CAMBRIDGE C|A ASSOCIATES

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VantagePoint

First Quarter 2015

VantagePoint is a quarterly publication from our Chief Investment Strategist summarizing C|A's total portfolio advice.

Advice in Brief

- We have been recommending since the middle of last year that investors shift more capital into safer assets—more fundamentally driven hedge funds and Treasuries—as equity markets become more expensive, even as we remain neutral on equities on the whole. We maintain this advice. Commodity weakness, US$ strength, disinflationary pressures, and US equity dominance are strong consensus views today. How these trends evolve will have a meaningful impact on the investment landscape.

- Commodity prices are unlikely to reach prior highs anytime soon, but a number of energy sector–related investments offer value today for long-term investors.

- US$ strength should persist. Consider increasing US$ exposures. Rather than overweight expensive US$ assets, US$ reference investors should hedge some non-US$ exposure.

- Time may be running out for US equity dominance. Investors that underweight US equities will eventually be rewarded. Overweight Eurozone and Japanese equities on a currency hedged basis and Asia ex Japan equities, which are relatively cheap and offer upside potential.

- Disinflationary pressures remain, making developed markets sovereign bonds expensive today. The diversification benefits of sovereign bonds suggest that they deserve a place in portfolios, even at today's prices. Such positions can be supplemented by cash given the potential for yields to rise from ultra-low levels.

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Portfolio Tilts from C|A's Chief Investment Strategist

	Overweights	Underweights	Pros/Cons of the Tilt
Diversified Growth	**US High-Quality Equities**	**US Small-Cap Growth**	**Pros:** Firms with historically stable profits and low leverage should be less vulnerable; small-cap growth is richly valued, and is vulnerable if risk appetite shifts downward **Cons:** High quality no longer cheap; small caps have more robust manager universe than high-quality strategies
	Asia ex Japan Equities		**Pro:** Asia ex Japan valuations are low relative to their history and may be defensive relative to broad EM given sharp declines in commodity prices **Cons:** Slower Asia ex Japan growth may put pressure on earnings; relatively defensive sectors are richly valued; macro headwinds hold potential for negative surprise over the near term
		US Equities	**Pro:** US valuations are elevated **Cons:** US economic growth is recovering; US stocks may benefit from EM volatility
	Eurozone Equities (currency hedged)		**Pros:** Attractive relative valuations; earnings and profit margins relatively depressed and may rebound; currency hedging to US$ can be defensive in flight to quality **Cons:** Macro risks have increased again; vulnerable to disappointment if ECB does not deliver on QE
	Japanese Equities (currency hedged)		**Pros:** Attractive relative valuations; improving focus on shareholder value; earnings strength beyond exporters **Cons:** Macro risks given swelling central bank balance sheet and high fiscal debt levels
	Low Equity Beta Diversifiers (e.g., less equity- and credit-oriented hedge funds)	**Macro Protection (particularly inflation resistant)** **Credit**	**Pros:** Real and nominal sovereign bonds remain overvalued; diversified commodity indexes somewhat unattractive (see below); credit markets are overvalued to very overvalued **Cons:** Likely decreases inflation and deflation protection, but can still provide diversification in varied macro environments; may increase portfolio active risk
Deflation Hedge	**Cash**	**Sovereign Bonds**	**Pros:** Return potential of bonds today not commensurate with interest rate risk; cash can be spending source for deflation or some *in*flationary periods **Con:** Holding zero-yield cash for extended period would be challenging
Inflation Resistant	**Natural Resources Equities**	**Commodities**	**Pros:** Similarly attractive valuation levels, but with less implementation hurdles (e.g., negative roll yield and no cash yield) than commodities **Con:** Lack of a performance pop in nasty inflation bout
	Gold	**Commodities**	**Pro:** Gold should hedge against risk of currency debasement **Cons:** Can't value gold, which has no cash flow; very vulnerable in central bank tightening
	Cash	**Commodities and Inflation-Linked Bonds**	**Pros:** Cash held as substitute for sovereign bonds can be double-counted as cash available as a liquidity reserve during inflation; "double-counting" use of cash allows for higher allocation to diversified growth **Con:** Holding zero-yield cash for extended period would be challenging. Less inflation resistant than ILBs, which provide a rare contractual link to inflation and commodities, which offer more expected upside in a nasty inflation bout
	US TIPS	**Global Inflation-Linked Bonds**	**Pro:** Higher real yield and core inflation with potential for relative currency appreciation amid US$ strength **Cons:** Potential increase in US real yields

Expect the unexpected. That is the signal from the noise of the last week. The surprise move by the Swiss National Bank (SNB) to abandon the 1.20 floor for the EUR/CHF exchange rate in place since September 2011 sent markets gyrating and brokers running for cover, or in the case of FXCM, grabbing hold of a $300 million lifeline extended by Jeffries. More victims may be uncovered in coming days. Aside from the EUR/CHF action marking the biggest move in a major FX pair since the collapse of Bretton Woods, it could also be an important signal that faith in central banks' ability to provide support to the markets could be at risk.

The SNB acted at a time when markets had been pricing in the increasing likelihood that Mario Draghi, president of the European Central Bank (ECB), will finally use the ECB's bazooka that he loaded back in July 2012 when he famously pledged, "Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough." With Germany's legal challenge on Outstanding Monetary Transactions resolved in favor of the ECB, markets have been positioning for shock and awe. Market participants have observed a sharp drop in liquidity of euro FX cross rates since the SNB abandoned its currency floor, suggesting volatility in these rates may continue. If Mr. Draghi fails to deliver at the ECB's next meeting on January 22, markets will riot. Of course, this increases the likelihood that he will not disappoint.

At the same time, other trends have been gathering steam over the last six months and have become consensus views. Most notably, oil prices have joined natural gas and a slew of metals in a sharp decline as if to punctuate that the commodity supercycle is really over, and the US dollar has moved up decisively as the US economy has shown signs of relative strength compared to other major currency areas. These market moves should serve as a warning not to be complacent—to understand what you own and how investments might react in different types of down markets. Expect the unexpected and make sure that you can live with your portfolio in the next major sell-off and that you know from where you will draw capital to be opportunistic.

In general, we have been recommending since the middle of last year that investors shift more capital into safer assets—more fundamentally driven hedge funds and Treasuries—as equity markets become more expensive, even as we remain neutral on equities on the whole. We maintain this advice. In this edition of *VantagePoint*, we explore some of the major trends in capital markets and provide advice on portfolio implications. We address the following:

- What are the implications of the end of the commodity supercycle?
- What should investors do about continued US$ strength?
- Should investors expect US equities to continue their strong outperformance?
- How should investors position for disinflationary conditions in a world of ultra-low bond yields?

Commodity Conundrum

The dispersion of views on where commodity prices will settle and the length of time it will take is enormous, but the consensus is that the commodity supercycle is over and it will be some time before major commodities return to previous highs. We agree. Falling commodity prices create winners and losers and understanding these forces will be important to investment success in the coming years.

Oil has fallen over 60% since the middle of the year and is not far above most analysts' estimates of the cash cost of production. Commodity prices may not need to decline much more before the bottom is reached, but that does not mean a recovery in oil prices is imminent. The market appears to be in the adjustment phase typical of boom and bust cycles. High prices have led to overinvestment, which only became apparent as growth began to slow, aided by commodity substitution and improved efficiencies. The typical path for supply and demand to come back into line is for commodity producers to cut capital expenditures, reducing production capacity. The big question, of course, is how far prices must fall (and how long that will take) before a recovery begins. The longer prices stay depressed and the lower they go, the more distress we would expect to see along the energy complex.

Lower for Longer?

This question is most pressing for oil given the size and importance of the commodity in global markets. The decline in oil over the last six months has been among the most severe over the last 30 years. Since 1980, oil prices have fallen 50% or more in five other periods. Those associated with recessions (e.g., 1990–91, 2001, and 2007–09) were bad for equity markets, while those associated more with supply shocks (OPEC supply increases in 1986 and 1997) were generally good periods for equities. The current environment has elements of both, but it appears to be driven more by oversupply and an increase in energy efficiency than a shortfall in demand.

Perhaps the strongest parallel can be made with the 1985–86 decline, which followed heavy investment in oil extraction technology concurrent with technological developments that improved energy efficiency. Further, like today, Saudi Arabia decided to target market share rather than cut production. Oil prices fell 61% in six months, reaching the cash cost of production, and remained low in real terms for 15 years. This parallel must be taken in a modern technology context. The time to recovery should be much faster than in the 1980s because shale producers can quickly ramp up and down supply in contrast to traditional oil producers. In fact, shale producers have to keep drilling just to stand still given steep decline rates for production.

While cash costs vary based on geography, estimates today are about \$35 to \$40 for the most expensive 10% of current production. The bear case suggests that prices need to remain low for quite some time to force a decline in capex and slow supply for long enough that it can come back into balance with demand. Should prices increase in the near term, more production can rapidly come on line, bringing back oversupply conditions. The adjustment time is also extended because producers hedge oil prices as far out as 9 or more months and have ample storage for excess supply. To reduce shale supply today, prices must stay low for long enough to take production permanently off line. Once the adjustment transpires, marginal costs will be closer to $60/bbl than $80/bbl.

This argument for the bear case is very plausible, although it is anyone's guess as to when market pricing would begin to recover once supply starts to adjust. Estimates of oversupply vary, ranging from 500,000 barrels per day to 2 million barrels, or roughly 0.5% to 2% a day. Analysts generally believe supply will begin to adjust in the middle of this year, based on expectations for capex, demand, and natural decline rates. However, it may take a prolonged period of low prices—years, not quarters—before supply falls into line.

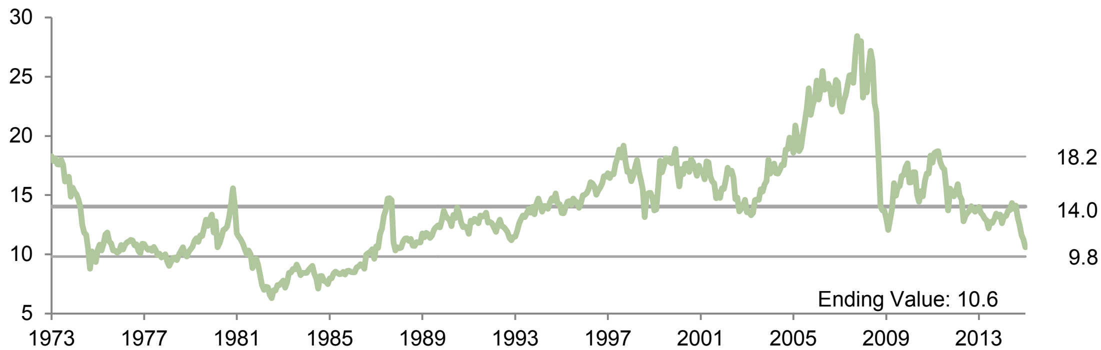
A more benign case can be made from two scenarios. The first is an unexpected decrease in OPEC supply, which could bring a faster recovery. While this is certainly possible, it seems unlikely, as the wealthier OPEC nations, most notably Saudi Arabia, have built up substantial reserve funds with the objective of meeting budgetary commitments in times of low oil prices. The ability to wipe out some of the high cost producers to keep prices higher for longer may be worth the near-term pain for OPEC nations, possible geopolitical motivations aside. A forced supply disruption due to political risk may also be enough to bring supply down more rapidly. The second is an increase in oil demand, which could also bring the market into balance sooner. After all, a lower oil price in and of itself increases demand for oil, and China has already taken advantage of low prices to stock up on cheap oil. However, this seems the least likely of the three scenarios. Investors should recognize there is a reasonable probability commodities will be in for a year or more of lower prices.

Oil Opportunities

An extended period of low oil prices would push the cost structure of the oil industry down, squeezing profits along the energy supply chain. Under this scenario, some players would go bankrupt and their creditors would see losses, creating a ripe environment for distressed investments and asset disposals as capital starved companies seek to rationalize assets. Investors interested in capitalizing on such opportunities should be patient or hire managers that will patiently deploy capital into opportunities that materialize. Private energy managers with the ability and skill set to participate in distressed buying opportunities would be a good option at this stage in the cycle.

The price of oil looks like a buy today, with limited downside relative to recovery potential. How can investors take advantage of this opportunity? The most obvious implementation would be through commodity futures. However, the market is still

Figure 1. Composite Normalized Price-Earnings Ratio for Natural Resources Equities
January 31, 1973 – January 15, 2015



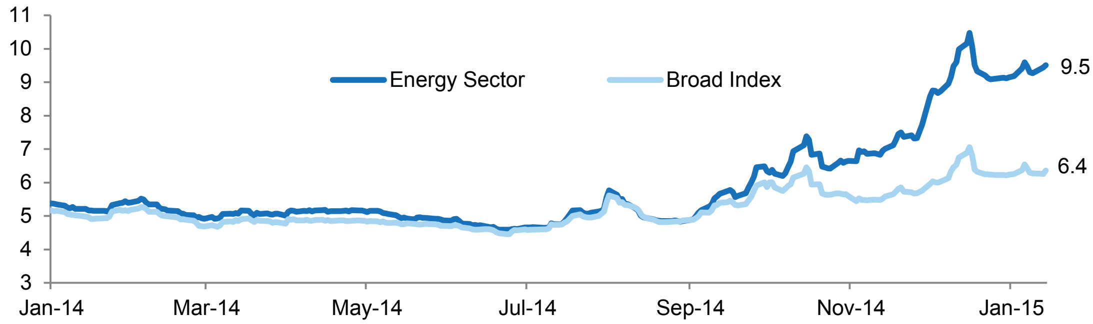
Sources: Cambridge Associates LLC and Thomson Reuters Datastream.
Notes: Natural resources equities are composed of 80% Datastream World Oil & Gas Index and 20% Datastream World Mining. Prices are adjusted to December 2014 dollars.

pricing in higher forward oil prices, with steep contango, cutting into prospective returns, while cash collateral continues to yield nothing.

Equity markets are pricing in much of the direct impact of lower energy prices today. The MSCI World Energy Index is down about 25% since its peak last year, compared to the broad MSCI World Index, which was down about 4% over the same period. Conservative estimates suggest energy companies are pricing in roughly $60 oil, which is comparable to futures prices in mid-2016. Broader natural resources equities experienced similar declines from their peaks. Global natural resources equities are now undervalued: a diversified basket of these firms trades at 10.6 times normalized earnings, 0.8 standard deviation below its historical average of 14.0 (Figure 1). This appears to be the cheapest the market has been since 1987. However, it is reasonable to posit that earnings may be overstated at the end of a long commodity boom. Adjusting earnings down to match the historical average decline over the four prior largest earnings contractions since 1973 increases the price-earnings (P/E) multiple to 14. So perhaps the market is fairly valued, rather than cheap. Regardless, investors should rebalance allocations to natural resources equities that have fallen to any policy or neutral levels given long-term prospects are reasonable to attractive, even as more downside risk may remain. We would wait until the market became very undervalued, or at least undervalued with a more meaningful earnings adjustment, before seeking to overweight natural resources equities relative to equities broadly, although we continue to prefer them to index-like diversified commodity allocations given implementation challenges of the latter.

The high-yield bond energy sector yields 9.5%, roughly 300 bps above the yield on the broad index and 800 bps above five-year Treasury notes (Figure 2). The 800 bps yield spread over a three-year period implies the market is pricing in a cumulative default rate of nearly 45% (assuming the average recovery rate of 40%) for energy-related high-yield bonds, a fairly severe level of defaults. According to analysis by JP Morgan, assuming oil prices of $65 12 to 18 months from now, 40% would be a draconian

Figure 2. J.P. Morgan High Yield: Energy Sector vs Broad Index Yield to Worst
January 1, 2014 – January 15, 2015 • Percent (%)



Source: J.P. Morgan Securities, Inc.

level of defaults. At these levels, energy sector high-yield bonds offer some value, but more distress could easily be priced in, of course, if oil prices stay lower for longer.

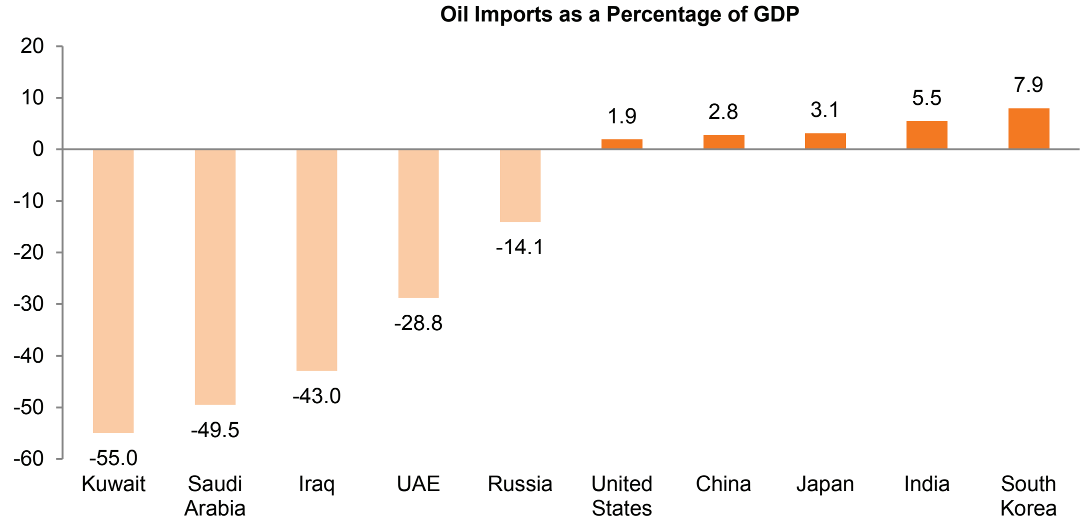
Selling has been somewhat indiscriminate across energy-related assets, providing active management opportunities in commodity futures, natural resources equities, and high-yield bonds. Investors using active managers should consider that high-quality firms with low-cost production and mega caps are a safer option at this stage in the cycle, but would not snap back as quickly in a v-shaped recovery as smaller firms, particularly those with higher-cost production.

Indirect Implications

Lower commodity prices also have broader portfolio implications. For example, falling commodity prices create wealth transfers that must be understood in evaluating relative investment opportunities. From an economic standpoint, lower commodity prices generally benefit net commodity consumers at the expense of net commodity producers, and consumer and transportation sectors relative to energy and materials sectors. Cheaper commodities reduce government revenues and depress economic activity of net exporters, while providing a dividend to net importers. This wealth transfer is not symmetrical. Net commodity importers tend to have more diversified economies receiving varying benefits from lower commodity prices, while net exporters tend to be concentrated in a smaller number of countries that have less diversified economies and may suffer disproportionately (Figure 3).

Assessments of the impact of commodity prices on economic growth are varied, though most studies estimate that commodity declines should be a fillip to global growth (assuming the fall in commodity prices itself isn't a sign of stalling global demand). A recent IMF study estimated that the decrease in oil prices would have a net positive impact on global growth ranging from 0.3% to 0.7% in 2015, holding all other effects constant. Benefits for countries like China that are major net importers would be especially large (0.4% to 0.7%). To the extent that currencies in commodity-importing countries have weakened relative to the US dollar, the fall in commodity prices has been blunted in local currency terms.

Figure 3. Oil Vulnerability Winners & Losers
2012 • Percent (%)

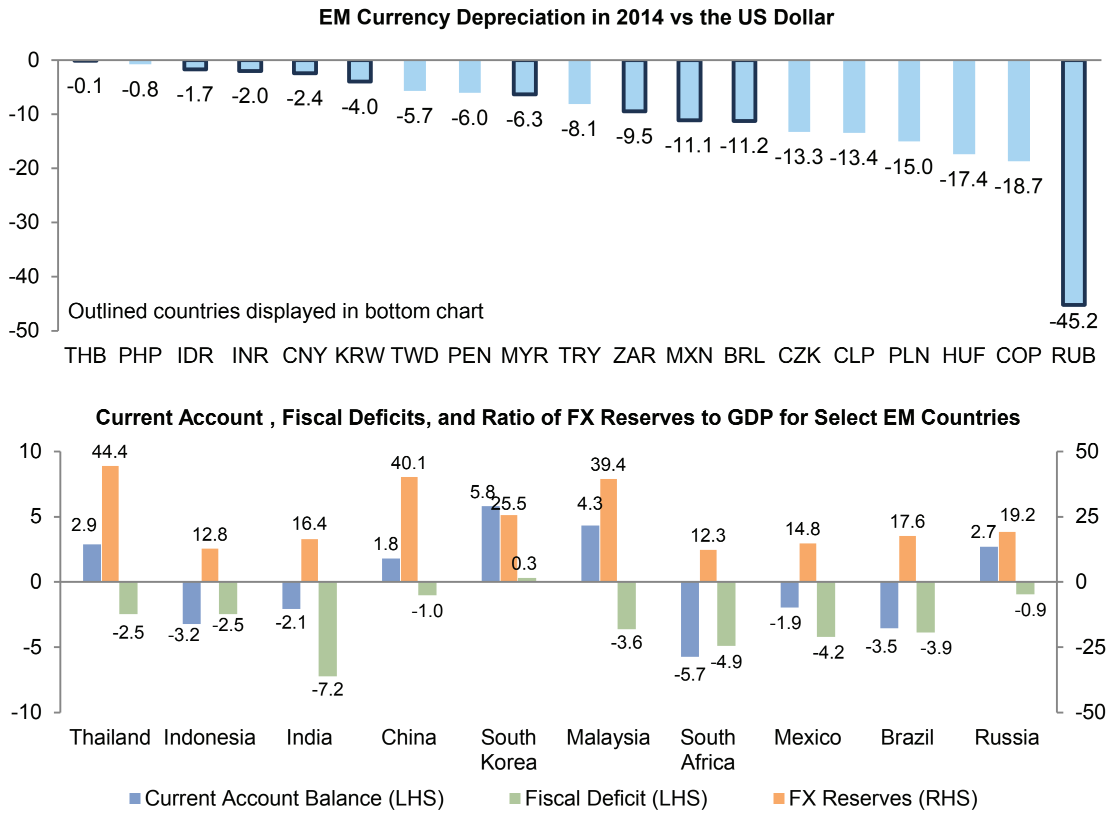


Sources: Thomson Reuters Datastream and *The Wall Street Journal.*
Notes: Oil exports and imports as a percentage of GDP are calculated by multiplying the barrels per day imported or exported by 365 days and the average 2012 oil price (U$/BBL), and dividing it by the annual 2012 GDP. Negative numbers represent net oil exporters.

However, falling commodity prices and the associated rising US dollar add stress to the sovereign finances of net commodity exporters, particularly those in emerging markets that already faced weak fiscal positions, current account deficits, and heavily indebted quasi-sovereigns, particularly those with little to no foreign exchange reserves (Figure 4). Corporations that stand to lose from weak commodity prices and from falling revenues due to commodity-related capex will also be pressured, particularly those that have outstanding debt denominated in US dollars. Financial linkages present the main risk to emerging markets, and markets more broadly. The longer commodity price declines and US$ strength persist (and the more severe these trends are), the more potential for distress and unexpected economic and political outcomes. As investors sort through investment implications, market volatility and risk aversion can rise.

This keeps us cautious on emerging markets debt and currencies, despite higher yields and at least partial currency adjustments. Some emerging market currencies with significant weights in the JPM GBI-EM Global Diversified Bond Index (e.g., South Africa, Turkey) may need to fall further to help countries close current account deficits, even as they are helped by weaker oil prices and have already weakened considerably. Continued US$ strength would likely pressure emerging market debt prices as well. While local currency emerging markets debt is fairly valued, investors should understand the risk exposures inherent in owning this asset class at present. US$-denominated debt faces perhaps the most significant risks from currency mismatches and the need for smaller corporations and countries to refinance in what may be a rising rate environment.

Figure 4. Emerging Markets Currencies and Macro Environment
As of December 31, 2014 • Percent (%)



Sources: International Monetary Fund and Thomson Reuters Datastream.
Notes: Bottom chart shows macro data for 10 of the 11 countries in the MSCI Emerging Markets Index that have weights greater than 2%. Taiwan is excluded due to availability of data. In top chart, EM currencies are represented by currency code: Thai baht (THB), Phillippine peso (PHP), Indonesian rupiah (IDR), Indian rupee (INR), Chinese yuan (CNY), South Korean won (KRW), Tawainese dollar (TWD), Peruvian nuevo sol (PEN), Malaysian ringgit (MYR), Turkish lira (TRY), South African rand (ZAR), Mexican peso (MXN), Brazilian real (BRL), Czech koruna (CZK), Chilean peso (CLP), Polish zloty (PLN), Hungarian forint (HUF), Colombian peso (COP), Russian ruble (RUB).

Overall, the fall in the price of oil and other commodities over the past year is a net benefit to the global economy. Net importers like the United States and Asia should benefit to some degree, while emerging markets net exporters—particularly those with weak finances—are vulnerable, although cheap prices provide a margin of safety. Just the opposite is true for US equities. The incremental benefit provided by lower commodity prices is unlikely to compensate for the overvaluation of US equities.

US Dollar Dominance

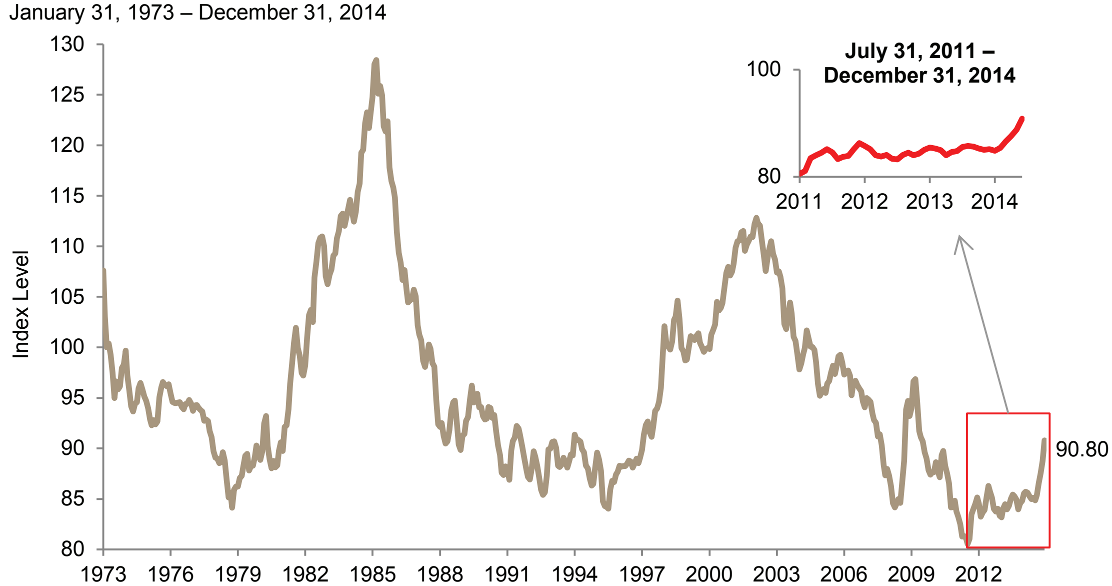
US$ appreciation was broad based in 2014: 14.1% versus the Japanese yen, 13.9% against the euro, 11.7% against the Swiss franc, and 11.4% against a basket of emerging markets currencies.[1] On a real trade-weighted basis, the US dollar has been on the rise since the July 2011, appreciating 12.7% through December 2014. The dollar has been boosted by the improved relative growth outlook for the United States, relatively high real yields amid expectations that the US Federal Reserve will begin raising policy rates this year, a narrowing trade deficit, and growing concerns over a raft of geopolitical risks. US$-based investors with meaningful (e.g., 20%+) foreign currency exposure should hedge at least a portion of this risk, while investors with reference currencies that are under pressure should seek to overweight US$ exposure either by decreasing currency hedging ratios or by increasing exposure to relatively attractively priced US$ assets, such as US TIPS, which are expensive, but compare favorably to global inflation-linked bonds, particularly to those issued by Eurozone sovereigns.[2]

Yet given the large moves in the US dollar already, some investors may rightfully ask whether it is too late to hedge or do something about US$ strength. Currency cycles tend to be long and of significant magnitude, suggesting that the US dollar still has quite a bit more room to appreciate (Figure 5). The two US$ bull market cycles

[1] Our equal-weighted basket of emerging markets currencies broadly reflects the 20 countries included in the MSCI Emerging Markets equity index.

[2] While some emerging markets are vulnerable to further currency weakness relative to the US dollar, it is more costly to hedge. As such, this discussion is focused on the US dollar relative to major developed markets currencies.

Figure 5. Real Trade-Weighted Value of the US Dollar
January 31, 1973 – December 31, 2014



Sources: Federal Reserve and Thomson Reuters Datastream.

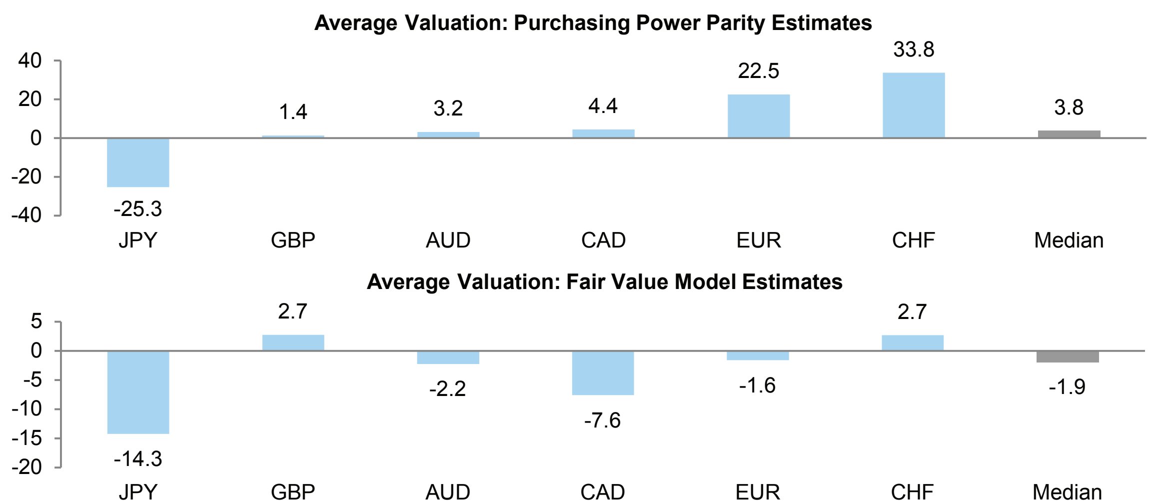
Notes: The index is based on a basket of foreign currencies weighted by the dollar amount of trade with the United States. The index represents the monthly trade-weighted average. Real trade-weighted value is rebased to 100 in March 1973.

since 1971 (the modern era of floating exchange rates) lasted six to seven years, with 52% appreciation from October 1978 to February 1985 and 33% from July 1995 to April 2002 in real trade-weighted terms. The current cycle appears to be 3.5 years or halfway through a typical up cycle in the US dollar, with potentially 20% to 30% more upside, if history is any guide.

Despite the recent rally in the US dollar, we do not yet view the currency as stretched relative to fundamentals. The real effective exchange rate is near its long-term average and the median valuation versus major currencies is near fair value as well when based on purchasing power parity and sell-side fair value models (Figure 6). The yen is an exception, as it is the one major currency that appears to be cheap. However, given the Bank of Japan (BOJ) has promised to expand its balance sheet more than any other central bank, extreme weakness should be expected (Figure 7). An increasing number of analysts are downgrading yen expectations relative to the US dollar toward ¥130 in 2015, which makes sense in an environment that may well require continued yen depreciation for Japan to meet its inflation objective of 2%.

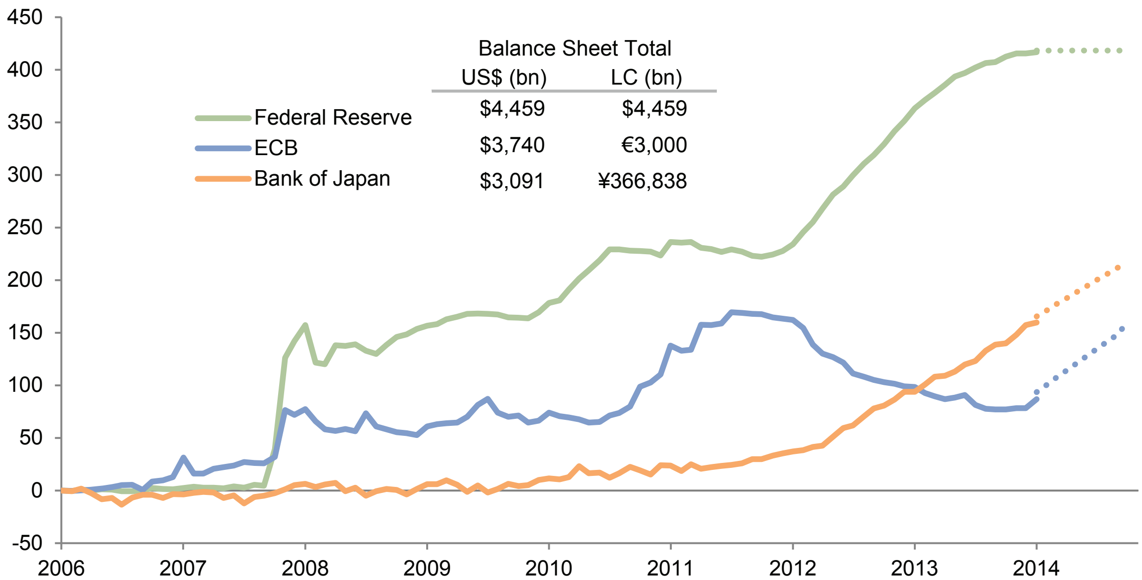
Given that a strong US dollar in 2015 seems to be the consensus view, what might trigger a reversal in US$ strength? The dollar could very well weaken this year should US economic growth not meet expectations (thus potentially delaying Fed rate hikes) or the ECB and BOJ fail to ease as much as expected. The start of Fed rate hikes does not always boost the dollar, if the market fears rate hikes will slow the economy,

Figure 6. Valuation Versus the US Dollar: Developed Markets Currencies
As of December 31, 2014 • Percent (%)



Sources: *The Economist* , Goldman, Sachs & Co., International Monetary Fund (IMF), and J.P. Morgan Securities, Inc.
Notes: PPP-implied exchange rates are based on relative price levels between countries, with the assumption that a basket of identical goods should cost the same across countries. Average PPP estimates for each currency reflect a simple average using IMF and Economist data, which are based on consumer prices. Fair value model estimates are derived from econometric models that take into account several variables such as PPP, interest rate differentials, fund flows, etc., to produce an equilibrium exchange rate. These fair value estimates differ from currency forecasts, as it is not always assumed that currencies revert to fair value over the forecast horizon. Average fair value model estimates for each currency reflect a simple average using Goldman Sachs and J.P. Morgan data.

Figure 7. Central Bank Balance Sheet Expansion
December 31, 2006 – October 31, 2015 • Local Currency



Source: Thomson Reuters Datastream.
Note: Projections begin after October 31, 2014.

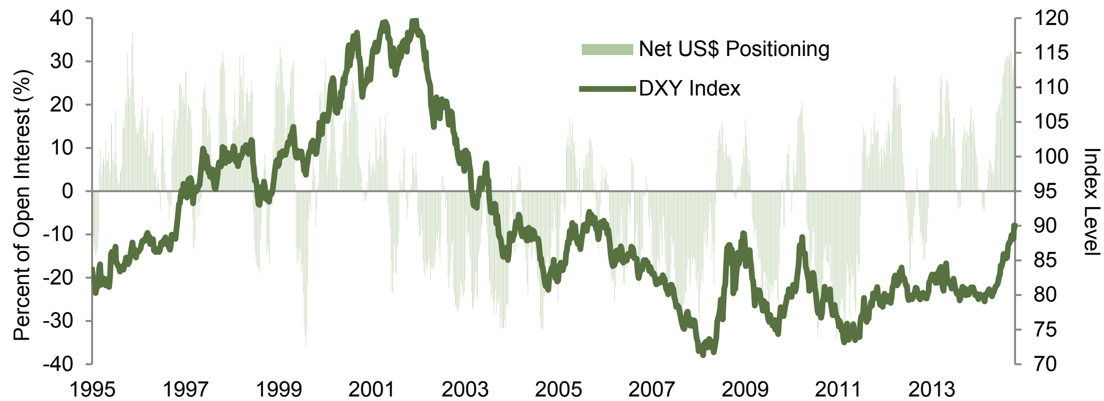
which is precisely what occurred in 1994. And given that the US dollar is a crowded, consensus trade today, any reversal could be relatively sharp as investors seek to cover euro, yen, and other shorts versus the US dollar (Figure 8). While there are some near-term risks to the US dollar, we would view a setback as a correction within a longer-term period of strength for the dollar.

We recommend US$-based investors hedge a portion of non-US$ developed market currency[3] exposure. At a minimum, we would hedge developed market currency exposure associated with tactical positions. It may be the case that managers used to implement such overweights take currency considerations into account in their security selection process, so this is worth investigating before putting on any hedges. Investors should take a multi-year horizon for such hedging, rather than try to time the current US$ cycle. As demonstrated by the EUR/CHF move last week, currency moves can be swift and unpredictable. In an environment in which central bank policies are diverging and beggar-thy-neighbor policies are proliferating, investors with meaningful foreign currency exposure should consider strategic currency hedges.[4]

[3] We expect the US dollar to continue to appreciate against some emerging market currencies as well. However, the cost of hedging emerging markets currencies and the positive interest rate carry make this less desirable, particularly as many vulnerable emerging markets currencies have already made significant adjustments (e.g., 30% to 40%) from their post 2010 highs. Some of the most vulnerable currencies also have the highest cost of carry today.

[4] Typically, investors with such programs hedge roughly 50% of foreign currency exposure. Given currency moves can be significant, maintaining such a program requires use of currency-hedged benchmarks for performance evaluation. Otherwise, it would be too difficult for virtually any investor to tolerate relative performance swings given currency volatility can be high.

Figure 8. Net Aggregate Non-Commercial Positioning of the US Dollar
March 21, 1995 – December 31, 2014



Sources: Thomson Reuters Datastream and US Commodity Futures Trading Commission.
Notes: Data are weekly. US$ positioning tracks the net aggregate futures positions of non-commercial speculators against the Australian dollar, Canadian dollar, euro, Japanese yen, Mexican peso, New Zealand dollar, Swiss franc, and UK pound traded on the Chicago Mercantile Exchange as a percent of the total open interest. A negative number indicates a net short position on the dollar while a positive number indicates a net long position. The DXY Index is a contract traded on the Intercontinental Exchange (ICE) based on the trade-weighted value of the dollar.

Hedging non-US$ currency risk provides other advantages. First, hedging is a means of improving the risk/return profile of global equity investments since investors are not always compensated for the meaningful added volatility that foreign currency exposure can bring. Second, the US dollar nearly always rallies amid periods of market stress and could prove defensive in the current environment as sharply shifting currency and commodity prices could bring about unforeseen market stresses. Further, the cost of hedging may be offset to some degree by the positive carry available for the US dollar relative to many developed markets currencies.

Non-US$-based investors should reduce US$ hedge ratios or invest in relatively attractively valued US$ assets. While many US assets have outperformed their foreign counterparts in recent years, investors with an allocation to global inflation-linked bonds, particularly euro-denominated sovereigns, would be well served to switch to US TIPS. While such bonds are overvalued in absolute terms, relative to global bonds, as represented by the Barclays World Government Inflation-Linked Bond Index, US TIPS of comparable maturity offer higher real yields, higher inflation expectations based on both forward estimates priced into the market and current 12-month trailing core inflation, as well as the potential for US$ appreciation (Figure 9).

Figure 9. Global vs Inflation-Linked Bonds
As of December 31, 2014

	Barclays World Govt ILBs	Barclays US TIPS	Ten-Year On-The-Run Inflation-Linked Bonds		
			US	France	UK
Real Yield (%)	-0.18	0.42	0.47	-0.22	-0.97
Core Inflation (%)	1.33	1.71	1.71	0.59	1.15
Maturity (years)	13.39	8.41	9.63	9.91	9.69
Duration	12.52	7.90	8.65	9.30	8.63

Sources: Barclays and Thomson Reuters Datastream.

US Equities Priced for Perfection

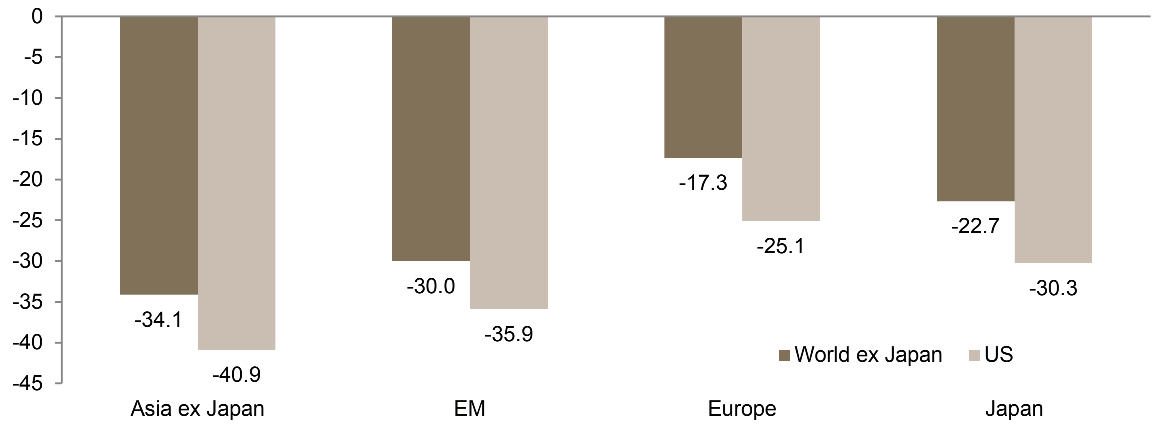
As was the case at the start of last year, US equities remain within a hair's breadth (roughly 7%) of being very overvalued. In terms of the S&P 500, this would translate to an index price of roughly 2,200 absent a concurrent improvement in earnings. Should US equities cross this threshold, we would further scale back allocations as equities historically have experienced relatively poor returns from a starting point of very overvalued levels.

At this stage in the cycle, we anticipate that multiple expansion will continue to be limited, with US equity price increases led more by earnings growth. The sustainability of strong earnings growth has become more questionable given its support from peak profit margins and escalating share buybacks. One of the major drivers of high margins has been robust growth in revenues from outside the United States, as such revenues are subject to lower taxes (provided they are not repatriated). With a stronger US dollar, this boost to margins may be diminished. Further, if the US economic recovery continues, profit margins should come under some pressure from rising wages and rising interest rates, making revenue growth increasingly important in supporting earnings.

Share repurchases are also a major factor boosting earnings growth. S&P 500 companies spent over $900 billion on stock repurchases and dividends, accounting for 90% of operating earnings. Buybacks have become a more important driver of returns than fund flows, with the former accounting for 3% of S&P 500 market capitalization and the latter only 0.5% for the 12 months ended September 30, 2014. Low interest rates have also been supportive of buybacks, as much buyback activity is debt financed despite high levels of cash on corporate balance sheets, so any increase in corporate borrowing rates could dampen this activity.

For now, we continue to recommend neutral weights to equities as a whole, and within equities recommend underweighting the United States. However, we would keep such underweights relatively modest given US equities' defensive character and the lack of very cheap assets in which to take overweight positions. In other words, there are few asset classes and investment strategies that are undervalued and none that appear very undervalued. What is undervalued (emerging markets and Asia ex Japan equities, natural resources equities, and select natural resource–related equities) may require patience from investors for relative value to be unlocked and would also be vulnerable should US equities suffer a setback. However, undervalued and relatively inexpensive equities may be cheap enough to provide some downside protection (Figure 10). More importantly, the lower valuations stack the odds of better long-term performance. If US equities enter very overvalued territory, we would recommend more significant underweights relative to investments that offer the most relative appeal at the time.

Figure 10. Excess Discounts vs World ex Japan and US Equities
As of December 31, 2014 • Percent (%)



Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.
Note: Excess discount refers to the current discount minus the implied "fair value" discount for each region.

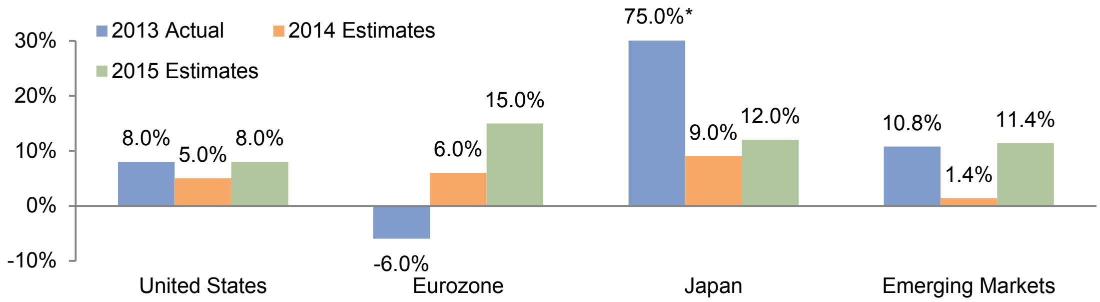
Today, we recommend diversifying our developed market equity overweight from Europe only to a mix of European and Japanese equities. We would not increase the US underweight to fund this position, but rather would cut back on European equities to fund roughly equal-sized positions in the two markets. With regard to Europe, we are shifting our focus to the Eurozone rather than a broader, pan-European allocation. Several factors influence this shift, most notably: the nascent improvement in European earnings growth has been driven by EMU countries and may be further enhanced a weaker euro; the heavyweight UK market has seen earnings remain stagnant; and the recent move by the SNB to abandon the EUR/CHF floor is likely to pressure earnings on an already expensive equity market. We continue to recommend currency hedging these overweight positions. In addition, we recommend shifting the emerging markets equity overweight to an emerging Asia or Asia ex Japan overweight rather than broad emerging markets, as these markets are comparably valued relative to their own history and may prove relatively attractive in an environment of lower commodity prices.

Japan Justification

We have been monitoring developments in Japan since the Abe administration began its plan to revive the Japanese economy. In particular, we have been looking for signs of improvement in corporate profitability that are not fully dependent on increased exports from ongoing depreciation of the yen. While yen depreciation has been significant, we now see credible indications that structural changes are beginning to take root.

Japanese earnings have grown significantly, albeit from a low base, outpacing those of other equity markets (Figure 11). At the same time, return on equity (ROE) has improved from pre-Abenomics levels of 4.5% to 8.5%—levels not seen since before the global financial crisis. Further, earnings growth is not limited to exporters. Among

Figure 11. Earnings Growth Expectations
As of December 31, 2014



Sources: J.P. Morgan Securities, Inc., and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.
Notes: Japan EPS growth/estimates are for its fiscal years ending March 2014 and March 2015, respectively. Graph capped at 30% for scaling purposes.

the 500 largest companies in the TOPIX, both those with foreign revenues and without have experienced strong growth in the last three years: median three-year earning per share growth for the 292 firms with foreign sales (accounting for 48% of total revenues) was 11.4%, compared to 17% growth for the 208 companies with no foreign sales.

Structural reforms have sought to focus companies on corporate governance with a focus on increasing shareholder value. For example, a new Corporate Governance Code will be implemented on June 1 of this year with a goal of reinforcing shareholder rights, particularly those of minority shareholders. This adds to the "Stewardship Code" introduced in February 2014 designed to promote dialogue between corporate leaders and institutional investors, and the development of the JPX Nikkei 400 stock index, eligibility for which is determined by previous profit levels, historical ROE, and corporate governance. The main pension fund (GPIF) and some local mutual funds and exchange-traded funds are targeting this subset of the market, making adoption of these objectives attractive to much of corporate Japan. Plans are underway to support an increase of women in the workforce by neutralizing the tax code, which currently provides disincentives for two spouses to engage in full-time work.

Structural changes take time to work, but it appears that the focus on governance is beginning to have some effect. Along with the improvement in ROE, buybacks and dividend payments have started to expand. With a buyback yield of less than 1% and a dividend yield of less than 2%, scope for increases exists. In addition, yen weakness from the expanded BOJ asset purchases, combined with GPIF's announcement that it would reduce its holdings of government bonds and double its holdings of both domestic and international equities, should be supportive to Japanese equity markets. Profits should be further enhanced by the sharp decline in oil prices, although yen depreciation has lessened the impact to some degree. Finally, the delay in increasing the consumption tax and the corporate tax cut of 2.5 ppts in FY 2015 and 0.8 ppts in FY 2016 should be supportive of equity markets.

Despite roughly doubling since the start of 2013, the stock market remains fairly valued as earnings have kept pace. Japanese equities are fairly valued on a price-to-book and P/E basis and are relatively cheap in comparison to US equities. Based on cyclically adjusted P/E ratios, Japanese equities trade at a 30% discount relative to their fair value discount to US equities (Figure 10). At the same time, earnings expectations for the Japanese market are slightly higher than those of most other major equity markets (Figure 11).

Longer term, fiscal risks loom given Japan's outsized fiscal debt burden, but in the near term, earnings should be supported by a weak yen, reduced corporate tax rates, increased focus on shareholder value, and low oil prices. From a risk/return perspective, Japanese equities offer a comparable value proposition to European equities relative to the United States. Therefore, we are diversifying our developed equity market overweight to include Japanese equities in addition to European equities, both on a currency hedged basis.

Asian Adjustment

We continue to recommend overweighting emerging markets equities, but would focus this overweight on emerging Asia or Asia ex Japan today. As discussed earlier, falling commodity prices create more divergent emerging markets conditions, generally benefitting net commodity consumers at the expense of net commodity producers. Among emerging markets, net commodity importers are largely Asian, while exporters are more concentrated in Europe, Latin America, South Africa, and the Middle East. At the same time, emerging markets economies (notably Asian economies) have become more integrated with developed markets. To the degree that developed markets benefit from lower commodity prices, Asian economies that export non-commodity goods and services will benefit.

Given uncertainty around the magnitude and duration of continued commodity price weakness, tilting emerging markets portfolios toward Asia by adding some Asia ex Japan exposure in place of global emerging markets (GEM) equities or using a GEM manager biased toward Asia may prove more defensive. Such economies are better positioned to benefit from lower commodity prices and also tend to have limited fiscal deficits, current account surpluses, and relatively high reserves. Further, such positioning should eliminate the direct impact of the sudden appreciation of the Swiss franc, which is likely to pressure consumers and banks in some emerging European countries. For example, half of Polish mortgages outstanding are in Swiss francs, accounting for 8% of GDP. Importantly, even as ASEAN equities are somewhat expensive, broader Asia ex Japan and emerging Asia are just as cheap relative to their history as emerging markets equities broadly.

Disinflation Dilemma

Amid sharply falling commodity prices, anemic growth in Japan and Europe, and slowing growth in many emerging markets, bond markets have been increasingly pricing in disinflation. Headline global inflation is sinking with the weight of falling oil prices, although core inflation is relatively stable. Disinflationary pressures persist across much of the globe, providing strong support for sovereign bonds.

At the same time, prospects for the US Federal Reserve to increase rates more aggressively than what is priced in to the market, a pick-up in commodity prices, or an unexpectedly strong global growth boost from lower commodity prices could send yields higher. As the US dollar has strengthened, core inflation has fallen, and disinflation concerns have grown, markets have pushed out expectations for Fed tightening from mid-year until well into the second half of 2015. If economic growth remains strong in the first half of this year, yields would likely get pushed up on expectations of earlier tightening.

Even in the face of rising policy rates (or rising expectations for tightening), demand for Treasuries could stay strong given the share of non-economic Treasury buyers such as foreign central banks. US Treasuries are further supported by the highest spreads in 25 years over German bunds, negative real yields in many countries, and falling issuance with a fiscal 2014 deficit of 2.8%, the smallest since 2008.

Core euro-denominated sovereigns meanwhile, have seen yields fall to unprecedented lows amid expectations that the ECB will expand its QE program to purchase sovereign bonds. Any disappointment in the timing or scope of the program would lead to disappointment and could send rates up sharply, particularly since the SNB is no longer providing liquidity to the market.

These conditions present a challenge for investors since yields have shrunk to such depths, intermediate returns from this point will be minimal. After all, beginning-period yields are the best determinant of subsequent intermediate- to long-term returns. As of the middle of January, yields on ten-year US Treasuries have fallen to 1.8% and are below 50 bps for German bunds and 25 bps for Japanese government bonds. On balance, even though sovereign bond yields are quite low, we continue to recommend holding some in portfolios as we believe their diversification properties, particularly in the event of unexpectedly strong deflationary pressures, would be welcome ballast to support liquidity needs and serve as dry powder under most negative scenarios. Given such bonds are very overvalued, we continue to recommend holding some cash in addition to bonds. We would put this cash back into sovereign bonds should yields rise closer to the low end of their fair value range. For US Treasuries, that would be 2.9% today.

Conclusion

Commodity weakness, US$ strength, disinflationary pressures, and US equity dominance are consensus views today. While we think the first three are likely to persist, we are humble enough to recognize that we may be wrong and should size positions accordingly. Strong market trends reinforce the consensus and raise the risk that markets will dislocate should evidence contrary to the consensus arrive. Investors should consider that commodity prices are unlikely to reach prior highs anytime soon, but that the energy sector offers value today for long-term investors. Conditions may get worse before they get better, but they offer some value today. If prices stay lower for longer, we expect distressed opportunities to develop. Private investments in energy funds with proven distressed capabilities may be the best means for capitalizing on such opportunities at this stage of the cycle. Investors should think carefully about their currency exposures and consider increasing US$ exposures. Given the relative expense of many US$ assets, rather than overweight US$ assets, US$ reference investors should consider hedging some non-US$ currency exposure. Time may be running out for US equity dominance. It may not come this year, but valuations are such that over the long term, investors that underweight will eventually be rewarded. Finally, disinflationary pressures remain front and center, making developed markets sovereign bonds quite expensive today. However, the diversification benefits of sovereign bonds suggest that they deserve some consideration in portfolios, even at today's prices. Such positions can be supplemented by cash given the potential for yields to rise from ultra-low levels. ■