Nation’s Inflation Conversation

Inflation is a much-discussed topic among investors that recently has garnered even more attention. Despite inflation not being a problem for some time, there was a pickup in the Consumer Price Index (CPI) earlier this year. The debate on whether consumer prices are rising and whether monetary prices will result in higher inflation is an important one from both economic and market perspectives.

There are many factors to consider in understanding the inflation picture. Current upside risks to inflation do appear to be low. Monthly inflation numbers tend to be noisy. The unemployment rate, although improved, is still high by historical measures. Global growth is forecast to continue, although at a modest pace. Energy production in the United States is increasing, which should reduce inflation pressures. However, U.S. growth remains far from robust. Housing inflation, although a possibility, seems less likely with recent data.

There have been several false alarms about rising inflation in the past several years about which markets have shown little concern. This can be costly if wrong. While indicators are not pointing to a structural rise in inflation, the main fact is higher inflation does not have to be present for there to be an inflation scare. All that is needed is the potential for higher inflation.

An inflation surprise and the removal of accommodative monetary policy would likely invoke selloffs in the equity markets. Also, a surprise jump in inflation would be a volatile event for markets, accompanied by readjustment of expectations. Given low inflation expectations, either a surprise or a scare would be harmful to stocks and credit because markets do not seem to be pricing in either scenario. And it would be harmful to credit because rates would rise.

In this month’s Investment Outlook we discuss:

- current trends in inflation;
- the Federal Reserve’s (Fed’s) take; and
- the market’s view.

Our outlook for the United States for 2014 is continued economic expansion, with several helpful tailwinds, including less fiscal drag and political turmoil, strong corporate profits, low inflation, and rising asset prices, among other things. PNC is forecasting GDP growth of 4.0% for second-quarter 2014. Our full-year 2014 forecast for GDP growth is 2.2%.

PNC’s six traditional asset allocation profiles are shown on the back page of this outlook.
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Current Trends in Inflation
For the past few years, inflation has been of little concern (Chart 1). The confluence of several factors is keeping inflation at bay.

A loose labor market means there is little pressure dragging overall prices higher. With the unemployment rate still above 6%, labor market slack has shifted wage pricing power into the hands of employers. Unit labor costs are up just 1.2% from a year earlier in the first quarter. The three-month moving average is even weaker—at just 1%—and has been trending downward since the middle of 2013. Labor costs lead the CPI by about a year, suggesting there is little need to worry in the near term. Historically, wage growth (specifically, average hourly earnings) have not accelerated until the unemployment rate has fallen below 5.5%, according to Cornerstone Macro. Further, many economists assume the improving labor market will draw previously discouraged workers back into the labor force. If this is true, further declines in the unemployment rate will be tempered, meaning it may take even longer for unit labor costs, and therefore inflation pressures, to notably increase.

The United States is also benefiting from stability in the commodity and food markets—usually responsible for the lion’s share of volatility in prices (Chart 2). Part of this is due to the energy renaissance in the United States. The ramp up in domestic natural gas production is keeping domestic energy prices low: Indeed, according to data compiled by the Bureau of Labor Statistics, overall energy prices have remained relatively unchanged since mid-2011. Though not as stable, food inflation has been relatively muted for several years as well. These benefits are filtering through the supply chain.

In conjunction with stable food and commodity prices, prices are also benefiting from international dynamics. Weaker international growth, especially among the emerging market countries, is keeping overall prices muted. In addition, the dollar is benefiting from weaker global growth. The rising dollar makes imported goods cheaper for the final consumer and forces domestically produced competing products to check price increases.

Finally, some monetarists are pointing out that rather than increasing lending and the money supply, banks are holding higher levels of excess reserves on their balance sheets. Others have noted that the velocity of money (how quickly money circulates) is well below its historical average, and by some measures may be at a record low. In a monetarist framework, there is no evidence of inflation accelerating when the velocity of money is slowing.

Pricing Trends
While overall inflation has not been a concern, there has been some acceleration this year. Noting the underlying trends can help explain why the uptick occurred. As
noted above, despite some modest movements in food and energy prices, this is not the full picture; core inflation has ticked higher (Chart 3). Of the CPI, food comprises about 15%; energy, 10%; and housing, 30%. The rest is labor and other finished goods.

Market participants keep an eye on consumer prices because the Fed uses core inflation, which excludes volatile gasoline and food prices, as a key indicator to determine whether it must increase interest rates or keep them at historically low levels to cool down or heat up the economy.

The underlying cause of the rise in core inflation has been limited to a few areas: new vehicles, clothing, health care, and travel. Vehicle sales have been strong, which helps explain the upward movement of prices. Spending on clothing has not been strong, which does not explain the price movement. Air fares are typically volatile.

Producer prices have not shown a strong buildup; therefore, they are not adding much to inflationary pressures. The Producer Price Index (PPI) rose 0.4% in June and again in July, reflecting a jump in energy prices, which now appear to be abating (Chart 4). In addition, the PPI for food suggests food prices will decline. Food commodity prices have declined 15% from their most recent peak reached earlier this year. Food forecasts predict larger crops helping soothe prices.

Import prices have picked up (Chart 5), in particular with higher costs of goods from China. Yet overall, the global inflation picture remains sanguine. The median inflation rate for the 34 Organisation for Economic Co-operation and Development (OECD) countries is only 0.9%.

**The Fed’s Take**

The Fed uses several measures to monitor inflation, removing spikes in prices, namely commodities, in order to check the underlying inflationary direction. This includes the Atlanta Fed’s core sticky price CPI (Chart 6, page 4) and the Cleveland
Fed’s median CPI. Both appear reasonable at present after climbing. But inflation indicators have shown some uptick. The Cleveland Fed’s median CPI indicator has risen from a low of 1.7% last September to 3.2% in May. Core personal consumption expenditures, the Fed’s core inflation measure, at last read reached 2%.

The Fed has shown little concern about inflation, primarily because wage pressures are stable. Wage inflation seems to be hovering around 2%, where it has remained since the Great Recession. It would seem policy makers would not show much concern until this number got above 3%. Fed research published recently argued that there remains a large pool of long-term unemployed and discouraged workers that can be drawn back into the labor force as the economy expands. However, in order for individuals to ask for better wages they must feel comfortable about their current and future economic situations, which is not likely at present.

The question economists and market participants are concerned with is whether the United States is beginning to see a real rise in inflation, which could force the Fed to raise interest rates. Fed Chair Janet Yellen has reinforced that the Fed will not raise the federal funds rate until after a “significant” time has passed beyond ending monetary stimulus. However, most economists would view inflation rising above 2% as changing this position, in order to curb price increases given a still recovering economy.

In testimony before the Senate Banking Committee, Ms. Yellen expressed she was not concerned about inflation, given the lack of wage pressures. She noted that even if inflation reached 2%, it was her view that it would not peak much higher than that in the long term. Additionally, recent commentary from Ms. Yellen warned of "stretched" valuations in various equity and debt securities; we do not expect the Fed to act on these concerns in the near term.

The size of the Fed’s balance sheet is often cited as a concern when considering inflation. Indeed, the assets of the Fed more than doubled in a mere seven weeks from September 12, 2008 (the day before the Lehman Brothers collapse), to October 31, 2008 (Chart 7). By December 7, 2012, they had more than tripled—an annualized growth rate of 30.4% since the collapse. Despite the dramatic rise in high-powered money, inflation has remained quite benign.

Investors question whether the Fed can shrink its balance sheets. On the surface, the Fed can sell purchased securities and decline to renew loans made to banks. However, the question remains whether this can be accomplished fast enough to rein in inflation. A slow drawn-out recovery allows the Fed ample time to reduce liquidity, limiting the risk of higher inflation. A sharp pickup in global economic activity might make this more difficult.

We do not take the inflation threat lightly; but, fortunately, there are several options available to the Fed that could help to tame price increases. For example, if a rapid increase in lending brought about a rise in inflation, the
Fed has already proposed raising the interest rate it pays on reserves. Such an increase might induce banks to hold onto cash rather than lend it out, and it might increase borrowing costs, tempering demand for new loans.

The Fed could also increase the minimum ratio of reserves against deposits that banks are required to hold. For much of its history, the Fed actively managed these reserve requirements as part of its policy arsenal, but it has not done so for a long time. Though it may seem a blunt tool, reserve requirements are potentially quite powerful in controlling the expansion of credit and money and, by extension, inflation.

Another possible option for the Fed is large-scale reverse repurchase agreements, better known as reverse repos. In a reverse repo, the Fed agrees to sell a security to a bank or other financial institution with a promise to rebuy that security at some point in the future. These agreements would quickly reduce excess reserves at banks while leaving the size of the Fed balance sheet unchanged. As former Fed Chair Ben Bernanke highlighted in his February 2010 testimony to Congress, “Reverse repos [would] allow the Fed to drain hundreds of billions of dollars of reserves from the banking system quite quickly, should it choose to do so.”

Further, the Fed could consider raising policy rates earlier than the promised late 2015. With the federal funds rate near zero, we think a modest increase, for example, 25 or 50 basis points, could temper inflation while still maintaining a historically low-interest-rate environment, remaining accommodative to a possibly still-struggling recovery (Chart 8). The Fed could possibly avoid a premature increase in rates, but that option does exist as its likely first move if inflation or economic growth are stronger than expected.

The Fed may be benefiting from the slow growth environment in the United States right now. The slower, more drawn-out recovery may aid the Fed in this regard by giving it time to reduce liquidity in the banking system in an orderly fashion, with limited risk of significantly higher inflation. On the other hand, if the global economy suddenly kicks into higher gear, we believe it may not be feasible to drain liquidity fast enough to avoid escalating inflation.

Indeed, there are other serious risks as well. Certainly, the Fed is neither omniscient nor always correct. Thus it is possible it may misdiagnose the economy or develop the wrong prognosis. The Fed could simply misjudge the situation, waiting too long or applying too little restraint. Further, political pressure may bias the Fed into making that mistake, despite independence. As an example, Japan’s Prime Minister Shinzo Abe campaigned on the notion of forcing the Bank of Japan (BOJ) to adopt a much more aggressive stance. Once he won, the BOJ did adopt a more aggressive position, without, it seems, even pretending it was the BOJ’s idea.

**The Market’s View**

In the post-1970s period, corporate profits have not correlated with reduced growth rates until prices increased more than 5% yearly, according to Strategas. In the near term, we do not expect inflation to be cause for worry in reference to corporate earnings. This provides some support to valuations. In terms of sector performance in
Investment Outlook

the past 20 years, performance during periods of inflation has been led by Information Technology and Energy, admittedly in a tame economic environment. Financials and high yield have been the laggards (Table 1).

Research has shown that over a long holding period, stocks provide a hedge against inflation. This is not always the case in shorter periods. Keep in mind that volatility usually accompanies a higher inflationary period.

Since 1926, 28% of stock market and 8% of bond market returns were negative on an annual basis. However, only rarely (about 2% of the time) did both stocks and bonds post simultaneous annual negative returns. Therefore, managing the stock/bond allocation can benefit the stability and predictability of portfolio performance.

In observing the correlation of five-year returns on U.S. stocks, bonds, and T-bills with realized inflation from 1930 to 2012 (Table 2), we note the nominal return on each asset class is positively correlated with subsequently realized inflation. As might be expected, nominal T-bill returns have the highest correlation with inflation. This is consistent with the fact that money market rates reset frequently and tend to track significant changes in inflation, at least on average.

What we are primarily concerned about is the real, inflation-adjusted returns on these asset classes. As shown in Table 1, the real return on stocks is essentially uncorrelated with realized inflation. That is good news, since it implies that stocks tend to do a good job of protecting purchasing power. Real returns on bonds and bills, however, are strongly negatively correlated with inflation. We conclude that both of these asset classes do a poor job of protecting purchasing power.

It may seem odd that the correlations of nominal returns with inflation are positive and not dramatically different for stocks and bonds, yet the correlations are very different when reviewing real returns. The explanation lies with differences in volatility between stocks and

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Average Return in Rising Inflation Environments (past 20 years)</th>
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<tbody>
<tr>
<td>Technology</td>
<td>26.8%</td>
</tr>
<tr>
<td>MSCI EM (USD)</td>
<td>21.4</td>
</tr>
<tr>
<td>Energy</td>
<td>18.6</td>
</tr>
<tr>
<td>Gold</td>
<td>18.5</td>
</tr>
<tr>
<td>S&amp;P Mid Cap 400</td>
<td>11.4</td>
</tr>
<tr>
<td>S&amp;P Small Cap 600</td>
<td>7.0</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>6.0</td>
</tr>
<tr>
<td>Utilities</td>
<td>5.8</td>
</tr>
<tr>
<td>Industrials</td>
<td>5.7</td>
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<tr>
<td>Health Care</td>
<td>5.4</td>
</tr>
<tr>
<td>REITs</td>
<td>3.2</td>
</tr>
<tr>
<td>Discretionary</td>
<td>2.4</td>
</tr>
<tr>
<td>Telecom</td>
<td>1.0</td>
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<tr>
<td>Staples</td>
<td>0.0</td>
</tr>
<tr>
<td>Materials</td>
<td>-0.9</td>
</tr>
<tr>
<td>High Yield Bond</td>
<td>-1.2</td>
</tr>
<tr>
<td>Financials</td>
<td>-6.9</td>
</tr>
</tbody>
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Source: Strategas Research Partners, PNC

<table>
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<tr>
<th>Table 2</th>
<th>Correlation of Five-Year Returns with Realized Inflation</th>
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<tr>
<td>January 1930–November 2012</td>
<td></td>
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<tr>
<td>Stocks</td>
<td>Bonds</td>
</tr>
<tr>
<td>Nominal Return</td>
<td>0.31</td>
</tr>
<tr>
<td>Capital Gain</td>
<td>0.31</td>
</tr>
<tr>
<td>Income</td>
<td>0.03</td>
</tr>
<tr>
<td>Real Return</td>
<td>-0.05</td>
</tr>
</tbody>
</table>

Source: Morningstar, Inc., PNC
bonds. Recall that correlation reflects the tendency of two random variables to move in the same direction (positive correlation) or in the opposite direction (negative correlation) relative to their respective average values. It indicates nothing about the relative magnitude of the movements. Just because nominal returns on both stocks and bonds tend to move in the same direction as realized inflation (that is, they are positively correlated with it) does not mean that they both move enough to fully offset the impact of inflation. If inflation turns out to be 1% higher, then an asset’s nominal return must also be 1% higher to help protect purchasing power. Simply moving in the right direction is not good enough. Nominal stock returns are much more volatile than nominal bond returns. Hence, given similar correlations with inflation, they are much more likely to rise or fall enough to fully offset changes in inflation. Ironically, higher (nominal) volatility works in the investor’s favor here.

Investors also often question the use of commodities, such as gold, and foreign currencies as inflation hedges. Our research shows these asset classes do not typically provide a reliable long-term protection of purchasing power, given that these asset classes serve as a store in value versus offering any real financial return.

Chart 11 shows the correlation between changes in the general price level (that is, inflation) and changes in the price of gold, the price of oil, a broad commodity index, and the dollar value of a trade-weighted basket of major currencies over five different holding periods since 1982. All four of the asset classes are positively correlated with inflation over a one-month holding period, with oil and broader commodities showing the highest correlation. The correlations for gold, oil, and broad commodities begin to break down, however, as the holding period is lengthened. Once the holding period reaches five years, all three have negative correlations with inflation. At a 10-year holding period, all three have very strong negative correlations with inflation. We note, however, that this appears to be period specific.

Data limitations prevent analysis of earlier data for oil, but data back to 1973 show 10-year correlations with inflation for gold of 0.25 and for broad commodities of -0.07. We find these more encouraging, at least in the case of gold. Nonetheless, we question the reliability of these asset classes as stores of real purchasing power. We are performing more research in this area.

What Could Cause Inflation to Rise?

Given the above analysis of current trends and Fed policy outlook we believe several indicators should stay on investors’ minds as indicators to track that could cause inflation to rise. Scenarios that we believe could bring about a rise in inflation are:

- continued rise in consumer goods prices;
- continued vigor in monetary growth with a pickup in the **money multiplier**, which has been noticeably low during the current deleveraging cycle (Chart 12, page 8);
- faster wage growth;
- further increases in energy prices, given the geopolitical situation; and
- marked improvement in the unemployment rate.
Federal Open Market Committee (FOMC) minutes show the Fed is divided on its outlook for inflation. Members believe that either:

- inflation will stay below 2% for a long time regardless of the improving unemployment rate; or
- there are upside risks relative to the decline in economic slack.

The median forecast from the FOMC suggests inflation will stay below 2% through 2016. Markets, however, may be too optimistic about Fed policy, in particular in reference to interest rates.

Higher prices for consumer goods generally are the drivers of purchasing power and economic activity and should be monitored above all. Inflation expectations based solely on monetary policy or unemployment trends are also notable, given the Fed-aided recovery. However, the slow pace of the U.S. recovery does not add to inflation pressures. We will continue to monitor inflation closely. We currently publish *Inflation Watch Indicators* weekly.

**PNC Current Recommendations**

PNC’s recommended allocations continue to reflect our positive view regarding the durability of the economic expansion while considering the continued downside risks inherent in the market and economic outlook:

- a baseline allocation of stocks relative to bonds;
- a tactical allocation to PNC Systematic Tactical Asset Rotation (STAR);
- a tactical allocation to real estate investment trusts (REITs);
- a tactical allocation to leveraged loans within the bond allocation;
- a tactical allocation to absolute-return-oriented fixed-income strategies within the bond allocation;
- an allocation to emerging markets within the international equity component;
- a preference for high-quality stocks;
- a tactical allocation to global bonds within the bond allocation;
- a tactical allocation of 52% value and 48% growth within U.S. large-cap stocks;
- a tactical allocation to global dividend-focused stocks; and
- an allocation to alternative investments for qualified investors.

**Baseline Allocation of Stocks Relative to Bonds**

Since one cannot accurately determine the short-term movement of stocks, we believe that institutional investors should focus on what is knowable and controllable. The one thing institutional investors can truly control is asset allocation reflective of their goals, cash flows, and risk budgets. PNC’s six baseline asset allocation models are shown on page 20.

**Preference for High-Quality Stocks**

Any relapse to stressed capital markets or to another credit crunch from a financial crisis likely poses a higher threat to lower-quality and highly leveraged companies.
Companies with weak balance sheets and less-robust business models have a much higher risk to their survival. Unfortunately, the economic outlook continues to be subject to continued downside risks in the wake of the financial crisis.

We favor a preference for high-quality stocks as a method of risk control against unexpected shocks to the economic system. This is also consistent with our explicit allocation to dividend-focused stocks.

**International Equities**

International equities offer a geographic diversification benefit and open the opportunity set to invest in firms around the world. Beyond the benefits of diversification and exposure to many of the world’s leading companies, there are other potential benefits to investing outside U.S. borders, including unique opportunities associated with Asia and Europe. Within the international equity component we recommend an allocation to emerging markets.

A reasonable assumption regarding returns is that the United States and other developed markets have similar long-term expected returns. Much of the difference is likely to come from currency gains or losses. We remain mindful of the currency risk inherent in international investing. While at times the weaker dollar makes international investing look more attractive than the underlying fundamentals might dictate, the reverse is true when the strong dollar punishes the international returns of U.S. investors.

**Allocation to Global Bonds within Bonds**

The strategic rationale for including global bonds in the portfolio rests on expanding the opportunity set within the investible bond universe. The Barclays Capital Global Aggregate Index, our proxy for high-quality global bonds, contains less than 40% U.S. issues (Chart 13). (For further details on global bonds, see the July 2011 Investment Outlook, Pulling the Fourth Lever.) We believe investors who decline to look outside the United States may be missing opportunities for diversification and perhaps enhanced returns.

A primary motivation for allocating to global bonds is the introduction of currency exposure to a portfolio. Although currency adds another level of volatility to a portfolio’s fixed-income allocation, investors gain a natural hedge against devaluation of the dollar, which traditional domestic fixed-income asset classes cannot offer (Chart 14, page 10).

The prospect of higher global economic growth outside the United States is another motive for allocating fixed income globally. As world economies grow more quickly, international bond investors may have the opportunity to reap the benefits of tightening global credit spreads relative to the United States. More importantly, investors can take advantage of higher interest rates abroad to gain higher yields. The addition of the currency exposure that comes with an unhedged global bond can act to lower the correlation with U.S. bond returns (Chart 15, page 10).

In general, we suggest that active management makes the most sense in this allocation. Generally, global bond index construction focuses on allocating more
assets to countries with more outstanding debt. This may or may not be a good thing. Larger and more stable economies are likely to be able to safely support higher debt levels, but some fundamental analysis is likely helpful. We also believe that the current state of the global economy, with the large dichotomy between most developed and emerging economies, provides a possible opportunity for active managers in terms of credit and foreign exchange exposure.

In our opinion, it is likely that many managers’ allocations will differ greatly from the index. This also affects the risk metrics, typically to the upside in terms of volatility, index tracking error, and historical drawdowns. This was explicitly taken into consideration by the PNC Investment Policy Committee when it sized the recommended allocation to global bonds.

Given the concerns regarding how the United States will handle upcoming monetary and fiscal policy decisions, as well as what effects those decisions might have on the value of the dollar, we believe an allocation outside traditional fixed-income bond sectors is prudent. We believe the advantage of higher global growth and diversification benefits, along with the ability to benefit from currency exposure outside the dollar, make investing in the global bond sector a viable complement to traditional dollar-based fixed-income assets. This allocation can be seen as adding to PNC’s defensive posture on U.S. interest rates, with 10-year Treasury rates now above 2% and our view that yields will rise over time as the current economic soft patch and the flight to safety fade (Chart 16). We also see this as an opportunity to benefit from higher bond yields elsewhere in the world.

**Allocation to Leveraged Loans within Bonds**

We believe an allocation to leveraged loans within the bond portion of a portfolio

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1The March 2010 *Investment Outlook, Shakespeare for Primates*, provides details about leveraged loans.
should help defend against higher interest rates. Since leveraged loans are adjustable-rate instruments tied to short-term interest rates (typically the 3-month London Interbank Offered Rate, or LIBOR), we believe holders should benefit from rising rates (Chart 17). If longer-term interest rates rise, we expect the shorter duration of leveraged loans should result in much better performance relative to longer-duration fixed income, such as the Barclays U.S. Aggregate Bond Index.

In summary, this allocation could be characterized as lowering the portfolios’ interest-rate risk while raising their credit risk and correlation with equities. We believe it accomplishes this without a large impact on portfolio income. In our opinion, this correlation with equities, which we have noted since recommending the allocation, has become more apparent in the recent stock market downturn, allowing investors an attractive entry point.

**Allocation to Absolute-Return-Oriented Fixed-Income within Bonds**

We believe an allocation to absolute-return-oriented fixed-income strategy within the bond portion of a portfolio has several benefits, including:

- defending against higher interest rates;
- further expanding the opportunity set for fixed income; and
- increasing exposure to credit.

Given our belief that the economy will continue to improve, strategies that protect against the risk of rising rates will become increasingly important. While we do not believe interest rates will necessarily move markedly higher in the near term, rate volatility has certainly increased, and we expect that the downside risk to holding excessive duration will increase the longer rates remain low. We believe it makes sense to further hedge against this risk while maintaining the ability to participate in upside credit potential. This is also consistent with our current tactical allocations to global bonds and leveraged loans.

We believe the Fed will continue to support the economy as necessary until the economy can grow and function without additional monetary policy accommodation. This should lend itself to further credit spread tightening over the short to intermediate term. Even with spreads at relatively attractive levels compared with historical standards, we admit the absolute low level of yields increases the difficulty of adding alpha within spread sectors. This is one aspect in which we believe an absolute-return long-short approach can add value. Absolute-return strategies have the ability to exploit mispricing via both long and short positions and also expand the opportunity set of strategies typically not accessible by traditional long-only managers. Typical trading strategies include, but are not limited to, capital structure arbitrage, convertible arbitrage, event driven, and pairs trading.

Table 3, page 12, illustrates the behavior of various products on the PNC platform consistent with the absolute-return-oriented fixed-income strategies during periods of rising interest rates. The strong relative performance in rising-rate environments is notable and is consistent with our expectation.

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2The July 2013 *Investment Outlook, Breaking the Bonds*, provides details about absolute-return-oriented fixed income.
Overweight of U.S. Large-Cap Value Stocks Relative to Growth

We believe the majority of the seven components of our decision framework continue to support an overweight to U.S. large-cap value style relative to growth. These components are:

- earnings growth;
- interest-rate level;
- inflation;
- volatility;
- foreign growth;
- valuation; and
- yield-curve slope.

In particular, we focus on the yield-curve slope because the results of our analysis show that a steep curve is supportive of value style outperformance relative to growth. To be clear, it is not a concrete rule that value outperformance over growth in a steep yield curve always exists, but it is an indication of a higher probability. Though recent Fed activities have flattened them to a degree, both the 2- to 10-year (Chart 18, page 14) and 10- to 30-year (Chart 19, page 14) Treasury slopes remain historically steep and supportive of the value overweight.

We continue to monitor the possibility that the typical impact of the steep yield curve might be derailed by:

- the credit cycle;
- capital constraints; or
- lack of loan demand.

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The March 2011 *Investment Outlook, Quest for Value*, provides details about the value style recommendation.
Bank loan data seem to be past their worst levels, and we believe there are reasons for cautious optimism.

- Banks are showing a greater willingness to extend consumer loans (Chart 20).
- Bank loan quality has continued to improve, implying a tailwind to bank earnings and a possible turn in the deleveraging cycle (Chart 21).
- Bank capital ratios have more than recovered, which should allow for loan growth and likely help prevent relapse of financial crisis within the banking industry (Chart 22).

Our value allocation has underperformed in the market downturn, given its more cyclical exposure. We believe it will perform better as global growth concerns fade.
Allocation to Global Dividend-Focused Stocks

A global dividend-focused allocation expands the opportunity set to invest in high-quality dividend-paying stocks domiciled in North America and beyond, where in some cases companies have exhibited faster dividend growth, essentially opening up the opportunity to invest in firms outside the United States, including the emerging markets. In addition, focusing on the combination of dividends and dividend growth has historically been a winning combination.

The reinvestment of dividends greatly enhances an investor’s return and is a large component of the dividend-focused strategy. Over time, the compounding of dividends drives the total return. As an investor’s investment holding period increases, dividends typically comprise a larger portion of return. As a reference point, from 1926 to 1959 dividends contributed more than 50% to total returns for the S&P 500®.

We believe the global dividend-focused allocation is positioned to take advantage of global opportunities and diversify across countries and sectors (Chart 23). A globally generated income stream is inherently more diverse than one from a single country or region. This can help to avoid concentration in terms of end markets, which may drive sales and revenues. A global dividend allocation may also allow an investor to invest in sectors perhaps underrepresented by a particular country.

Allocation to Alternative Investments

We also believe alternative asset classes should be considered for qualified investors because they may provide an effective risk management tool for portfolios. Our argument is that if alternative and traditional investments are put on even footing with regard to expected returns, then solely by virtue of the two investments being different, the risk of the overall portfolio is reduced without altering the portfolio’s expected return. The risks may not be less, but they are in some ways different, so we believe this diversification may help manage overall portfolio risk.

Every action (or inaction) involves risk, and we believe investors should think about risk when they consider alternative investments. However, our research suggests that adding carefully selected alternative investments to a diversified portfolio of traditional investments may reduce the overall risk (as defined by the volatility of returns) of that portfolio without affecting expected returns. We believe that alternative investments should be considered as a tool for managing portfolio risk, not for adding risk to increase returns, for qualified investors.

As an example of the possible value alternatives, in particular hedge funds, can bring to a portfolio in the current environment, look at the correlation between the S&P 500 and the HFRX™ Macro Index (Chart 24, page 15). Low correlation with stocks at times when they are falling would be a distinct positive in terms of reducing the downside. While at times these two very different assets move nearly in unison, the hedge funds do have exposure to other factors than solely stocks and also might adapt to the environment by changing exposures. In fact, the HFRX Macro Index had significantly outperformed the S&P 500 during previous downturns since the late-April 2013 market peak (Chart 25, page 15).
Given the current market environment, including a number of factors (such as low returns on cash and occasional spikes in macroeconomic concerns) that could continue to result in increased volatility, we believe alternative investments are worthy of consideration for qualified investors.4

Allocation to PNC STAR

The PNC STAR strategy uses broad exchange-traded funds to apply momentum exposure to industries, size, and international factors in a systematic way. We believe adding a small allocation of the PNC STAR strategy to a portfolio may help increase return without increasing risk and, with small allocations, may help marginally reduce risk (Chart 26).

In backtests, PNC STAR has produced excess returns with a volatility level similar to the benchmark S&P 500, resulting in a higher Sharpe ratio. In addition, the analysis has shown that the strategy has handled periods of crisis better than the S&P 500 and was generally quicker to recover. While past performance is not indicative of future results, historically this model has produced outperformance of just under 0.40% per month. In addition, the drawdown analysis has shown that the strategy has handled periods of crisis better than the S&P 500 did and was generally quicker to recover.

Momentum performance has dipped since the financial crisis, but appears to be regaining some momentum (to turn a phrase). If momentum continues to work in the future as it has historically, the strategy may lead to excess returns that should help improve the tactical allocation portfolios.

4 For more details, see our October 2009 Investment Outlook, Alternative Medicine, and our August 2009 white paper The Science of Alternative Investments.
Investment Outlook

Allocation to REITs

The strategic rationale for including REITs in the portfolio rests on expanding the opportunity set for income investors. The REIT mandate requires at least 90% of income to be distributed to shareholders in the form of dividends. Given the nature of the dividend model, we believe REITs fare better with investors not aiming for quick capital gains but for dividend income and modest price appreciation. Over a long investment holding period, REITs have tended to outperform the S&P 500 on a total-return basis (Chart 27). The total-return perspective is unique for REITs in that it has historically kept pace with or exceeded the broader market, with the additional benefits of:

- modest correlation with stocks;
- less market price volatility; and
- higher current returns.

REITs provide steady current-income-producing dividend yields competitive with investment-grade bonds, with the potential for increases in dividend and share price.

REITs allow shareholders to invest in commercial real estate while remaining liquid and leaving the management to professionals. REITs historically have had lower correlations versus other stocks, providing diversification benefits. Given the complex nature of the interrelated economics and industry fundamentals, leaving the investment in real estate to the professionals and buying for the long term into strong companies is a standing argument for long-term investing versus market timing. We believe the asset class should bring some diversification benefits in spite of the correlation tightening with the S&P 500.

REITs are not so much interest-rate sensitive as dependent on economic growth. Dividend growth rates have outpaced inflation over the past decade (Chart 28).
As of market close, Thursday, July 24, 2014:

<table>
<thead>
<tr>
<th>S&amp;P 500®</th>
<th>DJIA</th>
<th>90-DAY T-BILL</th>
<th>10-YEAR T-NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1685.94</td>
<td>15542.24</td>
<td>0.02%</td>
<td>2.59%</td>
</tr>
</tbody>
</table>

**Asset Allocation Recommendations**

**Equity Allocation**

- **Capitalization:** Baseline
  - 80% Large-Cap
  - 4% REIT
  - 4% Small-Cap
  - 9% Mid-Cap

- **Style:** Overweight Value within U.S. Large Cap
  - 48% Growth
  - 52% Value

**Global Positioning:** Baseline Plus Global Dividend Focus and Smart Beta

- 20% International
- 5% Smart Beta-PNC STAR
- 75% Domestic

**Fixed Income Allocation**

- **Credit Positioning:** Core, Leveraged Loans, Global, and Absolute-Return Oriented
  - 70% Core
  - 15% Leveraged Loans
  - 5% Absolute-Return Oriented
  - 10% Global

For qualified investors, we recommend an allotment to alternative assets of 20% of a balanced allocation to complement the traditional allocation.

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