BURLINGTON RETIREMENT SYSTEM

City of Burlington

City Hall, Room 20, 149 Church Street, Burlington, VT 05401

Robert Hooper, Chairman of the Board

Munir Kasti, Vice-Chairman

Meeting – Tuesday, February 22, 2022

Start Time – 9:00 AM – 11:00 AM

Zoom Meeting Only:

https://us02web.zoom.us/j/85261644826?pwd=SmI1amsvSkRmNzFSU29sV2VOMXhNUT09
Meeting ID: 852- 6164- 4826
Passcode: 834923
You may join by phone, dial +1 929 205 6099, meeting # 852-6164-4826

1. Agenda

2. Public Forum

3. Approve Minutes
   - January 18, 2022

4. Approve Return of Contributions — Effective Date of Benefit
   - Cory R. Marceau, Class B $1,091.02 — 03/01/2022

5. Approve Retirement Applications

	Effective Date of Benefit	Actual First Payment Date
Jason A. Lawson, Class A $5,905.31	01/01/2022	01/15/2022
Martha Q. Keenen, Class B $624.33	02/01/2022	02/15/2022

6. Administrative Updates
   - Retirement Administrative Position – Interviews in late March, or Early April

7. Fiducient's
   - BERS Fourth Quarter 2021 Investment Report
   - BERS Monthly Investment Update as of 1/31/2022
   - Review of Asset Allocation Modeling

8. Adjourn

BURLINGTON RETIREMENT BOARD
REMOTE MEETING WITH CALL-IN
BURLINGTON, VERMONT
MINUTES OF MEETING
DRAFT
January 18, 2022

MEMBERS PRESENT:	Robert Hooper, Chairperson Munir Kasti, Vice-Chairperson Patrick Robins Ben O'Brien Matthew Dow Dan Gilligan
OTHERS PRESENT:	Rich Goodwin Jim Strous Kate Pizzi Joe Ebisa Steve Lemanski Robert Lessard Hayley McClenahan

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1.0 CALL TO ORDER

Robert Hooper called the Retirement Board meeting to order.

MOTION by Matthew Dow, SECOND by Dan Gilligan, to adopt the agenda as as amended:

- **Reorder the agenda such that the Fiducient item is now #3 and the Hooker & Holcombe item is now #4.**

VOTING: unanimous; motion carries.

2.0 PUBLIC FORUM (VERBAL)

2.01 Verbal Comments
None at this time.

3.0. FIDUCIENT'S

3.01 December Investment Update

Ms. Pizzi began by speaking about market themes for the quarter. She noted that large cap equities performed extremely strong in the quarter. She outlined the asset class returns for Q4 2021. She noted significant outperformance in U.S. large cap equities (likely propelled by growth stocks), strong performance in developed market equities, though noted that emerging markets did not perform as strongly. She showed fixed income/bond performance for Q4 which was largely driven by interest rates. She noted that bonds with shorter maturities did worse than bonds with longer maturities in the quarter. She speculated that this could mean that the bond market doesn't believe that the economy will sustained higher inflation. She noted that the real asset class showed very significant outperformance in Q4, largely driven by inflation concerns. She noted that the federal reserve plans to halt their bond-buying program more quickly than originally planned, in an attempt to stymie inflation.

Ms. Pizzi then walked through how those asset class returns impacted the portfolio in Q4, 2021. She noted that the total plan allocation is approximately $250.5 million. She noted that the majority of investments are in equities, split between domestic and international equities. She spoke about the fixed income allocation, noting that it is invested in a core bond mandate through Johnson, but that part of that is being moved to a dynamic bond manager. She pointed out the differences between allocation and target allocation. She noted that there is a 4% overweight in U.S. equities balanced mainly by and underweight to fixed income due mainly to market appreciation, and said that Fiducient is comfortable with the positioning.

Ms. Pizzi then summarized portfolio performance for December and Q4 of 2022. She noted that December was a strong month and that the portfolio returned 3.2%, most of which came at the tail end of the month, and she noted that the QTD return was 4.3%. She said this is driven largely by the outperformance of U.S. equities.

3.02 2022 Capital Market Assumptions
Ms. Pizzi spoke about Fiducient's January 2022 investment outlook. She said that it is generally positive and noted that they anticipate economic recovery to persist in 2022 at a more modest pace as pandemic stimulus slows. She noted that supply chain challenges are expected to continue to lead to higher levels of inflation. She said that from an investment perspective, they anticipate more pronounced market movements and heightened volatility.

Ms. Pizzi spoke about the factors that underly their capital market assumptions. These include an economic growth forecast that they predict will be lower than 2021, a tighter or reduced fiscal/monetary policy by the Federal Reserve, a moderation of inflation (they predict an average of 2.5% over the next ten years), and assumptions around a strong dollar in 2022.

Mr. Robins asked about what they anticipate about pressure on wages and salaries during the year. Ms. Pizzi replied that while they don't have an explicit wage expectation, they have seen a significant increase in wages which support persistent inflation. Mr. Hooper asked about how long they are anticipating higher inflation, and Ms. Pizzi replied that they are estimating that inflation will remain high for the next 1-2 years.

Ms. Pizzi then showed the major asset classes and how these assumptions will affect those. She said that in general, they anticipate higher returns in nearly every asset class than last year on a nominal terms. She noted that the inflation increase of 0.7% is underpinning the increase across asset classes. She said that though the expectations for nominal returns are increasing, from a real return perspective they are decreasing. She noted that the discount rate in the BERS portfolio is based on the nominal rate (not the real rate). She said that there is an opportunity to add diversification in the real asset class, which could help with volatility.

4.0 UPDATE FROM HOOKER & HOLCOMBE

4.01 2021 BERS Preliminary Valuation Report

Mr. Lemanski provided a summary of the BERS actuarial valuation for year end June 30, 2021. He noted that the funded ratio decreased slightly from the prior year (was 71.6% in 2020 and is 70.6% in 2021). He noted that the Actuarially Determined Employer Contribution (ADEC) is up to $12.479 million for FY2022-23 from $11.686 million for FY2021-22. He walked through the drivers of this increase, which include asset gains, liability losses, assumption changes, and the outcome of the IBEW arbitration. He noted that the largest impacts on the ADEC were from assumption changes (assuming longer life expectancy and decreased investment return assumptions) and outcome of the IBEW arbitration. He noted that the BERS funded ratio is slightly lower than the average funded ratio in the public sector (~72%).

Mr. Lemanski then spoke in more detail about the assumption changes that are driving the higher ADEC. One change is a scheduled reduction in the plan's investment return assumption from 7.5% to 7.0%, to be reflected in a 0.1% per year decrease in the 2019-2023 valuations. Another change is that the mortality projection scale was updated to reflect the most recent annual mortality projections. He said that together these changes increase the accrued liability by $3,181,000 and increase the ADEC by roughly $354,000. Mr. Lemanski also noted a change related to the asset valuation method, where the BERS board approved a change in the smoothing of asset gains and losses from 10 years to 5 years. He said that the short term impact of this change increases the unfunded liability of $1.3 million and increases the ADEC by around $117,000.

Mr. Lessard walked through the executive summary of the valuation results. He pointed out the impact of an increase in retirements. He showed trends in the funded status of the portfolio. He broke out the unfunded liability by classes. He noted that the Class B funded ratio decreased from 2020 to 2021, as a result of the IBEW arbitration and the direct rate smoothing adjustments. Mr. Robins asked about the difference between Class A and Class B in terms of the funding ratio. Mr. Lemanski noted that there had historically been some deterioration in Class A and improvement in Class B. He said that that may be the result of assumptions that were not conservative enough for Class A and were too conservative for Class B, and that assumptions have since been tightened. Mr. Lessard then spoke about the ADEC and drivers of change for it. He also broke out the ADEC by Class A and Class B. Mr. Hooper asked about the significance of the union vs. non-union breakout for Class B. Finance Director Goodwin said that the breakout was at the request of the City Attorney's Office.

Mr. Lemanski then provided a summary of fund activity for FYE 2021 and a comparison of the actuarial versus market value of assets. He also spoke in more detail about Direct Rate Smoothing. He noted that projections for the funded ratio increase from 70.6% in 2023 to 77.2% in 2025.

Mr. Hooper left the meeting at this time.

5.0 APPROVE RETURN OF CONTRIBUTIONS

5.01 Approve Return of Contributions

Approve Return of Contributions	Amount	Effective Date of Benefit
Bruce Hathaway, Class B	$2,624.11	02/01/2022
Michael Z. Rebeor, Class A	$10,931.22	11/01/2021
Ryan O. Furmanchin, Class B	$6,125.03	02/01/2022
Ryan P. Alger, Class B	$5,599.83	02/01/2022
Sara DeGaetano, Class B	$1,387.30	02/01/2022

Wayne Place, Class B		$4,018.56	02/01/2022

MOTION by Dan Gilligan, SECOND by Ben O'Brien, to approve the return of contributions applications as presented.

VOTING: unanimous (Robert Hooper absent for vote); motion carries.

6.0 APPROVE RETIREMENT APPLICATIONS

6.01 Approve Retirement Applications

Approve Retirement Applications	Amount	Effective Date of Benefit	Actual First Payment Date
Jeffrey Herwood, Class B	$2,319.37	12/01/2021	12/15/2021

MOTION by Matthew Dow, SECOND by Patrick Robins, to approve the retirement applications as presented.

VOTING: unanimous (Robert Hooper absent for vote); motion carries.

7.0 ADJOURN

7.01 Motion to Adjourn

MOTION by Ben O'Brien, SECOND by Matthew Dow, to adjourn the meeting.

VOTING: unanimous (Robert Hooper absent for vote); motion carries.

RScty: AACoonradt

Calculation of Return of Employee Contributions — Form A

Burlington Employees' Retirement System — Cory R. Marceau

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Pension Benefit and Options. If it is determined at any time that the information provided in this Pension Distribution Kit conflicts with the terms of the Plan, the terms of the Plan will govern. Under the law, a plan must be operated in accordance with its terms and errors must be corrected. As a Plan participant, you may have made post-tax contributions to the Plan. As a result, a portion of your benefit may be non-taxable. **Consult with your tax advisor if you have any questions.**

Information Used in Determination

Participant Name:	**Cory R. Marceau**	Class:	B
Date of Birth:		Department:	School
Date of Hire:	11/19/2020	Post-Tax Employee Contributions:	$0.00
Date of Termination:	05/21/2021	Normal Retirement Date (NRD):	09/25/2050
Beneficiary Date of Birth:		Payment Start Date:	03/01/2022
		Vesting Percentage:	0.0000%

Determination of Employee Contribution Balance with Interest

Period Ending	Description	Transaction	Balance at End of Period
05/21/2021	Contributions	$1,076.71	$1,076.71
06/30/2021	Interest at 2%	$0.00	$1,076.71
02/28/2022	Interest at 2%	$14.31	$1,091.02

(1)	Pre-Tax Employee Contributions (Taxable):	$1,076.71
(2)	Interest Accrued on Employee Contributions (5.5% through 12/31/2017, 2% thereafter):	$14.31
(3)	Total Return of Employee Contributions with Interest:	$1,091.02

Determination of Taxable Portion of Benefit

Form of Payment	Total Benefit	Taxable Portion	Non-Taxable Portion
Return of Contributions	$1,091.02	$1,091.02	0.00

Calculation of Benefit Options — Form A

Burlington Employees' Retirement System, Class A - Police Non-Union — Jason A. Lawson

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Pension Benefit and Options. If it is determined at any time that the information provided in this Pension Distribution Kit conflicts with the terms of the Plan, the terms of the Plan will govern. Under the law, a plan must be operated in accordance with its terms and errors must be corrected.

Type of Calculation

Vested - Early Retirement

Information Used in Benefit Determination

Participant Name:	**Jason A Lawson**	Class:	A
Date of Birth:		Department:	Police Non-Union
Date of Hire:	01/31/2000	Vesting Percentage:	100.0000%
Date of Termination:	12/22/2021	Normal Retirement Date (NRD):	01/31/2025
Beneficiary Date of Birth:		Payment Start Date:	01/01/2022
		Employee Contribution Balance w/ Interest as of 01/01/2022:	$145,807.57

Earnings

Average Final Compensation*: $92,868.26

Determination of Benefit Amount

(1) Years of Creditable Service (CS)			21.91667
(2) Years of CS on or prior to June 30, 2006 [(2)+(3) is not to exceed 25 years]			6.41667
(3) Years of CS after June 30, 2006 [(2) + (3) is not to exceed 25 years]			15.50000
COLA Option	Full COLA	Half COLA	No COLA
(4) Accrual Rate on or prior to June 30, 2006 (not to exceed 25 years)	2.750%	3.250%	3.800%
(5) Accrual Rate after June 30, 2006 (not to exceed 25 years)	2.750%	3.250%	3.600%
(6) Retirement Accrual Percentage = [(2) x (4)] + [(3) x (5)]	60.2708%	71.2292%	80.1833%
(7) Monthly Vested Benefit Payable at NRD *= (6) x Average Final Compensation/12 x Vesting Percentage*	$4,664.37	$5,512.44	$6,205.40
(8) Early Retirement Reduction Factor	0.9439	0.9439	0.9439
(9) Monthly Vested Benefit Payable at Payment Start Date (7) x (8)	$4,402.70	$5,203.20	$5,857.28

Benefit Options Available

		Full COLA		Half COLA		No COLA	
Form of Payment	Option Factor	Initial Benefit	Survivor's Benefit (1)	Initial Benefit	Survivor's Benefit (1)	Initial Benefit	Survivor's Benefit (1)
Straight Life Annuity	1.0082	$4,438.80	**	$5,245.87	**	$\boxed{\$5,905.31}$	**
5 Year Certain & Life Annuity	1.0000	$4,402.70	$4,402.70	$5,203.20	$5,203.20	$5,857.28	$5,857.28
100% Joint & Survivor Annuity	0.8611	$3,791.17	$3,791.17	$4,480.48	$4,480.48	$5,043.70	$5,043.70
50% Joint & Survivor Annuity	0.9288	$4,089.23	$2,044.62	$4,832.73	$2,416.37	$5,440.24	$2,720.12
100% Joint & Survivor Pop-Up Annuity	0.8553	$3,765.63	$3,765.63	$4,450.30	$4,450.30	$5,009.73	$5,009.73
50% Joint & Survivor Pop-Up Annuity	0.9256	$4,075.14	$2,037.57	$4,816.08	$2,408.04	$5,421.50	$2,710.75
Return of Employee Contributions	N/A	$145,807.57	N/A	$145,807.57	N/A	$145,807.57	N/A

(1) **Survivor Benefits**: for the Joint & Survivor Annuity payments, the survivor's benefit is only payable if the chosen survivor is alive upon the participant's death. If the chosen survivor is not alive, then no additional benefit is payable upon participant death. The choice of survivor may not be changed after benefit payments have commenced.

** Average is of the five highest years of base earnings*

***Amount in excess (if any) of accumulated employee contributions, with interest, over payments made*

Calculation of Benefit Options — Form A

Burlington Employees' Retirement System, Class B - Non-Union — Martha Q. Keenan

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Pension Benefit and Options. If it is determined at any time that the information provided in this Pension Distribution Kit conflicts with the terms of the Plan, the terms of the Plan will govern. Under the law, a plan must be operated in accordance with its terms and errors must be corrected.

Type of Calculation

Vested - Early Retirement

Information Used in Benefit Determination

Participant Name:	Martha Q Keenan	Class:	B
Date of Birth:		Department:	Non-Union
Date of Hire:	01/03/2014	Vesting Percentage:	100.0000%
Date of Participation:	08/12/2015	Normal Retirement Date (NRD):	03/12/2023
Date of Termination:	01/20/2022	Payment Start Date:	02/01/2022
Beneficiary Date of Birth:		Employee Contribution Balance w/ Interest as of 02/01/2022:	$23,151.65

Earnings

Average Final Compensation*: $85,387.80

Determination of Benefit Amount

(1)	Years of Creditable Service (CS)	6.41667
(2)	Years of CS on or prior to 06/30/2006 [(2) + (3) is not to exceed 25 years]	0.00000
(3)	Years of CS after 06/30/2006 [(2) + (3) is not to exceed 25 years]	6.41667
(4)	Years of CS in excess of 25 years	N/A
	COLA Option	Full COLA
(5)	Accrual Rate on or prior to 06/30/2006 (not to exceed 25 years)	1.400%
(6)	Accrual Rate after 06/30/2006 (not to exceed 25 years)	1.400%
(7)	Accrual Rate in excess of 25 years	0.500%
(8)	Retirement Accrual Percentage = [(2) x (5)] + [(3) x (6)] + [(4) x (7)]	8.9833%
(9)	Monthly Vested Benefit Payable at NRD = *(8) x Average Final Compensation/12 x Vesting Percentage*	$639.22
(10)	Early Retirement Reduction Factor	0.9767
(11)	Monthly Vested Benefit Payable at Payment Start Date (9) x (10)	$624.33

Benefit Options Available

Form of Payment	Option Factor	Full COLA Initial Benefit	Full COLA Survivor's Benefit (1)
Straight Life Annuity	1.0856	$677.77	**
10 Year Certain & Life Annuity	1.0000	$624.33	$624.33
100% Joint & Survivor Annuity	0.8655	$540.36	$540.36
50% Joint & Survivor Annuity	0.9631	$601.29	$300.65
100% Joint & Survivor Pop-Up Annuity	0.8511	$531.37	$531.37
50% Joint & Survivor Pop-Up Annuity	0.9569	$597.42	$298.71
Return of Employee Contributions	N/A	$23,151.65	N/A

(1) **Survivor Benefits:** for the Joint and Survivor Annuity payments, the survivor's benefit is only payable if the chosen survivor is alive upon the participant's death. If the chosen survivor is not alive, then no additional benefit is payable upon participant death. The choice of survivor may not be changed after benefit payments have commenced.

** Average is of the three highest years of base earnings*

***Amount in excess (if any) of accumulated employee contributions, with interest, over payments made*

City of Burlington Employees Retirement System

Quarterly Investment Review - Fourth Quarter 2021

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- **Portfolio Expense Analysis**

Q2
Practice and Policy

- **Investment Review**
- **Investment Policy Review**
- **Fiduciary Training**

Q3
Municipal Landscape

- **Investment Review**
- **Municipal Landscape Update**
- **Annual Actuarial Review***

Q4
Asset/Liability Focus

- **Investment Review**
- **Asset Allocation Review**
- **Asset/Liability Modeling**

Fiduciary Trail®   Fiduciary Lockbox®

*Timing of actuarial review is dependent on client's individual plan and/or fiscal year and actuarial input.

January 2022 Investment Outlook

Key Observations

- We expect economic recovery to persist in 2022 at a more modest pace as extraordinary pandemic stimulus begins to moderate. Ongoing challenges with a recalibrating global supply chain are expected to continue to lead to persistently higher levels of inflation than we have seen over the last several decades.
- The investing backdrop remains mostly constructive in our view, but investors will likely be served by taking a thoughtful and diversified approach to risk-taking. The global economy is still in transition and pandemic-driven economic uncertainties are ongoing.

Capital Market Factors

- **Economic Growth:** The Conference Board's 2022 global economic growth forecast is 3.9 percent, a level characterized by the Board as "above potential recovery growth." 2023-2026 annualized growth is expected to moderate to 2.5 percent.
- **Monetary Policy:** The Fed's rotation to a tighter policy stance is expected to slow and then end its $120 billion monthly asset purchase program sometime in 2022 and begin to raise interest rates. At its December 2021 meeting, the Fed indicated an accelerated pace toward the elimination of its bond buying efforts by the middle of next year and a majority of FOMC members now expect at least three interest rate hikes by year-end 2022.
- **Fiscal Policy:** Massive pandemic-relief and infrastructure spending will likely continue to drive short-term deficits, stimulate near-term economic growth and fuel inflationary forces.
- **Inflation:** Current year-over-year inflation is running at a level in excess of 6 percent, which is meaningfully above the Fed's stated target, and is likely to remain high in the immediate future. However, the bond market's expectation is for inflation to gradually moderate back towards 2.5 percent over the next decade.
- **Currency:** The dollar strengthened in 2021 and was supported by a more consistent economic recovery in the U.S. compared to global peers. A more aggressive path to interest rate hikes by the Fed when compared to its peer institutions would support U.S. dollar strength, but volatility is expected as investors continue to digest the implications of Fed tightening in conjunction with actions of other global central banks.

Sources: The Conference Board, The Federal Reserve Bank of St. Louis

2022-2041 Twenty-Year Outlook

Asset Class	2022 Outlook E(R) - 20 Year	2021 Outlook E(R) - 20 Year	Year Over Year Change
Inflation	2.5%	1.8%	0.7%
Cash*	0.7%	0.7%	0.0%
TIPS	2.1%	1.7%	0.3%
Muni Bond**	2.1%	1.6%	0.5%
Muni High Yield**	5.6%	7.7%	-2.1%
US Bond	2.5%	2.1%	0.3%
Dynamic Bonds***	2.8%	2.8%	-0.1%
Global Bonds	2.2%	1.8%	0.4%
Corp HY Bond	4.5%	4.4%	0.1%
Global Equity	8.1%	7.7%	0.5%
US Equity (AC)	6.8%	6.4%	0.4%
US Equity (LC)	6.6%	6.3%	0.4%
US Equity (MC)	7.0%	6.6%	0.4%
US Equity (SC)	7.0%	6.7%	0.3%
Int'l Dev. Equity	8.6%	7.9%	0.8%
EM Equity	10.5%	9.4%	1.2%
Real Estate	6.3%	6.2%	0.1%
Broad Real Assets****	5.6%	4.8%	0.9%
Marketable Alternatives	6.8%	6.3%	0.5%
Private Equity	9.8%	9.4%	0.4%

**3-month forecast*

***Tax equivalent yield based on highest marginal tax rate (37%)*

****33% Cash, 33% Corp HY, and 34% Global Bonds*

*****20% REITs, 20% Global Infrastructure, 20% Commodities, 20% US Bonds, 15% Corp High Yield, 5% TIPS*

Investment Themes for 2022-2041

- Nominal return forecasts rose for most asset classes, but rising inflation expectations means most asset classes have declining year-over-year real return expectations.
- Meaningfully negative real returns continues to make cash an expensive opportunity cost for investors.
- Global bond yields generally rose. Despite the increase, most fixed income asset class forward-looking return expectations remain below expected inflation levels.
- Earnings accelerated in 2021 and expanded faster than stock prices. Non-U.S. equities remain more attractive on a valuation basis as U.S. equities have grown to represent 61 percent of the global equity market capitalization compared to 58 percent a year ago.
- With higher inflation expectations, real assets remain an important diversifier. Within real assets, broad real assets return expectations rose meaningfully faster than real estate.
- Alternative asset class return expectations rose modestly.

For additional information on forecast methodologies, please speak with your advisor. Please see Index Proxy Summary slide at the end of this presentation for summary of indexes used to represent each asset class. Past performance does not indicate future performance and there is a possibility of a loss.

Actuarial Review

Burlington Employees' Retirement System		
	6/30/2021	6/30/2020
Actuarial Value of Assets	219,377,787	209,861,722
Total Accrued Liability	310,778,910	293,171,198
Funded Ratio	70.6%	71.6%
Actuarial Return Assumption	7.2%	7.3%

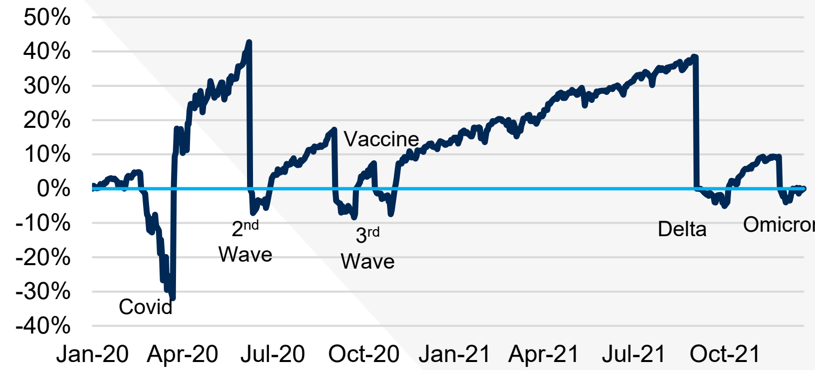
Source: hooker & holcombe, 6/30/2020 Valuation Report & Preliminary 2021 Valuation Results

Market Themes

1. Adaptation and flexibility should prove key for investors in 2022, driven by concern for moderating return opportunities and heightened capital market volatility.
2. Investors should remain attuned to a more differentiated array of central bank responses in the New Year as authorities increasingly customize policies to their particular economic circumstances.
3. U.S. large cap equities were among the leaders this quarter as the reopening trade took a back seat and large growth outpaced value. Real estate markets continued their banner year while fixed income was relatively flat, despite increased rate volatility.

S&P 500 Drawdowns (% Change from Previous High/Low)

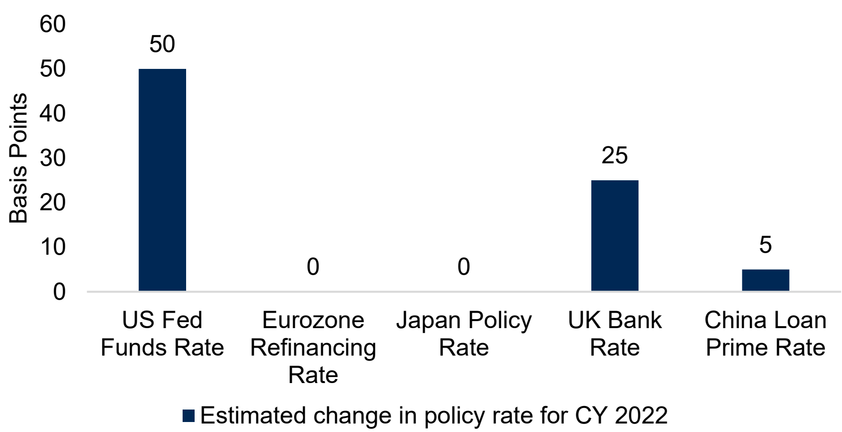
The COVID-19 pandemic has driven volatility over the past two years. Recent variants have had a more subdued impact.



Source: FactSet. As of December 20, 2021

Global Policy Rates

Market expectations are such that central bank coordination is likely to wane in 2022 as policy makers around the world react to their individual markets. This may present both opportunities and risks for investors in the coming quarters.



Source: FactSet. As of January 5, 2022

Elevated Rate Volatility

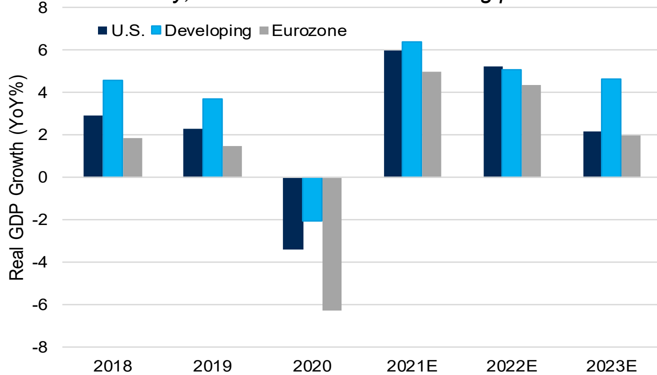
The 10-year U.S. Treasury yield experienced elevated volatility in Q4 as investors digested the emergence of the omicron variant, elevated inflation, an increasingly hawkish Fed and prospects for further economic recovery.

Source: FactSet. As of December 31, 2021.

Economic Review

Real GDP Growth (YoY)

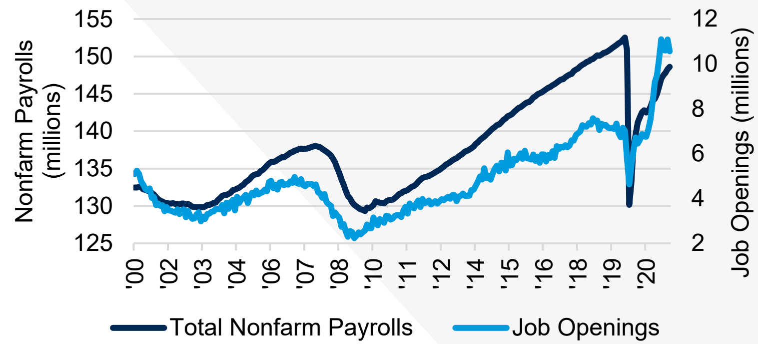
Estimates for positive GDP growth remain strong for 2022. A favorable consumer profile and corporate health provide a solid foundation for continued recovery, if at a somewhat moderating pace.



Source: FactSet, IMF World Economic Outlook. As of December 31, 2021.

U.S. Labor Market

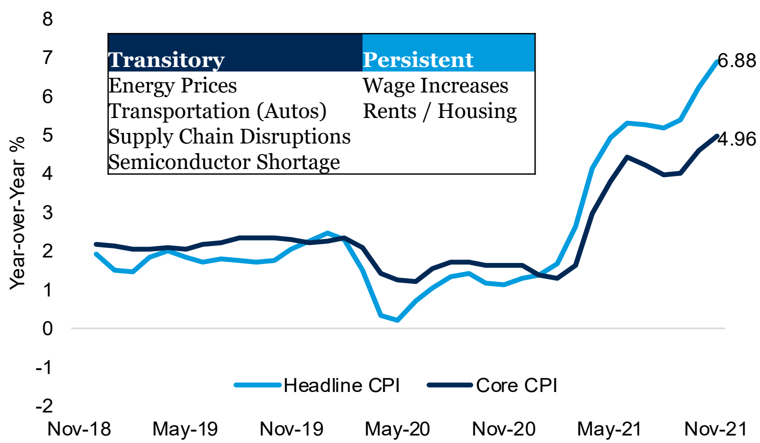
Job openings are at twenty-year highs, yet employment levels (nonfarm payrolls) are still below pre-pandemic levels. This supply/demand imbalance could lead to higher wages and a stronger consumer.



Source: FactSet, U.S. DOL. As of November 30, 2021

U.S. Inflation

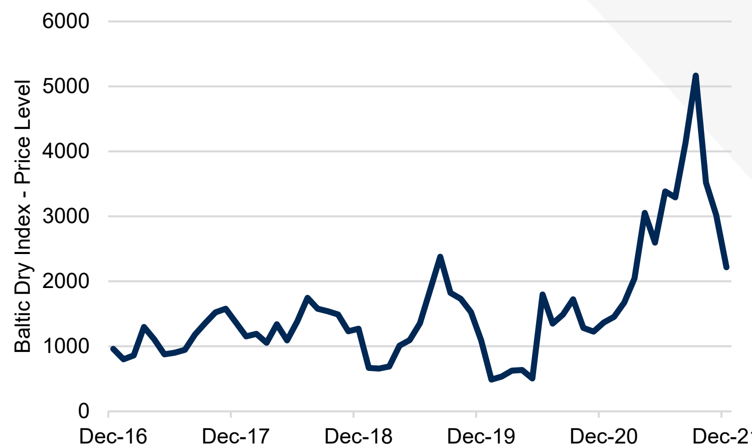
Inflation remains elevated, with energy and transportation seeing the largest increases year-over-year. Inflation may moderate but we don't expect it to revert to benign pre-pandemic levels.



Source: FactSet, Fiducient Advisors. As of November 30, 2021.

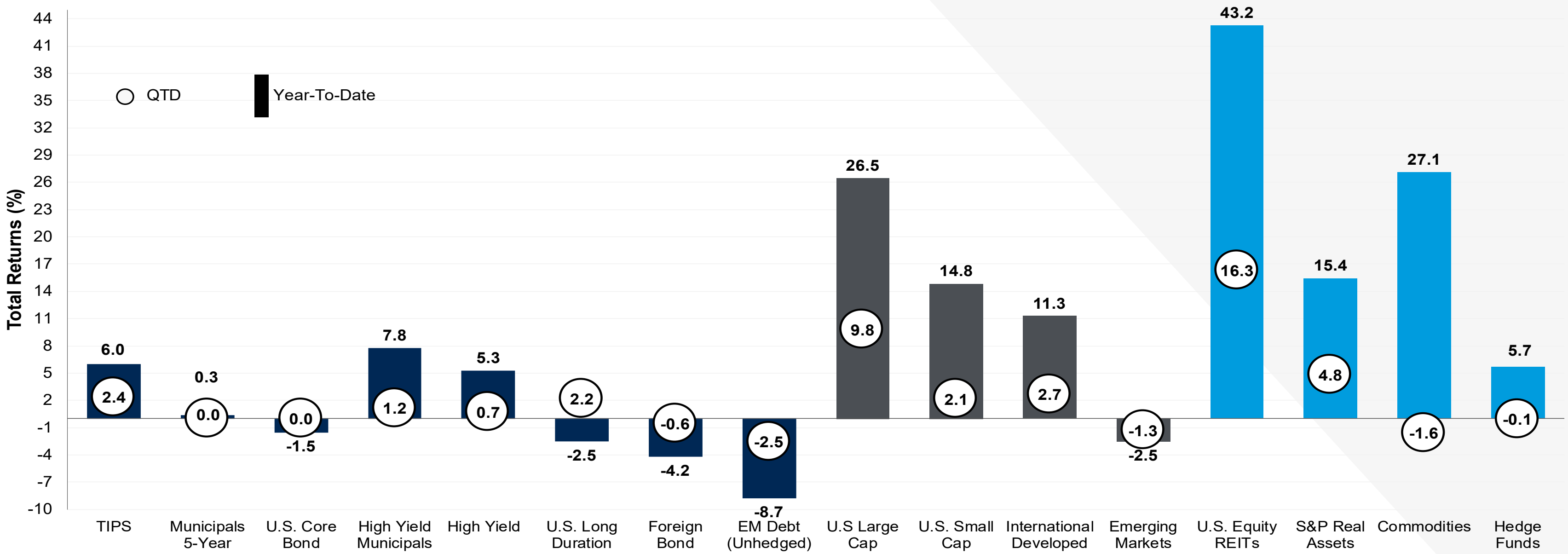
Shipping Costs

Supply chain issues are easing somewhat. The Baltic Dry Index, a measure of shipping costs of raw materials, has come off recent highs, which could alleviate inflation pressure in the future.



Source: FactSet, Baltic Exchange. As of December 31, 2021

Asset Class Returns



*Hedge fund returns are lagged 1 month. Sources: FactSet, J.P. Morgan, Russell, MSCI, FTSE Russell, Alerian, Morningstar. As of December 31, 2021.

Fixed Income (4Q)

+/- U.S. bonds were flat on the quarter. A hawkish Federal Reserve incited a flatter yield curve.

+ Credit spreads ultimately ended the quarter tighter as investors continued to demand yield in the low-rate environment.

- Non-USD debt struggled in the period. A rising U.S. dollar coupled with Evergrande's debt default was a headwind for EM debt.

Equity (4Q)

+ Despite a volatile quarter, U.S. and developed international equities ultimately ended the quarter higher following a year-end rally.

- Government regulation and intervention in China continued to weigh on investor enthusiasm, pushing emerging markets into negative territory for the quarter.

Real Asset / Alternatives (4Q)

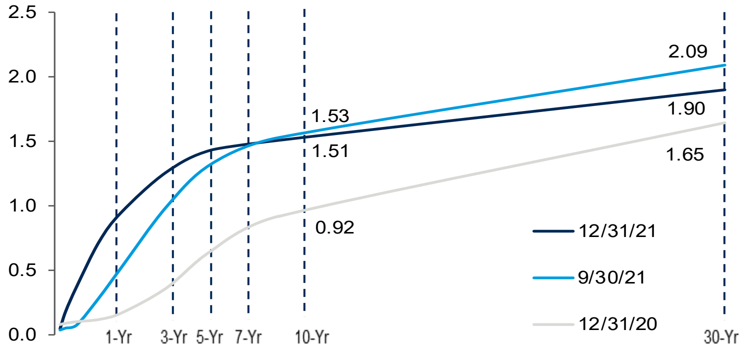
+ REITs benefited from strong industrial, self-storage and residential performance, areas that have continued to benefit during the COVID-19 era.

- Perceptions of lower energy demand due to COVID outbreaks led to falling energy prices, which weighed on the commodity market.

Fixed Income Market Update

U.S. Treasury Yields Curve

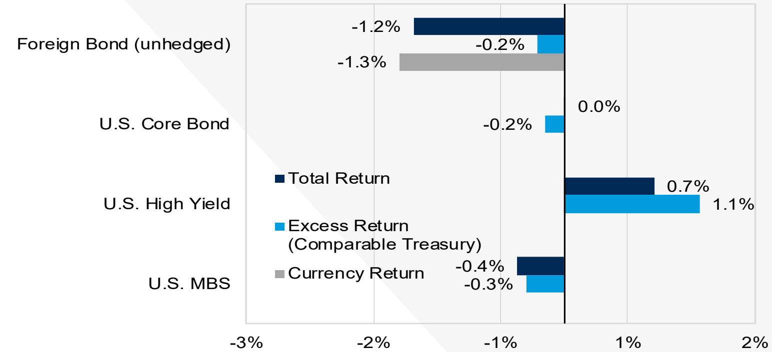
The U.S. curve flattened as the Fed accelerated their tapering program and outlook for rate hikes in 2022 solidified. Concerns about the impact of the omicron variant on the economy put pressure on the long-dated rates.



Source: FactSet

Index Performance Attribution (4Q 2021)

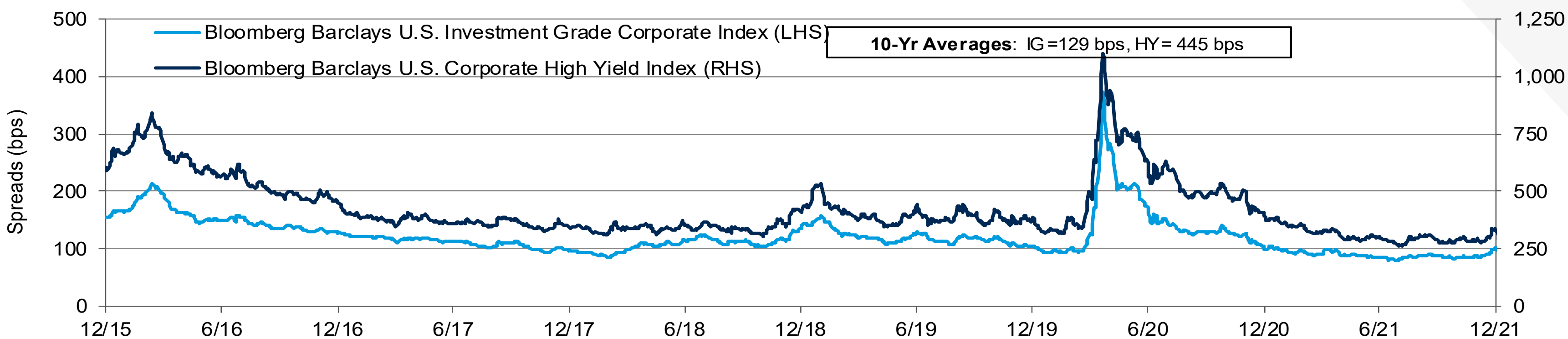
On a duration adjusted basis, high yield outpaced U.S. Treasuries while the mortgage market came under pressure as the Fed began its tapering program. A strengthening U.S. dollar was a major headwind for non-USD debt.



Source: FactSet. As of December 31, 2021

Credit Market Spreads – Trailing 5 Years

Credit spreads ultimately ended the quarter tighter, but the ride through the quarter was bumpy. Investor demand for yield continued to provide a tailwind for credit. Credit spreads sit well within their 10-year averages and, when coupled with heightened rate volatility, we currently favor active management.

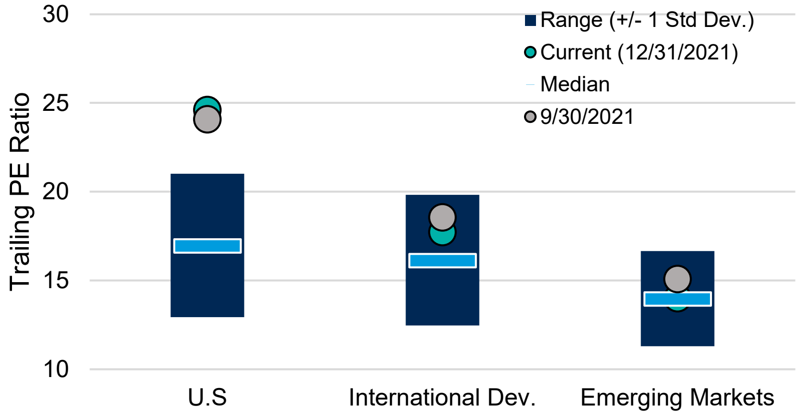


Source: FactSet. As of December 31, 2021

Equity Market Update

Equity Valuations (Trailing 15 Years)

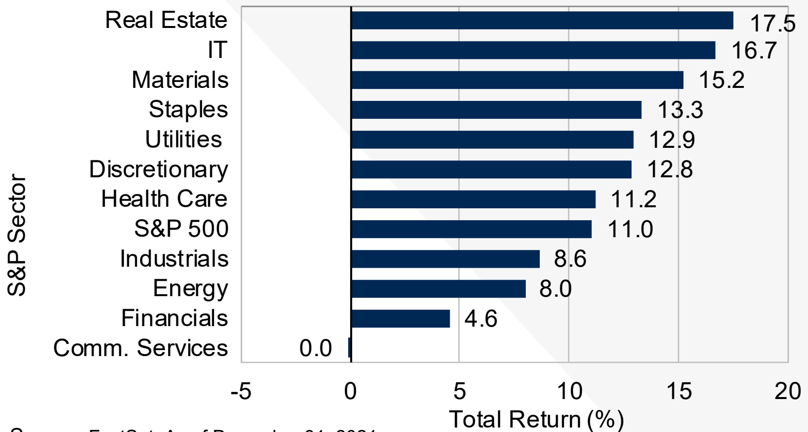
Valuations persist above longer-term averages in the U.S. but are less pronounced elsewhere in the world. Falling equity prices within emerging markets moved valuations lower and in-line with the 15-year median.



Source: FactSet. As of December 31, 2021

U.S. Equities – Return by Sector (4Q 2021)

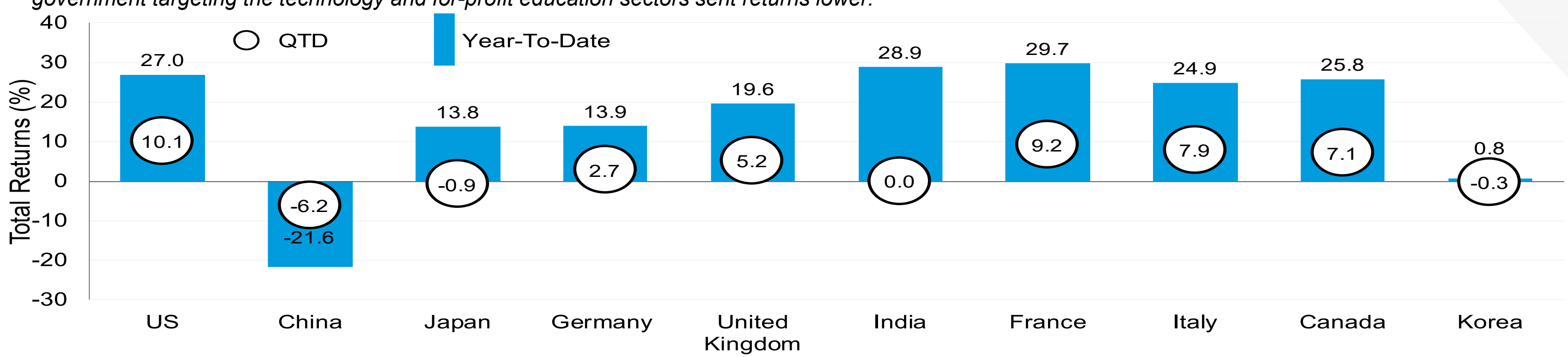
Real Estate and Information Technology led the way as the reopening trade reversed course, while energy and financials lagged the broader equity market.



Source: FactSet. As of December 31, 2021

Country Total Returns (%) – Top 10 Largest Economies

Equities were generally positive within developed regions, with the United States leading the way as COVID precautionary measures domestically were not as intense as those abroad. Chinese equities continued to be a drag on emerging market performance. Lingering concerns about the Chinese government targeting the technology and for-profit education sectors sent returns lower.



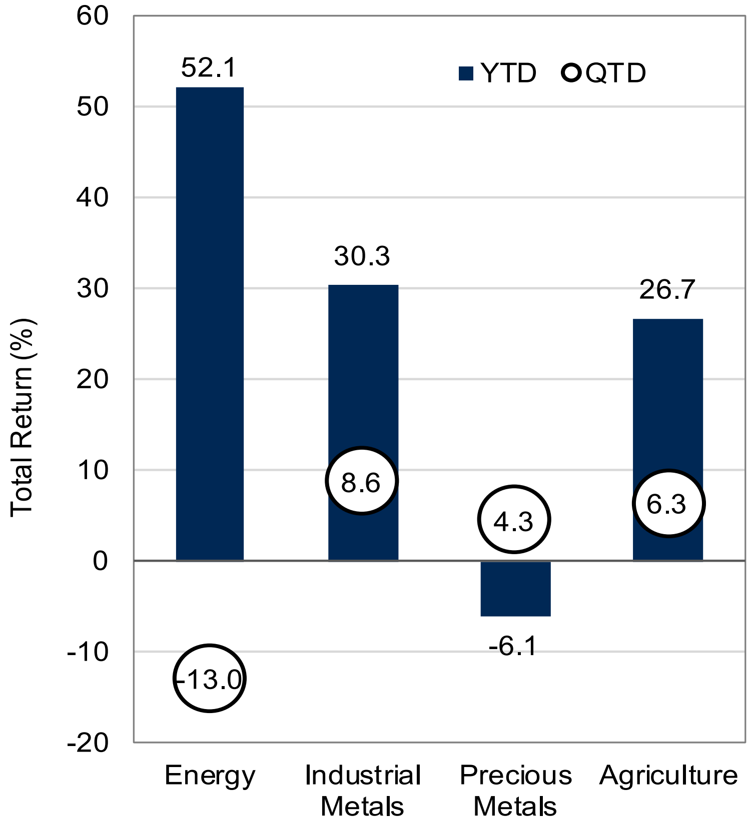
Source: FactSet. As of December 31, 2021.

Past performance does not indicate future performance and there is a possibility of a loss.

Real Assets Market Update

Real Assets Performance

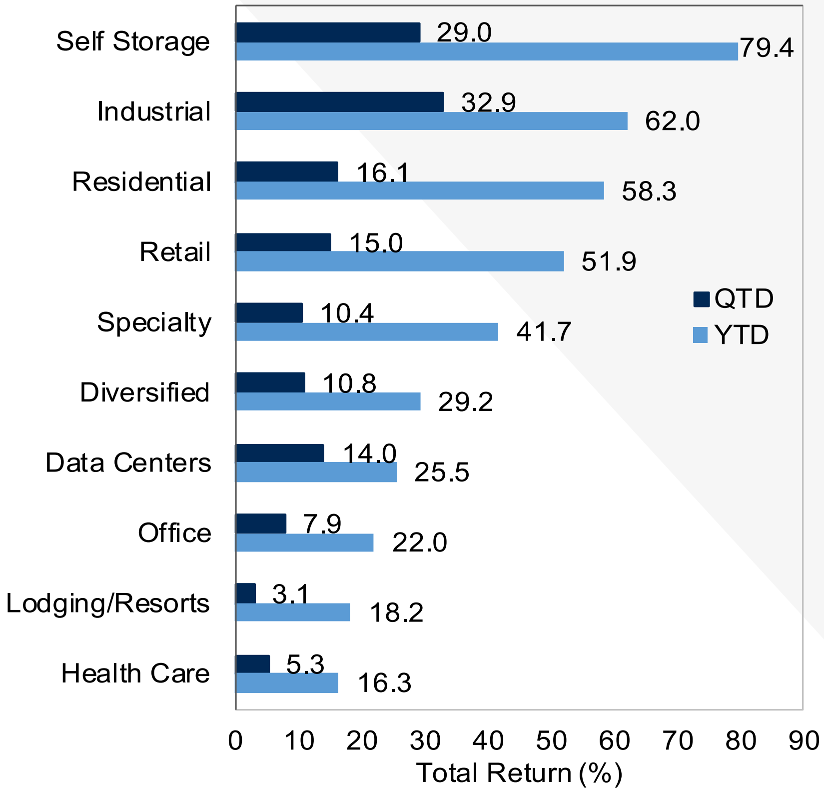
Energy reversed course in the fourth quarter as the breakout of COVID-19 cases weakened demand amid new lockdowns around the globe, while the supply chain backlog pushed industrial metals prices higher.



Source: FactSet. As of December 31, 2021

REIT Sector Performance

The Industrial and Self Storage sectors were the highlights this quarter, driven by the uncertainty generated by the omicron wave. Conversely, Lodging and Office lagged in the quarter. Real Estate, overall, performed well for the 2021 calendar year.



Source: FactSet. As of December 31, 2021

Past performance does not indicate future performance and there is a possibility of a loss.

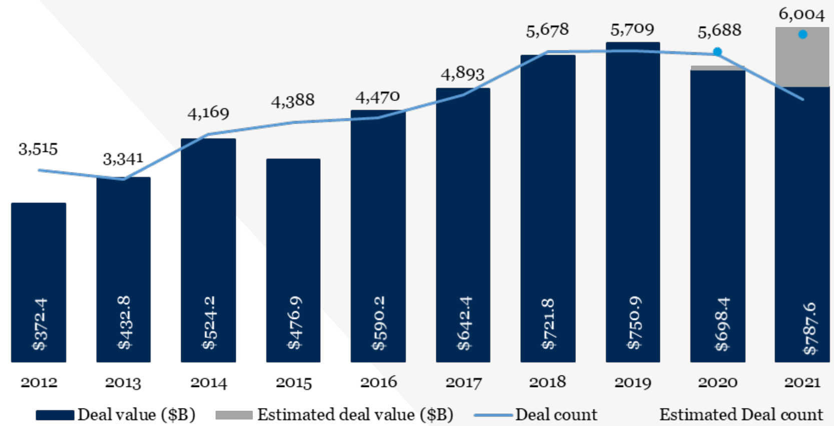
Private Equity

U.S. Private Equity deal activity is expected to shatter records in 2021, following heightened urgency ahead of (now unlikely) tax law changes and slightly reduced activity in 2020.

Fundraising activity has remained heightened with firms coming back to market sooner and raising larger funds as pace of deployment remained high.

Private equity performance remained strong, with venture capital and growth equity outpacing buyout. All markets outperformed public markets.

U.S. Private Equity Deal Activity



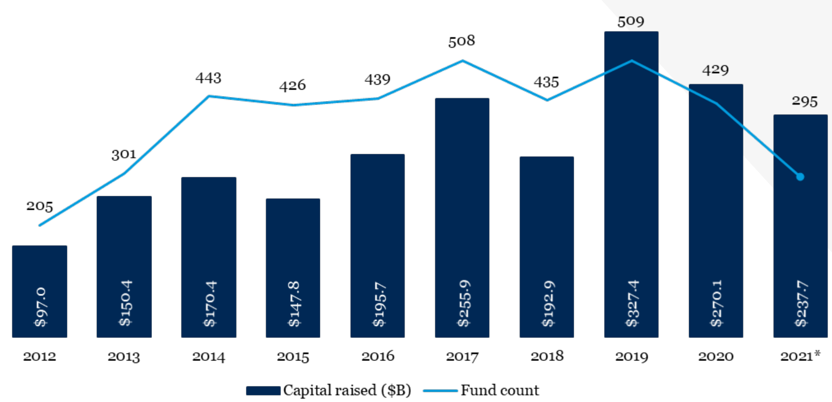
Source: Pitchbook. As of September 30, 2021.

Private Equity Performance

Benchmark	1-YR	3-YR	5-YR	10-Y	15-Y
US Private Equity	58.2%	25.1%	22.3%	16.7%	13.9%
US Buyout Index	51.2%	22.1%	20.4%	15.8%	13.2%
US Growth Equity Index	79.2%	34.5%	28.8%	20.0%	16.9%
US Venture Capital Index	88.1%	36.1%	25.8%	18.7%	14.6%
S&P 500 Index	40.8%	18.7%	17.6%	14.8%	10.7%

Source: Cambridge Associates. As of June 30, 2021.
Returns presented as horizon pooled return, net of fees.
S&P 500 Total Return Index as of June 30, 2021.

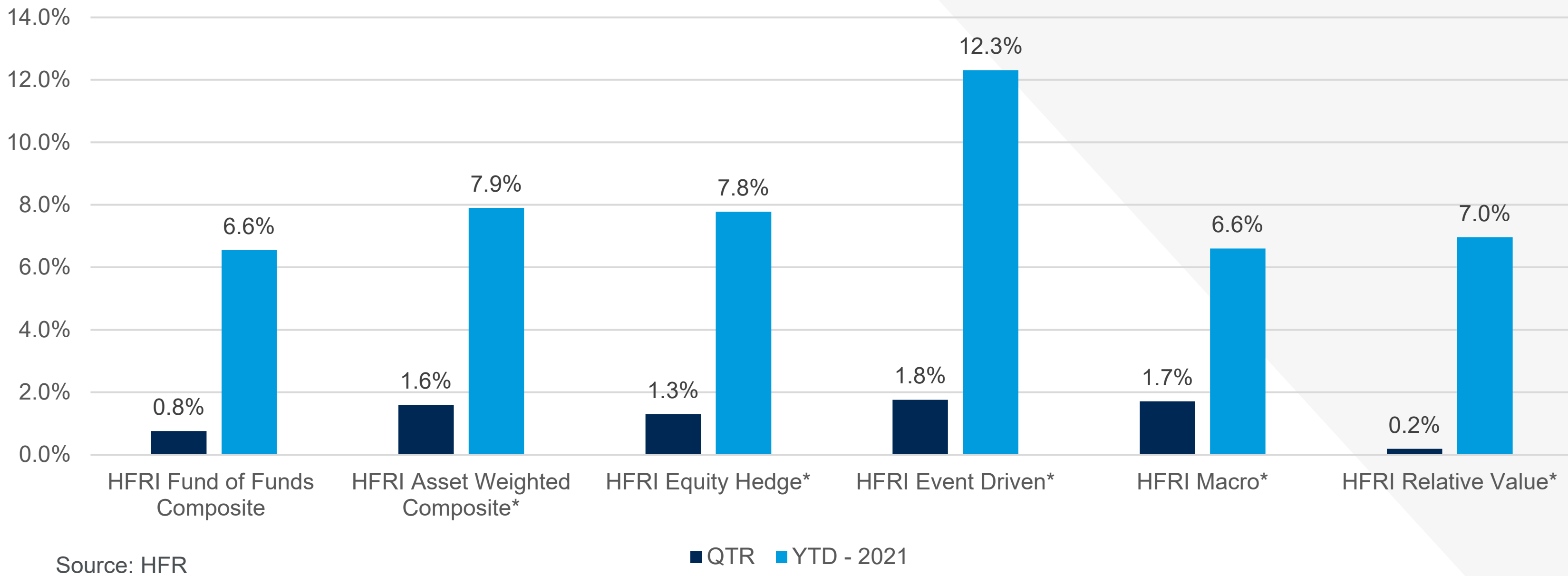
U.S. Buyout Fundraising Activity



Source: Pitchbook. As of September 30, 2021.

See disclosures for list of indices representing each asset class. Past performance does not indicate future performance and there is a possibility of a loss.

Marketable Alternatives



Source: HFR
*Methodology is asset weighted

- The HFRI Asset Weighted Composite finished the quarter in positive territory to conclude a year dominated by market uncertainty, high volatility, challenges of increasing interest rates and inflation, and the second year of a global pandemic.
- Equity Hedge strategies were up on the quarter, led by high beta and long-biased strategies that benefitted from a rally in equity markets to close out the year.
- Event Driven strategies outperformed on the quarter and the year, led by Activist and Special Situations sub-strategies in a market that continued to see strong corporate action and M&A activity.
- Macro strategies also advanced for the quarter as commodities rallied and interest rates continued to rise.
- Relative Value strategies gained modestly on the quarter. Fixed income-based, interest rate-sensitive strategies performed well as rates rose while Volatility Relative Value strategies also contributed.

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The Case For Diversification

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD	10Yr (Ann)
TIPS 13.6	Emerging Markets 18.2	U.S. Small Cap 38.8	U.S. Equity REITs 30.1	U.S. Equity REITs 3.2	U.S. Small Cap 21.3	Emerging Markets 37.3	High Yield Munis 4.8	U.S. Large Cap 31.5	U.S. Small Cap 20.0	U.S. Equity REITs 43.2	US Large Cap 16.5
High Yield Munis 9.3	High Yield Munis 18.1	U.S. Large Cap 32.4	High Yield Munis 13.8	Municipals 5-Year 2.4	High Yield 17.1	International Dev. 25.0	Municipals 5-Year 1.7	U.S. Equity REITs 26.0	U.S. Large Cap 18.4	Commodities 27.1	US Small Cap 13.2
U.S. Equity REITs 8.3	U.S. Equity REITs 18.1	International Dev. 22.8	U.S. Large Cap 13.7	High Yield Munis 1.8	U.S. Large Cap 12.0	U.S. Large Cap 21.8	Foreign Bond 0.5	U.S. Small Cap 25.5	Emerging Markets 18.3	US Large Cap 26.5	U.S. Equity REITs 11.4
Core Bond 7.8	International Dev. 17.3	Balanced 12.2	Core Bond 6.0	U.S. Large Cap 1.4	Commodities 11.7	EM Debt (unhedged) 15.2	Core Bond 0.0	International Dev. 22.5	TIPS 11.0	US Small Cap 14.8	International Dev. 8.0
Municipals 5-Year 6.9	EM Debt (unhedged) 16.9	Hedge Funds 9.0	Balanced 5.1	Core Bond 0.6	Emerging Markets 11.2	U.S. Small Cap 14.6	TIPS -1.3	Emerging Markets 18.4	Balanced 8.8	International Dev. 11.3	Balanced 7.4
High Yield 5.0	U.S. Small Cap 16.3	High Yield 7.4	U.S. Small Cap 4.9	Hedge Funds -0.3	EM Debt (unhedged) 9.9	Balanced 13.6	High Yield -2.1	Balanced 17.5	International Dev. 7.8	Balanced 9.8	High Yield 6.8
Foreign Bond 4.2	U.S. Large Cap 16.0	U.S. Equity REITs 2.5	TIPS 3.6	International Dev. -0.8	U.S. Equity REITs 8.5	High Yield Munis 9.7	Hedge Funds -4.0	High Yield 14.3	Core Bond 7.5	High Yield Munis 7.8	High Yield Municipals 6.7
U.S. Large Cap 2.1	High Yield 15.8	Municipals 5-Year 0.8	Hedge Funds 3.4	TIPS -1.4	Balanced 7.6	Hedge Funds 7.8	U.S. Large Cap -4.4	EM Debt (unhedged) 13.5	Hedge Funds 7.1	TIPS 6.0	Emerging Markets 5.5
Balanced 0.9	Balanced 11.5	Foreign Bond -1.0	Municipals 5-Year 3.2	Foreign Bond -2.3	TIPS 4.7	High Yield 7.5	U.S. Equity REITs -4.6	High Yield Munis 10.7	High Yield 7.1	Hedge Funds 5.7	Hedge Funds 4.4
EM Debt (unhedged) -1.8	TIPS 7.0	Core Bond -2.0	Foreign Bond 2.9	Balanced -3.3	Foreign Bond 3.2	Foreign Bond 6.5	Balanced -5.8	Core Bond 8.7	Foreign Bond 7.0	High Yield 5.3	TIPS 3.1
U.S. Small Cap -4.2	Foreign Bond 5.3	Emerging Markets -2.6	High Yield 2.5	U.S. Small Cap -4.4	High Yield Munis 3.0	U.S. Equity REITs 5.2	EM Debt (unhedged) -6.2	TIPS 8.4	High Yield Munis 4.9	Municipals 5-Year 0.3	Core Bond 2.9
Hedge Funds -5.7	Hedge Funds 4.8	High Yield Munis -5.5	Emerging Markets -2.2	High Yield -4.5	Core Bond 2.6	Core Bond 3.5	U.S. Small Cap -11.0	Hedge Funds 7.8	Municipals 5-Year 4.3	Core Bond -1.5	Municipals 5-Year 2.4
Commodities -13.3	Core Bond 4.2	TIPS -8.6	International Dev. -4.9	Emerging Markets -14.9	International Dev. 1.0	Municipals 5-Year 3.1	Commodities -11.2	Commodities 7.7	EM Debt (unhedged) 2.7	Emerging Markets -2.5	Foreign Bond 2.3
International Dev. -12.1	Municipals 5-Year 3.0	EM Debt (unhedged) -9.0	EM Debt (unhedged) -5.7	EM Debt (unhedged) -14.9	Hedge Funds 0.5	TIPS 3.0	International Dev. -13.8	Foreign Bond 6.3	Commodities -3.1	Foreign Bond -4.2	EM Debt (unhedged) 0.7
Emerging Markets -18.4	Commodities -1.1	Commodities -9.5	Commodities -17.0	Commodities -24.7	Municipals 5-Year -0.4	Commodities 1.7	Emerging Markets -14.6	Municipals 5-Year 5.4	U.S. Equity REITs -8.0	EM Debt (unhedged) -8.7	Commodities -2.9

Source: FactSet & Morningstar as of December 31, 2021. Periods greater than one year are annualized. All returns are in U.S. dollar terms. One month lag for Hedge Funds.

See disclosures for list of indices representing each asset class. Past performance does not indicate future performance and there is a possibility of a loss.

Financials Markets Performance

Financial Markets Performance

Total return as of December 31, 2021

Periods greater than one year are annualized
All returns are in U.S. dollar terms

Global Fixed Income Markets	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Bloomberg 1-3-Month T-Bill	0.0%	0.0%	0.0%	0.9%	1.1%	0.8%	0.6%	0.8%
Bloomberg U.S. TIPS	2.4%	6.0%	6.0%	8.4%	5.3%	4.2%	3.1%	4.7%
Bloomberg Municipal Bond (5 Year)	0.0%	0.3%	0.3%	3.3%	3.0%	2.4%	2.4%	3.5%
Bloomberg High Yield Municipal Bond	1.2%	7.8%	7.8%	7.8%	7.5%	6.0%	6.7%	5.2%
Bloomberg U.S. Aggregate	0.0%	-1.5%	-1.5%	4.8%	3.6%	3.0%	2.9%	4.1%
Bloomberg U.S. Corporate High Yield	0.7%	5.3%	5.3%	8.8%	6.3%	6.1%	6.8%	7.1%
Bloomberg Global Aggregate ex-U.S. Hedged	-1.2%	-1.4%	-1.4%	3.3%	3.1%	3.1%	3.8%	4.0%
Bloomberg Global Aggregate ex-U.S. Unhedged	-1.2%	-7.0%	-7.0%	2.5%	3.1%	1.5%	0.8%	2.6%
Bloomberg U.S. Long Gov / Credit	2.2%	-2.5%	-2.5%	10.6%	7.4%	5.7%	5.7%	7.0%
JPMorgan GBI-EM Global Diversified	-2.5%	-8.7%	-8.7%	2.1%	2.8%	1.0%	0.7%	3.5%
Global Equity Markets	**QTD**	**YTD**	**1YR**	**3YR**	**5YR**	**7YR**	**10YR**	**15YR**
S&P 500	11.0%	28.7%	28.7%	26.1%	18.5%	14.9%	16.6%	10.7%
Dow Jones Industrial Average	7.9%	20.9%	20.9%	18.5%	15.5%	13.3%	14.2%	10.1%
NASDAQ Composite	8.4%	22.2%	22.2%	34.3%	25.0%	19.8%	21.0%	14.4%
Russell 3000	9.3%	25.7%	25.7%	25.8%	18.0%	14.5%	16.3%	10.6%
Russell 1000	9.8%	26.5%	26.5%	26.2%	18.4%	14.8%	16.5%	10.7%
Russell 1000 Growth	11.6%	27.6%	27.6%	34.1%	25.3%	19.6%	19.8%	13.7%
Russell 1000 Value	7.8%	25.2%	25.2%	17.6%	11.2%	9.7%	13.0%	7.5%
Russell Mid Cap	6.4%	22.6%	22.6%	23.3%	15.1%	12.2%	14.9%	10.2%
Russell Mid Cap Growth	2.8%	12.7%	12.7%	27.5%	19.8%	14.9%	16.6%	11.7%
Russell Mid Cap Value	8.5%	28.3%	28.3%	19.6%	11.2%	10.0%	13.4%	8.8%
Russell 2000	2.1%	14.8%	14.8%	20.0%	12.0%	10.8%	13.2%	8.7%
Russell 2000 Growth	0.0%	2.8%	2.8%	21.2%	14.5%	11.7%	14.1%	10.0%
Russell 2000 Value	4.4%	28.3%	28.3%	18.0%	9.1%	9.5%	12.0%	7.2%
MSCI ACWI	6.7%	18.5%	18.5%	20.4%	14.4%	10.9%	11.9%	7.1%
MSCI ACWI ex. U.S.	1.8%	7.8%	7.8%	13.2%	9.6%	6.6%	7.3%	3.8%
MSCI EAFE	2.7%	11.3%	11.3%	13.5%	9.5%	6.8%	8.0%	3.6%
MSCI EAFE Growth	4.1%	11.3%	11.3%	19.0%	13.6%	9.7%	10.1%	5.5%
MSCI EAFE Value	1.2%	10.9%	10.9%	7.8%	5.3%	3.6%	5.8%	1.6%
MSCI EAFE Small Cap	0.1%	10.1%	10.1%	15.6%	11.0%	9.5%	10.8%	5.6%
MSCI Emerging Markets	-1.3%	-2.5%	-2.5%	10.9%	9.9%	6.1%	5.5%	4.5%
Alternatives	**QTD**	**YTD**	**1YR**	**3YR**	**5YR**	**7YR**	**10YR**	**15YR**
Consumer Price Index*	1.7%	6.6%	6.2%	3.3%	2.9%	2.4%	2.1%	2.2%
FTSE NAREIT Equity REITs	16.3%	43.2%	43.2%	18.4%	10.8%	9.3%	11.4%	6.9%
S&P Real Assets	4.8%	15.4%	15.4%	11.0%	7.4%	5.2%	5.9%	5.5%
FTSE EPRA NAREIT Developed	12.5%	36.9%	36.9%	13.1%	7.2%	7.9%	11.0%	5.4%
FTSE EPRA NAREIT Developed ex U.S.	2.1%	8.8%	8.8%	7.4%	7.1%	4.8%	7.8%	2.4%
Bloomberg Commodity Total Return	-1.6%	27.1%	27.1%	9.9%	3.7%	0.1%	-2.9%	-2.6%
HFRI Fund of Funds Composite*	-0.1%	5.7%	9.6%	7.7%	5.8%	4.1%	4.4%	2.8%
HFRI Fund Weighted Composite*	-0.7%	8.9%	13.9%	9.4%	7.0%	5.4%	5.6%	4.6%
Alerian MLP	0.6%	40.2%	40.2%	2.1%	-2.7%	-5.1%	-0.3%	4.3%

*One month lag.

Source: FactSet & Morningstar as of December 31, 2021. Periods greater than 1 year are annualized. All returns are in U.S. dollar terms.

Asset Allocation

As of December 31, 2021

	Asset Allocation ($)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Total Plan	**250,685,084**	**100.0**	**100.0**	**0.0**
Short Term Liquidity	**-2,274,427**	**-0.9**	**0.0**	**-0.9**
Key Bank Cash Portfolio	2,923,197	1.2	0.0	1.2
Pooled Cash	-5,197,624	-2.1	0.0	-2.1
Fixed Income	**39,988,851**	**16.0**	**18.0**	**-2.0**
JIC Core Bond Fund I	39,988,851	16.0	18.0	-2.0
Equity	**197,345,812**	**78.7**	**75.0**	**3.7**
Domestic Equity	**114,077,785**	**45.5**	**41.5**	**4.0**
Mellon Large Cap Core	86,555,078	34.5	31.0	3.5
Mellon Smid Cap Core	27,522,706	11.0	10.5	0.5
International Equity	**82,246,773**	**32.8**	**33.0**	**-0.2**
Mellon EAFE Fund	58,445,636	23.3	23.0	0.3
Mellon Emerging Markets	23,801,137	9.5	10.0	-0.5
Private Equity	**1,021,254**	**0.4**	**0.5**	**-0.1**
Hamilton Lane II	56,030	0.0	-	-
Hamilton Lane VII A	674,592	0.3	-	-
Hamilton Lane VII B	290,632	0.1	-	-
Real Assets	**15,624,848**	**6.2**	**7.0**	**-0.8**
UBS Trumbull Property Fund	13,688,885	5.5	6.0	-0.5
Molpus SWF II	1,935,963	0.8	1.0	-0.2

Investments with a zero balance were held in the portfolio during the reporting period and will be removed once they no longer impact portfolio performance.
Asset Allocation weightings may not add up to 100% due to rounding.

Total Portfolio Performance Summary - City of Burlington Employees Retirement System

As of December 31, 2021

Account Reconciliation

	QTR	YTD	Since Inception	Inception Date
Total Plan				**01/01/2008**
Beginning Market Value	242,885,162	227,648,778	126,047,968	
Net Contributions	-3,859,697	-10,018,895	-37,575,121	
Total Gain/Loss	11,659,619	33,055,200	162,212,237	
Ending Market Value	250,685,084	250,685,084	250,685,084	

Policy Benchmark Composition

Allocation Mandate	Weight (%)
May-2021	
Blmbg. U.S. Aggregate Index	18.00
S&P 500 Index	31.50
Russell 2500 Index	10.50
MSCI EAFE (Net) Index	23.00
MSCI Emerging Markets (Net) Index	10.00
NCREIF Fund Index - ODCE (net)	6.00
NCREIF Timberland Index	1.00

Trailing Performance Summary

	QTR	Jul-2021 To Dec-2021	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total Plan	**4.8**	**3.8**	**14.7**	**15.5**	**11.3**	**8.9**	**8.6**	**6.3**	**01/01/2008**
Policy Benchmark	*4.8*	*4.2*	*14.3*	*16.5*	*11.8*	*9.6*	*10.7*	*7.5*	
Difference	0.0	-0.4	0.4	-1.0	-0.5	-0.7	-2.1	-1.2	

Calendar Year Performance Summary

	2020	2019	2018	2017	2016	2015	2014	2013
Total Plan	**12.7**	**19.1**	**-5.2**	**17.0**	**8.7**	**-2.2**	**4.0**	**7.7**
Policy Benchmark	*14.5*	*20.6*	*-5.2*	*16.9*	*9.0*	*-0.2*	*7.3*	*19.0*
Difference	-1.8	-1.5	0.0	0.1	-0.3	-2.0	-3.3	-11.3

Manager Performance Overview

As of December 31, 2021

	QTR		Jul-2021 To Dec-2021		1 Year		3 Years		5 Years		7 Years	10 Years	Since Inception		Inception Date
Fixed Income	**-0.1**		**-0.2**		**-2.0**		**N/A**		**N/A**		**N/A**	**N/A**	**-2.0**		**01/01/2021**
Blmbg. U.S. Aggregate Index	*0.0*		*0.1*		*-1.5*		*N/A*		*N/A*		*N/A*	*N/A*	*-1.5*		
JIC Core Bond Fund I	**-0.1**	**(50)**	**-0.2**	**(65)**	**-2.0**	**(84)**	**N/A**		**N/A**		**N/A**	**N/A**	**1.6**	**(57)**	**03/01/2020**
Blmbg. U.S. Aggregate Index	*0.0*		*0.1*		*-1.5*		*N/A*		*N/A*		*N/A*	*N/A*	*1.1*		
IM U.S. Broad Market Core Fixed Income (MF) Median	-0.1		-0.1		-1.3		N/A		N/A		N/A	N/A	1.7		
Equity	**5.9**		**4.2**		**18.7**		**N/A**		**N/A**		**N/A**	**N/A**	**18.7**		**01/01/2021**
MSCI AC World Index (Net)	*6.7*		*5.6*		*18.5*		*N/A*		*N/A*		*N/A*	*N/A*	*18.5*		
Domestic Equity															
Mellon Large Cap Core	**11.0**	**(26)**	**11.7**	**(22)**	**28.7**	**(24)**	**26.0**	**(28)**	**18.4**	**(25)**	**N/A**	**N/A**	**17.9**	**(21)**	**04/01/2016**
S&P 500 Index	*11.0*		*11.7*		*28.7*		*26.1*		*18.5*		*N/A*	*N/A*	*17.9*		
IM U.S. Large Cap Core Equity (MF) Median	10.0		9.9		26.7		24.2		17.0		N/A	N/A	16.4		
Mellon Smid Cap Core	**3.9**	**(59)**	**1.1**	**(67)**	**18.4**	**(53)**	**22.1**	**(50)**	**13.9**	**(53)**	**N/A**	**N/A**	**15.1**	**(50)**	**04/01/2016**
Russell 2500 Index	*3.8*		*1.0*		*18.2*		*21.9*		*13.8*		*N/A*	*N/A*	*15.0*		
IM U.S. SMID Cap Equity (MF) Median	5.2		3.3		19.2		22.0		14.5		N/A	N/A	15.0		
International Equity															
Mellon EAFE Fund	**2.7**	**(61)**	**2.3**	**(28)**	**11.5**	**(36)**	**14.0**	**(39)**	**10.0**	**(25)**	**N/A**	**N/A**	**9.5**	**(23)**	**04/01/2016**
MSCI EAFE (Net) Index	*2.7*		*2.2*		*11.3*		*13.5*		*9.5*		*N/A*	*N/A*	*9.0*		
IM International Large Cap Core Equity (MF) Median	2.9		0.5		10.3		13.2		8.7		N/A	N/A	8.1		
Mellon Emerging Markets	**-1.4**	**(53)**	**-9.3**	**(57)**	**-2.5**	**(59)**	**10.9**	**(62)**	**9.8**	**(46)**	**N/A**	**N/A**	**9.5**	**(45)**	**04/01/2016**
MSCI Emerging Markets (Net) Index	*-1.3*		*-9.3*		*-2.5*		*10.9*		*9.9*		*N/A*	*N/A*	*9.5*		
IM Emerging Markets Equity (MF) Median	-1.3		-8.8		-1.6		11.8		9.6		N/A	N/A	9.2		

Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.

Manager Performance Overview

As of December 31, 2021

	QTR	Jul-2021 To Dec-2021	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Private Equity									
Hamilton Lane II	**0.0**	**0.0**	**-5.3**	**16.2**	**17.5**	**16.2**	**15.5**	**17.9**	**03/01/2009**
Hamilton Lane VII A	**0.0**	**4.0**	**31.0**	**19.6**	**16.6**	**14.3**	**14.7**	**14.0**	**07/01/2011**
Hamilton Lane VII B	**0.0**	**-6.3**	**-2.0**	**7.5**	**8.3**	**8.9**	**10.4**	**10.3**	**07/01/2011**
Real Assets	**4.2**	**9.7**	**13.1**	**N/A**	**N/A**	**N/A**	**N/A**	**13.1**	**01/01/2021**
UBS Trumbull Property Fund	**4.8**	**11.1**	**15.2**	**2.0**	**3.4**	**N/A**	**N/A**	**3.8**	**07/01/2016**
NCREIF Fund Index - ODCE (net)	*7.7*	*14.6*	*21.0*	*8.2*	*7.7*	*N/A*	*N/A*	*7.7*	
Molpus SWF II	**0.0**	**0.1**	**-0.5**	**-1.1**	**-1.0**	**0.3**	**1.9**	**1.7**	**03/01/2009**
NCREIF Timberland Index	*0.0*	*1.9*	*4.4*	*2.2*	*2.7*	*2.7*	*4.6*	*3.3*	

The inception date expressed on the Manager Performance Overview page(s) represents the first day of the first full month following the purchase of the investment. Performance figures shown at the fund level begin on this inception date. Inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies. Composite performance includes all funds held in the composite since inception.

Returns are net of fees unless otherwise stated. Mutual fund performance stated above may differ slightly from the current share class' historical performance due to share class exchanges.

Valuations data as of:
Molpus and Hamilton Lane - 9/30/2021
UBS Trumbull Property Fund - 12/31/2021

All private equity and real estate assets are adjusted for any capital activity.

Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.

Manager Commentary

As of December 31, 2021

Manager	Manager Status	Comments
Fixed Income		
JIC Core Bond Fund I	Maintain	4Q 2021 - Commentary not available at time of report production.
Domestic Equity		
Mellon Large Cap Core	Maintain	In accordance with its investment objective, the Mellon Large Cap Core strategy performed in line with the S&P 500 Index.
Mellon Smid Cap Core	Maintain	In accordance with its investment objective, the Mellon Smid Cap Core strategy performed in line with the Russell 2500 Index.
International Equity		
Mellon EAFE Fund	Maintain	In accordance with its investment objective, the Mellon EAFE Fund performed in line with the MSCI EAFE.
Mellon Emerging Markets	Maintain	In accordance with its investment objective, the Mellon Emerging Markets strategy performed in line with the MSCI Emerging Markets.
Private Equity		
Hamilton Lane II	Maintain	4Q 2021 - Commentary not available at time of report production.
Hamilton Lane VII A	Maintain	4Q 2021 - Commentary not available at time of report production.
Hamilton Lane VII B	Maintain	4Q 2021 - Commentary not available at time of report production.
Real Assets		
UBS Trumbull Property Fund	Maintain	4Q 2021 - Commentary not available at time of report production.
Molpus SWF II	Maintain	4Q 2021 - Commentary not available at time of report production.

Manager Gain/Loss Summary

Quarter Ending December 31, 2021

	Market Value As of 10/01/2021	Net Flows	Return On Investment	Market Value As of 12/31/2021
Short Term Liquidity				
Key Bank Cash Portfolio	2,050,044	873,153	-	2,923,197
Pooled Cash	-1,368,943	-3,828,680	-	-5,197,624
Total Short Term Liquidity	**681,101**	**-2,955,528**	**-**	**-2,274,427**
Fixed Income				
JIC Core Bond Fund I	40,042,247	-	-53,396	39,988,851
Total Fixed Income	**40,042,247**	**-**	**-53,396**	**39,988,851**
Domestic Equity				
Mellon Large Cap Core	80,967,295	-3,200,000	8,787,784	86,555,078
Mellon Smid Cap Core	33,171,353	-7,000,000	1,351,353	27,522,706
Total Domestic Equity	**114,138,648**	**-10,200,000**	**10,139,137**	**114,077,785**
International Equity				
Mellon EAFE Fund	47,003,212	10,200,000	1,242,424	58,445,636
Mellon Emerging Markets	24,127,832	-	-326,696	23,801,137
Total International Equity	**71,131,044**	**10,200,000**	**915,729**	**82,246,773**
Real Assets				
UBS Trumbull Property Fund	13,691,982	-661,247	658,150	13,688,885
Molpus SWF II	1,935,963	-	-	1,935,963
Total Real Assets	**15,627,945**	**-661,247**	**658,150**	**15,624,848**
Private Equity				
Hamilton Lane II	67,811	-11,781	-	56,030
Hamilton Lane VII A	841,831	-167,239	-	674,592
Hamilton Lane VII B	354,535	-63,903	-	290,632
Total Private Equity	**1,264,177**	**-242,923**	**-**	**1,021,254**
Total Plan	**242,885,162**	**-3,859,697**	**11,659,619**	**250,685,084**

Market Value & Flow Summary

Since Inception Ending December 31, 2021

Periods Ending	Beginning Market Value ($)	Net Cash Flow ($)	Gain/Loss ($)	Ending Market Value ($)	% Return
Dec-2007	-	-	-	126,047,968	N/A
Mar-2008	126,047,968	-314,583	-6,463,441	119,269,944	-5.4
Jun-2008	119,269,944	-34,506	-1,420,422	117,815,016	-1.0
Sep-2008	117,815,016	-1,639	-11,410,284	106,403,093	-9.9
Dec-2008	106,403,093	51,005	-18,744,117	87,709,981	-17.5
Mar-2009	87,709,981	-349,107	-6,198,914	81,161,960	-7.2
Jun-2009	81,161,960	-1,030,581	13,436,076	93,567,455	16.4
Sep-2009	93,567,455	619,883	14,098,425	108,285,763	14.9
Dec-2009	108,285,763	-115,779	3,547,706	111,717,690	3.1
Mar-2010	111,717,690	13,402	3,833,282	115,564,374	3.5
Jun-2010	115,564,374	739,868	-4,029,798	112,274,444	-3.5
Sep-2010	112,274,444	-780,144	10,497,177	121,991,477	9.3
Dec-2010	121,991,477	-439,159	6,066,208	127,618,526	4.9
Mar-2011	127,618,526	613,016	4,137,991	132,369,533	3.2
Jun-2011	132,369,533	-168,861	2,408,901	134,609,573	1.6
Sep-2011	134,609,573	-703,596	-9,573,123	124,332,854	-7.2
Dec-2011	124,332,854	-780,577	5,208,308	128,760,585	4.0
Mar-2012	128,760,585	1,032,061	8,131,545	137,924,191	6.3
Jun-2012	137,924,191	-740,359	-1,285,699	135,898,133	-1.0
Sep-2012	135,898,133	-233,704	6,403,068	142,067,497	4.7
Dec-2012	142,067,497	-127,106	3,395,681	145,336,072	2.2
Mar-2013	145,336,072	-1,537,090	4,572,279	148,371,261	3.1
Jun-2013	148,371,261	32,413	-3,404,263	144,999,411	-2.4
Sep-2013	144,999,411	-530,383	5,332,874	149,801,902	3.5
Dec-2013	149,801,902	-1,944,776	5,175,271	153,032,397	3.5
Mar-2014	153,032,397	-654,840	3,766,110	156,143,667	2.3
Jun-2014	156,143,667	2,041,778	6,299,031	164,484,476	3.8
Sep-2014	164,484,476	-1,324,196	-3,599,965	159,560,315	-2.2
Dec-2014	159,560,315	-1,137,601	398,924	158,821,638	0.1
Mar-2015	158,821,638	-1,160,759	2,998,155	160,659,034	1.9
Jun-2015	160,659,034	585,359	139,382	161,383,775	-0.2

Market Value & Flow Summary

Since Inception Ending December 31, 2021

Periods Ending	Beginning Market Value ($)	Net Cash Flow ($)	Gain/Loss ($)	Ending Market Value ($)	% Return
Sep-2015	161,383,775	-1,040,311	-8,081,581	152,261,883	-5.0
Dec-2015	152,261,883	-1,742,184	2,019,763	152,539,462	1.2
Mar-2016	152,539,462	-1,730,879	1,523,499	152,332,082	1.0
Jun-2016	152,332,082	266,995	2,811,606	155,410,683	1.7
Sep-2016	155,410,683	1,983,503	6,426,058	163,820,244	4.1
Dec-2016	163,820,244	-54,598	2,645,722	166,411,368	1.6
Mar-2017	166,411,368	-5,459	7,877,936	174,283,845	4.7
Jun-2017	174,283,845	-3,747,517	5,154,535	175,690,863	3.0
Sep-2017	175,690,863	-46,149	6,899,516	182,544,230	3.9
Dec-2017	182,544,230	-47,491	8,185,226	190,681,965	4.4
Mar-2018	190,681,965	-48,887	-525,152	190,107,926	-0.3
Jun-2018	190,107,926	-1,209,164	2,581,836	191,480,598	1.3
Sep-2018	191,480,598	-3,051,362	6,401,105	194,830,341	3.4
Dec-2018	194,830,341	-47,255	-17,862,223	176,920,863	-9.2
Mar-2019	176,920,863	-46,671	16,444,026	193,318,218	9.3
Jun-2019	193,318,218	-4,049,872	4,895,026	194,163,372	2.5
Sep-2019	194,163,372	-48,026	300,197	194,415,543	0.1
Dec-2019	194,415,543	-39,368	12,163,384	206,539,559	6.2
Mar-2020	206,539,559	-557,974	-35,504,673	170,476,912	-17.2
Jun-2020	170,476,912	-511,765	24,700,354	194,665,501	14.5
Sep-2020	194,665,501	-3,617,501	10,623,672	201,671,672	5.5
Dec-2020	201,671,672	216,270	25,760,836	227,648,778	12.7
Mar-2021	227,648,778	-2,006,662	9,977,196	235,619,313	4.4
Jun-2021	235,619,313	-1,986,839	13,714,043	247,346,516	5.8
Sep-2021	247,346,516	-2,165,696	-2,295,658	242,885,162	-0.9
Dec-2021	242,885,162	-3,859,697	11,659,619	250,685,084	4.8

MPT Statistics

As of December 31, 2021

3 Year Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha
Total Plan	15.48	15.46	9.95	0.95	-0.89	0.88	1.00	1.03	-1.30
Policy Benchmark	16.45	14.97	9.25	1.03	N/A	0.00	1.00	1.00	0.00
90 Day U.S. Treasury Bill	0.99	0.54	0.00	N/A	-1.03	15.20	0.16	-0.01	1.24

5 Year Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha
Total Plan	11.29	13.39	8.74	0.78	-0.65	0.72	1.00	1.02	-0.70
Policy Benchmark	11.85	13.12	8.30	0.83	N/A	0.00	1.00	1.00	0.00
90 Day U.S. Treasury Bill	1.14	0.47	0.00	N/A	-0.83	13.35	0.22	-0.02	1.35

7 Year Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha
Total Plan	8.88	11.78	7.63	0.71	-0.58	1.20	0.99	1.00	-0.73
Policy Benchmark	9.64	11.69	7.41	0.77	N/A	0.00	1.00	1.00	0.00
90 Day U.S. Treasury Bill	0.86	0.46	0.00	N/A	-0.77	11.84	0.09	-0.01	0.98

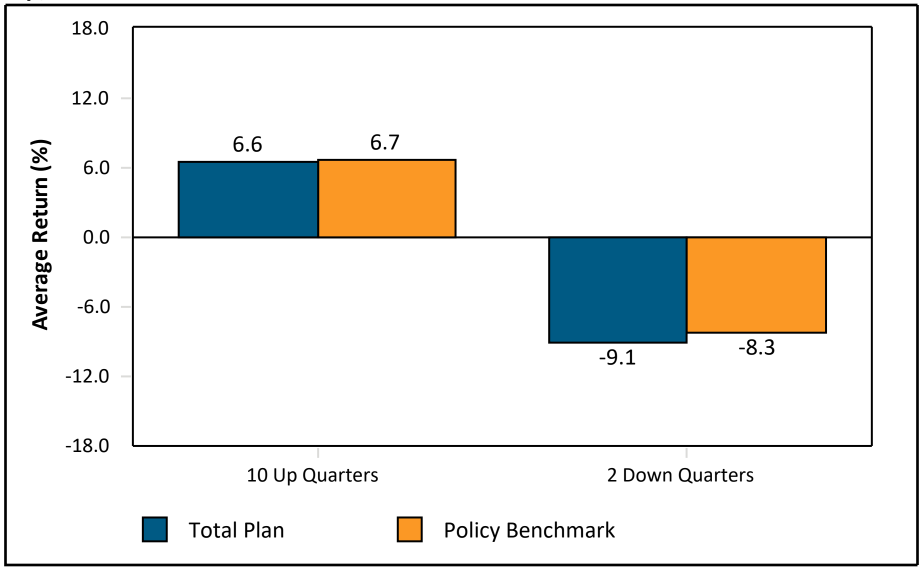
Since Inception Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha	Inception Date
Total Plan	6.31	12.78	8.33	0.49	-0.42	2.92	0.95	0.95	-0.81	01/01/2008
Policy Benchmark	7.55	13.11	8.56	0.57	N/A	0.00	1.00	1.00	0.00	01/01/2008
90 Day U.S. Treasury Bill	0.62	0.45	0.00	N/A	-0.57	13.27	0.11	-0.01	0.71	01/01/2008

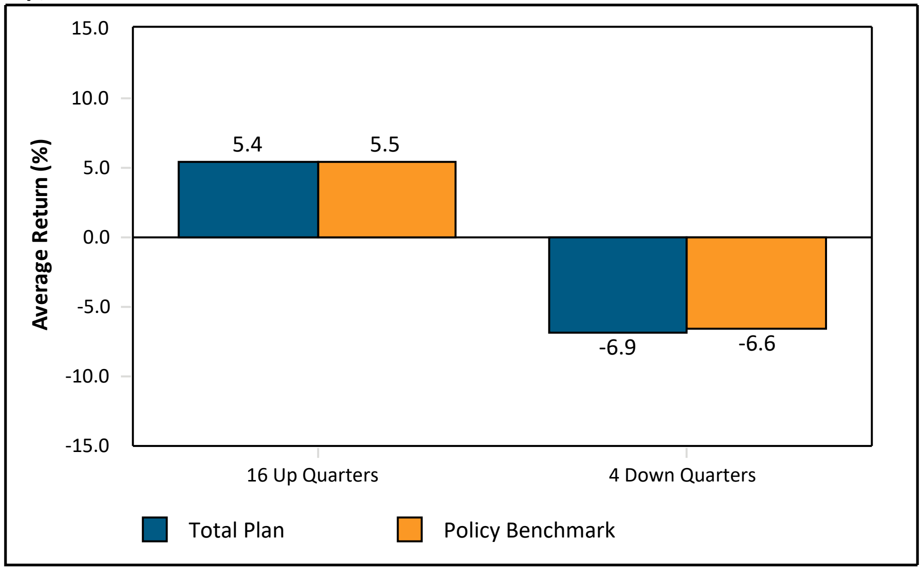
Market Capture

As of December 31, 2021

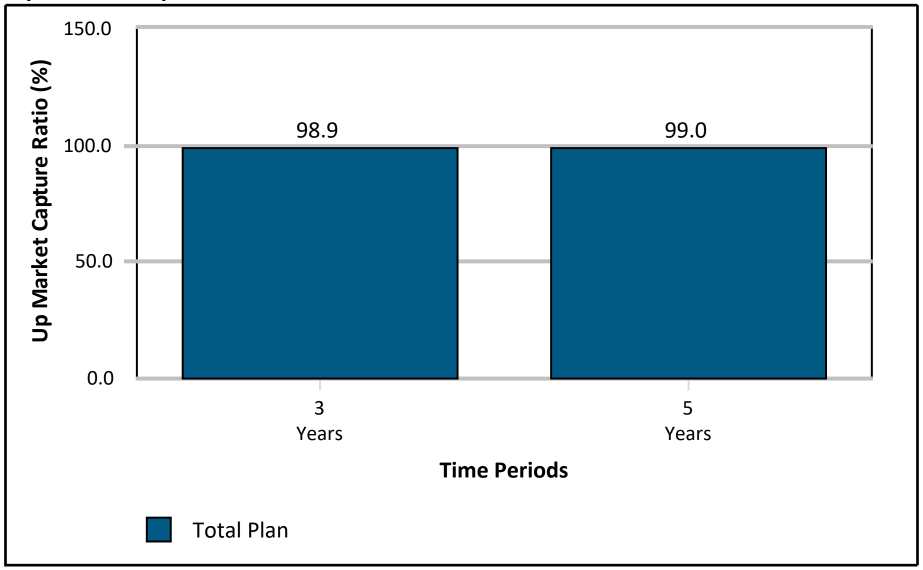
Up/Down Markets - 3 Years



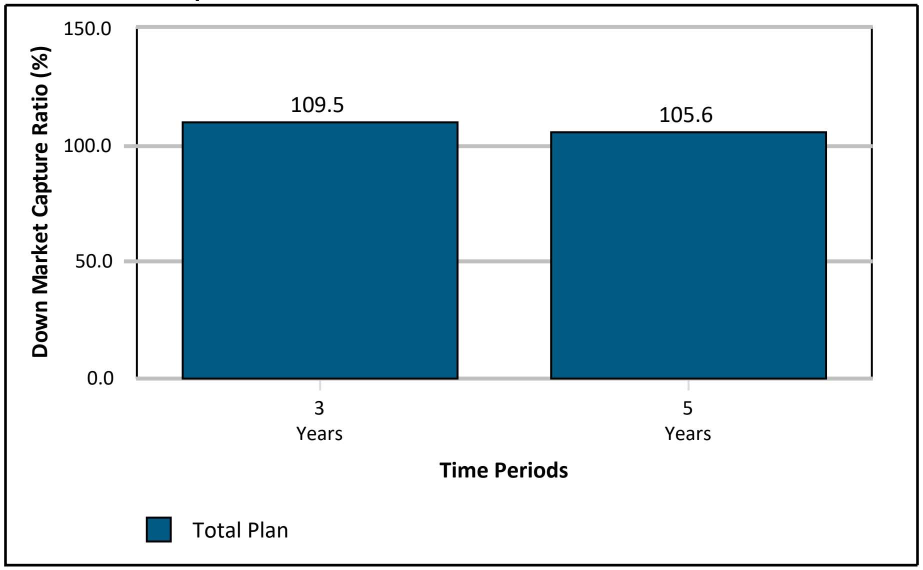
Up/Down Markets - 5 Years



Up Market Capture Ratio



Down Market Capture Ratio



Estimated Fee Analysis

As of December 31, 2021

MANAGER	Current Target %	Fee Schedule[1]
Johnson Core Bund I[2]	18.0%	0.25%
Mellon Large Cap Core	31.0%	0.01%
Mellon SMID Cap Core	10.5%	0.011%
Mellon EAFE	23.0%	0.02%
Mellon Emerging Markets	10.0%	0.05%
Hamilton Lane II	0.5%	No longer charging management fee
Hamilton Lane VII A		1.00%
Hamilton Lane VII B		1.00%
UBS Trumbull Property Fund[3]	6.0%	0.916%
Molpus SWF II	1.0%	1.00%
TOTAL Portfolio	**100%**	**0.13%**

[1]Expense ratios shown above do not include any applicable performance based/incentive fees. [2]Johnson Core Bond target allocation includes target allocation to U.S. Dynamic Bonds. Retirement Board is in the process of implementing a 3% target allocation to BlackRock Strategic Income Opportunities Fund. [3]UBS Trumbull Property Fund expense ratio is the estimated annual fee based on the following fee schedule: 0.955% on first $10 million; 0.825% on next $10 million.

DISCLOSURE: The figures on this page have been obtained from sources we deem to be reliable. Fiducient Advisors has not independently verified this information.

Benchmark Composition

Policy Benchmark

As of December 31, 2021

Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
May-2021		Jan-2016	
Blmbg. U.S. Aggregate Index	18.0	Bloomberg Intermediate US Govt/Credit Idx	28.0
S&P 500 Index	31.5	S&P 500 Index	30.0
Russell 2500 Index	10.5	Russell 2500 Index	18.0
MSCI EAFE (Net) Index	23.0	S&P Completion Index	2.0
MSCI Emerging Markets (Net) Index	10.0	MSCI EAFE (Net) Index	10.0
NCREIF Fund Index - ODCE (net)	6.0	MSCI Emerging Markets (Net) Index	10.0
NCREIF Timberland Index	1.0	NCREIF Timberland Index	2.0
Dec-2019		Jan-2000	
Blmbg. U.S. Aggregate Index	20.0	Blmbg. U.S. Aggregate Index	20.0
S&P 500 Index	32.0	S&P 500 Index	32.0
Russell 2500 Index	18.0	Russell 2500 Index	18.0
MSCI EAFE (Net) Index	10.0	MSCI EAFE (Net) Index	10.0
MSCI Emerging Markets (Net) Index	10.0	MSCI Emerging Markets (Net) Index	10.0
NCREIF Fund Index - ODCE (net)	8.0	NCREIF Fund Index - ODCE (net)	8.0
NCREIF Timberland Index	2.0	NCREIF Timberland Index	2.0
Jun-2017			
Bloomberg Intermediate US Govt/Credit Idx	20.0		
S&P 500 Index	30.0		
Russell 2500 Index	18.0		
S&P Completion Index	2.0		
MSCI EAFE (Net) Index	10.0		
MSCI Emerging Markets (Net) Index	10.0		
NCREIF Fund Index - ODCE (net)	8.0		
NCREIF Timberland Index	2.0		

Definitions & Disclosures

Please note: Due to rounding methodologies of various data providers, certain returns in this report might differ slightly when compared to other sources

REGULATORY DISCLOSURES

Offer of ADV Part 2A: Rule 204-3 under the Investment Advisers Act of 1940 requires that we make an annual offer to clients to send them, without charge, a written disclosure statement meeting the requirements of such rule. We will be glad to send a copy of our ADV Part 2A to you upon your written request to compliance@fiducient.com.

ASSET CLASS REPRESENTATIONS

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When referencing asset class returns or statistics, the following indices are used to represent those asset classes, unless otherwise notes. Each index is unmanaged and investors can not actually invest directly into an index:

TIPS: Bloomberg Barclays Global Inflation-Linked: U.S. TIPS Total Return Index Unhedged
Municipals 5-Year: Bloomberg Barclays Municipal Bond 5 Year (4-6) Total Return Index Unhedged USD
Core Bond: Bloomberg Barclays US Agg Total Return Value Unhedged USD
High Yield Municipals: Bloomberg Barclays Muni High Yield Total Return Index Value Unhedged USD
High Yield: Bloomberg Barclays US Corporate High Yield Total Return Index Value Unhedged USD
Foreign Bond: Bloomberg Barclays Global Aggregate ex-USD Total Return Index Value USD (50/50 blend of hedged and unhedged)
EM Debt (unhedged): J.P. Morgan GBI-EM Global Diversified Composite Unhedged USD
U.S. Large Cap: S&P 500 Total Return Index
U.S. Small Cap: Russell 2000 Total Return Index
International Developed: MSCI EAFE Net Total Return USD Index
Emerging Markets: MSCI Emerging Markets Net Total Return USD Index
World: MSCI ACWI Net Total Return USD Index
U.S. Equity REITs: FTSE Nareit Equity REITs Total Return Index USD
S&P Real Assets: S&P Real Assets Total Return Index
Commodities: Bloomberg Commodity Total Return Index
Hedge Funds: Hedge Fund Research HFRI Fund of Funds Composite Index
Balanced: 3% TIPS, 33% Core Bond, 4% High Yield , 2% Foreign Bond. 2% EM Debt (unhedged), 18% U.S. Large Cap, 6% U.S. Small Cap, 16% International, 8% Emerging Markets, 5% U.S. Equity REITS, 3% Commodities
U.S.: MSCI USA Net Total Return USD Index
China: MSCI CHINA Net Total Return USD Index
Japan: MSCI Japan Net Total Return USD Index
Germany: MSCI Germany Net Total Return USD Index
India: MSCI India Net Total Return USD Index
United Kingdom: MSCI UK Net Total Return USD Index
France: MSCI France Net Total Return USD Index
Italy: MSCI Italy Net Total Return USD Index
Brazil: MSCI Brazil Net Total Return USD Index
Canada: MSCI Canada Net Total Return USD Index

INDEX DEFINITIONS

- **Citigroup 3 Month T-Bill** measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.
- **Ryan 3 Yr. GIC** is an arithmetic mean of market rates of $1 million Guaranteed Interest Contracts held for three years.
- **Bloomberg Barclays Treasury U.S. T-Bills-1-3 Month Index** includes aged U.S. Treasury bills, notes and bonds with a remaining maturity from 1 up to (but not including) 3 months. It excludes zero coupon strips.
- **Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index** consists of Inflation-Protection securities issued by the U.S. Treasury.
- **Bloomberg Barclays Muni Index** is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- **Bloomberg Barclays Muni 1 Year Index** is the 1-year (1-2) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 3 Year Index** is the 3-year (2-4) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 5 Year Index** is the 5-year (4-6) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 7 Year Index** is the 7-year (6-8) component of the Municipal Bond index.
- **Bloomberg Barclays Intermediate U.S. Gov't/Credit** is the Intermediate component of the U.S. Government/Credit index, which includes securities in the Government and Credit Indices. The Government Index includes treasuries and agencies, while the credit index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements.

- **Bloomberg Barclays U.S. Aggregate Index** covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.
- **Bloomberg Barclays Global Aggregate ex. USD Indices** represent a broad-based measure of the global investment-grade fixed income markets. The two major components of this index are the Pan-European Aggregate and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate securities.
- **Bloomberg Barclays U.S. Corporate High Yield Index** covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- **JP Morgan Government Bond Index-Emerging Market (GBI-EM) Index** is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
- **The S&P 500** is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
- **The Dow Jones Industrial Index** is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.
- **The NASDAQ** is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.
- **Russell 3000** is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
- **Russell 1000** consists of the largest 1000 companies in the Russell 3000 Index.
- **Russell 1000 Growth** measures the performance of those Russell 1000 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 1000 Value** measures the performance of those Russell 1000 companies with lower P/B ratios and lower forecasted growth values.
- **Russell Mid Cap** measures the performance of the 800 smallest companies in the Russell 1000 Index.
- **Russell Mid Cap Growth** measures the performance of those Russell Mid Cap companies with higher P/B ratios and higher forecasted growth values.
- **Russell Mid Cap Value** measures the performance of those Russell Mid Cap companies with lower P/B ratios and lower forecasted growth values.
- **Russell 2000** consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
- **Russell 2000 Growth** measures the performance of the Russell 2000 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 2000 Value** measures the performance of those Russell 2000 companies with lower P/B ratios and lower forecasted growth values.
- **Russell 2500** consists of the 2,500 smallest U.S. companies in the Russell 3000 index.
- **Russell 2500 Growth** measures the performance of the Russell 2500 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 2500 Value** measures the performance of those Russell 2500 companies with lower P/B ratios and lower forecasted growth values.
- **MSCI World** captures large and mid-cap representation across 23 Developed Markets countries. With 1,645 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- **MSCI ACWI (All Country World Index) ex. U.S. Index** captures large and mid-cap representation across 22 of 23 Developed Markets countries (excluding the United States) and 23 Emerging Markets countries. With 1,859 constituents, the index covers approximately 85% of the global equity opportunity set outside the US.
- **MSCI ACWI (All Country World Index) ex. U.S. Small Cap Index** captures small cap representation across 22 of 23 Developed Markets countries (excluding the US) and 23 Emerging Markets countries. With 4,368 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
- **MSCI EAFE** is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. With 930 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- **MSCI EAFE Value** captures large and mid-cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the US and Canada. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 507 constituents, the index targets 50% coverage of the free float- adjusted market capitalization of the MSCI EAFE Index.
- **MSCI EAFE Growth** captures large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the US and Canada. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend. With 542 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- **MSCI Emerging Markets** captures large and mid-cap representation across 23 Emerging Markets countries. With 836 constituents, the index covers approximately 85% of the free-float adjusted market capitalization in each country.
- **Consumer Price Index** is a measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rates represent the inflation rate.
- **FTSE NAREIT Equity REITs Index** contains all Equity REITs not designed as Timber REITs or Infrastructure REITs.
- **S&P Developed World Property** defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- **S&P Developed World Property x U.S.** defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- **Fund Specific Broad Real Asset Benchmarks:**
  - **DWS Real Assets:** 30%: Dow Jones Brookfield Infrastructure Index, 30%: FTSE EPRA/NAREIT Developed Index,15%: Bloomberg Commodity Index, 15%: S&P Global Natural Resources Index, 10%: Barclays U.S. Treasury Inflation Notes Total Return Index
  - **PIMCO Inflation Response Multi Asset Fund:** 45% Barclays U.S. TIPS, 20% Bloomberg Commodity Index, 15% JP Morgan Emerging Local Markets Plus, 10% Dow Jones Select REIT, 10% Bloomberg Gold Subindex Total Return
  - **Principal Diversified Real Assets:** 35% BBgBarc U.S. Treasury TIPS Index, 20% S&P Global Infrastructure Index NTR, 20% S&P Global Natural Resources Index NTR, 15% Bloomberg Commodity Index, and 10% FTSE EPRA/NAREIT Developed Index NTR
  - **Wellington Diversified Inflation H:** 50% MSCI ACWI Commodity Producers Index, 25% Bloomberg Commodity Index, and 25% Bloomberg Barclays US TIPS 1 – 10 Year Index
- **Bloomberg Commodity Index** is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
- **HFRI Fund Weighted Composite Index** is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of $50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- **The Alerian MLP Index** is the leading gauge of energy Master Limited Partnerships (MLPs). The float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
- **The Adjusted Alerian MLP Index** is commensurate with 65% of the monthly returns of the Alerian MLP Index to incorporate the effect of deferred tax liabilities incurred by MLP entities.
- **Cambridge Associates U.S. Private Equity Index** is based on data compiled from more than 1,200 institutional-quality buyout, growth equity, private equity energy, and mezzanine funds formed between 1986 and 2015.

- **Cambridge Associates U.S. Venture Capital Index** is based on data compiled from over 1,600 institutional-quality venture capital funds formed between 1986 and 2015.
- **Vanguard Spliced Bloomberg Barclays US1-5Yr Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. 1–5 Year Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. 1–5 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US5-10Yr Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. 5–10 Year Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. 5–10 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US Agg Flt Adj Index:** Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009; Bloomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US Long Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. Long Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. Long Government/Credit Float Adjusted Index thereafter.
- **Vanguard Balanced Composite Index:** Made up of two unmanaged benchmarks, weighted 60% Dow Jones U.S. Total Stock Market Index (formerly the Dow Jones Wilshire 5000 Index) and 40% Bloomberg Barclays U.S. Aggregate Bond Index through May 31, 2005; 60% MSCI US Broad Market Index and 40% Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009; 60% MSCI US Broad Market Index and 40% Bloomberg Barclays U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Blomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Intermediate-Term Tax-Exempt Index:** Bloomberg Barclays 1–15 Year Municipal Bond Index.
- **Vanguard Spliced Extended Market Index:** Dow Jones Wilshire 4500 Index through June 17, 2005; S&P Transitional Completion Index through September 16, 2005; S&P Completion Index thereafter.
- **Vanguard Spliced Value Index:** S&P 500 Value Index (formerly the S&P 500/Barra Value Index) through May 16, 2003; MSCI US Prime Market Value Index through April 16, 2013; CRSP US Large Cap Value Index thereafter.
- **Vanguard Spliced Large Cap Index:** Consists of MSCI US Prime Market 750 Index through January 30, 2013, and the CRSP US Large Cap Index thereafter.
- **Vanguard Spliced Growth Index:** S&P 500 Growth Index (formerly the S&P 500/Barra Growth Index) through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index thereafter.
- **Vanguard Spliced Mid Cap Value Index:** MSCI US Mid Cap Value Index through April 16, 2013; CRSP US Mid Cap Value Index thereafter.
- **Vanguard Spliced Mid Cap Index:** S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter.
- **Vanguard Spliced Mid Cap Growth Index:** MSCI US Mid Cap Growth Index through April 16, 2013; CRSP US Mid Cap Growth Index thereafter.
- **Vanguard Spliced Total Stock Market Index:** Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005; MSCI US Broad Market Index through June 2, 2013; and CRSP US Total Market Index thereafter.
- **Vanguard Spliced Small Cap Value Index:** SmallCap 600 Value Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Value Index through April 16, 2013; CRSP US Small Cap Value Index thereafter.
- **Vanguard Spliced Small Cap Index:** Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter.
- **Vanguard Spliced Small Cap Growth Index:** S&P SmallCap 600 Growth Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Growth Index through April 16, 2013; CRSP US Small Cap Growth Index thereafter.
- **Vanguard Spliced Total International Stock Index:** Consists of the Total International Composite Index through August 31, 2006; the MSCI EAFE + Emerging Markets Index through December 15, 2010; the MSCI ACWI ex USA IMI Index through June 2, 2013; and FTSE Global All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard Spliced Developed Markets Index:** MSCI EAFE Index through May 28, 2013; FTSE Developed ex North America Index through December 20, 2015; FTSE Developed All Cap ex US Transition Index through May 31, 2016; FTSE Developed All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard Spliced Emerging Markets Index:** Select Emerging Markets Index through August 23, 2006; MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Index through November 1, 2015; and FTSE Emerging Markets All Cap China A Transition Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard REIT Spliced Index:** MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009; MSCI US REIT Index through January 31, 2018; MSCI US Investable Market Real Estate 25/50 Transition Index through July 24, 2018; MSCI US Investable Market Real Estate 25/50 Index thereafter.

Additional:

- Equity sector returns are calculated by Russell and MSCI for domestic and international markets, respectively. MSCI sector definitions correspond to the MSCI GICS® classification (Global Industry Classification System); Russell uses its own sector and industry classifications.
- MSCI country returns are calculated by MSCI and are free float-adjusted market capitalization indices that are designed to measure equity market performance in each specific country.
- Currency returns are calculated using Bloomberg's historical spot rate indices and are calculated using the U.S. dollar as the base currency.
- The Index of Leading Economic Indicators, calculated by The Conference Board, is used as a barometer of economic activity over a range of three to six months. The index is used to determine the direction and stability of the economy. The composite index of leading indicators, which is derived from 10 leading indicators, helps to signal turning points in the economy and forecast economic cycles. The leading indicators are the following: average weekly hours, average weekly initial claims, manufacturers' new orders, both consumer and non-defense capital goods, vendor performance, building permits, stock prices, money supply (M2), the interest rate spread and the index of consumer expectations.
- S&P Target Date Indexes are constructed using a survey method of current target date investments with $100 million or more in assets under management. Allocations for each vintage are comprised of exchange-traded- funds that represent respective asset classes used in target date portfolios. The indexes are designed to represent a market consensus glide path.

DEFINITION OF KEY STATISTICS AND TERMS

- **Returns:** A percentage figure used when reporting historical average compounded rate of investment return. All returns are annualized if the period for which they are calculated exceeds one year.
- **Universe Comparison:** The universe compares the fund's returns to a group of other investment portfolios with similar investment strategies. The returns for the fund, the index and the universe percentiles are displayed. A percentile ranking of 1 is the best, while a percentile ranking of 100 is the worst. For example, a ranking of 50 indicates the fund outperformed half of the universe. A ranking of 25 indicates the fund was in the top 25% of the universe, outperforming 75%.
- **Returns In Up/Down Markets:** This measures how the fund performed in both up and down markets. The methodology is to segregate the performance for each time period into the quarters in which the market, as defined by the index, was positive and negative. Quarters with negative index returns are treated as down markets, and quarters with positive index returns are treated as up markets. Thus, in a 3 year or 12 quarter period, there might be 4 down quarters and 8 up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the down quarters. The up market capture ratio is the ratio of the fund's return in up markets to the index. The down market capture ratio is the ratio of the fund's return in down markets to the index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio.

- **Standard Deviation:** Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.
- **R-Squared**: This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.
- **Beta**: This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse that the market in down markets. It is important to note, however, a low fund beta does not imply the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).
- **Alpha:** The Alpha is the nonsystematic return, or the return that can't be attributed to the market. It can be thought of as how the manager performed if the market's return was zero. A positive alpha implies the manager added value to the return of the portfolio over that of the market. A negative alpha implies the manager did not contribute any value over the performance of the market.
- **Sharpe Ratio:** The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The higher the Sharpe ratio, the more reward you are receiving per unit of total risk. This measure can be used to rank the performance of mutual funds or other portfolios.
- **Treynor Ratio:** The Treynor ratio measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. The ratio relates excess return over the risk-free rate to the additional risk taken; however, systematic risk is used instead of total risk. The Treynor ratio is similar to the Sharpe ratio, except in the fact that it uses the beta to evaluate the returns rather than the standard deviation of portfolio returns. High values mean better return for risk taken.
- **Tracking Error:** Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.
- **Information Ratio:** The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.
- **Consistency:** Consistency shows the percent of the periods the fund has beaten the index and the percent of the periods the index has beat the fund. A high average for the fund (e.g., over 50) is desirable, indicating the fund has beaten the index frequently.
- **Downside Risk:** Downside risk is a measure similar to standard deviation but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.
- **M-Squared:** M-squared, or the Modigliani risk-adjusted performance measure is used to characterize how well a portfolio's return rewards an investor for the amount of risk taken, relative to that of some benchmark portfolio and to the risk-free rate.

DEFINITION OF KEY PRIVATE EQUITY TERMS

- **PIC (Paid in Capital):** The amount of committed capital that has been transferred from the limited partner to the general partner.
- **TVPI (Total Value to Paid in Capital):** Money returned to limited partners plus the fund's unrealized investments, divided by money paid-in to the partnership. The TVPI should equal RVPI plus DPI.
- **DPI (Distribution to Paid In Capital):** Money returned (distributions) to limited partners divided by money paid in to the partnership. Also called cash-on-cash multiple.
- **RVPI (Residual Value to Paid In Capital):** The value of a fund's unrealized investments divided by money paid-in to the partnership.
- **Internal rate of return (IRR):** This is the most appropriate performance benchmark for private equity investments. It is a time-weighted return expressed as a percentage. IRR uses the present sum of cash drawdowns (money invested), the present value of distributions (money returned from investments) and the current value of unrealized investments and applies a discount.
- **Commitment:** Every investor in a private equity fund commits to investing a specified sum of money in the fund partnership over a specified period of time. The fund records this as the limited partnership's capital commitment. The sum of capital commitments is equal to the size of the fund.
- **Capital Distribution:** These are the returns that an investor in a private equity fund receives. It is the income and capital realized from investments less expenses and liabilities. Once a limited partner has had their cost of investment returned, further distributions are actual profit. The partnership agreement determines the timing of distributions to the limited partner. It will also determine how profits are divided among the limited partners and general partner.
- **Carried Interest:** The share of profits that the fund manager is due once it has returned the cost of investment to investors. Carried interest is normally expressed as a percentage of the total profits of the fund.
- **Co-Investment**: Co-Investments are minority investments made alongside a private equity investor in an LBO, a recapitalization, or an expansion capital transaction. It is a passive, non-controlling investment, as the private equity firm involved will typically exercise control and perform monitoring functions.
- **General Partner (GP):** This can refer to the top-ranking partners at a private equity firm as well as the firm managing the private equity fund.
- **GP Commitments:** It is normal practice for the GP managing a private equity fund to also make a financial commitment to the fund on the same basis as the LPs in the fund, and this is seen as an important factor driving the alignment of GP and LP interests. The historic benchmark for GP commitments has been 1% of the total fund size, but this is by no means universal, and many GPs commit significantly larger amounts. Furthermore, there has been a marked trend towards GPs making larger commitments to their funds over recent years.
- **Leveraged Buy-Out (LBO):** The acquisition of a company using debt and equity finance.
- **Limited Partner (LP):** Institutions or high-net-worth individuals/sophisticated investors that contribute capital to a private equity fund.
- **Public Market Equivalent (PME):** Performance measure used to evaluate performance relative to the market. It is calculated as the ratio of the discounted value of the LP's inflows divided by the discounted value of outflows, with the discounting performed using realized market returns.
- **Primaries:** An original investment vehicle that invests directly into a company or asset.

VALUATION POLICY

Fiducient Advisors does not engage an independent third-party pricing service to value securities. Our reports are generated using the security prices provided by custodians used by our clients. Our custodial pricing hierarchy is available upon request. If a client holds a security not reported by the first custodian within the hierarchy, the valuation is generated from the next custodian within the hierarchy, and so forth. Each custodian uses pricing services from outside vendors, where the vendors may generate nominally different prices. Therefore, this report can reflect minor valuation differences from those contained in a custodian's report. In rare instances where Fiducient Advisors overrides a custodial price, prices are taken from Bloomberg.

REPORTING POLICY

This report is intended for the exclusive use of the client listed within the report. Content is privileged and confidential. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecast represents median expectations and actual returns, volatilities and correlations will differ from forecasts. Please note each client has customized investment objectives and constraints and the investment strategy for each portfolio is based on a client-specific asset allocation model. Past performance does not indicate future performance and there is a possibility of a loss. Performance calculated net of investment fees. Certain portfolios presented may be gross of Fiducient Advisors' fees and actual performance would be reduced by investment advisory fees. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice.

Custodian reports are the reports that govern the account. There will be different account values between Fiducient Advisors' reports and the custodian reports based on whether the report utilizes trade date or settlement date to calculate value. Additionally, difference between values contained on reports may be caused by different accrued income values. Any forecasts represent future expectations and actual returns, volatilities and correlations will differ from forecasts. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice. Past performance does not indicate future performance and there is a possibility of a loss.

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Unless specified otherwise, all returns are net of individual manager fees, represent total returns and are annualized for periods greater than one year. The deduction of fees produces a compounding effect that reduces the total rate of return over time. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) quarterly fee assessment, (b) $1,000,000 investment, (c) portfolio return of 8% a year, and (d) 0.50% annual investment advisory fee would be $5,228 in the first year, and cumulative effects of $30,342 over five years and $73,826 over ten years. Additional information on advisory fees charged by Fiducient Advisors are described in Part 2 of the Form ADV.

OTHER

By regulation, closed-end funds utilizing debt for leverage must report their interest expense, as well as their income tax expense, as part of their total expense ratio. To make for a useful comparison between closed-end funds and both open-end funds and exchange-traded funds, adjusted expense ratios excluding interest and income tax expenses are utilized for closed-end funds within this report. See disclosure on closed-end fund fact sheets for information regarding the total expense ratio of each closed-end fund.

Please advise us of any changes in your objectives or circumstances.

CUSTODIAN STATEMENTS

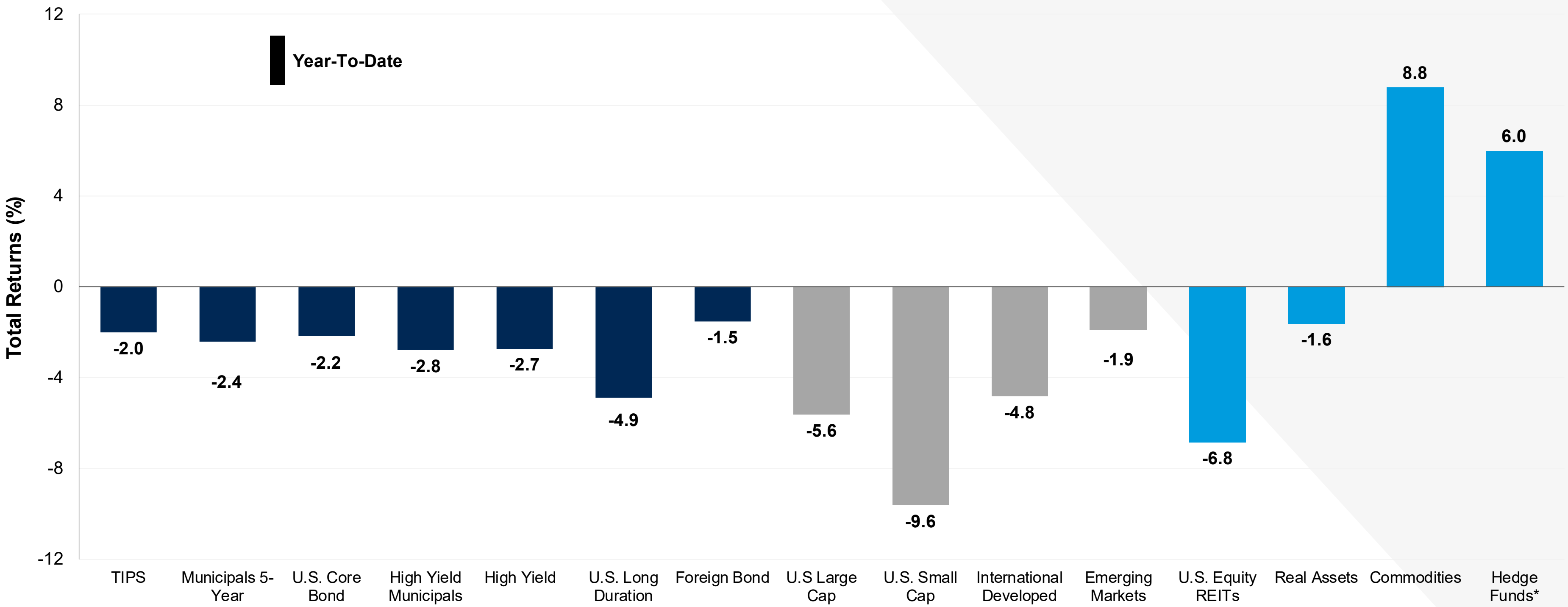
Please remember to review the periodic statements you receive from you custodian. If you do not receive periodic statements from your custodian or notice issues with the activity reported in those statements, please contact Fiducient Advisors or your custodian immediately.

FIDUCIENT
Advisors
Helping Clients Prosper

City of Burlington Employees Retirement System

Monthly Performance Update - January 2022

Asset Class Performance



*Hedge fund returns are lagged 1 month. Sources: FactSet, Morningstar. As of January 31, 2022.

Fixed Income (January)

- A more hawkish Federal Reserve sent interest rates higher during the period and fixed income markets broadly sold off.

- High yield and other spread sectors generally underperformed in the risk-off market environment.

- Despite elevated inflation levels, TIPS came under pressure as real yields moved higher and breakeven levels moved lower.

Equity (January)

- Expectations of tighter monetary policy, elevated inflation and geopolitical tensions sent equity markets sharply down.

- U.S stocks broadly underperformed non-U.S. segments of the global equity market.

\+ Emerging markets held up the best as many central banks had already begun to tighten monetary conditions and were less impacted by rising rates than in the U.S and other developed countries.

Real Asset / Alternatives (January)

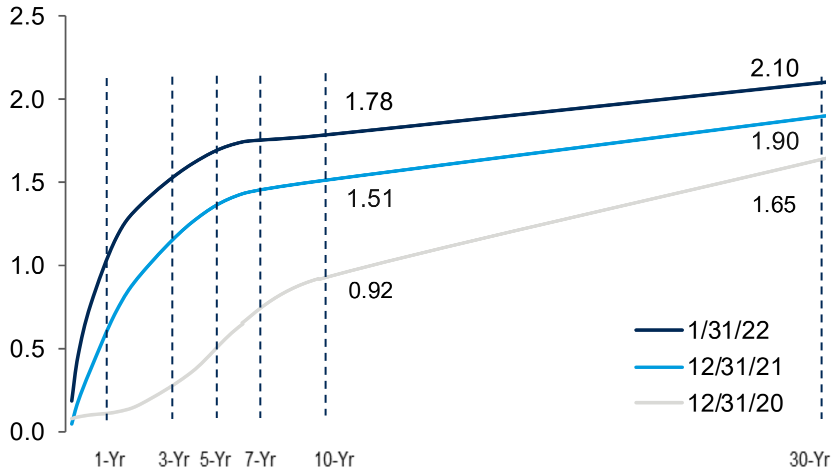
- REITs, which were one of the top performers in 2021, sold off in tandem with the broader equity market.

\+ Supply shortages and geopolitical tensions pushed energy prices higher, the driving force of the commodity market's strong return.

Fixed Income Market Update

U.S. Treasury Yields Curve

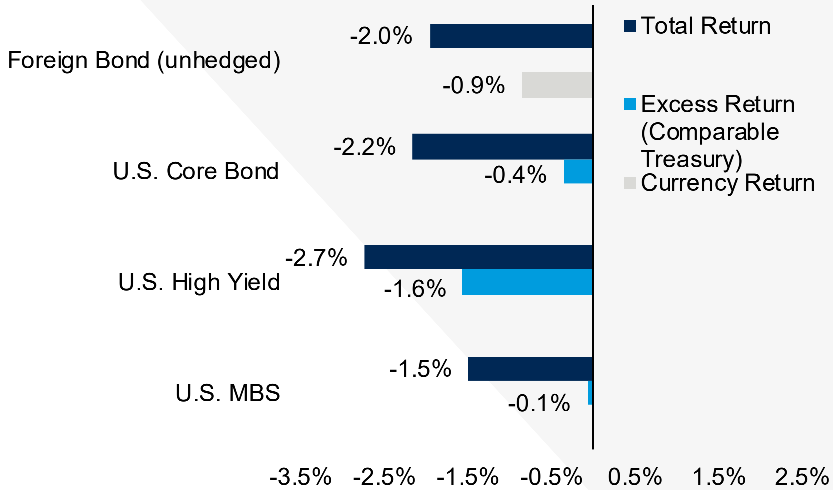
Interest rates moved higher following the Federal Reserve meeting as market expectations have now solidified for multiple interest rate hikes in 2022. The 10-Year U.S. Treasury Yield ended 27 basis points higher.



Source: FactSet. As of January 31, 2022

Index Performance Attribution (January 2022)

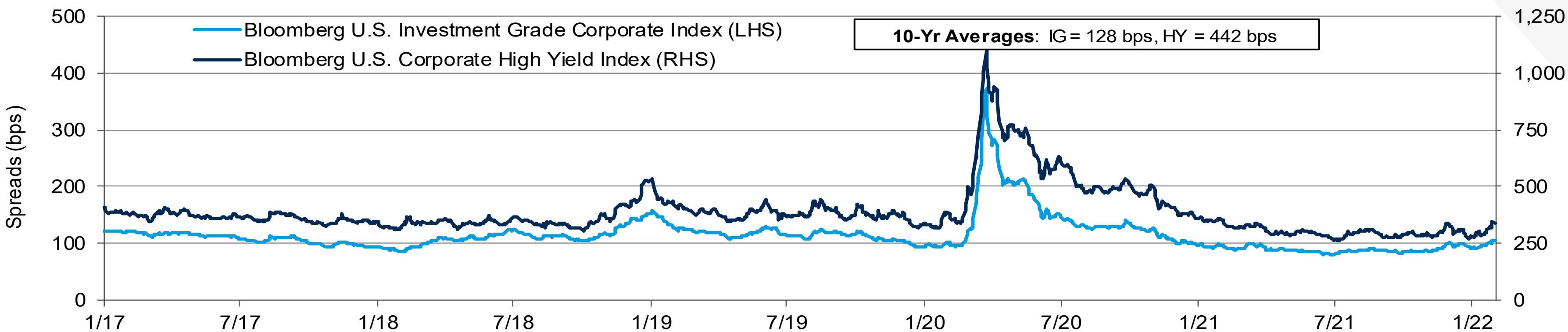
U.S. dollar strength was an added headwind for non-U.S. debt. Spread sectors generally underperformed similar duration Treasuries.



Source: FactSet. As of January 31, 2022

Credit Market Spreads – Trailing 5 Years

Credit spreads moved higher during January as investors digested what the impact will be from tightening monetary policy and the recent waive of the omicron COVID-19 variant. Investment grade and high yield spreads ended 14 and 59 basis points wider, respectively.



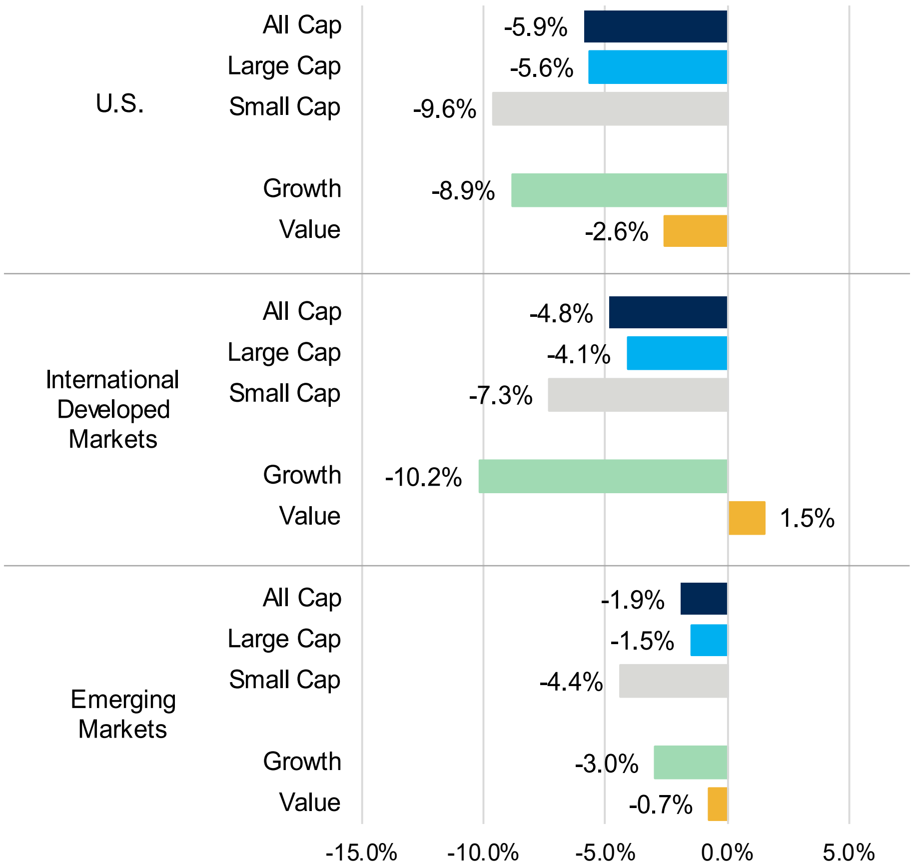
Source: FactSet. As of January 31, 2022

Past performance does not indicate future performance and there is a possibility of a loss.

Equity Market Update

Market Capitalization & Style Performance (January 2022)

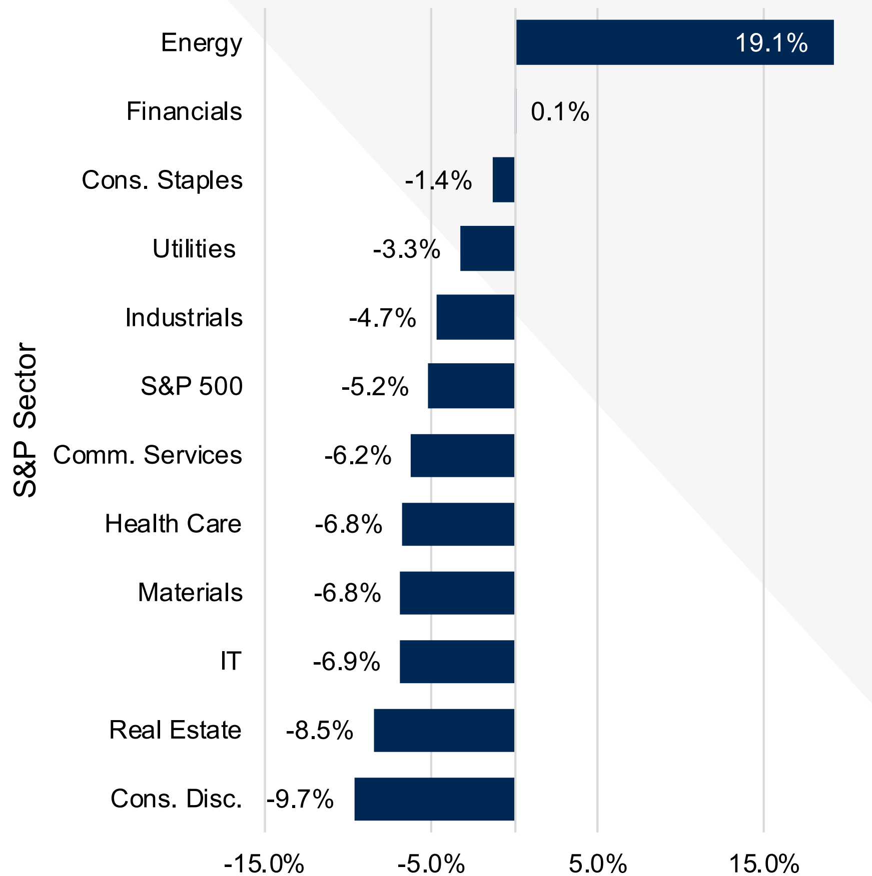
Large cap stocks, which are typically more defensive, outpaced small cap across regions. Value generally outperformed growth stocks in the month as technology related companies fell the hardest and financials benefited from rising interest rates.



Source: FactSet. As of January 31, 2022

U.S. Equities –Returns by Sector (January 2022)

U.S. equities broadly sold off in January in anticipation of tighter monetary policy. The energy sector was the lone bright spot, benefiting from rising commodity prices.



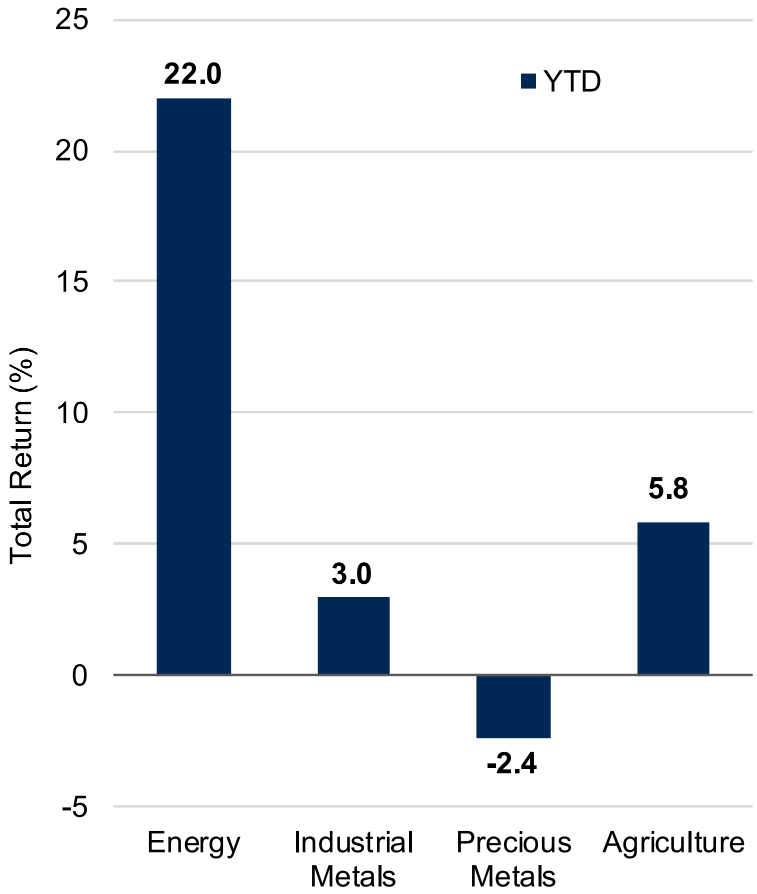
Source: FactSet. As of January 31, 2022

Past performance does not indicate future performance and there is a possibility of a loss.

Real Asset Market Update

Real Assets Performance

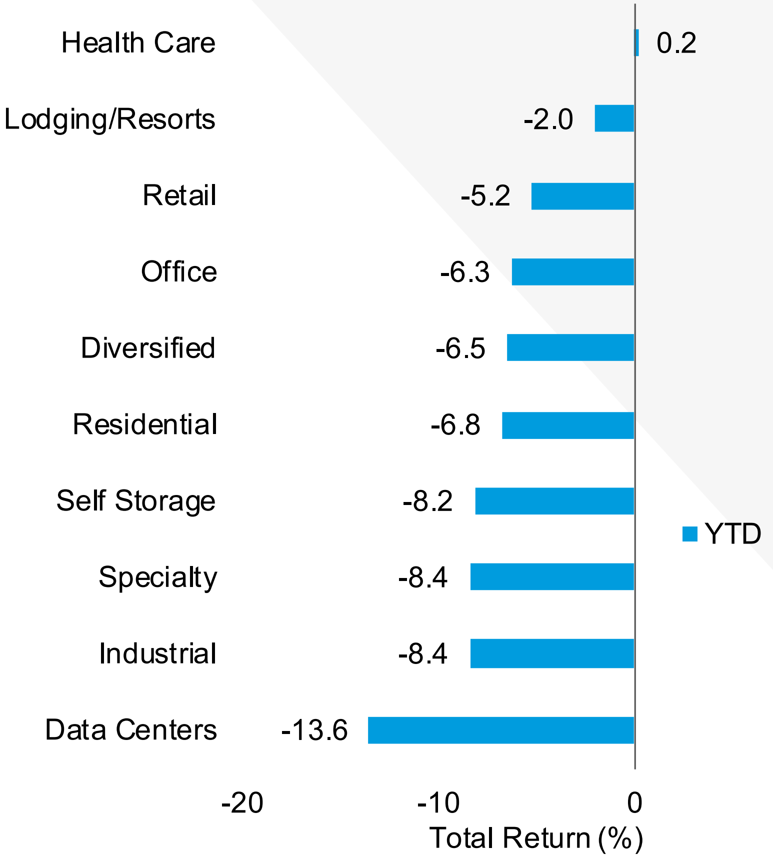
Commodities were generally higher in January. Energy soared during the month as supply shortages and geopolitical tensions in Eastern Europe and the Middle East lifted prices. Precious metals declined in the face of higher real interest rates and an uptick in the U.S. dollar.



Source: FactSet. As of January 31, 2022

REIT Sector Performance

REITs declined alongside the broader equity market. Areas that were top performers last year, such as self-storage and industrial, generally fell the hardest. The more defensive health care sector held up best, and lodging/resorts were better insulated due to shorter lease durations.



Source: FactSet. As of January 31, 2022

Past performance does not indicate future performance and there is a possibility of a loss.

Financial Markets Performance

Total Return as of January 31, 2022

Periods greater than one year are annualized
All returns are in U.S. dollar terms

Global Fixed Income Markets	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Bloomberg 1-3-Month T-Bill	0.0%	0.0%	0.0%	0.9%	1.1%	0.8%	0.6%	0.8%
Bloomberg U.S. TIPS	-2.0%	-2.0%	3.5%	7.2%	4.7%	3.5%	2.6%	4.5%
Bloomberg Municipal Bond (5 Year)	-2.4%	-2.4%	-2.4%	2.2%	2.2%	1.8%	2.0%	3.3%
Bloomberg High Yield Municipal Bond	-2.8%	-2.8%	2.6%	6.5%	6.6%	5.3%	6.0%	5.0%
Bloomberg U.S. Aggregate	-2.2%	-2.2%	-3.0%	3.7%	3.1%	2.4%	2.6%	3.9%
Bloomberg U.S. Corporate High Yield	-2.7%	-2.7%	2.1%	6.3%	5.4%	5.6%	6.2%	6.8%
Bloomberg Global Aggregate ex-U.S. Hedged	-1.1%	-1.1%	-2.0%	2.6%	3.1%	2.7%	3.6%	3.9%
Bloomberg Global Aggregate ex-U.S. Unhedged	-2.0%	-2.0%	-7.9%	1.2%	2.3%	1.5%	0.4%	2.6%
Bloomberg U.S. Long Gov / Credit	-4.9%	-4.9%	-4.5%	8.0%	6.3%	4.0%	5.1%	6.7%
JPMorgan GBI-EM Global Diversified	0.0%	0.0%	-7.8%	0.3%	2.4%	1.0%	0.0%	3.5%

Global Equity Markets	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
S&P 500	-5.2%	-5.2%	23.3%	20.7%	16.8%	14.6%	15.4%	10.2%
Dow Jones Industrial Average	-3.2%	-3.2%	19.4%	14.5%	14.6%	13.4%	13.4%	9.8%
NASDAQ Composite	-9.0%	-9.0%	9.7%	26.1%	21.6%	18.6%	18.9%	13.6%
Russell 3000	-5.9%	-5.9%	18.8%	19.9%	16.1%	14.0%	15.0%	10.0%
Russell 1000	-5.6%	-5.6%	20.3%	20.5%	16.6%	14.3%	15.3%	10.2%
Russell 1000 Growth	-8.6%	-8.6%	17.5%	26.4%	22.3%	18.3%	18.0%	12.9%
Russell 1000 Value	-2.3%	-2.3%	23.4%	13.8%	10.5%	10.0%	12.3%	7.2%
Russell Mid Cap	-7.4%	-7.4%	13.9%	16.1%	12.8%	11.3%	13.4%	9.4%
Russell Mid Cap Growth	-12.9%	-12.9%	-1.5%	17.4%	15.8%	12.9%	14.2%	10.4%
Russell Mid Cap Value	-4.3%	-4.3%	23.1%	14.1%	9.9%	9.5%	12.4%	8.2%
Russell 2000	-9.6%	-9.6%	-1.2%	12.0%	9.7%	9.7%	11.3%	7.8%
Russell 2000 Growth	-13.4%	-13.4%	-15.0%	11.4%	10.9%	9.7%	11.7%	8.8%
Russell 2000 Value	-5.8%	-5.8%	14.8%	11.7%	7.9%	9.2%	10.6%	6.7%
MSCI ACWI	-4.9%	-4.9%	13.2%	15.4%	12.6%	10.4%	10.7%	6.6%
MSCI ACWI ex. U.S.	-3.7%	-3.7%	3.6%	9.1%	8.0%	6.0%	6.2%	3.5%
MSCI EAFE	-4.8%	-4.8%	7.0%	9.3%	7.9%	5.9%	6.9%	3.2%
MSCI EAFE Growth	-10.5%	-10.5%	0.9%	12.3%	10.4%	7.8%	8.3%	4.6%
MSCI EAFE Value	1.0%	1.0%	12.9%	5.9%	5.1%	3.8%	5.4%	1.6%
MSCI EAFE Small Cap	-7.3%	-7.3%	2.4%	9.9%	8.6%	8.3%	9.1%	4.9%
MSCI Emerging Markets	-1.9%	-1.9%	-7.2%	7.2%	8.3%	5.7%	4.2%	4.4%

Alternatives	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Consumer Price Index*	0.5%	6.6%	7.1%	3.5%	2.9%	2.5%	2.1%	2.2%
FTSE NAREIT Equity REITs	-6.8%	-6.8%	33.3%	11.4%	9.2%	7.2%	9.9%	5.9%
S&P Real Assets	-1.6%	-1.6%	13.7%	8.1%	6.8%	4.9%	5.4%	5.3%
FTSE EPRA NAREIT Developed	-4.4%	-4.4%	31.0%	7.7%	6.6%	5.4%	9.8%	4.7%
FTSE EPRA NAREIT Developed ex U.S.	-4.0%	-4.0%	5.9%	2.6%	5.8%	3.8%	6.4%	2.0%
Bloomberg Commodity Total Return	8.8%	8.8%	34.7%	11.0%	5.4%	1.8%	-2.3%	-2.1%
HFRI Fund of Funds Composite*	0.2%	6.0%	6.0%	8.4%	5.7%	4.1%	4.5%	2.7%
HFRI Fund Weighted Composite*	1.2%	10.2%	10.2%	10.8%	7.1%	5.6%	5.8%	4.6%
Alerian MLP	11.1%	11.1%	47.1%	1.6%	-1.6%	-3.2%	0.6%	4.7%

*One month lag.

Source: FactSet, Morningstar. As of January 31, 2022. Periods greater than 1 year are annualized. All returns are in U.S. dollar terms.

Asset Allocation

As of January 31, 2022

	Asset Allocation ($)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Total Plan	**238,650,347**	**100.0**	**100.0**	**0.0**
Short Term Liquidity	**-2,165,527**	**-0.9**	**0.0**	**-0.9**
Key Bank Cash Portfolio	4,188,625	1.8	0.0	1.8
Pooled Cash	-6,354,153	-2.7	0.0	-2.7
Fixed Income	**39,141,503**	**16.4**	**18.0**	**-1.6**
JIC Core Bond Fund I	39,141,503	16.4	18.0	-1.6
Equity	**187,314,952**	**78.5**	**75.0**	**3.5**
Domestic Equity	**107,318,635**	**45.0**	**41.5**	**3.5**
Mellon Large Cap Core	82,075,359	34.4	31.0	3.4
Mellon Smid Cap Core	25,243,276	10.6	10.5	0.1
International Equity	**78,975,063**	**33.1**	**33.0**	**0.1**
Mellon EAFE Fund	55,625,495	23.3	23.0	0.3
Mellon Emerging Markets	23,349,567	9.8	10.0	-0.2
Private Equity	**1,021,254**	**0.4**	**0.5**	**-0.1**
Hamilton Lane II	56,030	0.0	-	-
Hamilton Lane VII A	674,592	0.3	-	-
Hamilton Lane VII B	290,632	0.1	-	-
Real Assets	**14,359,420**	**6.0**	**7.0**	**-1.0**
UBS Trumbull Property Fund	12,423,457	5.2	6.0	-0.8
Molpus SWF II	1,935,963	0.8	1.0	-0.2

Investments with a zero balance were held in the portfolio during the reporting period and will be removed once they no longer impact portfolio performance.
Asset Allocation weightings may not add up to 100% due to rounding.

City of Burlington Employees Retirement System

Performance Update As Of January 31, 2022

Portfolio Performance

	Value	Performance(%)								
		1 Month	Jul-2021 To Jan-2022	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total Plan	**238,650,347**	**-4.3**	**-0.7**	**9.5**	**13.8**	**10.3**	**8.2**	**8.1**	**5.9**	**01/01/2008**
Policy Benchmark		*-4.2*	*-0.2*	*9.3*	*12.4*	*10.5*	*9.1*	*9.8*	*7.2*	

Calendar Year Performance

	2021	2020	2019	2018	2017	2016	2015
Total Plan	**14.7**	**12.7**	**19.1**	**-5.2**	**17.0**	**8.7**	**-2.2**
Policy Benchmark	*14.3*	*14.5*	*20.6*	*-5.2*	*16.9*	*9.0*	*-0.2*

Allocation Mandate	Weight (%)
May-2021	
Blmbg. U.S. Aggregate Index	18.00
S&P 500 Index	31.50
Russell 2500 Index	10.50
MSCI EAFE (Net) Index	23.00
MSCI Emerging Markets (Net) Index	10.00
NCREIF Fund Index - ODCE (net)	6.00
NCREIF Timberland Index	1.00

The allocation mandate represents the current benchmark composition for the portfolio. Please keep in mind that the investment objective may have changed over time.

Manager Performance Overview

As of January 31, 2022

	1 Month		Jul-2021 To Jan-2022		1 Year		3 Years		5 Years		7 Years	10 Years	Since Inception		Inception Date
Fixed Income	**-2.1**		**-2.4**		**-3.3**		**N/A**		**N/A**		**N/A**	**N/A**	**-3.8**		**01/01/2021**
Blmbg. U.S. Aggregate Index	*-2.2*		*-2.1*		*-3.0*		*N/A*		*N/A*		*N/A*	*N/A*	*-3.4*		
JIC Core Bond Fund I	**-2.1**	**(61)**	**-2.4**	**(67)**	**-3.3**	**(79)**	**N/A**		**N/A**		**N/A**	**N/A**	**0.4**	**(59)**	**03/01/2020**
Blmbg. U.S. Aggregate Index	*-2.2*		*-2.1*		*-3.0*		*N/A*		*N/A*		*N/A*	*N/A*	*-0.1*		
IM U.S. Broad Market Core Fixed Income (MF) Median	-2.1		-2.2		-2.8		N/A		N/A		N/A	N/A	0.6		
Equity	**-5.1**		**-1.1**		**12.0**		**N/A**		**N/A**		**N/A**	**N/A**	**11.6**		**01/01/2021**
MSCI AC World Index (Net)	*-4.9*		*0.4*		*13.2*		*N/A*		*N/A*		*N/A*	*N/A*	*11.7*		
Domestic Equity															
Mellon Large Cap Core	**-5.2**	**(53)**	**5.9**	**(26)**	**23.3**	**(30)**	**20.7**	**(23)**	**16.7**	**(21)**	**N/A**	**N/A**	**16.5**	**(18)**	**04/01/2016**
S&P 500 Index	*-5.2*		*5.9*		*23.3*		*20.7*		*16.8*		*N/A*	*N/A*	*16.6*		
IM U.S. Large Cap Core Equity (MF) Median	-5.0		4.5		21.7		18.9		15.3		N/A	N/A	15.2		
Mellon Smid Cap Core	**-8.3**	**(50)**	**-7.2**	**(57)**	**6.1**	**(54)**	**14.4**	**(54)**	**11.6**	**(52)**	**N/A**	**N/A**	**13.2**	**(48)**	**04/01/2016**
Russell 2500 Index	*-8.3*		*-7.4*		*5.8*		*14.2*		*11.5*		*N/A*	*N/A*	*13.1*		
IM U.S. SMID Cap Equity (MF) Median	-8.5		-5.3		7.8		14.5		11.8		N/A	N/A	12.9		
International Equity															
Mellon EAFE Fund	**-4.8**	**(77)**	**-2.7**	**(65)**	**7.3**	**(58)**	**9.8**	**(53)**	**8.3**	**(29)**	**N/A**	**N/A**	**8.4**	**(27)**	**04/01/2016**
MSCI EAFE (Net) Index	*-4.8*		*-2.7*		*7.0*		*9.3*		*7.9*		*N/A*	*N/A*	*8.0*		
IM International Large Cap Core Equity (MF) Median	-2.4		-1.9		8.2		9.9		7.4		N/A	N/A	7.7		
Mellon Emerging Markets	**-1.9**	**(55)**	**-11.0**	**(56)**	**-7.2**	**(59)**	**7.2**	**(64)**	**8.3**	**(49)**	**N/A**	**N/A**	**9.0**	**(49)**	**04/01/2016**
MSCI Emerging Markets (Net) Index	*-1.9*		*-11.0*		*-7.2*		*7.2*		*8.3*		*N/A*	*N/A*	*9.0*		
IM Emerging Markets Equity (MF) Median	-1.6		-10.6		-6.0		8.1		8.1		N/A	N/A	8.9		

Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.

Manager Performance Overview

As of January 31, 2022

	1 Month	Jul-2021 To Jan-2022	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Private Equity									
Hamilton Lane II	**0.0**	**0.0**	**-5.3**	**16.2**	**17.5**	**16.2**	**15.5**	**17.8**	**03/01/2009**
Hamilton Lane VII A	**0.0**	**4.0**	**31.0**	**19.6**	**16.6**	**14.3**	**14.7**	**13.9**	**07/01/2011**
Hamilton Lane VII B	**0.0**	**-6.3**	**-2.0**	**7.5**	**8.3**	**8.9**	**10.4**	**10.2**	**07/01/2011**
Real Assets	**0.0**	**9.7**	**13.4**	**N/A**	**N/A**	**N/A**	**N/A**	**12.1**	**01/01/2021**
UBS Trumbull Property Fund	**0.0**	**11.1**	**15.5**	**2.0**	**3.4**	**N/A**	**N/A**	**3.8**	**07/01/2016**
NCREIF Fund Index - ODCE (net)	*0.0*	*14.6*	*21.0*	*8.2*	*7.7*	*N/A*	*N/A*	*7.6*	
Molpus SWF II	**0.0**	**0.1**	**-0.5**	**-1.1**	**-1.0**	**0.3**	**1.9**	**1.7**	**03/01/2009**
NCREIF Timberland Index	*0.0*	*1.9*	*4.4*	*2.2*	*2.7*	*2.7*	*4.6*	*3.3*	

The inception date expressed on the Manager Performance Overview page(s) represents the first day of the first full month following the purchase of the investment. Performance figures shown at the fund level begin on this inception date. Inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies. Composite performance includes all funds held in the composite since inception.

Returns are net of fees unless otherwise stated. Mutual fund performance stated above may differ slightly from the current share class' historical performance due to share class exchanges.

Valuations data as of:
Molpus and Hamilton Lane - 9/30/2021
UBS Trumbull Property Fund - 12/31/2021

All private equity and real estate assets are adjusted for any capital activity.

Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.

Manager Gain/Loss Summary

1 Month Ending January 31, 2022

	Market Value As of 01/01/2022	Net Flows	Return On Investment	Market Value As of 01/31/2022
Short Term Liquidity				
Key Bank Cash Portfolio	2,923,197	1,265,428	-	4,188,625
Pooled Cash	-5,175,833	-1,178,320	-	-6,354,153
Total Short Term Liquidity	**-2,252,636**	**87,108**	**-**	**-2,165,527**
Fixed Income				
JIC Core Bond Fund I	39,988,851	-	-847,348	39,141,503
Total Fixed Income	**39,988,851**	**-**	**-847,348**	**39,141,503**
Domestic Equity				
Mellon Large Cap Core	86,555,078	-	-4,479,720	82,075,359
Mellon Smid Cap Core	27,522,706	-	-2,279,430	25,243,276
Total Domestic Equity	**114,077,785**	**-**	**-6,759,150**	**107,318,635**
International Equity				
Mellon EAFE Fund	58,445,636	-	-2,820,141	55,625,495
Mellon Emerging Markets	23,801,137	-	-451,569	23,349,567
Total International Equity	**82,246,773**	**-**	**-3,271,710**	**78,975,063**
Real Assets				
UBS Trumbull Property Fund	13,688,885	-1,265,428	-	12,423,457
Molpus SWF II	1,935,963	-	-	1,935,963
Total Real Assets	**15,624,848**	**-1,265,428**	**-**	**14,359,420**
Private Equity				
Hamilton Lane II	56,030	-	-	56,030
Hamilton Lane VII A	674,592	-	-	674,592
Hamilton Lane VII B	290,632	-	-	290,632
Total Private Equity	**1,021,254**	**-**	**-**	**1,021,254**
Total Plan	**250,706,875**	**-1,178,320**	**-10,878,208**	**238,650,347**

Definitions & Disclosures

Please note: Due to rounding methodologies of various data providers, certain returns in this report might differ slightly when compared to other sources

REGULATORY DISCLOSURES

Offer of ADV Part 2A: Rule 204-3 under the Investment Advisers Act of 1940 requires that we make an annual offer to clients to send them, without charge, a written disclosure statement meeting the requirements of such rule. We will be glad to send a copy of our ADV Part 2A to you upon your written request to compliance@fiducient.com.

ASSET CLASS REPRESENTATIONS

All material and information is intended for Fiducient Advisors L.L.C. business only. Any use or public dissemination outside firm business is prohibited. Information is obtained from a variety of sources which are believed though not guaranteed to be accurate. Any forecast represents future expectations and actual returns, volatilities and correlations will differ from forecasts. Past performance does not indicate future performance. This presentation does not represent a specific investment recommendation. Please consult with your advisor, attorney and accountant, as appropriate, regarding specific advice.

When referencing asset class returns or statistics, the following indices are used to represent those asset classes, unless otherwise notes. Each index is unmanaged and investors can not actually invest directly into an index:

TIPS: Bloomberg Barclays Global Inflation-Linked: U.S. TIPS Total Return Index Unhedged
Municipals 5-Year: Bloomberg Barclays Municipal Bond 5 Year (4-6) Total Return Index Unhedged USD
Core Bond: Bloomberg Barclays US Agg Total Return Value Unhedged USD
High Yield Municipals: Bloomberg Barclays Muni High Yield Total Return Index Value Unhedged USD
High Yield: Bloomberg Barclays US Corporate High Yield Total Return Index Value Unhedged USD
Foreign Bond: Bloomberg Barclays Global Aggregate ex-USD Total Return Index Value USD (50/50 blend of hedged and unhedged)
EM Debt (unhedged): J.P. Morgan GBI-EM Global Diversified Composite Unhedged USD
U.S. Large Cap: S&P 500 Total Return Index
U.S. Small Cap: Russell 2000 Total Return Index
International Developed: MSCI EAFE Net Total Return USD Index
Emerging Markets: MSCI Emerging Markets Net Total Return USD Index
World: MSCI ACWI Net Total Return USD Index
U.S. Equity REITs: FTSE Nareit Equity REITs Total Return Index USD
S&P Real Assets: S&P Real Assets Total Return Index
Commodities: Bloomberg Commodity Total Return Index
Hedge Funds: Hedge Fund Research HFRI Fund of Funds Composite Index
Balanced: 3% TIPS, 33% Core Bond, 4% High Yield , 2% Foreign Bond. 2% EM Debt (unhedged), 18% U.S. Large Cap, 6% U.S. Small Cap, 16% International, 8% Emerging Markets, 5% U.S. Equity REITS, 3% Commodities
U.S.: MSCI USA Net Total Return USD Index
China: MSCI CHINA Net Total Return USD Index
Japan: MSCI Japan Net Total Return USD Index
Germany: MSCI Germany Net Total Return USD Index
India: MSCI India Net Total Return USD Index
United Kingdom: MSCI UK Net Total Return USD Index
France: MSCI France Net Total Return USD Index
Italy: MSCI Italy Net Total Return USD Index
Brazil: MSCI Brazil Net Total Return USD Index
Canada: MSCI Canada Net Total Return USD Index

INDEX DEFINITIONS

- **Citigroup 3 Month T-Bill** measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.
- **Ryan 3 Yr. GIC** is an arithmetic mean of market rates of $1 million Guaranteed Interest Contracts held for three years.
- **Bloomberg Barclays Treasury U.S. T-Bills-1-3 Month Index** includes aged U.S. Treasury bills, notes and bonds with a remaining maturity from 1 up to (but not including) 3 months. It excludes zero coupon strips.
- **Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index** consists of Inflation-Protection securities issued by the U.S. Treasury.
- **Bloomberg Barclays Muni Index** is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- **Bloomberg Barclays Muni 1 Year Index** is the 1-year (1-2) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 3 Year Index** is the 3-year (2-4) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 5 Year Index** is the 5-year (4-6) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 7 Year Index** is the 7-year (6-8) component of the Municipal Bond index.
- **Bloomberg Barclays Intermediate U.S. Gov't/Credit** is the Intermediate component of the U.S. Government/Credit index, which includes securities in the Government and Credit Indices. The Government Index includes treasuries and agencies, while the credit index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements.

- **Bloomberg Barclays U.S. Aggregate Index** covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.
- **Bloomberg Barclays Global Aggregate ex. USD Indices** represent a broad-based measure of the global investment-grade fixed income markets. The two major components of this index are the Pan-European Aggregate and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate securities.
- **Bloomberg Barclays U.S. Corporate High Yield Index** covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- **JP Morgan Government Bond Index-Emerging Market (GBI-EM) Index** is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
- **The S&P 500** is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
- **The Dow Jones Industrial Index** is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.
- **The NASDAQ** is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.
- **Russell 3000** is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
- **Russell 1000** consists of the largest 1000 companies in the Russell 3000 Index.
- **Russell 1000 Growth** measures the performance of those Russell 1000 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 1000 Value** measures the performance of those Russell 1000 companies with lower P/B ratios and lower forecasted growth values.
- **Russell Mid Cap** measures the performance of the 800 smallest companies in the Russell 1000 Index.
- **Russell Mid Cap Growth** measures the performance of those Russell Mid Cap companies with higher P/B ratios and higher forecasted growth values.
- **Russell Mid Cap Value** measures the performance of those Russell Mid Cap companies with lower P/B ratios and lower forecasted growth values.
- **Russell 2000** consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
- **Russell 2000 Growth** measures the performance of the Russell 2000 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 2000 Value** measures the performance of those Russell 2000 companies with lower P/B ratios and lower forecasted growth values.
- **Russell 2500** consists of the 2,500 smallest U.S. companies in the Russell 3000 index.
- **Russell 2500 Growth** measures the performance of the Russell 2500 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 2500 Value** measures the performance of those Russell 2500 companies with lower P/B ratios and lower forecasted growth values.
- **MSCI World** captures large and mid-cap representation across 23 Developed Markets countries. With 1,645 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- **MSCI ACWI (All Country World Index) ex. U.S. Index** captures large and mid-cap representation across 22 of 23 Developed Markets countries (excluding the United States) and 23 Emerging Markets countries. With 1,859 constituents, the index covers approximately 85% of the global equity opportunity set outside the US.
- **MSCI ACWI (All Country World Index) ex. U.S. Small Cap Index** captures small cap representation across 22 of 23 Developed Markets countries (excluding the US) and 23 Emerging Markets countries. With 4,368 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
- **MSCI EAFE** is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. With 930 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- **MSCI EAFE Value** captures large and mid-cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the US and Canada. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 507 constituents, the index targets 50% coverage of the free float- adjusted market capitalization of the MSCI EAFE Index.
- **MSCI EAFE Growth** captures large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the US and Canada. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend. With 542 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- **MSCI Emerging Markets** captures large and mid-cap representation across 23 Emerging Markets countries. With 836 constituents, the index covers approximately 85% of the free-float adjusted market capitalization in each country.
- **Consumer Price Index** is a measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rates represent the inflation rate.
- **FTSE NAREIT Equity REITs Index** contains all Equity REITs not designed as Timber REITs or Infrastructure REITs.
- **S&P Developed World Property** defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- **S&P Developed World Property x U.S.** defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- **Fund Specific Broad Real Asset Benchmarks:**
  - **DWS Real Assets:** 30%: Dow Jones Brookfield Infrastructure Index, 30%: FTSE EPRA/NAREIT Developed Index,15%: Bloomberg Commodity Index, 15%: S&P Global Natural Resources Index, 10%: Barclays U.S. Treasury Inflation Notes Total Return Index
  - **PIMCO Inflation Response Multi Asset Fund:** 45% Barclays U.S. TIPS, 20% Bloomberg Commodity Index, 15% JP Morgan Emerging Local Markets Plus, 10% Dow Jones Select REIT, 10% Bloomberg Gold Subindex Total Return
  - **Principal Diversified Real Assets:** 35% BBgBarc U.S. Treasury TIPS Index, 20% S&P Global Infrastructure Index NTR, 20% S&P Global Natural Resources Index NTR, 15% Bloomberg Commodity Index, and 10% FTSE EPRA/NAREIT Developed Index NTR
  - **Wellington Diversified Inflation H:** 50% MSCI ACWI Commodity Producers Index, 25% Bloomberg Commodity Index, and 25% Bloomberg Barclays US TIPS 1 – 10 Year Index
- **Bloomberg Commodity Index** is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
- **HFRI Fund Weighted Composite Index** is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of $50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- **The Alerian MLP Index** is the leading gauge of energy Master Limited Partnerships (MLPs). The float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
- **The Adjusted Alerian MLP Index** is commensurate with 65% of the monthly returns of the Alerian MLP Index to incorporate the effect of deferred tax liabilities incurred by MLP entities.
- **Cambridge Associates U.S. Private Equity Index** is based on data compiled from more than 1,200 institutional-quality buyout, growth equity, private equity energy, and mezzanine funds formed between 1986 and 2015.

- **Cambridge Associates U.S. Venture Capital Index** is based on data compiled from over 1,600 institutional-quality venture capital funds formed between 1986 and 2015.
- **Vanguard Spliced Bloomberg Barclays US1-5Yr Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. 1–5 Year Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. 1–5 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US5-10Yr Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. 5–10 Year Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. 5–10 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US Agg Flt Adj Index:** Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009; Bloomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US Long Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. Long Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. Long Government/Credit Float Adjusted Index thereafter.
- **Vanguard Balanced Composite Index:** Made up of two unmanaged benchmarks, weighted 60% Dow Jones U.S. Total Stock Market Index (formerly the Dow Jones Wilshire 5000 Index) and 40% Bloomberg Barclays U.S. Aggregate Bond Index through May 31, 2005; 60% MSCI US Broad Market Index and 40% Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009; 60% MSCI US Broad Market Index and 40% Bloomberg Barclays U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Blomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Intermediate-Term Tax-Exempt Index:** Bloomberg Barclays 1–15 Year Municipal Bond Index.
- **Vanguard Spliced Extended Market Index:** Dow Jones Wilshire 4500 Index through June 17, 2005; S&P Transitional Completion Index through September 16, 2005; S&P Completion Index thereafter.
- **Vanguard Spliced Value Index:** S&P 500 Value Index (formerly the S&P 500/Barra Value Index) through May 16, 2003; MSCI US Prime Market Value Index through April 16, 2013; CRSP US Large Cap Value Index thereafter.
- **Vanguard Spliced Large Cap Index:** Consists of MSCI US Prime Market 750 Index through January 30, 2013, and the CRSP US Large Cap Index thereafter.
- **Vanguard Spliced Growth Index:** S&P 500 Growth Index (formerly the S&P 500/Barra Growth Index) through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index thereafter.
- **Vanguard Spliced Mid Cap Value Index:** MSCI US Mid Cap Value Index through April 16, 2013; CRSP US Mid Cap Value Index thereafter.
- **Vanguard Spliced Mid Cap Index:** S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter.
- **Vanguard Spliced Mid Cap Growth Index:** MSCI US Mid Cap Growth Index through April 16, 2013; CRSP US Mid Cap Growth Index thereafter.
- **Vanguard Spliced Total Stock Market Index:** Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005; MSCI US Broad Market Index through June 2, 2013; and CRSP US Total Market Index thereafter.
- **Vanguard Spliced Small Cap Value Index:** SmallCap 600 Value Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Value Index through April 16, 2013; CRSP US Small Cap Value Index thereafter.
- **Vanguard Spliced Small Cap Index:** Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter.
- **Vanguard Spliced Small Cap Growth Index:** S&P SmallCap 600 Growth Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Growth Index through April 16, 2013; CRSP US Small Cap Growth Index thereafter.
- **Vanguard Spliced Total International Stock Index:** Consists of the Total International Composite Index through August 31, 2006; the MSCI EAFE + Emerging Markets Index through December 15, 2010; the MSCI ACWI ex USA IMI Index through June 2, 2013; and FTSE Global All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard Spliced Developed Markets Index:** MSCI EAFE Index through May 28, 2013; FTSE Developed ex North America Index through December 20, 2015; FTSE Developed All Cap ex US Transition Index through May 31, 2016; FTSE Developed All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard Spliced Emerging Markets Index:** Select Emerging Markets Index through August 23, 2006; MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Index through November 1, 2015; and FTSE Emerging Markets All Cap China A Transition Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard REIT Spliced Index:** MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009; MSCI US REIT Index through January 31, 2018; MSCI US Investable Market Real Estate 25/50 Transition Index through July 24, 2018; MSCI US Investable Market Real Estate 25/50 Index thereafter.

Additional:

- Equity sector returns are calculated by Russell and MSCI for domestic and international markets, respectively. MSCI sector definitions correspond to the MSCI GICS® classification (Global Industry Classification System); Russell uses its own sector and industry classifications.
- MSCI country returns are calculated by MSCI and are free float-adjusted market capitalization indices that are designed to measure equity market performance in each specific country.
- Currency returns are calculated using Bloomberg's historical spot rate indices and are calculated using the U.S. dollar as the base currency.
- The Index of Leading Economic Indicators, calculated by The Conference Board, is used as a barometer of economic activity over a range of three to six months. The index is used to determine the direction and stability of the economy. The composite index of leading indicators, which is derived from 10 leading indicators, helps to signal turning points in the economy and forecast economic cycles. The leading indicators are the following: average weekly hours, average weekly initial claims, manufacturers' new orders, both consumer and non-defense capital goods, vendor performance, building permits, stock prices, money supply (M2), the interest rate spread and the index of consumer expectations.
- S&P Target Date Indexes are constructed using a survey method of current target date investments with $100 million or more in assets under management. Allocations for each vintage are comprised of exchange-traded- funds that represent respective asset classes used in target date portfolios. The indexes are designed to represent a market consensus glide path.

DEFINITION OF KEY STATISTICS AND TERMS

- **Returns:** A percentage figure used when reporting historical average compounded rate of investment return. All returns are annualized if the period for which they are calculated exceeds one year.
- **Universe Comparison:** The universe compares the fund's returns to a group of other investment portfolios with similar investment strategies. The returns for the fund, the index and the universe percentiles are displayed. A percentile ranking of 1 is the best, while a percentile ranking of 100 is the worst. For example, a ranking of 50 indicates the fund outperformed half of the universe. A ranking of 25 indicates the fund was in the top 25% of the universe, outperforming 75%.
- **Returns In Up/Down Markets:** This measures how the fund performed in both up and down markets. The methodology is to segregate the performance for each time period into the quarters in which the market, as defined by the index, was positive and negative. Quarters with negative index returns are treated as down markets, and quarters with positive index returns are treated as up markets. Thus, in a 3 year or 12 quarter period, there might be 4 down quarters and 8 up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the down quarters. The up market capture ratio is the ratio of the fund's return in up markets to the index. The down market capture ratio is the ratio of the fund's return in down markets to the index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio.

- **Standard Deviation:** Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.
- **R-Squared**: This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.
- **Beta**: This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse that the market in down markets. It is important to note, however, a low fund beta does not imply the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).
- **Alpha:** The Alpha is the nonsystematic return, or the return that can't be attributed to the market. It can be thought of as how the <u>manager</u> performed if the market's return was zero. A <u>positive</u> alpha implies the manager added value to the return of the portfolio over that of the market. A <u>negative</u> alpha implies the manager did not contribute any value over the performance of the market.
- **Sharpe Ratio:** The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The <u>higher</u> the Sharpe ratio, the more reward you are receiving per unit of total risk. This measure can be used to rank the performance of mutual funds or other portfolios.
- **Treynor Ratio:** The Treynor ratio measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. The ratio relates excess return over the risk-free rate to the additional risk taken; however, systematic risk is used instead of total risk. The Treynor ratio is similar to the Sharpe ratio, except in the fact that it uses the beta to evaluate the returns rather than the standard deviation of portfolio returns. High values mean better return for risk taken.
- **Tracking Error:** Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.
- **Information Ratio:** The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.
- **Consistency:** Consistency shows the percent of the periods the fund has beaten the index and the percent of the periods the index has beat the fund. A high average for the fund (e.g., over 50) is desirable, indicating the fund has beaten the index frequently.
- **Downside Risk:** Downside risk is a measure similar to standard deviation but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.
- **M-Squared:** M-squared, or the Modigliani risk-adjusted performance measure is used to characterize how well a portfolio's return rewards an investor for the amount of risk taken, relative to that of some benchmark portfolio and to the risk-free rate.

DEFINITION OF KEY PRIVATE EQUITY TERMS

- **PIC (Paid in Capital):** The amount of committed capital that has been transferred from the limited partner to the general partner.
- **TVPI (Total Value to Paid in Capital):** Money returned to limited partners plus the fund's unrealized investments, divided by money paid-in to the partnership. The TVPI should equal RVPI plus DPI.
- **DPI (Distribution to Paid In Capital):** Money returned (distributions) to limited partners divided by money paid in to the partnership. Also called cash-on-cash multiple.
- **RVPI (Residual Value to Paid In Capital):** The value of a fund's unrealized investments divided by money paid-in to the partnership.
- **Internal rate of return (IRR):** This is the most appropriate performance benchmark for private equity investments. It is a time-weighted return expressed as a percentage. IRR uses the present sum of cash drawdowns (money invested), the present value of distributions (money returned from investments) and the current value of unrealized investments and applies a discount.
- **Commitment:** Every investor in a private equity fund commits to investing a specified sum of money in the fund partnership over a specified period of time. The fund records this as the limited partnership's capital commitment. The sum of capital commitments is equal to the size of the fund.
- **Capital Distribution:** These are the returns that an investor in a private equity fund receives. It is the income and capital realized from investments less expenses and liabilities. Once a limited partner has had their cost of investment returned, further distributions are actual profit. The partnership agreement determines the timing of distributions to the limited partner. It will also determine how profits are divided among the limited partners and general partner.
- **Carried Interest:** The share of profits that the fund manager is due once it has returned the cost of investment to investors. Carried interest is normally expressed as a percentage of the total profits of the fund.
- **Co-Investment**: Co-Investments are minority investments made alongside a private equity investor in an LBO, a recapitalization, or an expansion capital transaction. It is a passive, non-controlling investment, as the private equity firm involved will typically exercise control and perform monitoring functions.
- **General Partner (GP):** This can refer to the top-ranking partners at a private equity firm as well as the firm managing the private equity fund.
- **GP Commitments:** It is normal practice for the GP managing a private equity fund to also make a financial commitment to the fund on the same basis as the LPs in the fund, and this is seen as an important factor driving the alignment of GP and LP interests. The historic benchmark for GP commitments has been 1% of the total fund size, but this is by no means universal, and many GPs commit significantly larger amounts. Furthermore, there has been a marked trend towards GPs making larger commitments to their funds over recent years.
- **Leveraged Buy-Out (LBO):** The acquisition of a company using debt and equity finance.
- **Limited Partner (LP):** Institutions or high-net-worth individuals/sophisticated investors that contribute capital to a private equity fund.
- **Public Market Equivalent (PME):** Performance measure used to evaluate performance relative to the market. It is calculated as the ratio of the discounted value of the LP's inflows divided by the discounted value of outflows, with the discounting performed using realized market returns.
- **Primaries:** An original investment vehicle that invests directly into a company or asset.

VALUATION POLICY

Fiducient Advisors does not engage an independent third-party pricing service to value securities. Our reports are generated using the security prices provided by custodians used by our clients. Our custodial pricing hierarchy is available upon request. If a client holds a security not reported by the first custodian within the hierarchy, the valuation is generated from the next custodian within the hierarchy, and so forth. Each custodian uses pricing services from outside vendors, where the vendors may generate nominally different prices. Therefore, this report can reflect minor valuation differences from those contained in a custodian's report. In rare instances where Fiducient Advisors overrides a custodial price, prices are taken from Bloomberg.

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OTHER

By regulation, closed-end funds utilizing debt for leverage must report their interest expense, as well as their income tax expense, as part of their total expense ratio. To make for a useful comparison between closed-end funds and both open-end funds and exchange-traded funds, adjusted expense ratios excluding interest and income tax expenses are utilized for closed-end funds within this report. See disclosure on closed-end fund fact sheets for information regarding the total expense ratio of each closed-end fund.

Please advise us of any changes in your objectives or circumstances.

CUSTODIAN STATEMENTS

Please remember to review the periodic statements you receive from you custodian. If you do not receive periodic statements from your custodian or notice issues with the activity reported in those statements, please contact Fiducient Advisors or your custodian immediately.

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4Q 2021 Asset Allocation Analysis

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January 2022 Investment Outlook

Key Observations

- We expect economic recovery to persist in 2022 at a more modest pace as extraordinary pandemic stimulus begins to moderate. Ongoing challenges with a recalibrating global supply chain are expected to continue to lead to persistently higher levels of inflation than we have seen over the last several decades.
- The investing backdrop remains mostly constructive in our view, but investors will likely be served by taking a thoughtful and diversified approach to risk-taking. The global economy is still in transition and pandemic-driven economic uncertainties are ongoing.

Capital Market Factors

- **Economic Growth**: The Conference Board's 2022 global economic growth forecast is 3.9 percent, a level characterized by the Board as "above potential recovery growth." 2023-2026 annualized growth is expected to moderate to 2.5 percent.
- **Monetary Policy**: The Fed's rotation to a tighter policy stance is expected to slow and then end its $120 billion monthly asset purchase program sometime in 2022 and begin to raise interest rates. At its December 2021 meeting, the Fed indicated an accelerated pace toward the elimination of its bond buying efforts by the middle of next year and a majority of FOMC members now expect at least three interest rate hikes by year-end 2022.
- **Fiscal Policy**: Massive pandemic-relief and infrastructure spending will likely continue to drive short-term deficits, stimulate near-term economic growth and fuel inflationary forces.
- **Inflation**: Current year-over-year inflation is running at a level in excess of 6 percent, which is meaningfully above the Fed's stated target, and is likely to remain high in the immediate future. However, the bond market's expectation is for inflation to gradually moderate back towards 2.5 percent over the next decade.
- **Currency**: The dollar strengthened in 2021 and was supported by a more consistent economic recovery in the U.S. compared to global peers. A more aggressive path to interest rate hikes by the Fed when compared to its peer institutions would support U.S. dollar strength, but volatility is expected as investors continue to digest the implications of Fed tightening in conjunction with actions of other global central banks.

Sources: The Conference Board, The Federal Reserve Bank of St. Louis

2022-2041 Twenty-Year Outlook

Asset Class	2022 Outlook E(R) - 20 Year	2021 Outlook E(R) - 20 Year	Year Over Year Change
Inflation	2.5%	1.8%	0.7%
Cash*	0.7%	0.7%	0.0%
TIPS	2.1%	1.7%	0.3%
Muni Bond**	2.1%	1.6%	0.5%
Muni High Yield**	5.6%	7.7%	-2.1%
US Bond	2.5%	2.1%	0.3%
Dynamic Bonds***	2.8%	2.8%	-0.1%
Global Bonds	2.2%	1.8%	0.4%
Corp HY Bond	4.5%	4.4%	0.1%
Global Equity	8.1%	7.7%	0.5%
US Equity (AC)	6.8%	6.4%	0.4%
US Equity (LC)	6.6%	6.3%	0.4%
US Equity (MC)	7.0%	6.6%	0.4%
US Equity (SC)	7.0%	6.7%	0.3%
Int'l Dev. Equity	8.6%	7.9%	0.8%
EM Equity	10.5%	9.4%	1.2%
Real Estate	6.3%	6.2%	0.1%
Broad Real Assets****	5.6%	4.8%	0.9%
Marketable Alternatives	6.8%	6.3%	0.5%
Private Equity	9.8%	9.4%	0.4%

*3-month forecast

**Tax equivalent yield based on highest marginal tax rate (37%)

***33% Cash, 33% Corp HY, and 34% Global Bonds

****'20% REITs, 20% Global Infrastructure, 20% Commodities, 20% US Bonds, 15% Corp High Yield, 5% TIPS

Investment Themes for 2022-2041

- Nominal return forecasts rose for most asset classes, but rising inflation expectations means most asset classes have declining year-over-year real return expectations.
- Meaningfully negative real returns continues to make cash an expensive opportunity cost for investors.
- Global bond yields generally rose. Despite the increase, most fixed income asset class forward-looking return expectations remain below expected inflation levels.
- Earnings accelerated in 2021 and expanded faster than stock prices. Non-U.S. equities remain more attractive on a valuation basis as U.S. equities have grown to represent 61 percent of the global equity market capitalization compared to 58 percent a year ago.
- With higher inflation expectations, real assets remain an important diversifier. Within real assets, broad real assets return expectations rose meaningfully faster than real estate.
- Alternative asset class return expectations rose modestly.

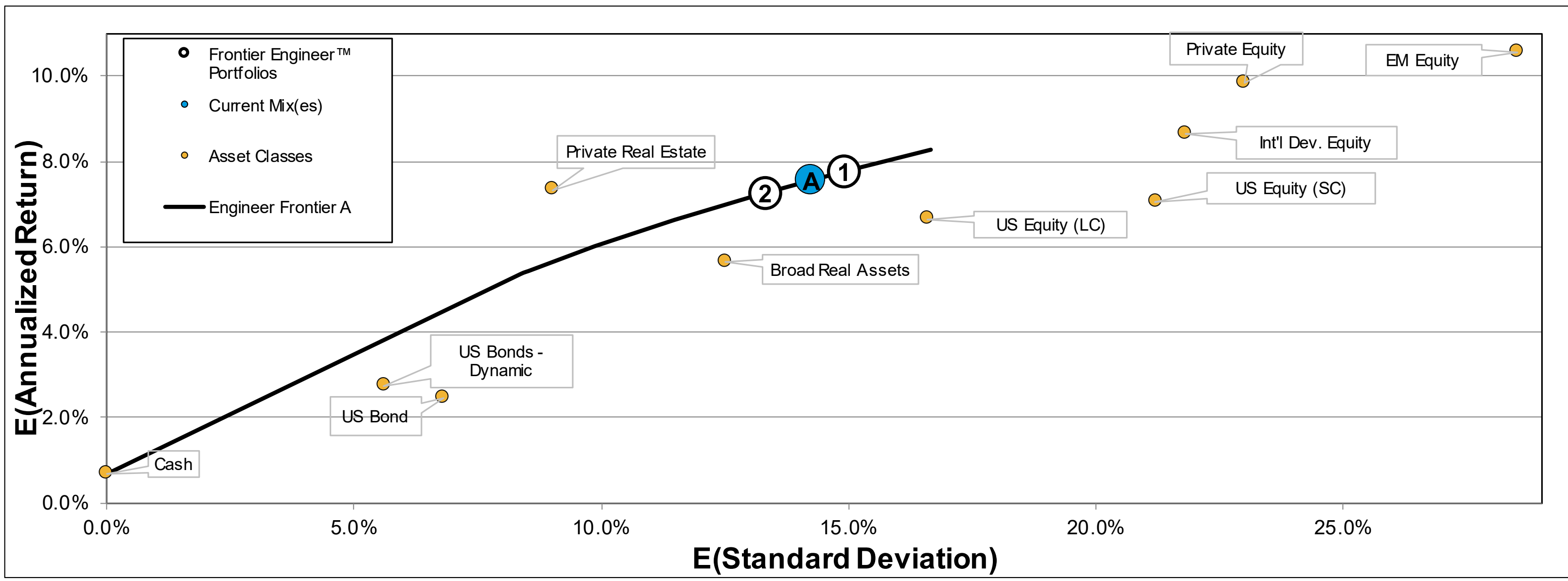
For additional information on forecast methodologies, please speak with your advisor. Please see Index Proxy Summary slide at the end of this presentation for summary of indexes used to represent each asset class. Past performance does not indicate future performance and there is a possibility of a loss.

Asset Allocation Analysis

- We believe **Asset Allocation** is the primary determinant of long-term investment results.
- Our proprietary **Frontier Engineer®** system is the cornerstone of asset allocation decisions.
- Our Capital Markets Group develops **Capital Market Assumptions** (CMAs) for each major asset class at least annually.
  - ✓ The Capital Markets Group considers and analyzes a wide variety of factors that we believe will have the greatest impact on future returns and risks for each asset class studied.
  - ✓ Our CMAs are not intended to predict the future return in any single year, but rather to reflect our median expected outcome over the next ten years.
  - ✓ Our forecasting efforts center on **a ten-year horizon**. Any adjustments made to extend the forecast horizon to **twenty years** or beyond are grounded in our expectation that asset classes ultimately mean revert toward longer term historical averages.
  - ✓ Fiducient Advisors' Capital Markets Team develops our CMAs based on a "building block" approach outlined in our white paper "Capital Market Forecasts". *(Copies are available upon request.)*
- **Correlations** (how asset classes behave in reference to one another) also significantly impact asset allocation analysis.
- **Fat Tails** (non-normal return elements of skewness and kurtosis) also meaningfully impact our asset allocation analysis.
- Given the current market environment, full market cycle (10 year) return assumptions are lower than long term (20 year) assumptions.

Frontier Engineer® Analysis – 20 Year Outlook

1/31/2022	Asset Allocation														Forecasts				Past (1/88-1/22)	
	Fixed Income	Equity	Real Assets	Alternatives	Cash	US Bond	US Bonds - Dynamic	US Equity (LC)	US Equity (SC)	Int'l Dev. Equity	EM Equity	Private Real Estate	Broad Real Assets	Private Equity	Annualized Return	Annualized Volatility	Normal 100 Year Flood*	Non-Normal 100 Year Flood**	Annualized Return	Annualized Volatility
Current Mix (A)	18%	75%	7%	1%		15.0%	3.0%	31.0%	10.5%	23.0%	10.0%	7.0%		0.5%	7.5%	14.2%	-25%	-35%	9.2%	12.2%
Mix 1	11.1%	76.9%	11.5%	0.5%		7.8%	3.3%	33.2%	11.1%	22.1%	10.5%	7.0%	4.5%	0.5%	7.8%	14.9%	-26%	-37%	9.4%	12.8%
Mix 2	21.2%	66.9%	11.4%	0.5%		14.8%	6.4%	28.9%	9.6%	19.3%	9.1%	7.0%	4.4%	0.5%	7.2%	13.3%	-23%	-33%	9.1%	11.4%



The expected one in a hundred worst case calendar year return based on normally distributed capital market assumptions. Greater losses are possible (1% expected likelihood).
***The expected one in a hundred worst case calendar year return based on non-normally distributed capital market assumptions (factoring in skewness & kurtosis). Greater losses are possible (1% expected likelihood).*
Historical Returns and Risk Metrics for each Mix represent back-tested calculations developed with the benefit of hindsight. Return calculations use an asset-weighted methodology based on the target asset allocation of each mix and the total return of index proxies used to represent each asset class and are gross of fees. Historical returns are hypothetical and do not represent returns earned by a client. It is not possible to invest in an index. Please see disclosures at the end of this presentation for additional important information, including index proxies used to represent each asset class. Please ask for a copy of Fiducient Advisor's white paper titled 10-Year Capital Market Forecasts. Past performance does not indicate future performance and it is possible to lose money when investing.

Actuarial Review

Name of Plan		
	6/30/2021	6/30/2020
Actuarial Value of Assets	219,377,787	209,861,722
Total Accrued Liability	310,778,910	293,171,198
Funded Ratio	70.6%	71.6%
Actuarial Return Assumption	7.2%	7.3%

Source: hooker & holcombe, 6/30/2020 Valuation Report & Preliminary 2021 Valuation Results

FIDUCIENT Advisors

Helping Clients Prosper

Research Paper

10-Year Capital Market Forecasts (2022-2031)

Asset Class Returns, Standard Deviations, Correlations & Tail Assumptions

January 2022

Synopsis

Fiducient Advisors updates asset class assumptions at least annually to reflect 10-year estimates for asset class returns, standard deviations, skewness, kurtosis and correlations. This paper details our input assumptions for the investment period from January 2022 to December 2031.

Executive Summary of Year-Over-Year Return Assumption Changes

Asset Class	2022 Outlook E(R) - 10 Year	2021 Outlook E(R) - 10 Year	Year Over Year Change
Inflation	2.5%	1.8%	**0.7%**
Cash*	0.1%	0.1%	**0.0%**
TIPS	1.3%	0.7%	**0.5%**
ST Bonds	0.6%	0.5%	**0.1%**
Muni Bond**	1.2%	1.0%	**0.2%**
Muni High Yield**	4.9%	6.7%	**-1.8%**
US Bond	1.7%	1.2%	**0.5%**
Dynamic Bonds***	2.0%	1.7%	**0.3%**
Global Bonds	1.4%	0.8%	**0.6%**
For. Dev. Bond	1.2%	0.4%	**0.7%**
LT Bonds	2.5%	2.3%	**0.2%**
Corp HY Bond	3.7%	3.4%	**0.4%**
EM Bond	2.6%	1.7%	**0.8%**
Global Equity	7.2%	6.8%	**0.4%**
US Equity (AC)	5.9%	5.5%	**0.3%**
US Equity (LC)	5.7%	5.4%	**0.3%**
US Equity (MC)	6.1%	5.7%	**0.3%**
US Equity (SC)	6.1%	5.8%	**0.2%**
Int'l Dev. Equity	7.7%	7.0%	**0.7%**
EM Equity	9.6%	8.5%	**1.1%**
Real Estate	5.4%	5.3%	**0.1%**
Private Real Estate	6.4%		
Broad Real Assets****	4.7%	3.9%	**0.8%**
Global Infrastructure	7.1%	5.4%	**1.7%**
Commod. Fut.	3.3%	2.3%	**1.0%**
Marketable Alternatives	5.9%	5.4%	**0.5%**
Liquid Alternatives	4.4%	3.9%	**0.5%**
Private Equity	8.9%	8.5%	**0.3%**

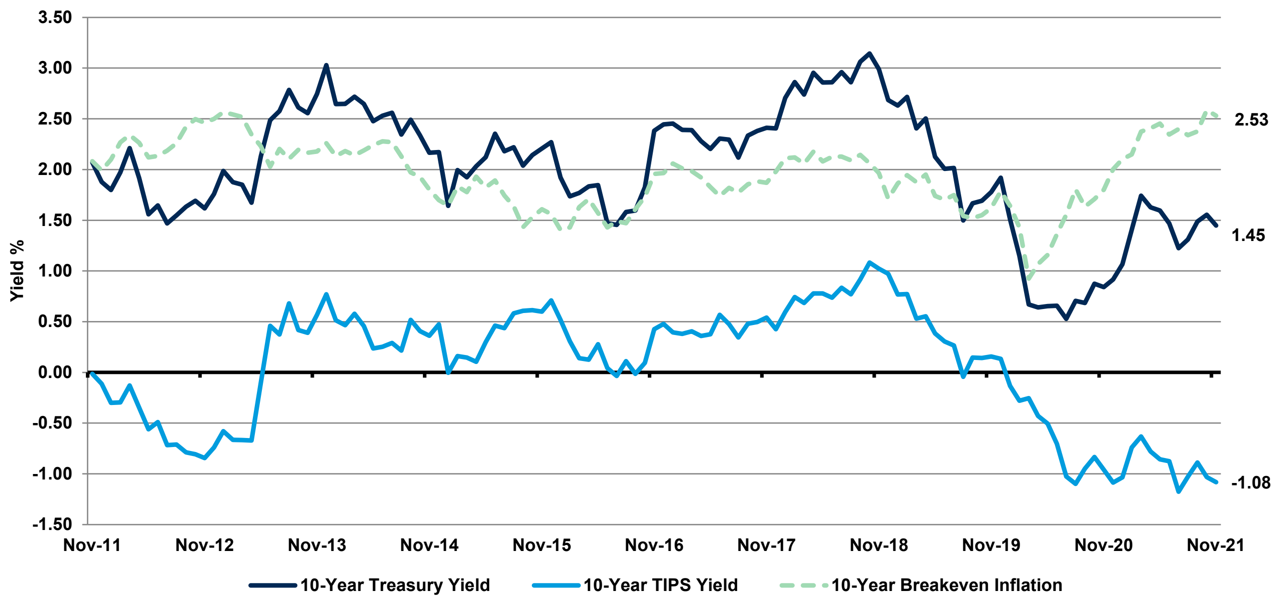
**3-month forecast*
***Tax-equivalent yield based on highest marginal tax rate (37%)*
****33% Cash, 33% Corp HY and 34% Global Bonds*
*****20% REITs, 20% Global Infrastructure, 20% Commodities, 20% US Bonds, 15% Corp High Yield, 5% TIPS*

Our Investment Themes for 2022-2031

- Nominal return forecasts rose for most asset classes but rising inflation expectations means most asset classes have declining year-over-year real return expectations.
- Meaningfully negative real returns continue to make cash an expensive opportunity cost for investors.
- Global bond yields generally rose. Despite the increase, most fixed income asset class forward-looking return expectations remain below expected inflation levels.
- Earnings accelerated in 2021 and expanded faster than stock prices. Non-U.S. equities remain more attractive on a valuation basis as U.S. equities have grown to represent 61 percent of the global equity market capitalization compared to 58 percent a year ago.
- With higher inflation expectations, real assets remain an important diversifier. Within real assets, broad real assets return expectations rose meaningfully faster than real estate.
- Alternative asset class return expectations rose modestly.

10-Year Return Forecasts by Asset Class

INFLATION (CPI): Inflation is used as a building block of total return for several asset classes. Our forecast of inflation is the difference between the 10-year nominal U.S. Treasury yield and the 10-year TIPS real yield. As of November 30, 2021, this difference was 2.53 percent (i.e., 1.45% - -1.08%). We believe this implied breakeven inflation rate (2.53 percent) is a rational median case assumption regarding CPI inflation for all items in the Consumer Price Index over the next 10 years. The following are the implied breakeven and our forward CPI expectations based on current breakeven inflation relationships.



Source: Bloomberg

<u>Historical 10-Year U.S. Nominal and Real Rates (as of November 30, 2021)</u>

While the 10-year CPI forecast is 2.53 percent, we expect higher inflation (2.81 percent) in the first five years and lower inflation (2.25 percent) in the following five years.

10-Year Forecast of Annual CPI: 2.5%

Implied Breakeven CPI (11/30/21)

Maturity	Nominal	TIPS	Implied CPI
5 Years	1.16%	-1.65%	2.81%
7 Years	1.37%	-1.48%	2.85%
10 Years	1.45%	-1.08%	2.53%
20 Years	1.86%	-0.65%	2.51%
30 Years	1.79%	-0.51%	2.31%

Implied Forward CPI (11/30/21)

Forward CPI	Implied CPI
1-5 Years	2.81%
5-10 Years	2.25%
10-20 Years	2.50%
20-30 Years	1.89%

Source: Bloomberg

TIPS: As of November 30, 2021, the Bloomberg U.S. TIPS Index had 45 issues (all U.S. Sovereign) with an average real yield of -1.27 percent and an average maturity of 8.13 years.

Bloomberg U.S. TIPS (11/30/21)

Summary Statistics	Value
Average Maturity (Yrs)	8.13
Average Real Duration (Yrs)	5.01
Average Coupon (%)	0.65
Yield to Worst (%)	1.26
Number of Issues	45

Source: Bloomberg

Combining the real yield of the Bloomberg Barclays Capital U.S. TIPS Index (-1.27 percent) with our forecasted inflation (2.53 percent) leads to an expected return of 1.26 percent.

10-Year Forecast of Annualized Geometric Return: 1.3%

SHORT TERM BONDS: The historical duration of the asset class has been steady at approximately two years, which is calculated using blended return assumptions for cash and U.S. investment-grade fixed income. The blended return comes two-thirds from cash and one third from U.S. Investment Grade Fixed Income. Our expected geometric return forecast is 0.65 percent.

10-Year Forecast of Annualized Geometric Return: 0.7%

U.S. TAX-EXEMPT (MUNICIPAL) FIXED INCOME: As of November 30, 2021, the Bloomberg Capital U.S. Municipal Bond: 5 Year (4-6) Index had 6,083 issues with an average maturity of 4.98 years and an average duration of 3.82 years. The index is investment-grade rated.

Bloomberg 5-Year U.S. Municipal Bond (11/30/21)

Summary Statistics	Value
Average Maturity (Yrs)	4.98
Average Duration (Yrs)	3.82
Average Coupon (%)	4.65
Yield to Worst (%)	0.73
Number of Issues	6,083

Source: Bloomberg

Our tax-adjusted return forecast for the Bloomberg Capital Municipal Bond: 5 Year (4-6) Index is found by dividing the current yield to worst by one minus the highest marginal federal tax rate [(0.73% / (1 - 0.37)] = 1.16%.

10-Year Forecast of Annualized Geometric Return: 1.2%[1]

U.S. TAX-EXEMPT (MUNICIPAL) HIGH YIELD FIXED INCOME: As of November 30, 2021, the Bloomberg U.S. Municipal High Yield Index had 5,261 issues with an average maturity of 21.27 years and an average duration of 6.06 years. The index is below investment-grade rated.

Bloomberg U.S. Municipal High Yield Bond (11/30/21)

Summary Statistics	Value
Average Maturity (Yrs)	21.27
Average Duration (Yrs)	6.06
Average Coupon (%)	4.54
Yield to Worst (%)	3.07
Number of Issues	5,261

Source: Bloomberg

Our tax-adjusted return forecast for the Bloomberg Barclays Capital U.S. Municipal High Yield Index is found by dividing the current yield to worst by one minus the highest marginal federal tax rate [(3.07% / (1 - 0.37)] = 4.87%.

10-Year Forecast of Annualized Geometric Return: 4.9%[2]

U.S. INVESTMENT GRADE FIXED INCOME: As of November 30, 2021, the Bloomberg Capital U.S. Aggregate Bond Index had 12,297 issues with an average maturity of 8.72 years and an average duration of 6.78 years. The index is investment-grade rated. The return forecast for the Bloomberg Barclays Capital U.S. Aggregate Bond Index is its current yield to worst of 1.69 percent.

Bloomberg U.S. Aggregate (11/30/21)

Sector Breakdown	%
Govt / Agency	40.3
Credit	30.1
MBS	27.3
ABS	0.3
CMBS	2.0

Credit Breakdown	%
AAA	71.5
AA	3.3
A	11.2
BBB	14.0
BB or lower	0.0

Maturity Breakdown	%
1-3 Years	19.6
3-5 Years	20.5
5-7 Years	22.5
7-10 Years	17.4
> 10 Years	20.0

Summary Statistics	Value
Average Maturity (Yrs)	8.72
Average Duration (Yrs)	6.78
Average Coupon (%)	2.45
Yield to Worst (%)	1.69
Number of Issues	12,297

Source: Bloomberg

10-Year Forecast of Annualized Geometric Return: 1.7%

[1] The 1.2 percent annualized return assumption is used for optimization purposes to advantage municipal bonds over taxable bonds in taxable accounts as appropriate. However, 0.7 percent in annualized return is used when looking at portfolio level forward looking returns that are a weighted average of the underlying asset class return expectations.

[2] The 4.9 percent annualized return assumption is used for optimization purposes to advantage municipal bonds over taxable bonds in taxable accounts as appropriate. However, 3.1 percent in annualized return is used when looking at portfolio level forward looking returns that are a weighted average of the underlying asset class return expectations.

DYNAMIC BONDS: The asset class is calculated using blended return assumptions for cash (1/3), corporate high yield (1/3) and global bonds (1/3). The (unbiased) expected geometric return forecast is 1.99 percent.

10-Year Forecast of Annualized Geometric Return: 2.0%

LONG-TERM BONDS: As of November 30, 2021, the Bloomberg Capital U.S. Long Gov/Credit Index had 3,063 issues with an average maturity of 23.73 years and an average duration of 16.50 years. The index is investment-grade rated. The return forecast for the Bloomberg Capital U.S. Long Gov/Credit Index is its current yield to worst of 2.53 percent.

10-Year Forecast of Annualized Geometric Return: 2.5%

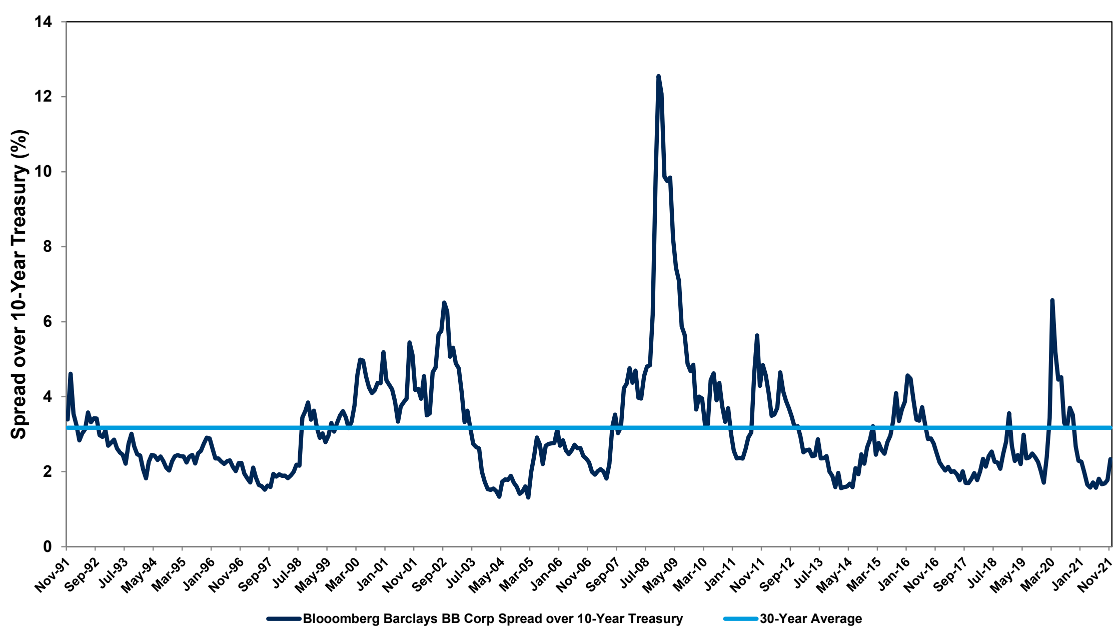
HIGH YIELD BONDS: As of November 30, 2021, the FTSE U.S. High Yield Market Index had 2,005 issues (all BB rated or lower) representing $1.47 trillion in market value. The yield to worst was 4.95 percent with an average maturity of 6.3 years and a 4.36-year average duration. The following charts reflect current high yield bond market metrics and historical spread data.

FTSE U.S. High Yield Market Index

Market Value ($B)	Par Value ($B)	MV / PV Premium (Discount)	Average Coupon (per $100 Par)	Coupon/ MV Yield	Current YTW
$1,469	$1,428	103%	5.71%	5.55%	4.95%

Source: Bloomberg, FTSE

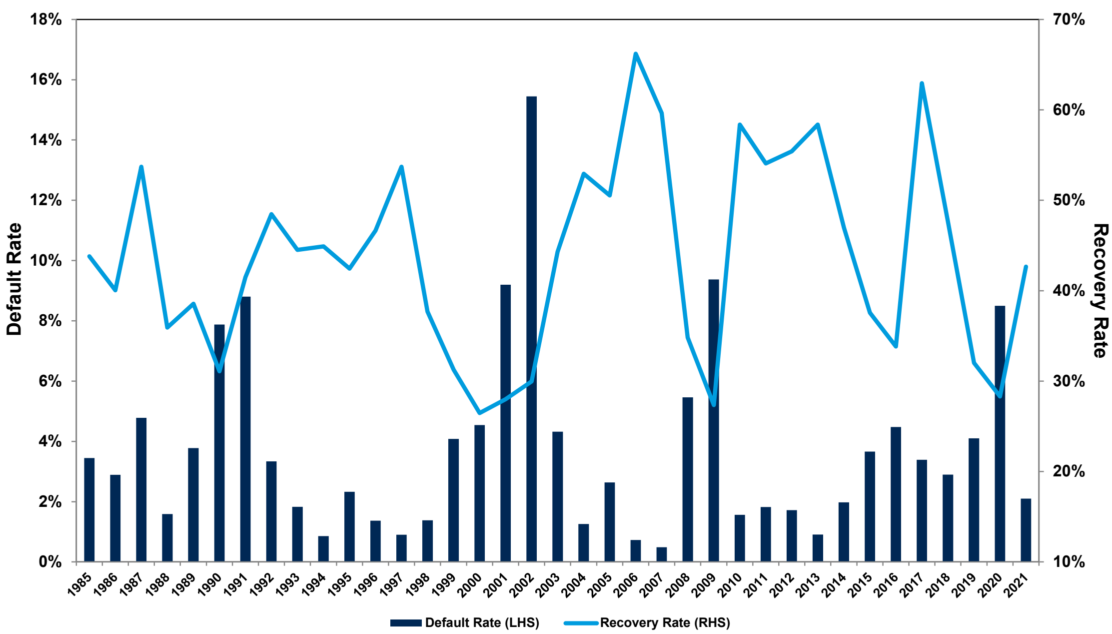
BB-Rated Corporate Spread vs. 10-Year U.S. Treasury (1991-2021)



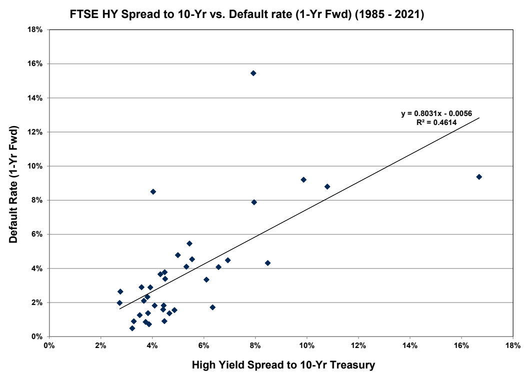
Source: Bloomberg

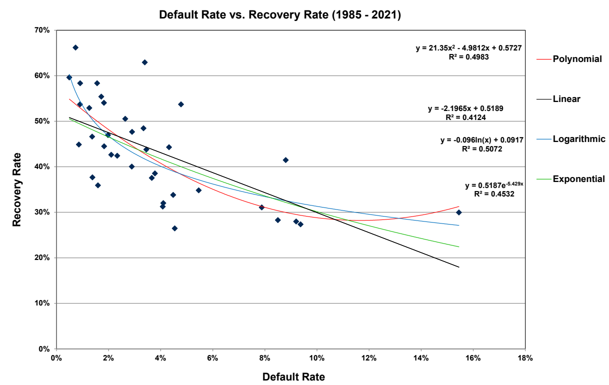
- As of November 30, 2021, the Bloomberg Barclays BB-rated Corporate Bond spread over the 10-year U.S. Treasury was 2.34 percent, which is 0.83 percent below the long-term historical average of 3.17 percent since November 1991.
- This represents a spread compression of 34 basis points on a year-over-year basis, which comes from both a higher yield on the index (+27 bps), but also a rise in the 10 Year-Treasury yield (+61 bps).
- From August 1983 to November 2021, the Bloomberg Barclays U.S. Corporate High Yield Index returned an annualized 8.71 percent versus 6.90 percent for the Bloomberg Barclays Capital U.S. Aggregate Bond Index. This represents a historical risk premium of 1.81 percent for high yield bonds (over investment-grade intermediate bonds).
- Moody's current forecast for U.S. high yield default rate is 2.1 percent through October 2021, which is a significant decrease from last year's spike to 8.50 percent.

<u>Historical High Yield Bond Default and Recovery Rates</u>



Source: Credit Suisse through 2013 and Moody's since 2014





Source: Credit Suisse, Moody's, Fiducient Advisors Analysis

- The geometric return forecast is derived from the *High Yield Default-Loss Method*, where expected return is a function of current credit spreads, our internal expected default rates and expected recovery rates.
- Each year end's high yield credit spread is used to estimate the following year's default rate (left pane above) from 1985 to 2021 and each year's actual default rate is used to predict an implied recovery rate using four different mathematical relationships (right pane above).

High Yield Default-Loss Method applied as of November 30, 2021[3]

Polynomial Default-Recovery Regression

10-Year Treasury	Current Yield-to-Worst	Current Spread	Assumed Annual Default Rate	Assumed Annual Recovery Rate	Assumed Annual Loss Rate	Expected Return
1.45%	4.95%	3.50%	2.26%	47.28%	-1.19%	3.76%

Linear Default-Recovery Regression

10-Year Treasury	Current Yield-to-Worst	Current Spread	Assumed Annual Default Rate	Assumed Annual Recovery Rate	Assumed Annual Loss Rate	Expected Return
1.45%	4.95%	3.50%	2.26%	47.08%	-1.20%	3.75%

Logarithmic Default-Recovery Regression

10-Year Treasury	Current Yield-to-Worst	Current Spread	Assumed Annual Default Rate	Assumed Annual Recovery Rate	Assumed Annual Loss Rate	Expected Return
1.45%	4.95%	3.50%	2.26%	45.71%	-1.23%	3.72%

Exponential Default-Recovery Regression

10-Year Treasury	Current Yield-to-Worst	Current Spread	Assumed Annual Default Rate	Assumed Annual Recovery Rate	Assumed Annual Loss Rate	Expected Return
1.45%	4.95%	3.50%	2.26%	46.01%	-1.22%	3.73%

Source: Credit Suisse, Moody's, FTSE, Bloomberg, Fiducient Advisors Analysis

- Based on the High Yield Default-Loss Method, the market is pricing in a 12-month forward looking 2.26 percent annual expected default rate as of November 30, 2021. This implies an expected recovery rate of around 46 percent, and subsequent annual loss rate of approximately 1.20 percent. This represents an estimate based on recent default and recovery rates. We believe the midpoint of the range of all methods reflects a sensible view of default losses over a full market cycle.

10-Year Forecast of Annualized Geometric Return: 3.7%

[3] Default Rate = -0.0056% + 0.8031 * [HY Yield-to-Worst Spread vs. 10-Year Treasury]. R2 = 0.4614. Recovery Rate algorithm combines linear, polynomial, logarithmic and exponential factors; additional details available upon request.

FOREIGN DEVELOPED FIXED INCOME: As of November 30, 2021, the FTSE World Government Bond ex-U.S. Index had an average yield to maturity of 0.46 percent with an average maturity of 11.0 years and a 9.82-year average duration.

Foreign Developed Bond Market Data as of November 30, 2021[4]

Country	Global Allocation Ex-US (%)	Local Bond Market Maturity (Years)	Local Bond Market YTM (%)	U.S. Treasury Equivalent YTM (%)	Interest Parity (Currency) Spread (%)	Gross Debt to GDP Ratio (%)	Sovereign Credit and/or Currency Premium / (Discount) (%)
Japan	27.1%	13.3	0.21	1.35	1.14	254	(0.81)
France	13.7%	10.0	0.07	1.27	1.20	115	0.02
Italy	12.6%	8.8	0.77	1.24	0.46	156	(0.03)
Germany	10.0%	8.7	(0.28)	1.25	1.54	69	0.23
United Kingdom	8.5%	16.3	0.99	1.43	0.44	104	0.05
Spain	8.2%	9.2	0.30	1.31	1.01	120	0.01
Belgium	3.1%	11.7	0.14	1.33	1.19	114	0.02
Canada	2.8%	8.6	1.42	1.32	(0.11)	117	0.02
Netherlands	2.6%	9.8	(0.13)	1.34	1.47	52	0.37
Australia	2.4%	8.7	1.72	1.29	(0.43)	57	0.33
Austria	2.0%	12.9	(0.01)	1.44	1.45	83	0.14
Ireland	1.1%	9.9	0.15	1.33	1.18	59	0.32
Mexico	1.0%	8.6	7.34	1.23	(6.11)	61	0.30
Finland	0.8%	9.0	(0.09)	1.30	1.39	70	0.23
Poland	0.7%	4.6	2.29	1.14	(1.15)	57	0.33
Denmark	0.7%	9.5	(0.06)	1.27	1.33	42	0.47
Malaysia	0.7%	9.6	3.50	1.31	(2.19)	67	0.25
Israel	0.6%	7.6	0.99	1.21	0.21	72	0.21
Singapore	0.6%	9.7	1.57	1.28	(0.29)	155	(0.02)
Sweden	0.4%	6.7	0.22	1.21	0.99	37	0.52
Norway	0.3%	5.0	1.50	1.14	(0.36)	41	0.48
Total / WTD Average	**100.00%**	**11.0**	**0.46**	**1.31**	**0.85**	**146**	**(0.15)**
United States	N/A*	8.1	1.13			134	

*The United States is 39.0% of the Total World Government Bond Index.

Source: Factset, FTSE

[4] Source: FTSE (FTSE World Government Bond ex-U.S. Index data); Fiducient Advisors Calculation. Formerly the Citi World Government Bond ex-U.S. Index.

Expected return is calculated by isolating the sovereign index yield and currency and/or credit components of the foreign developed bond market. The sovereign index yield component is calculated by taking the weighted average local bond market yield. Interest rate parity is then used to calculate the expected currency impact embedded in the foreign developed bond markets (in U.S. dollar terms). The difference in like-maturity rates across borders explains the currency Spot-Futures exchange rate relationship. If not, one could borrow in one currency, lend in the other and lock in an arbitrage profit.

Fixed Income Returns Decomposition Method: (YLD) +/- (IRP) +/- (CRE/CUR)

10-Year Forecast (2022 - 2031): (0.46%) + (0.85%) + (-0.15%) = 1.16%

- *YLD* = Index Yield
- *IRP* = Interest Rate Parity Currency Adjustment
- *CRE/CUR* = Sovereign Credit/Currency Adjustment

The sovereign credit and/or currency premium / (discount) adjustment is applied to individual countries based on their debt-to-GDP ratios and reflects our opinion of how interest parity relationships do not fully reflect the potential for currency debasement (a form of implicit default) or actual potential principal losses due to explicit default.

10-Year Forecast of Annualized Geometric Return: 1.2%

EMERGING MARKETS (LOCAL CURRENCY) FIXED INCOME: As of November 30, 2021, the JPMorgan GBI-EM Global Diversified Index had an average yield to maturity of 6.1 percent with an average maturity of 7.3 years and a 5.19-year average duration. Expected return is calculated by isolating the *sovereign index yield, currency and/or credit* components of the emerging markets bond market. The *sovereign index yield* component is calculated by taking the weighted average local bond market yield. Interest rate parity is then used to calculate the expected currency impact embedded in the emerging markets bond markets (in U.S. dollar terms). The difference in like-maturity rates across borders explains the currency Spot-Futures exchange rate relationship. If not, one could borrow in one currency, lend in the other and lock in an arbitrage profit. In order to isolate each country's implied credit spread, credit default swaps for each country are used to quantify credit risk above and beyond that of U.S. denominated bonds. This amount is then backed out of each country's yield in order to be removed from the interest rate parity calculation since implied credit risk is captured in the local bond yield and therefore should not be accounted for in the interest rate parity calculation as well.

JPMorgan GBI-EM Emerging Markets Bond Data as of November 30, 2021[5]

Country	Allocation (%)	Local Bond Market Maturity (Years)	Local Bond Market YTM (%)	U.S. Treasury Equivalent YTM (%)	Market Implied Credit Spread	Interest Parity (Currency) Spread (%)	Gross Debt to GDP Ratio (%)	Sovereign Credit and/or Currency Premium / (Discount) (%)
Indonesia	10.0%	8.4	6.2	1.2	0.4	(4.6)	37	0.5
China	10.0%	6.9	3.0	1.2	1.0	(0.7)	66	0.3
Mexico	9.6%	8.5	7.5	1.3	0.7	(5.6)	61	0.3
Thailand	9.0%	8.1	2.0	1.2	0.2	(0.6)	50	0.4
Brazil	8.6%	2.7	11.7	1.1	2.4	(8.2)	99	0.1
Malaysia	8.5%	7.5	3.6	1.2	0.4	(2.0)	67	0.2
South Africa	8.3%	13.1	10.3	1.5	1.0	(7.8)	69	0.2
Russia	7.5%	6.3	8.3	1.2	2.3	(4.9)	19	0.7
Poland	7.2%	4.4	3.0	1.1	0.5	(1.5)	57	0.3
Czech Republic	4.7%	6.7	2.6	1.2	0.4	(1.0)	38	0.5
Colombia	4.1%	8.5	8.1	1.3	0.2	(6.6)	65	0.3
Hungary	3.5%	6.1	4.3	1.2	2.1	(1.0)	80	0.2
Romania	3.0%	4.2	5.1	1.1	0.7	(3.2)	50	0.4
Peru	2.1%	9.6	6.0	1.3	0.9	(3.9)	35	0.5
Chile	2.0%	8.6	5.7	1.2	0.8	(3.7)	33	0.6
Turkey	1.2%	3.5	20.6	1.1	4.9	(14.6)	40	0.5
Serbia	0.3%	7.0	3.9	1.2	2.4	(0.3)	58	0.3
Dominican Republic	0.2%	3.4	5.6	1.1	2.9	(1.6)	71	0.2
Philippines	0.1%	9.8	4.8	1.3	0.8	(2.6)	52	0.4
Uruguay	0.1%	8.2	8.9	1.2	0.5	(7.2)	68	0.2
Total / WTD Average	**100%**	**7.3**	**6.1**	**1.2**	**1.0**	**(3.9)**	**57**	**0.3**
United States		8.1	1.1				134	

Source: Factset, JPMorgan

Fixed Income Returns Decomposition Method: (YLD) +/- (IRP) +/- (CRE/CUR)

10-Year Forecast (2022 - 2031): (6.11%) + (-3.90%) + (0.35%) = 2.56%

- *YLD* = Index Yield
- *IRP* = Interest Rate Parity Currency Adjustment
- *CRE/CUR* = Sovereign Credit/Currency Adjustment

The sovereign credit and/or currency premium / (discount) adjustment is applied to individual countries based on their debt-to-GDP ratios and reflects our bias for how interest parity relationships do not fully reflect the potential for currency debasement (a form of implicit default) or actual potential principal losses due to explicit default.

10-Year Forecast of Annualized Geometric Return: 2.6%

GLOBAL FIXED INCOME: The asset class is calculated using blended return assumptions for U.S. investment-grade fixed income (40 percent) and foreign investment grade developed sovereign bonds (60 percent). Our expected geometric return forecast is 1.4 percent.

10-Year Forecast of Annualized Geometric Return: 1.4%

[5] Source: JPMorgan (JPMorgan GBI-EM Global Diversified Index data); Factset (CDS Spreads); Fiducient Advisors Calculation.

U.S. LARGE CAP EQUITIES: The expected geometric return forecast for U.S. Large Cap Equities (S&P 500) is derived by applying the *Cyclically-Adjusted Earnings Yield Method* where return is a function of the historical 10-year average real earnings, current price and our 10-year inflation assumption (CPI).

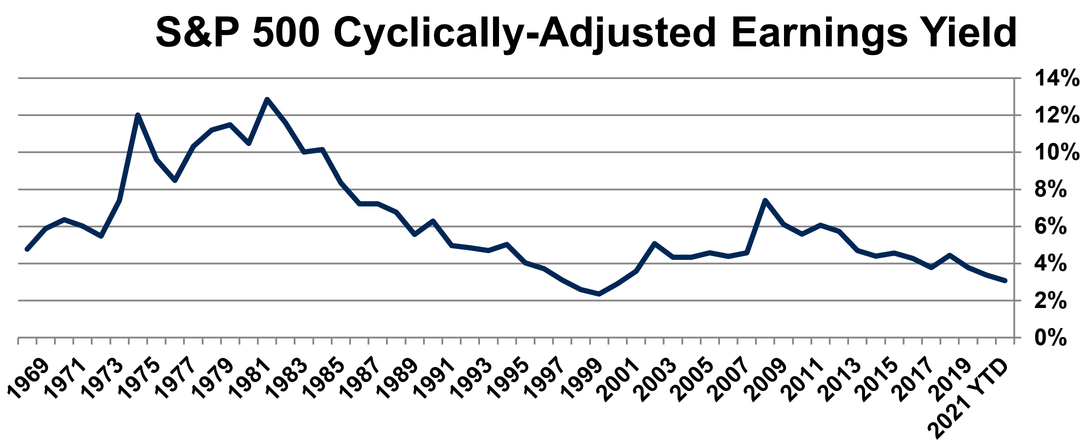
Cyclically-Adjusted Earnings Yield Method: {[1 + (EARNINGS/PRICE)] * (1 + CPI)} - 1

10-Year Forecast (2022 - 2031): {[1 + (140.69 / 4,567)] * (1 + 2.53%)} - 1

10-Year Forecast (2022 - 2031): {(1 + 3.08%) * (1 + 2.53%)} - 1 = 5.69%

- *EARNINGS* = Historical 10-year average real earnings of the S&P 500 Index as of November 30, 2021
- *PRICE* = Current S&P 500 Index real price as of November 30, 2021
- *CPI* = Our Inflation Forecast

10-Year Forecast of Annualized Geometric Return: 5.7%



Source: Bloomberg, as of November 30, 2021

U.S. MID CAP EQUITIES: Using historical correlations and volatility for Large, Mid and Small Cap U.S. Equities (from 1979-2021) and U.S. market cap weights, the Black-Litterman arithmetic return forecast for Mid Cap is 7.7 percent (vs. 7.1 percent for Large Cap). Adjusting for forecasted volatility (18.3 percent Annual Standard Deviation), our expected geometric return is 6.1 percent.

10-Year Forecast of Annualized Geometric Return: 6.1%

U.S. SMALL CAP EQUITIES: Using historical correlations and volatility for Large, Mid and Small Cap U.S. Equities (from 1979-2021) and U.S. market cap weights, the (unbiased) Black-Litterman arithmetic return forecast for Small Cap is 8.3 percent (vs. 7.1 percent for Large Cap). Adjusting for forecasted volatility (21.2 percent Annual Standard Deviation), our expected geometric return is 6.1 percent.

10-Year Forecast of Annualized Geometric Return: 6.1%

Black-Litterman (U.S. Mid and Small Cap Equities)[6,7]

MCs as of: **11/30/2021**

Market Caps

	% MC
US Equity (LC)	76.8%
US Equity (MC)	12.5%
US Equity (SC)	10.6%
	100.00%

Stream as of: **11/2021**

Volatility

	St. Dev.
US Equity (LC)	15.0%
US Equity (MC)	16.8%
US Equity (SC)	19.6%

1 / 1979 - 11 / 2021

Correlation Matrix

	US Equity (LC)	US Equity (MC)	US Equity (SC)
US Equity (LC)	1.00	0.94	0.84
US Equity (MC)	0.94	1.00	0.94
US Equity (SC)	0.84	0.94	1.00

1979-2021

Covariance Matrix

	US Equity (LC)	US Equity (MC)	US Equity (SC)
US Equity (LC)	2.25%	2.37%	2.47%
US Equity (MC)	2.37%	2.82%	3.09%
US Equity (SC)	2.47%	3.09%	3.84%

1979-2021

Mkt St. Dev.	16.99%
Mkt Variance	2.89%
Mkt RP	8.84%
RA Coefficient	3.06
RFR	0.05%

[MC1%*COV1+MC2%*COV2+MC3*COV3] X RA Coeff. + RFR

These are monthly Standard Deviations multiplied by the SQRT or 12.

Ar. Ret.	7.1%	7.7%	8.3%
St. Dev.	16.6%	18.3%	21.2%
Ge. Ret.	**5.69%**	**6.05%**	**6.06%**

Risk Aversion Coefficient = MRP/VAR

10-Yr Forecast St. Dev.different from 1979-present.

Source: Morningstar, Bloomberg, MSCI

Use of Indices and Benchmark Return: Indices cannot be invested in directly. Index performance is reported gross of fees and expenses and assumes the reinvest dividends and capital gains. Past performance does not indicate future performance and there is a possibility of a loss. See disclosure page for indices representing each asset class. See the appendix for additional information about the Black-Letterman method.

U.S. ALL CAP EQUITIES: Using relative market capitalization weights[8], historical correlation, volatility and our forecasted expected returns for Large, Mid and Small Cap U.S. Equities, the expected geometric return forecast for All Cap is 5.9 percent.

10-Year Forecast of Annualized Geometric Return: 5.9%

FOREIGN DEVELOPED EQUITIES: The expected geometric return forecast for Foreign Developed Equities (MSCI EAFE) is derived by applying the *Cyclically-Adjusted Earnings Yield Method* where return is a function of the 10-year average real earnings, current price and our 10-year inflation assumption (CPI).

Cyclically-Adjusted Earnings Yield Method: {[1 + (EARNINGS/PRICE)] * (1 + CPI)} - 1

10-Year Forecast (2022 - 2031): {[1 + (112.21 / 2,223.70)] * (1 + 2.53%)} - 1

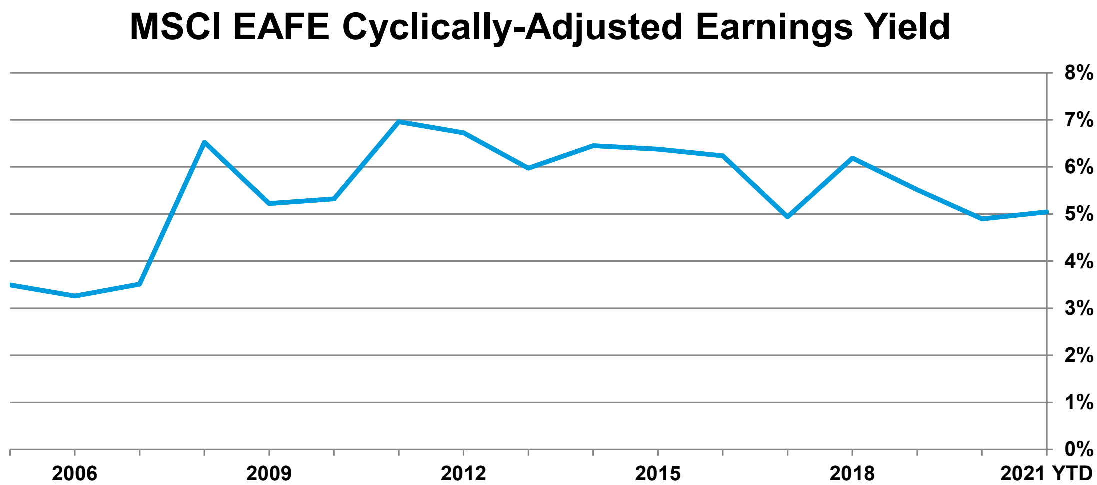
10-Year Forecast (2022 - 2031): {(1 + 5.05%) * (1 + 2.53%)} - 1 = 7.70%

- *EARNINGS* = 10-Year average real earnings of the MSCI EAFE Index as of November 30, 2021
- *PRICE* = Current MSCI EAFE Index real price as of November 30, 2021
- *CPI* = Inflation Forecast

10-Year Forecast of Annualized Geometric Return: 7.7%

See disclosures for list of indices representing each asset class. Indices cannot be invested in directly. Performance is reported gross of fees and expenses and assumes the reinvest dividends and capital gains. Past performance does not indicate future performance and there is a possibility of a loss.

[6] RA Coefficient (i.e., Risk Aversion Coefficient) = Market Risk Premium/Market Variance.
[7] 10-Year forecast standard deviation different from 1979-2021 historical standard deviation.
[8] As of November 30, 2021, the U.S. equity market capitalization was comprised as follows: 76.8% Large Cap, 12.5% Mid Cap and 10.6% Small Cap. Source: Bloomberg, MSCI.



Source: Morningstar, MSCI, as of November 30, 2021

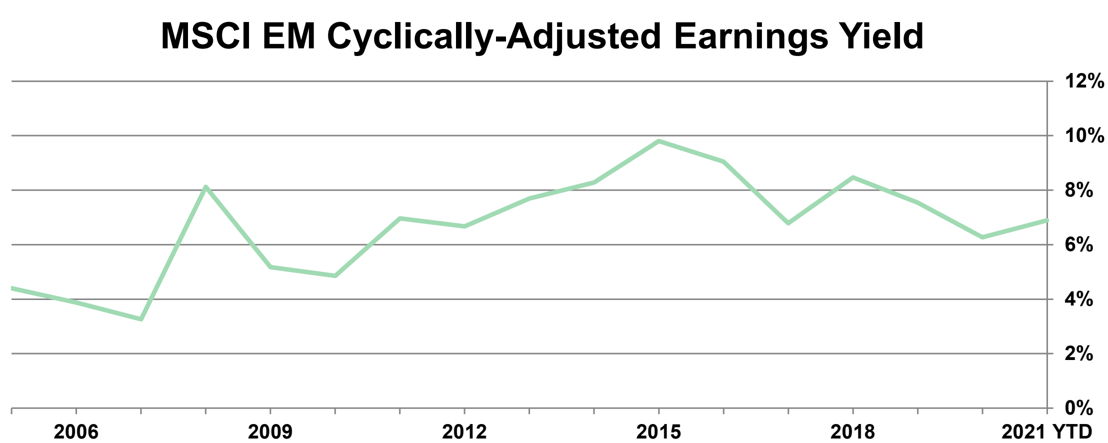
EMERGING MARKETS EQUITIES: The expected geometric return forecast for Emerging Markets Equities (unhedged MSCI Emerging Markets) is derived by applying the *Cyclically-Adjusted Earnings Yield Method* where return is a function of the 10-year average real earnings, current price and our 10-year inflation assumption (CPI).

<u>Cyclically-Adjusted Earnings Yield Method:</u> {[1 + (EARNINGS/PRICE)] * (1 + CPI)} - 1

10-Year Forecast (2022 - 2031): {[1 + (83.56 / 1,212.42)] * (1 + 2.53%)} - 1

10-Year Forecast (2022 - 2031): {(1 + 6.89%) * (1 + 2.53%)} - 1 = 9.60%

- *EARNINGS* = 10-year average real earnings of the MSCI Emerging Markets Index as of November 30, 2021
- *PRICE* = Current MSCI Emerging Markets Index real price as of November 30, 2021
- *CPI* = Inflation Forecast



Source: Morningstar, MSCI, as of November 30, 2021

10-Year Forecast of Annualized Geometric Return: 9.6%

GLOBAL EX-U.S. EQUITIES: Using relative market capitalization weights[9] (excluding the U.S.), historical correlation, volatility and forecasted expected returns for Foreign Developed and Emerging Markets Equity, our expected geometric return forecast for Global ex-U.S. is 8.6 percent.

10-Year Forecast of Annualized Geometric Return: 8.6%

GLOBAL EQUITIES: Using relative market capitalization weights[10], correlation, volatility and forecasted expected returns for U.S. All Cap, Foreign Developed and Emerging Markets Equity, our expected geometric return forecast for Global is 7.2 percent.

10-Year Forecast of Annualized Geometric Return: 7.2%

PUBLIC REAL ESTATE (REITs): From 1972-2021, the FTSE NAREIT All Equity REITs Total Return Index had a total annualized return of 11.77 percent. The price component of return was 3.77 percent with 1.60 percent (annualized) coming from yield compression (*as the dividend yield fell from 6.13 percent in 1972 to 2.84 percent in 2021*). CPI averaged 3.88 percent annually, so real price return (excluding yield compression) was -0.99 percent annually. At 7.28 percent annually, the dividend was the largest component of return. The following returns decomposition method is used to forecast returns where total return is a function of dividend yields, real price return, yield compression and inflation (CPI).

Modified Returns Decomposition Method: **[(DY) + (RPR[11]) + (YLD C) + (CPI)]**

Historical FTSE NAREIT All Equity REITs Total Return Index (1972-2021): [(7.28%) + (-0.99%) + (1.60%) + (3.88%)] = 11.77%

10-Year Forecast (2022-2031): [(2.84%) + (0.00%) + (0.00%) + (2.53%)] = 5.37%

- *DY* = Dividend Yield
- *RPR* = Real price return excluding yield compression
- *YLD C* = Return resulting from yield compression
- *CPI* = Inflation Forecast

10-Year Forecast of Annualized Geometric Return: 5.4%

Use of Indices and Benchmark Return Indices cannot be invested in directly. Index performance is reported gross of fees and expenses and assumes the reinvest dividends and capital gains. Past performance does not indicate future performance and there is a possibility of a loss. See disclosure page for indices representing each asset class.

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[9] As of November 30, 2021, the Global ex-U.S. equity market capitalization was comprised as follows: 70.6% Foreign Developed and 29.4% Emerging Markets. Source: Bloomberg, MSCI.

[10] As of November 30, 2021, the Global equity market capitalization was comprised as follows: 61.4% U.S., 27.2% Foreign Developed and 11.3% Emerging Markets. Source: Bloomberg, MSCI.

[11] Unlike traditional stocks, REITs pay out virtually all their earnings (or FFO) in dividends and rely on the issuance of new equity (and debt) to grow earnings (or FFO). Therefore, the expected long-term RPR is capped at zero.

PRIVATE REAL ESTATE: The asset class return assumption is calculated using the public real estate return assumption plus an alpha assumption of +100 bps as compensation for less liquidity compared to public real estate.
10-Year Forecast of Annualized Geometric Return: 6.4%[12]

BROAD REAL ASSETS: The asset class is calculated using blended return assumptions for REITs (20 percent), Global Infrastructure (20 percent), Commodities (20 percent), Investment-Grade Fixed Income (20 percent), Corporate High Yield (15 percent) and TIPS (5 percent). Our expected geometric return forecast is 4.7 percent.
10-Year Forecast of Annualized Geometric Return: 4.7%

GLOBAL INFRASTRUCTURE: The current weighted yield on the Dow Jones Brookfield Global Infrastructure Index is 4.52 percent as of November 30, 2021. Adding the yield to our inflation assumption results in a 7.05 percent return expectation.
10-Year Forecast of Annualized Geometric Return: 7.1%

COMMODITIES: The expected return for a Commodity Futures index aggregates the expected spot price appreciation of the underlying commodities (expected to match inflation/CPI over a full market cycle), the expected excess return generated from the roll return in a forward contract, and the return from holding T-Bills (or TIPS) as collateral for the futures contracts. As of November 30, 2021, the historical components of return for the S&P GSCI and Bloomberg Commodity Indices were as follows:

Commodity Futures Returns Decomposition Method: [(SPOT) +/- (ROLL) +/- (COLLATERAL)]
Historical S&P GSCI Total Return Index (1971-2021): [(2.31%) + (-2.58%) + (4.19%)] = 3.94%
Historical Bloomberg Commodity Total Return Index (1991-2021): [(5.46%) + (-5.04%) + (2.09%)] = 2.34%
10-Year Forecast (2022-2031): [(2.53%) + (0.00%) + (0.75%)] = 3.28%

- SPOT = Spot price return, assumed to keep pace with inflation as measured by CPI forecast
- ROLL = Roll return, assumed to be earned from holding a futures contract to (near) maturity
- COLLATERAL = Collateral return, earned by the return of the asset used to collateralize futures/swaps (i.e., T-Bills, TIPS, etc.). Collateral return is assumed to keep pace with a 10-year incremental rise in risk free rates (currently 0.05 percent) to the expected 10-year Treasury (1.45 percent).

10-Year Forecast of Annualized Geometric Return: 3.3%

Use of Indices and Benchmark Return Indices cannot be invested in directly. Index performance is reported gross of fees and expenses and assumes the reinvest dividends and capital gains. Past performance does not indicate future performance and there is a possibility of a loss. See disclosure page for indices representing each asset class

MARKETABLE ALTERNATIVES: The return forecast for Marketable Alternatives is unique in that it, along with private equity, are the only investment categories with net positive manager alpha assumptions. That is, the return forecast is not meant to represent a return expectation for the aggregate market, but rather a skillful portfolio of Marketable Alternatives strategies. For purposes of measuring historical risk exposures and correlations to other asset classes, the HFRI Fund of Funds Index, an equal-weighted composite, is used as the proxy. The return, risk, correlation, skewness and kurtosis assumptions are expected to differ on a strategy-by-strategy basis.

Our current 10-year standard deviation (or volatility) forecast for a diversified multi-strategy portfolio of Marketable Alternatives is 8.7 percent, the same volatility expected of hypothetical portfolio consisting of 58 percent investment grade U.S. fixed income and 42 percent global equity mix based on our 10-year forecasts. This fixed/equity mix has a 4.40 percent 10-year geometric expected return forecast. Our expectation is for a skillful and diversified portfolio of hedge fund managers to add 1.5 percent of excess return (i.e., 4.4% + 1.5% = 5.9%) net of manager fees at approximately the same volatility level. For Liquid Alternatives, the same process is employed but a zero percent excess return is used to arrive at a 4.4 percent return assumption.

10-Year Forecast of Annualized Geometric Return: 5.9% for Marketable Alternatives[12]& 4.4% for Liquid Alternatives

PRIVATE EQUITY: We assume investors demand a 3 percent risk premium over U.S. All Cap Equity net of manager fees to justify the risk and illiquidity of investing in private equity. The private equity return forecast is not meant to represent a return expectation for the aggregate private equity market, but rather a portfolio of skillful private equity funds. This return forecast is expected to differ depending upon the unique properties of the private equity investment product (i.e., buyout, venture, etc.).

10-Year Forecast of Annualized Geometric Return: 8.9%

[12] While our 10-year return forecast is expressed as if Marketable Alternatives returns were normally distributed, the Frontier Engineer® model treats the return forecast as a median (rather than mean), and fattens the left tail, increasing the magnitude of lower probability events. Additional detail surrounding forecast assumptions at the individual sub-strategy level is available upon request.

APPENDIX 1: RETURN, RISK AND CORRELATION ASSUMPTIONS (ANNUALIZED)

Return & Risk Assumptions (Forecasts)	Arithmetic Return	Geometric Return	Standard Deviation	Skewness	Kurtosis
Cash	0.1%	0.1%	0.0%	0	0
ST Bonds	0.6%	0.6%	2.3%	0.57	1.06
TIPS	1.8%	1.3%	9.8%	-0.78	5.30
Muni Bond	0.8%	0.7%	4.6%	-0.35	1.80
Muni High Yield	4.1%	3.1%	14.4%	-1.57	10.97
US Bond	1.9%	1.7%	6.8%	-0.21	0.94
US Bonds - Dynamic	2.2%	2.0%	5.6%	-1.09	8.41
For. Dev. Bond	1.6%	1.2%	8.8%	0.00	0.63
HY Bond	4.7%	3.7%	13.9%	-1.19	9.30
EM Bond	4.0%	2.6%	16.7%	-1.66	9.56
Global Bonds	1.7%	1.4%	7.2%	-0.15	0.06
Long Term Bonds	3.1%	2.5%	11.0%	0.04	1.64
Global Equity	8.8%	7.2%	17.7%	-0.70	1.67
US Equity (AC)	7.3%	5.9%	16.9%	-0.65	1.31
US Equity (LC)	7.1%	5.7%	16.6%	-0.60	1.08
US Equity (MC)	7.8%	6.1%	18.3%	-0.76	2.55
US Equity (SC)	8.3%	6.1%	21.2%	-0.51	1.42
Non-US Equity (ACWI)	11.0%	8.6%	22.0%	-0.66	1.81
Int'l Dev. Equity	10.1%	7.7%	21.8%	-0.58	1.50
EM Equity	13.7%	9.6%	28.5%	-0.69	2.06
Real Estate	7.6%	5.4%	21.2%	-0.74	7.73
Private Real Estate	6.8%	6.4%	9.0%	-0.74	7.73
Broad Real Assets	5.5%	4.7%	12.5%	-1.70	10.31
Commod. Fut.	5.4%	3.3%	20.3%	-0.79	3.82
Global Infrastructure	8.7%	7.1%	17.9%	-0.88	2.26
Marketable Alternatives	6.3%	5.9%	8.7%	-0.87	5.07
Hedge Funds (Liquid)	4.8%	4.4%	8.7%	-0.87	5.07
Private Equity	11.5%	8.9%	23.0%	0.00	0.00

Correlation Assumptions (Forecasts)	Cash	ST Bonds	TIPS	Muni Bond	Muni High Yield	US Bond	US Bonds - Dynamic	For. Dev. Bond	HY Bond	EM Bond	Global Bonds	Long Term Bonds	Global Equity	US Equity (AC)	US Equity (LC)	US Equity (MC)	US Equity (SC)	Non-US Equity (ACWI)	Int'l Dev. Equity	EM Equity	Real Estate	Private Real Estate	Broad Real Assets	Commod. Fut.	Global Infrastructure	Marketable Alternatives	Hedge Funds (Liquid)	Private Equity
Cash	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ST Bonds	0	1.00	0.59	0.66	0.11	0.89	0.21	0.51	0.17	0.23	0.78	0.71	0.01	0.11	0.11	0.11	0.05	0.01	0.11	-0.01	0.14	0.14	0.07	0.29	0.12	0.06	0.06	-0.16
TIPS	0	0.59	1.00	0.57	0.36	0.76	0.47	0.58	0.29	0.34	0.68	0.70	0.10	0.06	0.05	0.10	0.02	0.14	0.12	0.16	0.25	0.25	0.56	0.54	0.39	0.14	0.14	-0.04
Muni Bond	0	0.66	0.57	1.00	0.47	0.75	0.44	0.46	0.25	0.27	0.72	0.65	0.08	0.10	0.10	0.11	0.03	0.08	0.08	0.05	0.16	0.16	0.23	0.14	0.27	0.12	0.12	-0.09
Muni High Yield	0	0.11	0.36	0.47	1.00	0.32	0.53	0.20	0.47	0.24	0.32	0.31	0.26	0.23	0.22	0.28	0.19	0.28	0.26	0.25	0.33	0.33	0.47	0.28	0.43	0.36	0.36	0.14
US Bond	0	0.89	0.76	0.75	0.32	1.00	0.35	0.55	0.29	0.30	0.94	0.93	0.09	0.18	0.19	0.19	0.10	0.08	0.15	0.03	0.21	0.21	0.20	0.31	0.29	0.08	0.08	-0.11
US Bonds - Dynamic	0	0.21	0.47	0.44	0.53	0.35	1.00	0.26	0.95	0.60	0.49	0.40	0.59	0.54	0.53	0.57	0.51	0.55	0.47	0.53	0.54	0.54	0.65	0.30	0.76	0.50	0.50	0.17
For. Dev. Bond	0	0.51	0.58	0.46	0.20	0.55	0.26	1.00	0.12	0.33	0.66	0.52	0.26	0.04	0.05	0.03	-0.03	0.33	0.37	0.12	0.11	0.11	0.25	0.28	0.41	0.04	0.04	-0.08
HY Bond	0	0.17	0.29	0.25	0.47	0.29	0.95	0.12	1.00	0.57	0.20	0.27	0.63	0.63	0.61	0.67	0.63	0.60	0.54	0.59	0.61	0.61	0.66	0.32	0.74	0.52	0.52	0.22
EM Bond	0	0.23	0.34	0.27	0.24	0.30	0.60	0.33	0.57	1.00	0.29	0.26	0.64	0.57	0.57	0.58	0.52	0.66	0.61	0.74	0.47	0.47	0.59	0.46	0.74	0.57	0.57	0.21
Global Bonds	0	0.78	0.68	0.72	0.32	0.94	0.49	0.66	0.20	0.29	1.00	0.89	0.08	0.07	0.09	0.08	-0.01	0.07	0.07	0.02	0.18	0.18	0.24	0.15	0.28	0.09	0.09	-0.10
Long Term Bonds	0	0.71	0.70	0.65	0.31	0.93	0.40	0.52	0.27	0.26	0.89	1.00	0.08	0.17	0.17	0.18	0.08	0.07	0.13	0.03	0.23	0.23	0.26	0.27	0.28	0.07	0.07	-0.08
Global Equity	0	0.01	0.10	0.08	0.26	0.09	0.59	0.26	0.63	0.64	0.08	0.08	1.00	0.90	0.90	0.87	0.78	0.97	0.95	0.77	0.57	0.57	0.63	0.34	0.83	0.64	0.64	0.40
US Equity (AC)	0	0.11	0.06	0.10	0.23	0.18	0.54	0.04	0.63	0.57	0.07	0.17	0.90	1.00	0.99	0.97	0.89	0.77	0.69	0.69	0.65	0.65	0.57	0.30	0.77	0.62	0.62	0.40
US Equity (LC)	0	0.11	0.05	0.10	0.22	0.19	0.53	0.05	0.61	0.57	0.09	0.17	0.90	0.99	1.00	0.94	0.84	0.77	0.69	0.67	0.62	0.62	0.55	0.29	0.78	0.59	0.59	0.38
US Equity (MC)	0	0.11	0.10	0.11	0.28	0.19	0.57	0.03	0.67	0.58	0.08	0.18	0.87	0.97	0.94	1.00	0.94	0.76	0.67	0.70	0.71	0.71	0.62	0.32	0.78	0.65	0.65	0.39
US Equity (SC)	0	0.05	0.02	0.03	0.19	0.10	0.51	-0.03	0.63	0.52	-0.01	0.08	0.78	0.89	0.84	0.94	1.00	0.69	0.62	0.66	0.70	0.70	0.57	0.27	0.69	0.62	0.62	0.38
Non-US Equity (ACWI)	0	0.01	0.14	0.08	0.28	0.08	0.55	0.33	0.60	0.66	0.07	0.07	0.97	0.77	0.77	0.76	0.69	1.00	0.99	0.77	0.52	0.52	0.63	0.37	0.83	0.62	0.62	0.37
Int'l Dev. Equity	0	0.11	0.12	0.08	0.26	0.15	0.47	0.37	0.54	0.61	0.07	0.13	0.95	0.69	0.69	0.67	0.62	0.99	1.00	0.71	0.50	0.50	0.55	0.35	0.82	0.58	0.58	0.35
EM Equity	0	-0.01	0.16	0.05	0.25	0.03	0.53	0.12	0.59	0.74	0.02	0.03	0.77	0.69	0.67	0.70	0.66	0.77	0.71	1.00	0.47	0.47	0.56	0.38	0.77	0.67	0.67	0.30
Real Estate	0	0.14	0.25	0.16	0.33	0.21	0.54	0.11	0.61	0.47	0.18	0.23	0.57	0.65	0.62	0.71	0.70	0.52	0.50	0.47	1.00	1.00	0.75	0.28	0.68	0.35	0.35	0.21
Private Real Estate	0	0.14	0.25	0.16	0.33	0.21	0.54	0.11	0.61	0.47	0.18	0.23	0.57	0.65	0.62	0.71	0.70	0.52	0.50	0.47	1.00	1.00	0.75	0.28	0.68	0.35	0.35	0.21
Broad Real Assets	0	0.07	0.56	0.23	0.47	0.20	0.65	0.25	0.66	0.59	0.24	0.26	0.63	0.57	0.55	0.62	0.57	0.63	0.55	0.56	0.75	0.75	1.00	0.60	0.91	0.50	0.50	0.25
Commod. Fut.	0	0.29	0.54	0.14	0.28	0.31	0.30	0.28	0.32	0.46	0.15	0.27	0.34	0.30	0.29	0.32	0.27	0.37	0.35	0.38	0.28	0.28	0.60	1.00	0.58	0.44	0.44	0.12
Global Infrastructure	0	0.12	0.39	0.27	0.43	0.29	0.76	0.41	0.74	0.74	0.28	0.28	0.83	0.77	0.78	0.78	0.69	0.83	0.82	0.77	0.68	0.68	0.91	0.58	1.00	0.72	0.72	0.45
Marketable Alternatives	0	0.06	0.14	0.12	0.36	0.08	0.50	0.04	0.52	0.57	0.09	0.07	0.64	0.62	0.59	0.65	0.62	0.62	0.58	0.67	0.35	0.35	0.50	0.44	0.72	1.00	1.00	0.50
Hedge Funds (Liquid)	0	0.06	0.14	0.12	0.36	0.08	0.50	0.04	0.52	0.57	0.09	0.07	0.64	0.62	0.59	0.65	0.62	0.62	0.58	0.67	0.35	0.35	0.50	0.44	0.72	1.00	1.00	0.50
Private Equity	0	-0.16	-0.04	-0.09	0.14	-0.11	0.17	-0.08	0.22	0.21	-0.10	-0.08	0.40	0.40	0.38	0.39	0.38	0.37	0.35	0.30	0.21	0.21	0.25	0.12	0.45	0.50	0.50	1.00

Disclosures

This report does not represent a specific investment recommendation. Comparisons to any indices referenced herein are for illustrative purposes only and are not meant to imply that actual returns or volatility will be similar to the indices. Indices cannot be invested in directly. Unmanaged index returns assume reinvestment of any and all distributions and are reported gross of any fees and expenses. Any forecasts represent future expectations and actual returns; volatilities and correlations will differ from forecasts.

When referencing asset class returns or statistics, the following indices are used to represent those asset classes, unless otherwise notes. Each index is unmanaged and investors can not actually invest directly into an index:

APPENDIX 2: INDEX DISCLOSURES

Indices used to generate historical risk and return metrics	Most Recent Index	Index Dates	Linked Index 1	Index Dates	Linked Index 2	Index Dates	Linked Index 2	Index Dates
Cash	FTSE Treasury Bill 3 Mon USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
ST Bonds	Bloomberg US Govt/Credit 1-3 Yr TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
TIPS	Bloomberg US Treasury US TIPS TR USD	12/21 - 3/97	Bloomberg US Agg Bond TR USD	2/97 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Muni Bond	Bloomberg Municipal 5 Yr 4-6 TR USD	12/21 - 1/88	Bloomberg US Agg Bond TR USD	12/87 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Muni High Yield	Bloomberg HY Muni TR USD	12/21 - 11/95	Bloomberg Municipal 5 Yr 4-6 TR USD	10/95 - 1/88	Bloomberg US Agg Bond TR USD	12/87 - 1/79	N.A.	N.A. - N.A.
US Bond	Bloomberg US Agg Bond TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
US Bonds - Dynamic	*Custom Blend of Indices	12/21 - 2/90	Bloomberg US Agg Bond TR USD	1/90 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
For. Dev. Bond	50% CITI WGBI NonUSD Hdg 50% CITI WGBI NonUSD	12/21 - 1/85	Bloomberg US Agg Bond TR USD	12/84 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
HY Bond	Bloomberg US Corporate High Yield TR USD	12/21 - 7/83	Bloomberg US Agg Bond TR USD	6/83 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
EM Bond	JPM GBI-EM Global Diversified TR USD	12/21 - 1/03	JPM EMBI Global Diversified TR USD	12/02 - 1/94	Bloomberg US Corporate High Yield TR USD	12/93 - 7/83	Bloomberg US Agg Bond TR USD	6/83 - 1/79
Global Bonds	Bloomberg Global Aggregate TR Hdg USD	12/21 - 2/90	Bloomberg US Agg Bond TR USD	1/90 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Long Term Bonds	Bloomberg US Govt/Credit Long TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Global Equity	MSCI ACWI GR USD	12/21 - 1/88	S&P 500 TR USD	12/87 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
US Equity (AC)	Russell 3000 TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
US Equity (LC)	S&P 500 TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
US Equity (MC)	Russell Mid Cap TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
US Equity (SC)	Russell 2000 TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Non-US Equity (ACWI)	MSCI ACWI Ex USA GR USD	12/21 - 1/88	MSCI EAFE GR USD	12/87 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Int'l Dev. Equity	MSCI EAFE GR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
EM Equity	MSCI EM GR USD	12/21 - 1/88	MSCI EAFE GR USD	12/87 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Real Estate	FTSE Nareit All Equity REITs TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Private Real Estate	FTSE Nareit All Equity REITs TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Broad Real Assets	S&P Real Asset TR USD	12/21 - 5/05	*Custom Real Assets Index	4/05 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Commod. Fut.	BCI+TIPS-CASH	12/21 - 3/97	BCI+AGG-CASH	2/97 - 1/91	GSCI+AGG-CASH	12/90 - 1/79	N.A.	N.A. - N.A.
Global Infrastructure	DJ Brookfld Global Infra TR USD	12/21 - 2/03	Alerian MLP TR USD	1/03 - 1/96	Wilshire US RESI TR USD	12/95 - 1/79	N.A.	N.A. - N.A.
Marketable Alternatives	HFRI Fund of Funds Composite USD	12/21 - 1/90	HFN Hedge Fund Aggregate Average	12/89 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Hedge Funds (Liquid)	HFRI Fund of Funds Composite USD	12/21 - 1/90	HFN Hedge Fund Aggregate Average	12/89 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Private Equity	Cambridge PE 67% Buyout vs. 33% Venture	12/21 - 4/86	Russell 2000 TR USD	3/86 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.

*US Bonds - Dynamic Index - 1/3 Bloomberg Gbl Agg Ex USD TR Hdg USD, 1/3 FTSE Treasury Bill 3 Mon USD & 1/3 Bloomberg US Corporate High Yield TR USD

APPENDIX 3: STANDARD DEVIATION FORECASTS

Annualizing a historical monthly standard deviation by multiplying by $\sqrt{12}$ understates true annual volatility (because of monthly serial correlation). Therefore, standard deviation is derived (for all asset classes) by calculating the annual standard deviation of all historical 12-month periods.

An adjustment will be made to asset classes with shorter return streams that will attempt to normalize volatility between asset classes. The methodology is used for the following asset classes:

Asset Classes

- TIPS (March 1997)
- Emerging Markets Bonds (January 1994)
- Hedge Funds Portfolio (January 1990)
- Midstream Energy (January 1990)
- Emerging Market Equities (January 1988)
- Foreign Bonds (January 1985)
- High Yield Bonds (November 1984)

Methodology

Standard Deviation (σ) of Asset = [short-term σ of asset] * [long-term σ of comparable asset]
[short-term σ of comparable asset]

APPENDIX 4: DIFFERENTIATING ARITHMETIC AND GEOMETRIC ASSUMPTIONS

1. ARITHMETIC RETURNS VS. GEOMETRIC RETURNS

The arithmetic average annual return is always equal to or greater than a geometric (or compounded) annualized return. Since the CAPM and the Black-Litterman are single time period models, they forecast an arithmetic return (i.e., one-year). On the other hand, geometric returns are more appropriate for quantifying expected holding period returns (i.e., 10-years).

Geometric Return = [Arithmetic Return] – [(Standard Deviation)^2] / 2

The Frontier Engineer® asset allocation modeling seeks to optimize (the median expected) aggregate portfolio geometric returns (per unit risk) rather than arithmetic returns (per unit risk).

2. OPTIMIZING FOR GEOMETRIC RETURN

If two assets have the same expected return (and low correlation), they can be combined in a portfolio to generate a higher holding period return (geometric) than either two investments on a segregated basis. The following example shows how two investments with 10 percent expected arithmetic returns and 20 percent expected annual standard deviations can be combined in a portfolio to generate a higher time horizon return (geometric) than either on a segregated basis (*correlation = 0*).

Expected Arithmetic Return (2 asset portfolio) = $w_1*(AR_1) + w_2*(AR_2)$
Expected Arithmetic Return (2 asset portfolio) = 0.50*10% + 0.50*10% = **10.0%**

AR_1 = Arithmetic Return of asset 1
AR_2 = Arithmetic Return of asset 2
w_1 = weight of asset 1
w_2 = weight of asset 2

Expected Standard Deviation (2 asset portfolio) = $\sqrt{}$[(w_1^2* σ_1^2+w_2^2* σ_2^2) + (2*w_1*w_2* σ_1* σ_2*$r_{(1,2)}$)]
Expected Standard Deviation (2 asset portfolio) = $\sqrt{}$[(0.502*0.202+0.502*0.202) + (2*0.50*0.50*0.20*0.20*0.00)] = **14.1%**

w_1 = weight of asset 1
w_2 = weight of asset 2
σ_1 = standard deviation of asset 1

σ_2 = standard deviation of asset 2
$r_{(1,2)}$ =Correlation between asset 1 and 2

As previously stated, geometric return = arithmetic return – $\sigma_2/2$

- Expected Geometric Return (Asset 1 in vacuum) = 10% - 20%^{2}/2 = **8.0%**
- Expected Geometric Return (Asset 2 in vacuum) = 10% - 20%^{2}/2 = **8.0%**
- Expected Geometric Return (50/50 Portfolio) = 10% - 14.1%^{2}/2 = **9.0%**

3. **Conclusion**

Two low correlating assets with the same arithmetic return have a higher geometric return when combined within a portfolio (and rebalanced) than either has on a stand-alone basis.

APPENDIX 5: DEFINITIONS

Fiducient Advisors' Frontier Engineer® portfolio optimization requires 10-year forecasts of the following metrics:

1. **Expected Median Annual Return**[13] of each asset class
2. **Expected Annual Geometric Return**[14] of each asset class
3. **Expected Annual Standard Deviation** of each asset class
4. **Expected Correlation** among all asset classes
5. **Expected Skewness** of each asset class (corrected for asymmetry)
6. **Expected Excess Kurtosis** of each asset class (corrected for tails)

Expected 10-Year Median Annual Return Forecast

Our annual median return forecast represents the expected midpoint of all possible future 10-year returns for an asset class. These return forecasts (or expected returns) are highly unlikely to be precisely correct over the 10-year time horizon. We expect the actual 10-year return to have a 50 percent probability of being higher or lower than the forecast.

Expected 10-Year Geometric Annual Return[15] Forecast

Our geometric return forecast represents the expected midpoint of all possible future 10-year outcomes for an asset class. These geometric return forecast estimates (or expected returns) are highly unlikely to be precisely correct over the 10-year time horizon. We expect the actual 10-year return to have a 50 percent probability of being higher or lower than the forecast.

[13] Median return is used because it does not require a normal return distribution assumption.
[14] The expression of the expected geometric return forecast (from median returns) requires a normal return distribution assumption (i.e., that mean = median). This is for illustrative purposes only. The geometric return forecasts are expressed as if returns were normal (i.e., median = mean). For Frontier Engineer® optimization, asset class return distributions do not have to be normally (Gaussian) distributed.
[15] Geometric Return = Arithmetic Mean or Median Return – σ2/2.

Expected 10-Year Annual Standard Deviation Forecast

Our 10-year standard deviation forecast represents the median expected (normally distributed) variability of annual returns about the mean. The higher the standard deviation, the more uncertain the outcome.

Expected Correlation

Our 10-year forecast of asset class correlation coefficients quantifies the degree to which two assets are expected to move together. The correlation coefficient can range from -1 (perfect negative correlation) to +1 (perfect positive correlation).

Expected Skewness

Our 10-year skewness forecast quantifies the degree of expected asymmetry of the return distribution. If the left tail is more pronounced than the right tail, the asset has negative skewness. If the reverse is true, it has positive skewness. If the two are equal, it has zero skewness (normally distributed).

Expected Excess Kurtosis

Our 10-year excess kurtosis forecast of each asset class quantifies the degree of expected peakedness (or flatness) of the return distribution. If excess kurtosis is positive, the distribution is more peaked (with extreme events). If excess kurtosis is negative, the distribution is flatter (with fewer extreme events).

APPENDIX 6: FORECASTING METHODS

RETURNS:

10-year asset class return forecasts are developed using various methodologies including:

1. Risk Premium Method
2. Equity Returns Decomposition Method
3. Cyclically-Adjusted Earnings Yield (Modified CAPE) Method
4. Black-Litterman Method
5. Fixed Income Returns Decomposition Method
6. High Yield Default-Loss Method
7. Commodity Futures Returns Decomposition Method
8. Corrections for extreme asset class over/under valuation (or other disequilibrium in capital market assumptions)

1. The Risk Premium Method adds a risk premium to a referenced asset's return forecast.

   Return = (RA) +/- (RP)

   - *RA = Forecasted Return of "Reference Asset"*
   - *RP = Appropriate "Risk Premium" added to the Referenced Asset's forecast*

2. The Equity Returns Decomposition Method breaks out the components of equity returns.

   Return = [(1 + DIV) * (1 + P/E) * (1 + REG) * (1 + CPI)] - 1

   - *DIV = Dividend Yield*
   - *P/E = P/E Expansion/Contraction*
   - *REG = Real Earnings Growth = [Return on Equity] * [Earnings Retention Ratio]*
   - *CPI = Inflation (Consumer Price Index)*

   The following is the Modified Equity Returns Decomposition Method for REITs and MLPs:

   Return = [(DY) +/- (RPR) +/- (YLD C) +/- (CPI)]

   - *DY = Dividend/Distribution Yield*
   - *RPR = Real price return excluding yield compression*
   - *YLD C = Price return resulting from yield compression*
   - *CPI = Inflation (Consumer Price Index)*

3. The Cyclically-Adjusted Earnings Yield Method incorporates a smoothing technique to earnings by dividing the average real earnings by the current (real) Index price. The result is a cyclically-adjusted real earnings yield of an individual equity asset class, to which forward-looking inflation expectations are applied to garner an unbiased nominal expected return.

   Return = {[1 + (EARNINGS/PRICE)] * (1 + CPI)} – 1

   - *EARNINGS = 10-year average real earnings of Index*
   - *PRICE = Current real price of Index*
   - *CPI = Inflation (Consumer Price Index)*

4. The Black-Litterman Method uses reverse mean-variance optimization to arrive at unbiased asset class return forecasts by inputting correlation, volatility and market capitalization weights, then solving for (equilibrium) expected returns (or risk premiums).

   - *Market capitalization weights for each asset*
   - *Correlation between the assets*

- *Volatility (or standard deviation) of assets*
- *Risk free rate*
- *The risk aversion coefficient of the reference market portfolio*

5. The Fixed Income Returns Decomposition Method forecasts the components of fixed income Index returns (Yield Δ and Price Δ) and combines them for a total return forecast.

   Returns = (YLD) +/- (CUR) +/- (PE) +/- (CRED)

   - *YLD = Bond Index YTM*
   - *CUR = Expected currency effect derived from interest rate parity*
   - *PE = Bond Index "Price Effect"*
   - *CRED = Credit spread premium*

6. The High Yield Default-Loss Method forecasts fixed income returns by regressing default rates, recovery rates and credit spreads to generate an expected loss rate, then combines the Index yield to solve for a total return forecast.
   - *Bond Index Yield*
   - *U.S. Treasury Yield*
   - *Historical Default Rates*
   - *Historical Recovery Rates*

7. The Commodity Futures Index Returns Decomposition Method forecasts and aggregates the components of a commodity futures Index's total return.

   Returns = (SPOT) +/- (ROLL) +/- (COLLATERAL)

   - *SPOT = Spot price return, which is assumed to keep pace with inflation as measured by CPI forecast*
   - *ROLL = Roll return expected to be earned from holding a futures contract to (near) maturity*
   - *COLLATERAL = Collateral return, which is earned by the return of the asset used to collateralize futures/swaps (i.e., T-Bills)*

STANDARD DEVIATION:
Standard deviation is derived by calculating the rolling annual standard deviation of all historical 12-month periods. For asset classes with short track records, adjustments to historical standard deviations may be made where appropriate. Such adjustments may be made using the following methodology:

Standard Deviation (σ) of Asset = $\dfrac{\textbf{[short-term σ of asset] * [long-term σ of comparable asset]}}{\textbf{[short-term σ of comparable asset]}}$

CORRELATION:

For all but two asset classes, correlation is calculated using long-term historical monthly data over common time periods. Cash is assumed to have a zero correlation to all asset classes. Private Equity's correlation is calculated using long-term historical (calendar year) annual data over common time periods.

SKEWNESS AND KURTOSIS:

We observe (monthly) skewness and excess kurtosis for each asset class over a uniform period of time (1997 to present). Failing to observe skewness and excess kurtosis over a uniform period of time for each asset class, especially during periods of stress (i.e., no emerging markets equity data for October 1987), will likely understate the impact of extreme events for asset classes with shorter return streams relative to those with longer return streams. Adjustments may be made to skewness and excess kurtosis from historical measures if warranted.

Fiducient Advisors reserves the right to make corrections for over or undervaluation of asset classes (or what we believe is capital markets disequilibrium) when developing forecasts. An expectation of mean-reversion in relative valuations (convergence of relationships) may be used when developing 10-year capital market assumptions.

Indices for Past Return & Risk Metrics

Indices used to generate historical risk and return metrics	Most Recent Index	Index Dates	Linked Index 1	Index Dates	Linked Index 2	Index Dates	Linked Index 2	Index Dates
Cash	FTSE Treasury Bill 3 Mon USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
US Bond	Bloomberg US Agg Bond TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
US Bonds - Dynamic	*Custom Blend of Indices	12/21 - 2/90	Bloomberg US Agg Bond TR USD	1/90 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
HY Bond	Bloomberg US Corporate High Yield TR USD	12/21 - 7/83	Bloomberg US Agg Bond TR USD	6/83 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Global Bonds	Bloomberg Global Aggregate TR Hdg USD	12/21 - 2/90	Bloomberg US Agg Bond TR USD	1/90 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
US Equity (LC)	S&P 500 TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
US Equity (SC)	Russell 2000 TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Int'l Dev. Equity	MSCI EAFE GR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
EM Equity	MSCI EM GR USD	12/21 - 1/88	MSCI EAFE GR USD	12/87 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Real Estate	Wilshire US RESI TR USD	12/21 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Broad Real Assets	S&P Real Asset TR USD	12/21 - 5/05	*Custom Real Assets Index	4/05 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Marketable Alternatives	HFRI Fund of Funds Composite USD	12/21 - 1/90	HFN Hedge Fund Aggregate Average	12/89 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Private Equity	Cambridge PE 67% Buyout vs. 33% Venture	12/21 - 4/86	Russell 2000 TR USD	3/86 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.

*US Bonds - Dynamic Index - 1/3 Bloomberg Gbl Agg Ex USD TR Hdg USD, 1/3 FTSE Treasury Bill 3 Mon USD & 1/3 Bloomberg US Corporate High Yield TR USD

Note: Private Equity Index is frequently 3-6 months behind the other indices. For historical return calculation purposes, it is given 0% returns during the most recent period where gaps may exist.

Disclosures

The historical performance information derived from the Frontier Engineer and used or presented in charts, tables, or graphs represent simulated historical performance, which has been derived by retroactively applying an asset allocation modeling process in its most recently developed form with its most recently derived ten-year (forward-looking) capital market assumptions. Such historical return simulations (or back testing) was performed by simulating the combination of actual index returns for the historical period with a buy and hold strategy effective January 1, 1988 through the most recently available month-end date with simulated rebalancing occurring every month-end (with the reinvestment of dividends and capital gains from each index).

Back tested performance is hypothetical and does not reflect actual trades or actual client performance. As with all models, there are inherent limitations which are derived from the retroactive application developed with the benefit of hindsight, including the risk that certain factors such as material economic and market conditions could have contributed to materially different (either higher or lower) performance results than those depicted, or that certain material factors may have been included or excluded from consideration. As such, actual results during the applicable back tested period would have been different than those depicted.

The asset allocation modeling process currently used was initially developed in 2002, and was not offered as a strategy prior to that time. The output of a forward-looking model (or process) is a representation of allocation percentages among specific asset classes. Clients cannot invest directly in a target allocation, but rather, in underlying securities within designated asset classes. Advisor may change its models from time to time, and regularly updates its model as additional capital market assumption information becomes available or to increase or decrease relative weightings or emphasis on certain factors. Consequently, the Advisor may choose to deviate from a stated model over time as the model itself is revised, which could have a materially positive or negative impact on performance.

During the period represented, numerous modelling changes were made, including the regular changes in (ten-year and/or twenty-year basis) forward-looking expected returns, expected volatilities, expected non-normal return distribution assumptions, as well as tracking-error assumptions and risk budgets. Furthermore, such assumptions can be modified client-by-client depending on certain preferences, priorities, constraints or unique considerations applicable to each client.

Other economic and market factors may have impacted decision-making when using the model to manage client funds, including the list of approved asset classes by a client or client type as well as any client-directed or Advisor implemented constraints.

All investments bear the risk of loss, including the loss of principal. Past performance, actual or hypothetical, is no guarantee of future results.

The returns displayed on the preceding pages are gross of fees. Actual performance would be reduced by investment advisory fees and other expenses that may be incurred in the management of the client's portfolio. The collection of fees produces a compounding effect on the total rate of return net of management fees. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) quarterly fee assessment, (b) $1,000,000 investment, (c) portfolio return of 8% a year, and (d) 0.50% annual investment advisory fee would be $5,228 in the first year, and cumulative effects of $30,342 over five years and $73,826 over ten years. Additional information on advisory fees charged by Fiducient Advisors are described in Part 2 of the Form ADV.

Disclosures

INDEX DEFINITIONS

FTSE Treasury Bill 3 Month measures return equivalents of yield averages and are not marked to market. It is an average of the last three three-month Treasury bill month-end rates.
Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index consists of Inflation-Protection securities issued by the U.S. Treasury.
Bloomberg Barclays Muni 5 Year Index is the 5 year (4-6) component of the Municipal Bond index.
Bloomberg Barclays High Yield Municipal Bond Index covers the universe of fixed rate, non-investment grade debt.
Bloomberg Barclays U.S. Aggregate Index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.
FTSE World Government Bond Index (WGBI) (Unhedged) provides a broad benchmark for the global sovereign fixed income market by measuring the performance of fixed-rate, local currency, investment-grade sovereign debt from over 20 countries,
FTSE World Government Bond Index (WGBI) (Hedged) is designed to represent the FTSE WGBI without the impact of local currency exchange rate fluctuations.
Bloomberg Barclays US Corporate High Yield TR USD covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
JP Morgan Government Bond Index-Emerging Market Index (GBI-EMI) is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
JPMorgan EMBI Global Diversified is an unmanaged, market-capitalization weighted, total-return index tracking the traded market for U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.
MSCI ACWI is designed to represent performance of the full opportunity set of large- and mid-cap stocks across multiple developed and emerging markets, including cross-market tax incentives.
The S&P 500 is a capitalization-weighted index designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
Russell 3000 is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
Russell Mid Cap measures the performance of the 800 smallest companies in the Russell 1000 Index.
Russell 2000 consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
MSCI EAFE is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. The index covers approximately 85% of the free float-adjusted market capitalization in each country.
MSCI Emerging Markets captures large and mid-cap representation across Emerging Markets countries. The index covers approximately 85% of the free-float adjusted market capitalization in each country
The Wilshire US Real Estate Securities Index (Wilshire US RESI) is comprised of publicly-traded real estate equity securities and designed to offer a market-based index that is more reflective of real estate held by pension funds.
Alerian MLP Index is a float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
Bloomberg Commodity Index (BCI) is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
Treasury Inflation-Protected Securities (TIPS) are Treasury bonds that are indexed to inflation to protect investors from the negative effects of rising prices. The principal value of TIPS rises as inflation rises.
HFRI Fund of Funds Composite is an equal-weighted index consisting of over 800 constituent hedge funds, including both domestic and offshore funds.
Cambridge Associates U.S. Private Equity Index (67% Buyout vs. 33% Venture) is based on data compiled from more than 1,200 institutional-quality buyout, growth equity, private equity energy, and mezzanine funds formed between 1986 and 2015.
HFN Hedge Fund Aggregate Average is an equal weighted average of all hedge funds and CTA/managed futures products reporting to the HFN Database. Constituents are aggregated from each of the HFN Strategy Specific Indices.
Goldman Sachs Commodity Index (GSCI) is a broadly diversified, unleveraged, long-only composite index of commodities that measures the performance of the commodity market.