



## 2015: The Year Ahead

### Annual Market Outlook

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**MV Financial Research & Strategy Group**  
**January 21, 2015**

## The Year Ahead: 2015 Annual Outlook

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## I. Markets in 2015: Year One of the “Next Seventy”

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*Ihr naht euch wieder, schwankende Gestalten,  
Die früh sich einst dem trüben Blick gezeigt.*

*Again you come, you wavering forms,  
Once long ago you passed before my clouded sight.*

--Johann Wolfgang von Goethe, *Faust Part I*

### A. The Long Road from Bretton Woods

Seventy years ago marked the end of the Second World War – the bloodiest and most destructive global conflagration the world has ever witnessed. The war was the third in a succession of shocks – following the First World War and the Great Depression – to shatter what had hitherto been a long period of relative prosperity. Since the end of the Franco-Prussian War in 1871, most of Western Europe had evolved into a community of outward-looking nations committed to international commerce under the auspices of free trade and the self-regulating mechanism of the gold standard. At the same time, the post-Civil War era saw the rapid growth of a new emerging market – the United States. Nations from Japan to Argentina strove to become reliable, dues-paying members of this global club, dreaming of ever-more prosperous futures.

But the first half of the 20<sup>th</sup> century shattered those dreams. Wealth – the accumulated capital of claims on productive economic assets – was destroyed at levels of unheard-of proportions. On August 14, 1945 – Victory in Japan Day – the S&P 500 stock index stood at 14.7, less than half its September 16, 1929 peak value before the Great Crash of '29. And that was in the U.S. – the only Great Power nation left standing. There was no stock market to speak of anywhere in war-ravaged Europe, China or Japan. Surveying the ashes of Dresden and Hiroshima, the idea that the S&P 500 would realize a 13,900% cumulative price appreciation, from that August day to the dawn of 2015, would have seemed ludicrous. And yet...

Chart 1: “The Last Seventy”: 1945-2015



Source: MVF Research, FactSet

Chart 1 leaves out all the happy things that have happened in the last seventy years and focuses only on the negative. Why? We do this not to be curmudgeonly, but to illustrate how the road from 1945 has been anything but a walk in the park. There have been numerous economic and geopolitical shocks along the way, some of which – the Cuban Missile Crisis comes to mind – were existentially terrifying. And still – we must have done something right, because the institutions we put in place at the end of World War II were strong enough to put the world back on a course leading to global prosperity, as evidenced by the stock market's fortunes in this period. The far-sighted architects of those institutions – the Bretton Woods framework for international economic development and trade, and the Marshall Plan for the reconstruction of Europe – put aside whatever political and ideological bickering they had just long enough to do the right thing for the future. After the enlightened greed of the 19<sup>th</sup> century classical free trade era succumbed to the angst and despair of the nascent 20<sup>th</sup> century, leaders like Dean Acheson, Harry White and George Kennan proved that national and supranational policymaking, when done right, could be a force for good. Government didn't have to be the problem.

## B. No Irrational Exuberance Here

That lesson – the virtues of prudent policymaking – is instructive as we commence Year One of the Next Seventy. On paper this should be a time of high fives and celebrations. Over the past five-odd years, following the market bottom of March 2009, the S&P 500 has enjoyed an average annual return greater than 15%. For the past three years the average annual return has been more than 20%. On top of that impressive absolute number has been a very subdued risk environment. We've gained more and risked less than at any time in recent memory.

Yet the mood is, to say the least, tempered. If the growth market of the late 1990s was the era of "irrational exuberance", in Alan Greenspan's words, the bull of 2009-14 might be called the Rally of the Sourpusses. There is a palpable sense that this rally is a paper tiger – that if the Fed had not flooded the world with minted paper as crisp as the new-fallen snow, then our portfolios would be threadbare, not stuffed with plenty. Exhibit A, the skeptics point out, is the very uneven pace of performance geographically during this period, as illustrated in Chart 2 below.

Chart 2: Uneven Outcomes, 2010 - 2015

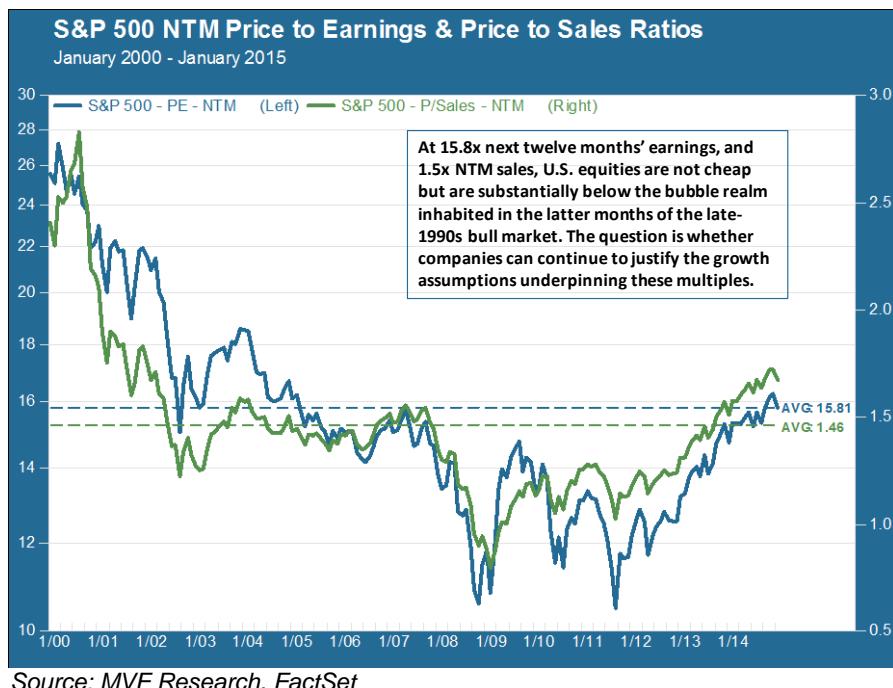


U.S. stocks went gangbusters, the argument goes, because institutions had to do something with all the cash the Fed was dropping from its monetary helicopters. Europe, and Japan, by comparison, dithered and faltered (though Japan did pick up the QE gauntlet in 2013). By keeping interest rates at zero and implicitly promising to come back to the rescue anytime stock indexes approached a 10% correction, the Fed essentially pushed investors out of safe haven assets and into riskier equities (though the safe havens did fine as well). As soon as the training wheels come off, we are staring at an overpriced stock market built on a foundation of sand – that has been the glum assessment of many opinionators. We should point out that the dire predictions of imminent share price collapse have been made at the outset of each of the last three years – exactly the period in which the S&P 500 delivered its 20% average annual return.

How much truth is there to the doomsayers' arguments? We are neither ideological bulls nor bears – we draw our conclusions from what the data tell us and adapt our thinking accordingly. Let's deconstruct the skeptical view into its two component parts: (a) the market (particularly the U.S.) is prohibitively expensive; and (b) there is not enough future organic growth to justify these valuations in the absence of artificial central bank stimulus.

Expensive? Yes, but we're not quite in nosebleed territory. Consider Chart 3 below:

Chart 3: Valuation Trends, 2000 - 2015



At present, the NTM P/E (price to next twelve months' projected earnings) ratio is just about equal to its 15 year average, and the corresponding price to sales ratio is somewhat above the average. Both measures indicate that stocks are not cheap – in fact they are higher than they have been any time in the last ten years. But they are substantially below the stratospheric peaks reached at the height of the late-1990s madness. After three years of a multiple expansion rally (where stock prices have grown at a faster clip than underlying earnings or sales) there are not loads of bargains out there. So, to go back to the first part of our deconstruction of the skeptics' argument: equities are expensive, yes, but not prohibitively so.

This brings us to the second part of the deconstruction: whether, as the bear argument goes, there is simply not enough organic growth to be achieved once the Fed lets go and leaves the

economy to its own devices. This is not only a profoundly important question, but in its answer – whatever that may be – may lie the key to what the Next Seventy are going to look like. Since the onset of the Industrial Revolution, growth has been the lifeblood of the capitalist economic system. Indeed, without growth, capitalism cannot function. Rational actors will not invest their wealth into productive assets if there is little chance for those assets to grow and yield a sufficient return on investment. The glumness attending the 2009-14 equity rally is not some passing hissy fit by spoiled investors. It is concern about the future of growth.

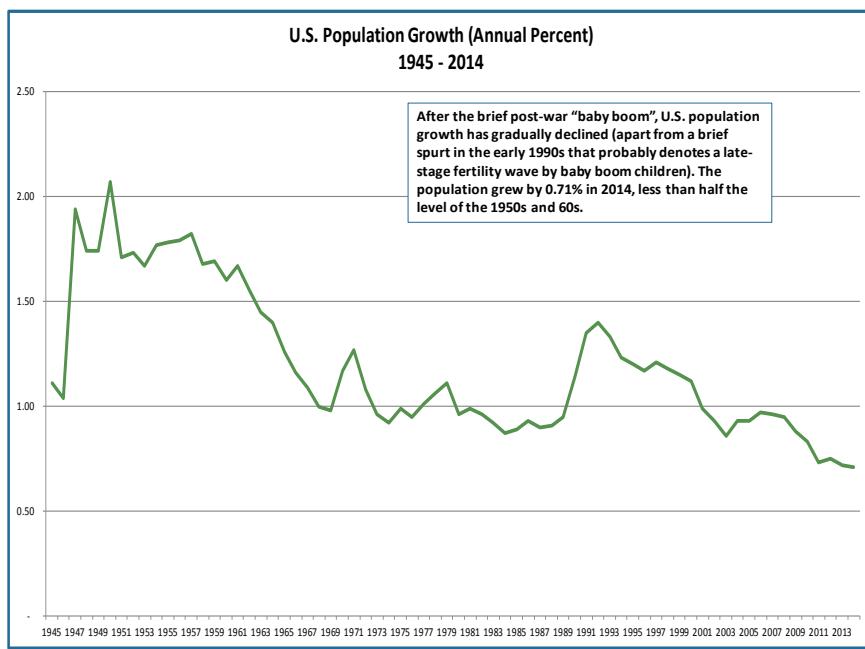
### C. Growth in the 21<sup>st</sup> Century

2014 saw the English language release of an extraordinary book by economist Thomas Piketty called *Capital in the 21<sup>st</sup> Century* (our heading for this Section C is a nod to that work). Piketty supplied some very deep insights about the relationship between capital, national income, savings and growth, tracing an historical course from the early years of the Industrial Revolution through the Golden Age of 19<sup>th</sup> century classical free trade, the devastation of 1914-45, and international trade's Second Golden Age under the postwar Bretton Woods framework. We can scarcely do justice to this work in the brief space allotted by this paper, but Piketty's observations on growth in particular are important to our thesis.

Let us start from a simple definition of "growth". An economy can grow in one (or both) of two ways: by population growth, with a steady or increasing percentage of the total population choosing to participate in the work force; or by growth in output per capita; i.e. how many goods and services the economy can produce for every hour of labor expended to produce them. In other words, growth comes about either by having more people to produce things, or by finding efficiencies for each person to produce more things in the same amount of time.

With that in mind let us first consider population growth. Piketty observes that for most of human history population growth was exceedingly slow, but then exploded in the wake of the Industrial Revolution, reached a peak rate in late 19<sup>th</sup> and early 20<sup>th</sup> centuries, and then began to decline. Chart 4, below, shows U.S. population growth from 1945 to the present.

Chart 4: U.S. Population Growth Trends, 1945-2014

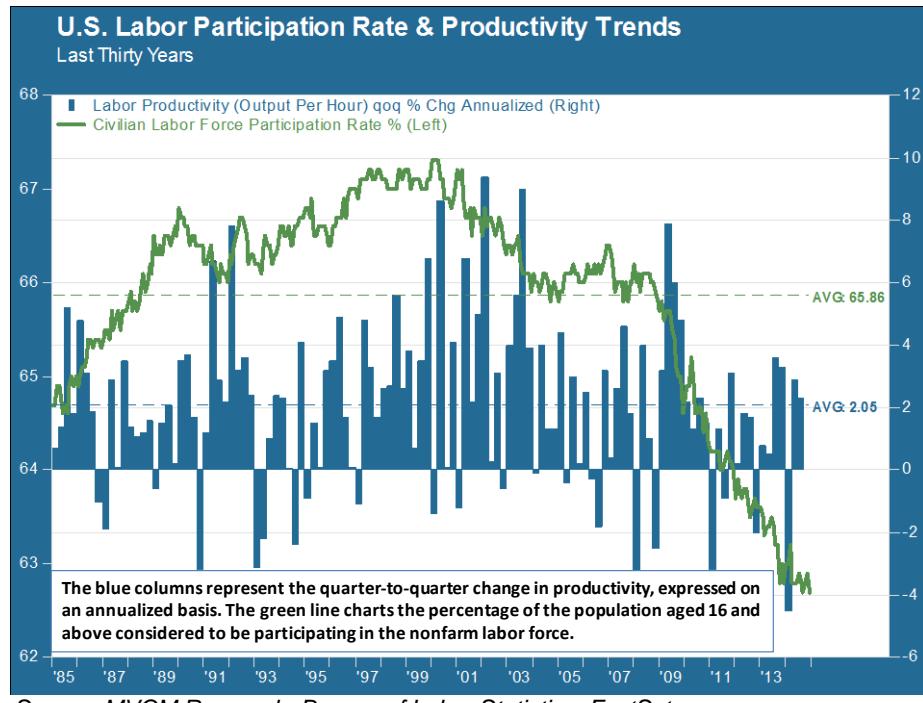


Source: U.S. Census Bureau

Chart 4 tells us that while the pool of potential labor force participants is still increasing every year, it is increasing at a slower rate. If, hypothetically, we had no way of ever improving economic productivity – no efficient new technologies or business processes or management styles to produce more stuff in the same amount of time – we would expect our economy to grow by less than 1% per annum based on the current rate of population growth.

Fortunately that is not the case, of course. We have been figuring out how to make things faster, better and cheaper with each successive wave of innovation from the cotton gin to the Model T Ford and the semiconductor chip. And a good thing, too, because not only is the rate of population growth declining, but there is an even more dramatic trend solidly underway: the percentage of the total population participating in the work force is declining. Chart 5 below plots a thirty year trend for the labor force participation rate versus the rate of change in productivity.

Chart 5: Importance of Productivity in a Declining Labor Pool



What has caused this plunge in the percentage of Americans working? There is no one single answer. Part of it, of course, has to do with boomers retiring. As always, our most populous generation makes a loud noise whenever it does anything. But that is only part of the reason. In fact, the labor participation rate for Americans aged 65 and higher has actually been on a gradual *increase* over the last decade. Another explanation for the decline, as is reasonably clear from the chart, is that good jobs have become scarcer since the 2008 recession. Notice how the pace of decline in the green line accelerates during the post-recession years. In fact, the flow of workers out of the work force has actually helped *improve* our headline unemployment data. A decrease in the number of Americans working or actively looking for a job, all else being equal, has the effect of lowering the unemployment rate.

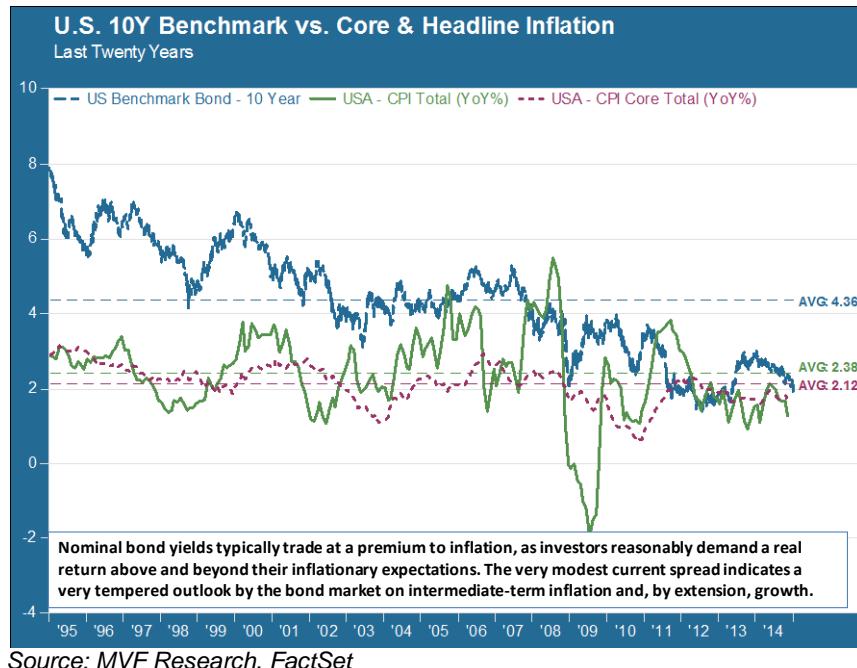
So, in light of anemic population growth and a declining work force, it seems like it's all up to productivity to save the day and provide the growth catalyst. Here the data are somewhat inconclusive. On average, productivity growth has been positive in the post-recession years, and the latest reading (as of the end of 3Q2014) is right around the thirty year average. But the overall trend for this time is below longer term norms.

We live in an age where technology is evolving at a furious pace. We are constantly told by Silicon Valley's *digerati* that "creative disruption" is the key to prosperity, and will bring with it unimaginably new paradigms for work and leisure. We hope they are right: that the fruits of these paradigms will presently show up in the productivity data, and thus translate to more growth. But for the time being, the jury is still out.

## D. Over to You, Bond Market

One crowd that does not seem to be buying into the Silicon Valley spin on limitless productivity is the bond market. Chart 6 below shows the relationship between nominal bond yields (represented by the 10 year Treasury) and inflation, as it has trended over the last twenty years.

Chart 6: Bond Skeptics: The Decline in Real Yields



Source: MVF Research, FactSet

Nominal bond yields normally reflect investors' demands for a return above and beyond the expected rate of inflation. Inflation erodes the purchasing power of income derived from bond interest and principal payments. With that in mind, consider that the nominal yield on the 10 year Treasury is below 2%, while core inflation (a less volatile measure of the Consumer Price Index that excludes energy and food prices) is 1.6%. Now, the average spread between nominal yields and core inflation over the last twenty years has been 2.24% ( $4.36 - 2.12$ ) – much higher than the currently prevailing spread of less than 0.25%. Investors in the 10 year do not appear to be losing sleep over the threat of loss of purchasing power; rather, the consensus augurs for low growth.

The growth question thus looms large in 2015 and beyond. Can China and India – perhaps with help from other large emerging economies like Indonesia – join the U.S. as global growth workhorses? If so, can the workhorses pull the rest of the world out of the mud to join them? This is our overall theme as we move now into an analysis of the various factors at play this year. How growth and prices evolve – and how they translate into jobs, wages and quality of life – will be perhaps the most important factor shaping the early contours of the Next Seventy. It's Year One. Fasten your seatbelts, as there may be some turbulence during the journey.

## II. 2015 Investment Thesis

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### A. Executive Summary

- After three years in which U.S. large cap stocks produced average annual returns over 20%, we see prospects for continued growth at a more moderate pace more or less in line with that of underlying earnings growth. Fundamentals continue to favor the U.S., including above-trend GDP growth, robust corporate financial statements and a strong dollar. The jobs market has improved, but market watchers will be looking to see if rising payrolls translate into rising wages in 2015.
- Outside the U.S., growth remains challenging. Lower energy prices have pulled Europe into deflation, though broad declines in non-energy related goods and services are not yet evident. Economic growth in Europe is not expected to push much past 1% and high unemployment remains a problem. But two factors could work in Europe's favor this year. A widely expected quantitative easing program could give stocks a boost and keep interest rates low. Second, a weak euro could benefit exporters and contribute to higher than expected growth. On the other hand, Greece's upcoming general election may call back into question its future within the Eurozone.
- Emerging markets have also suffered from the growth curse in recent years. China has thus far managed to keep its growth rate above 7%, but concerns persist about the health of the Chinese property market and the pace of investment. India will be a country to watch in 2015 with an ambitious reform program by the new government. Brazil is mired in stagnation while Russia's economic fortunes are in sharp reversal. After three years of underperformance emerging market stocks may be due for a technical improvement, but the fundamentals are not yet there.
- Volatility is back. The intraday trading range for the S&P 500 has been more than 1% every trading day through the middle of January. Market movements have been more sideways than directionally up or down, but significant reversals can certainly not be ruled out as the year progresses. A "melt up" is also possible; this happens sometimes in the late stages of a bull market when late-to-the-game money comes off the sidelines to participate in the growth.
- 2015 is supposed to be the year of policy divergence, when the Fed starts raising rates in the U.S. even as Europe and Japan pour on the stimulus in an attempt to spark growth. But time continues to be on the Fed's side, as inflation remains well below the 2% target. In 2014 intermediate and long term rates fell while short term rates rose. Rates are down across the board so far this year. For the intermediate term, rates should trend upwards – it would be hard to imagine a sustainable world of both zero rates and positive GDP growth. Whether that day is at hand, though, remains unknown.
- How low will oil go? With benchmark crude trading around the mid-\$40s, some are calling for a return to \$20 oil. We would expect prices to stabilize before that, but a return towards the \$100 levels of the past several years may not be in the cards for a while. Commodities generally continue to suffer from weak global demand.
- As with every year, many of the events that will impact asset markets this year are unknown to us now. Will this be the year when cyberterrorists hack Wall Street? Will an economic meltdown somewhere trigger a contagion of defaults elsewhere? Of course, X-factors can be positive as well: a breakthrough innovation unlocking new growth, perhaps. Only time will tell.

## B. State of the Global Economy

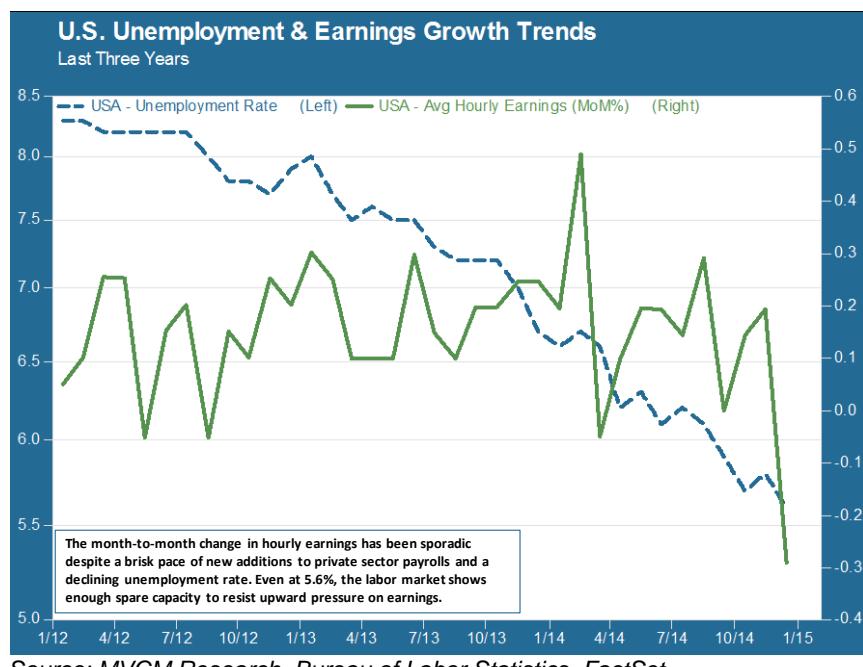
One year ago we were writing about the increasingly strong case for sustainable, if moderate, growth in the U.S. while problems loomed over Europe, Japan and emerging markets. Fast forward to the present and that dynamic is not only still in place, but even more entrenched. The U.S. grew at a 2.7% annualized rate (real GDP) through the end of the third quarter last year, and that quarter turned out to be the strongest since 2003, posting a 5% year-on-year gain. Meanwhile, the Eurozone is staring at looming deflation. Abenomics is sputtering in Japan, where consumption turned sharply lower following last April's increase of the consumption tax. China is fighting to maintain its target 7.5%-plus growth rate, while Brazil can only dream of such numbers. Russia's economy is entering into what may be a long, dark night of the soul.

We live in an interconnected global economy, so what happens in Shanghai or Sao Paulo matters for us here at home. Companies in the S&P 500 derive a substantial and increasing share of their total sales and earnings from outside the U.S. The big question for the year ahead is whether our growth at home is strong enough to withstand negative pressures from outside, and perhaps even to bring up the rest of the world on our economic coattails. A related question is front and center in the pre-2016 political discourse: whether this is the year we see the fruits of growth spread beyond the top socio-economic strata to a broader cross-section of American households.

### i. U.S.: Jobs Are Back, Where Are the Wages?

Three years ago the U.S. unemployment rate was stuck above 8% and inching its way down at a maddeningly slow pace. The pace quickened, though, as private sector payrolls swelled with new hires. The headline rate fell to 5.6% according to the latest release by the Bureau of Labor Statistics. Much less impressive, though, has been the pace of wage growth. Chart 7 below compares the unemployment rate trend with that of average monthly earnings growth.

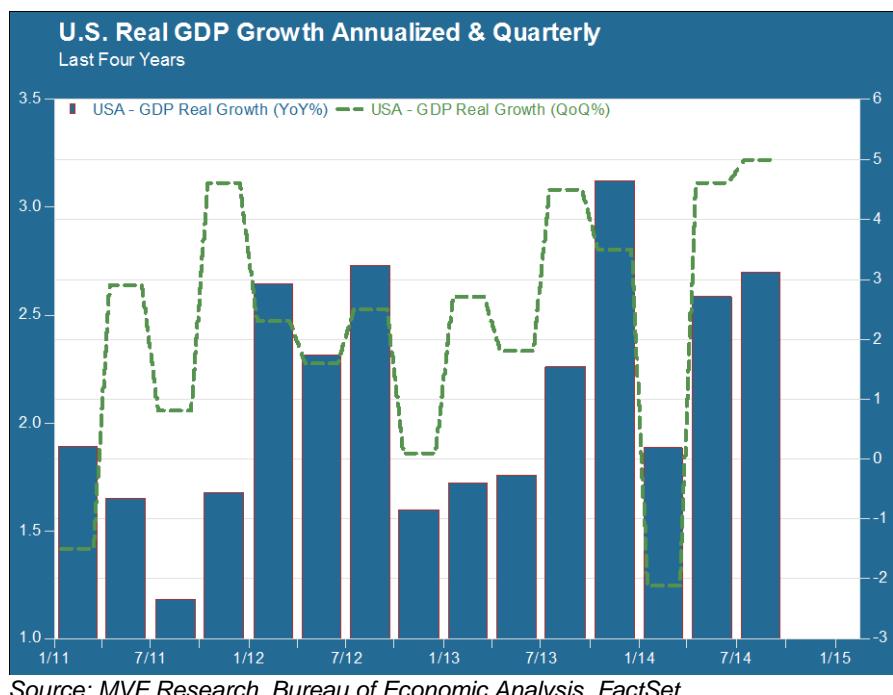
Chart 7: Wage Growth Lags Job Creation



Wages remain low in part because of the decline in labor force participation. As we pointed out earlier in this report, this rate has declined to its lowest level since the 1970s. Another reason is

that many of the jobs which have been created are in lower-paying sectors of the services economy. This trend, though, may be due for a change. A confluence of factors – including lower oil prices, higher consumer confidence and growing real GDP – is creating a potentially robust tailwind for household wealth. The annualized GDP rate of 2.7% is above the revised consensus long term growth rate projection of 2.0%. And that 2.7% takes into account a miserable Q1 in 2014, largely due to a much harsher than usual winter. In the second and third quarters the economy grew at 4.6% and 5.0% respectively, as shown in Chart 8 below.

Chart 8: U.S. GDP Gains Momentum



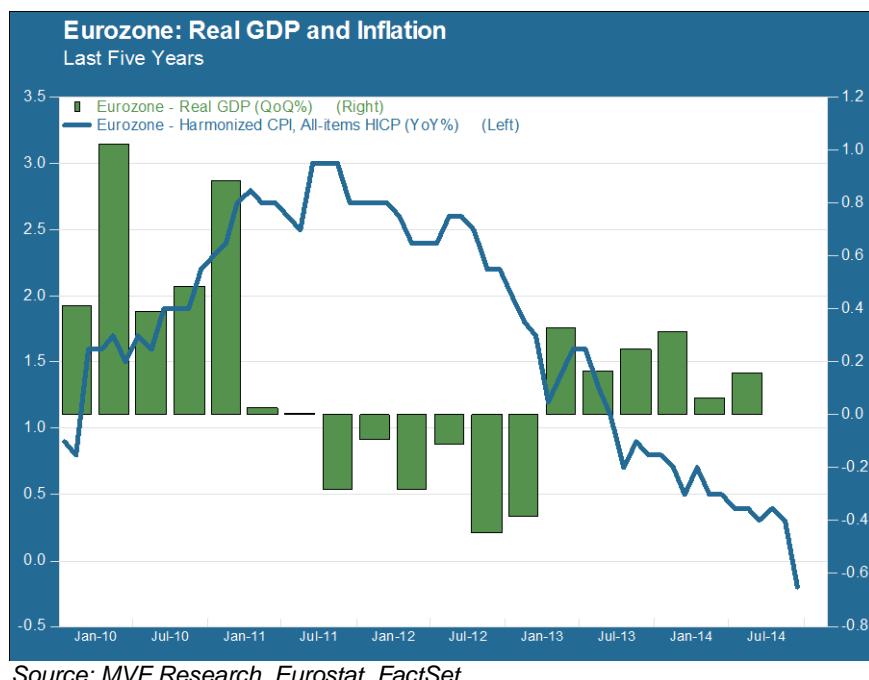
The preliminary 4<sup>th</sup> quarter GDP report will come out at the end of January, and it will be a much-anticipated release. Economists have been revising their 2015 forecasts upwards to 3% or even higher. A solid 4Q posting could provide a boost to business investment, which would likely give further impetus to new hiring and – at some point – a positive change of fortune for wages and income. With that said, we still have the ROW – Rest of World – variable to deal with.

## ii. Deflated: Europe's Long and Winding Road Back to Growth

Over in Europe, a range of metrics from GDP growth to inflation and long term bond yields all register in at sub-1% levels. Only unemployment remains in double digits. To be sure this is not 2011-12, when the acute fear of a break-up for the currency union hung over the policy salons of Brussels and Berlin. It's more of a chronic condition, a set of problems seemingly impervious to improvement. The biggest of these problems is deflation. As Chart 9 below shows, this trend has accelerated into a spiral into negative price territory.

European GDP, we should note, fell by less than the U.S. during the worst of the 2008-09 recession. Yet U.S. GDP recovered all that it lost during the recession by 2011, whereas GDP in the Eurozone is still less in real dollar terms than it was in 2008. The reasons are complex: Europe's labor markets are less flexible than those of the U.S., population growth is anemic, productivity has been erratic, and a divergence of policy views among Eurozone nations has made it difficult to formulate and implement a concerted political response to the crisis.

Chart 9: Price and Growth Doldrums in Europe



Source: MVF Research, Eurostat, FactSet

The financial system has been a drag on growth as well. European companies make far greater use of traditional bank loans than they do of the capital markets for debt financing. While in the U.S. 70% of corporate debt issuance comes from bond issues and only 30% from bank loans, fully 85% of Eurozone corporate debt financing is provided by banks. Since the 2008 crisis banks have been gun-shy about extending new higher-risk loans. They have been the beneficiaries of cheap credit through the European Central Bank's Long Term Refinancing Operations, but for the most part the banks have ploughed those funds into low risk assets, primarily sovereign debt, rather than new loans. This has impeded the injection of new credit into the broader economy.

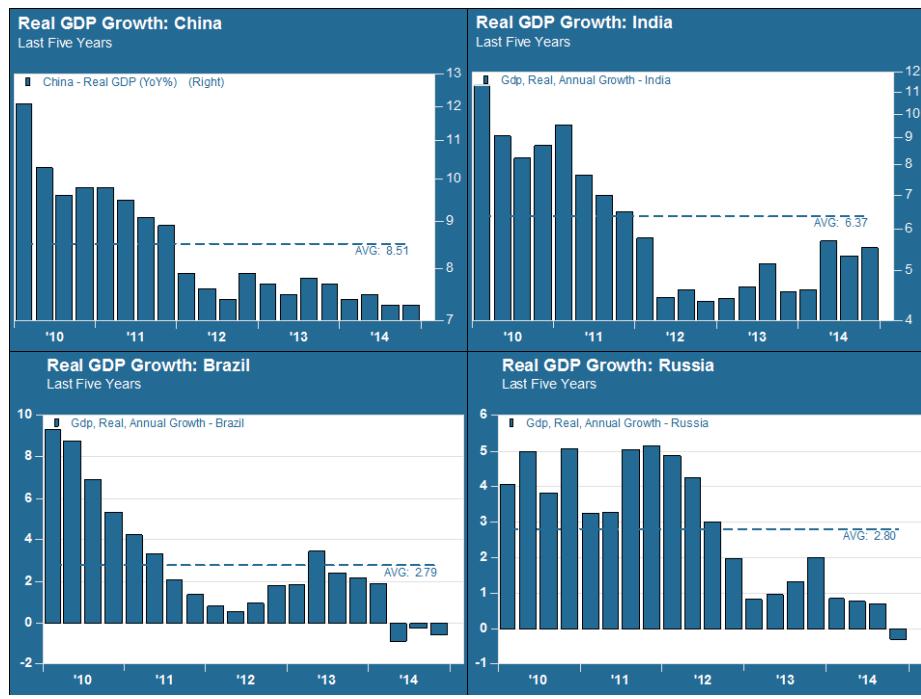
All this makes it increasingly likely that the ECB will attempt to switch to a full-throated quantitative easing program sometime in 2015, perhaps as early as January 22 (the day after this report is published) when the bank's key policymakers next meet. Bond markets expect this: yields on a wide swath of Euro area sovereign debt are at historic lows (we discuss this more fully in the section "Stocks, Bonds and Risk" below).

Whatever happens on January 22<sup>nd</sup>, there are questions about whether QE alone – without additional pro-growth policy measures from national governments – will be sufficient to restore some bounce to the economy. But a strong QE program would likely give beleaguered European stocks a shot in the arm. And any growth that were to occur above the modest consensus outlook could be a positive narrative for the Continent's equity markets as the year wears on.

### iii. Emerging Markets: The Taming of the Growth Engines

The slowdown in emerging markets is not a single story; every country has its own particular set of challenges. For example the downward spiral in Russia, exacerbated by economic sanctions from the West, the retreat in energy prices and a collapse in the rouble, bears little resemblance to China's deliberative policies to rebalance its economy in favor of increased domestic consumption. Brazil's reversal is a mix of misguided economic policies, corruption at the commanding heights of the business world, and price trends for many of its key commodity exports. Chart 10 below traces the downward trajectory of growth in the so-called BRIC countries (Brazil, Russia, India and China).

Chart 10: BRIC Blues



Source: MVF Research, FactSet

There are some common threads to the growth reversal. Many emerging countries made liberal use of multicurrency instruments in global debt markets to finance their growth. This works as long as the growth is there. But worldwide consumer demand is not what it was ten years ago, at the height of the emerging market go-go years. Weak demand puts downward pressure on local currencies, which makes it more expensive to pay off foreign debt. Perception becomes reality: capital flight ensues and central banks face the unpleasant task of radical interest rate hikes to stem the outflows. Turkey, South Africa and Russia have all seen variations of this phenomenon over the past year. If interest rates rise in the U.S. – increasing the funding costs of money that finds its way into emerging market investments – it may further exacerbate the problem.

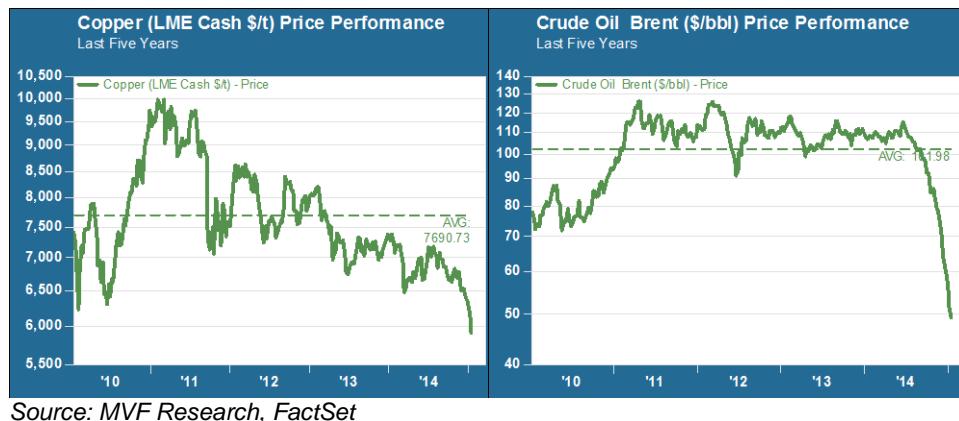
Over the longer term, the odds are still in favor of growth in emerging markets. Notwithstanding the flighty nature of portfolio capital as it moves in and out of markets in pursuit of higher short-term gains, many of the world's largest corporations have made substantial direct investments in China, India, Brazil and, yes, even Russia. Microsoft, General Electric and Cisco Systems, among many others, have a massive physical presence outside the U.S. They are unlikely to be packing up shop on account of short term trends in equity markets and interest rates. But for portfolio investors fundamental conditions in emerging capital markets remain challenging.

### C. Capital Markets Watch

2015 is off to a bumpy start in capital markets. After three years of relatively low risk, volatility is back with a vengeance. On January 13 we experienced what traders call an “outward down day” on the S&P 500. That is when the index’s intraday high is higher than the previous day, the intraday low is also lower than the previous day, and the closing price is lower than the previous close. The intraday high-low spread for the index has been more than 1% every single trading day so far this month (through January 19). In commodities markets the Great Rout of 2014 continues. Copper – a widely used proxy for overall industrial activity - fell by more than 6% in one trading session on heavy selling pressure from China. With crude oil down by about 15%

since January 1<sup>st</sup>, as of this writing, energy traders are openly musing the notion of \$20 oil, a level last seen in the early 2000s. Chart 11 below illustrates the commodities carnage.

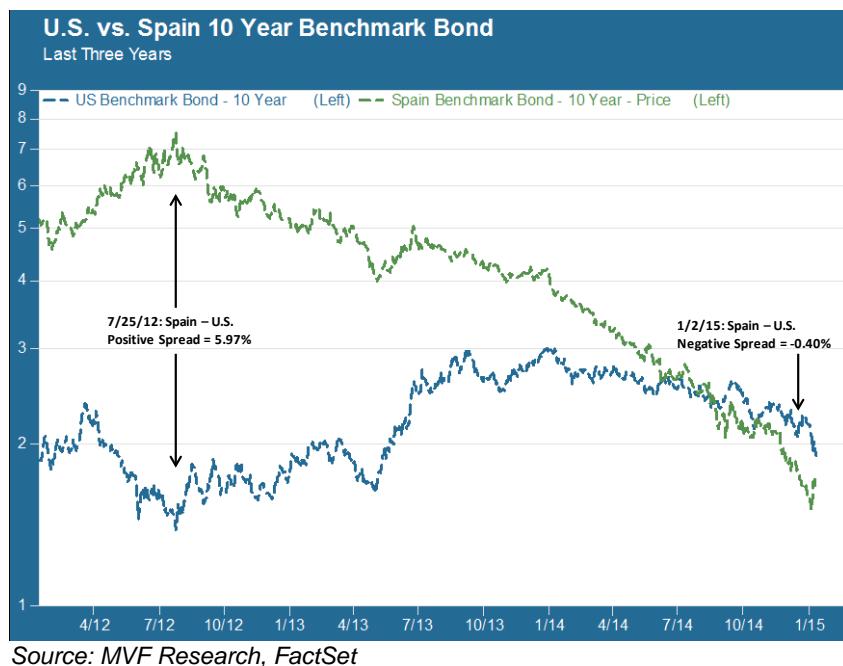
Chart 11: Turmoil in Commodities Markets



### i. Debt and Deflation

The heavy selling in risk asset markets has sent money tumbling into safer havens. Once again U.S. government bond yields defy consensus expectations; the 10 year bellwether issue now sits well below 2%. The bond market seems to expect very little in the way of rising prices in the coming years. And the examples of Japan and Europe remind us that rates do not need to obey historical precedents. In Europe, even some of the riskier sovereigns are trading at negative spreads to U.S. Treasuries. Chart 12 below illustrates this with Spain. As recently as 2012 the spread between Spanish and U.S. yields was over 5%. Now the spread is negative; Spain's sovereign yield is lower than that of the U.S. despite the higher risks.

Chart 12: More Risk, Less Yield – Spain vs. U.S. Sovereign Yields



This relationship between U.S. and European bonds is paradoxical. U.S. Treasuries essentially serve as the global proxy for a risk-free rate. Not that they are technically risk-free – it is at least theoretically possible that the U.S. could default on its debt – but they are still putatively lower risk than anything else out there. Who would want to earn less interest on a riskier security than could be obtained on a safer one?

The culprit behind the paradox is deflation. Deflation turns financial theory upside down, because the theoretical models have a fixed assumption that prices go up over time, not down. The models start from a risk-free rate, build in a premium over inflation, and then add risk assumptions. But what if the rational investor expects prices to be lower in the future? In that case, a 1.5% coupon on Spanish debt looks pretty good (assuming Spain stays solvent). A 1.5% coupon in today's euros will be worth even more two years from now if prices are lower then.

All of which is to say that deflation takes all bets off the table. We do not believe that Europe is necessarily headed towards chronic deflation such as that experienced by Japan for a good chunk of the past two decades. But it makes the ECB's job all the more daunting in the coming weeks and months. Either Chairman Draghi and his team can convince the world that an orderly stimulus program is capable of engineering a measured level of inflation and growth back into the system, or we can expect the Wonderland of European bonds to become weirder still.

## ii. Equities: Pullbacks and Risk

The past two years have been remarkably placid for U.S. equity investors. Investors earned substantially above-average gains on lower than average risk. Pullbacks happened, of course, but they were brief and shallow. From the beginning of 2013 through August 2014 there were only two pullbacks of 5% or more. The first, in May-June 2013, lasted 34 days from peak to trough. The second, in January 2014, lasted just 19 days from peak to trough. Chart 13 below shows the S&P 500 price trend, along with the CBOE VIX index, a benchmark for market risk. The chart shows increased pullback frequency and a rising risk level from September 2014.

Chart 13: Volatility Makes a Comeback



Source: MVF Research, FactSet

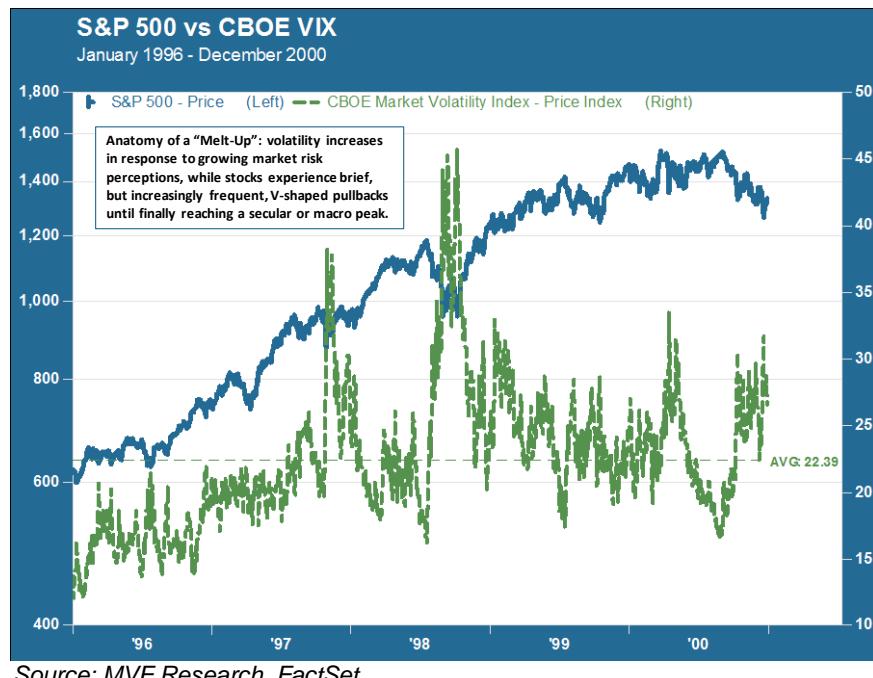
Let us focus first on the green line showing volatility trends in the VIX. We look at two things here: baseline risk, or where the VIX trades in “normal” environments, and the brief, sharp spikes typical when market X-factors surface. With regard to baseline risk, we are interested in whether

it declines or increases over defined periods, as indicated by the crimson lines connecting two successive low points. From early 2013 through the summer of 2014 the general trend was flat to down, with the VIX remaining under its period average most of the time and then turning noticeably lower in the middle of 2014. Baseline risk then started to trend higher. For 2015 to date it has remained above the two-year average of 14.3. This does not yet signal a longer-term trend, though, as the VIX is well known for sharply reversing direction during shifts of market sentiment.

We then turn to the size, duration and frequency of those Andean spikes that tend to coincide with X-factors. When we consider the spikes together with the blue line denoting S&P 500 price performance, we see – unsurprisingly – a close correlation between VIX spikes and market pullbacks. We also see that the spikes are notably higher starting in September 2014. That month coincided with the onset of a 7.5% stock market reversal, the largest since June 2012. The market bounced back from that reversal in a steep V-shaped rally. Since then, though, the spikes have become more frequent. In 2015 alone we have already seen three consecutive pullbacks testing the 5% threshold, finding support and then bouncing back.

As noted in the Executive Summary above, our base case for 2015 expects the growth market dynamic to continue, with the pace of earnings growth being a key influencing factor in how much more stock prices can appreciate. However, the return of volatility means we need to be very mindful of alternative outcomes. Volatility does not always mean a negative trend. In the second half of the late 1990s bull market, one of the strongest ever recorded, a general calm gave way to pronounced volatility spikes and periodic reversals. Chart 14 below illustrates this period.

Chart 14: What a “Melt-Up” Looks Like



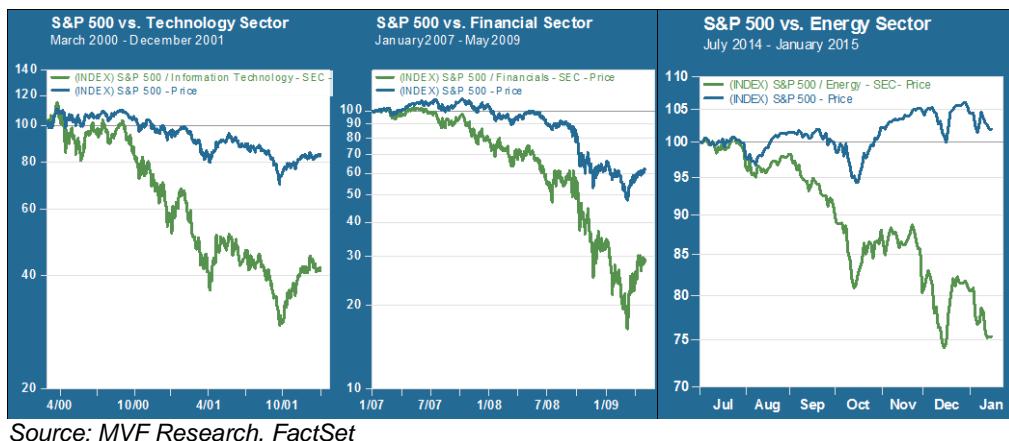
Source: MVF Research, FactSet

Note in particular that the average VIX level for this period was 22.4 – considerably higher than recent averages even in the more volatile environment starting last fall. The peak spike breached 45 during the tumult of 1998, when Russia defaulted on its sovereign debt and the collapse of hedge fund Long Term Capital Management nearly brought down a whole slew of Wall Street giants. From that point there would be nearly an entire year and a half before the bull finally reached its peak and fell apart with the collapse in technology shares.

### iii. Negative Sector Leadership

That tech collapse in 2000-01 brings up another important notion as we look ahead to performance in 2015. Sustained reversals – i.e. secular bear markets or macro gap environments – are often catalyzed by downward leadership in one industry sector. In 2000 it was tech, and in 2007 it was finance. In both cases the out-of-favor sector was the canary in the coal mine, eventually leading the broader market down with it. So it seems natural, considering the state of things at the beginning of 2015, to wonder if the same thing is going on now, with 2015 energy playing the role of 2007 financials and 2000 tech. Consider Chart 15 below:

Chart 15: Harbingers of Gloom



Source: MVF Research, FactSet

Negative sector breakouts do not always serve as omens of a broader market breakdown. In the second half of 2013 the utilities sector took a sharp downward turn, but that didn't stop the S&P 500 from clocking in at 32% by year end. The question to consider is whether a strong rationale exists for why energy sector weakness could spill over into something larger. We don't see that rationale just yet; indeed, lower energy prices are normally seen as a contributor to growth in the broad economy. Of course, not many observers caught onto the full implications of the impending crisis when financials turned down in 2007. Even then-Fed Chairman Ben Bernanke was dismissive of the contagious threat of what was then just a problem with subprime loans.

Another consideration is that the energy sector in 2015 makes up a bit less than 9% of the total market capitalization of the S&P 500. By contrast, both tech and financials comprised more than 20% of the index when they turned south. Their woes thus made a significantly larger dent in the overall market. Nevertheless, energy's divergence is clearly making a major contribution to the higher volatility we are seeing today, and we must not dismiss its potential to be a catalyst for further and spreading weakness.

### iv. Currencies Corner

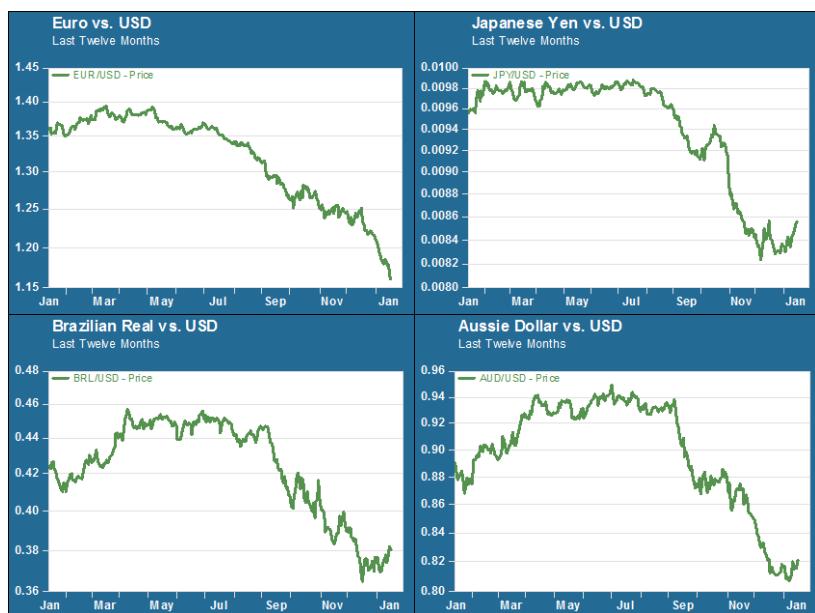
A discussion on assets and risk would not be complete without currencies. The notable currency trend of 2014 was the ascent of the U.S. dollar versus just about every other denomination. The reasons were varied. Against the euro the dollar reached levels not seen since shortly after the single European currency became valid legal tender. The Australian dollar suffered as commodity prices weakened. The yen's fall was at least in part an orchestrated move by policy officials to improve Japan's trade position. And many emerging markets, as we noted earlier in this report, fell into a debt trap spiral when tepid growth sparked capital outflows, weakening the currency and making repayment of foreign loans more difficult.

Given the stronger growth prospects in the U.S. and the growing divergence of central bank policies between the Fed (tighter), the ECB and the Bank of Japan (looser), a stronger dollar is

still the consensus outlook. That could provide a tailwind to growth-starved parts of the world, particularly Europe. Continued weakness in the euro will, all else being equal, improve the competitive pricing of European exports. We are already seeing some evidence of this in Germany, where FY2014 GDP came in at 1.5%. That is quite a bit higher than the 0.1% seen one year ago. Germany's economy relies heavily on exports of high value-added goods and services.

Chart 16 below illustrates the decisive U.S. dollar trend of recent months.

Chart 16: The Dominant Dollar



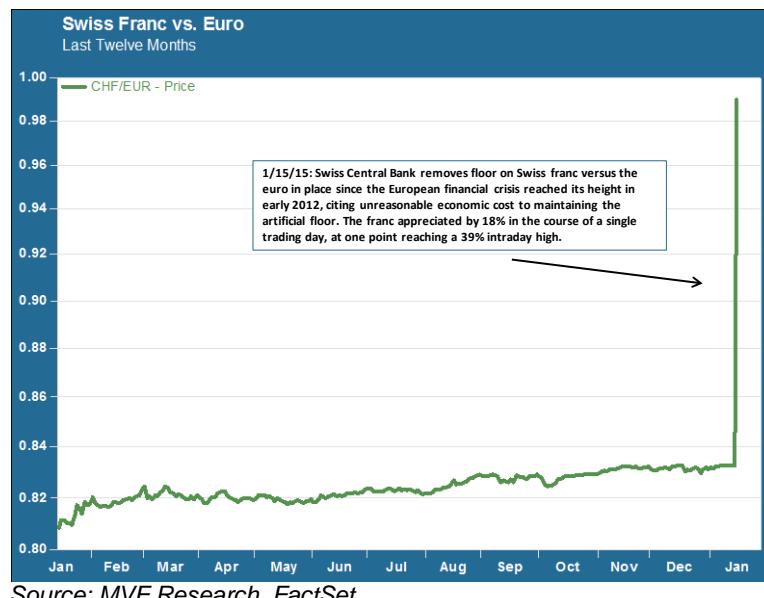
Source: MVF Research, FactSet

On January 15 the Swiss central bank announced it was removing a floor on the euro-Swiss franc exchange rate. The floor had been put in place in 2012 as a way to control the flow of outside capital seeking a safe haven at the height of the Eurozone crisis. The Swiss franc, along with the Japanese yen, often acts as a “risk-off” safe harbor when other markets get jumpy. To defend the floor, the central bank conducted open market operations to buy euros and sell francs. The cost of this hedge eventually became unsustainable, the bank said in a statement.

Why now? With this move the Swiss central bank telegraphed its own conviction that the ECB will shortly embark on a new QE program, the result of which would be likely to further devalue the euro. The subtext of this message is a dim view on the likely utility of any monetary stimulus without supportive new programs by national economic policymakers. Meanwhile, the surprise move is a reminder that central banks have not lost the capacity to shock periodically. That, in turn, is yet another reminder that volatility is back.

Chart 17 below shows what happened as a result of the Swiss Central Bank's move.

Chart 17: Swiss Surprise: Removal of Floor vs. Euro



## v. X-Factor Watch

We conclude our capital markets watch by considering what X-factors are lurking out there that could suddenly emerge from the swamp. We have just discussed one event – the release of the Swiss franc floor against the euro - that caught markets entirely unaware. Here we consider what ex-Defense Secretary Donald Rumsfeld would have called the “unknown unknowns” – all the more likely to create havoc because we can’t even quantify them.

### Cyberterrorism

2014 was not a promising year for the security of the technology platforms on which we rely for an increasingly large part of our lives. From Home Depot to JPMorgan and Sony, the damage caused by cyberterrorists was significant and lasting. We are fortunate to have thus far been spared a successful hack (as far as we know) on a systemically critical part of the financial and capital markets infrastructure. Unfortunately, the odds are not ever in our favor.

### Meltdown in Russia

Russian people are rightfully famous for their ability to endure extreme hardship and somehow live to tell another wry *anekdot* over pelmeni and vodka. But these are very trying times for the Russian economy. Vladimir Putin is not likely to back down from his increasingly hardline stance against the West, and thus is likely to continue facing sanctions. Dollar-denominated corporate debt is a problem for many of the country's largest businesses, and big pieces of that will start coming due this year. By itself the economy is unlikely to drag the rest of the world down, but the collateral risks – geopolitical included – are unpredictable.

### Eurozone Break-up

As bad as Europe's woes are, we do not think an actual break-up of the Eurozone is in the cards for this year. But there will be a general election in Greece before the end of January, the expected result of which is a victory by the radical opposition Syriza party. Party leaders have attempted to strike a more placating tone recently than is their normal wont. Nonetheless, there is

a simmering frustration among ordinary Europeans that is finding an outlet in extreme political parties across the region from France to Italy and even Germany.

### *China Hard Landing*

China's growth rate is its lowest in a quarter century, though not low enough to bank on a hard landing. We consider this to be an X-factor because we don't really know what one would look like. Traditional data points like GDP, inflation and credit creation only give us a partial look into what is really happening on the ground in this very large, very transitional country. In our working lifetimes we have seen one Asian economic superstar – Japan – turn out to be a paper tiger and chronic basket case. The parallels are limited; China's economy is vastly different from Japan's. But there is enough mystery behind the curtain to keep us guessing...and hoping the country's vaunted economic mandarins continue to deliver the goods.

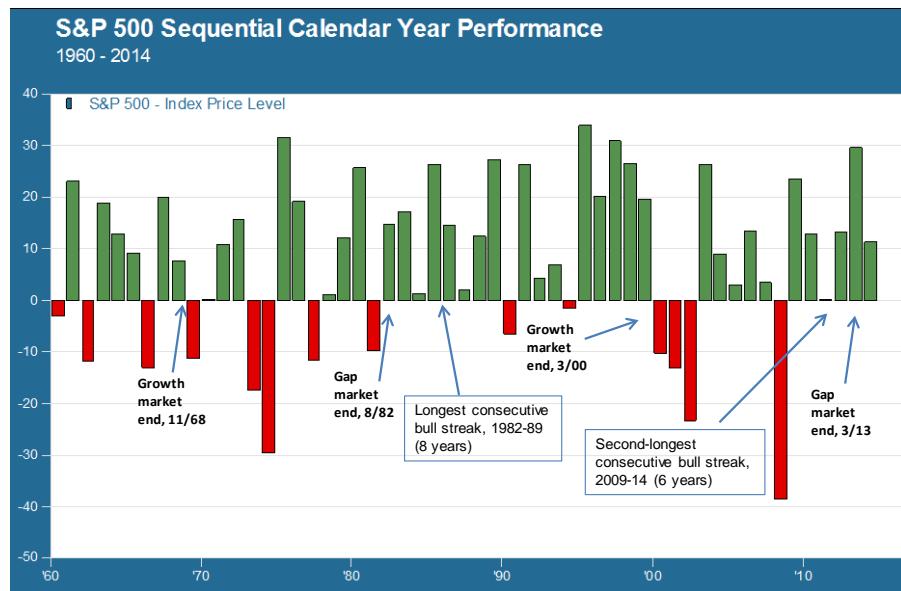
## D. Asset Class Outlook

Taking into account the observations made elsewhere in this report, we now consider the year ahead from the standpoint of the key asset classes which make up the portfolios we manage.

### i. Equities

Chart 18 below shows an interesting tidbit; we are currently in the second-longest calendar bull streak since 1960, at six years and counting (the longest was the eight year run from 1982-89).

Chart 18: Six and Counting – 2009-14 Bull Streak



Source: MVF Research, FactSet

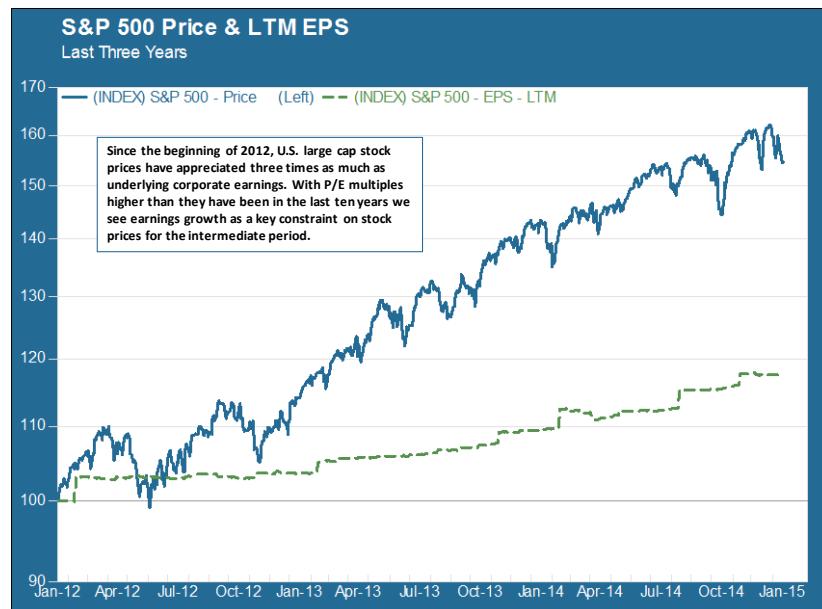
The duration of the 2009-14 has many observers convinced it is a bit long in the tooth and due for a reversal. Notwithstanding the early-2015 spate of volatility in the markets, we continue to see a more likely case for continued upside this year, albeit modest compared to the gains of the past three years. Our base case expects stock prices to stay more or less in line with corporate earnings. This base case outlook, of course, is subject to any number of the variables we have identified (as well as plenty of others, no doubt) throughout this report.

Chart 18 also identifies the beginnings and ends of recent macro growth and gap (reversal) markets, and this also supports the case for continued upside before the next major reversal. The

macro gap market that began in 2000 ended in 2013 when the S&P 500 first regained the 1527 high of 2000, and then the subsequent “false dawn” high of 2065 reached in 2007. Macro markets tend to be multi-year events – the last macro growth duration was 18 years, and the subsequent gap lasted 13 years. Now, it is always possible that 2013 itself was a false dawn. But a reversal from today’s prices back to the 2007 or 2000 highs would imply a correction of more than 20%. Possible, to be sure, but not supported by the empirical evidence we presently have at hand.

Chart 19 below depicts how stocks and earnings have trended for the past three years. We believe modest but firm economic growth should support equity prices in line with earnings, but that expectations for multiple expansion continuation should be tempered.

**Chart 19: Expansion Rally: Stocks Outpace Earnings in Last Three Years**



Source: MVF Research, FactSet

Now we turn to positioning among different equity asset classes. Chart 20 below shows the one, three and five year total returns for key benchmark indexes along with three year risk-adjusted returns data (Sharpe ratio).

**Chart 20: Diverse Equity Asset Class Performance Trends**

Asset Class	1 Year	3 Years	5 Years	Sharpe Ratio (3 Years)
Russell 1000 Value TR USD	13.45%	20.89%	15.42%	2.09
Russell 1000 Growth TR USD	13.05%	20.26%	15.81%	1.95
Russell Mid Cap Value TR USD	14.75%	21.98%	17.43%	2.06
Russell Mid Cap Growth TR USD	11.90%	20.71%	16.94%	1.77
Russell 2000 Value TR USD	4.22%	18.29%	14.26%	1.36
Russell 2000 Growth TR USD	5.60%	20.14%	16.80%	1.38
MSCI EU GR USD	-6.68%	11.99%	5.16%	0.81
MSCI Pacific Ex Japan GR USD	-0.34%	9.50%	6.06%	0.62
MSCI Japan GR USD	-3.72%	9.93%	5.68%	0.79
MSCI EM Asia GR USD	5.27%	9.30%	5.24%	0.73
MSCI EM Latin America GR USD	-12.03%	-5.95%	-5.02%	-0.19
MSCI EM Eastern Europe GR USD	-37.11%	-8.85%	-7.06%	-0.26

Source: MVF Research, MorningstarDirect

The dominance of U.S. over non-U.S. equities in the past five years is stunning. Diversification has not been a friend to portfolio managers during this period. For the last twelve months, in particular, it would appear that any position outside of large- and mid-cap U.S. stocks was a value subtractor. At some point, history and the laws of gravity would argue, the trend should change and mean reversion should happen. What could be the catalysts for such a reversion in 2015?

Europe could potentially be the beneficiary of low expectations. Any economic expansion above 1%, coupled with even slightly positive price growth, would likely be interpreted as "better than expected". Combine that outcome with a full-blown QE by the ECB early in the year, and it would not be a complete surprise to see a rebound in European equity prices.

In emerging markets we don't see much that we like in Eastern Europe or Latin America, but emerging Asia could be an interesting story. The big question mark here is China, whose size would have a commensurate effect on regional performance. But India is also in the spotlight with an ambitious reform agenda under the newly elected government of Narendra Modi. Indonesia, the world's fourth-most populous country, also has a new government eager to implement growth-oriented policies.

We are also paying attention to domestic small cap stocks, which underperformed in 2014. To the extent that the rest of the world does continue to languish this year small caps, which on average have a smaller global reach than the largest U.S. companies, could serve as a cleaner proxy for a "growth in America" strategy.

We are wary of too much diverse exposure given the general climate we have described elsewhere in this report. But tactical opportunities may present themselves in some of these recently out of favor asset classes.

## ii. Fixed Income

What do bond investors want? That question is on the minds of many as a New Year brings with it yet another flight to quality in the 10 year Treasury, with yields back below 2%. At the beginning of 2014 the consensus for rising rates was almost universal on Wall Street. As it turned out, though, you would have earned twice as much by going into long-dated Treasuries as you would have through an investment in small cap stocks. Who says "low risk, low return"?! Chart 21 below shows recent performance trends for different fixed income exposures.

**Chart 21: Diverse Fixed Income Asset Class Performance Trends**

Asset Class	1 Year	3 Years	5 Years	Sharpe Ratio (3 Years)
Barclays 1-3 Yr US Treasury TR USD	0.63%	0.48%	1.07%	0.92
Barclays Treasury 5-7 Yr TR USD	4.84%	1.38%	4.57%	0.39
Barclays Treasury 7-20 Yr TR USD	10.03%	2.32%	6.59%	0.44
Barclays US Corp A TR USD	7.23%	4.86%	6.21%	1.19
Barclays US Corporate High Yield TR USD	2.45%	8.43%	9.03%	1.79
Barclays Municipal TR USD	9.05%	4.30%	5.16%	1.14
Barclays Gbl Agg Ex USD TR USD	-3.08%	-0.75%	1.38%	-0.12
Barclays EM USD Aggregate TR USD	4.76%	5.81%	7.41%	0.91

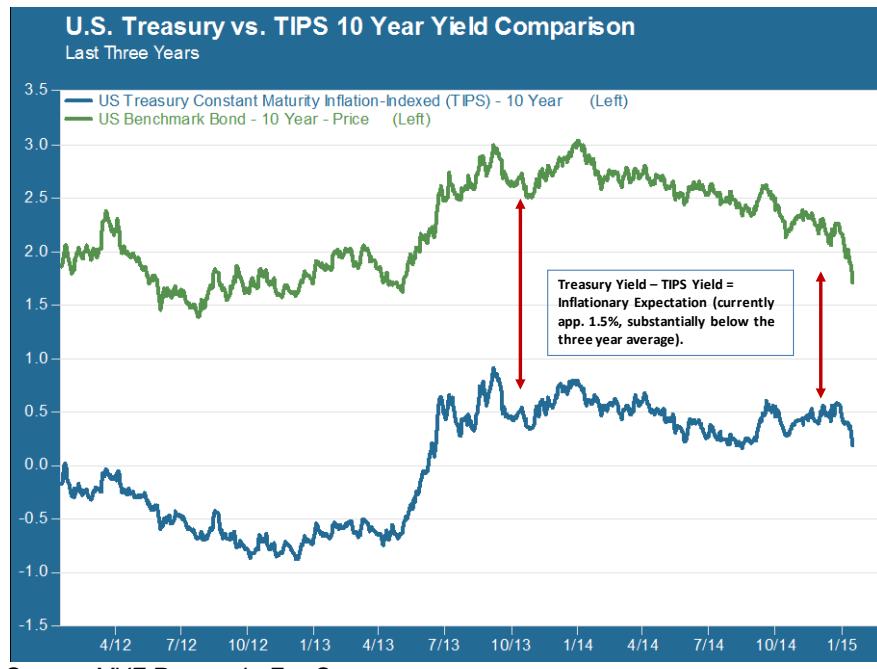
Source: MVF Research, MorningstarDirect

As with equities, fixed income investors did not find much solace in the benefits of diversification last year. What makes the performance of safe haven U.S. bonds all the more surprising is that it was not part and parcel of a risk-off move, as is often the case. The stock market, as we have seen, did just fine. High levels of foreign demand, seeking higher yields than the sub-1% fare on

offer in Europe and Japan, served as a key catalyst for last year's rally. As long as the disparity between U.S. and other developed sovereign rates lasts – and aggressive QE by the ECB could magnify that disparity – the long-awaited spike in core U.S. rates may be delayed further still.

How one invests in fixed income this year depends in no small part on whether one believes that the current spread between nominal and inflation-protected yields is likely to continue, or whether it will widen as the growth case wins out over the deflation case. Chart 22 below shows the spread between the 10 year Treasury and the 10 year TIPS, which spread is a proxy for inflationary expectations.

Chart 22: Bond Market Expects Low Inflation, Low Growth



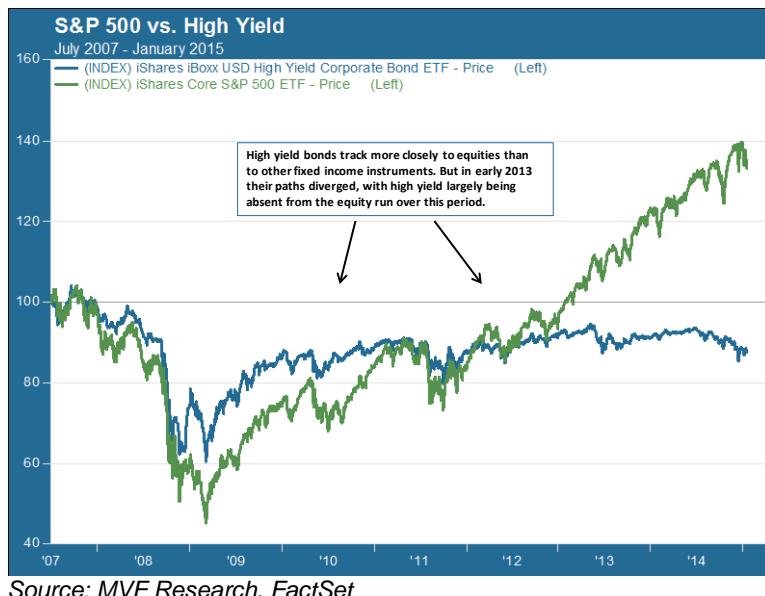
For most of the past three years the Treasury-TIPS spread has been somewhere between 2 – 2.5%; in other words, close to the Fed's long-term target range. That outlook would be consistent with the expected rate hikes beginning in 2015. That expectation, in turn, would argue for shorter durations and a higher than average exposure to floating rate instruments, in order to hedge against the negative effect rising rates have on longer-maturity securities.

But if the current Treasury-TIPS spread of 1.5% holds, or tightens further, then it would be unwise to be too far underweight in intermediate & long term core instruments. The problem, of course, is that at this stage of the year we do not know whether the growth story or the deflation story is going to prevail. Probably the best way to address the uncertainty is to maintain a neutral position that includes traditional core instruments with both intermediate and short durations, as well as unconventional strategies that can adjust to very short or negative as well as longer durations.

Non-U.S. bonds are not a must-have asset class in our strategic view. Whereas we will almost always have at least some exposure to developed and emerging markets equities (currently below default target rates in both cases), we continue into 2015 with no exposure to non-U.S. fixed income in our strategic models. We see particular risks in Europe. If the ECB fails to mobilize a strong QE program – or if it does mobilize QE and then the stimulus turns out to be largely ineffective – we have a hard time imagining some of the riskier sovereign yields remaining at negative spreads to U.S. Treasuries. If that turns out not to be the case – well, in our opinion there are better ponds in which to fish for outperformance than non-U.S. debt.

High yield debt has been an anomaly of late. As the table in Chart 21 above shows, this asset class has been a laggard of late, underperforming other bond classes in recent periods. This is particularly unusual because high yield tends to trade more like equities than like fixed income. Since the U.S. equity market has been on a tear as of late, one could reasonably expect high yield bonds to be following along. Instead, as borne out by Chart 23 below, the paths of equities and high yield bonds diverged sometime in early 2013, with junk bonds failing to keep up with equities and eventually trading flat to lower.

Chart 23: Diverging Paths for Equities and High Yield Bonds



Source: MVF Research, FactSet

Given the tendency of high yield debt to offer little downside protection when equities perform poorly, this would be one asset class to keep a close eye on if volatility trends to the negative.

### iii. Alternative Asset Classes

Chart 24 below shows performance data for various alternative asset classes.

Chart 24: Diverse Alternative Asset Performance Trends

Asset Class	1 Year	3 Years	5 Years	Sharpe Ratio (3 Years)
HFRI Fund of Funds Composite Index	3.35%	5.67%	3.29%	1.73
BofAML Convertible Ex Mandatory TR USD	9.33%	16.07%	11.97%	1.99
Wilshire US REIT TR USD	31.78%	16.43%	17.26%	1.21
S&P GSCI Energy TR	-44.06%	-16.60%	-9.12%	-0.70
S&P GSCI Precious Metal TR	-4.11%	-10.56%	0.51%	-0.54
S&P GSCI Industrial Metal TR USD	-7.44%	-6.50%	-5.82%	-0.35
S&P GSCI Agricultural TR	-10.73%	-7.98%	-2.53%	-0.30
Alerian MLP Infrastructure TR USD	7.61%	13.24%	18.06%	0.98

Source: MVF Research, MorningstarDirect

Alternative assets serve as a counterpoint to equities and fixed income to manage overall portfolio risk. As Chart 24 shows, the notable trend in recent years has been the poor

performance of commodities, particularly energy-related commodities. Demand for most commodities is weaker than average, in no small part due to a slower pace of growth in China, the world's largest commodities user. On the supply side, energy prices have weakened in the face of increased U.S. production of crude oil and natural gas.

The fundamental forces contributing to the decline largely seem to be still in place: below-trend global demand, in particular a diminished appetite from China, and changes to the supply equation for energy resulting from increased U.S. hydrocarbon production. However, the magnitude of commodities' performance reversal is sizable enough to present some potential tactical opportunities in 2015. In addition to their potential tactical appeal, commodities have also resumed exhibiting the kind of low correlation benefits that have made them traditionally attractive additions to diversified portfolios. Chart 25 below compares the correlation benefits of commodities in the past twelve months versus the 2009-13 period. We see similar low correlation benefits for Master Limited Partnerships, a way of obtaining energy sector exposure typically somewhat less impacted by price fluctuations than direct commodity exposures.

Chart 25: Commodities' Return to Low Correlation

Correlation Matrix								Correlation Matrix									
Time Period: 1/1/2014-12/31/2014	1	2	3	4	5	6	7	8	Time Period: 1/1/2009-12/31/2013	1	2	3	4	5	6	7	8
1 S&P GSCI Energy TR	1.00								1 S&P GSCI Energy TR	1.00							
2 S&P GSCI Precious Metal TR	0.32	1.00							2 S&P GSCI Precious Metal TR	0.38	1.00						
3 S&P GSCI Industrial Metal TR USD	0.53	0.25	1.00						3 S&P GSCI Industrial Metal TR USD	0.52	0.33	1.00					
4 S&P GSCI Agricultural TR	-0.01	0.26	0.07	1.00					4 S&P GSCI Agricultural TR	0.43	0.35	0.41	1.00				
5 Bloomberg Commodity TR USD	0.74	0.61	0.45	0.60	1.00				5 Bloomberg Commodity TR USD	0.80	0.57	0.71	0.79	1.00			
6 Alerian MLP Infrastructure TR USD	0.66	0.24	0.34	-0.13	0.40	1.00			6 Alerian MLP Infrastructure TR USD	0.34	0.19	0.35	0.37	0.43	1.00		
7 Barclays US Agg Bond TR USD	0.16	0.25	0.25	0.32	0.38	0.28	1.00		7 Barclays US Agg Bond TR USD	-0.15	0.23	-0.07	0.15	0.01	-0.08	1.00	
8 S&P 500 TR USD	0.21	0.30	0.52	0.43	0.43	0.35	0.24	1.00	8 S&P 500 TR USD	0.61	0.14	0.69	0.45	0.65	0.42	-0.03	1.00

Source: MVF Research, MorningstarDirect

Correlations between equities and both commodities and MLPs substantially lower in last twelve months than previous five years.

Outside of commodities we continue to see three key exposure areas for alternative asset portfolios: hedged equity, nontraditional fixed income and yield-driven. Hedged equity strategies can be attractive on a risk adjusted basis in volatile long equity environments (consider the Sharpe ratio of 1.7 for the HFRI Fund of Funds index, a proxy for various hedge strategies. The other two exposures provide balance on both sides of the interest rate conundrum. In the event of rising rates, nontraditional strategies can partially immunize rate risk exposure through very short or negative duration. On the other side, yield instruments can add value in the event that rates continue to stay very low.

### III. Conclusions

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- After three years of double digit equity returns with mostly subdued volatility, we expect gains to be more modest for 2015 and to be more in line with the pace of corporate earnings. Our base case scenario anticipates large cap U.S. equity price gains in the mid to upper single digit levels.
- Volatility started to trend up in late summer last year and has picked up even more since the beginning of 2015. Higher volatility requires us to consider alternative outcomes that may be markedly different from our base case.
- More volatility does not necessarily produce negative performance. “Melt-ups” often happen in the late stages of a bull trend, driven by inflows of cash coming in from the sidelines to chase returns, with periodic pullbacks in response to headline market events.
- The U.S. starts 2015 in a strong economic position relative to the rest of the world. Headline GDP, inflation and employment numbers are broadly positive. The absence to date of upward price pressure, particularly on wages, may give the Fed further pause before raising rates.
- Europe’s economic challenges continue and are widely expected to give the ECB the leverage it needs to enact a sizable quantitative easing program. A combination of QE and a weak euro, which makes exports more competitive, could give a boost to Euro-area stocks.
- The growth equation is challenging in emerging markets as well. China managed to keep its growth rate above 7% for 2014 but fell slightly shy of its 7.5% target. China, perhaps together with India and Indonesia, may account for the lion’s share of EM economic growth this year.
- Interest rates continue to defy expectations. Most major European intermediate sovereign issues sport yields well below 1%, while U.S. Treasury 10 year yields have fallen below 2%. The bond market appears unconvinced that global growth will pick up any time soon.
- Energy and other commodity prices are experiencing what is likely to be long term weakness; but the magnitude of the decline since crude oil reached a peak last June offers the potential for some tactical opportunities. Energy’s effect on the broader economy is still an unknown.
- 2015 is shaping up to be a year where “to expect the unexpected” may be the best recipe for action. Although diversification has not been a friend to portfolio managers in the past several years, with U.S. large cap equities achieving outsize gains compared to just about everything else, we see the coming year as one in which to avoid excessive concentration in any asset class. Higher volatility could plausibly work to the benefit of emerging markets or small cap stocks as much as it may to more conservative hedge strategies. We believe it will be a year requiring close attention, focus and agility.

## IV. Important Disclosures

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