

Beyond beta

Mihir Worah | PIMCO | 10 February 2015

Investors should consider a moderate risk-on posture in multi-asset portfolios given continued global growth and a low probability of recession in 2015. As the global economy creeps further into a slow and extended business cycle, we expect greater divergence in returns within asset classes and sectors – which means an emphasis on tactical asset allocation, careful bottom-up security selection and prudent relative value decisions are going to be critical in 2015.

1. INTRODUCTION

Investors already weary of a persistent low yield environment complicated by uncertainties – geopolitical tensions, plummeting oil prices, volatile currencies, to name a few – may need to prepare for another challenging year in 2015. From an asset allocation perspective, achieving target returns may be difficult. Not only do we anticipate a tug-of-war escalating between divergent monetary policies and uneven global economic growth, we also observe that 2015 begins with fuller asset valuations than in the recent past amid a persisting low yield environment.

Yet, the picture is not entirely bleak. We anticipate a more extended business cycle through the combination of a slow-moving Fed willing to chase inflation rather than impede robust U.S. growth and increased policy stimulus from the European Central Bank (ECB) along with a continuation of the Bank of Japan's (BOJ) asset purchases. As long as the odds of a recession remain low, we expect various risk assets will deliver attractive returns. In particular, we observe the equity risk premium in the U.S. relative to real rates remains close to its longrun average, reducing the probability of a sharp correction. Nevertheless, there remains significant risk of increased market volatility as we approach the start of the Fed tightening cycle.

1.1 Forum conclusions

At our Cyclical Forum in December 2014, our investment professionals from around the world gathered to discuss how the global macro economy is likely to evolve over the coming year. Following the Forum, our portfolio management leadership team considered how the interplay between macroeconomic fundamentals, valuations, risks and market technicals is likely to impact risk and return potential across global asset classes.



Bottom line: We believe an overweight to equity risk is still warranted and see pockets of opportunity across credit sectors. In contrast, we are modestly negative interest rate risk, and we have a neutral stance on commodities. In 2015, an emphasis on robust portfolio construction and on exploiting relative value opportunities across asset classes will be more important than the bold "beta bets" that have been sufficient over the past few years.

Figure 1: Allocation themes

Equities	Rates and credit	Real assets	Currencies
With interest rates low and some years still ahead for the business cycle to run its course, current equity valuations appear justified. We favor European and Japanese equities (on a currency-hedged basis) and find attractive investment opportunities in emerging Asia.	Given the likelihood of the Fed hiking interest rates later in 2015, we favor fixed income sectors that are less sensitive to rising rates. European peripheral debt, US non-agency mortgage- based securities and select EM debt sectors offer attractive	US TIPS and European inflation-linked bonds are attractively priced inflation hedges. We maintain a neutral stance on commodities but are bearish on gold. We believe oil prices are hovering near bottom, through bouts of volatility may produce extreme	As central bank policies diverge further, we expect continued strengthening of the US dollar and further weakening of the euro and the Japanese yen. We find select opportunities in emerging currencies, in particular the Indian rupee and Mexican peso.
	value.	outcomes.	

Source: PIMCO

2. MACROECONOMIC OVERVIEW

Our top-down macroeconomic forecasts form the backdrop for the asset allocation views that are expressed in our multi-asset portfolios. These macro views originate from our Secular and Cyclical Economic Forums, during which investment professionals from all our global offices gather in Newport Beach to discuss the outlook for economies and markets.



2.1 Outlook for major global economies

We expect global growth to accelerate from around 2.50% (year-over-year) in 2014 to 2.75% in 2015. We believe the majority of this improvement will come from supply-driven declines in oil prices. Acceleration in the velocity of money, driven by the transfer of incremental petrodollar cash flows from producers to consumers, is also supportive of higher global growth this year.

Across key global economies, we expect growth in 2015 to be highly divergent, though overall somewhat stronger than in 2014. In particular, we expect U.S. and Japanese growth to pick up, reaching levels of around 3.0% and 1.5%, respectively. Dr. Ben Bernanke, the guest speaker at the December Cyclical Forum, affirmed our view that the outlook for the U.S. economy in 2015 is incrementally positive, reflecting improving household finances and confidence as well as increasing evidence that the economic recovery is becoming self–sustaining and broad–based.

In Japan, we expect growth to rebound due to bold action by policymakers as well as declining oil prices and a depreciating yen. However, the private sector still must confront major secular and structural headwinds.

Among other regions, we expect to see growth in Europe of around 1.0% in 2015, higher than in 2014 but still weak. In China, we expect growth of around 6.5%, moderating downward as China continues its attempts to transition to a growth model (and growth rate) that is less reliant on credit expansion and investment.

2.2. Cyclical inflation outlook

Declining oil prices are likely to have a clear downside impact on global inflation data this year. In most developed economies, headline inflation will likely become negative in the early part of 2015, only to bounce back into positive territory as we go into late 2015 and early 2016. Core inflation (excluding food and energy) will likely remain around current levels of 1.6% on a year-over-year basis.

"Our discussion of global rates and risk assets was anchored by our secular New Neutral thesis. However, we concluded that this longerterm outlook for lower neutral policy rates is now largely priced into the markets." - Daniel J. Ivascyn, Group Chief Investment Officer

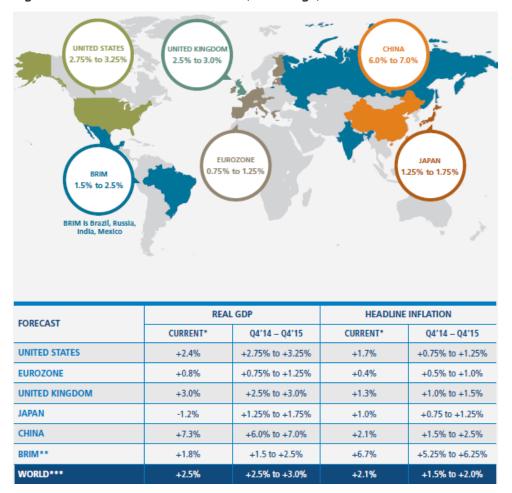


Figure 2: Growth outlook for 2015 (GDP range)

Sources: Bloomberg, PIMCO calculations. * Current data for real GDP inflation represents four quarters ending Q3 2014. ** BRIM is Brazil, Russia, India, Mexico. *** World is weighted average of countries listed in the table.

3. ASSET ALLOCATION THEMES FOR MULTI-ASSET PORTFOLIOS

Investors should consider a moderate risk-on posture in multi-asset portfolios given continued global growth and a low probability of recession in 2015. As the global economy creeps further into a slow and extended business cycle, we expect greater divergence in returns within asset classes and sectors – which means an emphasis on tactical asset allocation, careful "bottom-up" security selection and prudent relative value decisions are going to be critical in 2015.

Several broad themes will be reflected in our multi-asset portfolios in 2015. A moderate risk-on posture means we expect to maintain an overweight to **global equities**. Within global



equity market regions, we favor non-U.S. equities, in particular European and Japanese equities (both on a hedged basis) and select emerging Asia equities.

On **interest rates**, we continue to believe in our secular New Neutral hypothesis, in which average policy rates are set well below the levels that prevailed before the global financial crisis. However, this longer-term outlook for lower neutral policy rates is now largely priced into the markets. What is probably not yet fully reflected by the rate markets is the view that the U.S. economy is likely to grow at a robust 3.0% rate in 2015, the output gap will continue to shrink and the Fed is likely to start hiking. This means we expect to have an underweight to global rates over the cyclical horizon relative to what a well-diversified portfolio would normally have.

On **spread sectors**, we believe investors should consider selective overweights, carefully surveying individual credits in non-agency mortgage-backed securities, investment grade, high yield and emerging markets where attractive spreads can offer diversified sources of portfolio carry, with careful credit analysis helping to identify strong credits and avoid defaults.

Turning to **real assets**, we maintain a neutral stance on commodities: The drop in commodity prices and the resulting curtailment of production means supply and demand will move back into balance over the course of 2015. Within commodities we are neutral oil, favor industrial versus precious metals and have a negative view on the agricultural commodities. Given current valuations and with our expectations that oil prices are near bottom, inflation–linked bonds in the U.S. and Europe may offer attractive opportunities.

Finally, on **currencies**, we expect to maintain our overweight to the U.S. dollar. The rare coincidence of attractive valuations, increasing growth differentials and divergent monetary policies should lead to further appreciation of the USD.



Figure 3: Asset allocation philosophy

MACRO FUNDAMENTALS Asset class returns are influenced by surprises in growth and inflation as well as central bank and fiscal policy

VALUATIONS

Long-term mean reversion drives returns over long-term investment horizons Beginning valuation levels are the strongest indicators of future returns

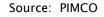


Figure 4: Where we see value

Overall View	Tactical Tilts	Weighting	Select Opportunities and Risks	
UNDER OVER WEIGHTING	U.S. equities		EM Asia equities offer attractive valuations and may benefit from strong U.S. growth; European financials may benefit from ECB accommodation; we selectively participate in merger arbitrage and other event-driven market- neutral pairings	
	European equities			
	Japanese equities			
EQUITIES	EM Asia equities			
UNDER OVER WEIGHTING	U.S. duration		With the markets now pricing PIMCO's New Neutral thesis, U.S. rates may be slightly rich; ECB accommodation is likely to compress peripheral spreads; select EM sovereigns offer attractive real yields, even after hedging currency risk	
	Core Europe	+		
	Peripheral Europe	+		
RATES				
UNDER OVER WEIGHTING	Non-agency MBS	- +	Oil price pressures have caused credit spreads to widen not only in	
	Investment grade credit	- +	energy but also in other sectors: We favor credits that have widened to attractive levels but retain fundamental strength	
	High yield corporates			
CREDIT	Emerging markets	+		
UNDER OVER WEIGHTING	Inflation-linked bonds	+	Longer-maturity inflation breakeven appear low in spite of the significan repricing of oil; negative roll yields across commodity futures markets warrant a more tactical, relative value approach to generating return	
	Commodities	- +		
	REITs	•		
REAL ASSETS				
UNDER OVER WEIGHTING	USD		USD strength is likely to persist throughout the year; countries	
	Euro	•	with improving fundamentals and attractive rates may be able to	
	Yen	•	keep up with or outpace the dollar	
	Emerging markets			
CURRENCIES				

Source: PIMCO

4. GLOBAL EQUITIES - EXTENDED BUSINESS CYCLE SUPPORTIVE OF EQUITIES

While there will be bouts of volatility in global equity markets as the Fed first approaches and then proceeds to hike rates, we believe volatility is likely to be lower than its long-term history would suggest given the likelihood that the Fed will move very slowly – one could say unusually slowly. This, in addition to the degree of slack remaining in the economy, means the business cycle probably still has a few more years left to run, which we believe is supportive of equity valuations.

4.1 Equities versus bonds

Some investors may be concerned equities are overvalued, but with real interest rates low and likely to stay lower for longer, somewhat higher than average equity valuations, we believe, are justified. A robust measure of the relative attractiveness of equities versus bonds is the equity risk premium (ERP), as measured by the cyclically adjusted earnings yield (inverse of the cyclically adjusted price-to-earnings ratio, or Shiller P/E) adjusted for the level of real yields. The current value of this metric for U.S. equities compared with its longterm history since the 1950s is right around its median. This means that relative to the level of bond yields, equities offer long-term incremental return potential that is in line with historically fair levels. Moreover, one typically finds the ERP compressing in the mid to late stages of a business cycle. Hence there could be further multiple expansion despite the fact that corporate profits as a share of GDP are at an all-time high and potentially at risk of receding.

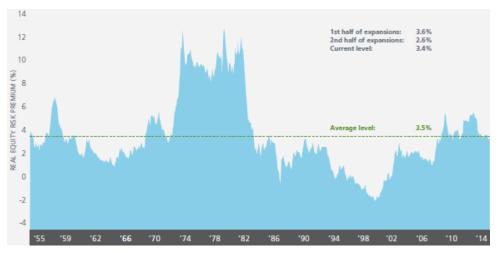


Figure 5: US real equity risk premium suggests attractive long-term return potential in equities

Sources: Robert Shiller, Yale database, Bloomberg, PIMCO as of December 2014. Hypothetical example for illustrative purposes only. Equity Risk Premium (ERP) = S&P500 cyclically adjusted earnings yield (inverse of the Shiller P/E) – 10 year real rate. 10 year real rate uses 10 year TIPS yield since 1998 and 10 year nominal rates less 36 month trailing inflation for periods before 1998. Expansions are defined based upon NBER business cycle data. First and second halves are equal halves of the full expansion period per this data; e.g. a hypothetical 20 month expansion would be sub-sampled by using the first 10 months as the first half and the second 10 months as the latter.

4.2 Regional views

Within the overall equity overweight, we are focusing on several major themes in 2015. In developed market equities, although we see U.S. equities as fairly valued, we expect Europe and Japan to outperform the U.S. (on a currency-hedged basis) for three key reasons – their valuations are more attractive, their central banks are easing and there is potential for upside surprises in earnings growth. However, the effectiveness of BOJ policy and the ability of the ECB to deliver versus what are now high market expectations are key risks to this view.

Some believe that further U.S. economic strength coupled with a stronger U.S. dollar should support outperformance of more domestically focused stocks, such as small caps, over large caps. We, however, believe small cap valuations are still too rich, and as such do not warrant a systematic overweight. Moreover, to the extent that the U.S. stock and bond markets are supported by overseas investors, the more liquid large cap stocks are likely to be the beneficiaries.

Moving beyond developed markets, although emerging market (EM) equity valuations appear attractive relative to their own history, we are being very selective at this stage. In general, we expect EM equities to struggle given headwinds through continued U.S. dollar strength, lower growth differentials and weakening earnings in many emerging markets. However, we find equities of large Asian countries such as China and India attractive as lower oil prices and inflation allow further monetary stimulus along with policy reforms that could boost equity valuations further.

VALUATION SCORE ²	P/B ³	TTM P/E ⁴	CYCLICALLY ADJUSTED P/E ⁵	DIVIDEND YIELD (%)
	2.1	18.4	19.6	2.5
	1.4	12.6	11.8	2.7
	2.8	19.2	23.6	2.0
	1.5	22.1	12.8	3.7
	1.7	21.4	30.5	1.4
	1.5	10.2	15.5	3.0
	1.0	11.7	11.0	1.1
	1.9	15.2	18.0	2.9
	2.9	19.0	20.0	1.5
		• • • •	2.1 18.4 1.4 12.6 2.8 19.2 1.5 22.1 1.7 21.4 1.5 10.2 1.0 11.7 1.0 11.7	VALUATION SCORE? P/B3 ITIM P/E4 ADJUSTED P/E5 - 2.1 18.4 19.6 - 1.4 12.6 11.8 - 2.8 19.2 23.6 - 1.5 22.1 12.8 - 1.7 21.4 30.5 - 1.5 10.2 15.5 - 1.9 11.7 11.0

Figure 6: Equity indexes: valuation scorecard and key value indicators¹

1. All fundamental data are taken from Bloomberg. All figures are on a consolidated basis. Trailing returns are local currency total returns. Data as of 2 January 2015. 2. Valuation score is computed as follows: We percentile rank key valuation indicators for each variable (P/B etc.) based on the past 10-year history for each. We then combined these scores equally weighted across P/B, P/E variables and dividend yield. Among P/E variables, we attach a weight of 25% to Spot P/E and 75% to cyclically adjusted P/E. 3. P/B = Price-to-Book ratio. 4. Trailing Twelve Months Price-to-Earnings is computed by dividing price by trailing 12 month EPS (earnings per share) before extraordinary items (As-reported EPS in the case of S&P 500). 5. Cyclically adjusted price-to-earnings ratio, or Shiller's P/E, is calculated by finding the ratio of the average of 10-year trailing real earnings and the inflation-adjusted price. For EM indices, cyclically adjusted P/E is computed using prices and EPS in USD, and adjusted for USD inflation in the computation of median EPS at current prices.

5. GLOBAL FIXED INCOME - POCKETS OF OPPORTUNITY ACROSS GLOBAL CREDIT SECTORS

Bonds play a vital and special role in a multi-asset portfolio. They can be viewed as a potential return generator as they have for most of the last 20 years, and also as a hedge against downside economic surprises that result in equity market drawdowns.

While current valuations mean there is not much term premium in the bond market, we believe the stock-bond correlation will continue to be negative. High quality bonds therefore remain useful as portfolio hedges in the context of a multi-asset portfolio.

Given our secular New Neutral hypothesis of lower neutral policy rates relative to history, we don't see a bear market for bonds in 2015, but rather a year of muted and differentiated returns. In particular, we see limited upside for interest rate duration. For example, we expect the 10-year U.S. Treasury yield to end the year in the high 2% range, modestly higher



than implied by the forward markets. As such, our preference is to position multi-asset portfolios flat to modestly underweight U.S. Treasuries, U.K. Gilts and German Bunds. As discussed earlier, high quality bonds play a special role in a multi-asset portfolio – not just generating income and returns, but also serving as a hedge during economic downturns. Our core duration underweight is sized with this point firmly in mind.



Figure 7: History of the stock-bond correlation (1927-2014) We see a continued negative correlation in 2015

Sources: Ibbotson, PIMCO, Bloomberg. Stocks are represented by the S&P 500 (S&P 90 for periods prior to the release of the S&P 500). Correlations are estimated on a non-overlapping basis, using monthly returns (12 data points). Data as of June 1927-June 2014. Bonds are represented by long Treasuries (Ibbotson) which should not be interpreted as a full sample representation of the bond market. Different asset class proxies will have different results.

5.1 Notable opportunities in bonds

Within bond markets we see several areas likely to offer attractive risk-adjusted returns.

Within U.S. credit sectors, recent widening in credit spreads has created select opportunities in both investment grade and high yield corporate issues. We continue to favor non-agency mortgages given the outlook for above-trend economic growth and continued stabilization in the housing and job markets. However, rigorous analysis of individual securities and diversification across multiple credits is important to optimize liquidity and to manage servicer and policy risks such as principal and interest modifications.

In non–U.S. credit sectors, we favor European peripheral bonds given the likelihood of an ECB QE program, which we believe will be announced at either the January or March 2015 meeting and is likely to range in size from \in 500 billion to \in 1 trillion. A program of this magnitude likely would be centered on government bonds; however, non–financial corporate bonds are also likely to feature in the mix and therefore stand to benefit.



Also in Europe, we favor select subordinated bank debt. Many European banks are raising capital, moving toward higher capital ratio requirements in a new regulatory regime, and the ECB is expected to provide liquidity to help ensure banks can stay solvent.

Finally, emerging market bonds have generally reset to more attractive valuations, but several countries are buffeted by macroeconomic or policy headwinds. Also, considering our views of continued strength in the U.S. dollar and neutral stance on commodities, we suggest investors be selective when investing in EM debt.



Figure 8: CCC rated non-agency MBS: Estimated hold to maturity lossadjusted yields

Source: PIMCO projections based on sample CCC-Rated securities and stated housing price appreciation assumptions as of 31 December 2014. Returns assume 2-year cumulative home price appreciation rates shown in horizontal axis.

HOME PRICE APPRECIATION SCENARIOS

Figure 9: Yields on key eurozone peripheral sovereigns have fallen steadily; likelihood of ECB QE is positive for these eurozone peripherals



Source: Bloomberg data through 31 December 2014. Data shown are on-the-run 10-year sovereign bond yields.

6. REAL ASSETS U.S. - TIPS AND EUROPENA ILBS OFFER ATTRACTIVE OPPORTUNITIES

U.S. TIPS and European inflation-linked bonds are attractively priced inflation hedges. We maintain a neutral stance on commodities but are bearish on gold. We believe oil prices are hovering near bottom, though bouts of volatility may produce extreme outcomes.

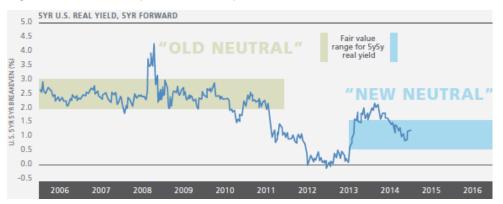


Given our view on global GDP growth reaching a rate of around 2.75%, oil demand should increase by over 1 million barrels per day in 2015, necessitating more U.S. production. However, we believe current oil prices will not support the amount of supply growth required to balance the markets. As such, we expect oil prices to be in the mid to high \$60s per barrel by the end of 2015 / early 2016.

We also have a negative outlook for **gold prices** in 2015 as real interest rates are likely to move higher. Gold prices could see a sharp correction given the market's new understanding of the relationship between central bank balance sheets, the velocity of money and inflation. If the likelihood of hyperinflation is negligible, it is difficult to justify gold trading so far above its marginal cost of production.

Among the most attractive inflation hedges available are U.S. **Treasury Inflation–Protected Securities** (TIPS), and we find them extremely attractive at current valuations. Although headline inflation in 2015 is likely to turn negative on a year–over–year basis due to the sharp decline in oil prices, we believe the market is too pessimistic: It is underpricing the closing of the output gap and continued monetary accommodation by the Fed (even as it gets off the zero bound). We believe investors generally are not taking into account how core inflation and in particular the services component of inflation remains steady, and they are too focused on the goods portion of inflation, which is likely to have reached a bottom. In particular, it is quite likely that inflation over the next 10 years will average above the 1.5% that is currently reflected in the TIPS market. Therefore TIPS, along with inflation–linked bonds in Europe, offer attractive opportunities today.

We are neutral in our exposure to REITs as the 2014 outperformance has moved valuations from cheap to fair, in our view.





Source: Bloomberg as of 31 December 2014. This is market implied expectation for 5-year inflation breakevens, 5 years into the future.

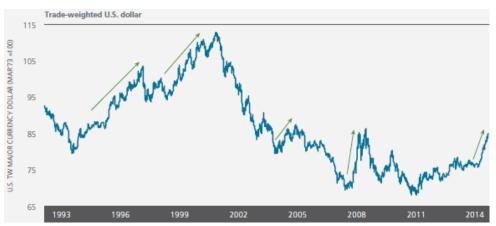


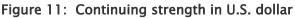
7. CURRENCIES - CONTINUING STRENGTH IN US DOLLAR

On currencies, our dominant cyclical view in multi-asset portfolios remains the U.S. dollar overweight versus other G-10 currencies as a result of diverging economic growth and - importantly - diverging central bank actions.

We expect both the euro and the yen to decline versus the U.S. dollar over the cyclical horizon despite significant weakening already. This decline in their currencies is a primary tool by which these regions can boost economic growth and also solidify inflation expectations.

In emerging market space, just as we are very selective in our exposure to equities, we are very selective in currencies. USD strength will pose a headwind to non-dollar currencies, including those of emerging market countries. Nevertheless, two EM currencies we currently favor are the Indian rupee and the Mexican peso. The case for the rupee is strong, given attractive carry, a credible central bank, declining inflation and net benefits from lower oil prices. With the peso, we believe the market is overreacting to the oil price decline. Most of Mexico's oil production is hedged and, in fact, it is a very small net importer of energy. The recent decline in the peso offers an attractive entry point as Mexico is the EM country likely to benefit the most from the upturn in the U.S. economy.





Source: Bloomberg data through 31 December 2014

8. ASSET ALLOCATION BEST IDEAS FOR 2015

Investors may need to brace for a challenging year from an asset allocation perspective: Recent macroeconomic and market developments are likely to have a profound impact on risk and return potential across global asset classes.



Persistently low yields, divergent monetary policies in major economies, extremely low oil prices, volatile currencies and geopolitical concerns all confront investors this year.

In asset allocation portfolios, this means reaching beyond beta and looking for relative value opportunities across regions and sectors in an effort to achieve risk and return objectives. Here are highlights of our macro views and the major themes we intend to express in multi-asset portfolios in 2015.

8.1 Macro themes

- We expect global growth to accelerate from around 2.50% in 2014 to 2.75% in 2015
- We expect growth in 2015 to be highly divergent across countries and regions
- Lower neutral policy rates are now largely priced into the markets
- Headline inflation will likely go into negative readings in the early part of 2015
- Core inflation (excluding food and energy) will likely remain positive in 2015

8.2 General themes

- We anticipate an extended business cycle that is supportive of risk assets
- As long as the odds of a recession remain low, we expect various risk assets will deliver attractive returns
- There remains significant risk of increased market volatility as we approach the start of the Fed tightening cycle
- Exploiting relative value opportunities within and across asset classes will be more important than bold "beta bets"
- Investors should consider a moderate risk-on posture in multi-asset portfolios

8.3 Key Overweights in 2015

- We expect to maintain an overweight to global equities; Europe, Japan and EM Asia in particular
- Carefully survey individual credits where attractive spreads can offer diversified sources of portfolio carry
- Inflation-linked bonds in the U.S. and Europe may offer attractive opportunities
- Coincidence of attractive valuations, growth differentials and divergent policy should lead to further appreciation of the USD



8.4 Key Underweights in 2015

- Underweight U.S. duration given the U.S. economy is likely to grow at a robust 3.0% rate in 2015, the output gap will continue to shrink and the Fed is likely to start hiking
- Gold prices could see a sharp correction given the market's new understanding of the relationship between central bank balance sheets, the velocity of money and inflation

8.5 Key risks

- Watch for volatility surrounding first Fed hike
- A further sharp drop in oil prices would pose a key risk
- Not likely, but if deflation takes hold in Europe, peripheral countries and global growth could get hit

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assurance that the guarantor will meet its obligations. High yield, lower-rated securities involve greater risk than higher-rated securities; portfolios that invest in them may be subject to greater levels of credit and liquidity risk than portfolios that do not. There is no guarantee that these investment strategies will work under all market conditions or are suitable for all investors and each investor should evaluate their ability to invest long-term, especially during periods of downturn in the market. Investors should consult their investment professional prior to making an investment decision. The MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets. The MSCI World Index consists of the following 24 developed market country indices: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The MSCI Emerging Markets 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 21 emerging market country indices: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey. The S&P 500 Index is an unmanaged market index generally considered representative of the stock market as a whole. The index focuses on the Large-Cap segment of the U.S. equities market. The EURO STOXX 50 Index, Europe's leading blue-chip index for the Eurozone, provides a blue-chip representation of supersector leaders in the Eurozone. The index covers 50 stocks from 12 Eurozone countries. The Nikkei Stock Average is an index of 225 leading stocks traded on the Tokyo Stock Exchange. Similar to the Dow Jones Industrial Average, it is composed of representative "blue chip" companies (termed first-section companies in Japan) and is a price-weighted index, whereby the movement of each stock, in yen or dollars respectively, is weighed equally regardless of its market capitalization. The MSCI China Index is a market capitalization weighted index composed that was originally designed as a benchmark representing People's Republic of China (PRC) companies that are freely available only to non-PRC domestic investors. The Index is free-float adjusted, calculated in Hong Kong dollars and published in real time. The index is made up primarily of H-shares and red chips trading in Hong Kong and selected B-shares. The MSCI Korea Index is designed to measure the performance of the large and mid cap segments of the South Korean market. With 106 constituents, the index covers about 85% of the Korean equity universe. The MSCI India Index is a market capitalization weighted index composed of approximately 70 issues, and is generally representative of the market structure of India. The index is calculated separately; without dividends, with gross dividends reinvested and estimated tax withheld, and with gross dividends reinvested, in both U.S. Dollars and local currency. The MSCI Taiwan Index is a free-float adjusted market capitalization weighted index that is designed to track the equity market performance of Taiwanese securities listed on Taiwan Stock Exchange and GreTai Securities Market. The MSCI Taiwan Total Return Index takes into account both price performance and income from dividend payments. The MSCI Taiwan Index is constructed based on the MSCI Global Investable Market Indexes Methodology, targeting a free-float market capitalization coverage of 85%. It is not possible to invest directly in an unmanaged index. This material contains the opinions of the manager and such opinions are subject to change without notice. This material has been distributed for informational purposes only. Forecasts, estimates and certain information contained herein are based upon proprietary research and should not be considered as investment advice or a recommendation of any particular security, strategy or investment product. Information contained herein has been obtained from sources believed to be reliable, but not guaranteed. PIMCO provides services only to qualified institutions and investors. This is not an offer to any person in any jurisdiction where unlawful or unauthorized. | Pacific Investment Management Company LLC, 650 Newport Center Drive, Newport Beach, CA 92660 is

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