INVESTMENT OUTLOOK

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Second Quarter 2015

BETWEEN THE SIGNAL AND THE NOISE

- Slower first quarter growth caused expectations for the first hike in U.S. interest rates to shift from June to September, but we should anticipate re-accelerating real growth to still increase 2.8% in 2015. Low interest rates and falling energy prices are a tailwind to stronger global growth. The likelihood for interest rate hikes sometime in 2015 remains high in the U.S., as well as Canada and the U.K. The pace of interest rate hikes matters more than whether the first hike is June or September, although a June start is better.
- The need to begin U.S. monetary policy normalization drives our expectations for interest rate hikes sooner rather than later. Cyclical pent-up consumption, deferred investment, new housing deficit, and destocking underpin cyclical drivers of the North American expansion. Efforts to minimize regulatory cost and maintain profitability drive investment and hinge on leveraging innovation.
- Investors should be concerned about the trend in underlying inflation from wages, shelter, food and services, which are all rising faster than 2%. Concerns about deflation are unwarranted, with the possible exception of Japan. Transitory disinflationary effects of falling energy prices will sunset before year-end. Low and stable global inflation is constructive long-term, and can extend economic expansions. Policies seeking to boost inflation risk inefficient capital allocation and stagflation.
- There is nothing more that overly stimulative monetary policy can do, having far exceeded its potential long ago. Politicians failed to exploit a historic opportunity by leaving the heavy lifting of bolstering economic recovery to central banks, instead of pursuing the hard work of constructive fiscal, tax, labor, trade, and regulatory reform. Financial reform legislation was fundamentally flawed and created more economic headwinds than solving recognized problems. As a result, rising fixed income illiquidity is a real concern.
- Significant declines in the Yen and Euro bolstered equity sentiment, but currency devaluation is not a long-term solution enhancing global competitiveness. Unprecedented monetary policies for an extended period only result in significant imbalances that will be difficult to unwind and result in unintended consequences. Quantitative easing has undermined the purchasing power of the Euro and Yen, while increasing risk of inflation, but failed to provide any sustainable improvement in economic growth or global competitiveness.
- Countries still matter (again) and currency volatility has been quietly increasing for two years with a more normal and typical asynchronous global expansion. Some countries will be more resilient to increasing macroeconomic volatility and this inflection point in global interest rates, but historical risk measures are evolving more rapidly now and will be more difficult to estimate. This has important ramifications for international portfolio diversification and adding value in asset allocation.
- U.S. equities continue to benefit from high profit margins driving stronger earnings growth with various tailwinds, including accelerating innovation containing labor costs and efficient utilization of basic materials. S&P 500 share buybacks of $600 billion a quarter are causing shares outstanding to decline. Corporations will likely continue borrowing to buy back shares as long as interest rates remain low. Falling energy prices had the greatest impact on lower earnings.
- U.S., Canadian, Eurozone and Japanese Government 10-year bonds are significantly overvalued. Favoring tilts toward floating rate bonds, bank loans, and cash will minimize losses over the next 3-5 years. Risk of a fiscal crisis in Japan, Italy, France or Greece, and even a few large municipalities is increasing where tax revenue growth is weak and there is little progress on fiscal deficits. Further credit downgrades of sovereign debt in Japan and Europe are expected.
- An overweight to global equity is still recommended, but favor Europe and Emerging Markets, as well as cyclical Technology, Materials, and Industrials. Japan should be underweighted, while European and Japanese currency exposures should remain hedged.

FOG IS LIFTING AFTER THE Q1 SLOWDOWN

In the clutter of noise and short-termism, there are key distinct trends and indicators. Focus on valuation, economy, interest rates, and other measures of currency and volatility effects have served us well for nearly 25 years. Our discipline kept us focused on the things that matter in spite of period of dense "fog" with our longer time horizon. This quarter we examine the state of global asset allocation, portfolio diversification, and currency effects. The rotation from a *synchronized global recovery* (2009-2012) to a global *asynchronous expansion* has resulted in greater divergences in country performance and higher currency volatility. *Between the Signal and the Noise* implies fundamental choices about tactical and strategic asset allocation to resolve, including stabilizing economic conditions and normalizing monetary policy.

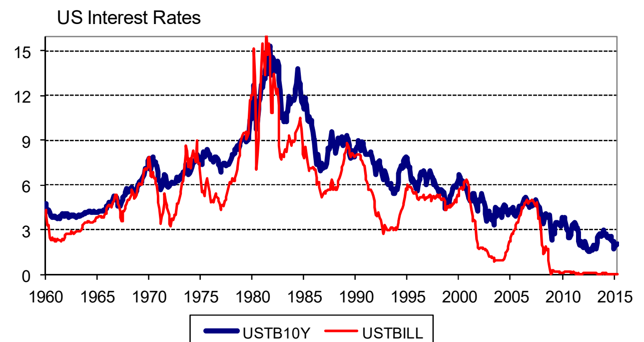
America is emerging from yet another first quarter slowdown. Slower U.S. economic growth was blamed on the "fiscal cliff" in 2013 and the "polar vortex" in 2014. In 2015, foul weather in the East has again slowed output, while West Coast drought conditions are having an impact on agriculture, driving up food prices. California provides over 50% of America's fruits and vegetables. Lower oil prices also slowed investment in the Energy sector. These headwinds were compounded by a strike at West Coast ports, and a stronger U.S dollar that will hit earnings and exports. Weeks after the strike was settled, ships were still anchored off the Port of Long Beach waiting to unload.

The slowdown should be transitory, as in prior years. Eventually ships will be unloaded and idled construction will restart. Some portion of deferred activity may be lost, but it won't be significant. Indeed, Q2 activity has picked up and growth should firm through the rest of the year. Europe may be finally accelerating, but will not exceed 2% growth. Euro and Yen weakness has encouraged foreign investment flows into U.S. dollar assets.

Primary headwinds to U.S. growth have moderated, and U.S. profit margins remain resilient. Declining S&P 500 earnings growth to 3% for 2015 looks disappointing, primarily due to energy, but should reaccelerate to 7-8% next year. Higher U.S. interest rates may limit further increase in Price/Earnings, thus a global equity return exceeding 5-7% this year is unlikely without a positive economic surprise. Over a longer horizon, the equity risk premium should be greater than normal, not because equity returns are higher, but real bond returns are likely to be negative. Within asset classes, there is greater opportunity to add value through tactical asset allocation.

How can the Fed raise interest rates if there is still so much economic uncertainty and low inflation? Falling energy prices lowered global inflation, but the effect will sunset by year-end. As economic growth stabilized, unemployment fell, and capacity slack diminished, the risk of accelerating inflation has increased. We think the Federal Reserve, Bank of England, and Bank of Canada are already late transitioning to policy normalization. Forward guidance sought to persuade us interest rates would remain low for an extended period, but it is finally yielding to the need for policy normalization.

Interest rates must normalize regardless of inflation trends as U.S. real GDP has converged on potential real growth of 2.7%. Hiking U.S. interest rates to between 1-2% would still be below the Taylor Rule's current target rate of over 2% and accommodative. Unwinding bloated central bank balance sheets and normalizing interest rates is a challenge, never before attempted, particularly with fixed income liquidity declining. The importance of increasing bond market volatility and evolving asset class correlations to portfolio allocation decisions can't be overemphasized. Higher fixed income value-at-risk should drive reduced allocation targets.



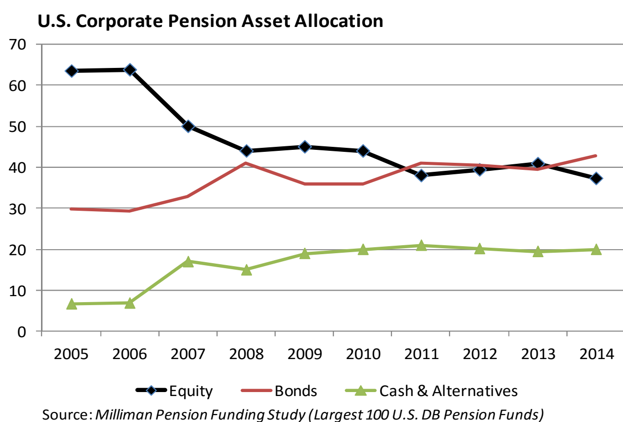
Although policymakers seem concerned about deflation, investors should focus on recent inflationary trends. Higher wages (2.2% for weekly earnings), food (2.3%), college education (3.7%), services (2.4%), and shelter (3.7% for 33% of CPI) are driving inflation higher. Most consumers feel their cost of living has been rising despite CPI inflation near 0%. Lower energy prices dampened inflation expectations, but risk of accelerating inflation is increasing.

Using every conceivable tool to extinguish the interest rate risk premium, bond yields were driven lower seeking to stimulate growth. Instead of wage increases, new jobs, and growth, quantitative easing inflated bond prices. Imbalances built up over many years have raised concerns about bond liquidity, as well as challenges unwinding asset purchases and excess bank reserves. As yields rise, volatility will increase further given amplified leverage and extended duration of many large pension funds. Overvalued exposures should be impacted, including low volatility equities and higher yielding private investments (i.e., real estate, infrastructure, private equity, and timber). Low interest rates drove demand for high dividend yielders in utilities, telecoms, and consumer staples, despite slow or negative earnings growth.

After exhausting all conventional means, central banks were left with just a megaphone and a balance sheet. Unconventional policies like explicit forward guidance, maturity extension (i.e., Operation Twist), and publishing FOMC members individual forecasts for interest rates manipulated bond market rates lower. Central banking credibility is strained, even as policymakers expressed concern about financial imbalances they exacerbated.

Investors, asset owners, lenders, portfolio managers, and policymakers embraced assurances that "interest rates will remain low for an extended period", but are left bearing the cost of inevitable interest rate normalization. Evolving forward guidance suggests debtors and investors must re-evaluate their outlook, completing the circle of policymaker's *explicit moral hazard*.

Regulations intended to promote financial stability have reduced bond market liquidity needed for efficient price discovery. Higher capital requirements and business limitations for banks, broker-dealers and systemically important financial institutions (SIFIs) had unintended consequences. Intensifying illiquidity increase the frequency of events like the Treasury Flash Crash of October 15, 2014. More incidents of unsettling market dysfunction and central bank intervention are cause for concern, undermining investor confidence in free markets, as well as central bank credibility. Pension reforms resulted in an unprecedented bond allocation increase without regard to fundamentals or increasing risks, coinciding with the Pension Protection Act. A *Great Rotation* reducing bond allocations might coincide with as much as a 0.5% risk premium on Treasury yields for as long as it takes to unwind excessive debt issuance and other imbalances built up since 2007.



The ability of active managers to add value is a function of investment skill and breath of the decision universe, as described in the Fundamental Law of Active Management[1]. We believe that the opportunity for global tactical asset allocation (Global TAA) across equity, bond and currency markets is compelling. Global TAA is no longer limited to rotation across countries, currencies, sectors, and asset classes. Alternative beta and new factor indices have significantly expanded the breadth of opportunities within asset classes, as well. New ETFs and published indices expanded the ways to implement decisions. This is the most exciting development for Global TAA strategies in a decade.

Q1/2015 Market Review

Following a remarkable 2014, global equity returns extended gains modestly, including the U.S. S&P 500 (1.0%) and MSCI EAFE (4.9%). Latin American equities continue to lag with Brazil tumbling -14.6% in US$-terms following the re-election of Socialist President Dilma Rousseff. Canada (-6.0%) also lagged on weaker oil price sentiment, while European and Pacific Rim countries firmed from Denmark (15.8%) and Germany (8.3%) to Japan (10.2%) and China (8.1%) for MSCI total returns in US$. Denmark had the strongest expected equity return for our Global TAA models at year-end, and stood out for awhile despite outperforming in 2014, as well. European strength is noteworthy given the Euro weakened 11.2% during the quarter. Within the U.S. equity market, growth stocks outperformed value, while small-cap finally outperformed large-cap. Our expectation for greater dispersion among global equity markets is evident regionally. Countries still matter.

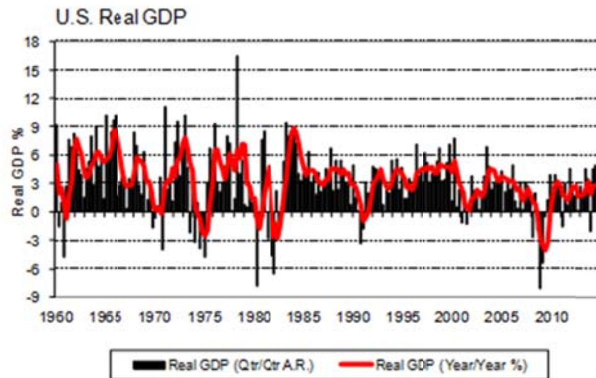
The six year bull market in global equities was driven by growth in earnings, thus fundamentally consistent with a modest increase in the forward Price/Earnings ratio from 13X to 17X, while yielding a total return of 232% on the S&P 500 index. The increase in the S&P 500 Index to 2068 might suggest the equity market is overvalued. Yet, 10-year Treasury bonds yielding 1.93% are of far greater valuation concern. Yield curve normalization will result in negative real bond returns for at least 3-5 year horizon.

The most meaningful economic surprise of 2014 was the 46% decline in oil prices, which fell another 10.7% in Q1. The quarter-end $48 level should provide a reasonable floor in 2015 given an assumed marginal production cost of about $60, suggesting a stable $50-70 trading range.

Economic and Market Outlook

Global real economic growth should accelerate to 3.5% in 2015 with the U.S. accelerating from 2.4% to 2.8%. This would be the strongest U.S. growth since 2005. The square root recovery traced out by the heavy red line below and that we have written about since 2009 has been the best reflection of the extended economic cycle, as we've described in the past. While economic conditions improved over the last two years, there remain many geopolitical and economic threats.

[1] Richard Grinold, "The Fundamental Law of Active Management", *Journal of Portfolio Management* in Spring 1989



Low interest rates and falling energy prices should lift discretionary spending, inventory, housing, and capital investment in 2015. These four drivers are key to the U.S. economic expansion. Earnings growth will benefit if elevated profit margins can be maintained. Although this global economic cycle is quite mature, we expect it can extend longer than normal if inflation remains contained. Emerging Markets continue to outpace developed market economies, and complement a resilient North American expansion, reinforcing global growth of 3.5%.

Among the *Things That Matter*, the risk of accelerating core inflation is increasing with lower unemployment and higher capacity utilization. Thus, Federal Reserve needs to normalize interest rates soon, which` will likely trigger a correction in U.S. government bonds that drags along other global bond markets. Long bonds could be more risky than equities now, so systemic fixed income leverage is an increasing concern considering Orange County's bankruptcy of just a $7.5 billion plan in 1994.

Economic Forecasts	2011	2012	2013	2014e	2015e	2016e	2017e
U.S. GDP (Y/Y Real)	1.6	2.3	2.2	**2.4**	**2.8**	**3.3**	**3.0**
S&P500 Earnings	14.7	6.0	5.7	**6.7**	**3.0**	**7.0**	**5.0**
U.S. CPI Inflation (Y/Y)	3.0	1.8	1.8	**1.8**	**2.2**	**3.0**	**2.6**
U.S. Unemployment	8.5	7.8	6.7	**5.7**	**5.3**	**5.2**	**5.1**
Fed Funds Target	0.25	0.25	0.25	**0.25**	**1.00**	**2.50**	**3.25**
10y Treasury Notes	1.88	1.85	3.00	**2.17**	**3.00**	**4.50**	**5.00**
S&P 500 Target	1258.	1426	1848.	**2059.**	**2150.**	**2300.**	**2450**

Near 80% capacity utilization, while U.S. unemployment has fallen another 1% in a year to 5.4% suggests the economy operating near its normal equilibrium. The *Race Against the Machines* (accelerating productive innovation transforming labor demand) and hyper-competition driving productivity have undermined labor force participation. These forces likely pushed up the natural unemployment rate closer to its historical average of 6.2%, rather than the absurdly low 5.0-5.2% normal rate assumed in the *Economic Projections of Federal Reserve Board Members and Bank Presidents* (ref: March 2015). How is such a radical departure still embracing crisis-level monetary policy justified near full employment with diminished excess capacity?

To bolster global growth, we need faster workforce growth (difficult with falling birthrates) or rising productivity, possible through accelerating innovation. The only other way to bolster productivity is through constructive regulatory and fiscal policy changes, but government re-regulation has been hostile in this regard.

Accelerating pent-up household formation has been driving a firmer housing market. 2014 was the best year for housing starts since 2007, and the fundamentals remain constructive with low inventory of new homes. Growth in housing starts should drive up lumber and other basic material prices, increasing sales prices and shelter costs further. Housing is 32% of CPI inflation and 42% of the core rate, thus core inflation must rise if housing inflation continues increasing at 3.8%. Lower oil price should not delay normalization of interest rates.

The Federal Reserve's balance sheet has increased five-fold from $900 billion to over $4.5 trillion since 2008. Maturing bonds can eventually bring it down to a more reasonable size. Paying 0.25% interest on free excess bank reserves has attracted over $3 trillion in bank deposits that taxpayers must finance at a cost of $75 billion annually. This interest burden will increase as rates rise. A new reverse repo facility will provide interest-bearing accounts for non-bank financial institutions such as money market funds, home loan banks, and other agencies (i.e., Freddie Mac and Fannie Mae). These deposit rates set by the Federal Reserve hope to be more effective targeting policy given open market operations controlling the Federal Funds rate is not defensible near the zero-bound until excess reserves are drained. Once rates rise over 1%, reverting to more normal policy management may be possible. In the meantime, central banks shouldn't delay normalization.

The U.S. fiscal deficit has improved with increases in tax rates driving higher tax revenue, while Congress froze government spending and let emergency unemployment benefits extended from 26 to 99 weeks finally expire. Interest rates have fallen back toward record low levels after successive rounds of quantitative easing, but near the zero-bound for rates has only had diminishing effect on lowering long-term lending rates and boosting demand for credit. European countries with the strongest credit ratings witnessed negative yielding government bonds, but this simply can't be sustainable.

The Financial Crisis provided an opportunity to radically reform tax and spending policies to improve global competitiveness and fiscal sustainability, but we failed to promote sustainable economic growth or improve productivity. The $816 billion Recovery Act of 2009 (ARRA) and other government programs promised to kick-start economic growth, but pushed us further into debt. In its defense, Larry Summers has hypothesized a complex narrative of *Secular Stagnation* to explain the Recovery Act's objective failure. Government spending promotes job and productivity multipliers if, and only if, there is a positive economic return on investment capital.

ARRA was too late passed in mid-February 2009 versus the Q2/2009 recession trough, it allocated 1/3rd to entitlements and 1/3 for individual tax credits, both which had little chance of providing any economic multiplier.

Global debt has increased by more than $60 trillion since 2007, when outstanding debt stood at $140 trillion. Japan has the highest ratio of government debt to GDP at 234%, which is more than Greece (183%), Italy (139%), or Spain (132%). In Europe, calls for prudent austerity have triggered social unrest. So, accumulation of debt over a long time period has consequences at the most inconvenient times. To reduce debt levels, these countries may have no other alternative than to increase their efforts to privatize public assets. This may increase supply of marketable assets available to asset owners, which are natural long-term investors in such assets.

Public-private partnerships in infrastructure are better able to ensure more efficient and disciplined project development, leveraging taxpayers' capital (bigger pot) to achieve objectives more effectively. Governments have experimented with success using "first (money) in, last out" financing of PPP investment. Such an investment can return principal, plus a commercially competitive return instead of an outlay of taxpayer money. Investors own these assets, reducing ongoing maintenance costs, but foregoing government control.

Headwinds of increased regulation and poor policy decisions offset the tailwinds of low interest rates and fiscal stimulus. Prudent and efficient regulatory reform could increase global competitiveness that is more sustainable and impactful than observed competitive currency devaluation. It would also reduce inflationary effects already driving up consumer prices as costs are passed along. The global economic recovery is completing its sixth year with few, if any, signs of a recession likely in the foreseeable future. Low inflation has allowed productivity and profit margins to exceed expectations, extending the duration of this expansion.

Among *Things that Matter*, policymakers should be more concerned about risk of rising core inflation than deflation, in our opinion. It is a symptom of recession. However, the benefits of low and stable inflation are significant, and should not be squandered, nor should we expect symmetry in targeting inflation. The cost of high inflation is well known, from loss of purchasing power and higher interest rates to reduced productivity and lower profit margins. Low global inflation will continues to extend the economic expansion.

Irrational Complacency --This Time Its Bonds!

It is just a matter of time when interest rates must begin to normalize. The first rate hike by the Federal Reserve is more likely in June than September, and Canada should follow shortly thereafter. Although rate hikes could begin with any meeting that the data supports action, a meeting with a press conference would enable further elaboration on this significant inflection point. A *Great Rotation* to reduce interest rate sensitivity should take hold with bond market losses.

Investors should focus on the need for normalizing interest rates as economic conditions have improved significantly since the Financial Crisis more than five years ago. Once policy interest rates reached a lower bound, unconventional policies were no longer as effective. While inflation is a key driver of bond yields, it is secondary to the need for yield curve normalization. Fixed mortgage and borrowing rates were pinned to minimum levels, so initial changes in interest rates won't have much impact on lending rates. Central banks need room to maneuver before the onset of the next recession, which implies real interest rates should be positive, consistent with normal economic conditions.

The decline in money multipliers globally is evidence that quantitative easing, which drove U.S. money supply growth in excess of 20% during 2011 (QE-2) and 2013-2014 (QE-3), had little impact when interest rates were too low. Public companies have favored buying back stock over increasing investment. Refinancing debt at lower rates freed up cash flow to redirect interest costs. Increased financial regulation limited lending to small businesses and households, where it was needed most.

There should be a greater gap between "emergency" monetary policy stimulus needed in 2008 and today. Across the yield curve, interest rates are similar to year-end in 2008, but economic conditions couldn't be more different. Indicators such as declining unemployment and real GDP over 4.3% hardly suggest the need to continue emergency monetary policy fit for the Financial Crisis. Economic conditions appear at least as robust as 2004, which implies the need for U.S. 10-year Treasury yields of 2.2% to rise above 4.5%. Previous interest rate cycles commencing in 1994 and 2004 began earlier than consensus expected, and with CPI inflation below 3%.

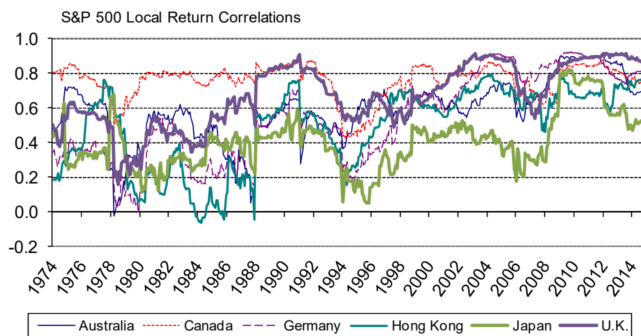
Global debt issuance surged to meet demand from households, asset owners, and central banks engaged in quantitative easing. New banking regulations also increased government bond demand. It isn't surprising bond investors became irrationally complacent as the Federal Reserve sought to extinguish the interest rate risk premium for seven years. An exaggerated historical Sharpe ratio for bonds justified de-risking, but expected returns will be much lower and bond volatility will be higher, as well as more difficult to predict, with rising macroeconomic volatility.

Bold moves by the Bank of Japan (BoJ) and European Central Bank (ECB) toward increased quantitative easing as the Federal Reserve backs down and shifts toward beginning to normalize interest rates have caused dramatic shifts in currency levels. A strong U.S.

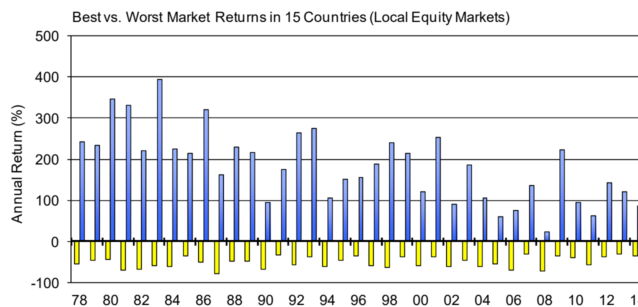
dollar versus Euro (-11.2%), Canadian dollar (-8.5%) and Japanese yen has increased foreign appeal of 10-year Treasuries yielding 1.9% given the spread to JGBs yielding 0.3% and Eurobonds yielding 0.5%. Treasury fundamentals must eventually prevail, dragging global bond yields higher. Remarkably, since the European Sovereign Debt Crisis, yields over 7% in Spain and Italy during 2012 have fallen steadily toward 1.5% in 2015.

Countries Still Matter

During the financial crisis, global equity correlations rose significantly. As policymakers started to diverge, so did economic conditions. Economic volatility has increased, and risk-on/risk-off faded with factor return correlations. At one of the most significant inflection points with an imminent reversal in interest rates, we should expect global return correlations to fall further. The financial crisis was a historical outlier that will take several years to wash out. Risk-On/Risk-Off has faded, so most strategists now agree with our belief of increasing return dispersion with increasing focus on national interests.



Since the rotation to an asynchronous global expansion, global equity return correlations have fallen. This provides greater opportunity to add value through country rotation. In this chart we compound clairvoyant best and worst returns on a monthly basis to measure the total available tactical asset allocation excess return opportunity through country and currency rotation.

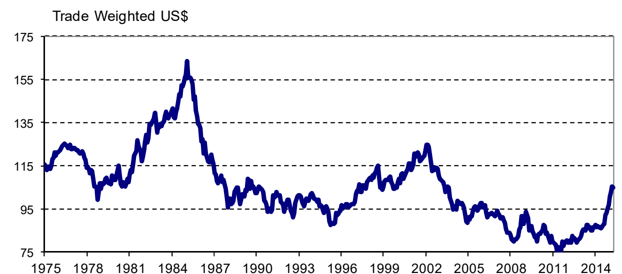


Since 2012, the tactical opportunity for country rotation has returned to a normal level in the last three years, and the benefits of portfolio diversification are increasing again with more asynchronous economic conditions.

Currency Effects Matter Too

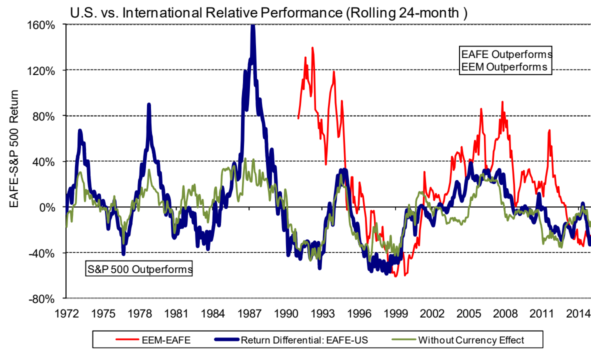
America enjoys many benefits from the U.S. dollar being the world's reserve currency, most importantly the ability to finance imports at a lower cost and global demand for Treasuries. Most traded commodities, particularly oil and gold, are priced primarily in U.S. dollars. So, it isn't surprising foreign governments have attempted to propose alternatives as weakness marginalized its status, yet many countries continued to peg their exchange rate to the U.S. dollar. Since 1994, the US dollar has ranged between 60-70% of total worldwide official foreign exchange reserves. Most fluctuations in reserve levels can be attributed to shifting relative exchange rates. The U.S. dollar can retain its status if the U.S. government pursues prudent fiscal, monetary, and regulatory policies.

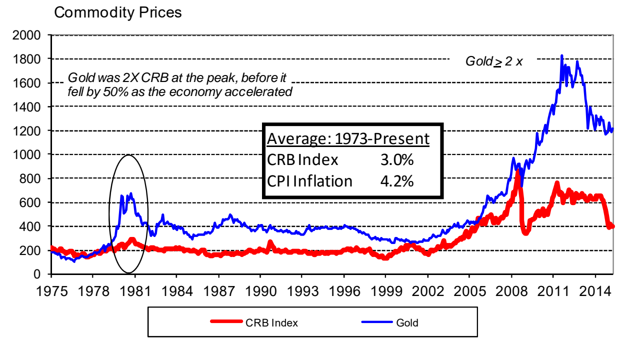
Any chance for the Chinese yuan, Russian ruble, Brazilian real, Japanese yen, or European euro was undone by fiscal mismanagement and/or poor policy decisions. Even gold, often considered an alternative currency, has fallen over 35% since its peak in 2011. Gold is an inefficient portfolio allocation with equity equivalent volatility for an expected return less than inflation, and inferior equity diversification versus cash.



Having managed assets for clients worldwide, currency effects are important to consider, as is the base currency. Changes in currency levels are a zero-sum game over long time horizons, but can be significant in the short-run. Remarkable money flows have been observed into hedged ETF products as the Yen and Euro weakened. Unlike stocks and bonds with a positive risk premium, there is no similar return attributable to currencies, net of interest rate differentials.

In the chart above, the effect on international equity performance with and without currency effects can be significant, but have grown complacent about managing currency as volatility declined. With greater international exposures, return dispersion of underlying markets and respective currencies enhances portfolio diversification.



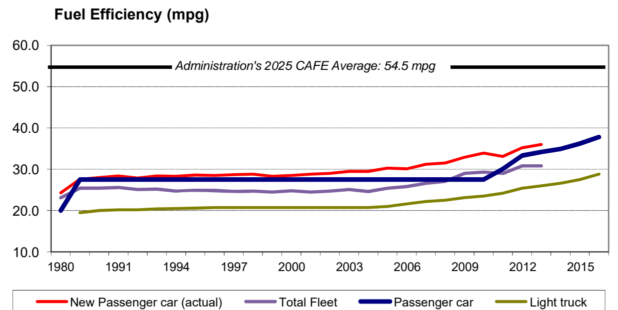


Currency devaluation resulting from faltering relative economic performance will tend to bolster a country's competitive advantage. Strength in a country's currency will tend to slow export growth, as well as inflation. Floating currency exchange rates facilitate competitive rebalancing in a global economy with low barriers to free trade. When the US dollar is weak for a prolonged period of time, other countries often will vocalize concern about being disadvantaged. When the U.S. dollar is strong and confidence is robust there is no better currency for global exchange than the U.S. dollar.

Monetary union, without harmonization of tax rates and political interests, is untenable, just as the European Monetary Union has exposed, particularly during times of crisis. It is now clear that EU countries that opted out of monetary union, most significantly the United Kingdom, have highlighted the cost of not having a sovereign currency and the prudent fiscal discipline it imposes (i.e., Greece, Italy, Portugal, etc.). Fiscal deficits continue to rise in developed economies as tax revenues fail to exceed growth in spending, particularly in Europe and Japan. Failings of the Eurozone have derailed any move toward a global currency such as SDRs or even a gold standard. While U.S. debt soared since 2009, other nations that might challenge U.S. foreign reserve status also struggle with fiscal deficits.

Gold has always been a universal currency, but the cost of holding it over the long-term is expensive, and often has been politicized. Given its volatility as a traded commodity and insufficient availability to function as a reserve currency, discussion of a gold standard can be dismissed, except under scenarios of hyperinflation or currency debasement. It is not surprising that gold became popular after 2002, but the estimated marginal cost of production today is just $800, suggesting it remains overvalued. Over the long run, commodity returns equal inflation – holding costs. Historical prices back to 1900 of gold track broader indices of commodities, and suggest this holding cost to be about 0.5% per year coinciding with 3% inflation. To be sure, if input cost increases can't exceed output costs, then commodity returns can't exceed inflation.

Concerns have shifted from peak oil supply to peak demand. High oil prices over a sustained period have increased incentives to conserve or choose alternatives. Higher U.S. CAFE standards have driven improved fuel efficiency for passenger cars. Technological innovation inevitably is applied to other vehicles and globally. Transportation consumes the greatest share of oil utilization, so doubling U.S. fuel economy reduces global demand. Achievement goals driving technology innovation should be more productive, in this case reducing emissions, than corporate divestment initiatives might hope to achieve. Incentives and dynamic constraints are always more efficient means to an end.



Large variances in gasoline prices regionally suggest benefits of oil price declines may be delayed in some states. While gasoline prices have fallen from $3.70 on average a year ago to less than $2.00, Northern California is still paying about $3.50/gallon for example, and yet to realize much benefit from falling oil prices.

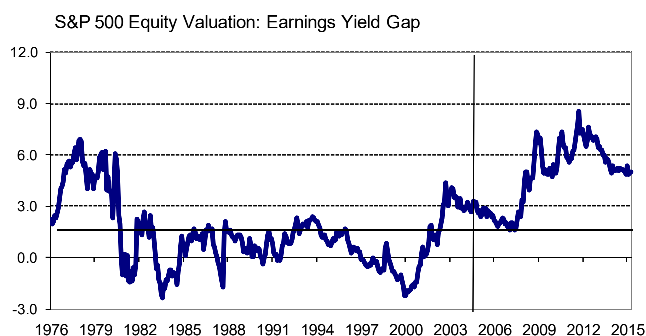
Energy sector earnings growth expectations have declined materially since October 2014 from roughly 7% to -57% in 2015, thus a dramatic shift in contrast to recent years. While Energy is just 8.5% of the S&P 500, such a dramatic decline in earnings will certainly have an impact on overall earnings growth. Earnings of energy-intensive sectors should benefit from lower oil and gas prices, particularly transportation, utilities and chemicals, as well as other industrial and consumer sectors.

Equity Bull Markets Don't Die of Old Age

The global economic expansion is entering its seventh year. The S&P 500 total return has compounded an

annualized return of 8.3% and 11.6% for U.S. small-cap stocks vs. 1.6% for MSCI EAFE and 0.6% for MSCI Emerging Markets. The U.S. economy has outperformed other regions, thus it is not surprising its stock market has also outperformed most other countries. Price level is not as important as the valuation and earnings growth.

The U.S. equity market can be judged to be reasonably valued relative to book value and dividend yield, but attractive relative to the Earnings Yield gap below. Compelling valuations have moderated as stock indices rose over many years, but the S&P 500 still appears attractive, not significantly overvalued as some suggest. Instead, it is global bonds that are significantly overvalued after excessive issuance compelled by manipulated lower interest rates met investor demand. This is how asset class bubbles classically develop.



Mean reversion is a persuasive argument and we should eventually expect another recession, but this cycle will be longer in duration if inflation remains contained. Just as economic cycles don't have an expiration date, neither should bull markets. Recessions undermine earnings, and lead to eventual equity corrections.

Europe and Japan are cheaper than the U.S. on a simple Price/Earning basis, while currency weakness should boost earnings translation and exports. Interest rates are more likely to rise sooner in the U.S., but economic conditions remain less compelling in Europe and Japan. Low interest rates have encouraged stock buybacks, and the U.S. listed share count has been declining again. If earnings growth remains positive, equity indices can appreciate even as interest rates rise.

On the other hand, if economic recession is imminent, than stocks will likely struggle and exposure should be reduced. Typically rising interest rates cause recessions only well into the cycle of increasing rates. Bull markets typically don't die of old age, but are most often murdered by recessions resulting from rapid interest rate increases or a collapse in domestic aggregate demand.

The Third Stimulus Lever: Regulation

We need to reset our fundamental intuition about how policy decisions affect potential growth and productivity. There are actually three government controlled policy levers that can provide economic stimulus---monetary, fiscal, and regulatory. Consideration of fundamental regulatory reform seems hopeless, but understanding its effect should not be dismissed. Focus was on the first two policy levers since 2009, yet the third policy lever was either ignored or turned into an economic headwind. Changes to regulation give the illusion of control, even if misguided. Prudent governance balances benefits and risks of rule changes needed to sustain prosperity and promote living standards. Global competitiveness of a nation hinges on efficiency and effectiveness of controls.

A recent report by the Competitive Enterprise Institute found that the U.S. Federal Government imposed 3,554 new regulations in 2014, increasing the total annual cost to over $1.8 trillion per year, of which no less than $58 billion is required simply to enforce all the regulations in the Federal Register. State and local agencies magnify these numbers. According to regulations.gov, over 7,700 proposed regulations are open for comment. The third stimulus lever of regulation has become an increasing headwind, offsetting economic benefits of fiscal and monetary stimulus executed at great cost, but limiting economic growth, job creation, and investment.

Increasing regulatory costs are inflationary and have hit consumers' wallets. The cost of every new rule targeting business is passed along in the price of goods and services, undermining productivity. Other countries have followed a similar track, increasing control through more insidious rules and regulations. Innovative regulatory reform can change a nation global competitiveness, thus not a proposition to be overlooked. It is remarkable how little is written on this topic given its share of national income improving productivity and lowering inflation.

New rules may originate in legislation, such as health care and financial reforms, or be imposed by state and federal agencies. Regulations issued by government agencies without Congressional legislation often impact small businesses most significantly, not having the resources to spread large fixed costs across a broader revenue base. This tends to limit new business formation and reduce competition. We observe how increased regulation drove financial and industrial acquisitions rolling up the most innovative or disruptive businesses. Ideological activism through non-legislative rulemaking can downplay or dismiss adverse economic impacts. The EPA has increased issuance of new rules by 12.5% in five years, which likely increased energy costs.

Health Care and Financial reform was complex and impractical, resulting in innumerable unintended and adverse consequences. Failure to meet so many rulemaking deadlines in a timely way has contributed to increased economic uncertainty. Law firm Davis-Polk has monitored the disappointing rulemaking progress for the 2300 page 2009 Dodd-Frank Financial Reform

legislation. Through 2014, regulators missed more than 36% of 277 deadlines and finalized just 231 (58.5%) of the 395 required rules. Worse yet, 91 (23%) required regulations still haven't even been proposed.

Financial reform legislation failed to address reforming credit rating agencies or GSEs (i.e., Freddie Mac and Fannie Mae), and actually impeded competition that increased "too big to fail" risk. New rules and regulations increased compliance costs significantly, and are particularly burdensome for smaller companies. The Consumer Financial Protection Bureau increased duplication of existing enforcement and regulation without consolidating or improving the efficiency and effectiveness of existing regulatory agencies. For example, some banks are already accountable to as many five unique regulators, in addition to the CFPB. The highly politicized CFPB was never designed with suitable public accountability and suffers from the same intolerable talent and resource void of other regulators. Existing laws and regulations were sufficient preceding the Financial Crisis, yet existing regulatory process and implementation problems resulting from glaring lapses in regulators' oversight and capabilities remain.

Systemic financial risk was rooted in collapsing mortgage securities on the heels of plunging real estate prices, poor underwriting, and questionable credit ratings. Policymakers were quick to blame banks in 2009, without regard to the role of the Community Reinvestment Act, Federal Reserve's failure to oversee non-bank lenders originating more than 80% of subprime mortgages, or the CFTC's unwillingness to regulate credit default swaps, in particular those being written by AIG—regulated by the now dissolved Office of Thrift Supervision (OTS), which had primary oversight for most of the largest bankrupt subprime lenders like Countrywide, Washington Mutual, Wachovia, Option One, IndyMac Bancorp, Ameriquest, and New Century.

The Federal Reserve had all the rules and regulations needed to intercede and correct loan origination deficiencies, but failed to do so before credit crunch leading to the Financial Crisis. As the primary U.S. banking regulator, they failed to correct the deteriorating credit quality of loan origination and toxic mortgage securitization, which toppled subprime lenders and several investment banks. The failures of the Financial Crisis weren't for lack of enough regulators or regulations. It was the complexity of the system with multiple overlapping regulators that prevented adequate oversight to simply enforce existing rules and common sense, as seen with very complex banks such as Washing Mutual and Wachovia overseen by a marginalized regulator. Remarkably, OTS was the successor to the same regulator who oversaw the Savings & Loan banks in the 1980s, which failed to detect systemic insolvency and fraud.

Critical issues contributing to the Financial Crisis can't be resolved by simply overlaying another regulator or additional duplicative rules to enforce. Regulators had fallen woefully behind financial industry innovation. New products were being engineered at an overwhelming pace for the existing management, processes and procedures. It wasn't insufficient regulation that was the root cause of the 2008 Credit Crunch, but more likely lack of government investment in resources and talent needed to maintain existing regulatory responsibilities. Crafting legislation with more industry and bipartisan input could have resolved many of the challenges that have encumbered financial and heath care reform laws.

The FDIC has concluded that increased compliance costs are a crucial factor motivating consolidation, hitting small community banks and limiting new start-ups that can't afford additional overhead being simply less cost competitive versus larger institutions able to handle new excessive and duplicative regulatory burdens. The glaring lapses in regulators' oversight and capabilities preceded the Financial Crisis under existing law from the Federal Reserve to the SEC.

Leveraging Value Added in Dual Alpha

Global investing benefits when we observe differences in the performance of equity and bond market resulting from asynchronous economic cycles. Rotating between country and currency market exposures provide an opportunity to add value both bottom-up or security selection and top-down or tactical asset allocation. The notion of *Dual Alpha* provides parallel leveraging of value added in uniquely diversified strategies that are uncorrelated or even negatively correlated. Global TAA either uses derivative overlays or can adjusting underlying investment product exposures to layer this strategy in parallel, which can double the value added potential by leveraging active management skill without leveraging assets or risk. Implementation of market-based strategies generally has exceptional liquidity resulting in little market impact.

Investors should increase exposure to global active management. Value added from security selection and Global TAA tend to be uncorrelated or even negatively correlated, increasing portfolio diversification. Active tracking error may be a little higher with Global TAA, but increases the potential information ratio (IR = active return / tracking error) with greater breadth assuming some skill. Getting two value added engines operating in parallel for the price of one product is appealing.

Final Thoughts

The Federal Reserve needs to normalize monetary policy, suspending re-investment of maturing bonds and hiking interest rates. The greatest financial market risk is likely the extended manipulation of bond yields, risking

explicit moral hazard. Risk of a liquidity squeeze has been exacerbated by financial reform regulations, and could become a liquidity crunch, resulting in persistently steeper than normal yield curves worldwide. In contrast with the 2008 credit crunch, credit spreads increased to unprecedented levels.

Canada and the United Kingdom should follow the lead of the Federal Reserve, in this regard. This will likely trigger a correction in Treasury bonds, dragging other countries along. Favoring shorter fixed income maturities and floating rate securities will minimize losses. Once the Fed begins to raise interest rates, we should expect ¼% increases in successive meetings. Risk of recession in the foreseeable future is low, so macroeconomic risks to equities and credit exposures are not meaningful. Equity markets should respond more similarly to 2004 rate increases, when the S&P 500 returned 10.4%, than 1994 performance.

Some dismiss liquidity concerns as mistaken volatility, but broker-dealer inventory according to the New York Fed has materially declined since 2007. It is now a fraction of what it was 15 years ago, although outstanding corporate debt and new issuance are at record levels. We are concerned that as interest rates rise, illiquidity will increase as bond demand declines, spiking yields and imposing up to a 0.5% risk premium.

Global growth continues to be led by Emerging Markets and North America. Many secular forces that drive economic growth in emerging countries remain in place, including urbanization, industrialization, and insatiable consumption with expanding credit. What has concerned us were challenging trends in productivity and profit margins, despite compelling valuations and economic conditions. We believe Russia, Brazil, and OPEC nations should be avoided, however China, India, South Korea, and Eastern European countries are compelling.

Profit margins in developing nations have plunged since 2012 due to rising labor and basic material costs, but more importantly has been an increase in on-shoring. Trade rebalancing is a consequence of a future theme: *A New Industrial Revolution.* Adaptive robotics and rapid prototyping has disintermediated labor and introduced creative destruction with production customization.

Behavioral Finance helps us understand why defying conventional wisdom can be beneficial—not for the sake of being contrarian, but thoughtfully pursuing audacious challenges. Behavioral biases explain why markets may not always appear rational, cloud intuition, and induce market inefficiency. Cognitive and emotional biases are perpetuated by aversion to losing money. Herding seeks comfort in the consensus, extrapolates growth trends, or becomes overly complacent. Passive investors never get a chance for more than guaranteed underperformance. Sometimes this difference is just a few basis points, but other more exotic index strategies or ETFs can be costly to manage, trade, and administer.

The foundation of *Objective Driven Investing* (ODI) dates back to von-Neumann and Morgenstern's model of expected utility, specifically the balancing of expected return versus risk. Fiduciary standards long embraced modern portfolio theory's origin of ODI, but never focused much attention on the impact or importance of constraints. Virtually every investment decision is made under varying uncertainty about risk and return, yet some asset owners and consultants view risk as well-defined and stable. Strategic policy objectives focused only on risk fail to recognize historical volatility and correlation distorted by central bank manipulation of the bond market. Assumed bond volatility can be increased by some amount, but return correlations are too complex to simply adjust. Popularity of objectives focused on minimizing risk rather than maximizing risk-adjusted expected return result in high bond allocations and low potential long-term returns at a critical inflection point.

Traditional balanced 60% global equity and 40% fixed income policy portfolios continue to perform well relative to risk allocation and other de-risking strategies. Treasury bonds should underperform historical returns with much higher risk. Concern about equity valuations are not surprising after strong returns and indices near record highs, but manipulated global fixed income markets are at much greater valuation and liquidity risk.

How do we discriminate between the signal-and-the-noise*?* Being rooted in intuitive investment disciplines reinforces confidence during difficult times and when it matters most to diverge from consensus. Investors appear more preoccupied by the clock on the wall and high equity index levels, rather than fundamentals of overvalued global bond market. Potential threats to economic expansion and profitability are difficult to dismiss, but the U.S economy exhibits remarkable resilience leveraging innovative creativity.

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