jun 21	Dec 21
USDCNY	6.6	6.3	6.3
USDIDR	14,085	13,800	13,800
USDINR	74.4	71.0	70.0
USDKRW	1,110	1,100	1,060
USDRUB	76	65	65
USDTRY	7.8	7.3	7.9
USDBRL	5.4	5.0	5.0
USDMXN	20.6	21.0	21.5

Source: UBS, as of 11 November 2020

# Rates and bonds

	Base rates			10-у	10-year yields (%)			
	Current	2021E	2022E	Spot	Jun 21	Dec 21		
USD	0.13	0.09	0.09	0.96	0.85	0.90		
EUR	-0.50	-0.50	-0.50	-0.49	-0.40	-0.40		
CHF	-0.75	-0.75	-0.75	-0.43	-0.50	-0.50		
GBP	0.10	0.10	0.10	0.40	0.30	0.40		
JPY	-0.03	-0.10	-0.10	0.05	0.00	0.00		

Source: UBS, as of 11 November 2020

# Economic forecasts

	GDP growth (%)			Inflation (%)		
	2019	2020E	2021E	2019	2020E	2021E
Americas						
US	2.2	-3.6	3.6	1.8	1.2	1.1
Brazil	1.1	-4.5	3.0	3.7	3.1	4.3
Canada	1.6	-5.4	4.3	1.9	0.6	1.3
Europe						
Eurozone	1.3	-7.4	5.2	1.2	0.2	1.0
– Germany	0.6	-5.8	4.1	1.4	0.4	1.0
– France	1.5	-9.6	6.8	1.3	0.5	0.8
– Italy	0.3	-8.8	5.8	0.6	-0.2	0.3
– Spain	2.0	-11.4	6.0	0.8	-0.4	0.6
UK	1.3	-11.3	5.0	1.8	0.8	1.5
Russia	1.3	-3.5	2.7	4.5	3.3	3.9
Switzerland	1.1	-4.5	3.2	0.4	-0.7	0.2
Asia						
China	6.1	2.1	7.5	2.9	2.6	1.8
Japan	0.7	-5.2	3.2	0.5	0.0	-0.1
India	4.2	-10.5	10.0	4.8	5.9	4.0
South Korea	2.0	-2.0	4.8	0.4	0.7	1.4
Developed markets	1.6	-5.4	4.2	1.4	0.7	1.0
Emerging markets	4.0	-2.8	6.7	4.4	4.0	3.6
World	3.0	-3.8	5.6	3.1	2.6	2.5

E= Estimate

Source: UBS, as of 11 November 2020

# Impressum

# Year Ahead 2021 – UBS House View

This report reflects the insights and perspective from the entire CIO team across the globe and demonstrates the intellectual leadership of UBS.

**Global Chief Investment Officer** 

Mark Haefele

**Editor in Chief** Kiran Ganesh

Supervisory analyst Mark Boehme

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Contact ubs.com/cio

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