Stembrook Asset Management

Stembrook Market Review — Fourth Quarter 2016

The final quarter of 2016 was punctuated by a pivotal presidential election in the U.S. and December's Federal Open Market Committee (FOMC) announcement. The former having a strong and immediate impact on capital markets in the U.S. and abroad. Global equity markets, at first, showed signs of extreme volatility post-election, but quickly rebounded in the days following. Equity returns were strong throughout the remainder of the quarter, especially in small cap stocks.

Most notably, bond yields rose post-election; the 10-year U.S. Treasury yield increased by nearly 0.6% from November 8th through the end of December. Treasuries, investment grade bonds and municipal bonds were negatively impacted. All three of these categories have longer duration; hence, they are more sensitive to changes in interest rates. Shorter duration investments, such as cash equivalents, high yield bonds and floating rate bonds, outperformed in this rising rate environment. The middle chart at the bottom of this page highlights changes in yields versus bond returns for the quarter. It is still too early to determine what lasting impact the 2016 election will have on the economy and capital markets.

Although bond yields have increased, they are still quite low by historical measures, as can be seen in the chart in the lower left hand corner of this page. Our proprietary models forecast pre-tax returns ranging from 1% to 3% for fixed income and 4% to 11% for equities (see table to the right). Even with higher bond yields, equities remain more attractive than fixed income investments, on a relative basis. Our views are outlined in the following comments.

Economic Backdrop

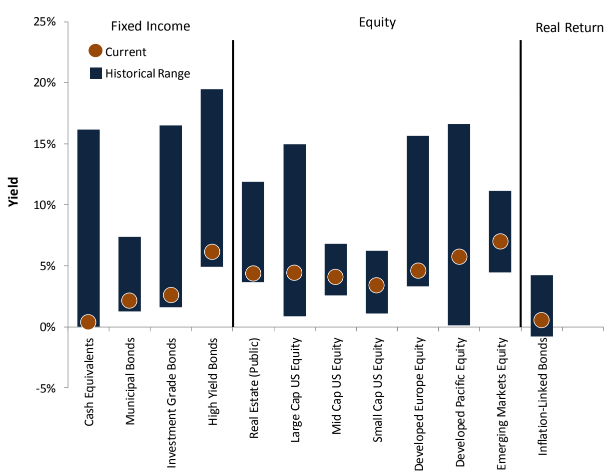
- Global economic growth continues to make forward progress, with fourth quarter growth forecasted to be slightly over 2.5% for G-20 countries.[1] Prices are rising, albeit slowly, for the same country group, with CPI growth reaching 1.9%.[2] This inflation level is low compared to the long-term average, but extremely accommodative monetary policies across the globe have the potential to put upward pressure on prices.

Expected Market Returns and Risks
7-10 Year Horizon

	Pre-Tax Annualized Return	After-Tax Annualized Return	Volatility[1]
Inflation	1.9%	1.9%	3.1%
Cash Equivalents	1.2%	0.7%	3.3%
Municipal Bonds	2.1%	2.1%	4.4%
Inflation-Linked Bonds	2.4%	1.3%	4.7%
Investment Grade Bonds	2.4%	1.3%	6.7%
High Yield Bonds	2.6%	1.1%	13.7%
Real Estate (Public)	4.4%	2.2%	18.3%
Broad Market US Equity	9.0%	7.1%	17.5%
Developed Non-US Equity	8.5%	6.5%	22.4%
Emerging Markets Equity	10.9%	7.0%	30.6%

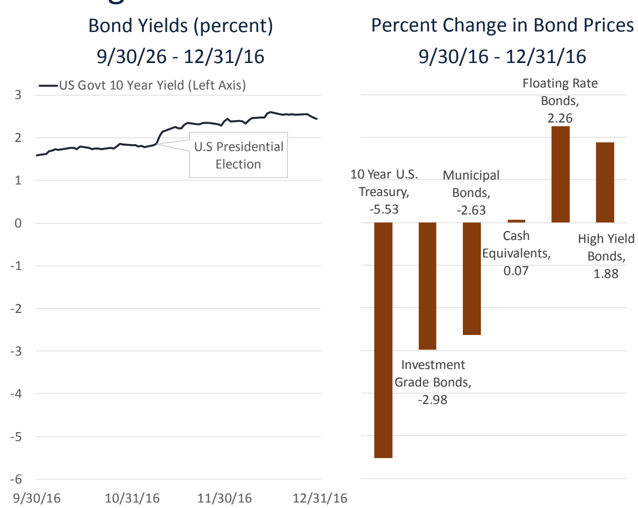
A sampling of return expectations produced by our models. Expected returns are projections and are not guaranteed.

Yields Across Asset Classes



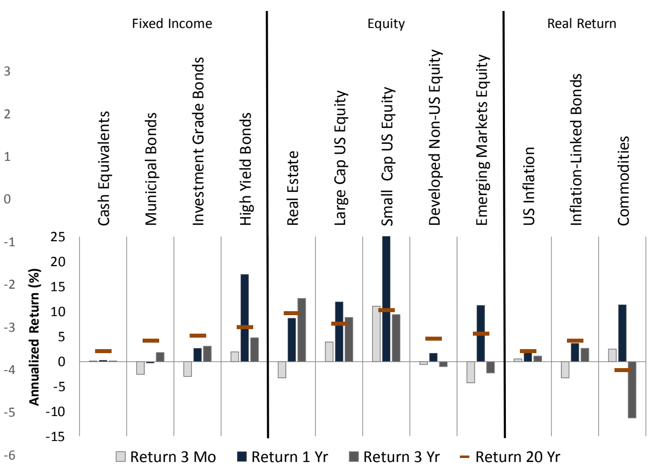
Yields are an indicator of future returns. Orange dots show current yields. Blue bars show historical ranges. Yields are generally low versus their historical range.

Rising Yields and Fixed Income Returns



Rising yields in the fourth quarter had an adverse impact on bond returns. Shorter duration and credit issues outperformed longer dated treasuries and municipals.

Historical Market Returns



Historical market returns as of September 30th, 2016. 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	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Small Cap US Equity	Small Cap 7.5%	EM Eq 39.8%	Inv Grd Bnd 5.2%	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%
High Yield Bonds	HY Bnd 6.0%	Commod 16.2%	CPI 0.1%	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%
Large Cap US Equity	S&P 500 5.8%	Infl-Indx Bnd 11.6%	Infl-Indx Bnd -1.2%	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%
Real Estate (Public)	Real Estate 4.0%	Intl Eq 11.2%	HY Bnd -26.2%	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%
Investment Grade Bonds	Inv Grd Bnd 3.6%	Inv Grd Bnd 7.0%	Small Cap -31.1%	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%
Inflation-Linked Bonds	Infl-Indx Bnd 3.6%	S&P 500 5.5%	Commod -35.6%	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%
Emerging Markets Equity	EM Eq 1.7%	CPI 4.1%	S&P 500 -37.0%	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%
Inflation	CPI 1.6%	HY Bnd 2.2%	Real Estate -39.2%	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%
Developed Non-US Equity	Intl Eq 0.8%	Small Cap -0.3%	Intl Eq -43.4%	Inv Grd Bnd 5.9%	Inv Grd Bnd 6.5%	Commod -13.3%	CPI 2%	Infl-Indx Bnd -9.4%	Intl Eq -4.5%	EM Eq -14.8%	CPI 1.8%
Commodities	Commod -4.7%	Real Estate -17.6%	EM Eq -53.2%	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%

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.

- Real annualized GDP growth in the U.S. is expected to drop off from a solid third quarter growth rate of 3.5% to a more moderate 2.2% in the fourth quarter.[3]
- Despite accommodative monetary policies and copious slack in the labor market, Europe is expected to grow at a modest 1.5%.[1]
- Much like Europe, Japan's economy remains in slow growth mode with real growth expected to reach 0.8%.[1] Unlike Europe, Japan has a very tight labor market and unfavorable demographics that will likely limit future growth.
- For the third consecutive quarter, GDP growth in emerging economies remained steady at 4.1%, with notable laggards, Brazil and Argentina, continuing to trail. Much of the group's strength comes from China and India, which are expected to grow at 6.7% and 6.0% rates respectively, in the fourth quarter.[1]
- Not surprising to market participants, the FOMC raised the Federal Funds Target rate by 1/4% from 0.5% to 0.75%. Economist's expectations are for multiple, gradual rate hikes in 2017, as the Fed begins to normalize its monetary policy.
- The Global Purchasing Managers Index (PMI) for manufacturing is showing signs of strength. The Global PMI reading was 52.7 and only 8 of the 28 countries measured a reading below 50. A reading over 50 indicates industry expansion, while readings below 50 indicate industry compression.[4]

Currencies

- The U.S. Dollar dramatically reversed its downward trajectory, rising 7.1% in the fourth quarter, much of the lift coming post-election. The Dollar was up 4% for the year.[5]

Equities

- U.S. equities gained ground on their developed market counterparts in the fourth quarter. Broad market U.S. stocks were up 4.3%[6] in the quarter versus a -0.6% return for developed non-U.S. equities.[7]
- As the U.S. Dollar gained momentum and the specter of tighter global trade policies weighed on investors, small cap U.S. stocks continued to outperform large caps. Small cap stocks were up 11%[8] in the quarter versus a 3.8% return in large cap U.S. stocks.[9]
- A stronger Dollar and the fear of unfavorable trade policies from the U.S. subdued returns in emerging market equities, which were down 4.3% for the quarter, but still returned 11.3% for the year.[10]
- Value stocks in the U.S. continued to outperform growth stocks after years of underperformance. Value stocks were up 7.3% in the quarter versus a 0.5% return for growth stocks, outperforming growth by 10.5% for the year.[11]

Fixed Income

- Bond prices across the U.S. fell in the fourth quarter, with the exception of high yield bonds, which dramatically outperformed other traditional fixed income investments.

Commodities

- Oil prices surged 11.4% in the fourth quarter and ended the year up 45%.[12]

Current Positioning

- We invest in **lower priced, value-oriented equities**, which tend to outperform the broad market over time. Value stocks outperformed in 2016.
- We remain **overweight U.S. equities and developed non-U.S. equities.**
- We remain **overweight emerging market equities**, where valuations and long-term growth potential remain attractive. This investment is implemented through an actively managed, value-oriented strategy.
- We remain **overweight municipal bonds** for taxable **and** tax-deferred investors, as prospective returns, relative to other fixed income sectors, remain attractive.
- Given our significant concerns regarding a longer-term, secular rise in interest rates, we continue to **hold shorter maturity bonds**, while steering away from **U.S. Treasuries** and investing in **corporate bonds, high yield bonds and floating rate bonds**. These positions have added significant value amidst rising rates in the final quarter of 2016.
- As a hedge against inflation and a diversifier in the portfolio, we continue to hold **commodities**, after trimming gains in December.

We continue to focus our efforts on helping you meet your financial objectives by following our disciplined investment approach. Our approach incorporates time-tested return and risk models, fundamental valuations and tax-efficient strategies. This investment discipline is tailored to your individual situation in order to craft a customized 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, 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 in to 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 12/31/16.
(2) Bloomberg, Stembrook Research: Inflation data as of 12/31/16. Aggregate statistics are weighted by each country's GDP translated in to USD.
(3) Bloomberg: Change in Real GDP Growth 6/30/16-9/30/16, Bloomberg Contributor Forecasted GDP Fourth Quarter 2016. As of 12/31/16.
(4) Bloomberg: Markit Global Purchasing Managers Index for Manufacturing. As of 12/31/16.
(5) Bloomberg: Dollar Index 9/30/16-12/31/16, 12/31/15-12/31/16.
(6) Bloomberg: The S&P Composite 1500 combines three leading indices, the S&P 500, the S&P MidCap 400, and the S&P SmallCap 600 to cover approximately 90% of the U.S. market capitalization.
(7) Bloomberg: MSCI Europe, Australia, Far East Total Return Index.
(8) Bloomberg: S&P SmallCap 600.
(9) Bloomberg: S&P 500.
(10) Bloomberg: MSCI Emerging Markets Total Return Index.
(11) Bloomberg: S&P 500 Value versus S&P 500 Growth. 12/31/15-12/31/16 total return 17.39% versus 6.89%.
(12) Bloomberg: West Texas Intermediate Spot Prices 9/30/16-12/31/16, 12/31/15-12/31/16.

Charts:

Expected Market Returns and Risks, 7-10 Year Horizon: As of 12/31/16.
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 12/31/16.
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 Yields and Fixed Income Returns: As of 12/31/16.
Sources: .*US Govt 10 Year Yield,* Bloomberg US Generic Govt 10 Year Yield. *US 10 Year Treasury*, Bloomberg US Generic Govt 10 Year. *Investment Grade Bonds*, Bloomberg Barclays U.S. Aggregate Index. *Municipal Bonds*, Bloomberg Barclays 5 Year Municipal Bond Index. *Cash Equivalents*, BofA Merrill Lynch 0-3 Month Treasury Bill Index. *Floating Rate Bonds*, S&P/LSTA U.S. Leveraged Loan 100 Index, *High Yield Bonds*, BofA Merrill Lynch US High Yield Index.

Historical Market Returns:
Source: Bloomberg, Stembrook Research.
Indices: BofA Merrill Lynch 0 to 3 Month US Treasury Bill Index, Barclays Capital Munis 5-Yr Index, Barclays Capital Aggregate Bond Index, Merrill Lynch U.S. High Yield Cash Pay, FTSE All Equity REIT Total Return, S&P 500 Composite Total Return, S&P SmallCap 600 Total Return, MSCI EAFE Index, MSCI EM (Emerging Markets) Index, Consumer Price Index – US, S&P 10 Year US TIPS Total Return, Bloomberg Commodity (Total Return) Index.

Global Asset Class Returns:
Source: Bloomberg, Thomson Reuters, Stembrook Research.
Indices: Consumer Price Index – US, U.S. 30-Day Treasury Bills, Citigroup Inflation-Linked Index, S&P 10 Year US TIPS Index Barclays Capital Aggregate Bond Index, BofA Merrill Lynch U.S. High Yield Cash Pay, 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.

Disclosures

This material is intended to inform you of products and services offered by Stembrook Asset Management, LLC (“Stembrook”). Stembrook is a New Jersey Registered Investment Advisor.

This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument.

We believe the information contained in this material to be reliable but do not warrant its accuracy or completeness. The opinions, estimates, and investment strategies and views expressed in this document constitute the judgment of Stembrook, based on current market conditions and are subject to change without notice. The investment strategies stated here may differ from those expressed for other purposes or in other context.

Past performance is not indicative of future results.

The obligations and securities sold, offered, or recommended are not deposits and are not insured by the FDIC, the Federal Reserve Bank, or any governmental agency.

The views and strategies described herein may not be suitable for all investors. This material is presented with the understanding that it is not rendering accounting, legal or tax advice. Please consult your legal or tax adviser concerning such matters.

Important note regarding Stembrook’s capital market expectations.

The capital market expectations developed by Stembrook Asset Management are estimates of both a central tendency of asset class behavior and a probable range of asset class behavior over a long-term horizon. These estimates are one of many inputs used in the portfolio construction process, and should not be used independently. These expectations should not be construed as the returns that will be achieved, but merely those that may be achieved if certain assumptions hold true. Also note that each client's portfolio may differ given specific goals and constraints applied to the portfolio construction process.

Additional information is available upon request.