

INVESTMENT OUTLOOK

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First Quarter 2016

OPPORTUNITY HIDING IN PLAIN SIGHT

- Asset class volatility and correlation measures are evolving more quickly now, and thus more difficult to forecast, coinciding with the inflection points in interest rates, inflation risk, productivity, and fiscal deficit. Global return dispersion is increasing, with stronger growth and firming inflation as oil price declines sunset. Greater country and risk factor dispersion increases tactical investment opportunities and portfolio diversification relative to efficient and prudent strategic asset allocation. With various false beliefs and misleading narratives, we believe there is *Opportunity Hiding in Plain Sight*.
- Global economic divergences are a precursor to greater capital market dispersion. Most strategists expect higher equity volatility, although rising volatility should be limited to fixed income and currency. Equity risk is behaving differently, characterized instead by increased variance-of-volatility responding to more frequent peripheral events. Dynamic hedging using stop-loss orders instead of options, much like portfolio insurance, has increased frequent changes in volatility. Volatility spikes offer tactical opportunities to rebalance, reposition, and hedge.
- Upside to low expected growth and inflation suggests any equity correction can be a buying opportunity, as well as a chance to reduce interest rate exposure further. Five economic drivers are critical to growth, namely: consumption, housing, exports, inventories, and investment. Investment, housing, and exports. They all have potential to contribute positively in 2016, benefiting from cheap energy and low interest rates. An emerging industrial renaissance has begun, albeit policy headwinds have limited potential growth.
- Profit margins exceed 9% and remain supportive to U.S. earnings. Unexpected in 2015 was the knock-on effects of lower oil prices and earnings translation of a stronger U.S. dollar. Weaker than expected Energy earnings collapsed -60% X 8% of the S&P 500 for a 4.8% adverse impact on earnings growth, but if energy and currency levels stabilize, equity markets will follow the firmer growth and quality of earnings.
- Compounding losses from rising global bond yields will be led by U.S. interest rate normalization. Fixed income illiquidity risk seems underappreciated, yet it is difficult to measure and challenging to hedge. High debt levels and record issuance under a mirage of bond liquidity mask a critical market risk as interest rates begin to rise. Japan's interest burden would become fiscally untenable with rising global rates given still weak potential growth and lack of structural reform. Investor rotation away from bonds could accelerate as losses compound, allocations are re-evaluated, and tax consequences are considered.
- Investors are being pulled in new unconventional directions, some that more likely to impair wealth, particularly in a new cyclical regime of rising interest rates. Global equities offer the best potential long-term real return, while bonds lag growth in liabilities, even if bonds correlate with discount rate changes. Long-proven truths have been questioned as old-fashioned, while provocative but unproven new nonsense seeks to be embraced.
- As economies diverge, greater asset class, country, and risk factor return dispersion should follow, increasing investment opportunities and international diversification. Asset class volatility and correlation measures are evolving more quickly now, thus more difficult to measure. Underestimated risk of private and alternative assets is still not well understood. Strategic asset allocation and risk models predicated on historic averages can lead to misallocation and greater than anticipated portfolio risk.
- We reduced our long-held global equity overweight to neutral last quarter (4Q/2015), but maintain an underweight bonds and short portfolio duration exposure as interest rates rise. The U.S. dollar should strengthen further, particularly versus the Yen and Euro, which should be partially hedged. U.S. dollar strength bolstered 2015 foreign flows into Treasuries, but can't be sustained. Currency and energy impact on earnings growth should moderate.

Economic Conditions

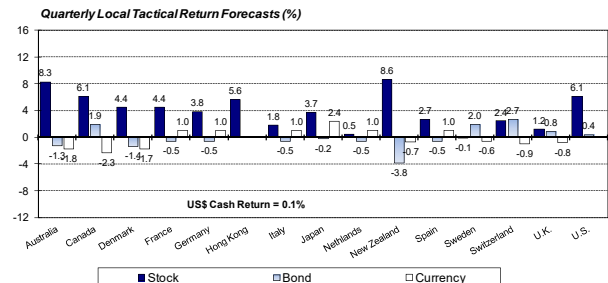
The global economy expanded about 2.7% in 2015 and can accelerate to at least 3.0% in 2016 on the heels of stronger growth in North America, Australia, India, China, and Korea. Potential growth in China and India remains strong, although rising wages with high labor intensity has undermined profit margins, thus earnings. Global asynchronous economic conditions result from diverging monetary and fiscal policy, although growth benefit from a troughing global trade and waning fiscal austerity in the U.S. and Europe. Plunging oil prices below \$35 frees up disposable income, but is wrongly assumed to be the result of weaker global growth. Lagged transitory effects depressing inflation and energy sector earnings growth reverse in 2016. Labor costs will rise with tighter supply in many sectors, combined with minimum wage increases. Regulatory costs and higher taxes are also increasing inflation.

While the global expansion has exceeded six years, business cycles don't run on a clock. Any U.S. equity correction can be a buying opportunity with no evidence of recession in the foreseeable future. Unemployment has fallen to 5%, housing prices recovered to near 2007 highs, and fiscal austerity is now moderating. Weaker oil prices, stronger U.S. dollar, and slowing emerging market growth affected inflation, import prices, trade, and earnings. Lagging productivity and adverse demographics undermined potential growth in Japan (<1%), Europe (1.5%), and the U.S. (2.5%). These estimates are less than 2.7-3.0%, which a well-functioning economy should enjoy.

Economic Forecasts	2012	2013	2014	2015	2016e	2017e
U.S. GDP (Y/Y Real)	2.3	2.2	2.5	2.4	2.7	3.0
S&P500 Earnings	6.0	5.7	8.3	-1.4	6.5	10.0
U.S. CPI Inflation (Y/Y)	1.8	1.8	0.7	0.9	2.3	2.7
U.S. Unemployment	7.8	6.7	5.6	5.0	4.8	5.0
Fed Funds Target	0.25	0.25	0.25	0.50	1.50	3.00
10y Treasury Notes	1.85	3.00	2.17	2.27	3.30	4.50
S&P 500 Target	1426	1848.	2059.	2044.	2200.	2350

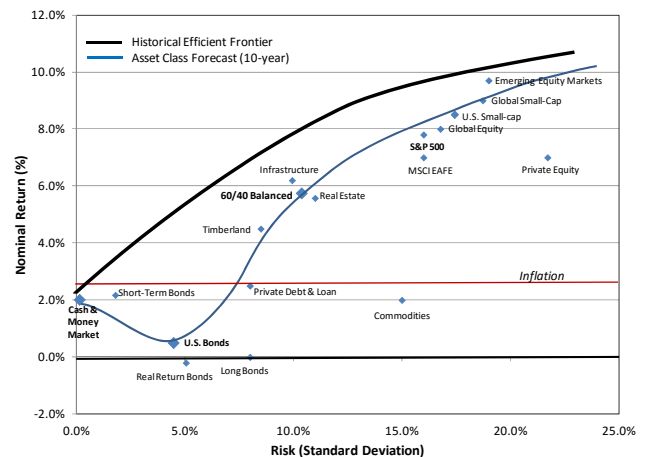
Global equity performance depends on accelerating earnings. S&P500 growth estimates of 7.6% to \$127 in 2016 are reasonable after no growth in 2015. Our forecast includes an S&P500 target of 2200, implying a total return of 9.8% with a dividend yield of 2.2%. U.S. 10yr Treasury yield should rise 1% for a -6.8% return. Global equities should outperform bonds by 5-10%. Holding greater cash seems prudent for now with a neutral tactical equity vs. short bond allocation, but suggests shifting to overweight equity this Spring assuming still reasonable valuation, progress on normalization, as well as better economic and earnings visibility. Before 2010, over 50% of S&P 500 revenues originated overseas, but that ratio dropped to 40% as international growth slowed and trade declined. As U.S. growth rises from 2.3% to 2.8%, oil price declines wash out, and still high profit margins are retained.

Global equity returns exceeding 7-9% will be more difficult with valuations closer to normal and slowing earnings growth, although accelerating in the U.S. Global equities, including the U.S., are still reasonably priced based on earnings yield vs. bonds. Low volatility and high dividend yield equities are expensive and typically underperform as interest rates rise. Europe is cheaper, but growing more slowly than the U.S., while Canada and Australia have upside to growth forecasts. Japanese equities could be a value trap without sustainable growth, while subject to great fiscal risk as rates rise without needed structural and fiscal reform.



Return and risk forecasts summarized for the next decade below reflect the need for interest rate normalization, particularly bonds. Forward guidance and quantitative easing manipulation stretched bond valuations that must correct. Higher Treasury yields will lift global bond yields, adversely impacting other yield sensitive investments. Some believe the economy is too fragile and inflation too low to raise interest rates, but even raising rates to 2% should still be stimulative. Dismissing inflation ignores transitory effects of plunging oil that reverses as price changes sunset.

Global Capital Markets: 10-year Expected Returns



This efficient frontier is remarkable for both its shape and dislocation of asset class return/risk. Strategic asset allocation studies typically assign unrealistic risk and return expectations to bonds. Rising global interest rates should result in extended bond market losses for the next several years. Long bonds, distressed debt,

hedge funds, infrastructure, and private equity, which enjoyed strong flows, should experience greater scrutiny. Rising bond yields pose risk to countries with excessive debt and fiscal deficits. Japanese and U.S. bonds are at risk with rising interest rates. Like equities in 2000 with P/E multiples exceeding 35X, bonds are overvalued. Increased long bond allocations and leverage in pension funds will come under increased scrutiny with systemic concerns given expansion of LDI and risk parity implementations. Lessons from the bankruptcy of Orange County, levered just 2:1 into a rising rate environment of 1994, seem to be forgotten.

Overblown fears of rising interest rates and China's slowing growth will subside, having little impact on U.S. growth. Recession doesn't hinge on depressed Treasury yields that are in part due to foreign currency weakness and negative interest rates in Europe and Japan. Eurozone and Japanese fiscal deterioration continues without structural labor, tax, and regulatory reform, while potential growth was cut by half. Trading algorithms are more likely to latch on to spurious correlations, causing wide swings in sentiment. Persistent monetary stimulus may have facilitated deferring structural reform, but these slowing economies risk a downward spiral. The future cost of lower credit ratings and bond risk premiums will raise financing costs and interest burdens, exacerbating fiscal deficits in the Eurozone and Japan. We believe this is the critical economic risk of 2016--not China, oil prices, or a flattening U.S. yield curve.

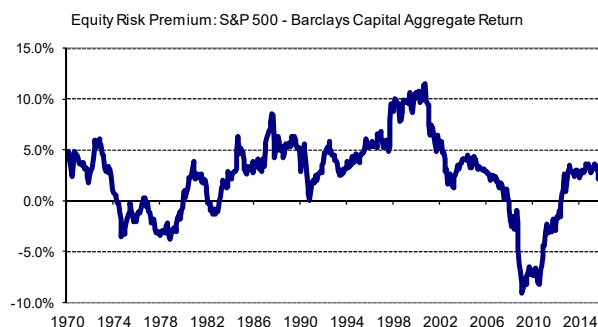
2015 Market Review

Last year was challenging by various measures with wider trading ranges in global equities. Global Equity returns were mixed in 2015 led by Switzerland (10.4%), Denmark (23.4%), Japan (9.6%), and even the U.S. S&P 500 (1.4%), while Emerging Markets (-14.9%) lagged, particularly Greece (-61.3%), Brazil (-41.4%), Turkey (-31.9%). MSCI EAFE returned -0.8%, which masks material underlying dispersion and volatility over 2015. Decoupling was also observed across sector returns. Consumer Discretionary (10.1%), Health Care (6.9%), Staples (6.6%), and Technology (5.9%) stocks led, while Energy (-21.1%), Materials (-8.4%) and Utilities (-4.8%) lagged.

Barclay's Aggregate Bond Index (0.4%) and 10-year Treasuries (0.9%) lagged the broad stock market return (S&P 500: 1.4%) in 2015, but bond yields have increased and are expected to rise further in 2016. We expect long Treasury yields to increase at least 1% across the yield curve, but longer duration bonds will sustain the greatest losses. Credit spreads have widened although default rates remain low, reducing adverse credit security risk compounding losses.

The U.S. dollar strengthened, particularly against the Canadian dollar (-17.5%) and Euro (-10.2%). Remarkably, the Japanese yen (-0.3%) was nearly unchanged, but Canadian and Australian dollar weakness reflects declines in commodity prices (CRB: -15.2%) from WTI Oil (-30.5%, also -45% in 2014) to Gold (-10.4%). Japanese and European equity investors still hope to benefit from stimulative monetary policy, low interest rates, and currency weakness to bolster credit growth and exports.

Perhaps the most unloved and mischaracterized equity bull market has played out since 2009. Return to normal relative risk premiums in 10-year annualized returns is observed below. International equity (MSCI EAFE) continues to lag given disappointing economic performance limiting earnings growth. As interest rates normalize, extended risk factors will underperform such as low volatility, large size, and high dividend yield.



2006-2015	Large Eqty	Small-cap	Int'l Eqty	Agg Bonds	Cash
Return	7.3%	6.8%	3.5%	4.5%	1.1%

Our 2016 Themes

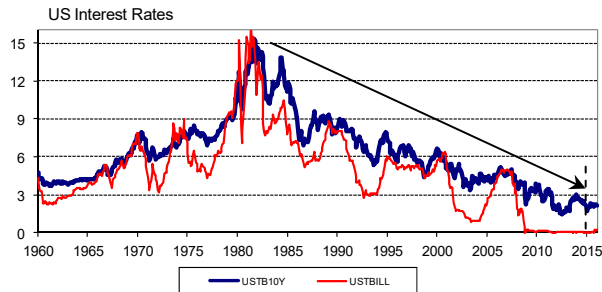
A tradition this time of year is to reflect on the state of the economy and consider what will matter most in the year ahead. This exercise expands our field of view by casting a wide net. Below we highlight some interesting and consequential thematic beliefs that should matter most to investors in 2016.

1. *Inflection Points and The Great Escape*

The importance of being impatient has led to *The Great Escape* at this *inflection point* of interest rates beginning with the first hike in December. The issue is no longer "when", but how fast will interest rates normalize. Normalization includes refunding the Fed's maturing bond holdings. Treasury bond risk declined with falling yields, but should increase as yields rise by 1-2%, imbedding a risk premium that impacts the capital market frontier. Other inflection points include higher U.S. inflation and productivity from low levels.

The Federal Reserve was late to hike interest rates. Lower inflation due to falling oil prices and a stronger U.S. dollar (lower import prices) may have given

policymakers room to be patient, but core inflation (ex-food, energy) has hovered closer to 2% than 0%. While unusual to raise rates with low inflation, unemployment of 5% is below the 50-year average of 6%. As oil price declines and U.S. dollar strength sunset, higher inflation (0.7%) will increase toward 3%. Interest rates should increase at least 1% in both 2016 and 2017, consistent with policymakers' expectation. Retirement of Minneapolis President Kocherlakota and annual rotation of voting members increases the hawkish bias of the FOMC, so yields could rise faster than expected.



Global differences in fiscal, monetary, regulatory and interest rate policy will result in greater cyclical economic divergence. A Treasury yield risk premium of up to 0.5% in yield may be required given \$19 trillion in outstanding government debt, which is 80% higher in 8 years, plus the current fiscal deficit and eventually refunding the Federal Reserve's holdings. Central banks now dominate buying of Japanese and Eurozone sovereign debt, but QE capacity is not unlimited. Inflation targeting risks stagflation (inflation without growth) and exacerbates imbalances, while ineffective bolstering growth. Investors should be vigilant about the global impact of rising U.S. interest rates and risk exceptional losses from rising bond yields. High yield bonds credit spreads widened over 3% in just six months, even as defaults remained low.

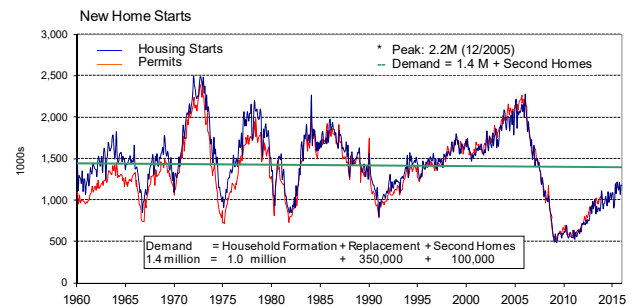
Federal Reserve credibility was undermined by monetary policy decisions, including keeping interest rates too low for an extended period and explicit moral hazard of forward guidance. Policy changes are most effective when unexpected, including curbing inflation expectations or bolstering confidence. Monetary policy stimulus (i.e., QE, low rates) shouldn't extend for years expecting some eventual better result. This opportunity to restore credibility with gradual normalization should not be squandered or swayed by sentiment induced volatility. As in 2004, disciplined normalization of monetary and interest rate policy is needed. Rule-based guiding principles, such as the multi-factor Taylor Rule, was correlated with historical policy decisions for decades and suggests a 2-3% target. Four rate hikes or +1% increase is expected in 2016.

2. Pent-up Demand for Capital Investment, Housing

There is upside to U.S. economic growth in 2016 from putting excess savings to work given pent-up investment needs and moderating fiscal austerity, adding another 0.5% to growth. Excess household deposits (\$10.4 trillion) and corporate cash (over \$7 trillion), including unrepatriated earnings, can boost investment, consumption, construction, and job growth. The ISM Survey is worth monitoring as a reliable leading indicator.

As the banks finally reach their new required capital levels, credit growth should accelerate. Higher corporate cash balances were required as commercial paper issuance declined from \$2.2 trillion in 2007 to just \$1 trillion today, restrained by financial regulation. This has limited growth in investment, research, development, and employment as corporations had to increase cash for financing working capital needs. Excess savings compounded by quantitative easing, and policy uncertainty has lowered return on assets, increased inflation risk, and crowded out investment opportunities. Bipartisan agreement could usher a 10-15% tax rate on repatriated foreign earnings, reinforcing investment and providing tax revenue, but has stalled awaiting broad corporate tax reform.

Household formation drives new housing construction. After the Financial Crisis, household formation plunged due to economic forces that doubled up households with children and parents moving home. As formation accelerates, inventory is at relative record lows, so pent-up demand adds to rising housing starts. Housing starts can exceed 1.5M/year driving up construction. The trend line below should be rising with population growth, but highlights the effect of the Financial Crisis.



3. Industrial Renaissance, Accelerating Innovation

Accelerating technological innovation is improving productivity, efficiency, consistency, and quality at lower cost. New markets are emerging with demand for products and services we never knew we needed. The Internet fueled a communications revolution that is bolstered by ubiquitous computing enabled lower cost access to information and analytical applications. This *Industrial Renaissance* has bolstered potential growth

and productivity, as well as secular disinflation from hyper-competition, globalization, and increasing price transparency. Potential for in-sourcing domestic activity is gaining traction as high labor intensive manufacturing plus transportation costs is losing its cost competitive advantage to smart robotics. China recognized this secular shift and has sought to reduce its economic dependency on exports.

This technology revolution has been as impressive as the prior industrial and agricultural revolutions. Though disruptive to labor, productivity, and prices, the industrial revolution, coupled with free markets and rule of law, helped improve prosperity and living standards. The communication revolution compounded innovation and growth, much like the telephone and printing press in the early 20th century. Increased productivity drives potential growth with investment into productive, commercially viable activities with compelling rates of return, not dependent on subsidies or tax credits.

The *Rise of the Machines* has just begun. Real and virtual robots disintermediated redundant and repetitive job functions from manufacturing and construction to services. Software and applications have displaced: travel agents, bank tellers, customer representatives, tax accountants, sales clerks, assembly line workers, and paralegals. Productivity became more difficult to measure with exponential growth in open source systems, free applications, digitized media, and various new business models that forgo measurable revenue. Application of *Big Information* (data + analytics) has sustained economic progress, but *real productivity* is evident in exceptional profit margins. Even defining employment is difficult with the advent of the gig-economy (flexible, adaptive) and expanding retired-but-active workers, not fully captured in participation rates. National economic data has been subject to greater revision due to shifting growth drivers, new business models, and increase in services versus making stuff.

4. Playing in a Crowded Sandbox

Disruptive new companies and special opportunities, as well as Infrastructure and real estate development need efficient and flexible access to financing capital at reasonable cost. Investment opportunities persists between-the-cracks of traditional asset classes and style boxes due to financial distress, cost of commercialization, poor management, unpredictable competition, and lack of vision into secular themes. Investing in private markets remains difficult, complex, uncomfortable, and risky. Asset owners are investing in direct internal programs to lower cost, as well as improve transparency and control. Deleveraging banks reduced short-term corporate financing and increased the need for asset owners to step into the void.

Thus, there are many practical challenges to private market investing that reduce net risk premia and exploitable inefficiencies:

1. High private fund management and transaction costs
2. Reduced liquidity with increased private exposure
3. Misleading return, low risk and correlation assumptions
4. Exceptional security selection skill required
5. Overvaluation with strained investment capacity
6. Diminished relevance of attribution, risk management
7. Overly complex investment products less transparent
8. Disappointing underperformance of private funds

Private capital markets are needed to fund new ideas, innovation, commercialization, infrastructure, and project development. Investors can benefit from opportunities in venture capital, private equity, convertible loans, infrastructure, and real estate, but it takes patience and discipline with efficient execution to exploit illiquid opportunities locked up for 5-10 years. Private market exposures increased with high hopes over the last decade, yet unlisted investments are difficult and infrequently valued, resulting in spuriously low assumed return volatility and correlation that overstate portfolio diversification. Companies with strong cash flow, compelling growth prospects, and no debt are opting to remain private, particularly if they require little capital given the burden of public listing.

Private fund co-investing was generally the result of an over-hyped intuitively good idea, subject to limited choice, poor execution, adverse selection, and too often pay-to-play. There are exceptions, but instead institutional investors are seeking creative ways to invest directly to lower costs by expanding internal public and private market teams. Collaborative private direct investing with like-minded investors, focused on sustainable competitive advantages, can effectively pursue compelling investments. Persistent risk premia of illiquidity, unlisted, and small size theoretically provide a compelling return over public markets, but diminishing premiums and disappointing returns has increased scrutiny of unrealistic risk and return assumptions with limited investment capacity.

A common mistake is neglect for realistic long-term sustainable competitive advantage with a reasonable expected return. Investment consequences include lower net private market returns and higher contribution to risk from misleading volatility and correlation estimates that are too low. Risk premiums to public companies have declined from high 1990s levels. Private market valuation is stretched given constrained capacity, and reflected in our efficient frontier above.

Private investments are under increased scrutiny given disappointing returns and greater risk than was assumed. Only recently have private fund management costs started to decline with competition. Many endowments are approaching 50% in private market

exposure, but is this prudent given more realistic risk and expected return forecasts? Locked-up illiquid fund holdings have resulted in greater fair value discounts in secondary markets, as CalPERs, USS, and other large asset owners reduced private equity holdings. Preqin notes new fund raising in 2015 declined 13 to 43% across private equity, real estate, and infrastructure.

5. Importance of Global Multi-Asset Investing

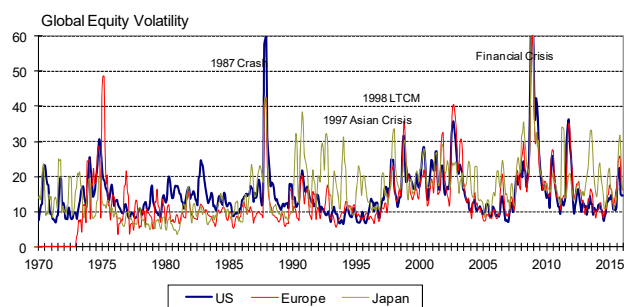
Asset allocation has long been recognized as the most important decision with significant return potential, but it is even more critical as economic dispersion increases, returns decouple, and correlations decline. International diversification benefits are finally increasing again with greater economic uncertainty. Global Tactical Asset Allocation (GTAA) seeks to dynamically enhance return by shifting asset allocation exposures to enhance return, while controlling risk. It favors exposures more likely to outperform given fundamental relationships. Recurring cognitive and emotional biases with differing individual *rational beliefs* provide systematically exploitable inefficiencies. Incorporating Global TAA increases potential excess return and portfolio diversification more than committing 25% to private market alternatives. Given higher than assumed correlations for private markets, Global TAA is pure alpha that can be applied up to 100% of assets under management without displacing active security selection. No wonder interest in Global Multi-Asset investing has increased.

Active asset allocation can add value while lowering total portfolio risk. There are many dimensions, including rotation between sectors or industries, styles (value-growth, large-small), countries, currencies, and asset classes. Risk factors such as quality, liquidity, credit, momentum, and others are an intriguing addition. Global TAA opportunities tend to increase when uncertainty and volatility are rising, while security selection tends to benefit when volatility is declining. This is why low or negative active return correlation is observed between top-down Global TAA and bottom-up security selection investment strategies. Global TAA mandates can be conveniently combined with other strategic, rebalancing, and hedging objectives, yet few bother to explore this opportunity.

Market return forecasts guide portfolio exposures based on a disciplined analysis of expected return and the contribution to risk, considering account specific investment guidelines and risk aversion. An overlay implemented with listed options or futures can provide complementary value added without displacing the underlying active security selection. If paired strategies exhibit minimal or even negative active return correlation, active return can increase without increasing total risk. Our Global TAA strategy, based on a disciplined fundamental philosophy, emphasizes

intuitive economic, financial, and investment relationships that have persisted for over 25 years.

With falling fund expense ratios, ETFs expanded in breadth and increased liquidity to access new risk factor dimensions. OTC derivatives have leveraged their footprint dramatically as regulatory capital requirements and the Volker Rule reduced investment banks' market making capacity. The conundrum that is most surprising is that listed futures volume and new products have been limited, if only because the trading commission is so low (\$15 for \$500,000 vs. \$0.02-0.05 on a \$35 stock or ETF). An expanding number of diverse liquid products provide many new tactical opportunities. Tactical asset allocation requires skill in return forecasting, portfolio construction, risk management, and implementation, but excess return becomes more meaningful as returns compress.



Historical bond assumptions of risk and return are misleading. The equity volatility chart above highlights increased variance-of-volatility observed, not simply higher volatility as commonly forecast. Evolving risk measures have a critical impact on strategic asset allocation, much to the dismay of those that embraced risk-focused allocation schemes. Uncertainty in naïve historical risk measures have led to misguided strategic policy decisions, assuming greater confidence in forecasting risk. The portfolio objective maximizing expected risk-adjusted expected return is intuitive and robust after three decades of use, but expected risk and return inputs must adapt.

Investors can meaningfully simplify their approach to managing portfolios to lower cost, improve liquidity, and increase active return. Capital markets have grown more complex, but offer sufficient investable opportunities in public markets. Illiquidity and alternative risk premiums are difficult to harvest and rebalance given illiquidity, limited price transparency, high management costs, and restrictive capacity. While investors chase new trends and provocative schemes, we subscribe to a simpler and intuitive model layering uncorrelated active strategies in parallel ("dual alpha"). This skews odds of being more often right than wrong to win more when right than lose when wrong. There are no short-cuts to enhancing return.

A simple balanced strategy of 60% equity and 40% fixed income continues to be a challenging benchmark to beat on a risk-adjusted basis. The importance of asset allocation is reflected in resource investment and investor flows into global asset allocation strategies. Derivative overlay strategies can manage the mix to add value, rebalance, or hedge market risks without leveraging assets or displacing security selection. The pendulum of specialization swings back-and-forth over decades. Focus on global asset allocation is increasing and popular with even wider than +10% ranges. This highlights the need for experienced asset allocators and sophisticated risk management tools.

6. Global Individual and Corporate Insecurity

Ubiquitous technology and applications have improved productivity and living standards, but also exposed new threats of identity theft and electronic fraud. Security costs are rising as the sophistication and frequency of cyber-attacks increase with technology dependency. Credit cards are hacked frequently, while compromised Social Security numbers are used to file fraudulent IRS returns, claim benefits, and secure loans. Bank accounts have been drained of savings. Individuals, corporations, and government agencies can no longer assume that their networks, computers, tablets, or cell phones are secure. Cyber crime is not limited to individual amateurs and can be state sponsored. Simple passwords are not sufficient to safeguard critical or valuable information and system access. This additional cost compounds inflation risk.

The world seems more dangerous and insecure after global terrorist attacks in the U.S., France, and in the Middle East/North African (MENA) region. Escalating global reach and incidence of radicalized terrorism has reduced our sense of security and increased cost of doing business. No longer is the enemy-of-my-enemy my friend. Weak global growth also increases vulnerability to exogenous shocks and various crises. Alliances and cartels, such as the United Nations, NATO, and OPEC have been destabilized. Insecurity increases risk of social uprising and costs to society.

Geo-economic instability persists, most obviously in countries with faltering potential growth and growing fiscal imbalances. For Japan, sunset in the *Land of the Rising Sun* comes with too much debt and failure to execute promised fiscal and labor reforms, coinciding with deteriorating demographic trends. Abenomics was a constructive idea, but failed to be fully executed. Japan's bond market and currency are at greater risk now from trading vigilantes, as interest burdens increase. Failure to implement structural reforms has subjected Japan to risk of compounding unsustainable interest expense and negligible potential growth. Eurozone countries also missed an opportunity for needed fiscal, tax, regulatory, and labor reform.

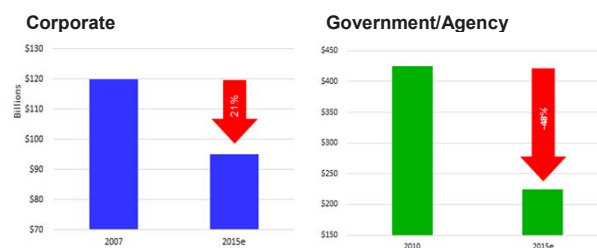
7. Underappreciated Regulatory Costs Rising

New laws and government policies should enhance competition, protect individual rights, and be judged by their results, rather than intentions, however noble. A record 81,611 pages in the Federal Register increased 5% in 2015, plus 23,901 guidance notices. How could we need this many new rules and who could possibly understand it all? Increasing populism, isolationism, protectionism, progressivism, and naïve rule-making are real threats to productivity and individual liberty, while undermining potential growth, free-market capitalism, inflation risk, and fiscal balance. However, rules and regulations need to be practical, enforceable, and follow rule of law. Private sector innovation will seek out weakness in overly complex legislation.

Taxpayers are still angry about the "Wall Street" bailout (Troubled Asset Relief Program or TARP). Yet, "As of Dec. 31, 2015, cumulative collections under TARP, together with Treasury's additional proceeds from the sale of non-TARP shares of AIG, *exceed* total disbursements by more than \$12 billion." In other words, the U.S. Government made money on back-stopping credit markets. However, Treasury wrote-off \$2 billion of \$82 billion given to U.S. carmakers. More than 70% of subprime mortgage debt was originated by non-bank mortgage companies like Countrywide, IndyMac, and First Century, which regulators at the OCC and Federal Reserve failed to manage or attempt to regulate. Credit Default Swaps soared to \$62 trillion in 2007 (four times U.S. GDP) and bankrupted AIG, but the SEC never sought to regulate these securities.

Complex financial reform regulations reduced bond liquidity, increased business costs, elevated inflation risk, and enabled high frequency trading, but failed to reduce financial risk much. Rule-making deadlines were missed repeatedly. Only 204/271 or 75% of required rule-making deadlines were completed as of year-end, and less than 50% of the original deadlines were met. Legislation sought to minimize conflicts-of-interest from mortgage originators and investment banks to credit rating agencies (i.e., Moody's, S&P, Fitch) and federal loan agencies like FannieMae and FreddieMac, but overlooked the failure of regulators to enforce existing law and common sense.

Bond Dealer Balance Sheet Capacity Reductions



Source: TABB Group

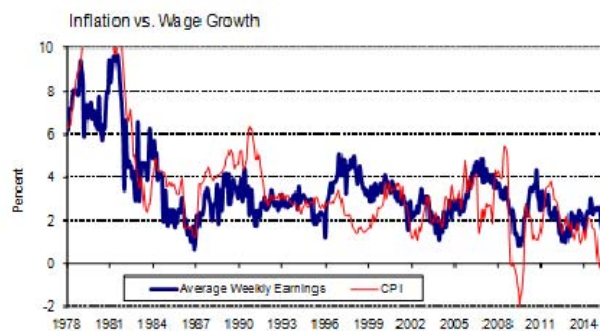
Bridging mark-to-market pricing of illiquid debt helped restore order to equity and credit markets, but more than Investment Banks contributed to the Financial Crisis. Regulators had the tools to manage unqualified mortgage borrowers, naïve bond investors, deficient credit ratings, and non-bank mortgage lenders. Despite concern about leverage among “too big to fail banks”, homeowners still leverage home purchases up to 5:1 with just 20% down, although underwriting has been improved and “liar” loans were eradicated. Many sad stories are the consequence of bad decisions enabled by the failure to enforce existing laws, regulations, and common sense. FASB 157: *Fair Value Measurement* (Q4/2007) combined dysfunctional credit rating agencies (AAA ratings for toxic mortgages) are rarely mentioned among the causes. Transition to mark-to-market accounting was ill-conceived and poorly implemented, turning an uncomfortable credit squeeze into a systemic credit crunch. The Financial Crisis was the result of complex interactions of many players making bad decisions, including regulators, policymakers and consumers.

Recently attracting attention are the remarkable profits of high frequency trading firms (HFTs). Cost of latency speed measured in milliseconds seems almost surreal. More than 50% of daily volume on U.S. exchanges comes from high frequency transactions and more than 70% is executed by algorithms. Increasingly, remarkable profits on high frequency trading are perceived as a “tax” on investment returns. In simple terms, the multi-exchange network, plus Regulation NMS (SEC rules hoped to improve execution efficiency and pricing transparency), exacerbated pricing arbitrage that sophisticated algorithms seek to exploit. Confidence of global financial markets is already faltering as stock exchanges grapple with credibility and investor’s perception of fairness.

Price differences between multiple exchanges increase arbitrage inefficiencies, so stock exchanges selling preferred access to quotes have compromised market integrity. Unintended consequences of Regulation NMS fragmented equity trading, which has bled into ETF and commodity trading, thereby exacerbating their volatility and downside risk. Flash crashes, trading dislocations, and block order fragmentation suggests HFTs are not enhancing market liquidity and increasing transaction costs. Multiple competing exchanges in the U.S. cause a unique problem not observed in other countries with just one stock exchange. It is no longer possible to routinely execute 25,000 shares of IBM, as it was a decade ago, although the bid/ask is narrower and commissions are lower. Thus, exchanges have ceased to be a fair competitive market. The IEX was recently founded by one of the whistleblowers of *Flash Boys*, and will be an interesting experiment seeking to restore a level playing field for investors.

8. Incomes and Misguided Beliefs

The industrial renaissance has redefined labor demand and valued skills. Although unemployment is low and wages have risen more than inflation, there remains great anxiety about economic security. Wages should have correlate with inflation, as cost of living increases are a baseline for benefit and wage increases. Low inflation results in lower wage increases, but total household income confuses many factors from number of wage earners to changes in entitlements, benefits, and taxes. Incentive bonus and profit sharing is now a greater share of household income, thus more variable.



Declining household income is an overused and misleading talking point. It is a myth in nominal terms and insignificant in real terms or net of inflation. Average wage growth of 4.0% was similar to CPI inflation of 4.2% over the last 50 years. Indeed, over the last five years, wages increased 2.3%, which exceeded CPI inflation of 1.8%. If inflation declines, income growth must moderate too. Wage growth has actually exceeded inflation in the most recent period. Thus, incomes have not stagnated any more than inflation simply declined. Increasing income inequality as a function of compounding income dispersion is economically inconsequential. Moreover, the notion of a “shrinking middle class” defined by arbitrary income ranges is mathematically insidious and misleading.

High statutory corporate and individual tax rates combined with a complex tax code encourage tax avoidance, reduce potential growth, limit productive investment, and undermine economic efficiency. Raising tax rates have generally reduced revenue. Thus, simplifying tax reform would provide a significant boost to potential growth, real income, and productivity. Fiscal austerity has limited growth in government spending, but next year’s budget is not constrained, so the fiscal deficit will begin to rise again from 4%.

A *Conflict of Visions*¹ is evident in debate and assumptions about fundamental economic beliefs regarding free markets, competition, global trade, rule

¹ Thomas Sowell, *A Conflict of Visions: Ideological Origins of Political Struggles* (2007, 1987)

of law, and Capitalism, which bolstered a remarkable increase in living standards. Economic uncertainty and individual anxiety can cause some to ignore lessons of history and embrace failed ideas, particularly if the memory has faded or are too young to appreciate. Fundamental values and beliefs developed over generations shape society's response to a rapidly evolving world, although populist ideas may be appealing in the near-term without understanding the long-term consequences evident in history.

Countries that pursued failed ideologies were prone to debt crises, currency devaluation, stagflation, and disappointing potential growth. Progressive and social democratic policies are inherently uncompetitive, inflationary, income limiting, and inefficient. These countries eventually devolve into soaring state dependency, higher tax rates, declining tax revenue, lower credit rating, unsustainable interest burden, and authoritarianism. Failing Socialist economies repeatedly grapple with increased social unrest, as observed in Brazil, Russia, and Greece to Venezuela, and destabilized MENA countries. Equity markets in these countries should continue to be avoided.

The curse of natural resources or *paradox of plenty* suggests that abundance tends to be squandered, even undermining potential economic growth and productive development. Sovereign wealth funds seek to buffer the downside of commodity prices and nonrenewable resource depletion over the longer run. However, falling commodity prices have consequences in the near-term for fiscal budgets and sovereign wealth funds, which grew large with exceptionally high prices for oil and gas producers such as Russia, Venezuela, Brazil, Norway, Alaska, Alberta, and in the Middle East. Such countries must now scramble to consider debt issuance and privatization offerings to fund government entitlements, education, and health care. In just a year, lower oil prices have strained capital accounts of OPEC nations, increasing potential social unrest as no-longer-affordable energy subsidies and benefits are reduced.

Elephants in the Room: China, Commodities

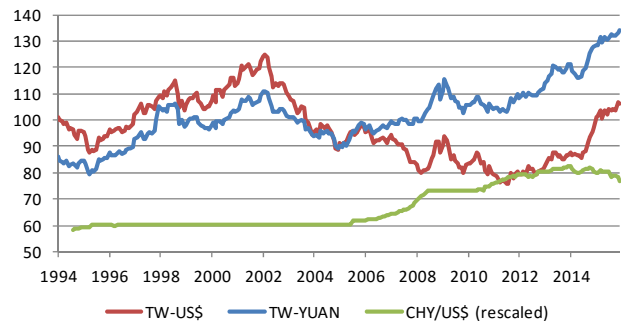
China and commodity prices, particularly oil, have caused investors to panic about global growth and rising interest rates, observed in global equity market volatility. Oil prices over \$100 were unsustainable, yet \$30 appears to be just typical overshooting behavior. Increased volatility and plunging commodity prices have failed to trigger much consideration about risk allocation schemes that increased commodity exposures, including gold. Investor speculation was facilitated by liquid ETFs in commodities that pushed up prices to unsustainable levels. Forces that drove overvalued commodity prices have reversed, and prices have generally declined since 2007. Some fear

lower commodity prices and weaker Yuan foretell the next recession, but this idea seems to be a red herring.

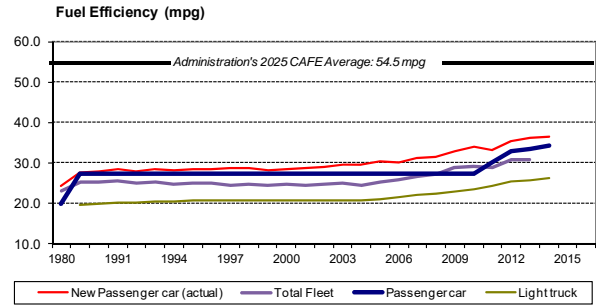
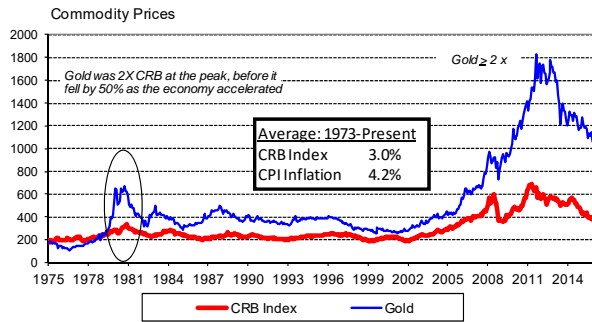
China has embarked on a radical transformation of its economy and financial system. It will be as difficult, as it is unprecedented. Market volatility was exacerbated by the strong run-up in prices with the first effort to liberalize markets, but stock market prices rose too high, too fast. China's stock market seems vulnerable, but there is emerging *Opportunity in Plain Sight* with compelling valuation and room for policymakers to maneuver. Chinese data is hard to trust, but secular trends of urbanization, industrialization and insatiable consumption underpin China, India, and Korea, as well as others in Emerging Europe and Latin America.

Turning attention to China's currency, trade-weighted Yuan appreciation contrasts with political rhetoric and a modest decline in the CNY/US\$ floating-peg rate. China adjusted its floating currency peg to lessen effects of Euro and Yen weakness to partially restore exchange rate competitiveness lost via U.S. dollar strength. Chinese yuan depreciation stirred memories of the Asian currency crisis in 1997, but the cause of currency adjustment is quite dissimilar. Chinese "manipulation" concerns seem tenuous in the historical context over the last decade.

Chinese Yuan vs. U.S. Dollar



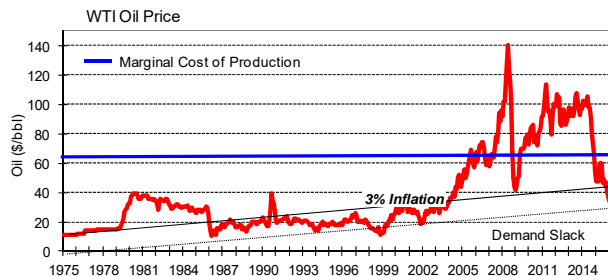
Fear of U.S. dollar devaluation encouraged speculative diversification into gold and commodities, but after 40% U.S. dollar appreciation since mid-2011 in the chart above, this notion appears misguided. Buyers of gold, which is --40% from 2011 highs, realized significant losses in their "store of value." It may seem instinctively prudent to allocate 5-10% to gold than buy a few put options or increase cash, but it is mathematically flawed. Portfolio diversification benefits most when return correlations are negative, yet the commodity correlation with global equities is +19% and -10% for bonds. Commodity volatility, including gold, is much higher than perceived, while underperforming inflation over the long-term. Hoped for portfolio diversification can't compensate enough for commodities much lower risk-adjusted relative return.



Source: EIA

Readers are familiar with our warning about irrationally soaring commodity prices, particularly oil and gold. We have cautioned that such strategic allocations are generally misguided given high risk for below inflation returns. Considering gold and oil volatility, commodities might not be prudent for retirement savings. Commodities tend to overshoot to the upside and downside, so differences above or below oil's \$50-60 equilibrium price (marginal production cost) can be significant given price volatility. Changes in input costs can't exceed output costs, thus commodity returns can't exceed 2-3% inflation, despite over 15% volatility. This theme is critical for both energy and basic materials--- that which is measured is managed from high prices to leveraging innovation.

More than 71% of oil used in the U.S. goes to transportation, so boosting CAFE standards 30% is consequential to lagging oil demand, just as "smart" efficiency gains reduced natural gas consumption. Economists historically used electricity and oil demand to project growth, but energy intensity has changed, and increased efficiency reduces energy utilization. Price effects demand too. So, although emerging countries increased their need for power, energy resource demand stalled for years, confusing investors.



Energy provided over 10% of U.S. capital investment, but last year collapsed to just 5%. It is not surprising capital investment was scaled back with investments predicated on \$70-80 oil prices. This gave rise to rerating high yield bonds, slashing valuations of private equity deals, and slowing capital expenditures. However, energy stocks may be cheap enough to overweight with attractive dividend yields, likely secure for larger integrated energy companies.

OPEC overproduction, including Iran and Iraq ramping up, plus rising U.S. exploration, outpaced oil demand. Oil prices below \$35 are unsustainable with escalating turmoil in the MENA region. The OPEC oil cartel has lost control of pricing power—that is beneficial for the world economy, not a growth concern. Oil companies will continue to invest to improve production efficiency, but not increase capacity. Since 2006, prices seem to be driven by investor speculation with securitization (inc. ETFs, derivatives) overwhelming natural hedgers.

Final Thoughts

Have the courage of your knowledge and experience. If you have formed a conclusion from the facts and know your judgment is sound, act on it, even though others may hesitate or differ. — Benjamin Graham

Focusing on emerging market growth and peak oil production as WTI oil prices reached \$100 gave way to offsetting energy demand destruction coming from a triple threat of conservation, substitution, and utilization innovation. Shut-in supplies from MENA are now coming on-line, exacerbating market imbalances.

Stocks can overcome a rising rate environment as long as the economy continues to grow, avoiding recession. If the economy slows too quickly, the Federal Reserve will slow its pace of interest rate hikes, but the most likely scenario is a steady path of hikes every other meeting or 1% per year, similar to 2004's cycle. Interest rates are too low with a bond-bloated balance sheet given moderate growth and rising inflation. Falling oil prices cut earnings growth and depressed inflation, but the effects are transitory and reverse in the coming months. The mostly likely scenario is a steady path of hikes every other meeting or 1% per year, most similar to 2004's cycle. The Federal Reserve has lost credibility that can only be restored with a steady hand in normalization. The next step is to reduce holdings as bonds mature, including \$1.36 trillion within five years.

Adding value is difficult and differentiating or being contrarian in portfolio management, beyond just provocative, is hard. Confidence in a discipline helps, however, but we also believe that long-term investors have lost focus and yearn for greater simplicity. Simple elegant truths are sometimes more difficult to discover, even when *Opportunity is Hiding in Plain Sight*. Increasing emphasis on risk allocation, from risk parity to maximum diversification, seems ill-advised with increasing opportunities, particularly as risk parameters become more unstable and uncertain. Taking advantage of opportunities requires a disciplined focus on risk-adjusted return objectives.

Investors have become educated about the adverse effects of high management fees, turnover, and transaction costs, few understand the impact of cash drag, particularly in mutual funds. Managers are more likely to outperform when market indices decline, as expected if they hold enough cash. Given the S&P 500's average total return of 13.6% over six years, just a 5% cash position yields a 0.7% drag on performance, exceeding expense ratios of many equity funds. There are various unintentional risks apparent in portfolios, but with prudent discipline and risk management, downside risk can be reduced.

Simplifying asset allocation can result in lower cost and ease of implementation, particularly in the face of complex challenges and varying economic conditions. Assuming *this time is different* never works out well, thus healthy skepticism is warranted when considering low risk strategies with expected exceptional returns. Active investors with patience and discipline can benefit from return dispersion and volatility if trading and management costs are administered prudently and risk is managed. With greater uncertainty, investors can be swayed by provocative promises, but our philosophy is to identify and focus on the things that intuitively matter most, while aware of coincident forces often mistakenly attributed.

Global markets and economies are at the threshold of several key inflection points, spanning inflation, productivity, and monetary normalization, including interest rates. *Opportunities Hiding in Plain Sight* emerge between asset classes, sectors, styles, risk factors, countries, and currencies. We think investors will return to embracing more conventional, liquid, and simpler strategic asset allocation of global balanced with broader mandates. Asset owners are countering high cost of external managers by bolstering their internal teams, observing the success of the Canadian Model while the Endowment Model is increasingly scrutinized. Moreover, *Risk-on/Risk-off* and flawed *New Normal* theories have finally faded, no longer relevant in an *asynchronous global expansion*.

Given current economic trends and valuations, we consider Industrials, Financials, and housing-related Consumer Discretionary to be compelling. Energy and Technology will be interesting once cheap enough. Low volatility, large-size, and high dividend yield equity tilts should underperform in a rising interest rate environment, particularly given extended valuations. This will tend to be a headwind for a traditional value tilt, but high quality earnings with above average growth and compelling valuations are more attractive.

The Treasury yield curve hasn't embraced the Federal Reserve's forecast for up to a 1% increase this year. Some suggest a flatter yield curve indicates increasing risk of recession, but Treasuries are uniquely attractive to European and Japanese investors with negative interest rates and weakening currencies. Risk of bond illiquidity could spike Treasury yields with high levels of government, asset-backed, mortgage, and corporate debt outstanding. Rising interest rates are particularly a risk to over-indebted countries with high fiscal deficits. The structural problems that triggered the European debt crisis of 2012 haven't been addressed yet, and Japan is now at even greater risk. Of course with uncertainty, there is *Opportunity Hiding in Plain Sight*.

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