SCHWAB 2016 MARKET OUTLOOK

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SCHWAB 2016 MARKET OUTLOOK

Unfinished Business

The spotlight stays on global monetary policy in 2016. Central banks around the world are still trying to restore economic conditions back to pre-crisis levels. Major policy differences remain, however, and will affect the direction of markets. We expect this unfinished business to result in a year of modest global stock market gains, a strong U.S. dollar and low bond yields amid bouts of volatility.

Executive summary

- Our view is that the U.S. bull market for stocks will push ahead in 2016 with mixed performance and continued volatility and corrections. After nearly seven years, the bull market is in a more mature phase, with weaker earnings and revenue growth, narrow market breadth and somewhat stretched valuations.
- Market corrections should be contained due to subdued investor sentiment and healthy leading economic indicators that suggest a U.S. recession is a distant risk.
- Fixed income markets will likely see higher short-term rates, a flatter yield curve and volatility. A key factor is the strength of the U.S. dollar. A rising dollar can affect inflation, economic growth and the demand for U.S. securities.
- International stock prices are likely to be supported by an improving global economy in 2016, especially in non-U.S. developed markets such as Europe and Japan. Gains may be limited, however, especially in emerging market countries that face concerns over a rising dollar and diverging monetary policies.
- We are optimistic that progress is being made as central banks move to finish the post-crisis task of fully stabilizing global economies. We suggest investors look for opportunities during bouts of market volatility in the year ahead.

U.S. MARKETS & ECONOMY

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Sweet ’16 or Sweat ’16?

Our view on U.S. stocks at the start of 2016 continues to be “neutral,” meaning we believe investors should not underweight or overweight U.S. stocks in their asset allocations. The broad investing landscape continues to be mixed. Our neutral view reflects a belief that the stock market remains in the mature phase of a “secular” (long-term) bull market.

Mixed economic signals

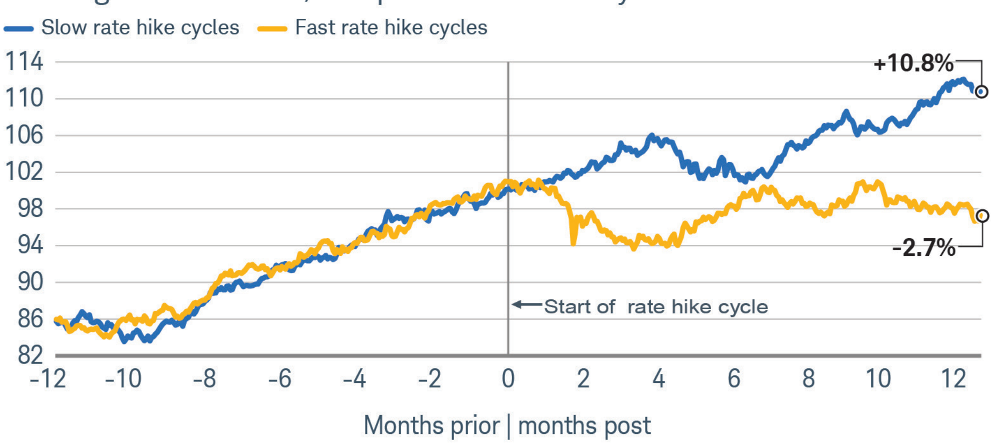
Most of the key U.S. leading economic indicators, including the stock market, are not signaling an economic recession. Inflation remains low, but it could be at an inflection point if global growth improves and/or if wage growth accelerates further. Inflation and the U.S. dollar are both key for Federal Reserve policy and the assumption that the pace of rate increases is likely to be gradual—which likely would be a positive for risk assets such as stocks.

As shown in the chart below, the pace of rate increases historically has been a key factor in the direction of the U.S. stock market.

When the Fed was raising rates slowly, meaning not at every, or even most, Federal Open Market Committee (FOMC) meetings, the S&P 500 stock index returned an average of +10.8% in the year following the initial increase. When the Fed was raising rates more quickly (i.e., at all or most consecutive FOMC meetings) the S&P 500 returned an average of -2.7% in the year following the initial increase.

Slow vs. Fast Rate Hike Cycles

Stock performance as measured by the S&P 500 index has tended to be stronger in the first year of “slow” rate hike cycles (Fed waits at least one meeting between hikes) compared with “fast” cycles.



Note: Fast cycle (Fed hikes at every FOMC meeting) dates: 11/20/67, 1/15/73, 9/26/80, 9/4/87, 2/4/94, 6/30/99, 6/30/04. Slow cycle (Fed waits at least one meeting between hikes) dates: 4/25/46, 4/15/55, 9/12/58, 7/17/63, 8/31/77. Cycles were set at, or indexed to, 100 to enable growth comparisons. Past performance is no guarantee of future results.

Source: Ned Davis Research (NDR), Inc. (Further distribution prohibited without prior permission.).

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A faster pace of rate increases suggests the Fed is acting to combat an inflation problem or an overheating economy (or both). Neither scenario is good for the stock market.

Dollar and inflation could hold key

We touched on some factors that could cause volatility in the stock market. Now let's turn to important supporting factors for 2016. Global central banks have monetary policies that provide ample liquidity. Low energy prices are helping to keep inflation in check and put money in consumers' wallets. Overall, U.S. economic growth is likely to remain moderate. Manufacturing activity (12% of the U.S. economy) remains weak, but the services sector (the other 88%) continues to show growth.

A key determinant of the pace at which the Fed continues to raise rates is likely to center around the strong U.S. dollar. A stronger dollar acts as a drag on the U.S. economy and hurts corporate earnings. Continuing dollar strength would likely slow the pace of the Fed's rate increases. The dollar and commodity prices tend to move inversely — countertrend moves in the dollar, commodity prices or inflation could trigger a faster pace of rate increases.

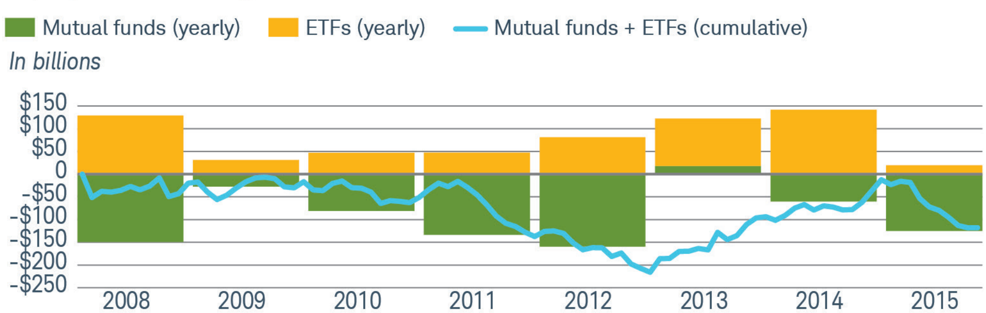
A resilient but somewhat expensive stock market

Looking at market fundamentals, valuations are slightly elevated and are likely to meander until corporate earnings are stronger. Stock buybacks and dividend increases have supported the bull market, although weak earnings and higher borrowing costs could slow the pace of both. The wider difference in yield, or "spread," between corporate bonds and Treasuries also is a concern (albeit concentrated among commodity issuers) as this typically goes hand-in-hand with weak equity performance due to the risk of rising corporate defaults. Also, due to weaker corporate fundamentals, revenue growth has been nonexistent and profit margins are coming down from record highs.

As shown in the chart below, the lack of participation by many investors during this bull market suggests the "wall of worry" stocks like to climb is still intact.

U.S. Fund Flows Weak During Bull Market

Although ETF flows have been more robust, mutual fund flows have been consistently weak—cumulatively, no net new money has been added to equity funds during the current bull market.



Source: Investment Company Institute, as of October 30, 2015

U.S. MARKETS & ECONOMY

The bouts of volatility that the stock market experienced in 2015 are likely to persist into 2016, driven by monetary policy divergences around the world and uncertainty about policy changes and economic growth. That said, the stock market has proven to be resilient during this nearly seven-year bull market. In fact, investor sentiment remains a compelling argument for why this bull market is probably not on its last legs.

Investor sentiment can be measured in "attitudes" about the market, but also in "actions" in the market; e.g., fund flows. As shown in the chart on the previous page, investors have not embraced this bull market. Looking back to 2008, investors added to traditional U.S. equity mutual funds (a good indicator of individual investor behavior) only in 2013. Even adding in exchange-traded funds (ETFs)—which are also widely used by institutional investors—no net new money has been added to U.S. equity funds on a cumulative basis over the past eight years. In fact, the highest level of outflows in eight years may be recorded in 2015.

The skepticism and anxiety investors have displayed during much of the current bull market is perhaps understandable, given the severity of the financial crisis and bear market. Although persistent outflows from U.S. equities suggests a build-up of investor cash, we are hesitant to make the call that flows will pick up in 2016, given the unfinished business this outlook details.

INVESTOR TAKEAWAY:
We believe the secular bull market that began in 2009 is not over. Typically, these are signs of bull market finales: growing recession risk; rapidly accelerating inflation; significantly tighter monetary policy; elevated wage inflation; speculative valuations; and investor euphoria. None of these forces are visible today.

Market suffering from a case of halitosis

Another area of concern continues to be weak market breadth—a characteristic of the stock market in place on and off since last spring. Market breadth measures the number of companies advancing relative to the number declining. Weak breadth occurs when there is a disproportional number of declining stocks relative to advancing stocks—suggesting bearish momentum and a market being led by too few stocks. Heading into 2016, we would like to see a shift back toward a larger number of advancing stocks, which would be a sign of more bullish momentum. Until then, we are likely to remain somewhat cautious.

Also as mentioned, we are looking for a resumption of positive earnings growth, after likely two consecutive quarters of negative revenue and earnings growth. If the dollar's ascent and commodity prices' descent stabilizes, it would provide support for earnings. The concentration of earnings weakness has been a function of the plunge in oil and other commodity prices, hitting the energy and materials sectors particularly hard. The currency translation problems associated with the strong dollar, meanwhile, are affecting the export sector.

The U.S. economy remains bifurcated, as noted earlier, with manufacturing in a slump but services still growing. We expect this bifurcation to persist in 2016 if the trends in commodities and the dollar persist. However, positive impacts from a commodities rout—including for U.S. consumers—tend to emerge with a lag, and should provide a boost to the U.S. economy (and in turn the stock market) in 2016.

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Tech, Financials Could Lead Pack

In 2016, we believe the information technology and financial sectors will outperform the market.

The technology sector benefits from the need for businesses to upgrade equipment to boost efficiency and productivity. It also is supported by the high level of consumer interest in technology, leading to strong retail sales. Also, the tech sector consistently has been a top-performing sector in the six months following an initial rate increase by the Federal Reserve.

The Fed's gradual move toward higher rates also should benefit the financial sector. Any increase in the federal funds rate, the Fed's benchmark rate, provides a boost to financial services companies that are holding large amounts of cash.

Fundamentally, U.S. consumers have been paying down debt to improve their finances and fewer are defaulting on their loans. The chart below shows the reduction of consumer debt is leveling off and a rising number of loans are being issued by banks. This combination could lead to greater loan demand. Consumers may have more confidence to take out loans and banks appear more willing to lend.

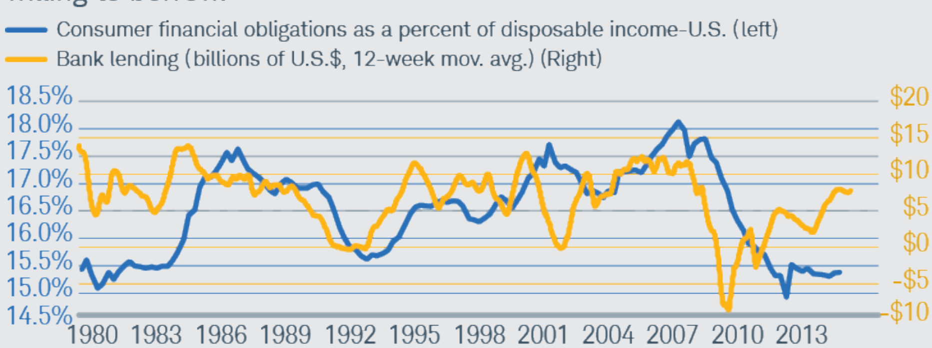
We expect underperformance in the utilities and telecommunications in 2016.

The utilities sector is likely to be negatively affected by the Fed's move toward higher rates. Investors who have been investing in the utilities sectors for the dividend income are likely to look elsewhere for yields and may stop viewing utilities stocks as bond substitutes.

The telecom sector will likely be hurt by declining revenue. Fierce competition is squeezing profits and consumer spending on telecom also is falling. Capital expenditures are rising, meanwhile, as telecom companies look to improve and expand their networks.

Borrowing Conditions Appear to Improve

Banks that are more willing to lend may find consumers more willing to borrow.



Source: FactSet and Federal Reserve, as of November 27, 2015

INVESTOR TAKEAWAY:
Within a balanced allocation to stocks in an overall portfolio, consider adding to exposure to the information technology and financial services sectors and possibly reducing exposure to the utilities and telecommunications sectors.

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Brighter Outlook, Limited Gains

Some of the most attractive global stock markets in 2016 may be found among non-U.S. developed markets, such as Europe and Japan, where profit growth momentum and the central bank impact on valuations may be more favorable.

While better global growth is a positive for emerging market stocks, they may lag behind developed market stocks due to lingering concerns over a rising dollar, a turnaround in inflation and the threat of destabilizing capital movements resulting from increasingly diverging monetary policies across the globe. These concerns could weigh on emerging markets and limit the flexibility of their central banks.

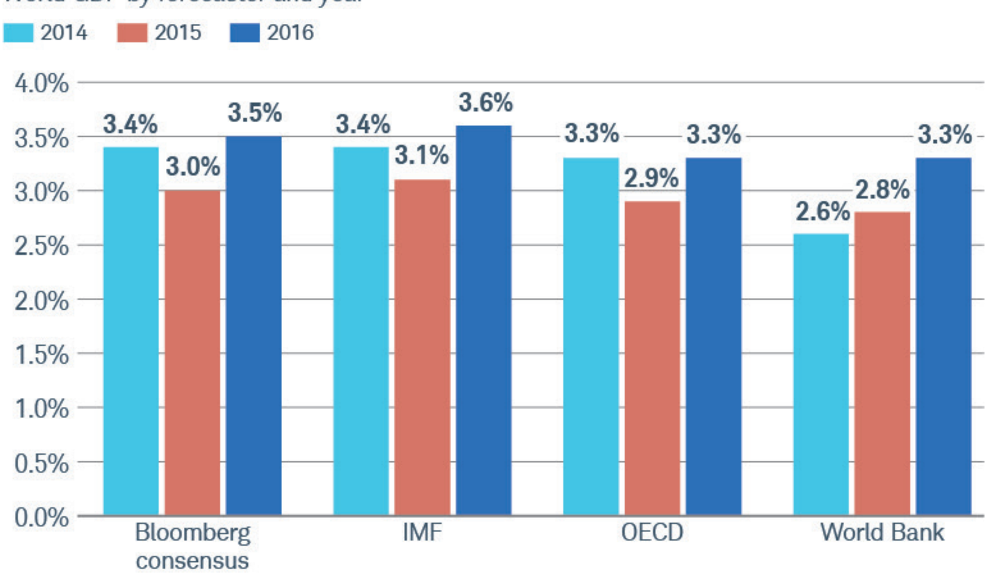
Low risk of global recession

Overall, we believe world economic growth will improve in 2016 after a global slowdown in 2015 and four years of intermittent recessions among major economies from 2011-2014. Global GDP growth of about 3.5%, while slightly below the pace of the mid-2000s, would mark a return to the 50-year average pace of growth.

Our economic outlook is shared by most forecasters, including the World Bank, the Organization for Cooperation and Development (OECD), and the consensus of economists' forecasts tracked by Bloomberg, as shown in the chart below. They all foresee a stronger world economy in 2016 than in 2014 or 2015.

Brighter Outlook for World Economy in 2016

World GDP by forecaster and year



Sources: Charles Schwab, Bloomberg, International Monetary Fund, Organization for Economic Cooperation and Development, and the World Bank. Data as of November19, 2015.

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The global manufacturing slowdown in 2015 was driven by both oil-related weakness among energy companies and reform efforts in China aimed at rebalancing GDP demand away from fixed investment. With the sharpest cuts in energy and mining behind us and China now back to boosting infrastructure spending to stabilize GDP, this weakness may begin to fade. The Global Manufacturing Purchasing Managers Index rose in October and November, signaling hope for renewed growth.

Brazil and Russia, commodity-driven emerging market economies, are the only countries we expect to suffer a recession in 2016. They were also in recession in 2015. Most other developed and emerging market economies are likely to see growth pick up in 2016.

Many investors seem to be most concerned about a global recession and the accompanying bear markets. Fortunately, the yield curve indicates a low probability of a recession in the world's major economies in the coming year.

Historically, a reliable indication of a recession within the coming year in economies around the world has occurred when central banks hike short-term rates and the spread between short and long term interest rates, known as the yield curve, turns negative. The more the yield curve is said to flatten, meaning short-term interest rates rise relative to long-term rates, the higher the probability of entering a recession within the next year, as illustrated in the table below.

Although current interest rates in many economies are very low in absolute terms, the yield spread has been a useful indicator of a forthcoming recession at all yield levels. It is worth noting that yield spreads could drop by 100 basis points for a number of countries, reflecting the flatter yield curves we believe are likely in 2016, and still reflect relatively low probabilities of a recession.

Odds of Recession Are Low in 2016

Historical percent of time economy fell into a recession within a year of different yield curves

Current yield spread (probability of a recession in the coming year)

Yield Spread	U.S.	Eurozone	U.K.	Sweden	Switzerland	Mexico
+300 to +200	**8%**	21%	16%	5%	24%	**19%**
+200 to +100	25%	**23%**	**7%**	**1%**	18%	16%
+100 to 0	35%	29%	12%	16%	**12%**	25%
0 to -100	81%	61%	22%	51%	15%	33%
-100 to -200	100%	75%	35%	73%	57%	100%
-200 or less	100%	100%	63%	85%	87%	100%

The yield spreads for each country/region are measured using the spread between the 10 year and 3 month yields, except Mexico, which is 5 year and 3 month, and Eurozone, which is 10 year and 2 year.

Yield spread in basis points. 100bp = 1%. Shading refers to where the yield curve is as of 11/19/2015 for each country.

Historical time period begins: U.S. 1967, Eurozone 1970, UK 1970, Switzerland 1975, Sweden 1970, Mexico 2000.

Source: Charles Schwab, Macrobond data as of November 19, 2015.

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Global shift in monetary policy

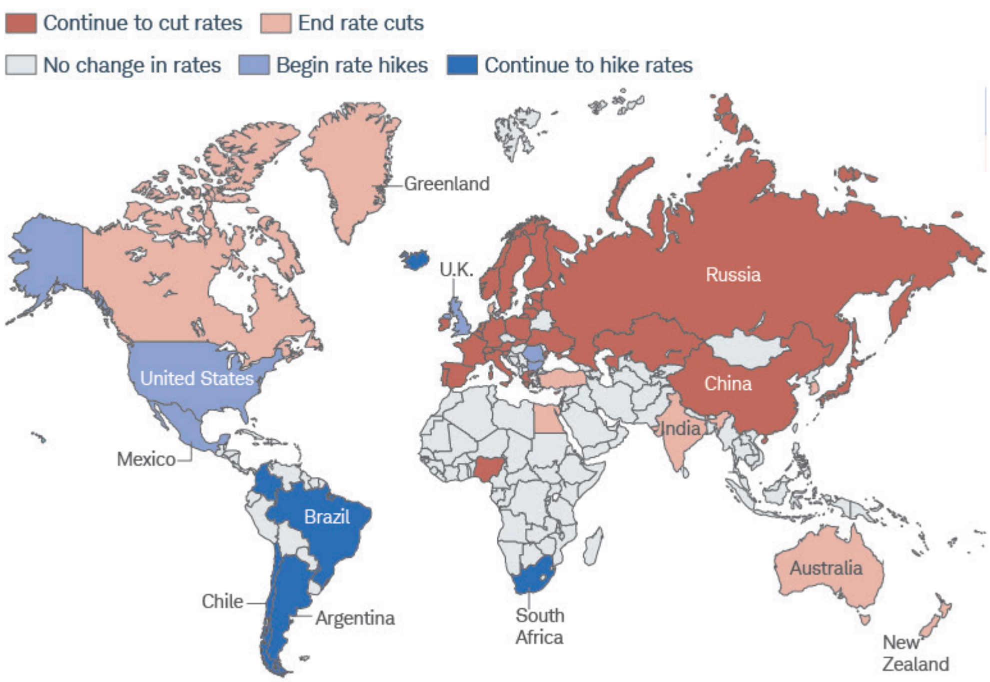
Global inflation may finally begin to turn around in 2016, due in part to the easing of the year-over-year drag of falling energy prices. After slowing for many years, global inflation may rise from close to zero to a little more than 1%. While 1% is still low inflation, the reversal of momentum and the big step back from the risk of deflation toward a 2% target may encourage more central banks to raise interest rates in 2016. The coming year may begin to usher in a global shift in monetary policy that has been in place since the Great Recession, as shown in the map below.

Along with the fading year-over-year declines in the energy sector, better economic growth in 2016 should help to lift stalled corporate profit growth and support stocks, though valuations may be capped by central banks moving off of zero interest rates. Markets have benefited from rising valuations in recent years as central banks stepped up stimulus when growth was weaker than expected (and this is still the case in Europe and Japan). In some major countries, the central banks may take the opportunity to withdraw stimulus more quickly if growth is stronger than expected in 2016. This may put pressure on valuations and limit stock market returns in 2016.

INVESTOR TAKEAWAY:
We think global economic growth should improve in 2016 and help lift corporate earnings and support stocks. Stock markets in developed countries may outperform those in emerging markets, where concerns over the rising dollar and other factors could limit returns.

Increasing Divergence in Central Bank Actions

Expected central bank actions in 2016 by country.



Source: Charles Schwab, Bloomberg data as of November 23, 2015.
*Eurozone and Bank of Japan expanding QE programs.

GLOBAL MARKETS & ECONOMY

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A Tale of Two Chinas

China will remain a focus of global investors in 2016 as the world's second largest economy manages an economic transition and slower growth. Some weakness is expected, but a more dramatic devaluation of China's currency is a risk that could ignite a currency war in Asia with negative consequences for global investors. While China's stock market and emerging markets overall may lag those of developed markets, China's challenges are unlikely to pull the global economy into recession in 2016.

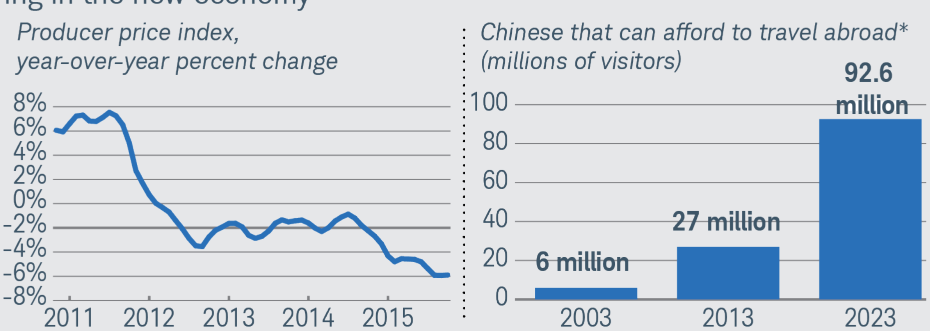
We believe China's economy is slowing gradually, not sharply. China is in some ways a tale of two economies – manufacturing and services. Data on the manufacturing sector is more abundant than on the service sector, despite its now smaller size. Falling producer prices indicate that capacity exceeds demand, a hangover from the "old" China that relied primarily on manufacturing. The service economy is growing faster in the "new" China and tends to be more labor intensive than manufacturing. A growing service economy is creating new jobs, boosting consumption.

China's economy is slowing down but it is also gradually maturing and becoming more diverse. This change to a slower growing and more developed economy is a positive long-term development. A rapid transition could encounter policy missteps and the hangover of rapid debt growth this decade could create a challenging interim period. China's policymakers have both a lot of room to cut interest rates and other monetary and fiscal policy tools at their disposal to bolster the economy. We are confident they will use those options, as needed, to avoid a severe economic slowdown that would negatively affect the global economy.

INVESTOR TAKEAWAY:
Emerging market stocks, including China, may modestly underperform developed international due to weak earnings growth and currency volatility.

China's Manufacturing Economy Shrinks

Falling prices reflect manufacturing overcapacity, while travel is booming in the new economy



Source: China Bureau of National Statistics, World Travel & Tourism Council (WTTC) and Oxford Economics. *Based on WTTC's assessment that $35,000 in household income is the threshold for better affordability of international travel, Oxford Economics 2023 forecast made in 2014. Data as of 11/24/2015.

FIXED INCOME

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Navigating a Rocky Road

We believe 2016 will be a challenging year for fixed income investors due to the combination of tighter Federal Reserve policy and rising market volatility. A key factor to watch will be the strength of the U.S. dollar, since a rising dollar can affect inflation, economic growth and demand for U.S. securities.

We expect fixed income markets to be characterized by higher short-term interest rates, a flatter yield curve and bouts of volatility. Volatility, however, can present opportunities. For investors looking for higher income, rising interest rates may offer an opportunity to add intermediate-term bonds to portfolios.

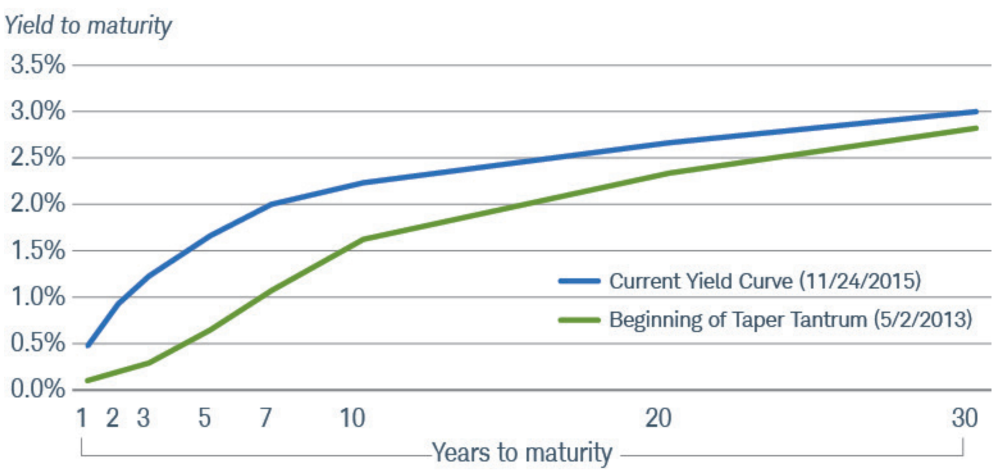
For investors concerned about the impact of rising interest rates on their fixed income portfolios, increasing the allocation to short-term bonds or investment grade floating-rate notes may help to mitigate some of the risk. In addition, we suggest strategies such as bond ladders and barbells to help manage through a changing interest rate environment.

Federal Reserve outlook

We expect the Federal Reserve to take a gradual approach to raising the federal funds rate. With U.S. GDP growth averaging only 2.3% annually since 2010, inflation below the Fed's 2% target level and global growth soft, a gradual return to more "normal" interest rates seems the likely path. It is unusual for the Fed to begin a "cycle" of rate increases with such slow growth and low inflation. Consequently, we expect that the yield curve will continue to flatten, with short-term interest rates rising more than long-term interest rates, as the Fed raises the target range for the federal funds rate.

Yields Are Up Since Start of 'Taper Tantrum'

Treasury yield curve versus May 2013.



Source: Bloomberg, as of November 24, 2015.

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The Fed exerts the most influence on short-term rates but intermediate- and long-term interest rates are heavily influenced by growth and inflation expectations. We expect intermediate- to long-term rates to remain low compared with previous cycles due to low inflation and strong demand for higher yielding assets. In our view, 10-year Treasury bond yields are likely to stay within in a range of 2% to 2.75% in 2016.

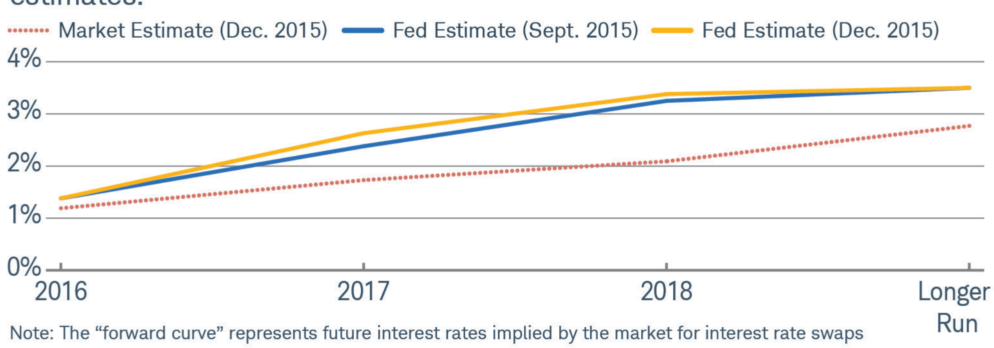
Our relatively sanguine view on longer-term interest rates is based on our belief that monetary policy tightening began in 2014 when the Fed started to reduce its bond purchases. Once the assets on the Fed's balance sheet were no longer expanding, the signs of tighter monetary policy emerged – a flatter yield curve, rising credit spreads, a stronger dollar and higher volatility. Consequently, the market has already discounted some of the tightening in monetary policy for this cycle.

A key feature of the market, however, is the gap between the Fed's expectations about the pace and magnitude of rate increases and the market's. Based on the latest Summary of Economic Projections (SEP), the median estimates from the Fed suggest a faster and steeper pace of rate increases than what is implied by market-based measures.

Over the past few years, the Fed's estimates have been falling, while the market estimates have remained about the same. It would not be surprising to see the Fed's estimates continue to move closer to where the market has short-term rates priced. The existence of the gap, however, is a potential source of volatility in the market. Bond yields will likely reflect whether the Fed is perceived to be ahead of the curve on inflation or behind the curve. When economic growth surprises on the upside, market expectations are likely to jump toward the Fed's estimates, but evidence of slower growth or lower inflation could cause the gap to widen. Moreover, volatility was low during the past few years due to the impact of easy Fed policy. Due to the Fed's signal that monetary policy would stay easy for a long time, the risk premium embedded in bonds with lower credit quality or longer maturities diminished. With Fed policy moving in reverse, we expect volatility to return as risk is repriced.

Still Far Apart

Market estimates for interest rates remain below the Federal Reserve's estimates.



Note: The "forward curve" represents future interest rates implied by the market for interest rate swaps

Source: Federal Reserve Board, 12/16/2015, 9/17/2015 and 6/17/2015, and Bloomberg Euro Dollar Synthetic Rate Forecast Analysis (EDSF) as of December 23, 2015.

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Watch the dollar

A key indicator to watch in 2016 will be the U.S. dollar's performance. Since July of 2014, the dollar has risen by more than 20% on a trade-weighted basis. A stronger U.S. dollar tends to have the same impact as a rate increase on the economy: It slows economic growth by making U.S. exports less competitive and it holds down inflation by reducing import prices. By our estimates, the dollar's rise since 2014 has been the equivalent of about a 1% to 1.5% increase in the federal funds rate in terms of its impact on the economy. If the dollar continues to rise, it will likely reduce the pace and magnitude of Fed rate increases even compared with current expectations. If the dollar weakens, the opposite would be true – the potential for rate increases would rise.

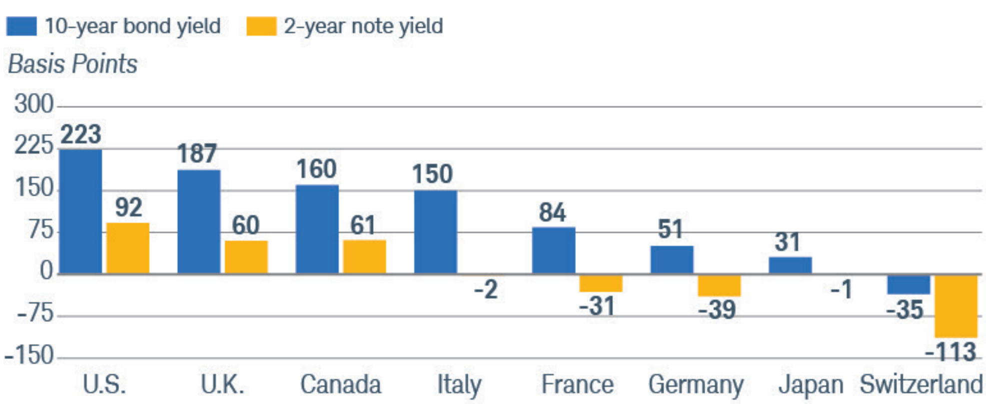
Our view is that the factors driving the U.S. dollar higher over the past year are still intact. The U.S. economy is growing at a stronger rate than most other major countries and while the U.S. trade deficit has widened recently, at less than 2.5% of GDP, it is not at levels historically associated with a weak dollar. Most importantly, the U.S. central bank is moving toward tighter policy while most others are still easing policy. In some countries, short-term interest rates are actually negative. Consequently, U.S. interest rates are significantly higher than in most other countries. This makes dollar-based investments relatively attractive.

Given our expectation for the U.S. dollar to appreciate, we continue to suggest underweighting international bonds and hedging currency exposure. In the emerging markets, we would focus on USD-denominated bonds and underweight local currency bonds. The outstanding local currency debt of EM companies has doubled in the past five years, leaving the market vulnerable as a result of falling emerging market currencies.

INVESTOR TAKEAWAY: Consider adding intermediate-term bonds to portfolios. Strategies such as bond ladders and barbells also can be useful in a rising rate environment. Increasing the allocation to short-term bonds or investment-grade floating-rate notes may help to mitigate some of the risk of a possible negative impact of rising interest rates on fixed-income portfolios.

U.S. Yields Outpace Global Counterparts

Higher yields in the U.S. should keep demand high and limit potential increases in intermediate- and long-term bond yields



Source: Bloomberg, as of November 24, 2015.

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Higher Yields, But Risks Remain

Corporate bond yields have risen over the past year and may offer an attractive entry point for investors looking to earn higher yields. Risks remain, however, especially with high-yield corporate bonds. We have a more favorable outlook on investment grade corporate bonds than those with high-yield ratings, as we expect bouts of volatility in the lower rated parts of the market in 2016.

The plunge in commodity prices should continue to be a drag on the high-yield market, given that energy and metals and mining issues make up roughly 17% of the Barclays U.S. Corporate High-Yield Bond Index. Among the issuers rated by Standard and Poor's that defaulted in the first 11 months of 2015, over half were in the energy and natural resources sector.[1] The low level of commodity prices may push that default rate even higher in 2016. Disappointing corporate earnings and liquidity concerns also pose risks to the high-yield market. We think these are less of a concern for the investment grade corporate bond market, as commodity issuers make up a smaller part of the market, and investment grade bonds tend to be more liquid, on average.

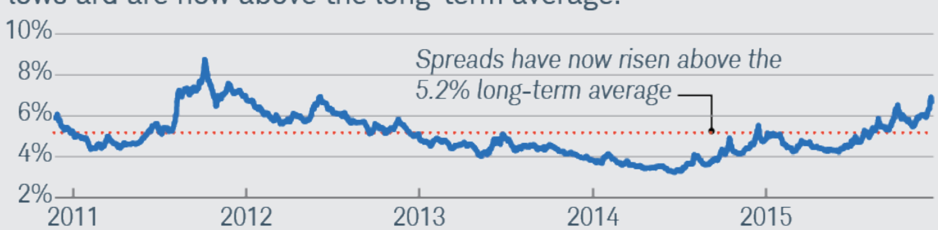
These concerns have pushed corporate bond yields higher and prices lower, with high-yield experiencing greater price swings. Through the first 11 months of 2015, high-yield bonds have posted a total return of -2%, compared with a 0.1% gain for investment-grade corporate bonds.[2]

We believe the higher spreads, however, make corporate valuations more attractive. High-yield spreads are now well above the long-term average and are more than three percentage points higher since the middle of 2014. With the heightened risks in the high-yield bond market, we expect short-term performance to be more volatile. Investors who cannot stomach the volatility should consider moving up in quality to investment-grade corporate bonds.

INVESTOR TAKEAWAY:
We favor investment-grade corporate bonds over those with high-yield ratings. For those investors with long investing horizons and who can stomach continuing market volatility, high-yield bonds may present an opportunity in 2016 if yields move even higher.

Valuations Have Improved

High-yield credit spreads have risen from their post-financial crisis lows ard are now above the long-term average.



Source: Barclays, using daily data as of November 24, 2015. The option-adjusted spread (OAS) is quoted as a fixed spread, or differential, over U.S. Treasury issues. OAS is a method used in calculating the relative value of a fixed income security containing an embedded option, such as a borrower's option to prepay a loan. Long-term average begins in January 1994.

[1] Standard and Poor's, "The U.S. Speculative-Grade Corporate Default Rate Grew to 2.8% in November," December 1, 2015.
[2] Barclays U.S. Corporate High-Yield Bond Index and Barclays U.S. Corporate Bond Index, respectively.

FIXED INCOME

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Muni Market On Solid Ground

Municipal bonds look attractive relative to other fixed income investments because after-tax yields are favorable and credit conditions are generally stable or improving, in our view. We favor maturities between 5 and 15 years with uninsured ratings of A or higher with a focus on state and local government general obligation (GO) bonds.

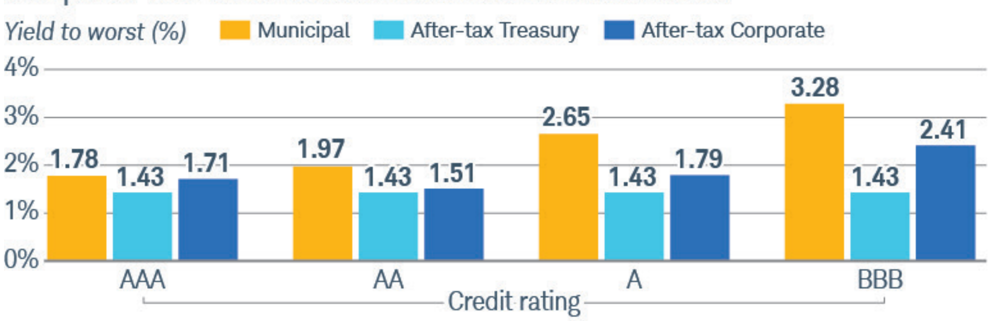
The top tax rate for investment income is the highest it has been in nearly 20 years – boosting the after-tax benefits of municipal bonds. High-income earners must now also pay a 3.8% Affordable Care Act surcharge on all investment income. Interest earned on muni bonds is one of the few forms of investment income exempt from the surcharge, increasing the after-tax payouts for high-income earners. The economic conditions for most municipalities are improving. Home prices have increased 36%[1] since the lows of 2012 and unemployment has been falling in most states – boosting tax receipts.

Nationally, fundamentals for the majority of municipalities are stable or improving. Rating upgrades have outpaced downgrades for 12 quarters in a row – the longest quarterly streak since 2001.[2] Given the upward trend in ratings, a downgrade for an individual issuer is notable and worth watching. High pension burdens, low oil prices, and weak regional economic growth have been the largest contributors to downgrades recently. None of these issues presents a systemic risk to the muni market, in our view.

INVESTOR TAKEAWAY:
We favor investment-grade municipal bonds over Treasuries and corporate bonds for investors in taxable accounts.

After-Tax Yields for Munis Appear Attractive

Munis yield more after-taxes than Treasuries and corporates of similar credit qualities. Investing in higher tax brackets should consider munis compared with other taxable fixed income investments.



* Yield-to-worst is the lower of the yield-to-worst or yield-to-call.
It is the lowest yield and investor will receive, barring default.

Note: Treasuries assume a 33% Federal tax rate and 3.8% Affordable Care Act tax rate. Corporates assume a 33% Federal tax rate, 5% state tax rate, and 3.8% Affordable Care Act tax rate.

Source: Bloomberg. As of November 20, 2015

[1] As represented by the percentage change in the S&P/Case- Shiller Composite-20 Home Price Index from March 31, 2012 to September 30, 2015.

[2] Source: Standard and Poor's, as of November 20, 2015.

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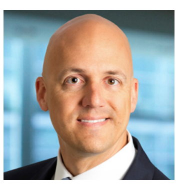

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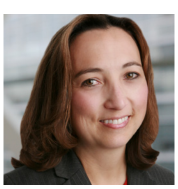

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Fixed income securities are subject to increased loss of principal during periods of rising interest rates. Fixed-income investments are subject to various other risks including changes in credit quality, market valuations, liquidity, prepayments, early redemption, corporate events, tax ramifications and other factors.

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International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, geopolitical risk, foreign taxes and regulations, and the potential for illiquid markets. Investing in emerging markets may accentuate these risks.

Index definitions

The Conference Board's Leading Economic Index (LEI) is a composite average of individual economic indicators designed to capture turning points in aggregate economic activity better than any individual component.

Purchasing Managers Index (PMI) is an indicator of the economic health of the manufacturing sector. The PMI index is based on five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment.

MSCI Emerging Markets (EM) Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. The MSCI Emerging Markets Index consists of the following 23 emerging market country indices: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and the United Arab Emirates.

Barclays U.S. Corporate High-Yield Bond Index covers the USD-denominated, non-investment-grade, fixed-rate, taxable corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below.-

Barclays U.S. Corporate Bond Index covers the USD-denominated, investment-grade, fixed-rate, taxable, corporate bond market. Securities are included if rated investment grade (Baa3/BBB–/BBB–) or higher using the middle rating of Moody's, S&P, and Fitch. This index is part of the U.S. Aggregate.

The S&P 500 Index is a capitalization-weighted index of 500 stocks from a broad range of industries. The component stocks are weighted according to the total market value of their outstanding shares.

Barclays Municipal Bond Index is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. To be included in the index, bonds must be rated investment grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch. The Barclays Municipal Bond: Muni Short (1-5) Index, Municipal Bond: Muni Intermediate (5-10) Index, Municipal Bond: Long Bond (22+) Index, Municipal AAA Index, Municipal AA Index, Municipal A Index, and Municipal BAA Index are all sub-indices of the Barclays Municipal Bond Index.

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