Stembrook Asset Management

Stembrook Market Review — First Quarter 2019

Easing concerns regarding global trade tensions along with indications from the Federal Reserve that they would pause interest rate hikes helped whet the appetite of stock and bond investors alike, pushing prices higher in the first quarter of 2019. After a volatile end to 2018, equity prices soared back in the first quarter, global stocks gained over 12%.[1] In addition, bond prices continued to rally, up nearly 3%, as interest rates have continued to decline.[2] These strong asset returns coincide with the U.S. economy nearing its longest expansion in history, currently in its 118^{th} month.[3] Although the economic expansion has been long, it has not been particularly strong compared to past expansions.

The decline in interest rates that began in the last month of 2018 continued into 2019 after a period of Federal Reserve policy tightening (see Interest Has Become Interesting—November 2018). Interest rates remain well above their cycle lows of 2016 (see center chart below). Short-term rates have increased on a much greater scale than intermediate and long-term interest rates. Investors holding cash can now earn a yield near or above inflation for the first time in years. We have taken advantage of this for clients holding cash and continue to favor shorter duration bonds given their increased yields and lower sensitivity to rising interest rates. A flattening or inversion of the yield curve, which we witnessed at points during the first and fourth quarters, can be an indicator of a future recession. But for the time being, economic growth remains slow but stable.

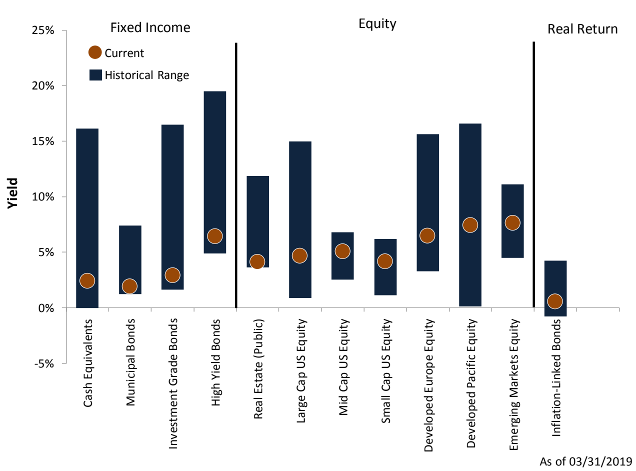
Our proprietary models forecast long-term, pre-tax returns ranging from 1% to 3% for fixed income-like asset classes and 4% to 11% for equity-like asset classes (see table to the right). Equity valuations have rebounded, causing us to lower our future return expectations. Bonds have also become less attractive as yields have fallen. Despite these changes, we still favor equities over fixed income investments. Our more detailed observations and current portfolio positioning are outlined in the following comments.

Expected Market Returns and Risks
7-10 Year Horizon

		Pre-Tax Annualized Return	After-Tax Annualized Return	Volatility[1]
	Inflation	1.8%	1.8%	3.1%
Fixed Income	Cash Equivalents	1.2%	0.7%	3.5%
Fixed Income	Municipal Bonds	1.8%	1.8%	4.4%
Fixed Income	Inflation-Linked Bonds	2.3%	1.3%	5.6%
Fixed Income	Investment Grade Bonds	2.7%	1.5%	6.7%
Fixed Income	High Yield Bonds	3.3%	1.6%	13.2%
Equity	Real Estate (Public)	4.2%	2.3%	17.5%
Equity	Broad Market US Equity	8.9%	7.0%	16.9%
Equity	Developed Non-US Equity	9.0%	6.9%	21.4%
Equity	Emerging Markets Equity	10.8%	7.1%	29.6%

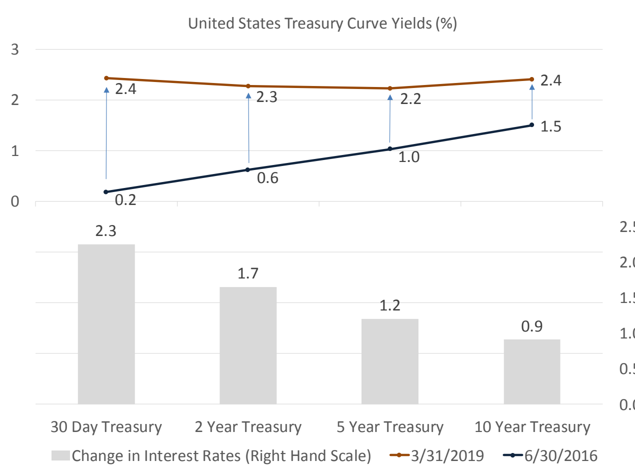
A sampling of return expectations produced by our models. Expected returns are projections and are not guaranteed.

Yields Across Asset Classes



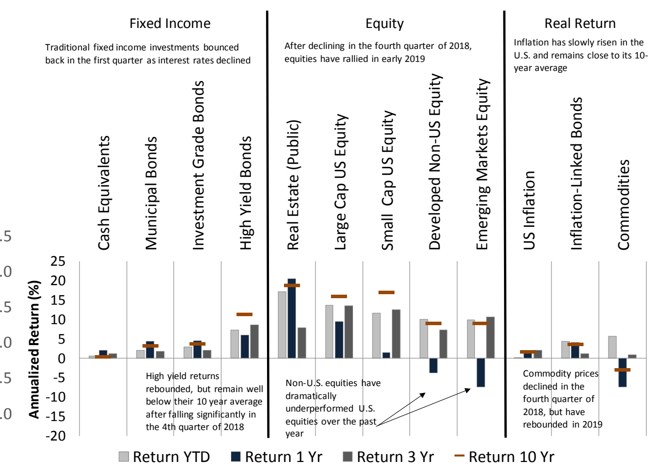
Yields are an indicator of future returns. Orange dots show current yields, blue bars show historical ranges. Yields are generally low versus their historical range.

Rising Interest Rates



Interest rates have risen significantly since bottoming in the second half of 2016. Short-term rates have increased more than long-term rates over this period.

Historical Market Returns



Historical market returns as of March 31^{st}, 2019. Note that looking backwards at recent returns is not a reliable method for predicting future returns.

Global Asset Class Returns

Asset Class Name	Last 10 Years	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Small Cap US Equity	Small Cap 11.2%	EM Eq 79.0%	Real Estate 28.6%	Infl-Indx Bnd 14.0%	EM Eq 18.2%	Small Cap 41.3%	Real Estate 31.8%	Real Estate 2.8%	Small Cap 26.5%	EM Eq 37.3%	CPI 2.0%
Large Cap US Equity	S&P 500 10.8%	HY Bnd 56.3%	Small Cap 26.3%	Real Estate 9.2%	Real Estate 17.6%	S&P 500 32.4%	S&P 500 13.7%	S&P 500 1.4%	HY Bnd 17.5%	Intl Eq 25.0%	Inv Grd Bnd 0.0%
Real Estate (Public)	Real Estate 10.5%	Intl Eq 31.8%	EM Eq 19.2%	Inv Grd Bnd 7.8%	Intl Eq 17.3%	Intl Eq 22.8%	Inv Grd Bnd 6.0%	CPI 0.8%	S&P 500 12.0%	S&P 500 21.8%	Infl-Indx Bnd -1.8%
High Yield Bonds	HY Bnd 9.0%	Real Estate 28.6%	Commod 16.8%	HY Bnd 4.5%	Small Cap 16.3%	HY Bnd 7.4%	Small Cap 5.8%	Inv Grd Bnd 0.5%	Commod 11.4%	Small Cap 13.2%	HY Bnd -2.1%
Emerging Markets Equity	EM Eq 6.7%	S&P 500 26.5%	HY Bnd 15.2%	CPI 3.0%	S&P 500 16.0%	Real Estate 1.9%	Infl-Indx Bnd 4.6%	Intl Eq -0.2%	EM Eq 11.3%	Real Estate 8.7%	Real Estate -4.0%
Developed Non-US Equity	Intl Eq 5.4%	Small Cap 25.6%	S&P 500 15.1%	S&P 500 2.1%	HY Bnd 15.4%	CPI 1.5%	HY Bnd 2.5%	Infl-Indx Bnd -1.4%	Real Estate 8.6%	HY Bnd 7.5%	S&P 500 -4.4%
Investment Grade Bonds	Inv Grd Bnd 2.9%	Commod 18.9%	Intl Eq 7.8%	Small Cap 1.0%	Infl-Indx Bnd 7.2%	Inv Grd Bnd -2.0%	CPI 1.3%	Small Cap -2.0%	Infl-Indx Bnd 3.6%	Inv Grd Bnd 3.5%	Small Cap -8.5%
Inflation-Linked Bonds	Infl-Indx Bnd 2.9%	Infl-Indx Bnd 10.1%	Infl-Indx Bnd 6.5%	Intl Eq -12.1%	Inv Grd Bnd 4.2%	EM Eq -2.6%	EM Eq -1.8%	HY Bnd -4.6%	Inv Grd Bnd 2.6%	Infl-Indx Bnd 3.0%	Commod -13.0%
Inflation	CPI 1.6%	Inv Grd Bnd 5.9%	Inv Grd Bnd 6.5%	Commod -13.3%	CPI 2.0%	Infl-Indx Bnd -9.4%	Intl Eq -4.5%	EM Eq -14.8%	CPI 1.8%	CPI 2.1%	Intl Eq -13.3%
Commodities	Commod -3.4%	CPI 2.7%	CPI 1.5%	EM Eq -18.4%	Commod -1.1%	Commod -9.5%	Commod -17.0%	Commod -24.7%	Intl Eq 1.6%	Commod 0.7%	EM Eq -14.5%

Returns are arranged in columns, by year. Each color represents a different asset class. Each year, the leaders and laggards tend to shift. Diversification across a range of asset classes can smooth returns and enhance growth.

Economic Backdrop

- **Overall, the global economy continues its slow, but steady upward march.**
- Expected real GDP growth in major countries continued to slow in the first quarter with growth expected to be slightly over 2.5%.[4] Consumer prices for the same group of G-20 countries also decreased slightly to a 2.6% annualized pace.[5]
- Notable weakness in both Japan and the Eurozone was a drag on developed markets' growth in the quarter, real GDP growth is expected to increase by only 1.4% and 1.2% respectively on an annualized basis.[4]
- Faster growing emerging market economies have not evaded the slowing global economy, real GDP in the country group is expected to increase by only 4.1% in the first quarter. Argentina and Turkey remain notable laggards, both of which are expected to contract in real terms for the same period.[4]
- Most economists surveyed by Bloomberg expect the Fed, who announced that they will be patient with rate increases, to remain on hold this year, pending any major shifts in the economy or inflation. The Federal Reserve's Open Market Committee has not made any changes to the Federal Funds Rate in the previous two meetings.
- Sentiment in European countries has begun to decline on fears of slowing global trade. Germany, an economy that relies heavily on exports, has had its manufacturing PMI fall to 44, a level that has not been seen since 2012. At the same time, manufacturing PMI in emerging economies has begun to rebound, with numerous countries exceeding or approaching 50. Overall, the index remains above 50 on a global basis. A reading of above 50 indicates expansion, while a reading below 50 indicates contraction.[6]

Equities

- **Equities bounced back in the first quarter. Markets that sold off the most at the end of 2018 tended to have the strongest rebound.**
- After falling by close to -17% in the fourth quarter of 2018, the technology focused NASDAQ index rebounded by nearly the same amount in the first quarter.[7]
- Large cap stocks in the U.S. also rebounded, up 13.7% in the quarter.[8]
- Outside of the U.S., stocks also performed well. After providing downside protection in the fourth quarter of 2018, emerging markets equities were up 9.9%[9] in the first quarter while developed non-U.S. stocks were up nearly 10.2%.[10]
- REITs continue to have some of the best returns in public equity markets with another strong quarter, up 17.2%.[11]

Fixed Income

- **Major fixed income markets gained in the first quarter as yields fell.**
- High yield bonds rose by 7.3% after a -4.5% decline in the fourth quarter.[12]

Current Positioning

- We maintain our **overweight to developed non-U.S. and emerging market equities**, where valuations and long-term growth potential remain attractive.
- We also maintain our **underweight to large cap U.S. equities.** After years of holding an overweight position in an outperforming market, valuations rose to above average levels and our models indicate that a reduced allocation to U.S. equities is prudent.
- We favor **lower priced, value-oriented equities, both in the U.S. and abroad,** which tend to outperform the broad market over time, with less volatility.
- We remain **overweight municipal bonds** for taxable investors.
- Given our significant concerns regarding a longer-term, secular rise in interest rates and the resulting negative impact on bond prices, we continue to **hold shorter maturity bonds**, while steering away from **U.S. Treasuries.**
- As credit quality in the asset class deteriorated and yields compressed, **we sold the remainder of our floating rate bond position,** which we began to trim in 2018 after a successful seven year holding period. The proceeds were **reinvested in core fixed income holdings**.

We continue to focus our efforts on helping you meet your financial objectives by following our disciplined investment approach. Our approach uses time-tested return and risk models, incorporating fundamental valuations and tax-efficient strategies. This investment discipline is tailored to your individual situation in our continuing effort to craft and implement your customized investment solution.

As always, we thank you for placing your trust in our investment management and advice and welcome your questions and comments at any time.

Peter D. D'Agati, CFA   Thomas Kosinski

Endnotes and Sources:

Text:

(1) Bloomberg: MSCI ACWI Total Return.12/31/18-3/31/19.
(2) Bloomberg: Bloomberg Barclays U.S. Aggregate Bond Index. 12/31/18-3/31/19.
(3) NBER: National Bureau of Economic Research. Tracks economic cycles since 1857. The longest on record was 120 months and lasted from March 1991—March 2001 and the current cycle began in June 2009.
(4) Bloomberg, Stembrook Research: GDP measures are based on the most recent annualized quarterly, seasonally-adjusted data. Statistics are stated in inflation-adjusted terms. Aggregate Statistics are weighted by each country's GDP translated into USD. Where available, official estimates are used. Where official estimates are not available, GDP data is based on Bloomberg Contributor Forecasted GDP. Emerging Markets measures are based solely on Bloomberg Contributor Forecasted GDP. As of 3/31/19.
(5) Bloomberg, Stembrook Research: Aggregate inflation statistics are weighted by each country's GDP translated in to USD. As of 3/31/19.
(6) Bloomberg: Markit Global Purchasing Managers Index for Manufacturing and Service. As of 3/31/19.
(7) Bloomberg: Nasdaq 100 Total Return. 9/30/18-12/31/18, 12/31/18-3/31/19.
(8) Bloomberg: S&P 500 Total Return. 12/31/18-3/31/19.
(9) Bloomberg: MSCI Emerging Markets Total Return. 12/31/18-3/31/19.
(10) Bloomberg: MSCI EAFE Total Return. 12/31/18-3/31/19.
(11) Bloomberg: FTSE NAREIT All Equity REITS Total Return. 12/31/18-3/31/19.
(12) Bloomberg: Bloomberg Barclays US Corporate High Yield Index Total Return. 12/31/18-3/31/19, 9/30/18-12/31/18.

Charts:

Expected Market Returns and Risks, 7-10 Year Horizon: As of 3/31/19.
Source: Stembrook Research.
(1) Volatility is measured in terms of Standard Deviation. Standard deviation is the statistical measurement of dispersion about an average, which depicts how widely a stock or portfolio's returns varied over a certain period of time. Investors use the standard deviation of historical performance to try to predict the range of returns that is most likely for a given investment. When an investment has a high standard deviation, the predicted range of performance is wide, implying greater volatility. If an investment's returns follow a normal distribution, then approximately 68 percent of the time they will fall within one standard deviation of the mean return of the investment, and 95 percent of the time within two standard deviations. For example, for a portfolio with a mean annual return of 10 percent and a standard deviation of two percent, you would expect the return to be between 8 and 12 percent about 68 percent of the time, and between 6 and 14 percent about 95 percent of the time. Source: Morningstar.

Yields Across Asset Classes: As of 3/31/19.
Sources: *Cash Equivalents Yields* since March 1976. Ibbotson, Federal Reserve Bank, Thomson Reuters, *Municipal Bond Yields* since March 1988. Barclays Capital, Charles Schwab, BofA Merrill Lynch, Standard & Poor's/Investortools Municipal Bond Indices, *Investment Grade Bond Yields* since March 1976. Barclays Capital, *High Yield* since December 1984. BofA Merrill Lynch, Barclays Capital, *Real Estate (Public) Earnings Yield* since March 1976. NAREIT all Equity, *Large Cap U.S. Equity Earnings Yield* since March 1976. Standard & Poor's, BARRA, *Mid Cap U.S. Equity Earnings Yield* since June 1991. Standard & Poor's, BARRA, *Small Cap U.S. Equity Earnings Yield* since December 1993. Standard & Poor's, BARRA, *Developed Europe Equity Earnings Yield* since March 1976. MSCI Europe, Standard & Poor's Europe 350, *Developed Pacific Equity Earnings Yield* since March 1976. MSCI Pacific, S&P/Citi PMI Asia Pacific, S&P Asia 50, *Emerging Market Equity Earnings Yield* since December 1998, *Inflation-Linked Bond Real Yield to Maturity* since March 1997. Citi Yield Book, Federal Reserve Bank. Note: Yields are not perfect predictors of future returns and should not be used in isolation.

Rising Interest Rates: As of 3/31/19.
Source: The Federal Reserve, Stembrook Research.

Historical Market Returns: As 3/31/19.
Source: Bloomberg, Stembrook Research.
Indices: Bloomberg Barclays U.S Treasury Bills 1-3 Month Total Return, Bloomberg Barclays Municipal Bond 5 Year (4-6) Total Return, Bloomberg Barclays U.S. Aggregate Bond Total Return, Bloomberg Barclays U.S. Corporate High Yield Total Return, FTSE All Equity REIT Total Return, S&P 500 Composite Total Return, S&P SmallCap 600 Total Return, MSCI EAFE Total Return, MSCI EM (Emerging Markets) Total Return, Consumer Price Index – U.S., S&P 10 Year U.S. TIPS Total Return, Bloomberg Commodity (Total Return) Index.

Global Asset Class Returns: As of 12/31/18.
Source: Thomson Reuters, Bloomberg, Stembrook Research.
Indices: Consumer Price Index – US, U.S. 30-Day Treasury Bills, Bloomberg Barclays U.S. Treasury Bills: 1-3 Month Index, Citigroup Inflation-Linked Index, S&P 10 Year US TIPS Index, Bloomberg Barclays U.S. Aggregate Bond Index, BofA Merrill Lynch U.S. High Yield Cash Pay, Bloomberg Barclays U.S. Corporate High Yield Index, Dow Jones Wilshire REIT Index, FTSE All Equity REIT Index, S&P 500 Composite Total Return, S&P SmallCap 600 Total Return, MSCI EAFE Index, MSCI EM (Emerging Markets) Index, Dow Jones AIG Commodity (Totl Ret) Index, Bloomberg Commodity Index.

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Additional information is available upon request.