Tennessee School Boards Association
TSBA OPEB Trust Meeting
Doubletree Downtown Nashville Hotel Robertson Room
Monday, February 17, 2020

The TSBA OPEB Trustees met on Monday, February 17, 2020. The following members were present: .

Mark Hansen called the meeting to order at and welcomed everyone.

{{Actions: Agenda Item Actions}} {{Discussion: Agenda Item Discussion}}{{AgendaItemEnd}}
The meeting adjourned at

Respectfully submitted,

Mark Hansen, Chairman	**Tammy Grissom, OPEB Trust Administrator**

OPEB Trust Meeting
Doubletree Downtown Nashville Hotel
Robertson Room
February 17, 2020

AGENDA

1:30 p.m.	Call to Order	Mark Hansen, Chairman
1:31 p.m.	Approval of Agenda	
1:32 p.m.	Approval of November 16, 2019 Minutes (Tab 1)	
1:33 p.m.	Approval of 6 month Financial Statements (December 31, 2019) (Tab 2)	
1:35 p.m.	Review of Investment Policy (Tab 3)	
1:45 p.m.	Review and Approve Changes to the Following Policies (Tab 4): • 1010 – Board of Trustees' Meetings • 3080 – Reimbursement for Trustees	
1:55 p.m.	Review Investment Report (Tab 5)	Chris Sigmund, Morgan Stanley
2:25 p.m.	Other Business	
2:30 p.m.	Adjourn	

Tennessee School Boards Association
OPEB Trust Meeting
Gaylord Opryland Resort and Convention Center
Magnolia Boardroom B

The TSBA OPEB Trustees met on Saturday, November 16, 2019. The following members were present: **Mark Hansen**, Collierville; **Scott McCormick**, Shelby County; **Dale Viox**, Arlington; **Kevin Long**, Johnson County; **Jim Campbell**, Jackson-Madison County; **Kathy Hall**, Johnson City; and **Tammy Grissom**, Trust Administrator. TSBA staff member present was **Emily Warren**. Also in attendance was **Lee Burklow** with Morgan Stanley and **Erica Saeger** with Crosslin.

Mark Hansen called the meeting to order at 11:57 a.m. and welcomed everyone.

HALL/LONG: Motion to approve the agenda. MOTION CARRIED.

VIOX/LONG: Motion to approve February 18, 2019 Minutes. MOTION CARRIED.

LONG/HALL: Motion to accept the 3-month Financial Statements (September 30, 2019). MOTION CARRIED.

MCCORMICK/ VIOX: Motion to approve the June 30, 2019 OPEB Trust audit. MOTION CARRIED.

Lee Burklow with Morgan Stanley reported on the financial stability of the OPEB Trust and on the performance of the Trust's investments in the current economy. He stated that the Trust is performing within the fiduciary guidelines as set forth by the investment policy and that the rate of return is extremely good for the year. He went into detail as to how the economy is in a good spot and discussed the current trend of the market.

LONG/HALL: Motion to re-elect Mark Hansen as Chairman and Dale Viox as Vice-Chairman. MOTION CARRIED

The meeting adjourned at 12:32 p.m.

Respectfully submitted,

Mark Hansen, Chairman	**Tammy Grissom, OPEB Trust Administrator**

TSBA OPEB Trust
Balance Sheet
As of December 31, 2019

		Dec 31, 19
ASSETS		
Current Assets		
Checking/Savings		
1000-00 · Suntrust Operating Account		5,651.90
Total Checking/Savings		5,651.90
Other Current Assets		
1300-00 · Investments		
1300-10 · Hickman County Investments	2,328,197.47	
1300-20 · Johnson County Investments	1,123,824.64	
1300-30 · Shelby County Investments	86,062,850.65	
1300-50 · Jackson-Madison Investments	408,105.51	
1300-60 · Arlington Investments	2,680,240.14	
1300-70 · Bartlett Investments	3,061,729.50	
1300-80 · Collierville Investments	1,453,001.86	
1300-90 · Lakeland Investments	1,644,150.82	
1300-91 · Millington Investments	313,501.86	
Total 1300-00 · Investments		99,075,602.45
Total Other Current Assets		99,075,602.45
Total Current Assets		99,081,254.35
TOTAL ASSETS		**99,081,254.35**
LIABILITIES & EQUITY		
Equity		
3200-00 · Unrestricted Net Assets		91,894,918.91
Net Income		7,186,335.44
Total Equity		99,081,254.35
TOTAL LIABILITIES & EQUITY		**99,081,254.35**

TSBA OPEB Trust
Profit & Loss
July through December 2019

	Jul - Dec 19	
Income		
4300-00 · Contributions		
4300-20 · Contributions - Johnson County	25,000.00	
4300-50 · Contributions - Jackson-Madison	25,000.00	
4300-70 · Contributions - Bartlett	500,000.00	
4300-90 · Contributions - Lakeland	475,000.00	
Total 4300-00 · Contributions		1,025,000.00
4400-00 · Unrealized Gain/Loss		
4400-10 · Unrealized Gain/Loss - Hickman	87,276.44	
4400-20 · Unrealized Gain/Loss - Johnson	41,858.71	
4400-30 · Unrealized Gain/Loss - Shelby	3,226,379.58	
4400-50 · Unrealized Gain/Loss - JMadison	15,899.30	
4400-60 · Unrealized Gain/Loss - Arlingto	100,422.78	
4400-70 · Unrealized Gain/Loss - Bartlett	110,749.16	
4400-80 · Unrealized Gain/Loss - Collierv	54,516.22	
4400-90 · Unrealized Gain/Loss - Lakeland	45,017.58	
4400-91 · Unrealized Gain/Loss - Millingt	11,763.62	
Total 4400-00 · Unrealized Gain/Loss		3,693,883.39
4500-00 · Interest, Dividends&Capital Gn		
4500-10 · Interest, Div., & CG - Hickman	62,083.91	
4500-20 · Interest, Div., & CG - Johnson	29,760.98	
4500-30 · Interest, Div., & CG - Shelby	2,293,931.05	
4500-50 · Interest, Div., & CG - JMadison	10,872.17	
4500-60 · Interest, Div., & CG - Arlingto	71,496.97	
4500-70 · Interest, Div., & CG - Bartlett	81,089.57	
4500-80 · Interest, Div., & CG - Collierv	38,678.68	
4500-90 · Interest, Div., & CG - Lakeland	32,114.81	
4500-91 · Interest, Div., & CG - Millingt	8,360.37	
Total 4500-00 · Interest, Dividends&Capital Gn		2,628,388.51
4800-00 · Interest Income		0.58
Total Income		7,347,272.48
Expense		
6400-00 · Administrative Fee		
6400-10 · Administrative Fee - Hickman	2,727.43	
6400-20 · Administrative Fee - Johnson	1,301.40	
6400-30 · Administrative Fee - Shelby	63,908.18	
6400-50 · Administrative Fee -J. Madison	462.00	
6400-60 · Administrative Fee - Arlington	3,140.20	
6400-70 · Administrative Fee - Bartlett	3,277.79	
6400-80 · Administrative Fee - Colliervil	1,702.25	
6400-90 · Administrative Fee - Lakeland	1,367.08	
6400-91 · Administrative Fee - Millington	367.25	
Total 6400-00 · Administrative Fee		78,253.58
6500-00 · Investment Advisor Fees		
6500-10 · Investment Advisor Fees - Hickm	1,950.44	
6500-20 · Investment Advisor Fees - Johns	939.82	
6500-30 · Investment Advisor Fees - Shelb	72,136.58	
6500-50 · Investment Advisor Fees - JMadi	335.76	
6500-60 · Investment Advisor Fees - Arlin	2,253.96	
6500-70 · Investment Advisor Fees - Bartl	2,572.20	
6500-80 · Investment Advisor Fees - Colli	1,218.55	

TSBA OPEB Trust
Profit & Loss
July through December 2019

	Jul - Dec 19
6500-90 · Investment Advisor Fees - Lakel	1,013.53
6500-91 · Investment Advisor Fees - Milli	262.62
Total 6500-00 · Investment Advisor Fees	82,683.46
Total Expense	160,937.04
Net Income	**7,186,335.44**

TSBA OPEB Trust

Descriptor Term:	Descriptor Code:	Revised:
Investment	**3060**	**02/12/18**
	Rescinds:	Previous Issued:
	3060	**04/29/15**

OBJECTIVES AND PERFORMANCE GOALS

The Trust's overall investment objective is to achieve a favorable total rate of return consistent with prudent financial management. The goal is to meet stated financial needs of the Trust while maintaining or increasing the real inflation adjusted value of the permanent funds for which the Trust has been entrusted.

The performance of the Trust's financial assets and its investment managers will be monitored on a quarterly basis. Portfolio asset allocation shall be reviewed at least annually. Individual managers will be expected to exceed the performance of relevant market index benchmarks over full market cycles. Risk-adjusted performance will also be measured against a peer group of similar managers and evaluated over three (3) and five (5) year annualized time periods.

BOARD OF TRUSTEES

The Board of Trustees is responsible for overseeing the investments assets of the Trust and for discharging its duties solely in the best interest of the Trust. These duties shall be discharged with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. In addition, the Board of Trustees will conduct a thorough review of any person or entity providing investment services to the Trust to avoid any potential conflict of interest situations.

FINANCE COMMITTEE

The Board of Trustees will act as the Finance Committee. The duties of the Finance Committee include, but are not limited to, the following:

1. Evaluating and selecting an investment consultant;

2. Developing investment objectives and performance measurement standards which are consistent with the financial needs of the Trust and individual funds;

3. Periodically reviewing the policy guidelines, and if needed, making changes after consideration of the advice and recommendations of the investment consultant and others;

4. Determining an asset allocation strategy and investment management structure designed to meet the Trust's investment objectives;

5. Evaluating and selecting investment managers;

6. Communicating investment objectives, portfolio guidelines, and performance standards to the investment managers;

7. Holding biannually meetings for the review of performance reports and financial statements and informational conference calls as needed;

8. Deploying existing assets and newly contributed funds to the investment managers;

9. Reviewing and evaluating investment results in the context of predetermined performance standards;

10. Ensuring that investment managers are in compliance with all portfolio guidelines and restrictions, and that undo risk is not being undertaken to achieve objectives;

11. Taking necessary corrective action when investment managers fail to achieve expected results; and

12. Engage in RFP process for all contracted services every three (3) years.

CUSTODIAN

Subject to approval by the Board of Trustees, the Finance Committee is authorized to hire a custodian to safekeep the Trust's assets. The duties of the custodian include, but are not limited to, the following:

1. Providing all normal custodial functions including security safekeeping, collection of income, settlement of trades, collection of proceeds of maturing securities, distribution of income, and daily investment of uninvested cash;

2. Providing reports detailing investment holdings and account transitions monthly and

an annual report summarizing the following to be submitted to the Finance Committee within 45 days following each fiscal year end;

3. The reports will include the following:

   a. Statement of all assets on hand;
   b. Statement of all assets received representing contributions to the account; and
   c. Statement of all sales, redemptions, maturities, and principal payments;

4. Establishing and maintaining directed account relationships with each investment manager; and

5. Preparing accounting reports as requested.

INVESTMENT MANAGEMENT

The Board of Trustees is authorized to engage the services of investment managers, as defined under the Investment Advisors Act of 1940, and other investment professionals to provide the specialized management necessary to meet the Trust's investment objectives and guidelines. Accordingly, the Board of Trustees requires the investment managers to adhere to the "prudent man rule" under such federal or state laws as may be applicable or which may be applicable in the future of the investment of Trust assets.

DELEGATION OF AUTHORITY

Investment managers retained by the Board of Trustees will be held responsible for making all investment decisions regarding the assets under their direction. Each investment manager will be provided with a copy of these investment policy objectives and guidelines. In addition, each manager will be provided with any additional specific goals and objectives that are applicable to the particular managed account that the manager is responsible for. Managers will be required to observe and operate within all guidelines specified by the Trust.

CAPITAL REQUIREMENTS

1. The Board of Trustees is directed to maintain an Operating Reserve balance which may be custodied in one or more accounts and must maintain a balance that is appropriate to meet the annual distribution needs of the Trust. Such funds may only be invested in insured money market instruments or in investments whose principal is guaranteed by the full faith and credit of the United States Government or one of its agencies. Irrespective

of the type of investment selected, funds may not be invested in any security with a maturity greater than one (1) year. The Board of Trustees is permitted to maintain all Trust funds in Operating Reserve investments until the Trust fund balance reaches a level where it is both economically prudent and fiscally appropriate to invest funds pursuant to paragraph 3 of this Section.

2. The Board of Trustees may establish an account or accounts whose balances are restricted to a particular use or program. Such accounts may be invested according to the guidelines established in this Investment Policy Statement or restricted to more conservative allocations pursuant to the timing of the need for the funds. Restricted fund balances may be expended at the direction of the Board of Trustees so long as such direction is not in conflict with agreements or restrictions attached to the receipt of such funds.

3. All remaining funds owned or controlled by the Board of Trustees shall be considered Capital Reserves. At the end of each operating year, any and all reserves held in accounts designed as Operating Reserves which are in excess of the required balance for the upcoming operating year shall be reallocated to the Capital Reserves account or accounts. All funds held in Capital Reserve accounts shall be invested pursuant to the guidelines established in this document.

INVESTMENT GUIDELINES

The Trust's investment policy objectives and guidelines will be reviewed and revised as needed from time to time by the Finance Committee. In conducting the review, the committee will consider applicable advice and recommendations of the Trust's staff, attorneys, accountants, investment managers, consultants, or other professionals retained to render advice to the Trust. All modifications shall be in writing and shall be approved by the Board of Trustees.

Asset Allocation – Investment Philosophy

General Policy

The Trust's investment philosophy is that assets should be allocated with the goal of producing the highest total return consistent with prudent financial management. Unless otherwise specified by individual fund objectives, this philosophy should be adhered to within the constraints of the following asset allocation ranges:

	Maximum allocation	Minimum allocation
Equity Investments	70%	35%
Fixed Income Investments	65%	20%
Cash & Equivalents	35%	0%
Alternative Investments – 40 Act Funds	15%	0%
Hedging Strategies		
Commodities ETF’s		
Managed Futures Funds		

Exceptions for Individual Funds

In cases where individual fund objectives require an exception to the above asset allocation ranges, written statements detailing the policy for each specific fund will be provided as Supplements to this Investment Policy.

Asset Allocation Targets

From time to time, the Finance Committee will determine specific asset allocation targets that it feels are best suited for accomplishing the above total return objective. These specific asset allocation targets will be communicated to individual investment managers in writing, and within a reasonable time frame, managers are expected to reallocate assets in order to comply with the target ranges established by the Committee. In the absence of specific asset allocation targets from the Trust, individual managers will have the direct responsibility for settling and maintaining an asset mix that they feel will best accomplish the Trust’s total return objective. At all times and in all cases, however, the above maximum and minimum limits, or where applicable, specific individual fund maximum and minimum limits are to be adhered to.

Proxy Voting

The Board of Trustees recognize that proxy voting is a fiduciary responsibility and require that proxies be voted based on those factors which would enhance the value of the Trust’s investments. The Board of Trustees delegates their authority to vote proxies to the investment managers employed by the Trust and instruct the managers to maintain accurate voting records and to vote proxies for the exclusive benefit of the Trust.

Types of Assets

In order to provide for adequate investment diversification across a broad range of assets, the following types of assets are approved for investment:

U.S. Common Stock
Non U.S. Common Stock
U.S. Preferred Stock
Non U.S. Preferred Stock
U.S. Government and Agency Securities
Non U.S. Government and Agency Securities
Corporate Bonds with a minimum BAA rating or the equivalent Municipal Debt
Convertible Securities
Commercial Paper
Money Market Funds
Mutual Funds (open and closed-end)
Exchange Traded Funds
Passive Index Funds
Commodities Exchange Traded Funds
1940 Act Alternative Funds – Hedging Strategies
1940 Act Managed Futures Funds
Certificate of Deposits

Additional Criteria

All fixed income and preferred stock issues must be investment grade and dollar denominated. Mutual fund investment must have investment objectives, rules, and regulations that are consistent with the Trust's Investment Policy. All assets selected for the Trust must have a readily ascertainable market value and must be readily marketable.

Prohibited Investments

Investment managers are prohibited from using the following assets and/or transactions:

Uncovered Options – Puts or Calls
Short Selling
Restricted Stock
Other Derivative Securities not specifically approved above

Cash & Cash Equivalents

All cash, wherever and whenever possible, should be invested in interest bearing instruments. These investments should have stable pricing and instant liquidity.

Diversification of Equity Securities

The Board of Trustees believes it necessary and desirable that equity securities held by the Trust represent a diversified portfolio. In this regard, the Finance Committee and Investment Consultant will select and continue to monitor equity investment managers that have diversification and risk management strategies that are consistent with this focus.

Investments Markets – Equities

In order to broaden the investment opportunities for the investment manager(s) to achieve the objectives set forth herein, the managers are permitted to invest in equity securities listed on the New York Stock Exchange, the American Stock Exchange, principal regional exchanges, and in over-the-counter securities for which there is a strong market providing ready liquidity of the specific security.

Diversification of Fixed Income Securities

The Board of Trustees believes it necessary and desirable that fixed income securities held by the Trust represent a diversified portfolio. In this regard, the Finance Committee and Investment Consultant will select and continue to monitor fixed income investment managers that have diversification and risk management strategies that are consistent with this focus.

Investment Markets – Fixed Income

In order to broaden the investment opportunities for the investment manager(s) to achieve the objectives set forth herein, the managers are permitted to invest in fixed income issues offered in both primary and secondary markets. Fixed income securities may include bonds, notes and pass-through securities issued or guaranteed by the U.S. Government or its agencies, corporate bonds, notes, debentures, or asset-backed securities. Should the rating on a debt or preferred stock security purchased subsequently fall below the minimum BAA (or equivalent) rating, a sale of the issue shall be required except as warranted by investment considerations.

TSBA OPEB Trust

Descriptor Term:	Descriptor Code:	Revised:
Board of Trustees' Meetings	**1010**	**02/18/19**
	Rescinds:	Previous Issued:
	1010	**11/04/17**

REGULAR MEETINGS OF TRUSTEES

Regular meetings of the Board of Trustees shall be held biannually. Any item of business may be considered at a regular meeting. The time, date, and location of meetings of the Board shall be determined by the Board.

SPECIAL MEETINGS OF TRUSTEES

Special meetings of the Board of Trustees may be called at any time by the Chairman or any three (3) of the Trustees upon giving ten (10) days written notice to all Trustees. An emergency meeting may be called with less than ten (10) days written notice provided that all Trustees agree to such a meeting. An agenda specifying the subject of any special meeting shall accompany such notice and only business included on that agenda may be transacted.

NOTICE OF MEETINGS

All meetings of the Board shall be conducted in the manner required by law. In the event of any conflict between any provision of this policy and any provision of any applicable law, this policy shall be deemed modified to the extent necessary to comply with such law. In addition to any notices of meetings required to be served under this policy, the Administrator shall cause to be published any schedule or notice of meeting of the Board required by law. Such publication requirement shall be deemed met by announcement on the TSBA website.

REQUIRED VOTE

Any action by the Trustees may be taken at a duly constituted meeting. A majority of the Trustees present at a duly constituted meeting shall be required for action.

OPEN MEETINGS

All meetings of the Board of Trustees and its committees will be held in accordance with the Tennessee Open Meetings Act.[1]

ELECTRONIC ATTENDANCE

Absent Trustees may ~~attend~~ participate in a regular or special meeting by electronic means of communication. ~~if the Trustee is absent because of work outside of the state, a family emergency, or the Trustee's military service. If a Trustee is absent due to military service, he/she may participate electronically as often as he/she is able to do so. However, a Trustee may not participate electronically more than one (1) time per year for absences due to work and/or family emergencies.~~

The following requirements apply to all electronic attendance ~~regardless of the reason for the Trustee's absence~~:

1. A quorum of the Board shall be physically present at the meeting in order for any Trustee to attend electronically;

2. The responsibility for the connection lies with the Trustee wishing to participate electronically. No more than two (2) attempts to connect shall be made unless the Board chooses to make additional attempts;

3. The Trustee wishing to participate must give the Chairman ~~and~~ or the Trust Administrator at least five (5) days' notice prior to the meeting of the Trustee's desire to participate electronically; and

4. All votes taken during a meeting where a Trustee is attending electronically shall be by roll call vote.

Legal References

1. TCA 8-44-101 *et seq.*

TSBA OPEB Trust

Descriptor Term:	Descriptor Code:	Revised:
Reimbursement for Trustees	**3080**	**02/20/17**
	Rescinds:	Previous Issued:
	3080	**11/16/09**

Trustees shall be reimbursed for expenses incurred in attending Trust meetings and any special meetings called by the Trust Chairman in accordance with Trust travel regulations.

EXPENSES OF TRUSTEES

No Trustee shall receive any salary for services from the Trust. Any Trustee or other officer of the Trust may submit to the Trust for approval and be reimbursed for expenses incurred in the pursuit of his position. Reimbursement for such expenses shall be in accordance with procedures and policies established by the Board of Trustees ~~consistent with the terms of the Agreement~~.

Performance Review - February 2020

Prepared on February 06, 2020 for:

TSBA OPEB TRUST

TAMMY GRISSOM TTEE
TSBA OPEB TRUST U/T/A DTD
11/05/2012
525 BRICK CHURCH PARK DRIVE
NASHVILLE TN 37207-3219

The Cap IV Group

Lee Burklow
Financial Advisor
First Vice President
Tel: +1 615 298-6556
Lee.Burklow@morganstanley.com

Robert Gordon
Financial Advisor
First Vice President
Tel: +1 615 298-6558
Robert.Gordon@morganstanley.com

Christopher Sigmund
Financial Advisor
Certified Investment Management Analyst (SM)
Tel: +1 615 298-6557
Chris.Sigmund@morganstanley.com

Your Branch:
3102 WEST END AVE STE 200
NASHVILLE, TN 37203

TABLE OF CONTENTS

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.

ACCOUNT(S) INCLUDED IN THIS REPORT

Morgan Stanley

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD — Reporting Currency: USD

MORGAN STANLEY WEALTH MANAGEMENT

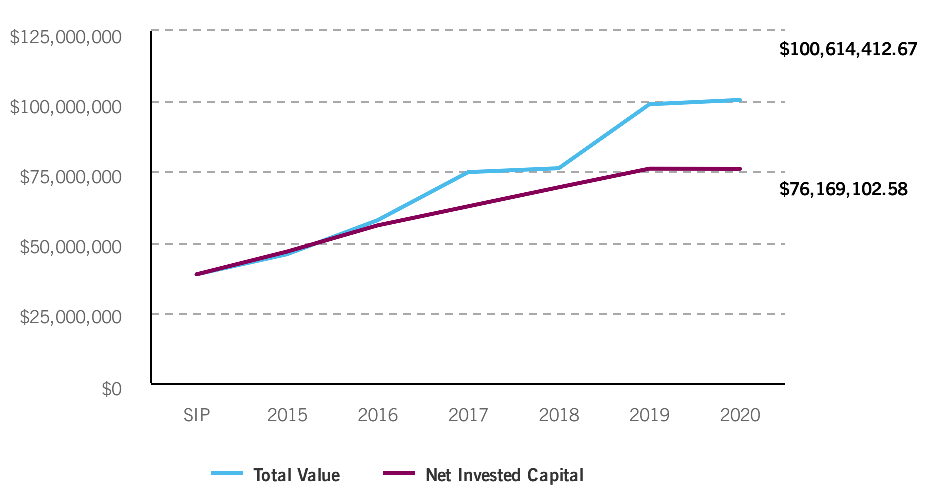
Account Name and Address	Advisory/ Brokerage	Account Number	Date Opened	Performance (%) Inception - 02/05/20	Total Value ($) 02/05/20	% of Portfolio 02/05/20
ARLINGTON CITY BOE 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX901	06/17/15	7.02	2,721,556.99	2.71
BARTLETT CITY BOE 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX902	06/17/15	7.16	3,108,747.23	3.09
COLLIERVILLE CITY BOE 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX903	06/17/15	7.04	1,475,291.84	1.47
HICKMAN CO. 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX866	06/03/15	7.07	2,363,883.08	2.35
JACKSON-MADISON 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX864	06/03/15	7.08	414,354.51	0.41
JOHNSON CO. 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX869	06/03/15	7.08	1,141,032.86	1.13
LAKELAND CITY BOE 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX900	06/17/15	6.87	1,669,460.89	1.66
MILLINGTON 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX583	07/05/16	9.11	318,316.29	0.32
SHELBY CO. 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX863	06/03/15	6.97	87,401,811.78	86.87
TRUST FEE ACCOUNT 525 BRICK CHURCH PARK DRIVE NASHVILLE	Brokerage	471-XXX947	06/26/15	-	0.20	0.00
Morgan Stanley Wealth Management Total					**100,614,455.67**	**100.00**
Total Portfolio					**100,614,455.67**	**100.00**

INVESTMENT SUMMARY DOLLAR WEIGHTED RETURNS

Morgan Stanley

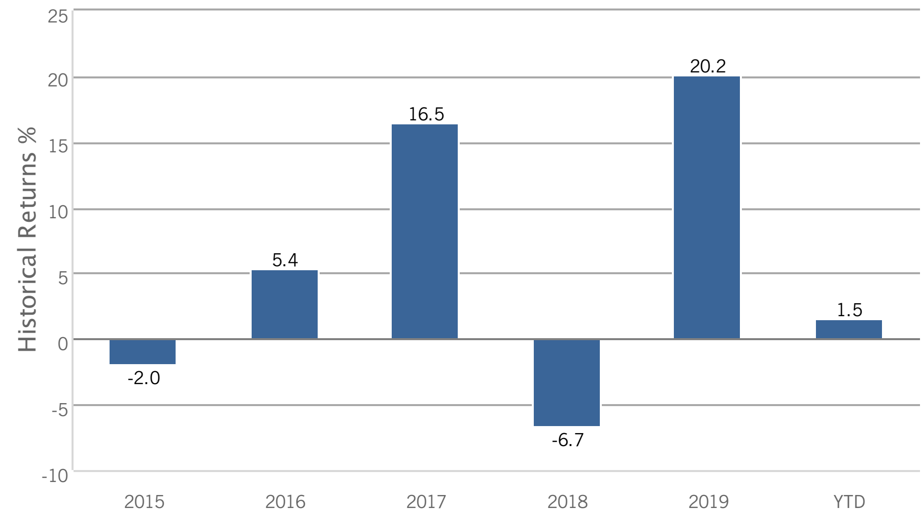
TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD — As of February 05, 2020 | Reporting Currency: USD

TOTAL VALUE VS. NET INVESTED CAPITAL



Does not include Performance Ineligible Assets.

DOLLAR-WEIGHTED PERIOD RETURN % (NET OF FEES)

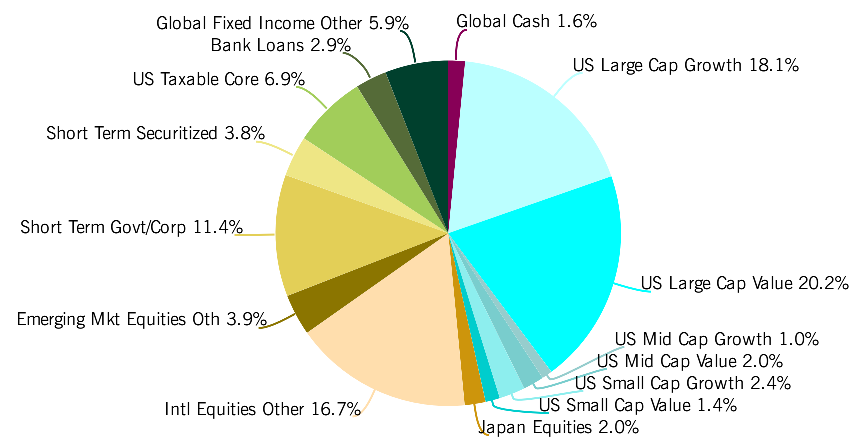


Does not include Performance Ineligible Assets.

DOLLAR-WEIGHTED RETURN % (NET OF FEES)

	Previous Year ($) 12/31/18-12/31/19	Year to Date ($) 12/31/19-02/05/20	Performance Inception ($) 06/09/15-02/05/20
Beginning Total Value	**76,362,265**	**99,075,604**	**38,680,482**
Net Contributions/Withdrawals	6,615,783	-40,751	37,488,620
Investment Earnings	16,097,557	1,579,559	24,445,310
Ending Total Value	**99,075,604**	**100,614,413**	**100,614,413**
DOLLAR WEIGHTED RATE OF RETURN (%) (Annualized for periods over 12 months)			
Return % (Net of Fees)	20.23	1.59	7.55
90-Day T-Bills	2.25	0.16	1.16

ASSET ALLOCATION



Fully Invested With a Watchful Eye Toward Risks and Opportunities

As of January 8, 2020

- **Risk markets begin the year where they left off.** We think strong 4Q rally in risk assets is due to four things: 1) Fed, ECB and BOJ expanding balance sheets aggressively; 2) progress on Brexit and trade; 3) early indications that the global economy is troughing, most notably PMIs in China and Europe; and 4) valuations have rebounded sharply from the very cheap levels last summer.

- **4Q breakout in global equity markets suggests secular bull market has begun next leg.** While equity markets are now pricing a strong rebound in growth, we think the rally can continue as long as the central banks' balance sheet expansion persists at current rates of $100 billion per month. Valuations look "fair" assuming volatility stays low and could even go higher.

- **Inflation may not be that far away**. With central banks seemingly unafraid of inflation and fiscal policy on the rise, inflation risks are growing. This is good for nominal GDP growth and in line with our global reflation theme, but many portfolios may not be prepared for it. Our portfolios are more aligned with a world of eventual rising inflation with overweight to US value and international stocks. We will look to hedge our portfolios from rising inflation during 2020 as opportunities arise.

- **The US will likely lag the global recovery.** International economies are more levered to global trade improving while the US is still dealing with the fading fiscal stimulus enacted in 2018 and corporate margin pressures. Capital spending has disappointed and is unlikely to bounce back much as US corporates delever until earnings growth returns. We forecast just 3 percent EPS growth for the S&P 500 in 2020. Meanwhile, international earnings growth looks better next year relative to the US, particularly in Japan, Brazil, and South Korea.

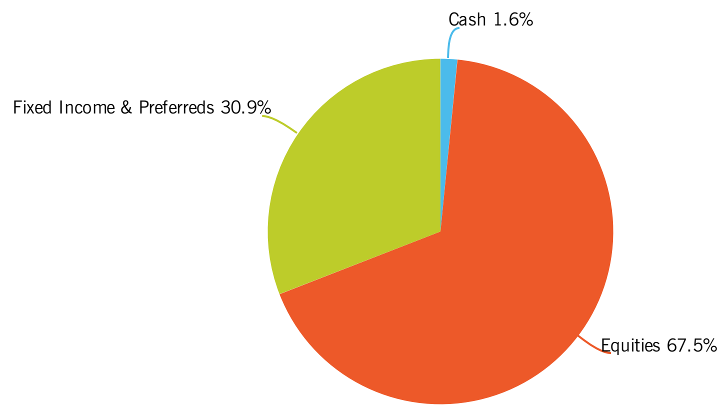
- **Our view has been consistent over the past year to favor quality growth at a reasonable price and Value.** Our only underweights within equities are in US growth and small/mid caps. Japan and Europe are our favored regions given their greater leverage to global growth recovery and trade deal. We also like select EM. We remain underweight credit.

- **US overweights:** Utilities, Staples & Financials. **US underweights**: Tech & Consumer Discretionary. We still prefer large cap to small and value to growth. We have been expecting a rotation from defensives to cyclicals once the Fed got ahead of the slowdown. That may have begun last month but is likely ahead of itself if rates are topping again. **Avoid profitless growth stocks and maintain some bond proxies for potential 1H growth disappointments.**

Source: Morgan Stanley & Co. Research

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD As of February 05, 2020 | Reporting Currency: USD

ASSET ALLOCATION - ASSET CLASS



ASSET ALLOCATION

	Total Value ($) 02/05/2020	% of Portfolio 02/05/2020
Cash	1,574,801.87	1.6
Equities	67,949,532.27	67.5
Fixed Income & Preferreds	31,090,121.53	30.9
TOTAL PORTFOLIO	**100,614,455.67**	**100.0**

EQUITIES ASSET ALLOCATION

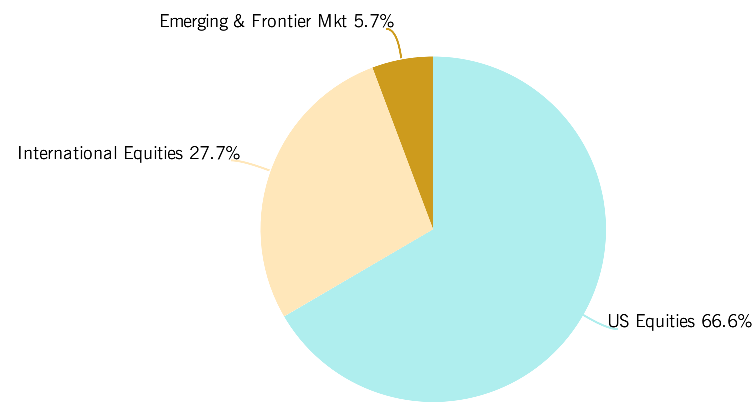
TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD

As of February 05, 2020 | Reporting Currency: USD

TOP EQUITY POSITIONS BASED ON TOTAL VALUE

SECURITY DESCRIPTION	Total Value ($) 02/05/2020	% of Equities 02/05/2020
OAKMARK FUND ADVISOR	7,000,999.61	10.3
PGIM JENNISON GROWTH Z	6,409,206.64	9.4
ISHARES CORE S&P U.S. GROWTH	6,248,285.40	9.2
ISHARES CORE S&P U.S. VALUE	5,910,745.05	8.7
AMERICAN EUROPACIFIC GRW F2	5,886,011.51	8.7
ISHARES CORE MSCI EAFE ETF	5,884,028.72	8.7
JOHN HANCOCK DISPLND VAL INST	5,863,251.52	8.6
THORNBURG INTL GROWTH I	5,075,112.47	7.5
VANGUARD INDEX FDS S&P 500 ETF	4,077,592.20	6.0
LAZARD EMRG MKT EQ BLEND INST	2,933,473.24	4.3
Top Equity Positions	**55,288,706.36**	**81.4**
Other Equity Positions	**12,660,825.91**	**18.6**
Total Equities	**67,949,532.27**	**100.0**

ASSET ALLOCATION - EQUITIES



ASSET ALLOCATION - EQUITIES

	% of Equities 02/05/2020	Total Value ($) 02/05/2020	% of Portfolio 02/05/2020
US Equities	**66.6**	**45,248,794.34**	**45.0**
US Large Cap Growth	26.8	18,196,787.95	18.1
US Large Cap Value	29.9	20,285,515.11	20.2
US Mid Cap Growth	1.5	995,761.22	1.0
US Mid Cap Value	2.9	1,974,493.22	2.0
US Small Cap Growth	3.6	2,436,359.83	2.4
US Small Cap Value	2.0	1,359,877.03	1.4
International Equities	**27.7**	**18,810,382.17**	**18.7**
Japan Equities	2.9	1,965,229.47	2.0
Intl Equities Other	24.8	16,845,152.70	16.7
Emerging & Frontier Mkt	**5.7**	**3,890,355.76**	**3.9**
Emerging Mkt Equities Oth	5.7	3,890,355.76	3.9
TOTAL EQUITIES	**100.0**	**67,949,532.27**	**67.5**

FIXED INCOME & PREFERREDS ASSET ALLOCATION

Morgan Stanley

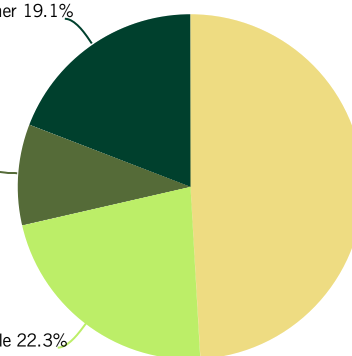
TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD

As of February 05, 2020 | Reporting Currency: USD

TOP FIXED INCOME & PREFERRED POSITIONS BASED ON TOTAL VALUE

SECURITY DESCRIPTION	Total Value ($) 02/05/2020	% of Fixed Income & Preferreds 02/05/2020
PGIM SHORT-TERM CORP BOND Z	15,262,479.90	49.1
PIONEER BOND Y	6,939,028.84	22.3
NUVEEN STRATEGIC INCOME INST	5,948,783.40	19.1
PUTNAM FLOATING RATE INC Y	2,939,829.39	9.5
Top Fixed Income & Preferred Positions	**31,090,121.53**	**100.0**
Other Fixed Income & Preferred Positions	**-**	**-**
Total Fixed Income & Preferred	**31,090,121.53**	**100.0**

ASSET ALLOCATION - FIXED INCOME & PREFERREDS



ASSET ALLOCATION - FIXED INCOME & PREFERREDS

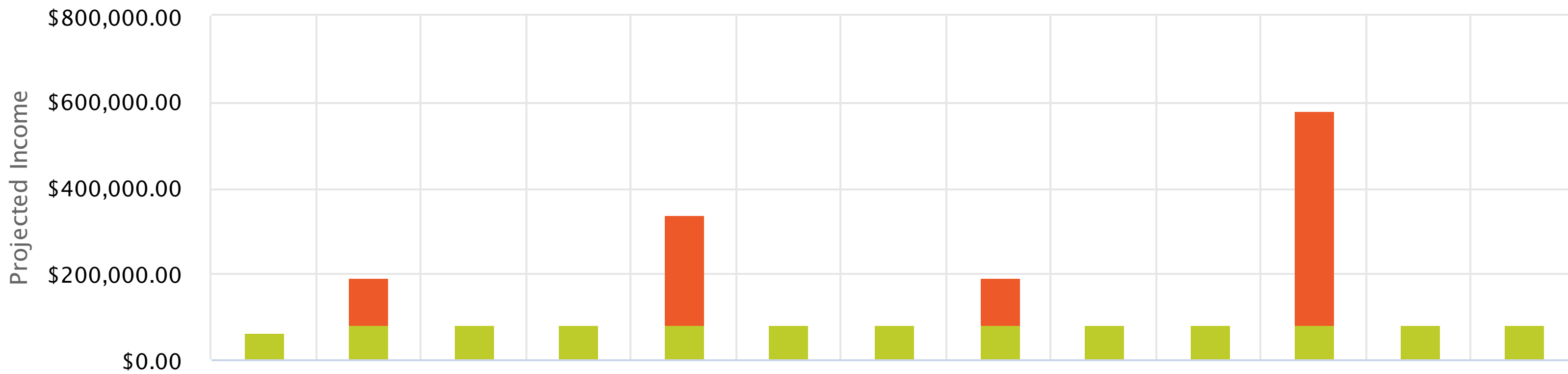
	% of Fixed Income & Preferreds 02/05/2020	Total Value ($) 02/05/2020	% of Portfolio 02/05/2020
Short Term Fixed Income	**49.1**	**15,262,479.90**	**15.2**
US Fixed Income Taxable	**22.3**	**6,939,028.84**	**6.9**
Bank Loans	**9.5**	**2,939,829.39**	**2.9**
Global Fixed Income Other	**19.1**	**5,948,783.40**	**5.9**
TOTAL FIXED INCOME & PREFERREDS	**100.0**	**31,090,121.53**	**30.9**

PROJECTED 12 MONTH INCOME SUMMARY

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD

As of February 05, 2020 | Reporting Currency: USD

PROJECTED 12 MONTH INCOME SUMMARY



Asset Class	Total Value ($) 02/05/2020	02/06/20 to 02/29/20 ($)	12 Month Projected Income ($) (03/01/20 - 02/28/21)													% Yield
			Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	
Cash	1,574,802	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
Equities	67,949,532	0	108,084	0	0	254,330	0	0	108,084	0	0	496,092	0	0	**966,590**	1.42
Fixed Income & Preferreds	31,090,122	65,966	84,216	84,216	84,216	84,216	84,216	84,216	84,216	84,216	84,216	84,216	84,216	84,216	**1,010,592**	3.25
Total	**100,614,456**	**65,966**	**192,300**	**84,216**	**84,216**	**338,546**	**84,216**	**84,216**	**192,300**	**84,216**	**84,216**	**580,308**	**84,216**	**84,216**	**1,977,182**	**1.97**

Projected Income is calculated only for securities where data is available.
In instances whereby payment frequency and/or last payment date is not available, income is based on the current dividend or coupon rate, and will be displayed in the Total column only.

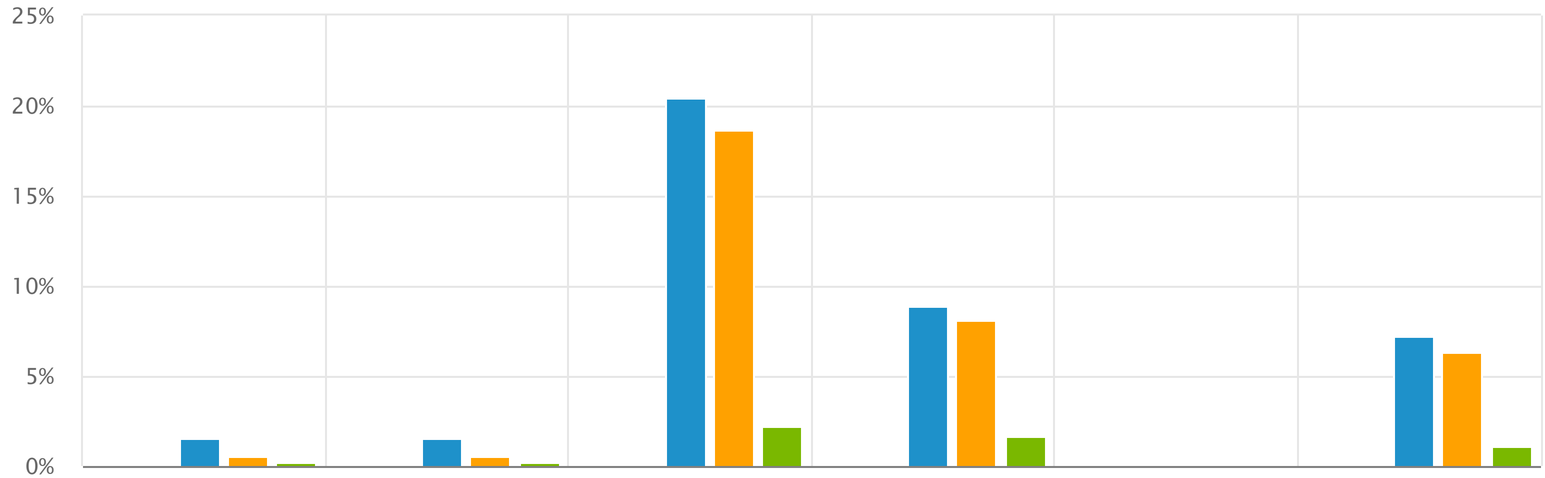
TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

Morgan Stanley

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD

As of February 05, 2020 | Reporting Currency: USD

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



	Quarter to Date 12/31/19 - 02/05/20	Year to Date 12/31/19 - 02/05/20	Previous Year 12/31/18 - 12/31/19	Last 3 Years 02/28/17 - 02/05/20	Last 5 Years 02/28/15 - 02/05/20	Performance Inception 07/13/15 - 02/05/20
Beginning Total Value ($)	98,300,159.04	98,300,159.04	75,725,161.30	60,463,074.00	-	0.00
Net Contributions/Withdrawals ($)	-40,751.27	-40,751.27	6,615,782.67	19,030,426.60	-	75,353,208.46
Investment Earnings ($)	1,585,639.43	1,585,639.43	15,959,215.06	20,351,546.60	-	24,491,838.74
Ending Total Value ($)	99,845,047.19	99,845,047.19	98,300,159.04	99,845,047.19	-	99,845,047.19
Return % (Net of Fees)	1.61	1.61	20.40	8.93	-	7.20
TN TSBA Composite (%)	0.59	0.59	18.63	8.13	-	6.38
FTSE T-Bills 30 Day (%)	0.15	0.15	2.20	1.67	-	1.13

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.
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.

POSITIONS TIME WEIGHTED PERFORMANCE DETAIL

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD As of February 05, 2020 | Reporting Currency: USD

CHANGE IN VALUE LAST 12 MONTHS RETURN % (GROSS OF FEES) VS. BENCHMARK (ANNUALIZED)

Product/ Security Description	Account Number	Inception Date/ Closed Date	Beginning Total Value ($)	Net Contributions/ Withdrawals ($)	Appreciation/ Depreciation ($)	Income Received ($)	Ending Total Value ($)	Last 12 Months (%) 02/28/19 - 02/05/20	% of Portfolio
Total Portfolio (Gross of Fees) *TN TSBA Composite*		**06/09/2015** **-**	**82,954,720.27**	**6,610,117.49**	**7,726,928.38**	**3,322,646.53**	**100,614,412.67**	**12.73** **11.24**	**100.00**
Exchange Traded/ Closed End Funds									
ISHARES CORE MSCI EAFE ETF(IEFA)	Multiple	11/28/2018 -	4,927,561.99	341,973.39	431,301.30	183,192.04	5,884,028.72	11.78	5.85
ISHARES CORE S&P U.S. GROWTH(IUSG)	Multiple	11/28/2018 -	4,929,860.02	149,269.23	1,073,091.60	96,064.55	6,248,285.40	23.17	6.21
ISHARES CORE S&P U.S. VALUE(IUSV)	Multiple	11/28/2018 -	4,885,018.86	65,831.26	829,149.04	130,745.89	5,910,745.05	18.65	5.87
ISHARES INC MSCI JAPAN ETF(EWJ)	Multiple	11/04/2016 -	812,953.80	60,130.24	87,425.90	19,910.06	980,420.00	11.96	0.97
ISHARES S&P MIDCAP 400 INDEX(IJH)	Multiple	11/28/2018 -	812,430.00	78,449.74	78,097.04	15,408.30	984,385.08	10.52	0.98
ISHARES SP SMALLCAP 600 INDEX(IJR)	Multiple	11/28/2018 -	1,619,684.82	203,089.36	100,227.71	27,386.89	1,950,388.78	6.28	1.94
JOHN HANCOCK MULTI FACT MID(JHMM)	Multiple	02/22/2019 -	817,681.45	55,874.63	123,558.09	10,023.18	1,007,137.35	15.45	1.00
VANGUARD FTSE EMERGING MARKETS(VWO)	Multiple	02/22/2016 -	814,378.54	68,472.78	43,223.25	30,807.95	956,882.52	8.26	0.95
VANGUARD INDEX FDS S&P 500 ETF(VOO)	Multiple	02/22/2016 -	3,275,135.30	60,588.05	667,852.24	74,016.61	4,077,592.20	21.88	4.05
Mutual Funds									

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.

POSITIONS TIME WEIGHTED PERFORMANCE DETAIL

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD | As of February 05, 2020 | Reporting Currency: USD

CHANGE IN VALUE LAST 12 MONTHS RETURN % (GROSS OF FEES) VS. BENCHMARK (ANNUALIZED) (Continued)

Product/ Security Description	Account Number	Inception Date/ Closed Date	Beginning Total Value ($)	Net Contributions/ Withdrawals ($)	Appreciation/ Depreciation ($)	Income Received ($)	Ending Total Value ($)	Last 12 Months (%) 02/28/19 - 02/05/20	% of Portfolio
AMERICAN EUROPACIFIC GRW F2(AEPFX)	Multiple	07/14/2015 -	4,953,364.42	170,718.73	586,341.15	175,587.21	5,886,011.51	14.79	5.85
BLACKROCK HIGH EQ INCOME INST(BMCIX)	Multiple	09/02/2015 -	821,865.86	54,905.55	68,376.50	37,733.89	982,881.80	12.07	0.98
DELAWARE SMID CAP GROWTH INST(DFDIX)	Multiple	09/02/2015 -	853,544.87	83,410.06	111,259.65	28,268.22	1,076,482.80	15.05	1.07
DWS SMALL CAP CORE S(SSLCX)	Multiple	02/20/2018 -	749,399.47	0.00	18,716.39	1,249.41	769,365.28	2.66	0.76
E V SHT DURATION GOVT INC I(EILDX)	Multiple	02/22/2019 12/31/2019	1,227,456.01	-1,245,331.55	-16,650.89	34,526.43	0.00	-	0.00
JOHN HANCOCK DISPLND VAL INST(JVLIX)	Multiple	07/24/2018 -	4,884,436.49	403,842.32	242,498.86	332,473.85	5,863,251.51	10.70	5.83
LAZARD EMRG MKT EQ BLEND INST(EMBIX)	Multiple	09/02/2015 -	2,480,791.65	196,948.74	193,273.86	62,458.98	2,933,473.23	9.33	2.92
NUVEEN STRATEGIC INCOME INST(FCBYX)	Multiple	10/02/2017 -	4,930,324.97	468,580.49	360,893.27	188,984.67	5,948,783.40	10.67	5.91
OAKMARK FUND ADVISOR(OAYMX)	Multiple	05/04/2018 -	5,736,567.44	404,488.93	314,892.20	545,051.04	7,000,999.61	13.68	6.96
PGIM JENNISON GROWTH Z(PJFZX)	Multiple	09/02/2015 -	5,009,657.41	83,438.14	897,765.45	418,345.64	6,409,206.64	25.47	6.37
PGIM SHORT-TERM CORP BOND Z(PIFZX)	Multiple	09/02/2015 -	9,875,987.67	4,731,418.78	357,976.09	297,097.37	15,262,479.91	5.93	15.17

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.

As of February 05, 2020 | Reporting Currency: USD

POSITIONS TIME WEIGHTED PERFORMANCE DETAIL

CHANGE IN VALUE LAST 12 MONTHS RETURN % (GROSS OF FEES) VS. BENCHMARK (ANNUALIZED) (Continued)

Product/ Security Description	Account Number	Inception Date/ Closed Date	Beginning Total Value ($)	Net Contributions/ Withdrawals ($)	Appreciation/ Depreciation ($)	Income Received ($)	Ending Total Value ($)	Last 12 Months (%) 02/28/19 - 02/05/20	% of Portfolio
PIONEER BOND Y(PICYX)	Multiple	05/03/2017 -	5,748,924.01	646,128.85	341,587.84	202,388.14	6,939,028.84	9.02	6.90
PUTNAM EQUITY INCOME Y(PEIYX)	Multiple	02/22/2019 -	1,633,470.05	40,870.23	237,733.82	77,266.73	1,989,340.83	18.20	1.98
PUTNAM FLOATING RATE INC Y(PFRYX)	Multiple	05/03/2017 -	2,470,227.25	365,951.02	-13,149.90	116,801.01	2,939,829.38	3.91	2.92
T ROWE PRICE JAPAN FUND(PRJPX)	Multiple	09/02/2015 -	821,999.58	9,705.29	134,909.44	18,195.15	984,809.46	17.57	0.98
TEMPLETON GLOBAL BD FD ADV(TGBAX)	Multiple	09/02/2015 12/19/2019	1,645,431.93	-1,580,896.84	-154,090.25	89,555.16	0.00	-3.59	0.00
THORNBURG INTL GROWTH I(TINGX)	Multiple	09/02/2015 -	4,172,536.94	173,021.63	694,094.40	35,459.50	5,075,112.47	16.92	5.04
VICTORY RS VALUE Y(RSVYX)	Multiple	09/02/2015 -	815,821.35	42,162.50	51,726.15	69,022.00	978,732.00	14.10	0.97
Cash, MMF and Bank Deposits									
BANK DEPOSIT PROGRAM(BDPS)	Multiple	06/18/2015 -	1,228,208.13	346,550.77	0.00	0.00	1,574,758.90	-	1.57
Cash(0000MONEY)	Multiple	06/17/2015 01/31/2020	0.00	135,151.83	-135,151.83	0.00	0.00	-	0.00
MORGAN STANLEY BANK N.A.(MSBNK)	Multiple	06/30/2015 01/31/2020	0.00	-3,795.11	0.00	3,795.11	0.00	-	0.00
MORGAN STANLEY PRIVATE BANK NA(MSPBNA)	Multiple	07/31/2015 01/31/2020	0.00	-831.55	0.00	831.55	0.00	-	0.00

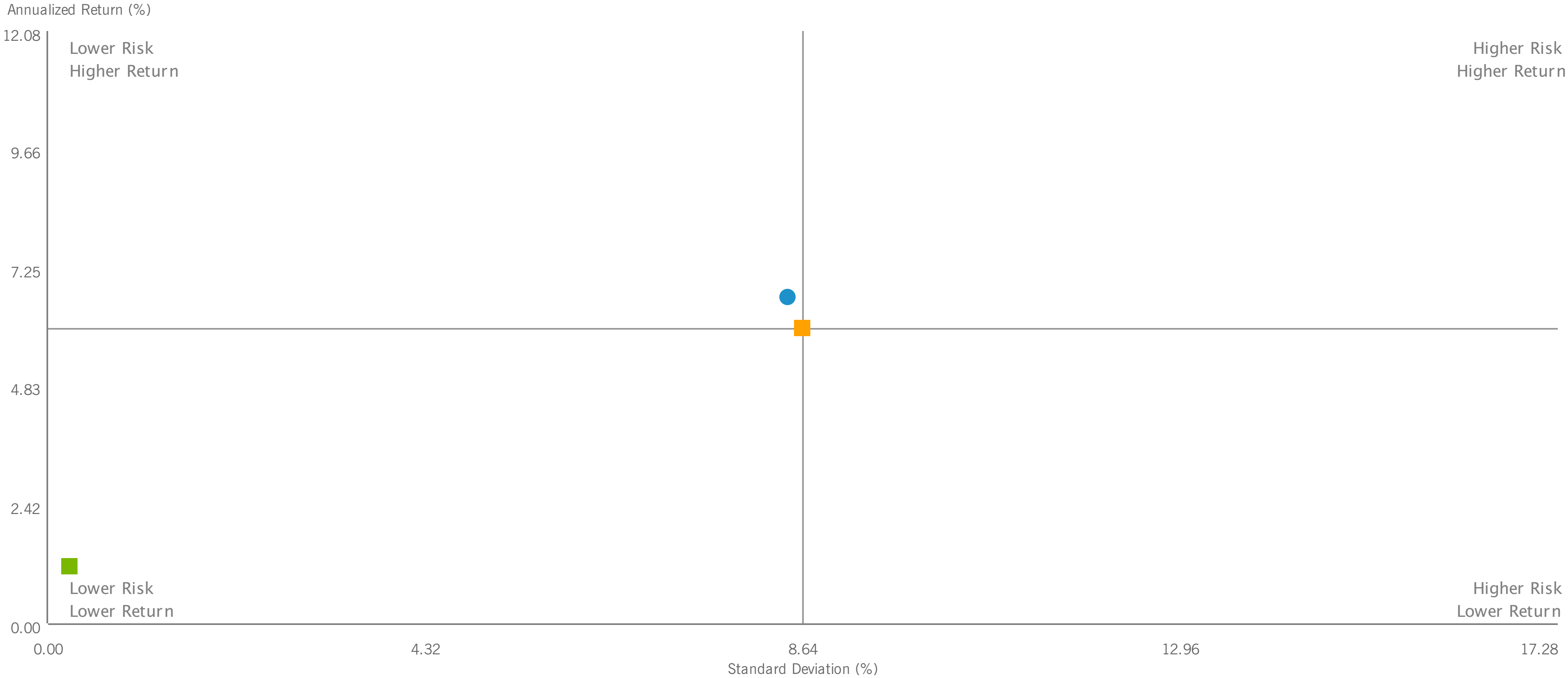
The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

RISK VS. RETURN - ADVISORY ASSETS ONLY

Morgan Stanley

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD | As of January 31, 2020 | Reporting Currency: USD

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



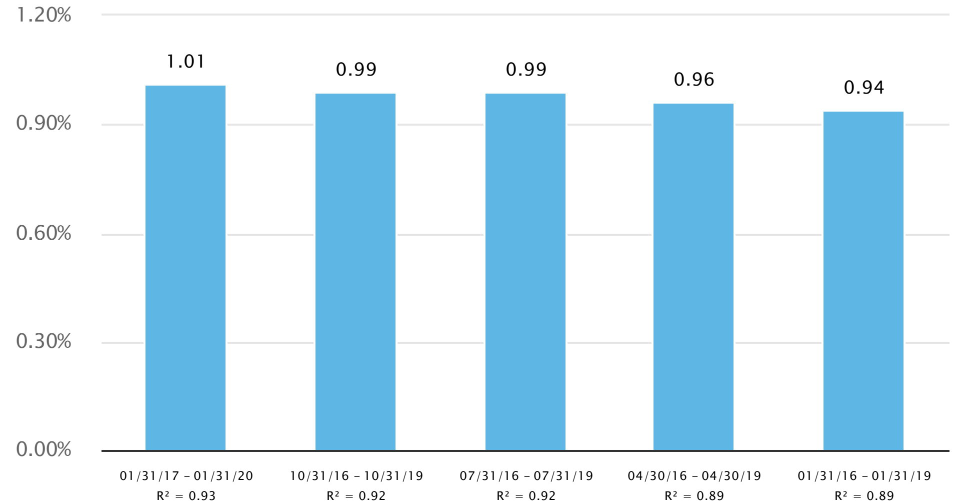
	Return % (Net of Fees) 07/31/15-01/31/20	Standard Deviation (%) 07/31/15-01/31/20
Portfolio	6.64	8.47
TN TSBA Composite	6.04	8.64
FTSE T-Bills 30 Day	1.15	0.25

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.
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.

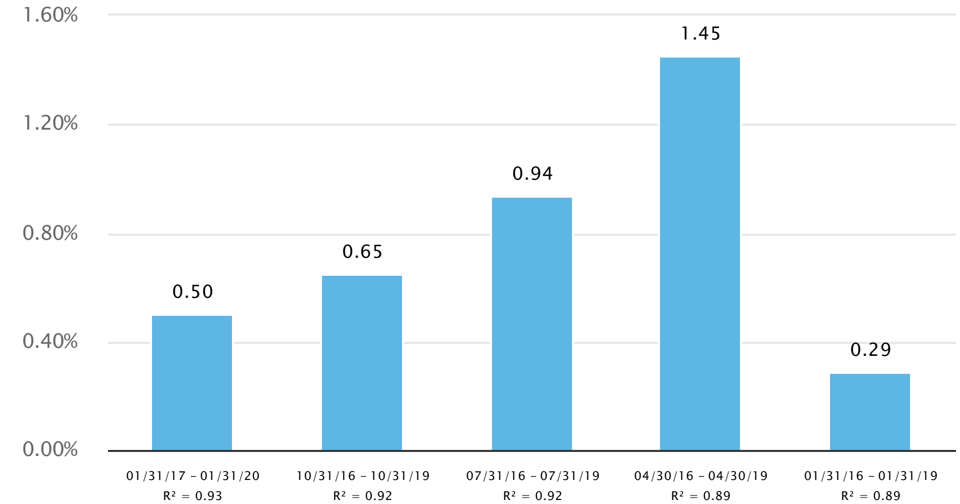
MODERN PORTFOLIO THEORY - ADVISORY ASSETS ONLY

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD | As of January 31, 2020 | Reporting Currency: USD

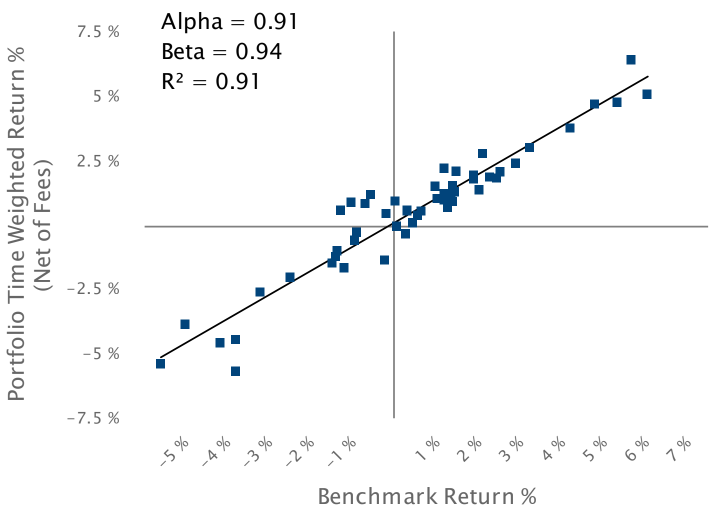
BETA - ROLLING PERIODS - TIME WEIGHTED RETURN %(NET OF FEES)



ALPHA - ROLLING PERIODS - TIME WEIGHTED RETURN %(NET OF FEES)



MONTHLY OBSERVATIONS SINCE 07/31/15 WITH SIMPLE REGRESSION LINE - TIME WEIGHTED RETURN %(NET OF FEES)



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

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

Modern Portfolio Theory: Seeks to quantify the relationship between risk and return and operates under the assumption that an investor must be compensated for assuming risk.

R^2: Is a measure that indicates the extent to which fluctuations in a portfolio's time weighted net of fees return is correlated with the return of the general market. An R^2 of 0.80 implies that 80% of the fluctuation of a portfolio's return is explained by the fluctuation in the market.

Graph Notes: Both the benchmark and portfolio returns are adjusted by the return of the 90-day Treasury Bills to illustrate the excess return above the Risk Free Rate for each period.

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.
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.

Our Key Overweights / Underweights

- Overweight Global Equities
  - Overweight International Developed, Underweight US and Equal-weight EM
  - Within the United States
    - Underweight Growth/Consumer Discretionary
    - Underweight Small/Mid Caps
    - Overweight Value
- Underweight Fixed Income
  - Tactical Overweight to Long Duration Treasuries to Hedge Portfolio
  - Underweight Credit Especially High Yield
  - Zero weight to International Developed Market Fixed Income

Source: Morgan Stanley Wealth Management GIC

Bottom Line: Our Recommendations

As of January 8, 2020

- While the global economy has slowed materially over the past year, we think global reflation is still the primary narrative and trend from 2016. 2018-20 represents a consolidation of this primary trend. Central banks are stimulating aggressively and while we expect the global economy to trough in 1Q2020, the US economy will trough later or show little sign of acceleration until 2H2020, leaving a defensive skew to leadership.

- Global equity markets had a difficult year in 2018 despite relatively strong economic and earnings growth in most regions. Tightening financial conditions, higher interest rates and peaking growth led to a 25% de-rating on global valuations which completed in December 2018. 2019 has been the opposite of 2018, with markets re-rating on lower interest rates and a new round of quantitative easing by central banks. Risk assets may remain overvalued until these activities subside which is unlikely in the near term. Valuations could overshoot fair value to the upside.

- Long-duration Treasuries have outperformed equities since our tactical shift in April, especially on a risk-adjusted basis. We still like long-duration Treasuries as US GDP growth slows. We have a preference for value sectors globally rather than growth given our view that valuations appear stretched for growth stocks and they are crowded. We do like high-quality large-cap growth stocks that trade at reasonable valuations.

- International equity markets have underperformed the US equity market for the past decade. Going forward, we expect International to outperform as the global economy troughs first and grows faster over the next few years, the Fed cuts rates and the US dollar declines. In contrast to the US, international economies also have more labor slack and fiscal capacity.

- Within fixed income, we recommend US-only positioning with no exposure to high yield and some TIPS as inflation expectations recover further with our leading indicators suggesting core CPI is heading to 2.5% or higher by the middle of 2020. We would revisit our position in high yield if spreads were to widen out again toward levels seen at the end of December. We continue to like long-duration Treasuries *tactically*.

- Our cyclical bear market/consolidation call for global equities ended in November when stocks broke out of a two-year range. We think the secular bull market is intact and the next leg has begun. It's important to note that SPX/GOLD has NOT broken out and informs us that inflation may be starting to stir. Our portfolios are set up to benefit from global reflation when it starts in earnest, although that may be a 2H20 story.

- We think the next leg of the secular bull market should coincide with a paradigm shift in which leadership moves from stability and growth assets to cyclicality and value. This aligns with our global reflation narrative from 2016 and the end of secular stagnation. The end of QE and the shift toward more fiscal spending by governments and capital spending by corporates should drive higher productivity over the next decade.

Source: Morgan Stanley Wealth Management GIC

DISCLOSURES

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

For convenience purposes, your Financial Advisor may have assigned a designated name for this Document. The list of the accounts covered in this document is noted herein and may not include all of your accounts with us or external custodians. Furthermore, the information included in this document may not include all asset classes/securities/liabilities held by you at the firm or external custodians. Please review this document carefully and discuss any questions you may have with your Financial Advisor. If you do not understand an entry, suspect an error, or want more details on current values or other information, contact your Financial Advisor. This document is based upon your Morgan Stanley account holdings and may include other holdings/information that you or a third party provided about assets custodied elsewhere. Morgan Stanley will not verify any other holdings/information. If any information reflects assets held away from Morgan Stanley that will be indicated. The information contained in this document is subject to, and does not supersede the confirmations and account statements you receive from us. Values shown in your official account statement may differ from the values shown in this document due to, among other things, different reporting methods, delays, market conditions and interruptions. If there are discrepancies between your official account statement and this document, rely on your official account statement.

The information in this document is approximate and subject to updating, correction and other changes. We are not obligated to notify you if information changes. Although the statements of fact and data in this document have been obtained from, and are based upon sources that we believe to be reliable, we do not guarantee their accuracy, or timeliness, and any such information may be incomplete or condensed. Percentage values shown in this document are subject to rounding, which may impact total values. The values of securities and other investments not actively traded may be estimated or may not be available.

This information is provided for informational purposes only and should not be used for tax preparation. The information reported on your Form(s) 1099 supersedes the information provided in this report and should be exclusively relied upon for tax preparation. Morgan Stanley, its affiliates and its employees are not in the business of providing tax or legal advice. Clients should seek advice based on their particular circumstances from an independent tax and legal advisor. Morgan Stanley Smith Barney LLC is a registered Broker/Dealer, Member SIPC, and not a bank. Where appropriate, Morgan Stanley Smith Barney LLC has entered into arrangements with banks and other third parties to assist in offering certain banking related products and services.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Market values used for performance calculation do not include Performance Ineligible Assets and thus may differ from asset allocation market values. Common examples of Performance Ineligible Assets include life insurance and annuities as well as Manually Added and External accounts, assets and liabilities.

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

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

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

Sub Account and Security Level Performance: The performance return methodology described above and in the TWR and IRR definitions applies to both Account Level and Sub-Account (e.g. Asset Class or Security level) performance returns. The inputs consist of market values and net flows.

For example, TWR is calculated by taking the Change in Market Value (Ending MV – Beginning MV) less any net flows, divided by the beginning MV. TWR = (Ending MV – Beginning MV – Net Flows) / Beginning MV

The difference lies in what is or is not included in the Market Values and Flows. For account level performance, the total account market values and all flows within the account are taken into account. For sub-account level performance, only those market values and flows associated with the specific securities included are taken into account.

Flows that are not security specific typically include account advisory fees, cash contributions or withdrawals, and any other flows that are not attributed to a specific security.

Flows that are security specific including purchases, sales, dividends, interest, partnership distributions, return of capital, fund sales charges, security transaction fees, and ongoing fund expenses are typically reflected in the security level returns.

Gross of Fees: As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, for an account with an initial value of $100,000 and a 2% annual fee, if the gross performance is 10% per year over a three year period, the compounding effect of the fees will result in a net annual compound rate of return of approximately 7.81% per year over a three year period, and the total value of the client's portfolio at the end of the three year period would be approximately $133,100 without the fees and $125,307 with the fees.

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.

Projected 12 Month: Projected 12 Month Income is based upon cash income from interest, cash dividends, and partnership distributions. It is a hypothetical projection calculated using current yields. The projected income referenced is based upon certain market projections effective as at today's date only and can change at any time. Such projected income is hypothetical, do not reflect actual investment results, and is not a guarantee of future results. The projected income is referenced for illustrative purposes only. Morgan Stanley does not represent or guarantee that the projected income referenced will or can be attained. The actual income may be lower or higher than the projections based upon a variety of factors and assumptions. The projected income shown may under or over compensate for the impact of actual market conditions and other factors. We make no representation or warranty as to the reasonableness of the assumptions made, or that all assumptions used to construct this projected income information have been stated or fully considered. To the extent that the assumptions made do not reflect actual conditions, the illustrative value of the hypothetical projected income will decrease.

The projected income referenced may include income from Morgan Stanley & Co. and External Accounts, where data is available. Such information was obtained from third party sources which Morgan Stanley believes to be reliable. However, we make no representation or guarantee that the information is accurate or complete. You should not rely upon this information to make any investment decision. Please refer to the official account statements and performance reports you received from your custodian and/or financial institution for information about projected income in your External Accounts. The projected income referenced does not include income from assets in Manually Added External Accounts.

Morgan Stanley Wealth Management is the trade name of Morgan Stanley Smith Barney LLC, a registered broker-dealer in the United States.

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 suitable 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. Morgan Stanley Smith Barney LLC offers investment program services through a variety of investment programs, which are opened pursuant to written client agreements. Each program offers investment managers, funds and features that are not available in other programs; conversely, some investment managers, funds or investment strategies may be available in more than one program.

Morgan Stanley's investment advisory programs may require a minimum asset level and, depending on your specific investment objectives and financial position, may not be suitable for you. Please see the Morgan Stanley Smith Barney LLC program disclosure brochure (the "Morgan Stanley ADV") for more information in the investment advisory programs available. The Morgan Stanley ADV is available at www.morganstanley.com/ADV (http://www.morganstanley.com/ADV). **Sources of Data.** Information in this material in this report has been obtained from sources that we believe to be reliable, but we do not guarantee its accuracy, completeness or timeliness. Third-party data providers make no warranties or representations relating to the accuracy, completeness or timeliness of the data they provide and are not liable for any damages relating to this data. All opinions included in this material constitute the Firm's judgment as of the date of this material and are subject to change without notice. This material was not prepared by the research departments of Morgan Stanley & Co. LLC or Morgan Stanley Smith Barney LLC. Some historical figures may be revised due to newly identified programs, firm restatements, etc.

Global Investment Manager Analysis (GIMA) Focus List, Approved List and Tactical Opportunities List; Watch Policy. GIMA uses two methods to evaluate investment products in applicable advisory programs: **Focus** (and investment products meeting this standard are described as being on the Focus List) and **Approved** (and investment products meeting this standard are described as being on the Approved List). In general, Focus entails a more thorough evaluation of an investment product than Approved. Sometimes an investment product may be evaluated using the Focus List process but then placed on the Approved List instead of the Focus List. Investment products may move from the Focus List to the Approved List, or vice versa. GIMA may also determine that an investment product no longer meets the criteria under either process and will no longer be recommended in investment advisory programs (in which case the investment product is given a "Not Approved" status). GIMA has a '**Watch**" policy and may describe a Focus List or Approved List investment product as being on "Watch" if GIMA identifies specific areas that (a) merit further evaluation by GIMA and (b) may, but are not certain to, result in the investment product becoming "Not Approved." The Watch period depends on the length of time needed for GIMA to conduct its evaluation and for the investment manager or fund to address any concerns. Certain investment products on either the Focus List or Approved List may also be recommended for the **Tactical Opportunities List** based in part on tactical opportunities existing at a given time. The investment products on the Tactical Opportunities List change over time. For more information on the Focus List, Approved List, Tactical Opportunities List and Watch processes, please see the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management. Your Financial Advisor or Private Wealth Advisor can also provide upon request a copy of a publication entitled "Manager Selection Process."

The **Global Investment Committee** is a group of seasoned investment professionals 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 model portfolio weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

The GIC Asset Allocation Models are not available to be directly implemented as part of an investment advisory service and should not be regarded as a recommendation of any Morgan Stanley investment advisory service. The GIC Asset Allocation Models do not represent actual trading or any type of account or any type of investment strategies and none of the fees or other expenses (e.g. commissions, mark-ups, mark-downs, advisory fees, fund expenses) associated with actual trading or accounts are reflected in the GIC Asset Allocation Models which, when compounded over a period of years, would decrease returns.

Adverse Active Alpha (AAA) is a patented screening and scoring process designed to help identify high-quality equity and fixed income managers with characteristics that may lead to future outperformance relative to index and peers. While highly ranked managers performed well as a group in our Adverse Active Alpha model back tests, not all of the managers will outperform. Please note that this data may be derived from back-testing, which has the benefit of hindsight. In addition, highly ranked managers can have differing risk profiles that might not be suitable for all investors. Our view is that Adverse Active Alpha is a good starting point and should be used in conjunction with other information. Morgan Stanley Wealth Management's qualitative and quantitative investment manager due diligence process are equally important factors for investors when considering managers for use through an investment advisory program. Factors including, but not limited to, manager turnover and changes to investment process can partially or fully negate a positive Adverse Active Alpha ranking. Additionally, highly ranked managers can have differing risk profiles that might not be suitable for all investors. For more information on AAA, please see the Adverse Active Alpha Ranking Model and Selecting Managers with Adverse Active Alpha whitepapers. The whitepaper are available from your Financial Advisor or Private Wealth Advisor. ADVERSE ACTIVE ALPHA is a registered service mark of Morgan Stanley and/or its affiliates. U.S. Pat. No. 8,756,098 applies to the Adverse Active Alpha system and/or methodology.

The Global Investment Manager Analysis (GIMA) Services Only Apply to Certain Investment Advisory Programs GIMA evaluates certain investment products for the purposes of some – but not all – of Morgan Stanley Smith Barney LLC's investment advisory programs (as described in more detail in the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management). If you do not invest through one of these investment advisory programs, Morgan Stanley Wealth Management is not obligated to provide you notice of any GIMA Status changes even though it may give notice to clients in other programs.

Strategy May Be Available as a Separately Managed Account or Mutual Fund Strategies are sometimes available in Morgan Stanley Wealth Management investment advisory programs both in the form of a separately managed account ("SMA") and a mutual fund. These may have different expenses and investment minimums. Your Financial Advisor or Private Wealth Advisor can provide more information on whether any particular strategy is available in more than one form in a particular investment advisory program. In most Morgan Stanley Wealth Management investment advisory accounts, fees are deducted quarterly and have a compounding effect on performance. For example, on an advisory account with a 3% annual fee, if the gross annual performance is 6.00%, the compounding effect of the fees will result in a net performance of approximately 3.93% after one year, 1 after three years, and 21.23% after five years. **Conflicts of Interest:** GIMA's goal is to provide professional, objective evaluations in support of the Morgan Stanley Wealth Management investment advisory programs. We have policies and procedures to help us meet this goal. However, our business is subject to various conflicts of interest. For example, ideas and suggestions for which investment products should be evaluated by GIMA come from a variety of sources, including our Morgan Stanley Wealth Management Financial Advisors and their direct or indirect managers, and other business persons within Morgan Stanley Wealth Management or its affiliates. Such persons may have an ongoing business relationship with certain investment managers or mutual fund companies whereby they, Morgan Stanley Wealth Management or its affiliates receive compensation from, or otherwise related to, those investment managers or mutual funds. For example, a Financial Advisor may suggest that GIMA evaluates an investment manager or fund in which a portion of his or her clients' assets are already invested. While such a recommendation is permissible, GIMA is responsible for the opinions expressed by GIMA. See the conflicts of interest section in the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management for a discussion of other types of conflicts that may be relevant to GIMA's evaluation of managers and funds. In addition, Morgan Stanley Wealth Management, MS & Co., managers and their affiliates provide a variety of services (including research, brokerage, asset management, trading, lending and investment banking services) for each other and for various clients, including issuers of securities that may be recommended for purchase or sale by clients or are otherwise held in client accounts, and managers in various advisory programs. Morgan Stanley Wealth Management, managers, MS & Co., and their affiliates receive compensation and fees in connection with these services. Morgan Stanley Wealth Management believes that the nature and range of clients to which such services are rendered is such that it would be inadvisable to exclude categorically all of these companies from an account.

Morgan Stanley charges each fund family we offer a mutual fund support fee, also called a "revenue-sharing payment," on client account holdings in fund families according to a tiered rate that increases along with the management fee of the fund so that lower management fee funds pay lower rates than those with higher management fees.

Consider Your Own Investment Needs: The model portfolios and strategies discussed in the material are formulated based on general client characteristics including risk tolerance. This material is not intended to be a client-specific suitability analysis or recommendation, or offer to participate in any investment. Therefore, clients should not use this profile as the sole basis for investment decisions. They should consider all relevant information, including their existing portfolio, investment objectives, risk tolerance, liquidity needs and investment time horizon. Such a suitability determination may lead to asset allocation results that are materially different from the asset allocation shown in this profile. Talk to your Financial Advisor about what would be a suitable asset allocation for you, whether CGCM is a suitable program for you.

No obligation to notify – Morgan Stanley Wealth Management has no obligation to notify you when the model portfolios, strategies, or any other information, in this material changes.

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

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

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

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

KEY ASSET CLASS CONSIDERATIONS AND OTHER RISKS

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

Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are suitable only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to: Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; Lack of liquidity in that there may be no secondary market for a fund; Volatility of returns; Restrictions on transferring interests in a fund; Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; Risks associated with the operations, personnel, and processes of the manager; and Risks associated with cybersecurity. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. All expressions of opinion are subject to change without notice and are not intended to be a forecast of future events or results. Further, opinions expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management. This is not a "research report" as defined by FINRA Rule 2241 or a "debt research report" as defined by FINRA Rule 2242 and was not prepared by the Research Departments of Morgan Stanley Smith Barney LLC or Morgan Stanley & Co. LLC or its affiliates. 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. While the HFRI indices are frequently used, they have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and the index may omit funds, the inclusion of which might significantly affect the performance shown. The HFRI indices are based on information self-reported by hedge fund managers that decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. Composite index results are shown for illustrative purposes and do not represent the performance of a specific investment. Individual funds have specific tax risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice. Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Wealth Management and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley Wealth Management or any of its affiliates, (3) are not guaranteed by Morgan Stanley Wealth Management and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Wealth Management is a registered broker-dealer, not a bank. This material is not to be reproduced or distributed to any other persons (other than professional advisors of the investors or prospective investors, as applicable, receiving this material) and is intended solely for the use of the persons to whom it has been delivered. This material is not for distribution to the general public. Past performance is no guarantee of future results. Actual results may vary. SIPC insurance does not apply to precious metals, other commodities, or traditional alternative investments. In Consulting Group's advisory programs, alternative investments are limited to US-registered mutual funds, separate account strategies and exchange-traded funds (ETFs) that seek to pursue alternative investment strategies or returns utilizing publicly traded securities. Investment products in this category may employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. Alternative investments are not suitable for all investors. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

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

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

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

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

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

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

Tax laws are complex and subject to change. Morgan Stanley Smith Barney LLC ("Morgan Stanley"), its affiliates and Morgan Stanley Financial Advisors and Private Wealth Advisors do not provide tax or legal advice and are not "fiduciaries" (under ERISA, the Internal Revenue Code or otherwise) with respect to the services or activities described herein except as otherwise provided in writing by Morgan Stanley and/or as described at www.morganstanley.com/disclosures/dol (http://www.morganstanley.com/disclosures/dol). Individuals are encouraged to consult their tax and legal advisors (a) before establishing a retirement plan or account, and (b) regarding any potential tax, ERISA and related consequences of any investments made under such plan or account.

Annuities and insurance products are offered in conjunction with Morgan Stanley Smith Barney LLC's licensed insurance agency affiliates.

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

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

We may act in the capacity of a broker or that of an advisor. As your broker, we are not your fiduciary and our interests may not always be identical to yours. Please consult with your Private Wealth Advisor to discuss our obligations to disclose to you any conflicts we may from time to time have and our duty to act in your best interest. We may be paid both by you and by others who compensate us based on what you buy. Our compensation, including that of your Private Wealth Advisor, may vary by product and over time.

Investment and services offered through Morgan Stanley Private Wealth Management, a division of Morgan Stanley Smith Barney LLC, Member SIPC.

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

Morgan Stanley Smith Barney LLC is a registered Broker/Dealer, Member SIPC, and not a bank. Where appropriate, Morgan Stanley Smith Barney LLC has entered into arrangements with banks and other third parties to assist in offering certain banking related products and services.

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

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

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

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

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment. **Ultrashort-term fixed income** asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

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

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

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

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

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

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

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. **Value investing** does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.
Any type of **continuous or periodic investment plan** does not assure a profit and does not protect against loss in declining markets. Since such a plan involves continuous investment in securities regardless of fluctuating price levels of such securities, the investor should consider his financial ability to continue his purchases through periods of low price levels.

This material is disseminated in the United States of America by Morgan Stanley Smith Barney LLC. Morgan Stanley Wealth Management is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule") and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule. This material, or any portion thereof, may not be reprinted, sold or redistributed without the written consent of Morgan Stanley Smith Barney LLC.

Closed or Purged Accounts: Data from accounts which have been closed and/or purged may be included in this report, for example in performance, asset allocation, or other attributes for periods when these accounts were open. If this report does contain data from any closed or purged accounts not identified earlier in the report, those accounts are identified below.

Closed Accounts: 471-XXX865, 471-XXX925

©2020 Morgan Stanley Smith Barney LLC. Member SIPC.

GENERAL DEFINITIONS

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

Annualized Standard Deviation: A statistical calculation that measures the volatility of returns over time; the larger the standard deviation, the greater the volatility.

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

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.

Graph Notes: Both the benchmark and portfolio returns are adjusted by the return of the 90-day Treasury Bills to illustrate the excess return above the Risk Free Rate for each period.

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.

Modern Portfolio Theory: Seeks to quantify the relationship between risk and return and operates under the assumption that an investor must be compensated for assuming risk.

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.

Performance ineligible assets: Performance returns are not calculated for certain assets because accurate valuations and transactions for these assets are not processed or maintained by Morgan Stanley Smith Barney LLC. Common examples include life insurance and annuities as well as Manually Added and External accounts, assets and liabilities.

R^2: Is a measure that indicates the extent to which fluctuations in a portfolio's time weighted net of fees return is correlated with the return of the general market. An R^2 of 0.80 implies that 80% of the fluctuation of a portfolio's return is explained by the fluctuation in the market.

Tax-Qualified Account(s): Accounts that qualify for favorable tax treatment under US federal tax law and may benefit from favorable tax treatment under applicable state tax law. Typically, these accounts benefit from tax deferred growth potential, meaning investment earnings (such as capital gains, dividends, and interest) are generally not subject to federal income tax while the earnings remain in the account. Capital gains rates generally do not apply. Distributions of taxable amounts are generally subject to ordinary income tax and, if made before age 59 1/2, may be subject to a 10% (25% for certain SIMPLE IRA distributions) penalty tax. Some tax-qualified accounts, such as traditional Individual Retirement Accounts ("IRA") and employer sponsored retirement plan accounts, may allow tax deductible and/or pre-tax contributions (subject to certain limitations and restrictions). Other tax-qualified accounts, such as Roth IRAs and Coverdell Education Savings Accounts, may allow income tax free distributions, but only if certain conditions are satisfied.

Taxable Account(s): Accounts that are not Tax-Qualified Account(s), meaning investment earnings (such as capital gains, dividends, and interest) are generally subject to current US federal income taxation when held by US taxable investors. Note, however, that this category may include specific assets that are generally not subject to US federal income tax such as municipal bonds.

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

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

BENCHMARK DEFINITIONS

TN TSBA Composite: The current allocation is comprised of 15.00% Barclays Aggregate, 15.00% BC Global Agg 1-3 YR, 1.00% FTSE T-Bills 30 Day, 49.00% MSCI AC World Net, 10.00% MSCI EAFE Net, 10.00% MSCI EM Net.

FTSE T-Bills 30 Day: A measure of monthly returns equivilant of yield averages that are not marked to market. A measure of short term rates.

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.

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.

BC Global Agg 1-3 YR: The Barclays Global Aggregate Index provides a broad-based measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities, and USD investment grade 144A securities. This index is the 1-3 Yr component of the Global Aggregate index.

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).

90-Day T-Bills: 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.

OPEB Trust Meeting
Doubletree Downtown Nashville Hotel
Robertson Room
February 17, 2020

AGENDA

1:30 p.m.	Call to Order	Mark Hansen, Chairman
1:31 p.m.	Approval of Agenda	
1:32 p.m.	Approval of November 16, 2019 Minutes (Tab 1)	
1:33 p.m.	Approval of 6 month Financial Statements (December 31, 2019) (Tab 2)	
1:35 p.m.	Review of Investment Policy (Tab 3)	
1:45 p.m.	Review and Approve Changes to the Following Policies (Tab 4): • 1010 – Board of Trustees' Meetings • 3080 – Reimbursement for Trustees	
1:55 p.m.	Review Investment Report (Tab 5)	Chris Sigmund, Morgan Stanley
2:25 p.m.	Other Business	
2:30 p.m.	Adjourn	

Tennessee School Boards Association
OPEB Trust Meeting
Gaylord Opryland Resort and Convention Center
Magnolia Boardroom B

The TSBA OPEB Trustees met on Saturday, November 16, 2019. The following members were present: **Mark Hansen**, Collierville; **Scott McCormick**, Shelby County; **Dale Viox**, Arlington; **Kevin Long**, Johnson County; **Jim Campbell**, Jackson-Madison County; **Kathy Hall**, Johnson City; and **Tammy Grissom**, Trust Administrator. TSBA staff member present was **Emily Warren**. Also in attendance was **Lee Burklow** with Morgan Stanley and **Erica Saeger** with Crosslin.

Mark Hansen called the meeting to order at 11:57 a.m. and welcomed everyone.

HALL/LONG: Motion to approve the agenda. MOTION CARRIED.

VIOX/LONG: Motion to approve February 18, 2019 Minutes. MOTION CARRIED.

LONG/HALL: Motion to accept the 3-month Financial Statements (September 30, 2019). MOTION CARRIED.

MCCORMICK/ VIOX: Motion to approve the June 30, 2019 OPEB Trust audit. MOTION CARRIED.

Lee Burklow with Morgan Stanley reported on the financial stability of the OPEB Trust and on the performance of the Trust's investments in the current economy. He stated that the Trust is performing within the fiduciary guidelines as set forth by the investment policy and that the rate of return is extremely good for the year. He went into detail as to how the economy is in a good spot and discussed the current trend of the market.

LONG/HALL: Motion to re-elect Mark Hansen as Chairman and Dale Viox as Vice-Chairman. MOTION CARRIED

The meeting adjourned at 12:32 p.m.

Respectfully submitted,

Mark Hansen, Chairman **Tammy Grissom, OPEB Trust Administrator**

TSBA OPEB Trust
Balance Sheet
As of December 31, 2019

		Dec 31, 19
ASSETS		
Current Assets		
Checking/Savings		
1000-00 · Suntrust Operating Account		5,651.90
Total Checking/Savings		5,651.90
Other Current Assets		
1300-00 · Investments		
1300-10 · Hickman County Investments	2,328,197.47	
1300-20 · Johnson County Investments	1,123,824.64	
1300-30 · Shelby County Investments	86,062,850.65	
1300-50 · Jackson-Madison Investments	408,105.51	
1300-60 · Arlington Investments	2,680,240.14	
1300-70 · Bartlett Investments	3,061,729.50	
1300-80 · Collierville Investments	1,453,001.86	
1300-90 · Lakeland Investments	1,644,150.82	
1300-91 · Millington Investments	313,501.86	
Total 1300-00 · Investments		99,075,602.45
Total Other Current Assets		99,075,602.45
Total Current Assets		99,081,254.35
TOTAL ASSETS		**99,081,254.35**
LIABILITIES & EQUITY		
Equity		
3200-00 · Unrestricted Net Assets		91,894,918.91
Net Income		7,186,335.44
Total Equity		99,081,254.35
TOTAL LIABILITIES & EQUITY		**99,081,254.35**

TSBA OPEB Trust
Profit & Loss
July through December 2019

	Jul - Dec 19
Income	
4300-00 · Contributions	
4300-20 · Contributions - Johnson County	25,000.00
4300-50 · Contributions - Jackson-Madison	25,000.00
4300-70 · Contributions - Bartlett	500,000.00
4300-90 · Contributions - Lakeland	475,000.00
Total 4300-00 · Contributions	1,025,000.00
4400-00 · Unrealized Gain/Loss	
4400-10 · Unrealized Gain/Loss - Hickman	87,276.44
4400-20 · Unrealized Gain/Loss - Johnson	41,858.71
4400-30 · Unrealized Gain/Loss - Shelby	3,226,379.58
4400-50 · Unrealized Gain/Loss - JMadison	15,899.30
4400-60 · Unrealized Gain/Loss - Arlingto	100,422.78
4400-70 · Unrealized Gain/Loss - Bartlett	110,749.16
4400-80 · Unrealized Gain/Loss - Collierv	54,516.22
4400-90 · Unrealized Gain/Loss - Lakeland	45,017.58
4400-91 · Unrealized Gain/Loss - Millingt	11,763.62
Total 4400-00 · Unrealized Gain/Loss	3,693,883.39
4500-00 · Interest, Dividends&Capital Gn	
4500-10 · Interest, Div., & CG - Hickman	62,083.91
4500-20 · Interest, Div., & CG - Johnson	29,760.98
4500-30 · Interest, Div., & CG - Shelby	2,293,931.05
4500-50 · Interest, Div., & CG - JMadison	10,872.17
4500-60 · Interest, Div., & CG - Arlingto	71,496.97
4500-70 · Interest, Div., & CG - Bartlett	81,089.57
4500-80 · Interest, Div., & CG - Collierv	38,678.68
4500-90 · Interest, Div., & CG - Lakeland	32,114.81
4500-91 · Interest, Div., & CG - Millingt	8,360.37
Total 4500-00 · Interest, Dividends&Capital Gn	2,628,388.51
4800-00 · Interest Income	0.58
Total Income	7,347,272.48
Expense	
6400-00 · Administrative Fee	
6400-10 · Administrative Fee - Hickman	2,727.43
6400-20 · Administrative Fee - Johnson	1,301.40
6400-30 · Administrative Fee - Shelby	63,908.18
6400-50 · Administrative Fee -J. Madison	462.00
6400-60 · Administrative Fee - Arlington	3,140.20
6400-70 · Administrative Fee - Bartlett	3,277.79
6400-80 · Administrative Fee - Colliervil	1,702.25
6400-90 · Administrative Fee - Lakeland	1,367.08
6400-91 · Administrative Fee - Millington	367.25
Total 6400-00 · Administrative Fee	78,253.58
6500-00 · Investment Advisor Fees	
6500-10 · Investment Advisor Fees - Hickm	1,950.44
6500-20 · Investment Advisor Fees - Johns	939.82
6500-30 · Investment Advisor Fees - Shelb	72,136.58
6500-50 · Investment Advisor Fees - JMadi	335.76
6500-60 · Investment Advisor Fees - Arlin	2,253.96
6500-70 · Investment Advisor Fees - Bartl	2,572.20
6500-80 · Investment Advisor Fees - Colli	1,218.55

TSBA OPEB Trust
Profit & Loss
July through December 2019

	Jul - Dec 19
6500-90 · Investment Advisor Fees - Lakel	1,013.53
6500-91 · Investment Advisor Fees - Milli	262.62
Total 6500-00 · Investment Advisor Fees	82,683.46
Total Expense	160,937.04
Net Income	**7,186,335.44**

TSBA OPEB Trust

Descriptor Term:	Descriptor Code:	Revised:
Investment	**3060**	**02/12/18**
	Rescinds:	Previous Issued:
	3060	**04/29/15**

OBJECTIVES AND PERFORMANCE GOALS

The Trust's overall investment objective is to achieve a favorable total rate of return consistent with prudent financial management. The goal is to meet stated financial needs of the Trust while maintaining or increasing the real inflation adjusted value of the permanent funds for which the Trust has been entrusted.

The performance of the Trust's financial assets and its investment managers will be monitored on a quarterly basis. Portfolio asset allocation shall be reviewed at least annually. Individual managers will be expected to exceed the performance of relevant market index benchmarks over full market cycles. Risk-adjusted performance will also be measured against a peer group of similar managers and evaluated over three (3) and five (5) year annualized time periods.

BOARD OF TRUSTEES

The Board of Trustees is responsible for overseeing the investments assets of the Trust and for discharging its duties solely in the best interest of the Trust. These duties shall be discharged with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. In addition, the Board of Trustees will conduct a thorough review of any person or entity providing investment services to the Trust to avoid any potential conflict of interest situations.

FINANCE COMMITTEE

The Board of Trustees will act as the Finance Committee. The duties of the Finance Committee include, but are not limited to, the following:

1. Evaluating and selecting an investment consultant;

2. Developing investment objectives and performance measurement standards which are consistent with the financial needs of the Trust and individual funds;

3. Periodically reviewing the policy guidelines, and if needed, making changes after consideration of the advice and recommendations of the investment consultant and others;

4. Determining an asset allocation strategy and investment management structure designed to meet the Trust's investment objectives;

5. Evaluating and selecting investment managers;

6. Communicating investment objectives, portfolio guidelines, and performance standards to the investment managers;

7. Holding biannually meetings for the review of performance reports and financial statements and informational conference calls as needed;

8. Deploying existing assets and newly contributed funds to the investment managers;

9. Reviewing and evaluating investment results in the context of predetermined performance standards;

10. Ensuring that investment managers are in compliance with all portfolio guidelines and restrictions, and that undo risk is not being undertaken to achieve objectives;

11. Taking necessary corrective action when investment managers fail to achieve expected results; and

12. Engage in RFP process for all contracted services every three (3) years.

CUSTODIAN

Subject to approval by the Board of Trustees, the Finance Committee is authorized to hire a custodian to safekeep the Trust's assets. The duties of the custodian include, but are not limited to, the following:

1. Providing all normal custodial functions including security safekeeping, collection of income, settlement of trades, collection of proceeds of maturing securities, distribution of income, and daily investment of uninvested cash;

2. Providing reports detailing investment holdings and account transitions monthly and

an annual report summarizing the following to be submitted to the Finance Committee within 45 days following each fiscal year end;

3. The reports will include the following:

   a. Statement of all assets on hand;
   b. Statement of all assets received representing contributions to the account; and
   c. Statement of all sales, redemptions, maturities, and principal payments;

4. Establishing and maintaining directed account relationships with each investment manager; and

5. Preparing accounting reports as requested.

INVESTMENT MANAGEMENT

The Board of Trustees is authorized to engage the services of investment managers, as defined under the Investment Advisors Act of 1940, and other investment professionals to provide the specialized management necessary to meet the Trust's investment objectives and guidelines. Accordingly, the Board of Trustees requires the investment managers to adhere to the "prudent man rule" under such federal or state laws as may be applicable or which may be applicable in the future of the investment of Trust assets.

DELEGATION OF AUTHORITY

Investment managers retained by the Board of Trustees will be held responsible for making all investment decisions regarding the assets under their direction. Each investment manager will be provided with a copy of these investment policy objectives and guidelines. In addition, each manager will be provided with any additional specific goals and objectives that are applicable to the particular managed account that the manager is responsible for. Managers will be required to observe and operate within all guidelines specified by the Trust.

CAPITAL REQUIREMENTS

1. The Board of Trustees is directed to maintain an Operating Reserve balance which may be custodied in one or more accounts and must maintain a balance that is appropriate to meet the annual distribution needs of the Trust. Such funds may only be invested in insured money market instruments or in investments whose principal is guaranteed by the full faith and credit of the United States Government or one of its agencies. Irrespective

of the type of investment selected, funds may not be invested in any security with a maturity greater than one (1) year. The Board of Trustees is permitted to maintain all Trust funds in Operating Reserve investments until the Trust fund balance reaches a level where it is both economically prudent and fiscally appropriate to invest funds pursuant to paragraph 3 of this Section.

2. The Board of Trustees may establish an account or accounts whose balances are restricted to a particular use or program. Such accounts may be invested according to the guidelines established in this Investment Policy Statement or restricted to more conservative allocations pursuant to the timing of the need for the funds. Restricted fund balances may be expended at the direction of the Board of Trustees so long as such direction is not in conflict with agreements or restrictions attached to the receipt of such funds.

3. All remaining funds owned or controlled by the Board of Trustees shall be considered Capital Reserves. At the end of each operating year, any and all reserves held in accounts designed as Operating Reserves which are in excess of the required balance for the upcoming operating year shall be reallocated to the Capital Reserves account or accounts. All funds held in Capital Reserve accounts shall be invested pursuant to the guidelines established in this document.

INVESTMENT GUIDELINES

The Trust's investment policy objectives and guidelines will be reviewed and revised as needed from time to time by the Finance Committee. In conducting the review, the committee will consider applicable advice and recommendations of the Trust's staff, attorneys, accountants, investment managers, consultants, or other professionals retained to render advice to the Trust. All modifications shall be in writing and shall be approved by the Board of Trustees.

Asset Allocation – Investment Philosophy

General Policy

The Trust's investment philosophy is that assets should be allocated with the goal of producing the highest total return consistent with prudent financial management. Unless otherwise specified by individual fund objectives, this philosophy should be adhered to within the constraints of the following asset allocation ranges:

	Maximum allocation	Minimum allocation
Equity Investments	70%	35%
Fixed Income Investments	65%	20%
Cash & Equivalents	35%	0%
Alternative Investments – 40 Act Funds	15%	0%
Hedging Strategies		
Commodities ETF’s		
Managed Futures Funds		

Exceptions for Individual Funds

In cases where individual fund objectives require an exception to the above asset allocation ranges, written statements detailing the policy for each specific fund will be provided as Supplements to this Investment Policy.

Asset Allocation Targets

From time to time, the Finance Committee will determine specific asset allocation targets that it feels are best suited for accomplishing the above total return objective. These specific asset allocation targets will be communicated to individual investment managers in writing, and within a reasonable time frame, managers are expected to reallocate assets in order to comply with the target ranges established by the Committee. In the absence of specific asset allocation targets from the Trust, individual managers will have the direct responsibility for settling and maintaining an asset mix that they feel will best accomplish the Trust’s total return objective. At all times and in all cases, however, the above maximum and minimum limits, or where applicable, specific individual fund maximum and minimum limits are to be adhered to.

Proxy Voting

The Board of Trustees recognize that proxy voting is a fiduciary responsibility and require that proxies be voted based on those factors which would enhance the value of the Trust’s investments. The Board of Trustees delegates their authority to vote proxies to the investment managers employed by the Trust and instruct the managers to maintain accurate voting records and to vote proxies for the exclusive benefit of the Trust.

Types of Assets

In order to provide for adequate investment diversification across a broad range of assets, the following types of assets are approved for investment:

- U.S. Common Stock
- Non U.S. Common Stock
- U.S. Preferred Stock
- Non U.S. Preferred Stock
- U.S. Government and Agency Securities
- Non U.S. Government and Agency Securities
- Corporate Bonds with a minimum BAA rating or the equivalent Municipal Debt
- Convertible Securities
- Commercial Paper
- Money Market Funds
- Mutual Funds (open and closed-end)
- Exchange Traded Funds
- Passive Index Funds
- Commodities Exchange Traded Funds
- 1940 Act Alternative Funds – Hedging Strategies
- 1940 Act Managed Futures Funds
- Certificate of Deposits

Additional Criteria

All fixed income and preferred stock issues must be investment grade and dollar denominated. Mutual fund investment must have investment objectives, rules, and regulations that are consistent with the Trust's Investment Policy. All assets selected for the Trust must have a readily ascertainable market value and must be readily marketable.

Prohibited Investments

Investment managers are prohibited from using the following assets and/or transactions:

- Uncovered Options – Puts or Calls
- Short Selling
- Restricted Stock
- Other Derivative Securities not specifically approved above

Cash & Cash Equivalents

All cash, wherever and whenever possible, should be invested in interest bearing instruments. These investments should have stable pricing and instant liquidity.

Diversification of Equity Securities

The Board of Trustees believes it necessary and desirable that equity securities held by the Trust represent a diversified portfolio. In this regard, the Finance Committee and Investment Consultant will select and continue to monitor equity investment managers that have diversification and risk management strategies that are consistent with this focus.

Investments Markets – Equities

In order to broaden the investment opportunities for the investment manager(s) to achieve the objectives set forth herein, the managers are permitted to invest in equity securities listed on the New York Stock Exchange, the American Stock Exchange, principal regional exchanges, and in over-the-counter securities for which there is a strong market providing ready liquidity of the specific security.

Diversification of Fixed Income Securities

The Board of Trustees believes it necessary and desirable that fixed income securities held by the Trust represent a diversified portfolio. In this regard, the Finance Committee and Investment Consultant will select and continue to monitor fixed income investment managers that have diversification and risk management strategies that are consistent with this focus.

Investment Markets – Fixed Income

In order to broaden the investment opportunities for the investment manager(s) to achieve the objectives set forth herein, the managers are permitted to invest in fixed income issues offered in both primary and secondary markets. Fixed income securities may include bonds, notes and pass-through securities issued or guaranteed by the U.S. Government or its agencies, corporate bonds, notes, debentures, or asset-backed securities. Should the rating on a debt or preferred stock security purchased subsequently fall below the minimum BAA (or equivalent) rating, a sale of the issue shall be required except as warranted by investment considerations.

TSBA OPEB Trust

Descriptor Term:	Descriptor Code:	Revised:
Board of Trustees' Meetings	**1010**	**02/18/19**
	Rescinds:	Previous Issued:
	1010	**11/04/17**

REGULAR MEETINGS OF TRUSTEES

Regular meetings of the Board of Trustees shall be held biannually. Any item of business may be considered at a regular meeting. The time, date, and location of meetings of the Board shall be determined by the Board.

SPECIAL MEETINGS OF TRUSTEES

Special meetings of the Board of Trustees may be called at any time by the Chairman or any three (3) of the Trustees upon giving ten (10) days written notice to all Trustees. An emergency meeting may be called with less than ten (10) days written notice provided that all Trustees agree to such a meeting. An agenda specifying the subject of any special meeting shall accompany such notice and only business included on that agenda may be transacted.

NOTICE OF MEETINGS

All meetings of the Board shall be conducted in the manner required by law. In the event of any conflict between any provision of this policy and any provision of any applicable law, this policy shall be deemed modified to the extent necessary to comply with such law. In addition to any notices of meetings required to be served under this policy, the Administrator shall cause to be published any schedule or notice of meeting of the Board required by law. Such publication requirement shall be deemed met by announcement on the TSBA website.

REQUIRED VOTE

Any action by the Trustees may be taken at a duly constituted meeting. A majority of the Trustees present at a duly constituted meeting shall be required for action.

OPEN MEETINGS

All meetings of the Board of Trustees and its committees will be held in accordance with the Tennessee Open Meetings Act.[1]

ELECTRONIC ATTENDANCE

Absent Trustees may ~~attend~~ participate in a regular or special meeting by electronic means of communication. ~~if the Trustee is absent because of work outside of the state, a family emergency, or the Trustee's military service. If a Trustee is absent due to military service, he/she may participate electronically as often as he/she is able to do so. However, a Trustee may not participate electronically more than one (1) time per year for absences due to work and/or family emergencies.~~

The following requirements apply to all electronic attendance ~~regardless of the reason for the Trustee's absence~~:

1. A quorum of the Board shall be physically present at the meeting in order for any Trustee to attend electronically;

2. The responsibility for the connection lies with the Trustee wishing to participate electronically. No more than two (2) attempts to connect shall be made unless the Board chooses to make additional attempts;

3. The Trustee wishing to participate must give the Chairman ~~and~~ or the Trust Administrator at least five (5) days' notice prior to the meeting of the Trustee's desire to participate electronically; and

4. All votes taken during a meeting where a Trustee is attending electronically shall be by roll call vote.

Legal References

1. TCA 8-44-101 *et seq.*

TSBA OPEB Trust

Descriptor Term:	Descriptor Code:	Revised:
Reimbursement for Trustees	**3080**	**02/20/17**
	Rescinds:	Previous Issued:
	3080	**11/16/09**

Trustees shall be reimbursed for expenses incurred in attending Trust meetings and any special meetings called by the Trust Chairman in accordance with Trust travel regulations.

EXPENSES OF TRUSTEES

No Trustee shall receive any salary for services from the Trust. Any Trustee or other officer of the Trust may submit to the Trust for approval and be reimbursed for expenses incurred in the pursuit of his position. Reimbursement for such expenses shall be in accordance with procedures and policies established by the Board of Trustees~~ consistent with the terms of the Agreement~~.

Performance Review - February 2020

Prepared on February 06, 2020 for:

TSBA OPEB TRUST

TAMMY GRISSOM TTEE
TSBA OPEB TRUST U/T/A DTD
11/05/2012
525 BRICK CHURCH PARK DRIVE
NASHVILLE TN 37207-3219

The Cap IV Group

Lee Burklow
Financial Advisor
First Vice President
Tel: +1 615 298-6556
Lee.Burklow@morganstanley.com

Robert Gordon
Financial Advisor
First Vice President
Tel: +1 615 298-6558
Robert.Gordon@morganstanley.com

Christopher Sigmund
Financial Advisor
Certified Investment Management Analyst (SM)
Tel: +1 615 298-6557
Chris.Sigmund@morganstanley.com

Your Branch:
3102 WEST END AVE STE 200
NASHVILLE, TN 37203

TABLE OF CONTENTS

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.

ACCOUNT(S) INCLUDED IN THIS REPORT

Morgan Stanley

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD

Reporting Currency: USD

MORGAN STANLEY WEALTH MANAGEMENT

Account Name and Address	Advisory/ Brokerage	Account Number	Date Opened	Performance (%) Inception - 02/05/20	Total Value ($) 02/05/20	% of Portfolio 02/05/20
ARLINGTON CITY BOE 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX901	06/17/15	7.02	2,721,556.99	2.71
BARTLETT CITY BOE 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX902	06/17/15	7.16	3,108,747.23	3.09
COLLIERVILLE CITY BOE 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX903	06/17/15	7.04	1,475,291.84	1.47
HICKMAN CO. 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX866	06/03/15	7.07	2,363,883.08	2.35
JACKSON-MADISON 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX864	06/03/15	7.08	414,354.51	0.41
JOHNSON CO. 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX869	06/03/15	7.08	1,141,032.86	1.13
LAKELAND CITY BOE 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX900	06/17/15	6.87	1,669,460.89	1.66
MILLINGTON 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX583	07/05/16	9.11	318,316.29	0.32
SHELBY CO. 525 BRICK CHURCH PARK DRIVE NASHVILLE	Advisory	471-XXX863	06/03/15	6.97	87,401,811.78	86.87
TRUST FEE ACCOUNT 525 BRICK CHURCH PARK DRIVE NASHVILLE	Brokerage	471-XXX947	06/26/15	-	0.20	0.00
Morgan Stanley Wealth Management Total					**100,614,455.67**	**100.00**
Total Portfolio					**100,614,455.67**	**100.00**

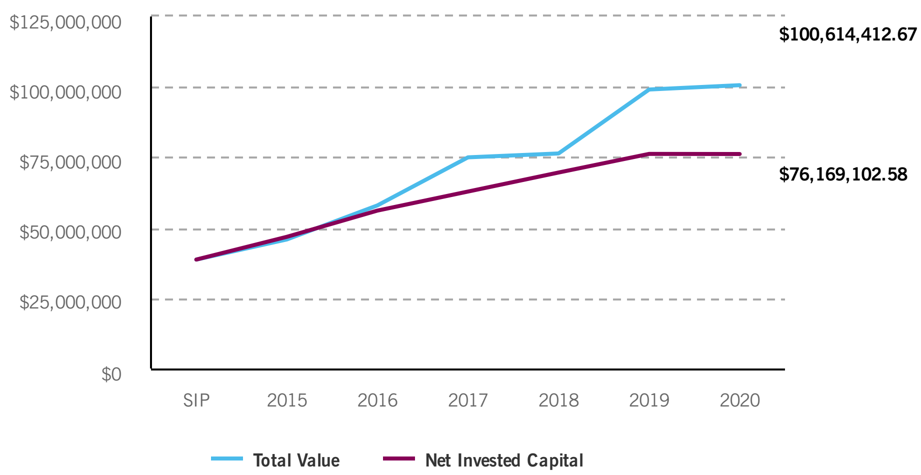
 All content within this Document applies to the accounts listed above or a subset thereof, unless otherwise indicated. The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

INVESTMENT SUMMARY DOLLAR WEIGHTED RETURNS

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD

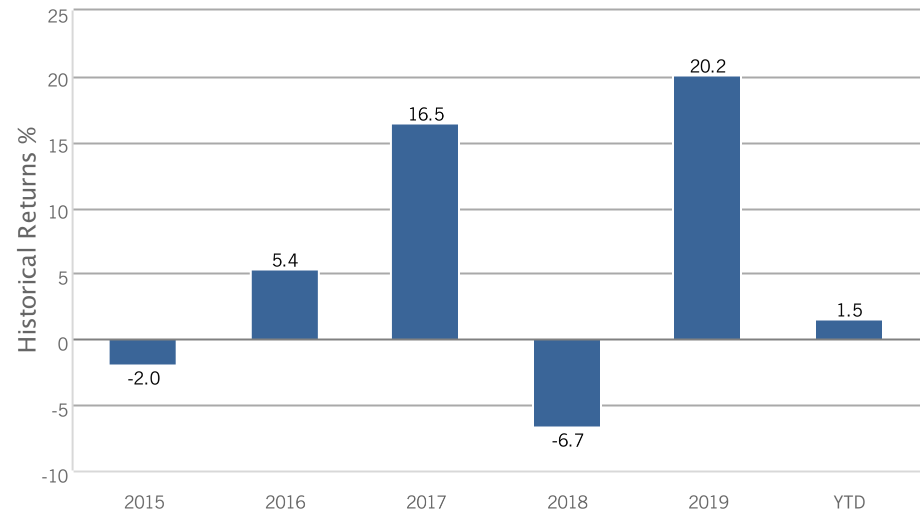
As of February 05, 2020 | Reporting Currency: USD

TOTAL VALUE VS. NET INVESTED CAPITAL



Does not include Performance Ineligible Assets.

DOLLAR-WEIGHTED PERIOD RETURN % (NET OF FEES)

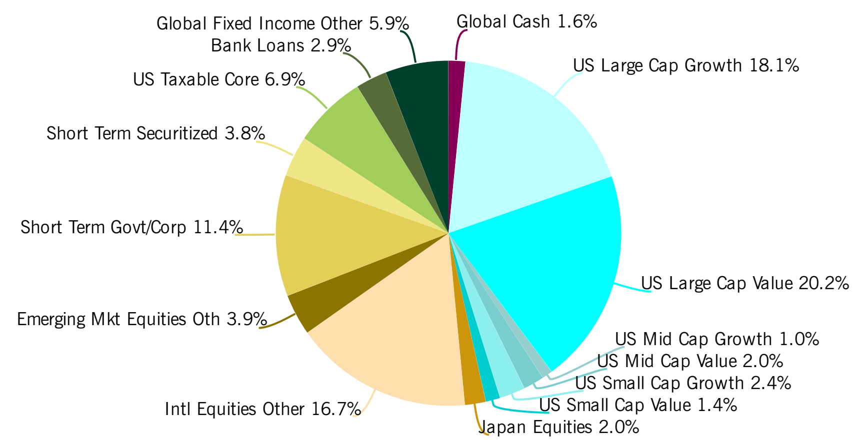


Does not include Performance Ineligible Assets.

DOLLAR-WEIGHTED RETURN % (NET OF FEES)

	Previous Year ($) 12/31/18-12/31/19	Year to Date ($) 12/31/19-02/05/20	Performance Inception ($) 06/09/15-02/05/20
Beginning Total Value	**76,362,265**	**99,075,604**	**38,680,482**
Net Contributions/Withdrawals	6,615,783	-40,751	37,488,620
Investment Earnings	16,097,557	1,579,559	24,445,310
Ending Total Value	**99,075,604**	**100,614,413**	**100,614,413**
DOLLAR WEIGHTED RATE OF RETURN (%) (Annualized for periods over 12 months)			
Return % (Net of Fees)	20.23	1.59	7.55
90-Day T-Bills	2.25	0.16	1.16

ASSET ALLOCATION



Fully Invested With a Watchful Eye Toward Risks and Opportunities

As of January 8, 2020

- **Risk markets begin the year where they left off.** We think strong 4Q rally in risk assets is due to four things: 1) Fed, ECB and BOJ expanding balance sheets aggressively; 2) progress on Brexit and trade; 3) early indications that the global economy is troughing, most notably PMIs in China and Europe; and 4) valuations have rebounded sharply from the very cheap levels last summer.

- **4Q breakout in global equity markets suggests secular bull market has begun next leg.** While equity markets are now pricing a strong rebound in growth, we think the rally can continue as long as the central banks' balance sheet expansion persists at current rates of $100 billion per month. Valuations look "fair" assuming volatility stays low and could even go higher.

- **Inflation may not be that far away**. With central banks seemingly unafraid of inflation and fiscal policy on the rise, inflation risks are growing. This is good for nominal GDP growth and in line with our global reflation theme, but many portfolios may not be prepared for it. Our portfolios are more aligned with a world of eventual rising inflation with overweight to US value and international stocks. We will look to hedge our portfolios from rising inflation during 2020 as opportunities arise.

- **The US will likely lag the global recovery.** International economies are more levered to global trade improving while the US is still dealing with the fading fiscal stimulus enacted in 2018 and corporate margin pressures. Capital spending has disappointed and is unlikely to bounce back much as US corporates delever until earnings growth returns. We forecast just 3 percent EPS growth for the S&P 500 in 2020. Meanwhile, international earnings growth looks better next year relative to the US, particularly in Japan, Brazil, and South Korea.

- **Our view has been consistent over the past year to favor quality growth at a reasonable price and Value.** Our only underweights within equities are in US growth and small/mid caps. Japan and Europe are our favored regions given their greater leverage to global growth recovery and trade deal. We also like select EM. We remain underweight credit.

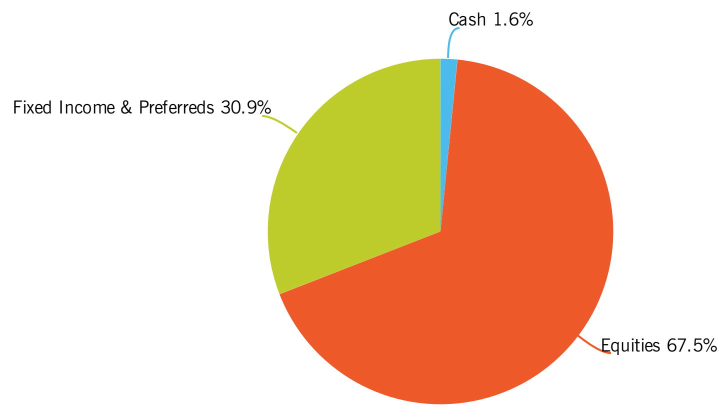
- **US overweights:** Utilities, Staples & Financials. **US underweights**: Tech & Consumer Discretionary. We still prefer large cap to small and value to growth. We have been expecting a rotation from defensives to cyclicals once the Fed got ahead of the slowdown. That may have begun last month but is likely ahead of itself if rates are topping again. **Avoid profitless growth stocks and maintain some bond proxies for potential 1H growth disappointments.**

Source: Morgan Stanley & Co. Research

ASSET ALLOCATION

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD As of February 05, 2020 | Reporting Currency: USD

ASSET ALLOCATION - ASSET CLASS



ASSET ALLOCATION

	Total Value ($) 02/05/2020	% of Portfolio 02/05/2020
Cash	1,574,801.87	1.6
Equities	67,949,532.27	67.5
Fixed Income & Preferreds	31,090,121.53	30.9
TOTAL PORTFOLIO	**100,614,455.67**	**100.0**

EQUITIES ASSET ALLOCATION

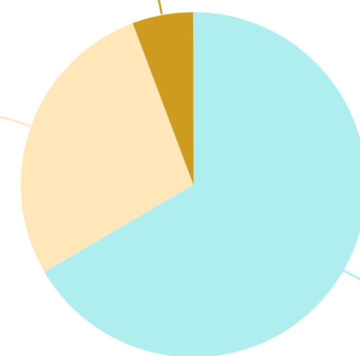
TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD

As of February 05, 2020 | Reporting Currency: USD

TOP EQUITY POSITIONS BASED ON TOTAL VALUE

SECURITY DESCRIPTION	Total Value ($) 02/05/2020	% of Equities 02/05/2020
OAKMARK FUND ADVISOR	7,000,999.61	10.3
PGIM JENNISON GROWTH Z	6,409,206.64	9.4
ISHARES CORE S&P U.S. GROWTH	6,248,285.40	9.2
ISHARES CORE S&P U.S. VALUE	5,910,745.05	8.7
AMERICAN EUROPACIFIC GRW F2	5,886,011.51	8.7
ISHARES CORE MSCI EAFE ETF	5,884,028.72	8.7
JOHN HANCOCK DISPLND VAL INST	5,863,251.52	8.6
THORNBURG INTL GROWTH I	5,075,112.47	7.5
VANGUARD INDEX FDS S&P 500 ETF	4,077,592.20	6.0
LAZARD EMRG MKT EQ BLEND INST	2,933,473.24	4.3
Top Equity Positions	**55,288,706.36**	**81.4**
Other Equity Positions	**12,660,825.91**	**18.6**
Total Equities	**67,949,532.27**	**100.0**

ASSET ALLOCATION - EQUITIES



ASSET ALLOCATION - EQUITIES

	% of Equities 02/05/2020	Total Value ($) 02/05/2020	% of Portfolio 02/05/2020
US Equities	**66.6**	**45,248,794.34**	**45.0**
US Large Cap Growth	26.8	18,196,787.95	18.1
US Large Cap Value	29.9	20,285,515.11	20.2
US Mid Cap Growth	1.5	995,761.22	1.0
US Mid Cap Value	2.9	1,974,493.22	2.0
US Small Cap Growth	3.6	2,436,359.83	2.4
US Small Cap Value	2.0	1,359,877.03	1.4
International Equities	**27.7**	**18,810,382.17**	**18.7**
Japan Equities	2.9	1,965,229.47	2.0
Intl Equities Other	24.8	16,845,152.70	16.7
Emerging & Frontier Mkt	**5.7**	**3,890,355.76**	**3.9**
Emerging Mkt Equities Oth	5.7	3,890,355.76	3.9
TOTAL EQUITIES	**100.0**	**67,949,532.27**	**67.5**

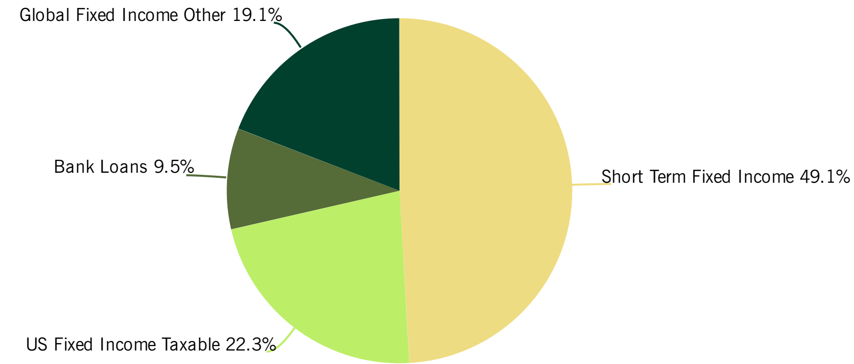
As of February 05, 2020 | Reporting Currency: USD

FIXED INCOME & PREFERREDS ASSET ALLOCATION

TOP FIXED INCOME & PREFERRED POSITIONS BASED ON TOTAL VALUE

SECURITY DESCRIPTION	Total Value ($) 02/05/2020	% of Fixed Income & Preferreds 02/05/2020
PGIM SHORT-TERM CORP BOND Z	15,262,479.90	49.1
PIONEER BOND Y	6,939,028.84	22.3
NUVEEN STRATEGIC INCOME INST	5,948,783.40	19.1
PUTNAM FLOATING RATE INC Y	2,939,829.39	9.5
Top Fixed Income & Preferred Positions	**31,090,121.53**	**100.0**
Other Fixed Income & Preferred Positions	**-**	**-**
Total Fixed Income & Preferred	**31,090,121.53**	**100.0**

ASSET ALLOCATION - FIXED INCOME & PREFERREDS



ASSET ALLOCATION - FIXED INCOME & PREFERREDS

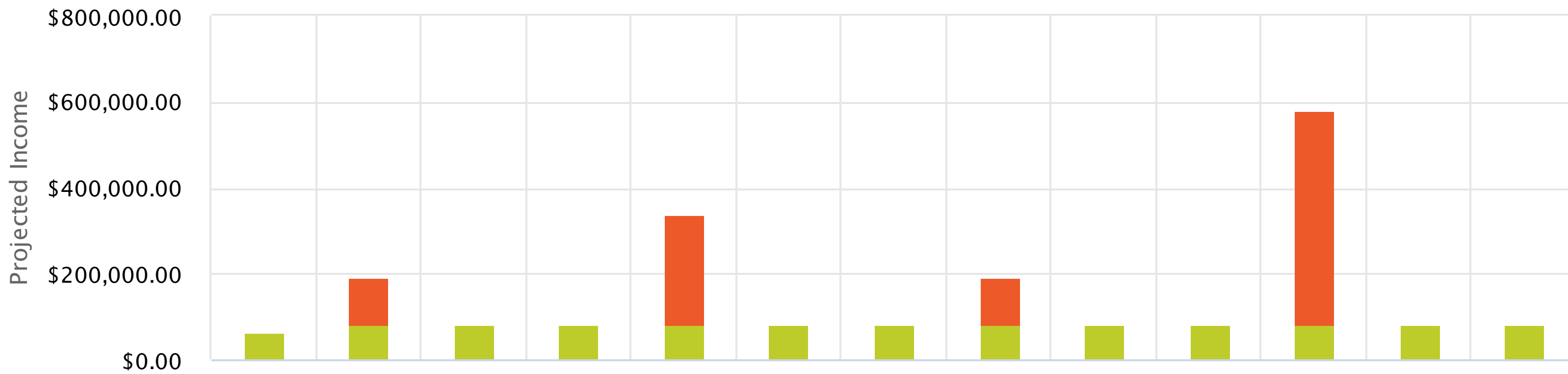
	% of Fixed Income & Preferreds 02/05/2020	Total Value ($) 02/05/2020	% of Portfolio 02/05/2020
Short Term Fixed Income	49.1	15,262,479.90	15.2
US Fixed Income Taxable	22.3	6,939,028.84	6.9
Bank Loans	9.5	2,939,829.39	2.9
Global Fixed Income Other	19.1	5,948,783.40	5.9
TOTAL FIXED INCOME & PREFERREDS	**100.0**	**31,090,121.53**	**30.9**

PROJECTED 12 MONTH INCOME SUMMARY

Morgan Stanley

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD | As of February 05, 2020 | Reporting Currency: USD

PROJECTED 12 MONTH INCOME SUMMARY



Asset Class	Total Value ($) 02/05/2020	02/06/20 to 02/29/20 ($)	12 Month Projected Income ($) (03/01/20 - 02/28/21)													% Yield
			Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	
Cash	1,574,802	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
Equities	67,949,532	0	108,084	0	0	254,330	0	0	108,084	0	0	496,092	0	0	**966,590**	1.42
Fixed Income & Preferreds	31,090,122	65,966	84,216	84,216	84,216	84,216	84,216	84,216	84,216	84,216	84,216	84,216	84,216	84,216	**1,010,592**	3.25
Total	**100,614,456**	**65,966**	**192,300**	**84,216**	**84,216**	**338,546**	**84,216**	**84,216**	**192,300**	**84,216**	**84,216**	**580,308**	**84,216**	**84,216**	**1,977,182**	**1.97**

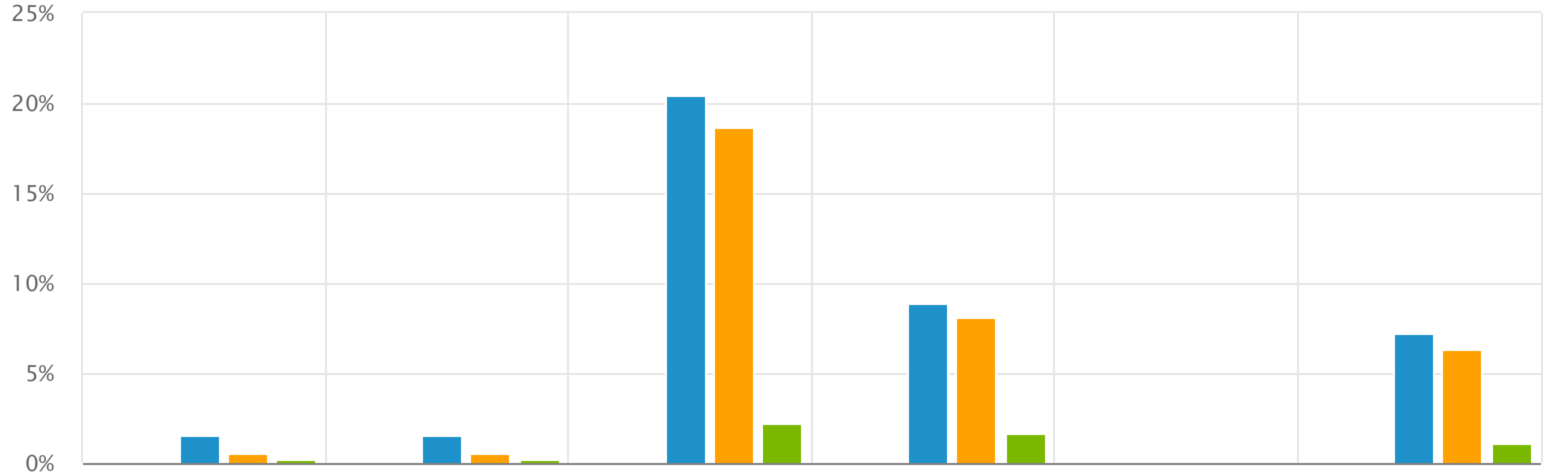
Projected Income is calculated only for securities where data is available.
In instances whereby payment frequency and/or last payment date is not available, income is based on the current dividend or coupon rate, and will be displayed in the Total column only.

TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD

As of February 05, 2020 | Reporting Currency: USD

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



	Quarter to Date 12/31/19 - 02/05/20	Year to Date 12/31/19 - 02/05/20	Previous Year 12/31/18 - 12/31/19	Last 3 Years 02/28/17 - 02/05/20	Last 5 Years 02/28/15 - 02/05/20	Performance Inception 07/13/15 - 02/05/20
Beginning Total Value ($)	98,300,159.04	98,300,159.04	75,725,161.30	60,463,074.00	-	0.00
Net Contributions/Withdrawals ($)	-40,751.27	-40,751.27	6,615,782.67	19,030,426.60	-	75,353,208.46
Investment Earnings ($)	1,585,639.43	1,585,639.43	15,959,215.06	20,351,546.60	-	24,491,838.74
Ending Total Value ($)	99,845,047.19	99,845,047.19	98,300,159.04	99,845,047.19	-	99,845,047.19
Return % (Net of Fees)	1.61	1.61	20.40	8.93	-	7.20
TN TSBA Composite (%)	0.59	0.59	18.63	8.13	-	6.38
FTSE T-Bills 30 Day (%)	0.15	0.15	2.20	1.67	-	1.13

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.
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.

POSITIONS TIME WEIGHTED PERFORMANCE DETAIL

Morgan Stanley

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD As of February 05, 2020 | Reporting Currency: USD

CHANGE IN VALUE LAST 12 MONTHS RETURN % (GROSS OF FEES) VS. BENCHMARK (ANNUALIZED)

Product/ Security Description	Account Number	Inception Date/ Closed Date	Beginning Total Value ($)	Net Contributions/ Withdrawals ($)	Appreciation/ Depreciation ($)	Income Received ($)	Ending Total Value ($)	Last 12 Months (%) 02/28/19 - 02/05/20	% of Portfolio
Total Portfolio (Gross of Fees) *TN TSBA Composite*		**06/09/2015 -**	**82,954,720.27**	**6,610,117.49**	**7,726,928.38**	**3,322,646.53**	**100,614,412.67**	**12.73** **11.24**	**100.00**
Exchange Traded/ Closed End Funds									
ISHARES CORE MSCI EAFE ETF(IEFA)	Multiple	11/28/2018 -	4,927,561.99	341,973.39	431,301.30	183,192.04	5,884,028.72	11.78	5.85
ISHARES CORE S&P U.S. GROWTH(IUSG)	Multiple	11/28/2018 -	4,929,860.02	149,269.23	1,073,091.60	96,064.55	6,248,285.40	23.17	6.21
ISHARES CORE S&P U.S. VALUE(IUSV)	Multiple	11/28/2018 -	4,885,018.86	65,831.26	829,149.04	130,745.89	5,910,745.05	18.65	5.87
ISHARES INC MSCI JAPAN ETF(EWJ)	Multiple	11/04/2016 -	812,953.80	60,130.24	87,425.90	19,910.06	980,420.00	11.96	0.97
ISHARES S&P MIDCAP 400 INDEX(IJH)	Multiple	11/28/2018 -	812,430.00	78,449.74	78,097.04	15,408.30	984,385.08	10.52	0.98
ISHARES SP SMALLCAP 600 INDEX(IJR)	Multiple	11/28/2018 -	1,619,684.82	203,089.36	100,227.71	27,386.89	1,950,388.78	6.28	1.94
JOHN HANCOCK MULTI FACT MID(JHMM)	Multiple	02/22/2019 -	817,681.45	55,874.63	123,558.09	10,023.18	1,007,137.35	15.45	1.00
VANGUARD FTSE EMERGING MARKETS(VWO)	Multiple	02/22/2016 -	814,378.54	68,472.78	43,223.25	30,807.95	956,882.52	8.26	0.95
VANGUARD INDEX FDS S&P 500 ETF(VOO)	Multiple	02/22/2016 -	3,275,135.30	60,588.05	667,852.24	74,016.61	4,077,592.20	21.88	4.05
Mutual Funds									

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.

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD | As of February 05, 2020 | Reporting Currency: USD

CHANGE IN VALUE LAST 12 MONTHS RETURN % (GROSS OF FEES) VS. BENCHMARK (ANNUALIZED) (Continued)

Product/ Security Description	Account Number	Inception Date/ Closed Date	Beginning Total Value ($)	Net Contributions/ Withdrawals ($)	Appreciation/ Depreciation ($)	Income Received ($)	Ending Total Value ($)	Last 12 Months (%) 02/28/19 - 02/05/20	% of Portfolio
AMERICAN EUROPACIFIC GRW F2(AEPFX)	Multiple	07/14/2015 -	4,953,364.42	170,718.73	586,341.15	175,587.21	5,886,011.51	14.79	5.85
BLACKROCK HIGH EQ INCOME INST(BMCIX)	Multiple	09/02/2015 -	821,865.86	54,905.55	68,376.50	37,733.89	982,881.80	12.07	0.98
DELAWARE SMID CAP GROWTH INST(DFDIX)	Multiple	09/02/2015 -	853,544.87	83,410.06	111,259.65	28,268.22	1,076,482.80	15.05	1.07
DWS SMALL CAP CORE S(SSLCX)	Multiple	02/20/2018 -	749,399.47	0.00	18,716.39	1,249.41	769,365.28	2.66	0.76
E V SHT DURATION GOVT INC I(EILDX)	Multiple	02/22/2019 12/31/2019	1,227,456.01	-1,245,331.55	-16,650.89	34,526.43	0.00	-	0.00
JOHN HANCOCK DISPLND VAL INST(JVLIX)	Multiple	07/24/2018 -	4,884,436.49	403,842.32	242,498.86	332,473.85	5,863,251.51	10.70	5.83
LAZARD EMRG MKT EQ BLEND INST(EMBIX)	Multiple	09/02/2015 -	2,480,791.65	196,948.74	193,273.86	62,458.98	2,933,473.23	9.33	2.92
NUVEEN STRATEGIC INCOME INST(FCBYX)	Multiple	10/02/2017 -	4,930,324.97	468,580.49	360,893.27	188,984.67	5,948,783.40	10.67	5.91
OAKMARK FUND ADVISOR(OAYMX)	Multiple	05/04/2018 -	5,736,567.44	404,488.93	314,892.20	545,051.04	7,000,999.61	13.68	6.96
PGIM JENNISON GROWTH Z(PJFZX)	Multiple	09/02/2015 -	5,009,657.41	83,438.14	897,765.45	418,345.64	6,409,206.64	25.47	6.37
PGIM SHORT-TERM CORP BOND Z(PIFZX)	Multiple	09/02/2015 -	9,875,987.67	4,731,418.78	357,976.09	297,097.37	15,262,479.91	5.93	15.17

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.

POSITIONS TIME WEIGHTED PERFORMANCE DETAIL

Morgan Stanley

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD As of February 05, 2020 | Reporting Currency: USD

CHANGE IN VALUE LAST 12 MONTHS RETURN % (GROSS OF FEES) VS. BENCHMARK (ANNUALIZED) (Continued)

Product/ Security Description	Account Number	Inception Date/ Closed Date	Beginning Total Value ($)	Net Contributions/ Withdrawals ($)	Appreciation/ Depreciation ($)	Income Received ($)	Ending Total Value ($)	Last 12 Months (%) 02/28/19 - 02/05/20	% of Portfolio
PIONEER BOND Y(PICYX)	Multiple	05/03/2017 -	5,748,924.01	646,128.85	341,587.84	202,388.14	6,939,028.84	9.02	6.90
PUTNAM EQUITY INCOME Y(PEIYX)	Multiple	02/22/2019 -	1,633,470.05	40,870.23	237,733.82	77,266.73	1,989,340.83	18.20	1.98
PUTNAM FLOATING RATE INC Y(PFRYX)	Multiple	05/03/2017 -	2,470,227.25	365,951.02	-13,149.90	116,801.01	2,939,829.38	3.91	2.92
T ROWE PRICE JAPAN FUND(PRJPX)	Multiple	09/02/2015 -	821,999.58	9,705.29	134,909.44	18,195.15	984,809.46	17.57	0.98
TEMPLETON GLOBAL BD FD ADV(TGBAX)	Multiple	09/02/2015 12/19/2019	1,645,431.93	-1,580,896.84	-154,090.25	89,555.16	0.00	-3.59	0.00
THORNBURG INTL GROWTH I(TINGX)	Multiple	09/02/2015 -	4,172,536.94	173,021.63	694,094.40	35,459.50	5,075,112.47	16.92	5.04
VICTORY RS VALUE Y(RSVYX)	Multiple	09/02/2015 -	815,821.35	42,162.50	51,726.15	69,022.00	978,732.00	14.10	0.97
Cash, MMF and Bank Deposits									
BANK DEPOSIT PROGRAM(BDPS)	Multiple	06/18/2015 -	1,228,208.13	346,550.77	0.00	0.00	1,574,758.90	-	1.57
Cash(0000MONEY)	Multiple	06/17/2015 01/31/2020	0.00	135,151.83	-135,151.83	0.00	0.00	-	0.00
MORGAN STANLEY BANK N.A.(MSBNK)	Multiple	06/30/2015 01/31/2020	0.00	-3,795.11	0.00	3,795.11	0.00	-	0.00
MORGAN STANLEY PRIVATE BANK NA(MSPBNA)	Multiple	07/31/2015 01/31/2020	0.00	-831.55	0.00	831.55	0.00	-	0.00

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.

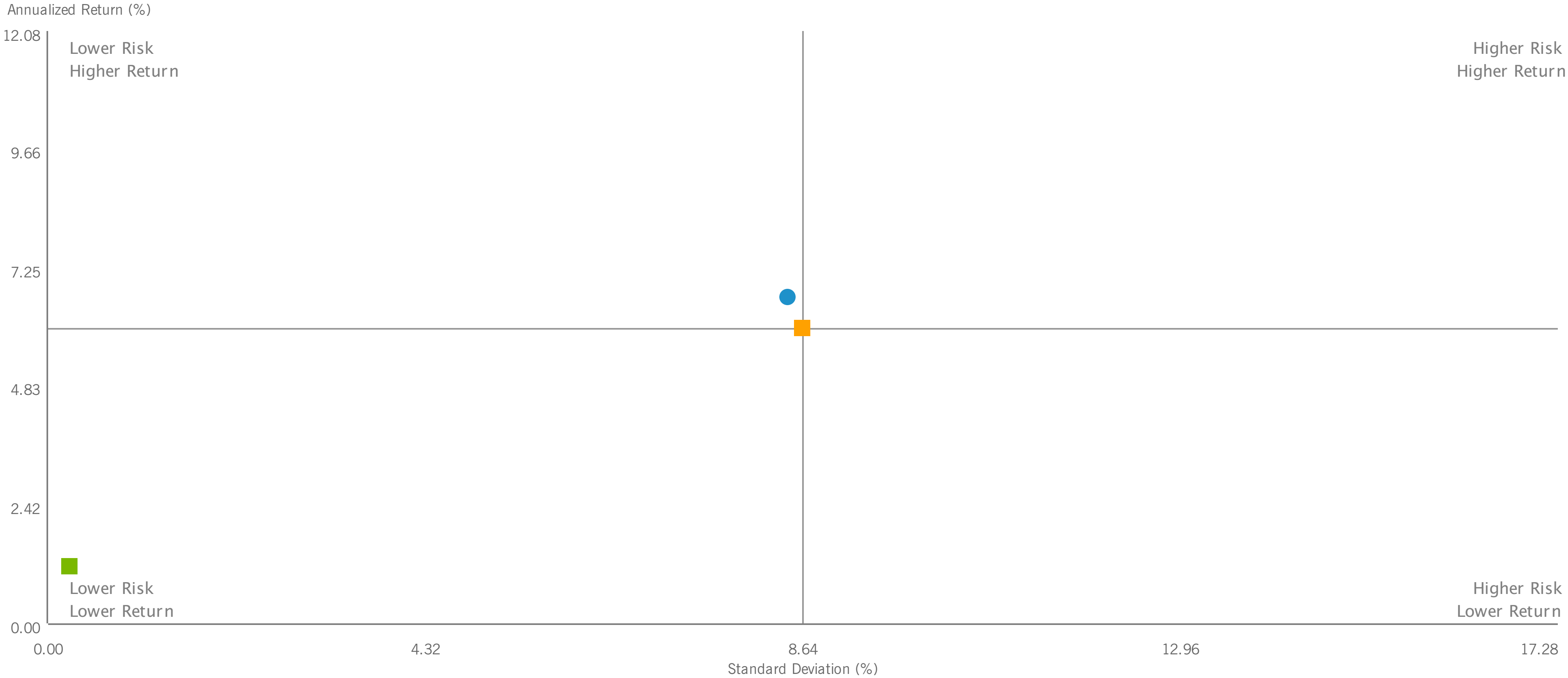
RISK VS. RETURN - ADVISORY ASSETS ONLY

Morgan Stanley

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD

As of January 31, 2020 | Reporting Currency: USD

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



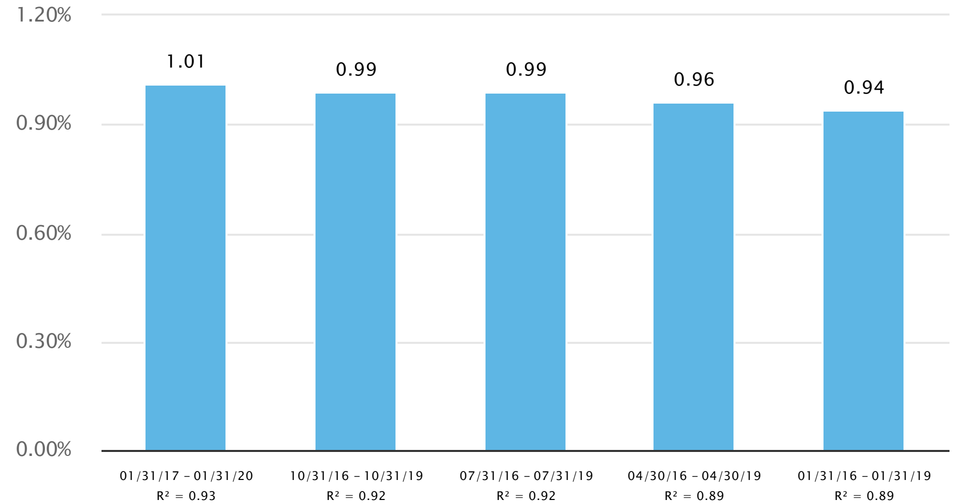
	Return % (Net of Fees) 07/31/15-01/31/20	Standard Deviation (%) 07/31/15-01/31/20
Portfolio	6.64	8.47
TN TSBA Composite	6.04	8.64
FTSE T-Bills 30 Day	1.15	0.25

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.
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.

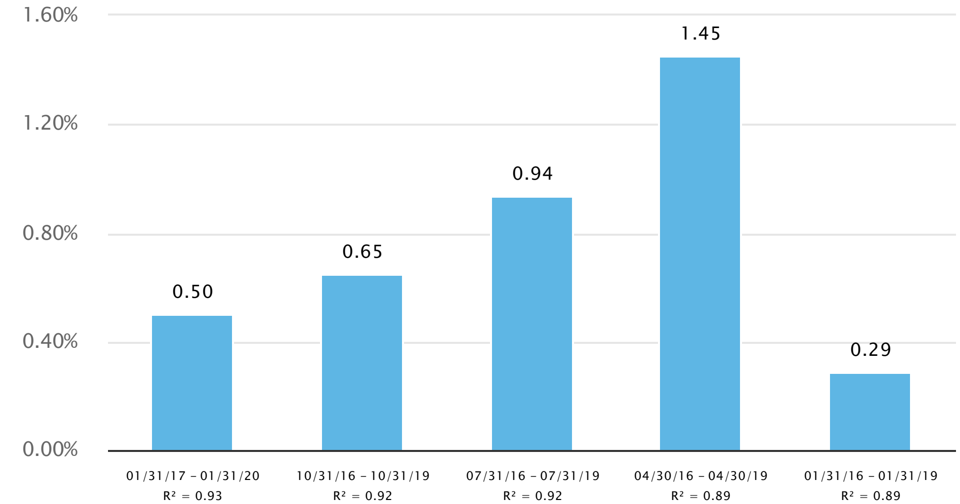
MODERN PORTFOLIO THEORY - ADVISORY ASSETS ONLY

TAMMY GRISSOM TTEE TSBA OPEB TRUST U/T/A DTD — As of January 31, 2020 | Reporting Currency: USD

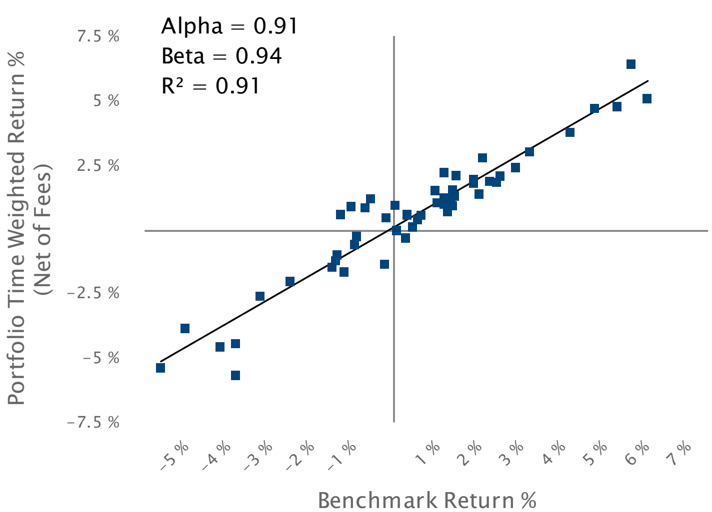
BETA - ROLLING PERIODS - TIME WEIGHTED RETURN %(NET OF FEES)



ALPHA - ROLLING PERIODS - TIME WEIGHTED RETURN %(NET OF FEES)



MONTHLY OBSERVATIONS SINCE 07/31/15 WITH SIMPLE REGRESSION LINE - TIME WEIGHTED RETURN %(NET OF FEES)



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

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

Modern Portfolio Theory: Seeks to quantify the relationship between risk and return and operates under the assumption that an investor must be compensated for assuming risk.

R^2: Is a measure that indicates the extent to which fluctuations in a portfolio's time weighted net of fees return is correlated with the return of the general market. An R^2 of 0.80 implies that 80% of the fluctuation of a portfolio's return is explained by the fluctuation in the market.

Graph Notes: Both the benchmark and portfolio returns are adjusted by the return of the 90-day Treasury Bills to illustrate the excess return above the Risk Free Rate for each period.

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.
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.

Our Key Overweights / Underweights

- Overweight Global Equities
  - Overweight International Developed, Underweight US and Equal-weight EM
  - Within the United States
    - Underweight Growth/Consumer Discretionary
    - Underweight Small/Mid Caps
    - Overweight Value
- Underweight Fixed Income
  - Tactical Overweight to Long Duration Treasuries to Hedge Portfolio
  - Underweight Credit Especially High Yield
  - Zero weight to International Developed Market Fixed Income

Source: Morgan Stanley Wealth Management GIC

Bottom Line: Our Recommendations

As of January 8, 2020

- While the global economy has slowed materially over the past year, we think global reflation is still the primary narrative and trend from 2016. 2018-20 represents a consolidation of this primary trend. Central banks are stimulating aggressively and while we expect the global economy to trough in 1Q2020, the US economy will trough later or show little sign of acceleration until 2H2020, leaving a defensive skew to leadership.

- Global equity markets had a difficult year in 2018 despite relatively strong economic and earnings growth in most regions. Tightening financial conditions, higher interest rates and peaking growth led to a 25% de-rating on global valuations which completed in December 2018. 2019 has been the opposite of 2018, with markets re-rating on lower interest rates and a new round of quantitative easing by central banks. Risk assets may remain overvalued until these activities subside which is unlikely in the near term. Valuations could overshoot fair value to the upside.

- Long-duration Treasuries have outperformed equities since our tactical shift in April, especially on a risk-adjusted basis. We still like long-duration Treasuries as US GDP growth slows. We have a preference for value sectors globally rather than growth given our view that valuations appear stretched for growth stocks and they are crowded. We do like high-quality large-cap growth stocks that trade at reasonable valuations.

- International equity markets have underperformed the US equity market for the past decade. Going forward, we expect International to outperform as the global economy troughs first and grows faster over the next few years, the Fed cuts rates and the US dollar declines. In contrast to the US, international economies also have more labor slack and fiscal capacity.

- Within fixed income, we recommend US-only positioning with no exposure to high yield and some TIPS as inflation expectations recover further with our leading indicators suggesting core CPI is heading to 2.5% or higher by the middle of 2020. We would revisit our position in high yield if spreads were to widen out again toward levels seen at the end of December. We continue to like long-duration Treasuries *tactically*.

- Our cyclical bear market/consolidation call for global equities ended in November when stocks broke out of a two-year range. We think the secular bull market is intact and the next leg has begun. It's important to note that SPX/GOLD has NOT broken out and informs us that inflation may be starting to stir. Our portfolios are set up to benefit from global reflation when it starts in earnest, although that may be a 2H20 story.

- We think the next leg of the secular bull market should coincide with a paradigm shift in which leadership moves from stability and growth assets to cyclicality and value. This aligns with our global reflation narrative from 2016 and the end of secular stagnation. The end of QE and the shift toward more fiscal spending by governments and capital spending by corporates should drive higher productivity over the next decade.

Source: Morgan Stanley Wealth Management GIC

DISCLOSURES

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

For convenience purposes, your Financial Advisor may have assigned a designated name for this Document. The list of the accounts covered in this document is noted herein and may not include all of your accounts with us or external custodians. Furthermore, the information included in this document may not include all asset classes/securities/liabilities held by you at the firm or external custodians. Please review this document carefully and discuss any questions you may have with your Financial Advisor. If you do not understand an entry, suspect an error, or want more details on current values or other information, contact your Financial Advisor. This document is based upon your Morgan Stanley account holdings and may include other holdings/information that you or a third party provided about assets custodied elsewhere. Morgan Stanley will not verify any other holdings/information. If any information reflects assets held away from Morgan Stanley that will be indicated. The information contained in this document is subject to, and does not supersede the confirmations and account statements you receive from us. Values shown in your official account statement may differ from the values shown in this document due to, among other things, different reporting methods, delays, market conditions and interruptions. If there are discrepancies between your official account statement and this document, rely on your official account statement.

The information in this document is approximate and subject to updating, correction and other changes. We are not obligated to notify you if information changes. Although the statements of fact and data in this document have been obtained from, and are based upon sources that we believe to be reliable, we do not guarantee their accuracy, or timeliness, and any such information may be incomplete or condensed. Percentage values shown in this document are subject to rounding, which may impact total values. The values of securities and other investments not actively traded may be estimated or may not be available.

This information is provided for informational purposes only and should not be used for tax preparation. The information reported on your Form(s) 1099 supersedes the information provided in this report and should be exclusively relied upon for tax preparation. Morgan Stanley, its affiliates and its employees are not in the business of providing tax or legal advice. Clients should seek advice based on their particular circumstances from an independent tax and legal advisor. Morgan Stanley Smith Barney LLC is a registered Broker/Dealer, Member SIPC, and not a bank. Where appropriate, Morgan Stanley Smith Barney LLC has entered into arrangements with banks and other third parties to assist in offering certain banking related products and services.

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

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

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

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

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

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

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

External Accounts: "External" generally refers to accounts, assets, and/or liabilities that you hold with other financial institutions and/or which may be custodied outside of Morgan Stanley (whose

subsidiaries include Morgan Stanley Smith Barney LLC and Morgan Stanley & Co.) ("External Accounts"). External Accounts are not under administration or management at Morgan Stanley and are not reflected in your Morgan Stanley account statements. Information related to External Accounts is provided solely as a service to you and your Financial Advisor/Private Wealth Advisor. The information reference is based upon information provided by external sources which we believe to be reliable. However, we do not independently verify this information. As such, we do not warrant or guarantee that such information is accurate or timely, and any such information may be incomplete or condensed.
Information related to Income, Performance, Tax Lots, Total Cost, Target Asset Allocation, Asset Classification and Gain/Loss may differ from the information provided by your custodian. External information presented herein is subject to, and does not supersede, the confirmations and account statements provided by your custodian. Values shown in an account statement from your custodian may differ from the values shown here due to, among other things, different reporting methods, delays, market conditions and interruptions. If there are discrepancies between your custodian's official account statement and this material, rely on the custodian's official account statement. We are not obligated to notify you or your Financial Advisor/Private Wealth Advisor if information changes. In performance calculations, the inception date referenced will reflect the first date on which Morgan Stanley received account information from the custodian. If information on an External Account cannot be reported, it will be noted.
Assets not custodied with Morgan Stanley are not covered by SIPC protection at Morgan Stanley or by additional protection under Morgan Stanley's excess insurance coverage plans. However, these assets may be subject to SIPC coverage at the entity at which they are custodied.

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

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

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

Market values used for performance calculation do not include Performance Ineligible Assets and thus may differ from asset allocation market values. Common examples of Performance Ineligible Assets include life insurance and annuities as well as Manually Added and External accounts, assets and liabilities.
Unless otherwise indicated, performance is a composite calculation of the entire portfolio and may include brokerage and investment advisory accounts as well as assets for different accounts included in this report. The accounts included in the composite may have (or have had) different investment objectives and strategies, been subject to different restrictions, and incurred different types of fees, markups, commissions and other charges. Accordingly, performance results may blend the performance of assets and strategies that may not have been available in all of the accounts at all times during the reporting period. In addition, accounts in the composite may have changed from brokerage to advisory or vice versa. Accounts may also have moved from one advisory program to another (including from a discretionary program to a non-discretionary program).

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

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

Sub Account and Security Level Performance: The performance return methodology described above and in the TWR and IRR definitions applies to both Account Level and Sub-Account (e.g. Asset Class or Security level) performance returns. The inputs consist of market values and net flows.

For example, TWR is calculated by taking the Change in Market Value (Ending MV – Beginning MV) less any net flows, divided by the beginning MV. TWR = (Ending MV – Beginning MV – Net Flows) / Beginning MV

The difference lies in what is or is not included in the Market Values and Flows. For account level performance, the total account market values and all flows within the account are taken into account. For sub-account level performance, only those market values and flows associated with the specific securities included are taken into account.

Flows that are not security specific typically include account advisory fees, cash contributions or withdrawals, and any other flows that are not attributed to a specific security.

Flows that are security specific including purchases, sales, dividends, interest, partnership distributions, return of capital, fund sales charges, security transaction fees, and ongoing fund expenses are typically reflected in the security level returns.

Gross of Fees: As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, for an account with an initial value of $100,000 and a 2% annual fee, if the gross performance is 10% per year over a three year period, the compounding effect of the fees will result in a net annual compound rate of return of approximately 7.81% per year over a three year period, and the total value of the client's portfolio at the end of the three year period would be approximately $133,100 without the fees and $125,307 with the fees.

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.

Projected 12 Month: Projected 12 Month Income is based upon cash income from interest, cash dividends, and partnership distributions. It is a hypothetical projection calculated using current yields. The projected income referenced is based upon certain market projections effective as at today's date only and can change at any time. Such projected income is hypothetical, do not reflect actual investment results, and is not a guarantee of future results. The projected income is referenced for illustrative purposes only. Morgan Stanley does not represent or guarantee that the projected income referenced will or can be attained. The actual income may be lower or higher than the projections based upon a variety of factors and assumptions. The projected income shown may under or over compensate for the impact of actual market conditions and other factors. We make no representation or warranty as to the reasonableness of the assumptions made, or that all assumptions used to construct this projected income information have been stated or fully considered. To the extent that the assumptions made do not reflect actual conditions, the illustrative value of the hypothetical projected income will decrease.

The projected income referenced may include income from Morgan Stanley & Co. and External Accounts, where data is available. Such information was obtained from third party sources which Morgan Stanley believes to be reliable. However, we make no representation or guarantee that the information is accurate or complete. You should not rely upon this information to make any investment decision. Please refer to the official account statements and performance reports you received from your custodian and/or financial institution for information about projected income in your External Accounts. The projected income referenced does not include income from assets in Manually Added External Accounts.

Morgan Stanley Wealth Management is the trade name of Morgan Stanley Smith Barney LLC, a registered broker-dealer in the United States.

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 suitable 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. Morgan Stanley Smith Barney LLC offers investment program services through a variety of investment programs, which are opened pursuant to written client agreements. Each program offers investment managers, funds and features that are not available in other programs; conversely, some investment managers, funds or investment strategies may be available in more than one program.

Morgan Stanley's investment advisory programs may require a minimum asset level and, depending on your specific investment objectives and financial position, may not be suitable for you. Please see the Morgan Stanley Smith Barney LLC program disclosure brochure (the "Morgan Stanley ADV") for more information in the investment advisory programs available. The Morgan Stanley ADV is available at www.morganstanley.com/ADV (http://www.morganstanley.com/ADV). **Sources of Data.** Information in this material in this report has been obtained from sources that we believe to be reliable, but we do not guarantee its accuracy, completeness or timeliness. Third-party data providers make no warranties or representations relating to the accuracy, completeness or timeliness of the data they provide and are not liable for any damages relating to this data. All opinions included in this material constitute the Firm's judgment as of the date of this material and are subject to change without notice. This material was not prepared by the research departments of Morgan Stanley & Co. LLC or Morgan Stanley Smith Barney LLC. Some historical figures may be revised due to newly identified programs, firm restatements, etc.

Global Investment Manager Analysis (GIMA) Focus List, Approved List and Tactical Opportunities List; Watch Policy. GIMA uses two methods to evaluate investment products in applicable advisory programs: **Focus** (and investment products meeting this standard are described as being on the Focus List) and **Approved** (and investment products meeting this standard are described as being on the Approved List). In general, Focus entails a more thorough evaluation of an investment product than Approved. Sometimes an investment product may be evaluated using the Focus List process but then placed on the Approved List instead of the Focus List. Investment products may move from the Focus List to the Approved List, or vice versa. GIMA may also determine that an investment product no longer meets the criteria under either process and will no longer be recommended in investment advisory programs (in which case the investment product is given a "Not Approved" status). GIMA has a '**Watch**" policy and may describe a Focus List or Approved List investment product as being on "Watch" if GIMA identifies specific areas that (a) merit further evaluation by GIMA and (b) may, but are not certain to, result in the investment product becoming "Not Approved." The Watch period depends on the length of time needed for GIMA to conduct its evaluation and for the investment manager or fund to address any concerns. Certain investment products on either the Focus List or Approved List may also be recommended for the **Tactical Opportunities List** based in part on tactical opportunities existing at a given time. The investment products on the Tactical Opportunities List change over time. For more information on the Focus List, Approved List, Tactical Opportunities List and Watch processes, please see the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management. Your Financial Advisor or Private Wealth Advisor can also provide upon request a copy of a publication entitled "Manager Selection Process."

The **Global Investment Committee** is a group of seasoned investment professionals 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 model portfolio weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

The GIC Asset Allocation Models are not available to be directly implemented as part of an investment advisory service and should not be regarded as a recommendation of any Morgan Stanley investment advisory service. The GIC Asset Allocation Models do not represent actual trading or any type of account or any type of investment strategies and none of the fees or other expenses (e.g. commissions, mark-ups, mark-downs, advisory fees, fund expenses) associated with actual trading or accounts are reflected in the GIC Asset Allocation Models which, when compounded over a period of years, would decrease returns.

Adverse Active Alpha (AAA) is a patented screening and scoring process designed to help identify high-quality equity and fixed income managers with characteristics that may lead to future outperformance relative to index and peers. While highly ranked managers performed well as a group in our Adverse Active Alpha model back tests, not all of the managers will outperform. Please note that this data may be derived from back-testing, which has the benefit of hindsight. In addition, highly ranked managers can have differing risk profiles that might not be suitable for all investors. Our view is that Adverse Active Alpha is a good starting point and should be used in conjunction with other information. Morgan Stanley Wealth Management's qualitative and quantitative investment manager due diligence process are equally important factors for investors when considering managers for use through an investment advisory program. Factors including, but not limited to, manager turnover and changes to investment process can partially or fully negate a positive Adverse Active Alpha ranking. Additionally, highly ranked managers can have differing risk profiles that might not be suitable for all investors. For more information on AAA, please see the Adverse Active Alpha Ranking Model and Selecting Managers with Adverse Active Alpha whitepapers. The whitepaper are available from your Financial Advisor or Private Wealth Advisor. ADVERSE ACTIVE ALPHA is a registered service mark of Morgan Stanley and/or its affiliates. U.S. Pat. No. 8,756,098 applies to the Adverse Active Alpha system and/or methodology.

The Global Investment Manager Analysis (GIMA) Services Only Apply to Certain Investment Advisory Programs GIMA evaluates certain investment products for the purposes of some – but not all – of Morgan Stanley Smith Barney LLC's investment advisory programs (as described in more detail in the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management). If you do not invest through one of these investment advisory programs, Morgan Stanley Wealth Management is not obligated to provide you notice of any GIMA Status changes even though it may give notice to clients in other programs.

Strategy May Be Available as a Separately Managed Account or Mutual Fund Strategies are sometimes available in Morgan Stanley Wealth Management investment advisory programs both in the form of a separately managed account ("SMA") and a mutual fund. These may have different expenses and investment minimums. Your Financial Advisor or Private Wealth Advisor can provide more information on whether any particular strategy is available in more than one form in a particular investment advisory program. In most Morgan Stanley Wealth Management investment advisory accounts, fees are deducted quarterly and have a compounding effect on performance. For example, on an advisory account with a 3% annual fee, if the gross annual performance is 6.00%, the compounding effect of the fees will result in a net performance of approximately 3.93% after one year, 1 after three years, and 21.23% after five years. **Conflicts of Interest:** GIMA's goal is to provide professional, objective evaluations in support of the Morgan Stanley Wealth Management investment advisory programs. We have policies and procedures to help us meet this goal. However, our business is subject to various conflicts of interest. For example, ideas and suggestions for which investment products should be evaluated by GIMA come from a variety of sources, including our Morgan Stanley Wealth Management Financial Advisors and their direct or indirect managers, and other business persons within Morgan Stanley Wealth Management or its affiliates. Such persons may have an ongoing business relationship with certain investment managers or mutual fund companies whereby they, Morgan Stanley Wealth Management or its affiliates receive compensation from, or otherwise related to, those investment managers or mutual funds. For example, a Financial Advisor may suggest that GIMA evaluates an investment manager or fund in which a portion of his or her clients' assets are already invested. While such a recommendation is permissible, GIMA is responsible for the opinions expressed by GIMA. See the conflicts of interest section in the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management for a discussion of other types of conflicts that may be relevant to GIMA's evaluation of managers and funds. In addition, Morgan Stanley Wealth Management, MS & Co., managers and their affiliates provide a variety of services (including research, brokerage, asset management, trading, lending and investment banking services) for each other and for various clients, including issuers of securities that may be recommended for purchase or sale by clients or are otherwise held in client accounts, and managers in various advisory programs. Morgan Stanley Wealth Management, managers, MS & Co., and their affiliates receive compensation and fees in connection with these services. Morgan Stanley Wealth Management believes that the nature and range of clients to which such services are rendered is such that it would be inadvisable to exclude categorically all of these companies from an account.

Morgan Stanley charges each fund family we offer a mutual fund support fee, also called a "revenue-sharing payment," on client account holdings in fund families according to a tiered rate that increases along with the management fee of the fund so that lower management fee funds pay lower rates than those with higher management fees.

Consider Your Own Investment Needs: The model portfolios and strategies discussed in the material are formulated based on general client characteristics including risk tolerance. This material is not intended to be a client-specific suitability analysis or recommendation, or offer to participate in any investment. Therefore, clients should not use this profile as the sole basis for investment decisions. They should consider all relevant information, including their existing portfolio, investment objectives, risk tolerance, liquidity needs and investment time horizon. Such a suitability determination may lead to asset allocation results that are materially different from the asset allocation shown in this profile. Talk to your Financial Advisor about what would be a suitable asset allocation for you, whether CGCM is a suitable program for you.

No obligation to notify – Morgan Stanley Wealth Management has no obligation to notify you when the model portfolios, strategies, or any other information, in this material changes.

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

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

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

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

KEY ASSET CLASS CONSIDERATIONS AND OTHER RISKS

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

Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are suitable only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to: Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; Lack of liquidity in that there may be no secondary market for a fund; Volatility of returns; Restrictions on transferring interests in a fund; Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; Risks associated with the operations, personnel, and processes of the manager; and Risks associated with cybersecurity. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. All expressions of opinion are subject to change without notice and are not intended to be a forecast of future events or results. Further, opinions expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management. This is not a "research report" as defined by FINRA Rule 2241 or a "debt research report" as defined by FINRA Rule 2242 and was not prepared by the Research Departments of Morgan Stanley Smith Barney LLC or Morgan Stanley & Co. LLC or its affiliates. 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. While the HFRI indices are frequently used, they have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and the index may omit funds, the inclusion of which might significantly affect the performance shown. The HFRI indices are based on information self-reported by hedge fund managers that decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. Composite index results are shown for illustrative purposes and do not represent the performance of a specific investment. Individual funds have specific tax risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice. Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Wealth Management and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley Wealth Management or any of its affiliates, (3) are not guaranteed by Morgan Stanley Wealth Management and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Wealth Management is a registered broker-dealer, not a bank. This material is not to be reproduced or distributed to any other persons (other than professional advisors of the investors or prospective investors, as applicable, receiving this material) and is intended solely for the use of the persons to whom it has been delivered. This material is not for distribution to the general public. Past performance is no guarantee of future results. Actual results may vary. SIPC insurance does not apply to precious metals, other commodities, or traditional alternative investments. In Consulting Group's advisory programs, alternative investments are limited to US-registered mutual funds, separate account strategies and exchange-traded funds (ETFs) that seek to pursue alternative investment strategies or returns utilizing publicly traded securities. Investment products in this category may employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. Alternative investments are not suitable for all investors. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

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

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

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

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

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

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

Tax laws are complex and subject to change. Morgan Stanley Smith Barney LLC ("Morgan Stanley"), its affiliates and Morgan Stanley Financial Advisors and Private Wealth Advisors do not provide tax or legal advice and are not "fiduciaries" (under ERISA, the Internal Revenue Code or otherwise) with respect to the services or activities described herein except as otherwise provided in writing by Morgan Stanley and/or as described at www.morganstanley.com/disclosures/dol (http://www.morganstanley.com/disclosures/dol). Individuals are encouraged to consult their tax and legal advisors (a) before establishing a retirement plan or account, and (b) regarding any potential tax, ERISA and related consequences of any investments made under such plan or account.

Annuities and insurance products are offered in conjunction with Morgan Stanley Smith Barney LLC's licensed insurance agency affiliates.

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

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

We may act in the capacity of a broker or that of an advisor. As your broker, we are not your fiduciary and our interests may not always be identical to yours. Please consult with your Private Wealth Advisor to discuss our obligations to disclose to you any conflicts we may from time to time have and our duty to act in your best interest. We may be paid both by you and by others who compensate us based on what you buy. Our compensation, including that of your Private Wealth Advisor, may vary by product and over time.

Investment and services offered through Morgan Stanley Private Wealth Management, a division of Morgan Stanley Smith Barney LLC, Member SIPC.

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

Morgan Stanley Smith Barney LLC is a registered Broker/Dealer, Member SIPC, and not a bank. Where appropriate, Morgan Stanley Smith Barney LLC has entered into arrangements with banks and other third parties to assist in offering certain banking related products and services.

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

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

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

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

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment. **Ultrashort-term fixed income** asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

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

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

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

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

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

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

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. **Value investing** does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.
Any type of **continuous or periodic investment plan** does not assure a profit and does not protect against loss in declining markets. Since such a plan involves continuous investment in securities regardless of fluctuating price levels of such securities, the investor should consider his financial ability to continue his purchases through periods of low price levels.

This material is disseminated in the United States of America by Morgan Stanley Smith Barney LLC. Morgan Stanley Wealth Management is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the “Municipal Advisor Rule”) and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule. This material, or any portion thereof, may not be reprinted, sold or redistributed without the written consent of Morgan Stanley Smith Barney LLC.

Closed or Purged Accounts: Data from accounts which have been closed and/or purged may be included in this report, for example in performance, asset allocation, or other attributes for periods when these accounts were open. If this report does contain data from any closed or purged accounts not identified earlier in the report, those accounts are identified below.

Closed Accounts: 471-XXX865, 471-XXX925

GENERAL DEFINITIONS

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

Annualized Standard Deviation: A statistical calculation that measures the volatility of returns over time; the larger the standard deviation, the greater the volatility.

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

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.

Graph Notes: Both the benchmark and portfolio returns are adjusted by the return of the 90-day Treasury Bills to illustrate the excess return above the Risk Free Rate for each period.

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.

Modern Portfolio Theory: Seeks to quantify the relationship between risk and return and operates under the assumption that an investor must be compensated for assuming risk.

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.

Performance ineligible assets: Performance returns are not calculated for certain assets because accurate valuations and transactions for these assets are not processed or maintained by Morgan Stanley Smith Barney LLC. Common examples include life insurance and annuities as well as Manually Added and External accounts, assets and liabilities.

R^2: Is a measure that indicates the extent to which fluctuations in a portfolio's time weighted net of fees return is correlated with the return of the general market. An R^2 of 0.80 implies that 80% of the fluctuation of a portfolio's return is explained by the fluctuation in the market.

Tax-Qualified Account(s): Accounts that qualify for favorable tax treatment under US federal tax law and may benefit from favorable tax treatment under applicable state tax law. Typically, these accounts benefit from tax deferred growth potential, meaning investment earnings (such as capital gains, dividends, and interest) are generally not subject to federal income tax while the earnings remain in the account. Capital gains rates generally do not apply. Distributions of taxable amounts are generally subject to ordinary income tax and, if made before age 59 1/2, may be subject to a 10% (25% for certain SIMPLE IRA distributions) penalty tax. Some tax-qualified accounts, such as traditional Individual Retirement Accounts ("IRA") and employer sponsored retirement plan accounts, may allow tax deductible and/or pre-tax contributions (subject to certain limitations and restrictions). Other tax-qualified accounts, such as Roth IRAs and Coverdell Education Savings Accounts, may allow income tax free distributions, but only if certain conditions are satisfied.

Taxable Account(s): Accounts that are not Tax-Qualified Account(s), meaning investment earnings (such as capital gains, dividends, and interest) are generally subject to current US federal income taxation when held by US taxable investors. Note, however, that this category may include specific assets that are generally not subject to US federal income tax such as municipal bonds.

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

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

BENCHMARK DEFINITIONS

TN TSBA Composite: The current allocation is comprised of 15.00% Barclays Aggregate, 15.00% BC Global Agg 1-3 YR, 1.00% FTSE T-Bills 30 Day, 49.00% MSCI AC World Net, 10.00% MSCI EAFE Net, 10.00% MSCI EM Net.

FTSE T-Bills 30 Day: A measure of monthly returns equivilant of yield averages that are not marked to market. A measure of short term rates.

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.

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.

BC Global Agg 1-3 YR: The Barclays Global Aggregate Index provides a broad-based measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities, and USD investment grade 144A securities. This index is the 1-3 Yr component of the Global Aggregate index.

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).

90-Day T-Bills: 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.