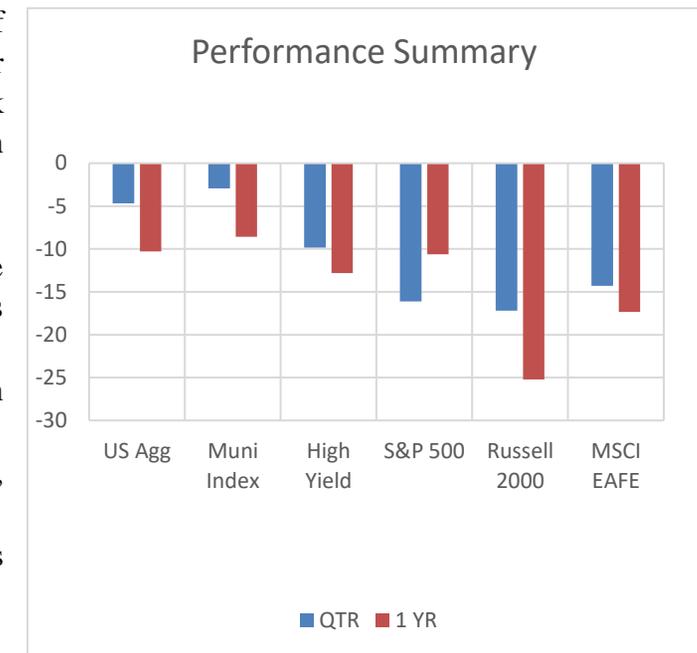


Global stocks and bonds dropped in June and posted another quarterly loss. A backdrop of surging inflation, central bank tightening, higher interest rates, record-low consumer confidence and slowing economic growth pressured financial markets. Most global stock indices had double-digit declines for the quarter, while bond losses varied from low to high single digits depending on the maturity and type of bond.

- The S&P 500 fell 16% for the quarter and slipped into bear market territory for the year. The first six months of the year was the worst performance in over 50 years for the S&P 500.
- US inflation ended the quarter at 8.6% (year over year), a 41-year-high. European inflation rose to a record 8.6%, while UK inflation hit a 40-year high of 9.1%.
- Soaring inflation prompted the Fed to raise rates 50 bps in May and 75 bps in June, the first 75-bps hike in 28 years.
- US Treasury yields rose in June for the quarter overall, leading to widespread losses for bonds. Core bonds were down 4.7% for the quarter.



In this quarter's commentary we focus on: Understanding Bear Markets; and Lessons Learned From Past Bear Markets.

Understanding Bear Markets

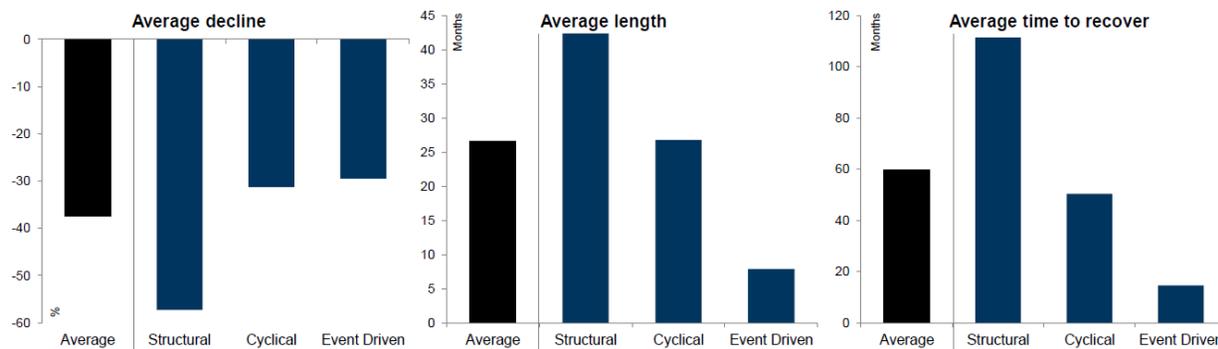
There are different types of bear markets, with each having different characteristics and triggers. In a recent study, Goldman Sachs defined bear markets in three different categories. Below we highlight the types of bear markets and findings from their research:

- **Structural bear markets-** triggered by structural imbalances and financial bubbles. Very often there is a 'price' shock such as deflation that follows.
- **Cyclical bear markets-** typically a function of rising interest rates, impending recessions, and a fall in corporate profits. This type of bear market is a function of the economic cycle.
- **Event-driven bear markets-** triggered by a one-off 'shock' that does not lead to a domestic recession (such as a war or a technical market dislocation).

The type of bear market matters and can have a significant impact on how far stock prices drop, the length of the sell-off, and how long it takes for stock prices to recover. The chart below shows the average cyclical and event-driven bear markets generally tend to fall around 30%, although differ in length and time to recover. Cyclical bear markets last an average of two years and take around five years to fully rebound back to their starting point. The event-driven bear markets tend to last around six months and usually recover within a year. Structural bear markets are by far

the worst, with the average decline in stock prices around 60% and usually play out over three years or more and can take up to a decade to fully recover.

Exhibit 5: US bear markets & recoveries since the 1800s



Source: Goldman Sachs Global Investment Research

Often the type of bear market is obvious. For example, the US housing bubble and the global financial crisis of 2008 was a typical structural bear market in terms of how long the sell off lasted, how much stocks sold off, and how much time it took to recover. While the pandemic-led bear market of 2020 had all the characteristics of a classic event-driven bear market, it was triggered by the virus, was short in duration but led to a sharp selloff in stocks and markets recovered quickly. Based on the findings in the study, the current bear market has elements of all three types, but most closely resembles a cyclical bear market. The implication being there *may* be further challenges ahead for the markets, but it should not be of the magnitude of a structural bear market, and the worst of the sell-off may be behind us. The chart below highlights the characteristics demonstrated by the different types of bear markets.

Exhibit 6: Characteristics of different types of bear markets

	Pre Bear	Cyclical	Event	Structural	Current
Rising rates		✓	Maybe	✓	✓
Exogenous shock		Maybe	✓	Maybe	✓
'Speculative Rise' in equity prices		✗	✗	✓	Selective
Economic Imbalances		✗	✗	✓	✓
Rising productivity		Maybe	-	✓	✗
Unusual strength in economy		✗	✗	✓	✗
'New Era' belief		✗	✗	✓	✗*
	Post Peak	Cyclical	Event	Structural	Current
Economic recession/downturn		Usually	Maybe	Usually	Not yet
Profits collapse		✓	Maybe	✓	Not yet
Interest rates fall & trigger rise in equity prices/fall in bonds		✓	Usually	✗	May 2023**
Price shock		✗	✗	✓	✓

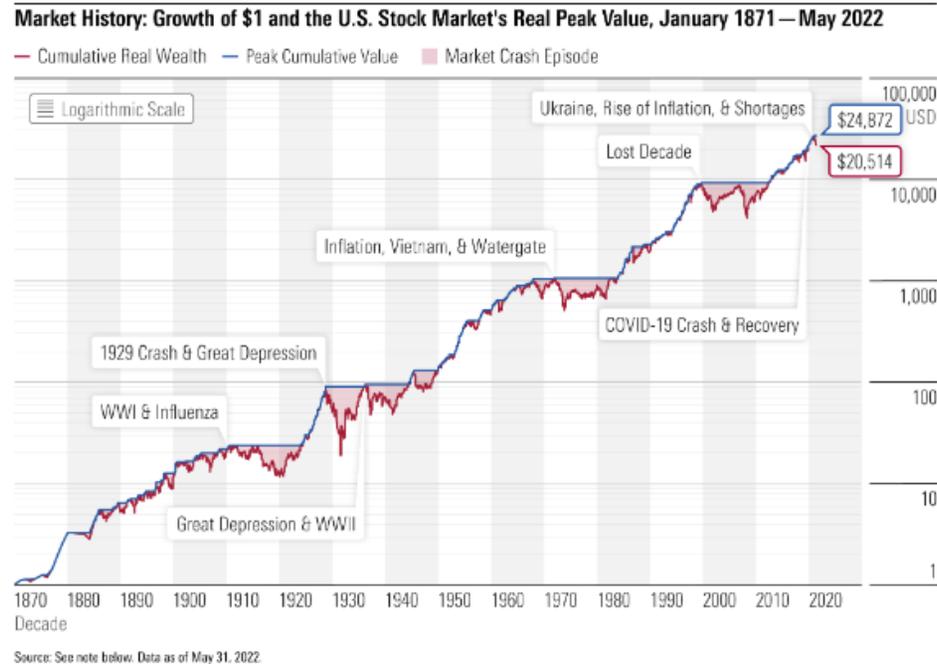
* Some pockets of the market like Crypto and Non-Profitable tech companies have shown signs of 'New Era' belief, but not the broader market

** Current market pricing of Fed Funds Future

Source: Goldman Sachs Global Investment Research

Lessons Learned from Bear Markets

Bear markets are not uncommon: Since 1903 there have been 20 bear markets in the US, which averages about 1 every five years. In each case, the markets eventually recovered and went on to new heights. The chart below is a simple reminder that the long-term trend for stocks has been higher and investors that were able to stay invested during these bear markets were well rewarded.



Not all bear Markets look the same: As we discussed above, there are different types of bear markets and they can vary significantly in their severity and length of time. The table at the end of this commentary lists all recorded bear markets since the 1800s and shows how much each has varied; all bear markets are clearly not the same. This variance in severity, length of the decline, and time to recovery are why it is so difficult to try and market time bear markets. Investors may get some of the elements correct, but to get all of them correctly is very difficult. And to attempt to get them right over multiple bear markets is near impossible. More on this in the next lesson.

The time to prepare for a bear market is before it starts: The best defense against bear markets is a disciplined investment approach, including the following:

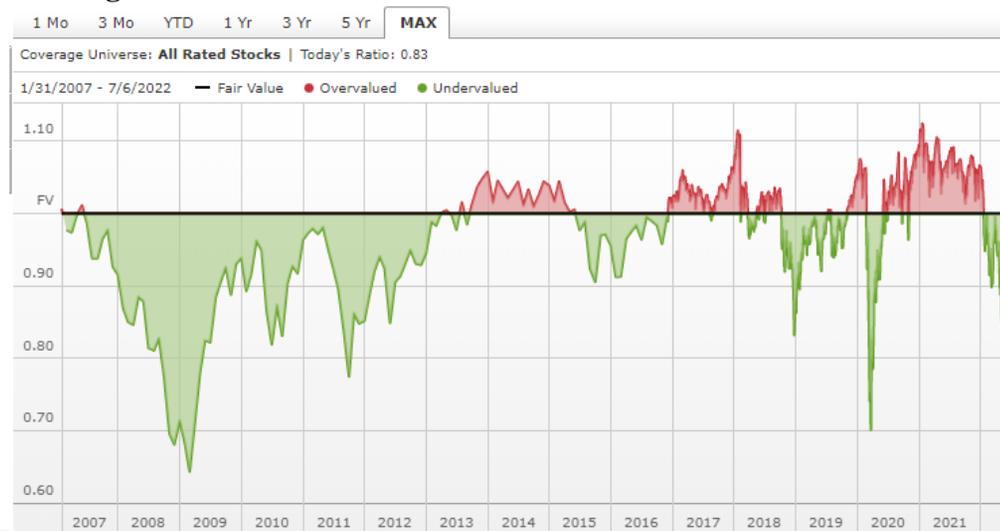
- **Keep your portfolio diversified-** a well diversified portfolio will keep you from being concentrated in assets that are getting hit the hardest (e.g. unprofitable tech, aggressive growth, etc.). It may also give you exposure to asset classes that are bucking the downtrend (e.g. commodities, real return, etc.).

- **Avoid the temptation to ‘market time’ bear markets-** it’s fine to reposition portfolios, raise some cash and become more defensive in your portfolio allocation to ride out the bear market, but resist the temptation to go completely in or out of the market. You may get lucky on one of the decisions, but it’s near impossible to consistently execute this type of market timing strategy. We know of numerous cases of investors getting out of the market completely, thinking they made a great decision, but then never got back in and missed the huge recovery. Do this a few times and it’s disastrous to your portfolio’s long-term results.
- **Have a spending strategy in place-** for retirees and investors that are withdrawing from their portfolios, make sure to have a spending strategy in place. Our recommendation is to have at least one to two years of your spending needs invested in high quality safety assets like cash and short-term bonds. Having safety assets in place ahead of time will give you the confidence that you can meet your spending needs and may keep you from panic selling at the bottom of a bear market.
- **Rebalance your portfolio-** rebalancing your portfolio simply means that when an asset class or position gets too large in your portfolio it should be trimmed back to its long term target, and conversely when an asset gets too small in your portfolio you add to it to bring it back to target. This simple but disciplined strategy can add significant value to your portfolio over the long term.

You make most of your money in a bear market; you just don’t realize it at the time: this quote is attributed to a famed value investor, Shelby Davis, contains a lot of wisdom and is a principal we’ve abided by for decades. It’s counterintuitive but the money that gets invested during a bear market often has the highest rate of return after several years. The premise is simple, money gets invested at a significant discount during bear markets, meaning valuations are much better than before the bear market and so are future returns.

Below is a fair value chart for the US stock market from the Morningstar research team. We’ve followed this fair value model for years and have found it to be a reliable indicator of opportunity in the stock market. No one can predict the ultimate bottom for the stock market, however our experience has taught us that when markets have reached this level of discount from fair value in the past, investors have been well rewarded.

Morningstar US Stock Fair Value Model:



History of All Bear Markets Since the 1800s:

Exhibit 4: US Bear markets & Recoveries since the 1800s

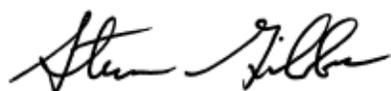
S = Structural, C= Cyclical, E = Event-driven

Type					Time to recover back to previous level		Volatility	
Type	Start	End	Length (m)	Decline (%)	Nominal (m)	Real (m)	Peak to trough	Trough to recovery
S	May-1835	Mar-1842	82	-56	259	-	13	17
C	Aug-1847	Nov-1848	15	-23	42	-	8	9
C	Dec-1852	Oct-1857	58	-65	67	-	19	25
C	Mar-1858	Jul-1859	16	-23	11	-	21	15
C	Oct-1860	Jul-1861	9	-32	15	-	31	17
C	Apr-1864	Apr-1865	12	-26	48	-	14	8
S	Feb-1873	Jun-1877	52	-47	32	11	11	11
C	Jun-1881	Jan-1885	43	-36	191	17	9	11
C	May-1887	Aug-1893	75	-31	65	49	10	12
C	Sep-1902	Oct-1903	13	-29	17	22	9	10
E	Sep-1906	Nov-1907	14	-38	21	250	15	11
C	Dec-1909	Dec-1914	60	-29	121	159	9	12
C	Nov-1916	Dec-1917	13	-33	85	116	12	12
C	Jul-1919	Aug-1921	25	-32	39	14	15	10
S	Sep-1929	Jun-1932	33	-85	266	284	30	20
S	Mar-1937	Apr-1942	62	-59	49	151	20	10
C	May-1946	Mar-1948	21	-28	27	73	14	12
E	Aug-1956	Oct-1957	15	-22	11	13	11	11
E	Dec-1961	Jun-1962	6	-28	14	18	17	10
E	Feb-1966	Oct-1966	8	-22	7	24	12	10
C	Nov-1968	May-1970	18	-36	21	204	11	12
S	Jan-1973	Oct-1974	21	-48	69	148	18	13
C	Nov-1980	Aug-1982	20	-27	3	8	14	24
E	Aug-1987	Dec-1987	3.3	-34	20	20	53	16
C	Jul-1990	Oct-1990	3	-20	4	4	20	17
S	Mar-2000	Oct-2002	30	-49	56	56	22	13
S	Oct-2007	Mar-2009	17	-57	49	49	37	19
E	Feb-2020	Mar-2020	1	-34	5	5	80	29
C	Jan-2022	Jun-2022	5	-23			25	
Average			26	-37	58	77	20	14
Median			17	-32	35	36	15	12
Average Structural			42	-57	111	116	22	15
Average Cyclical			25	-31	50	67	15	14
Average Event Driven			8	-29	13	55	32	15

Source: Datastream, Robert Shiller, Goldman Sachs Global Investment Research

If you have any questions about your portfolio or investment strategy don't hesitate to give us a call. Best regards,

Steve Giacobbe, CFA, CFP®



Asset Class		* ↔ Neutral weight ↓ Underweight ↑ Overweight
Equities	View*	Comments
U.S. Large Cap	↓	The valuation on large-cap stocks has improved. We would look to move back to a neutral weighting on further evidence that inflation has peaked, a recession gets priced in and earnings estimates decline. The outlook for some growth stocks has improved and we would selectively add positions when opportunities arise, recognizing we can't predict the market bottom.
U.S. Small/Mid Cap	↔	We are neutral on small/mid-cap stocks and would upgrade and add positions on further sell offs. Longer-term valuations are attractive and they should outperform large-cap stocks. Relative performance excels when the economy bottoms.
International Developed	↔	Valuations are attractive relative to U.S. stocks, and they should outperform on a multi-year time frame. In the short-term a strong \$ and recession fears are weighing on foreign stocks.
Emerging Markets	↔	Valuations are attractive for the long term. Emerging markets tend to be volatile and are always susceptible to further selloffs, but over a multi year time-frame they should outperform. We may upgrade and add to positions on further weakness.
Fixed Income		
Investment Grade	↓	Interest rates rose in the quarter as prices sold off. We recommend keeping some exposure for disciplined risk management and diversification purposes. If inflation falls and a recession happens, the relative performance of bonds will improve.
High-Yield Bonds	↔	High-yield bonds sold off sharply in the quarter and valuations have improved. We will actively look to upgrade and add positions on further sell offs and/or we become convinced the economy is bottoming out. Similar to small-cap stocks, high yield bonds usually perform best early in the economic cycle.
Municipal Bonds	↑	We upgraded municipals and think they are attractive relative to Treasury bonds, especially for high tax bracket investors.
TIPS	↔	TIPs are a hedge for higher inflation, we would hold positions in tax-deferred accounts as a long-term hedge against inflation hedge.
Floating-Rate Loans	↔	Similar to HY bonds, FRLs are likely to outperform core bonds in a strong economy. However, in a weak economic environment, there is downside risk. They will become less attractive when the Fed stops raising interest rates.
Emerging Markets	↔	This asset class can be volatile but also provides opportunity. Interest rates in many EM markets are higher than in the U.S.; we get some exposure thru our core bond managers. The recent sell off makes them attractive long-term.
Alternatives		
Absolute-Return/Alternatives	↑	We like this asset class and keep our rating at overweight in 2022. We like alternative funds as a way to hedge volatility, provide real returns, and improve the risk vs reward in portfolios. We favor simple and low-cost strategies like hedged equity, real return, clean energy transition and global macro. Over a full market cycle they should add value to portfolios.
REITs	↔	We are neutral on REITs. There are diversification benefits from owning REITs, however, we recognize REITs may be structurally impaired in the future as a result of secular trends. Rising rates may also be a headwind to REIT performance.
Commodities/Gold	↔	We view exposure in this area as an effective way for long-term investors to diversify their portfolios and hedge against higher inflation. These positions can be volatile in performance but may provide some relief in difficult markets.

U.S. Stocks**Market Performance, Second Quarter 2022**

Index	Q2 2022	1 YR
S&P 500	(16.10%)	(10.62%)
Russell 1000	(16.67%)	(13.04%)
Russell 1000 Value	(12.21%)	(6.82%)
Russell 1000 Growth	(20.92%)	(18.77%)
Russell Midcap	(16.85%)	(17.30%)
Russell 2000	(17.20%)	(25.20%)

Source: Morningstar

- Stocks dropped across the board in the second quarter. All major indices were down double digits.
- Growth stocks were down the most and were impacted by big losses in speculative and unprofitable technology stocks.
- Small-cap stocks were down sharply and may continue to be pressured in the short-term as recession risks get priced in. Long-term the valuation for small-cap stocks is starting to look very attractive.

International Stocks**Market Performance, Second Quarter 2022**

Index	Q2 2022	1 YR
MSCI EAFE	(14.29%)	(17.33%)
MCSI EME	(11.34%)	(25.00%)
MSCI BRIC	(4.22%)	(29.90%)

Source: Morningstar

- Foreign stocks held up better than US stocks but were still down sharply for the quarter. Strength in the US dollar has been a headwind, however longer-term valuations for foreign stocks are starting to look very attractive.
- Emerging market stocks held up better than foreign developed stocks but still suffered large losses for the quarter. Over the next five years we expect emerging market stocks to outperform and would add to positions on further selloffs.

Fixed Income**Market Performance, Second Quarter 2022**

Index	Q2 2022	1 YR
Vanguard Total Bond Index	(4.74%)	(10.49%)
Bloomberg Muni Bond	(2.94%)	(8.57%)
Bloomberg US High-Yield	(9.83%)	(12.81%)
JPM GBI- EM Global Diversified	(8.63%)	(19.28%)
iShares TIPS Bond	(3.11%)	(5.33%)
BofA Merrill Lynch 3-month Treasury Note	0.01%	0.01%

Source: Morningstar

- Core bonds failed to provide much risk protection in the quarter and were down close to 5%. Interest rates have increased which should improve forward looking returns, however they are still likely to be modest at best.
- High-yield bonds were down sharply for the quarter as recession risk has started to get priced in. Valuations have improved for high yield bonds and we are looking to upgrade and add positions on further sell-offs.

Alternative Assets**Market Performance, Second Quarter 2022**

Strategies	Q2 2022	1 YR
AQR Diversified Arbitrage	(2.77%)	(4.73%)
BNY Mellon Global Real Return	(4.82%)	0.50%
JPMorgan Hedged Equity	(5.33%)	(5.79%)
PIMCO All Asset	(10.19%)	(9.85%)
Vanguard REIT	(15.47%)	(8.07%)

Source: Morningstar

- Alternatives make a lot of sense in this environment of low-interest rates and rising inflation. We are selectively bullish on alternatives and believe they can add substantial value to portfolios over a full market cycle.
- We like alternative assets as a strategic way to reduce risk and increase absolute returns in portfolios. We expect alternatives to significantly outperform bonds over the full market cycle. We view real return, commodity, precious metal, and alternative strategies in general as an effective way to hedge against higher inflation.

Appendix:

Benchmark Definitions

U.S. Equity		Description
S&P 500	Index	The index includes 500 leading US companies and captures approximately 80% coverage of available market capitalization.
Russell 1000	Index	The Russell 1000 Index measures the performance of the large-cap segment of the U.S. equity universe and includes approximately 1000 of the largest securities. The Russell 1000 represents approximately 92% of the U.S. market.
Russell 1000 Value	Index	The Russell 1000 Value Index measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values.
Russell 1000 Growth	Index	The Russell 1000 Growth Index measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.
Russell Midcap	Index	The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. It includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership.
Russell 2000	Index	The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. It includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership.
International Equity		Description
MSCI EAFE	Index	The EAFE (Europe, Australasia, Far East) index consists of 21 developed market country indexes, excluding the US & Canada. It is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets.
MCSI EME	Index	The index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets and includes 23 emerging market countries in the index.
MSCI BRIC	Index	The index is a free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of the following four emerging market country indexes: Brazil, Russia, India, and China.

Fixed Income		Description
Vanguard Total Bond Index	Index Fund	This index measures a wide spectrum of public, investment-grade, taxable, fixed income securities in the United States—including government, corporate, and international dollar-denominated bonds, as well as mortgage-backed and asset-backed securities, all with maturities of more than 1 year.
Barclays Aggregate Bond	Index	The U.S. Aggregate Index covers the USD-denominated, investment-grade, fixed-rate, taxable bond market of SEC-registered securities. The index includes bonds from the Treasury, Government-Related, Corporate, MBS (agency fixed-rate and hybrid ARM pass-through bonds), ABS, and CMBS sectors.
Barclays Muni Bond	Index	The U.S. Municipal Indices cover the USD-denominated long-term tax-exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds.
Barclays US Corp High-Yield	Index	The index covers the USD-denominated, non-investment grade, fixed-rate, taxable corporate bond market and excludes Emerging Markets debt.
JPM GBI- EM Global Divers	Index	The index tracks returns for actively traded external debt instruments in emerging markets. Included in the index are US-dollar denominated Brady bonds, Eurobonds, and traded loans issued by sovereign entities.
iShares TIPS Bond	ETF	The iShares TIPS Bond ETF seeks to track the investment results of an index composed of inflation-protected U.S. Treasury bonds.
BofA Merrill Lynch 3-month Treasury Note	Index	The 3-month US Treasury Note Index is comprised of a single issue purchased at the beginning of the month and held for a full month. At the end of the month, that issue is sold and rolled into a newly selected issue.
Alternative Assets		Description
PIMCO All Asset All Authority	Mutual Fund	The investment seeks maximum real return, consistent with preservation of real capital and prudent investment management. The primary benchmark for the fund is the S&P 500, with a secondary objective of Consumer Price Index +650 basis points.
AQR Diversified Arbitrage	Mutual Fund	The investment seeks long-term absolute (positive) returns. It invests in a diversified portfolio of instruments, including equities, convertible securities, debt securities, loans, warrants, options, other types of derivative instruments.
JPMorgan Hedged Equity	Mutual Fund	The investment seeks to capture the majority of the returns associated with equity market investments while exposing investors to less risk than other equity investments. The fund invests in a broadly diversified portfolio of common stocks, while also selling index call options and purchasing index put options.

Alternative Assets		Description
Vanguard REIT	ETF	The investment seeks to provide a high level of income and moderate long-term capital appreciation by tracking the performance of a benchmark index that measures the performance of publicly traded equity REITs.
BNY Mellon Global Real Return	Mutual Fund	The fund allocates its investments among global equities, bonds, and cash; and generally, to a lesser extent, other asset classes, including real estate, commodities, currencies, and alternative or non-traditional asset classes and strategies, primarily those accessed through derivative instruments.