PIMCO

Asset Allocation Outlook 2017

Tails and Transitions

Uncertainty looms over the global outlook as long-held economic paradigms are challenged. As investors plot a roadmap for asset allocation in 2017, they should be mindful of macro transitions driving potential risks and opportunities.

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OVERALL RISK

We remain modestly overweight on overall risk positioning. In light of stretched valuations and complacency across many assets, we are maintaining ample dry powder and remain focused on portfolio liquidity as well as tail risk hedging strategies.

One can hardly imagine a better inflection point to revisit asset allocation frameworks than after the U.S. presidential election, especially given increasing skepticism of free trade and open borders as well as possible changes in economic paradigms that have prevailed over the last several years.

Investors clearly have had mixed feelings about recent developments. Early euphoria on what a Republican sweep in the U.S. would mean for equities has morphed into a wait-and-see attitude as equities consolidate and bonds reverse most of their initial sell-off.

In this outlook, we dissect in detail the current situation, which includes critical transitions that will have substantial consequences for the macro environment that we all must navigate. We also highlight return opportunities and related investment strategies, and, as always, share our views across the major asset classes.

We stress that the current state of valuations and the business cycle, when combined with higher macroeconomic uncertainty, will lead to increasingly diverse outcomes across and within asset classes. Detailed economic analysis and bottom-up security and sector selection must be combined with careful risk management and downside protection. Patience and nimbleness will be required in 2017 – but in light of the current environment, we also suggest reassessing one's approach to asset allocation.

Review and Outlook

To set the stage, let us begin by briefly revisiting last year's key themes. Our 2016 Asset Allocation Outlook came in February 2016, in the midst of a brief market meltdown driven by declines in oil prices as well as growth and inflation expectations.

At that juncture, we urged investors to remain focused on fundamentals, which indicated the market pullback may have been over done and presented opportunities to take targeted risks. Further, we underscored that investors needed to "altitude adjust" their long-term return expectations lower and volatility assumptions higher. We emphasized the following key investment themes:

- A recession was unlikely in the near term and global growth could pick up modestly
- Oil prices were likely to move higher rather than lower and end the year above $50/barrel
- Currencies were likely to continue to be a material source of volatility
- Value stocks were poised for a rebound after a long period of underperformance

Many of these key themes came to fruition. After the sell-off in the first quarter, equities rallied in 2016 (MSCI ACWI +8.5%), so too did investment grade bonds (Bloomberg Barclays U.S. Credit Index +5.6%) and high yield bonds (Bloomberg Barclays U.S. Corporate High Yield Index +14.7%). Commodity prices stabilized with oil ending the year at $57/barrel, and long-term U.S. inflation expectations[1] – which bottomed at 1.2% in February 2016 – ended the year at 2.0%. Currency volatility remained high, and was a significant driver of asset class returns. As we expected, value stocks as represented by the Russell 1000 value index outperformed the S&P 500 by about 5% in 2016.

[1]Represented by 10-Year U.S. Breakeven Inflation

Looking forward to 2017, we expect a highly uncertain investment environment amid a backdrop of four important transitions already underway:

> *Patience and nimbleness will be required in 2017 – but in light of the current environment, we also suggest reassessing one's approach to asset allocation."*

1. Handoff from monetary-led to fiscal-led policy:

As the European Central Bank begins to taper its monthly asset purchases, the Bank of Japan abandons its money supply target in favor of a yield target and the Federal Reserve looks to continue its hiking cycle, fiscal expansion will be needed to replace at least a portion of lost monetary stimulus. While details of the Trump administration's policies are yet to be finalized, our base case is for a $1.5 trillion fiscal boost spread over the next 10 years.

2. Transition from globalization to de-globalization:

As we forecasted in our *Secular Outlook* in June 2016, the acceleration of populism and a global shift in economic and diplomatic orthodoxy means protectionism is on the rise and many countries are likely to become more inward-looking.

3. China's currency regime shift:

While currency moves were muted after February 2016 in what we have dubbed the "Shanghai Accord," there is still room for policy errors as China looks to make a multi-year journey from a quasi-basket peg to what may become a managed or even free float of the renminbi while dealing with more unpredictable U.S. trade policy.

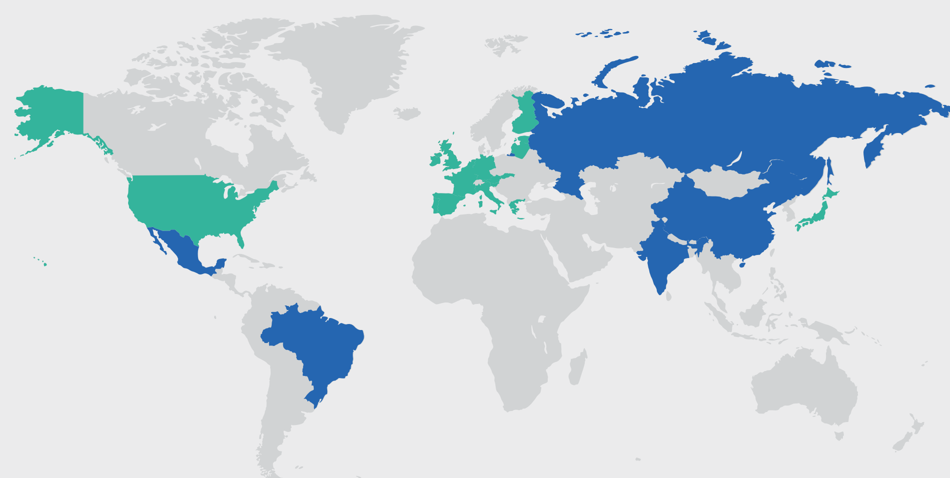
4. Pivot from disinflation to reflation:

A recovery in crude oil and strengthening real wages have led markets to begin to re-price inflation expectations upward. Coupled with the potential inflationary impact of the Trump administration's fiscal and trade policies, we may have a trend that persists over the cyclical and secular horizons.

GROWTH OUTLOOK FOR 2017 (GDP RANGE)

Developed Markets
1.50% to 2.0%

Emerging Markets
4.75% to 5.25%



	REAL GDP GROWTH (% YOY)			CPI INFLATION (% YOY)		
	2015	2016 FORECAST	2017 FORECAST	2015	2016 FORECAST	2017 FORECAST
DM[1]	**2.1**	**1.5**	**1.5-2.0**	**0.2**	**0.7**	**1.5-2.0**
U.S.	2.6	1.6	2.0-2.5	0.1	1.2	2.0-2.5
Eurozone	1.9	1.6	1.0-1.5	0.0	0.2	1.0-1.5
UK	2.2	2.0	0.75-1.5	0.0	0.7	2.25-2.75
Japan	0.6	0.8	0.75-1.25	0.8	-0.3	0.25-0.75
EM[2]	**4.7**	**4.9**	**4.75-5.25**	**3.8**	**3.6**	**2.75-3.25**
China	6.9	6.7	6.0-6.5	1.4	2.1	1.75-2.25
Brazil	-3.8	-3.6	0.25-1.25	9.0	8.8	5.0-6.0
Russia	-3.7	-0.6	0.5-1.5	15.5	7.1	4.5-5.5
India	7.2	7.5	7.0-8.0	4.9	5.1	5.0-6.0
Mexico	2.6	2.2	1.75-2.25	2.7	2.8	3.25-3.75
World[3]	**3.0**	**2.6**	**2.5-3.0**	**1.3**	**1.6**	**2.0-2.5**

Note: All data for real GDP and headline inflation are year-over-year (YOY) percentage changes.
[1] DM is the GDP-weighted average of U.S., eurozone, UK and Japan.
[2] EM is the GDP-weighted average of China, Brazil, Russia, India and Mexico.
[3] World is the GDP-weighted average of all countries listed in table above.
Source: Bloomberg, PIMCO calculations

Macroeconomic Backdrop

Our baseline prognosis for 2017 is that global real GDP growth remains in the 2.5%–3% range that has held over the past five years, but headline inflation in developed markets picks up from the depressed 2015–2016 levels while high inflation in emerging market economies like Brazil and Russia ebbs significantly. To be sure, we have less confidence in our baseline view than in years past, as **we see an increased risk of left- and right-tail events**. If the baseline holds we would expect:

- U.S. GDP grows at an above-trend rate of 2%–2.5% in 2017. Headline CPI inflation continues to converge with core inflation above 2% as we saw with December's data, and the Federal Reserve manages to raise interest rates two or three times during 2017 (with risks to the upside).
- Eurozone growth hovers sideways in a 1%–1.5% range as political uncertainty remains elevated ahead of crucial elections in France, Germany, the Netherlands and, potentially, in Italy. However, the populists/nationalists don't seize governmental power in any of the large countries.
- China's public sector credit bubble and its private sector capital outflows remain under control and growth slows into a 6%–6.5% band as policymakers prioritize financial stability over economic stimulus ahead of the 19th National Party Congress in the fourth quarter of 2017. A trade war with the U.S. is avoided.

Allocator's Roadmap

Uncertainty surrounding these major transitions means that the likelihood of extreme events or tail risks is much greater in 2017. This is true for both downside (left tail) and upside (right tail) risks.

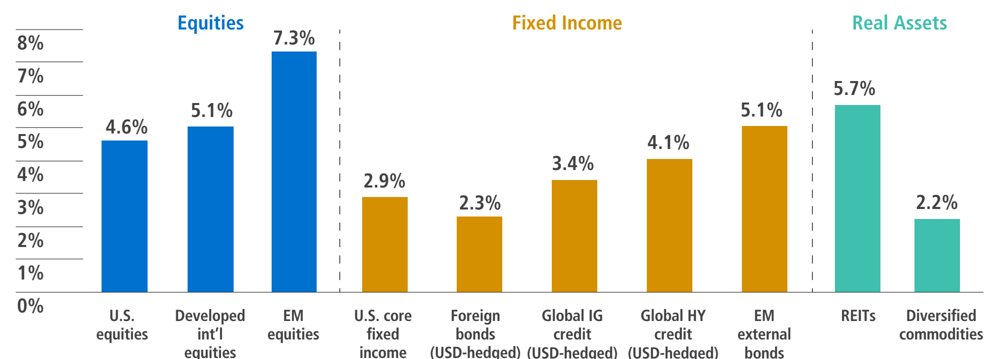
For example, consider potential outcomes from Trump administration policies. On one hand, deregulation coupled with tax reform could unleash a burst of productivity-boosting investment that may lead to sustained higher growth rates and corporate profits. On the other hand, trade wars, tariffs and geopolitical conflicts could depress growth and even tip the economy into a recession. In addition, as our analysis shows, starting valuations in both stock and bond markets don't promise attractive future returns. All of this calls for a careful and nuanced approach to asset allocation.

In 2017 and beyond, we believe investors will need to do more than simply rely on passive market exposures. For the last several years, market valuations were dominated by a single factor: central bank liquidity and the ensuing move to lower long-term rates. The predictability of central bank reaction functions lowered volatility and reduced the opportunity set for active managers. This trend benefited passive investments in both equities and bonds; however, it is now largely behind us.

We face a future where position on the business cycle, trends in earnings growth, as well as fiscal, tax, and trade policies could favor certain regions, industries and sectors over others. This should lead to – and has already – greater dispersion and less predictable correlations, making passive investing risky, and bottom-up analysis just as important as top-down macro. Overall, the environment ahead is likely to present active managers with a plethora of opportunities to add value.

In addition, the historically low levels of implied volatility in the options markets (as shown in the volatility chart) juxtaposed against our expectation of fatter tails means tail risk hedging strategies are an attractive tool to improve portfolio outcomes. While high quality government bonds will continue to offer attractive diversification properties in many states of the world, we caution that the likelihood of scenarios where portfolios overly dependent on this strategy underperform has increased.

PIMCO'S 10-YEAR CAPITAL MARKET ASSUMPTIONS[1]



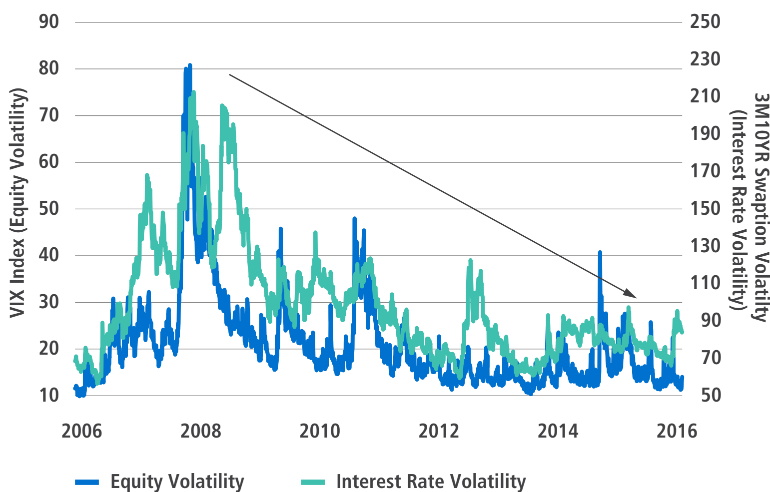
Source: PIMCO as of 13 December 2016

[1]Return estimates are based on the product of risk factor exposures and projected risk factor premia. The projections of risk factor premia rely on historical data, valuation metrics and qualitative inputs from senior PIMCO investment professionals.

U.S. equities: S&P 500 Index; Developed international equities: MSCI EAFE Net Dividend Index (USD Unhedged); EM Equities: MSCI Emerging Markets Index; U.S. core fixed income: Bloomberg Barclays U.S. Aggregate Index; Foreign bonds (USD-hedged): Bloomberg Barclays Global Aggregate ex-USD Hdg USD; Global IG: Bloomberg Barclays Global Agg Credit (USD Hedged); Global HY: MLX DevelMarkHighYieldConstr(USD Hedged); EM external bonds: JPMorgan EMBI Global Index; REITS: Dow Jones U.S. REIT Total Return Index; Diversified commodities: Bloomberg Commodity Index Total Return.

Despite recent global events, market-implied volatility across broad asset classes has remained near post-crisis lows. In this environment tail risk hedging should improve portfolio outcomes.

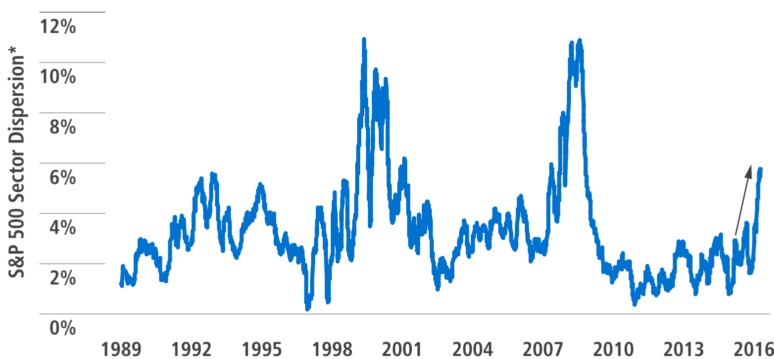
EQUITY AND INTEREST RATE VOLATILITY REMAIN AT LOW LEVELS, EVEN AFTER THE U.S. ELECTION



Source: PIMCO, Bloomberg as of 31 December 2016
The CBOE Volatility Index® (VIX®) is a key measure of market expectations of near-term volatility conveyed by S&P 500 stock index option prices.

Increased differentiation of returns across sectors has created opportunites for tactical management.

DISPERSION IN EQUITY RETURNS ACROSS SECTORS HAS INCREASED SINCE THE ELECTION



*Sector dispersion represents the difference between the average sector realized volatility and the overall S&P 500 Index volatility
Source: PIMCO, Bloomberg as of 11 January 2017

In an environment of low return prospects for passive asset class exposures, we suggest using every diversified return source available. While active management is often associated with skill in identifying and exploiting temporary market mispricing, there are other persistent ways to seek alpha or outperformance that are more "structural" in nature. Structural alpha strategies, also known as alternative risk premia or factor investing, seek to isolate well-known and time-tested sources of return premium including value, carry, momentum and volatility across asset classes. (For more on structural alpha, please see our August 2016 Asset Allocation Outlook.)

One can access these strategies indirectly by investing with active managers who combine them with traditional alpha sources. Alternatively, one could obtain exposures to them via "smart beta" strategies in equities, fixed income and commodities, or go another step and hedge the beta exposure altogether and invest in dedicated strategies that isolate and combine multiple structural alpha sources.

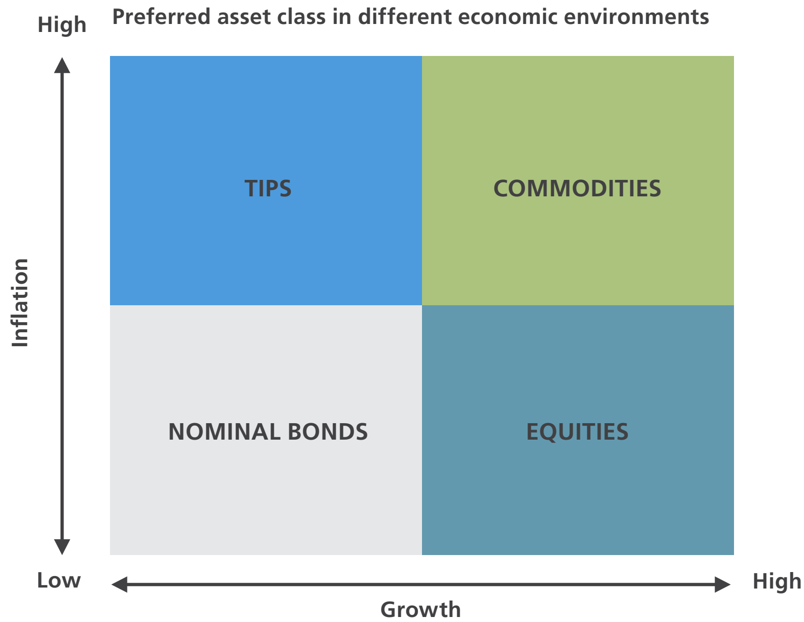
Other exploitable sources of returns for the patient investor are liquidity and complexity premia. Many investors need or prefer ready access to capital. Therefore, agreeing to lock up capital for a long period of time should allow investors to benefit from a liquidity premium and potentially generate incremental returns over strategies that promise to return capital over shorter horizons. Similarly, if assets are complex to understand and analyze, they often command a higher return for the risk assumed. Examples include certain asset-backed instruments, bank capital or emerging market corporate debt. Managers who have the scale, global presence, and expertise to accurately analyze these opportunities can consistently tap a wider opportunity set that some others cannot.

Before providing our detailed views on all major asset classes, we wanted to share three high-conviction views that will be important for asset allocations:

U.S. TREASURY INFLATION-PROTECTED SECURITIES (TIPS) COMPLEMENT NOMINAL BONDS AS A PORTFOLIO HEDGE

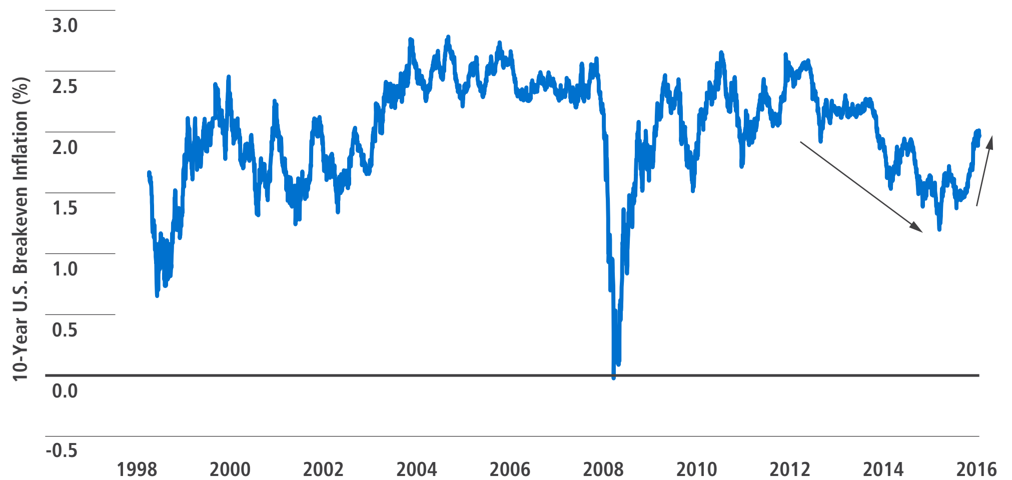
We have long argued that inflation risk was mispriced and the market is finally beginning to recognize it. Rising inflation expectations have profound asset allocation implications. U.S. Treasuries — both nominal and real – play a fundamental defensive role in asset allocation portfolios. After the taper tantrum in 2013, the outlook for lower commodity prices, a stronger U.S. dollar and lower inflation made nominal Treasuries the natural choice. Going forward, protectionism and a fiscal boost, combined with a U.S. economy operating close to full employment, raise the possibility of higher inflation and larger inflation surprises. In this environment, we believe TIPS will become a critical defensive element of multi-asset portfolios.

IN AN ENVIRONMENT OF LOW GROWTH AND RISING INFLATION, TIPS ARE THE PREFERRED 'RISK-FREE' ASSET



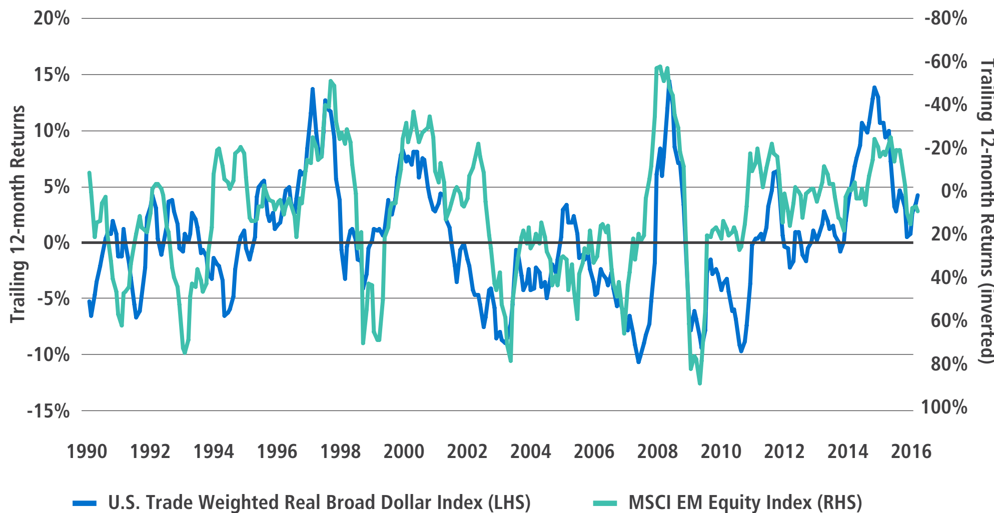
Source: PIMCO

INFLATION EXPECTATIONS INCREASED IN 2016



Source: PIMCO, Bloomberg as of 31 December 2016

EM EQUITY PERFORMANCE IS STRONGLY IMPACTED BY EM CURRENCY PERFORMANCE



Source: PIMCO, Bloomberg as of 31 December 2016

EQUITIES HAVE HISTORICALLY OUTPERFORMED ON A RISK-ADJUSTED BASIS IN THE LATE STAGES OF AN EXPANSION

Sharpe Ratio	U.S. IG Credit (over Treasuries)	U.S. Equities
Expansions	0.29	0.53
1st Half Expansions	0.50	0.75
2nd Half Expansions	**-0.10**	**0.28**
Recessions	-0.13	-0.43
Full Sample	0.15	0.33

As of 31 December 2016

Source: PIMCO, Bloomberg, Barclays. Data from 1973-2016

From 1973-1987, U.S. Equities total returns correspond to that of the MSCI USA Index. After 1988, U.S. Equities are the excess returns to the S&P 500 Index. U.S. Credit excess returns are measured over duration-matched Treasuries of the Bloomberg Barclays U.S. Credit Index.

INVEST WITH CAUTION IN EMERGING MARKETS (EM)

In early 2016, we had a constructive outlook on EM as valuations were very low while fundamentals were improving and commodity prices were bottoming. Looking back, EM assets had a strong recovery in 2016 across stocks, bonds and currencies. While valuations are still quite attractive (although not as much as in early 2016), we see some headwinds from a stronger U.S. dollar, future Fed hikes and potential changes in U.S. trade policy. Moreover, EM equity valuations have outperformed historic correlations to commodity prices. Therefore, we advocate being more targeted and selective in EM exposure this year.

UPSIDE/DOWNSIDE CAPTURE PROFILE OF EQUITIES APPEARS MORE ATTRACTIVE RELATIVE TO OTHER RISK ASSETS

Risk assets like high yield bonds, investment grade bonds and equities all had positive risk-adjusted returns in 2016, getting a further boost from the U.S. election results and optimism around pro-growth policies. However, given starting valuations, we believe equities are likely to outperform other risk assets by more in a right-tail event than they would underperform such assets in a left-tail event, we see equities as better positioned in 2017 based on our assessment of fatter tail risks (both right and left discussed above). Additionally, our studies show that equities tend to outperform other risk assets in the late stages of an economic expansion.

Asset allocation themes for multi-asset portfolios

POSITIONING	OPPORTUNITIES

EQUITIES

- U.S.
- Europe
- Japan
- Emerging markets

While we are more constructive on equities relative to other risk assets, in light of the recent rally we are maintaining a neutral view overall and an underweight to U.S. equities. Yet potential changes to U.S. tax policy and regulation may provide further support to domestically oriented U.S. corporations. We are moderately bullish on European equities, with growth in the region above trend and an accommodative ECB. We currently have a small positive allocation to EM as a long-term value play.

RATES

- U.S.
- Europe
- Japan
- Emerging markets

We remain defensive on interest rate exposure. In the U.S., we prefer TIPS (more on that below). Beyond the U.S., we find UK Gilts and Japanese government bonds rich, and we believe valuations of bonds by "peripheral" countries in Europe are not sustainable without ECB support.

CREDIT

- Securitized
- Investment grade
- High yield
- Emerging markets

This late in the cycle investors should appreciate the limited spread tightening potential of corporate bonds as well as the downside potential for defaults or spread widening. Our overweight to credit is focused on non-agency mortgage-backed securities, which will likely continue to benefit from an ongoing recovery in the U.S. housing market and remain well-insulated from many global risks.

REAL ASSETS

- Inflation-linked bonds
- Commodities
- REITs
- Gold

We maintain an overweight to real assets, with a focus on U.S. TIPS. Inflation expectations have risen recently, yet we believe there is still value in TIPS as the market is underpricing inflation risk. Inflation is on course to reach and possibly exceed the Fed's 2% target over the coming months. (The Fed watches the PCE measure of inflation, not CPI. The latter recently surpassed 2%.)

CURRENCIES

- USD
- Euro
- Yen
- Emerging markets

We continue to favor the U.S. dollar against a basket of Asian currencies – a region that has benefited inordinately from global trade. We also have a modest underweight in the euro, anticipating continued dovish monetary policy from the ECB. We are holding small tactical positions in some of the higher-carry "commodity currencies" given the excessive cheapening seen post elections.

Global Equities: Neutral

Equities are the asset class of choice when investors believe in growth combined with modest inflation.

However, as we have discussed, the market's expectations on inflation, growth and rates became too pessimistic during 2016. During this period, although equities saw poor earnings per share (EPS) growth, ever lower global yields helped push equity prices higher.

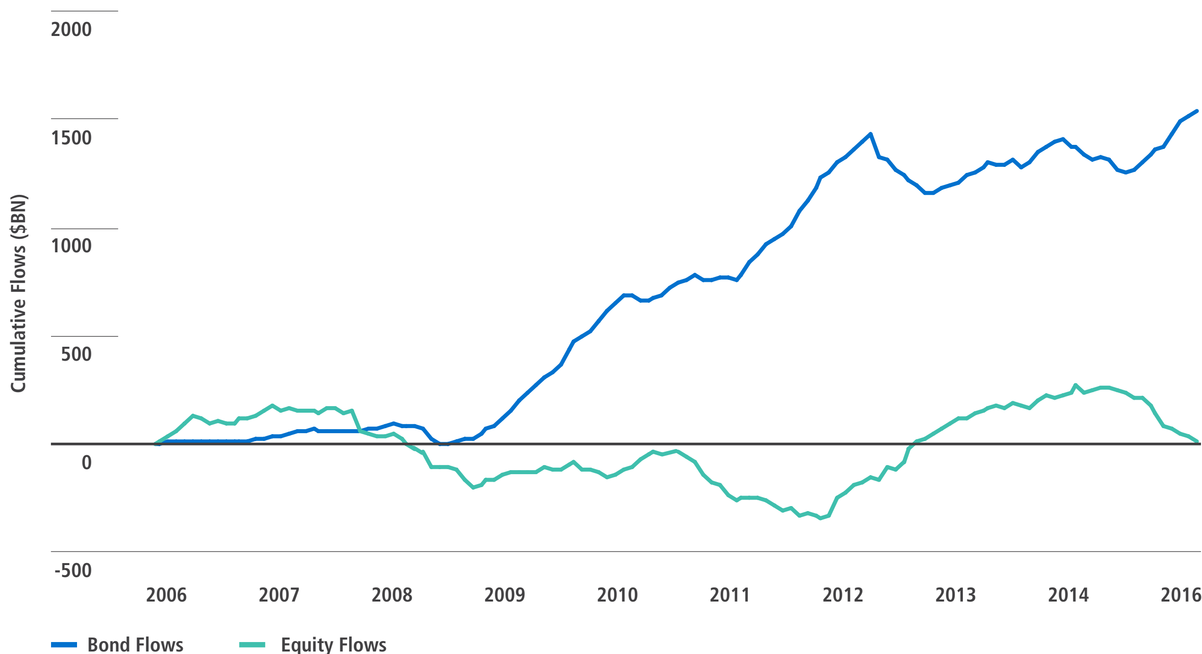
The end of 2016 has changed this pessimistic mindset. Views and forecasts on both growth and especially inflation have started to shift higher, and even at a historically high price-to-earnings ratio (P/E), equities have started attracting inflows. Indeed, when looking at our preferred measure for long-term value, the equity risk premium (ERP), equities do not look particularly rich (see table on the next page).

That said, equity returns going forward will crucially depend on three factors: perception of growth and inflation, positioning and market technicals, and finally, policy and politics.

The first indicator looks supportive as PIMCO expects steady positive global growth in 2017 and modestly higher inflation. However, given starting valuations, for equities to really perform in 2017, potential tax reform will have to turn into actual tax reform, and deregulation and fiscal stimulus will have to be geared toward raising *long-term* economic and earnings growth. A risk is that if stronger economic growth is accompanied by significantly higher inflation, we could see interest rates rise to a point where they overwhelm the pickup in earnings and negatively impact equity market returns.

We expect technicals to remain favorable as the large amount of money that has left equity markets returns (see flows chart), seeking out the better convexity (or upside/downside) that we discussed. The third factor, policy and politics, remains relatively fluid given the higher policy uncertainty in the U.S. and a heavy political calendar ahead in Europe.

BOND FLOWS HAVE SIGNIFICANTLY OUTPACED EQUITY FLOWS THE PAST 10 YEARS – 2016 WAS NO EXCEPTION



Source: EPFR as of 30 November 2016

Global Equities: Neutral *(continued)*

While we have a relatively constructive view of the asset class, the rapidity of the recent rally leads us to currently take a neutral position. However, we see attractive opportunities within major regions.

U.S.

The U.S. has outperformed after Trump's victory and has now reached levels that keep us cautious and mildly underweight. Earnings growth expectations have increased and the U.S. dollar has strengthened considerably. As such, we prefer exposure to domestic sectors and in particular small cap stocks that could be benefactors of the Trump administration's tax policies. We are especially cautious on sectors highly exposed to trade and USD strength, like technology.

EUROPE

European growth is continuing at an above-trend pace, the ECB remains accommodative, and the euro has been weak with Europe very exposed to overseas earnings. European banks have gone through a lot of restructuring, while the ECB's policy and regulatory momentum have remained positive. We expect earnings momentum to pick up meaningfully in the next two quarters and surprise on the upside. As a result, while we favor European equities, we will be carefully assessing the pace and nature of Brexit and keeping a close eye on political developments.

JAPAN

We are neutral on Japanese equities. The performance of the Nikkei is significantly linked to the movements in the Japanese yen and as such we prefer to express our views directly in the currency market. Even though Japan stands to benefit from more stable government yields due to the price targeting policy of the Bank of Japan, this has to be weighed against our broader caution on Asia and our belief that corporate earnings in Japan are likely to surprise to the downside.

EMERGING MARKETS

While we recognize valuations remain cheap, earnings momentum is still lacking and numerous policy and political uncertainties are likely to weigh on the sector. As such we are selective, often expressing our views in EM through more liquid and higher income generating positions, such as in the currency markets. Once we get more clarity on Trump's policies and the Fed's outlook, we will make tactical shifts.

WHILE THE CAPE IS ELEVATED VERSUS HISTORY, OUR ESTIMATE OF THE EQUITY RISK PREMIUM IS CLOSE TO HISTORICAL AVERAGES GIVEN LOW REAL YIELDS

	Cyclically adjusted P/E (CAPE)	Equity Risk Premium Estimate: (1/CAPE) - (10-year Real Yield)
Level as of 3 Jan 2017	24.6	3.6%
Percentile rank of current value	**84%**	**55%**
Expansion	19.6	3.6%
Recession	14.2	6.3%
1st Half Expansion	18.4	4.2%
2nd Half Expansion	21.3	2.7%

As of 3 January 2017. Historical timeframe is 1950–2017.
Source: PIMCO, Compustat as of 3 January 2017. CAPE is measured as price divided by median 10-year trailing earnings.
Equities represented by S&P 500 Index.

Global Rates: Underweight

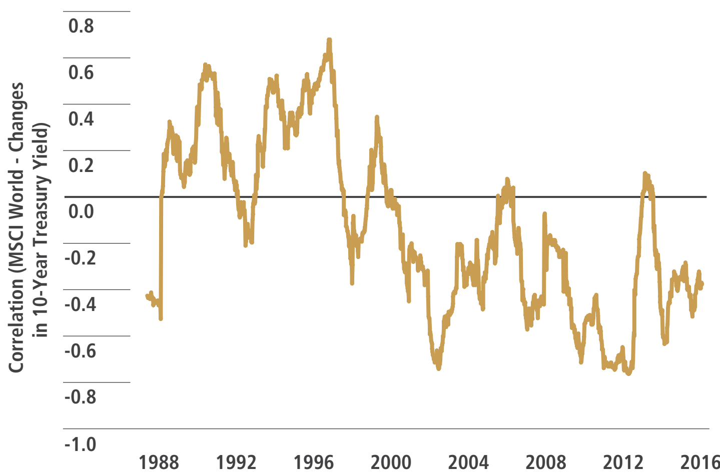
Our positioning in high quality government bonds is dependent on two competing outcomes. The first is our belief that inflation is likely to be higher than expected, which combined with the possibility of fiscal stimulus, suggests the Fed may hike rates faster than the market is currently expecting (two hikes in 2017 and two hikes in 2018). This would argue for a bearish position in bonds. Against this are the fatter tails we have mentioned, which along with the more advanced stage of this business cycle, suggest a somewhat higher than average probability of a recession. This would argue for an increased position in government bonds, especially in a portfolio that includes risky investments. Moreover, U.S. Treasuries are not as rich as they were in mid-2016 on a fundamental basis, as the sell-off over the last few months has reintroduced some term premium into the market. We balance this dichotomy by holding a large allocation to U.S. TIPS.

Outside the U.S., we find UK Gilts and Japanese government bonds rich, the former not yet having recovered from their Brexit-induced rally and the latter holding in line with the BoJ "peg." We feel both of these rates are likely to move higher as we move away from the era of central bank dominance.

Another beneficiary of central bank activity has been the bonds issued by the so-called peripheral countries in Europe. We believe current valuations are not sustainable without ECB support and as such have voided our long-held overweight positions in these bonds.

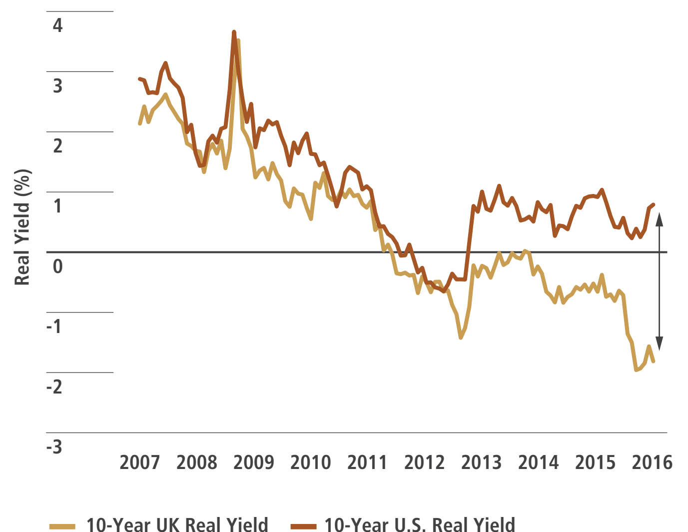
Finally, we caution investors to carefully analyze correlations and relative value among trades that may appear independent, such as an underweight to duration, a yield-curve steepener and positioning for a widening of breakeven inflation.

WHILE THE STOCK-BOND CORRELATION HAS VARIED OVER TIME, BONDS ARE LIKELY TO REMAIN A RELIABLE DIVERSIFIER, EVEN IF CORRELATIONS INCREASE FROM CURRENT LEVELS



Source: PIMCO, Bloomberg as of 31 December 2016. Equities represented by the MSCI World Index. Bonds represented by the change in the U.S. 10-Year Treasury yield. Correlation is measured on a weekly basis, using 52 weeks of data.

RELATIVE VALUATION OF UK AND U.S. REAL YIELDS HAS DIVERGED SIGNIFICANTLY



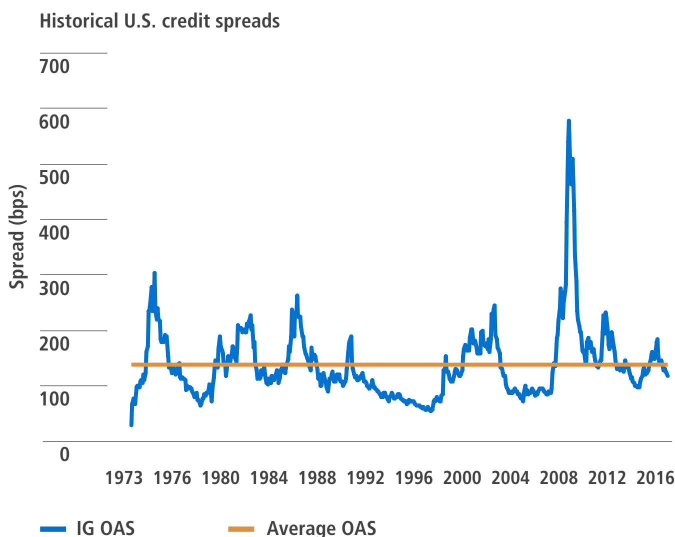
Source: PIMCO, Bloomberg as of 31 December 2016

Global Credit: Overweight Select Sectors

Given tight spreads and fat tails, investors should be increasingly discriminating about credit risk, seeking adequate compensation for more than just the typical default and liquidity risks. It's important to understand the late cycle behavior of corporate bonds: not a lot of carry or spread tightening potential on the upside, with significant default and spread widening risk on the downside. That said, we see plenty of opportunities in credit markets to earn attractive risk-adjusted returns.

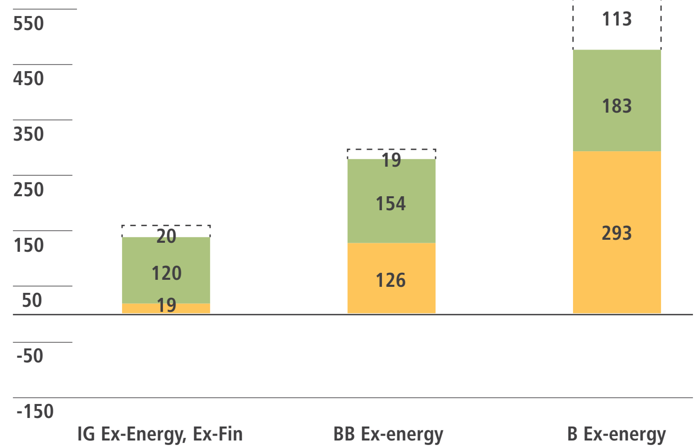
For example, we seek to harvest the returns from the complex cash flows embedded in non-agency mortgage-backed securities and contingent bank capital securities. In addition, we favor regular offerings from banks and financials, which should continue to benefit from aggressive de-risking to date as well as from steeper yield curves currently on offer. Several industries tied to the U.S. consumer appear attractive as well, such as cable, telecom, gaming, airlines and lodging.

CREDIT SPREADS ARE CLOSE TO HISTORICAL AVERAGES



Source: PIMCO, Barclays as of 31 December 2016
From 1973-1990 OAS is computed from the duration matched yield-to-worst of the Barclays IG Credit Index (at the rating bucket level) and Barclays Treasury Index. Starting in 1990 option-adjusted spreads are computed by Barclays (components of the Bloomberg Barclays U.S. Credit Indices), averaged with current market-value weights across rating buckets. OAS estimates are adjusted to maintain a constant ratings distribution over time.

CREDIT SPREADS ARE EMBEDDING A MEANINGFUL AMOUNT OF EQUITY RISK AND NOT PROVIDING ADEQUATE COMPENSATION FOR LIQUIDITY AND OTHER RISKS



Source: PIMCO, Bloomberg, Barclays as of 17 January 2017.

*Valuation gap represents the difference between observed spread and model fair value. Expected default losses are based on Moody's default rates since 1983. Estimates of compensation for equity beta & convexity are based on regression of realized risk premia of credit indices, on those of the S&P 500 index and 1M variance swaps on S&P 500 over the period 1999 – 2016. Current risk premium estimate for S&P 500 is defined as 1/CAPE * Payout ratio + Expected real growth – Expected real rate. Variance risk premium is estimated based on its relationship with Equity risk premium over the last 10 years.

Global Real Assets: Overweight

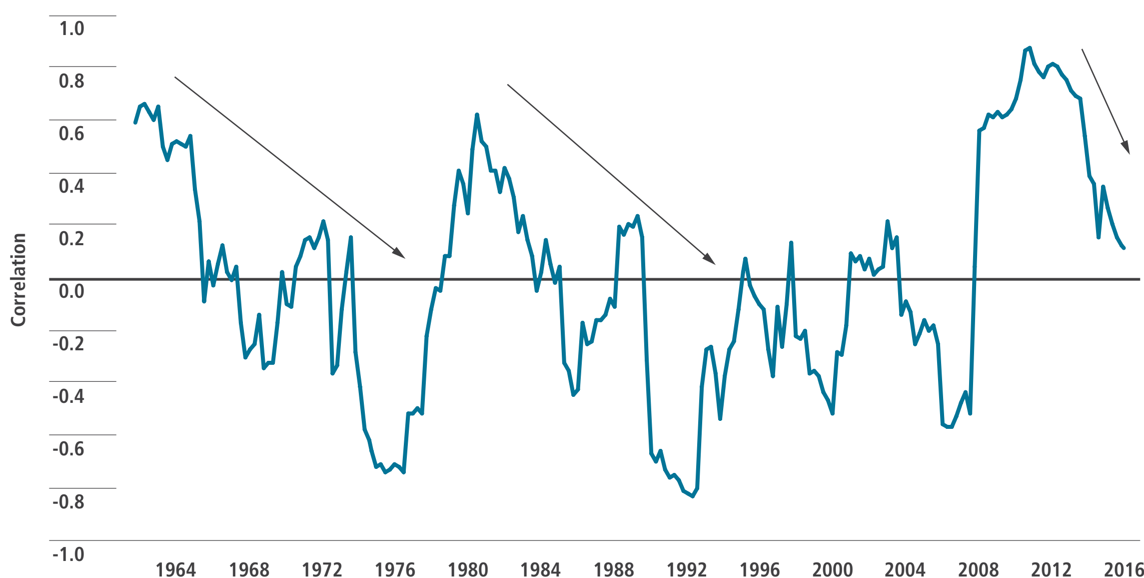
It is critical to hedge inflation in a world that is going from a deflationary to a reflationary bias. We highlighted this in our 2016 Outlook and held an overweight, and we believe recent events only add to the possibility of a bout of unexpected inflation. The tilt across the developed markets toward greater populism and protectionism are by themselves inflationary. The U.S. economy operating at close to full capacity adds further to these inflationary pressures.

As discussed previously, U.S. TIPS are a natural portfolio hedge in the current environment. Moreover, TIPS remain attractive relative to nominal Treasuries even without an expectation of inflation surprises. The breakeven inflation rate in 10-year TIPS is currently 2.0% per year for the next 10 years, which is below our expectations. We expect the Fed to achieve its target of 2% for the Personal Consumption Expenditures (PCE) measure of inflation, which should translate to about 2.35% for the more popular CPI if the historical difference between the two measures holds. We believe investors are not adequately pricing above-target future inflation as they are still anchored by several years of below-target inflation.

In addition, at current valuations, investing in a broad commodity index continues to offer value both as a diversifier and as an inflation hedge. Not only is the oil market supply imbalance correcting due to a slowdown in U.S. production combined with discipline from OPEC, but other commodities have also seen their own supply-side adjustments.

Finally, we find real estate investment trusts (REITs) attractive. They have been recently hurt by the sell-off in equity sectors that investors view as "bond proxies," and REITs now offer attractive valuations. They remain a defensive sector of the equity market and offer a high dividend yield. As such they provide a useful counterweight to portfolios heavily geared to higher interest rates. Furthermore, REIT fundamentals remain strong based on our analysts' view of continued strength in U.S. real estate.

EQUITY/COMMODITY CORRELATION HAS DECREASED SIGNIFICANTLY POST-CRISIS



Source: Bloomberg as of 31 December 2016
Correlations based on 3-year rolling quarterly returns
Commodity returns are based on the Composite Commodity Index, a fully-collateralized total return index, whose methodology is based on Ibbotson's Strategic Asset Allocation and Commodities (2006). The index is an equally-weighted, monthly rebalanced composite of the following six commodity indexes: S&P Goldman Sachs Commodity Index Total Return (since 1970), Bloomberg Commodity Index (formerly the Dow Jones-UBS Commodity Index Total Return, since 1991), Reuters/Jefferies CRB Total Return Index (since 1994), Gorton and Rouwenhorst Commodity Total Return Index (1959-2007), JPMorgan Commodity Futures Index (1970-2001), and Credit Suisse Commodity Total Return Benchmark (since 2001). Equities represented by the S&P 500 Index.

Global Currencies: Neutral

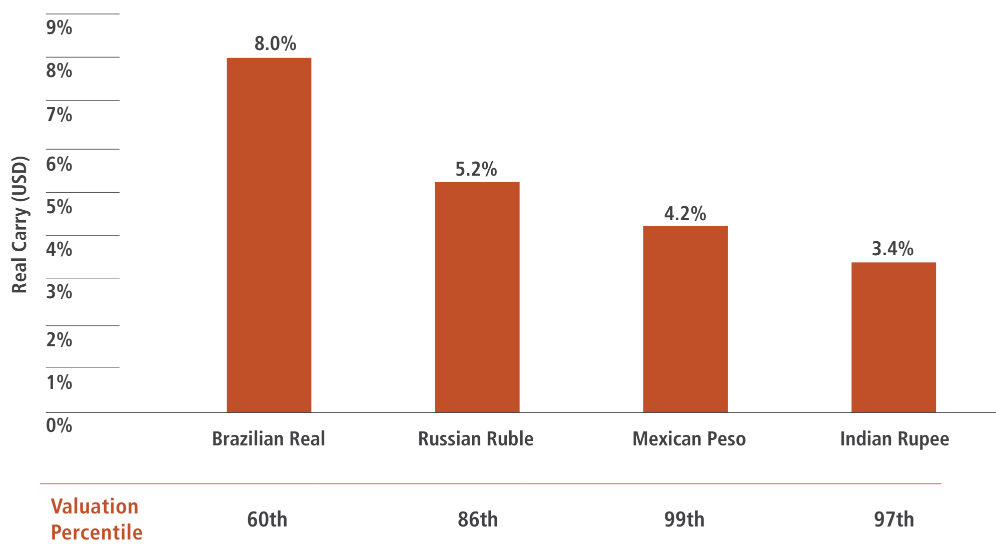
While we think the U.S. dollar will continue to appreciate, albeit at a slower pace, there are limits to how far it can rise. If the USD gets too strong, it is likely to lead to tighter financial conditions, causing large U.S. corporations highly exposed to overseas demand to suffer, leading to a sell-off in the stock market. Eventually these negative impacts could halt the Fed in its hiking tracks.

The proposed border-adjustment tax and repatriation of corporate overseas balances all point to a stronger dollar. Yet considering recent strength and current valuations, we have reduced our U.S. dollar overweights versus other developed market currencies.

Most of our FX exposures are in emerging markets, where we express our overall constructive stance on the global outlook by holding long exposure in high yielding currencies (BRL, RUB, INR) versus short exposure in low-yielding Asian currencies (CNY and others). We believe these positions would perform well if tariffs were disproportionately imposed on the Asian exporters, or if growth were to unexpectedly slow in that region.

Currencies are likely to play an even more important role in portfolios. The decision of how much FX exposure to hedge is even more relevant given the stock/bond correlation is likely to vary meaningfully in a rising rate environment.

REAL CARRY IS ATTRACTIVE FOR SELECT EM CURRENCIES, WITH POTENTIAL FOR ADDITIONAL APPRECIATION GIVEN CURRENT VALUATIONS



Source: PIMCO, Bloomberg as of 9 January 2017. Real carry calculated as 1-month forward implied carry (annualized) adjusted for inflation expectations. High valuation percentile indicates that the currency is currently cheap relative to model fair value.

CLOSING REMARKS

Despite substantial uncertainty surrounding the global outlook, our final suggestion is to avoid sitting on the sidelines. Solid options remain for investors to plot a path to their objectives, especially as inflation risks are rising across many developed markets, threatening to dilute the wealth of those waiting it out in cash.

Our recipe is to look beyond the passive market exposures that delivered returns early in this economic expansion. In addition to tactically shifting allocations, an investor's toolkit might include actively managed strategies targeting structural alpha, smart beta strategies, or strategies that hedge the beta exposure and focus entirely on alpha sources. Furthermore, in an era of higher uncertainty, the ability to protect capital during unforeseen market shocks through carefully selected tail risk hedges is going to be critical.

Of course, one should not get off the sidelines merely at the beginning of the year. 2017 calls for vigilance and flexibility over the full 12 months. We shall see whether the baseline, right-tail or left-tail scenario occurs, and be ready to hopefully capitalize.

The Asset Allocation team leverages firmwide resources

FULL PIMCO RESOURCES: **230+ Portfolio Managers** | **50+ Research Analysts** | **50+ Portfolio Analytics Analysts**

Mihir P. Worah
CIO Asset Allocation and Real Return

- PIMCO Investment Committee member
- Generalist portfolio manager
- 15 years of investment experience

Role: Asset allocation and portfolio construction

Geraldine Sundstrom
Managing Director, Asset Allocation

- Global macro and absolute return investment experience
- 20 years of investment experience

Role: Asset allocation and portfolio construction

Rahul Devgon
Senior Vice President

- Macro and technical trading
- Global macro and absolute return investment experience
- 18 years of investment experience

Role: Global macro and relative value trading

Emmanuel S. Sharef
Executive Vice President

- Quantitative real estate and economics experience
- 8 years of investment experience

Role: Quantitative Strategies

Nicholas Johnson
Managing Director

- Real assets and relative value investment experience
- 12 years of investment experience

Role: Real assets and relative value

Mukundan Devarajan
Executive Vice President

- Empirical analysis and portfolio construction
- 12 years of investment experience

Role: Risk premia and cross-asset research

CLIENT ANALYTICS

Jamil Baz
Managing Director

- Global Head of Client Analytics
- 30 years of investment experience

PORTFOLIO ANALYTICS

Ravi Mattu
Managing Director

- Global Head of Analytics
- 34 years of investment experience

RISK MANAGEMENT

William De Leon
Managing Director

- Global Head of Portfolio Risk Management
- 27 years of investment experience

The authors would like to thank PIMCO's Analytics group for their contributions to this paper.

A **"risk-free"** asset refers to an asset which in theory has a certain future return. U.S. Treasuries are typically perceived to be the "risk-free" asset because they are backed by the U.S. government. **All investments** contain risk and may lose value.

Capital market assumptions are for illustrative purposes only and are not a prediction or a projection of return. Return assumption is an estimate of what investments may earn on average over the long term. Actual returns may be higher or lower than those shown and may vary substantially over shorter time periods. It is not possible to invest directly in an unmanaged index.

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Alpha is a measure of performance on a risk-adjusted basis calculated by comparing the volatility (price risk) of a portfolio vs. its risk-adjusted performance to a benchmark index; the excess return relative to the benchmark is alpha. Smart beta refers to a benchmark designed to deliver a better risk and return trade-off than conventional market cap weighted indices. **Correlation** is a statistical measure of how two securities move in relation to each other.

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