Q3 2016 Economic Commentary

"There's no earthly way of knowing/Which direction they are going... There's no knowing where they're rowing..."

--Willy Wonka

We enter the final quarter of 2016 facing one of the more tumultuous periods across the globe in recent decades. While the U.S. enters the home stretch of a contentious and polarizing election, the political context in many Western countries is far from calming: in the U.K. the consequences of the June Brexit vote are in the developing stages in terms of policy; Italy is facing its own referendum and a deteriorating banking crisis; Spain struggles to form a government; France faces a messy contest between socialist, center-right and right-wing parties, and German Chancellor Angela Merkel faces the strongest challenges to her leadership alongside the imploding banking concerns centered on Deutsche Bank. Add to this mix the increasing concerns of a defiant and nuclear-armed North Korea, escalating turmoil in the Middle East and continuing terror threats that all serve to amplify uncertainty.

Despite the deteriorating backdrop, capital markets have consistently shrugged off such concerns with the benefit over the last few years of ever increasing liquidity injections. Unconventional central bank policies involving large asset-purchase programs along with share repurchases by corporations have fostered incremental demand and engendered more than just a boost in asset prices. They have also repressed volatility and the yield typically available to investors encouraging many to take on more market exposure.

We have long been concerned about the pronounced decoupling of capital market prices from the underlying fundamentals. Our concerns are now increasing as it appears the sources of liquidity may be changing and their impact waning. The long held concern of many of the unintended consequences of low and even negative interest rates (NIRP) is gaining traction as the benefits of these unconventional policies decline. The Bank of Japan (BOJ) and the European Central Bank (ECB) have recently refrained from additional policy moves generating signals that they may be more reluctant to attempt more, absent notable deterioration in economic activity.

The other primary source of liquidity, corporate America, is exhibiting a conspicuous slowdown in the rate of share buybacks and dividends. As earnings have slowed over the last two years, corporate cash levels along with the appetite for more debt has declined. The markets will now be more reliant on economic fundamentals and increasing corporate earnings growth. Here we are more sanguine.

The most recent indicators of both domestic and global economic trends depict a global economy decelerating further to the slowest growth phase of the last three years. Following six consecutive quarters (2Q 2014-3Q 2015) of Gross Domestic Product (GDP) growth in excess of 2% annualized rate (a/r) and averaging almost 2.8% over this period, the United States has slowed to stall speed starting in 4Q of 2015. For 2016, we project growth to average 1.6%, the weakest year of the recovery. This is consistent with much of the developed world as we see growth in the Euro Area estimated at 1.6% and Japan vacillating between expansion and contraction to end up with about 0.5% growth. Though we do not foresee a recession over the next few quarters, the odds are increasing and the current pace of growth is not sufficient to lift inflation to the levels sought by central banks.

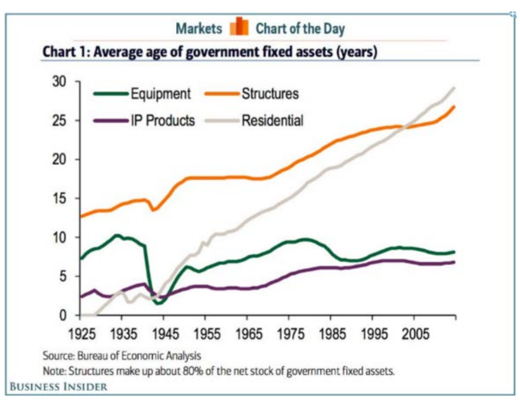
By contrast, emerging-market economies, led by China, India, along with some stabilization in Russia (and positive signs in Brazil), are experiencing their strongest expansion in two years, although still well below historical rates. According to the International Monetary Fund (IMF), emerging-market GDP is expected to advance by 4.2% this year. A major headwind to the current global recovery are the growing populist movements threatening trade and immigration. The World Trade Organization (WTO) estimates that the pace of global trade in 2016 has collapsed to a rate of 1.7% (with a tepid projection of 1.8% in 2017), the lowest since the financial crisis. We are fearful of the risk that a continued rise in protectionist measures will further impede longer term economic growth.

Despite that outlook, a key catalyst to help generate meaningful growth may be on the horizon. As central bankers tacitly admit that monetary policy may have hit the wall in terms of effectiveness, the pressure will increase on politicians in the developed world to formulate major fiscal stimulus programs. This is one area where both U.S. Presidential candidates seem to concur.

A recent study by the American Society of Civil Engineers (ASCE) estimates that through 2025, the United States has funded only about 56% of its needed infrastructure spending. The nation needs to spend $3.32 trillion to keep its ports, highways, bridges, trains, water and electric facilities up to date but has funded only $1.88 trillion of that according to the ASCE. The shortfall rises to $5.18 trillion through 2040 without new funding commitments.

Crumbling infrastructure "has a cascading impact on our nation's economy, impacting business productivity, gross domestic product, employment, personal income, and international competitiveness," said the ASCE report, in an update to its previous report, released three years ago. It also dampens families' disposable income. From 2016 through 2025, each household will lose $3,400 annually because of infrastructure deficiencies, the report notes.

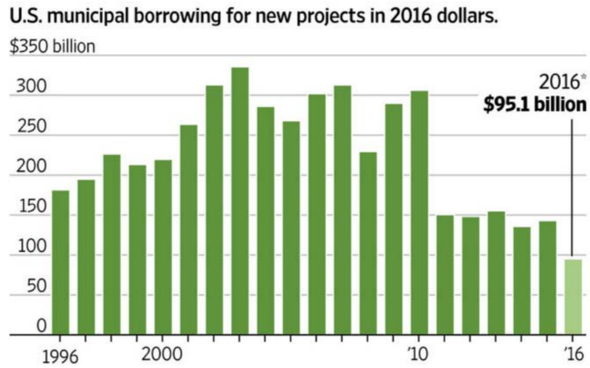
The same study notes that low infrastructure spending has translated into an increasing average age of government fixed assets from 21.8 years in 2009 to 23.7 in 2014. Structures are the main driver, with the average age rising from 24.7 to 26.7 (see chart below).



Historically low global interest rates have made borrowing cheaper than ever. However, instead of spending on aging roads, bridges and buildings, many state and local governments are scaling back in the face of declining tax revenues and underfunded employee pensions.

Issuance of new government bonds have recently dropped to levels not seen in the past 20 years with only about $140B in new project bonds issues in 2015. Adjusted for inflation, that is 53% lower than in 2006 and

21% lower than in 1996. So far this year, municipalities have borrowed $95.1 billion, about $10 billion more than at this time last year (see chart below).

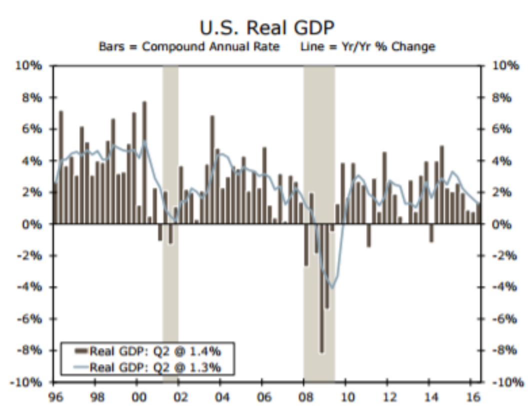


A full seven years after the recession ended, voters and government officials remain scarred by the deep budget cuts they endured at the height of the financial crisis and the sluggish revenue growth that has constrained spending since then. Federally, there is also the fiscal reality with which to contend. Following five years of a declining fiscal deficit, the Congressional Budget Office (CBO) estimates that in 2016 the fiscal deficit will balloon to $590B an increase of over $140B from last year.

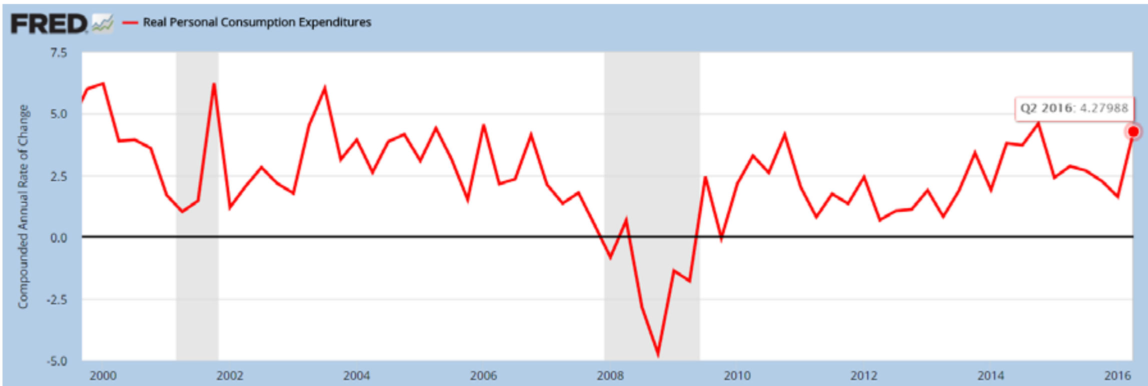
The dominant aim of economic policy should be to take advantage of historically low interest rates and combine larger fiscal deficits with stronger public investment. Though many are understandably skeptical of the efficacy of large scale public investment, if done well it would raise potential economic growth and likely engender greater private investment. Debt financed investments in infrastructure and other projects that generate returns that are higher than the interest payments on the debt do not increase the burden on taxpayers. All over the developed world, rising debt levels have left the private sector reluctant to borrow. But as the yield on government debt in these countries continue to decline, the hurdle rate to clear the interest rate on the funding drops precipitously. The government is now in the position to sustain economic activity with less concern about the size of public debt.

UNITED STATES:

The Bureau of Economic Analysis (BEA) fine tunes prior year GDP estimates multiple times as newly available and revised source data becomes available. The most recent revisions were in July for the 2013-2015 period. Full year 2015 growth was revised to 2.6% representing the best annual figure since 2006. Additionally, updates to the data now show that during the six quarters from 2Q 2014 through the end of 3Q 2015, GDP growth actually annualized at over a 2.9% growth rate. A discernable slowing starting in 4Q of 2015 now depicts an economy that has grown barely above 1% since that time and that has slowed to a 1.3% y/y rate of growth as of the most recent 2Q report. We have further reduced our full year 2016 estimate of GDP to a level around 1.6% with an estimation of a second half growth rate closer to 2%.



We have postulated for the last two years that tightening labor markets and commensurate rising wages would combine with reduced energy expenses (now we add declining food inflation to this list) to engender a cyclical upswing in consumer spending. The revised data now seem to substantiate that thesis. Real personal consumption expenditures (consumer spending adjusted for inflation) averaged 3.4% in the six quarters including 2014 through the first half of 2015. Since that time however, there has been a downshift in spending. Though 2Q real consumer spending accelerated to a 4.3% a/r (see chart below), this period appears anomalous. The prior three quarters averaged a 2.7% gain and we foresee 3Q to be more in line with the recent trend around 2.8%. Though this slowdown may not appear large, to an economy reliant on consumer spending, this decline likely subtracts 0.5% from GDP.



It is becoming increasingly probable that the consumer (facing high levels of debt combined with near 0% investment income) realizes the only way to achieve financial goals is via increased savings which is evident in the rise in the savings rate from 5% to almost 6% during the period noted above. Additionally, what had not been completely factored in might be rising health care expenditures.

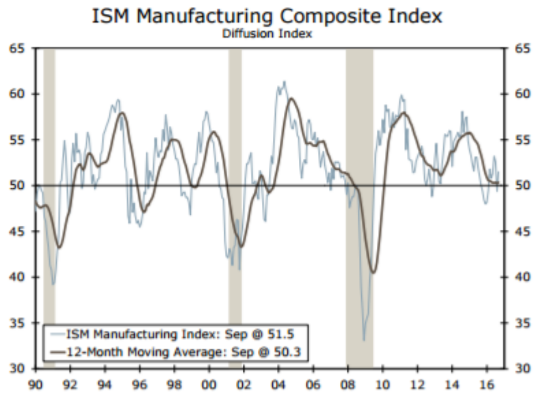
Rising health care premiums are leading employers to share the cost via increased use of high deductible health plans (HDHP) that keep premiums down. The IRS deems an HDHP to have a minimum deductible of $2,600 for a family and the share of covered workers participating in these plans has grown from 8% in 2009 to over 29% in 2016. Additionally, the percentage of covered workers that now have an annual deductible of over $1,000 in total is now over 50% versus just 10% a decade ago. Though the lower premiums appear seductive to the thesis of expanding cash flows, most visits to healthcare providers now require the consumer to foot the cost. We feel that the consumer is now spending more out of pocket before these deductibles are reached thus crowding out other consumption. Though this spending is eventually captured in the data of the Quarterly Services Survey (QSS), these increased costs are offsetting much of the benefit from lower food and energy costs.

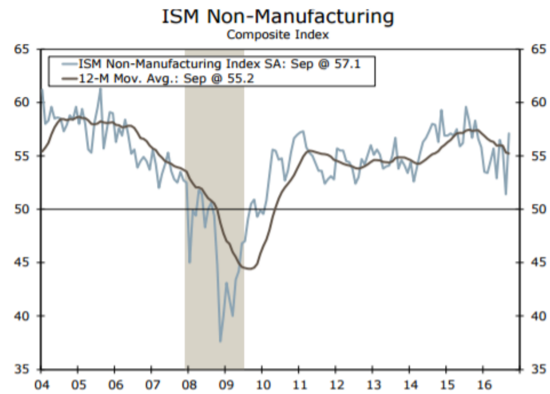
Entering 2016, we noted our expectation that both the housing and auto markets, two major contributors to the rebound in the economy since the recession, were slowing and that auto sales may have peaked. Following a 10% increase in housing starts (the main component of residential investment feeding into GDP) in 2015, the most recent data from August are now up less than 1% over last August though up over 6% through the same period last year. With mortgage rates expected to remain historically low and builders finally filling much of the low end inventory so desperately needed, we remain constructive on housing though expect a slowing to about a 4% annual increase in residential investment.

Though our prior call of peak auto sales may be technically accurate, total light vehicle sales still continue strong following a record year in 2015 of over 17.5MM in sales with a 4Q pace of just under 18MM. Through August, auto sales are still averaging an annual sales pace of over 17.2MM. We must also note a tightening of credit standards in auto lending that we expect will continue to moderate sales growth.

The factors (a rising U.S. dollar and plunging energy prices) that had concerned many regarding the weakness in the Institute of Supply Management (ISM) manufacturing and services index have long since stabilized. Still, ISM readings continue to barely remain in expansion territory. The September reading of

51.5 (see chart below) was an improvement but continued overseas weakness along with the dramatic pullback in energy exploration and production remains an impediment to improved export growth. Following a narrowing of the trade deficit in 3Q relative to the prior quarter, we expect net exports (the difference between exports and imports) to be additive to 3Q GDP by as much as .5%.





Still, we would not expect real exports to be a positive contributor to GDP growth on a sustained basis. Overseas economic growth should remain lackluster, depressing the trend rate of real export growth. Additionally, still solid consumer spending in the U.S. should facilitate a higher trend in import growth leaving net exports to revert to being a modest drag on U.S. real GDP growth in coming quarters.

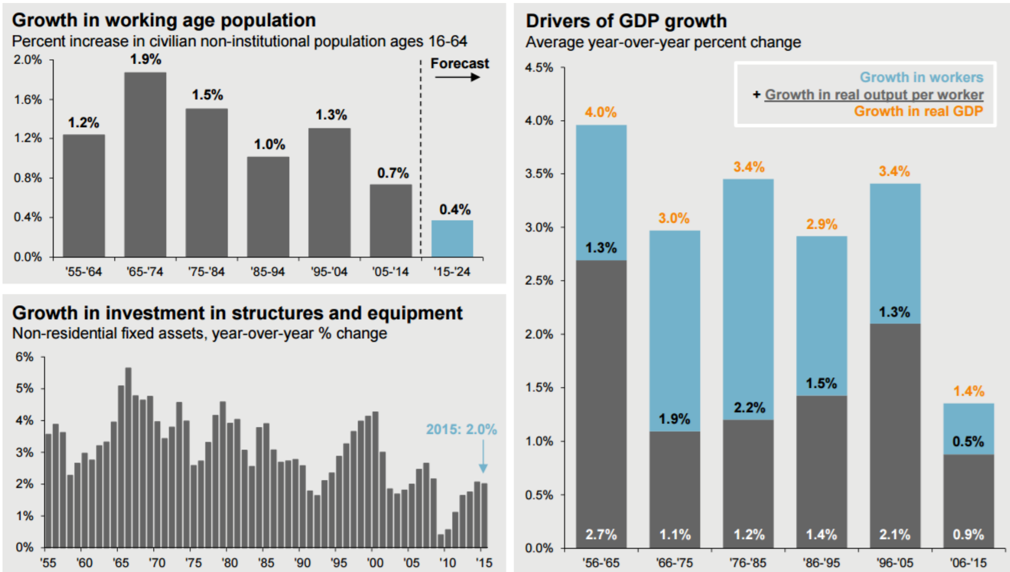
One component of the ISM index that is concerning was the high reading on the inventory component of 53.0, the second highest reading during the current expansion. Inventory builds are positive for growth as GDP measures production. For five consecutive quarters, inventories have been a drag on GDP growth and this reading indicates a still elevated level and an expectation that there is further to go in the current drawdown of inventories.

Moreover, we feel the consumer will remain critical to any expectation of an improving last half of the year as uncertainty surrounding business investment, net exports and inventories perseverate. For the first half of 2016, equipment investment and spending on structures declined. We are circumspect for a turnaround in business investment for the balance of the year despite three straight quarterly declines that have created a lower base from which to affect a turnaround.

Despite political promises to increase economic growth to levels of the 1980s and 1990s, one should remain dubious of that likelihood on a sustained basis. Growth in gross domestic product in a country is the product of increases in aggregate hours worked (labor force growth) along with productivity increases (defined as a measure of output such as revenue or inventory per unit of input of labor or capital). The United States is mired in a slow growth environment due to the secular impact of an aging demography in the developed world along with stagnating productivity growth. From 1960-2008, gross domestic product in the U.S. grew at an average annual pace of 3.3%. It is estimated that about 50% of that was due to an expanding labor force as baby boomers and women entered the work force in droves. Those tailwinds have changed course and since 2008, GDP has grown at a pace of less than 2.0%.

Growth in working age population averaged over 1.3% per year during the 50-year period from 1955-2005. As the first of the baby boomers turned 60 in 2005, we experienced the early declines in labor force growth during that decade (2005-2014) to a level of 0.7% about half of prior growth rates. From 2011 through 2015, the government's official labor productivity measure shows only 0.4% annual growth in output per hour of work. The trend is heightened recently with productivity for 1Q and 2Q 2016 representing a sequential contraction at a rate of -0.6% each which follows a -1.7% slowdown in 4Q 2015.

The charts below from J.P. Morgan do a great job of combining the inputs to GDP growth noted above and contrast it by decade with the decelerating output. It is critical to understand the impacts of both factors (demographics and productivity) on many other aspects of our economy.



As a population ages, aggregate spending needs change. Older people tend to be savers rather than borrowers. Younger people, by contrast, tend to be borrowers. As the U.S. has moved from a manufacturing base to a service-oriented economy, this has a greater impact on growth. The contribution of the consumer in such an economy has grown from 55% of GDP to a current level around 70%. Much of the GDP deceleration noted above is due to the slowing of real consumer spending from a post-World War II average of 4.1% to 2.2%. This is due to demographics.

This aging demography is also deflationary, global in scope, and affects productivity. More savers and fewer borrowers drive interest rates lower simply due to supply and demand. More money flowing into savings means the banks and other institutions gathering those savings need not boost rates to attract those deposits. In addition, aggregate hours worked falls as the population ages and workers move into retirement. Lower aggregate labor input reduces the amount of output produced by each unit of capital. This in turn acts to reduce the real return from investing in capital. Demographics are critical.

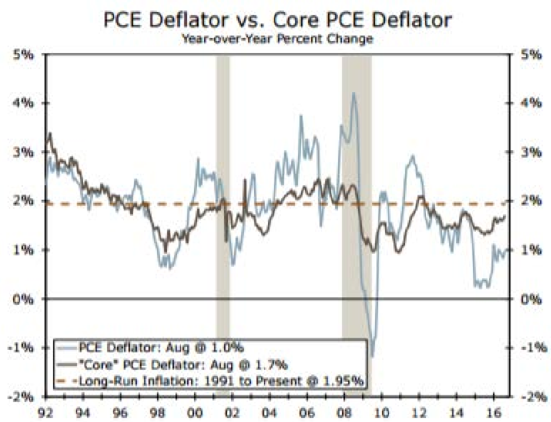
Productivity is the primary reason that despite slower economic growth an American worker makes much more today than a century ago and enjoys the benefits of a higher standard of living. Lack of productivity growth in turn has major implications for the job market and the recent slowdown in hiring may be a manifestation. The conundrum during this economic recovery as to why the labor market was so strong yet gross domestic product so weak lies in lack of productivity. From the 4Q of 2015 through the end of 2Q 2016, aggregate hours worked rose at a pace almost two-and-a-half times total business output. The need for additional labor is muted in such an environment and is a major reason we have anticipated a slowing in hiring.

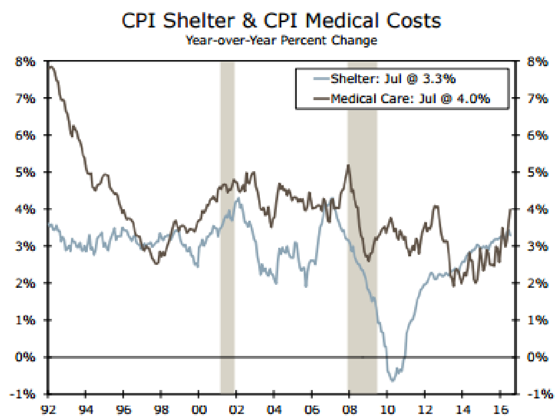
INFLATION:

In early October, the Organization for Economic Cooperation and Development (OECD) estimated that the annual rate of inflation in the Group of 20 largest economies (accounting for 85% of estimated global economic output) eased to 2.1% from 2.2% in July. This level of price increases represented the smallest rise since October 2009, when they increased by 1.7%.

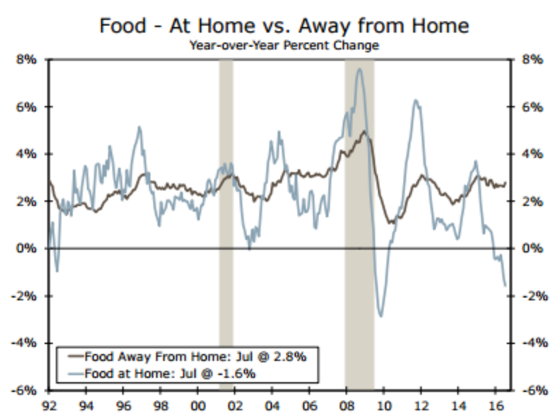
Despite the secular global concerns of deflation, we had noted in our annual commentary our expectation that the core inflation rates as measured by both the Consumer Price Index (CPI) and the preferred measure of the Federal Reserve, the Personal Consumption Expenditure (PCE) deflator, would rise and converge with the headline rate near the Fed target of 2%. Our view was predicated on the methodology of calculating the rate of change off of a low inflation base combined with rising wage pressures. We would now say we were partially correct.

As the chart below left indicates, both the headline and core (ex-food and energy) readings have gravitated up towards our expectation. However, the composition has been unexpected. As the chart on the right shows, shelter and medical costs (up 3.3% and 4.0% respectively) have accounted for all of the increases in prices for consumers which would be deflating were these inputs excluded.



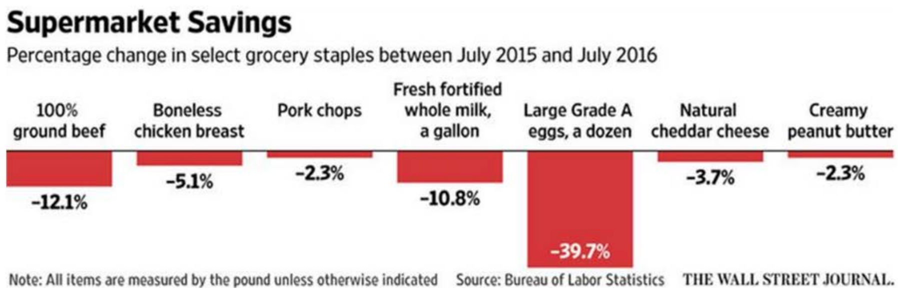


However, and in a startling development almost unheard of outside a recession, food prices have now fallen for nine straight months in the U.S. This represents the longest consecutive decline for food deflation (outside of 2009 during the latter part of the financial crisis) in over 55 years. Low energy costs and commodity prices as well as pricing competition from discounters are generally credited as contributors. For the U.S. consumer, this is another welcome development (gas prices are also down about 10% from year ago levels) with food deflation now down -1.8% over the last year as of August (chart below).



For those who have not noticed these price drops at their local supermarket, I will anecdotally note a recent purchase of a dozen eggs for 79 cents. This would have been around $3 a year ago. Nationwide, the price of a gallon of whole milk on average was $3.02 in August, 12% lower compared to a year ago. The price of a dozen large eggs fell 52% to $1.46 in the same period. In addition to reduced energy costs, this trend is being fueled (pun intended) by an excess supply of dairy products, meat, grains and other staples and less demand for many of those same products from China and elsewhere due to the strong dollar.

While consumers reap the windfall, these deflationary concerns are taking large tolls on businesses from grocery stores (already dealing with paper thin margins) to food distributors to restaurants. Though normally falling food prices might be a boon to eating out, restaurants are already facing higher labor costs and the need to raise prices to protect margins. The gap between the cost of eating out or cooking at home continues to widen.



THE FEDERAL RESERVE:

The concept of low or even negative interest rates being employed to stimulate demand is predicated upon the view that households attempt to smooth their consumption over time. Low interest rates should encourage consumers and businesses to spend by depressing returns on savings and safe assets such as government bonds. Such spending should create demand for goods, help lift sagging inflation and boost economic growth. That is the tired playbook from which most central bankers read. More realistically, it is the current high levels of debt and poor creditworthiness that directly constrain spending.

Meanwhile, these low rates have a contracting effect on household incomes via lowered interest on savings. With increased longevity and lower income on savings, it is logical that we find consumers subject to these low or negative rates are increasing their savings. Central banks are punishing savers without stimulating growth. However, it appears now their choices are between bad and worse.

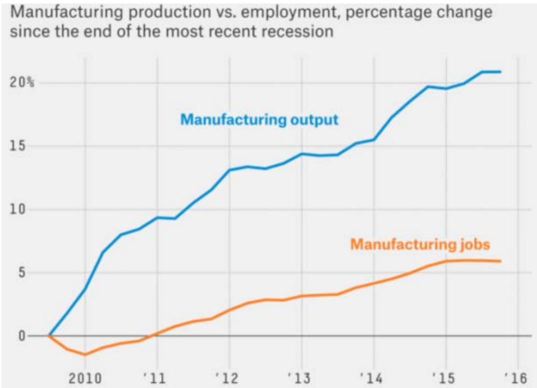
We have long been on record that the Federal Reserve was unlikely to raise rates at all in 2016 after a similar call for 2015. We maintain this view though the markets are pricing in one hike in December.

As Lael Brainard (a current member of the Federal Reserve’s Board of Governors) accurately assessed in a recent speech, “the costs to the economy of greater than expected strength in demand are likely to be lower than the costs of significant unexpected weakness”. With the Federal Reserve facing a GDP growth rate of about 1.6% for full year 2016, the lowest of the recovery, Janet Yellen would not increase the federal funds rate if she were truly data dependent as claimed. The case for raising rates may be predicated upon the increased benefit to savers and pension plans from higher income and to both banks and insurance companies of higher margins. However, that benefit would surely be negated were the increase in rates to propagate a further economic downturn.

EMPLOYMENT & WAGES:

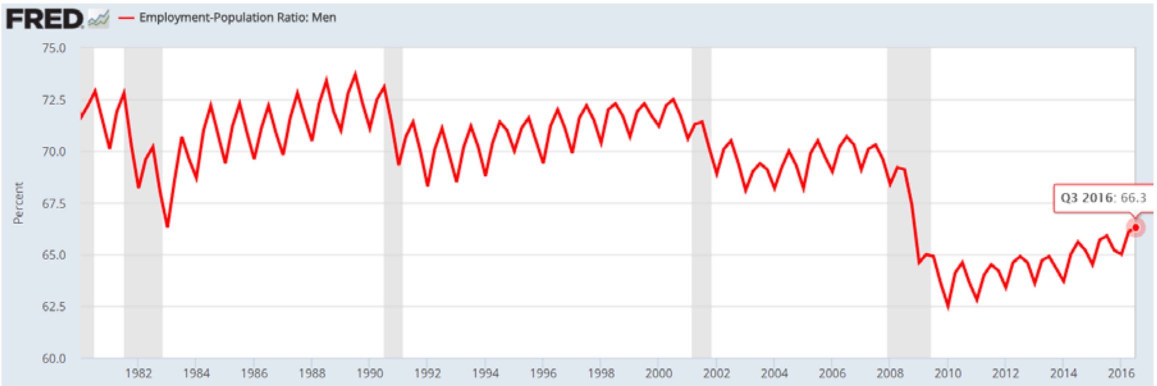
Though this does not comport with the political narrative, 2015 was a record year for manufacturing production in the U.S. no matter how you measure it. Voters clinging to the hope of promises to bring back manufacturing jobs to America are in for a big disappointment. There’s no ambiguity on this as every available metric tells the same story. U.S. manufacturing production is strong; we’re just doing it with far fewer workers. There can be no revival as there has really been no collapse.

With the focus around the loss of manufacturing jobs (estimated at 4.5M since NAFTA took effect in 1994 and 7.5M since the 1977 peak), we need to accept that most all of these jobs are not coming back. This has less to do with trade and more to do with the automation of most of these positions. Heavily automated factories are producing higher levels of manufacturing output with a fraction of the workers that were previously employed. Since the recession ended in 2009, total manufacturing output has increased over 20% (chart below). However, employment in this sector is up only 5% based on data as of the end of 2015.



Factory work has evolved over the past 15 years or so as companies have invested in advanced machinery requiring new sets of skills. Many workers who were laid off in recent decades—as technology, globalization and recession wiped out lower-skilled roles—don't have the skills to do today's jobs. The mismatch poses a problem for the economy, stymieing the ability of businesses to increase production and weighing on growth. This is exemplified by the number of open manufacturing jobs that have been rising since 2009, and this year stands at the highest level in 15 years, according to Labor Department data.

While the employment-population ratio for men has increased to over 66% during the recovery, it's clearly not back to its historical level (see chart below). And prime-aged men are exactly the people that a big public works program would put to work, because this is the demographic that most manufacturing and construction workers come from. Construction employment is still well below what it was a decade ago; infrastructure spending would change that.

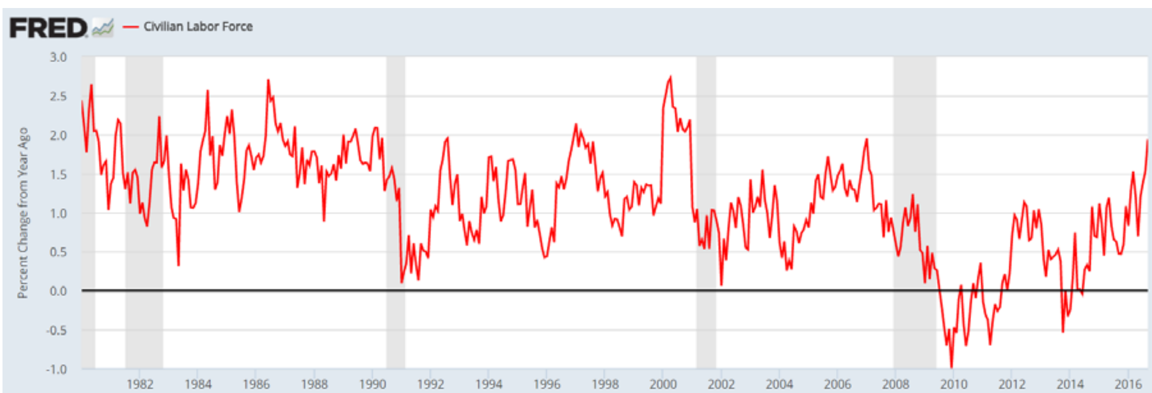


The most recent nonfarm payrolls report for September continued to show a moderating but still solid pace of job growth. Job gains have averaged over 192K for each of the last 3-month and 6-month averages. As an economic cycle matures, much of the excess slack of the labor market dissipates and the job growth should decelerate as the unemployment rate falls. After averaging payroll growth over 230K per month for the entirety of 2014 and 2015, we are now experiencing this slowdown.

As the slack in the labor market dissipates and job gains slow, the labor market tightness generally puts upwards pressure on wages. This is what we have been expecting for the better part of two years but the data from the Bureau of Labor & Statistics (BLS) on average hourly earnings (+2.6%y/y) along with our favored indicator, the Atlanta Fed Wage Tracker (+3.3%y/y on chart on next page) only mildly corroborate this.

The reason for this may again be demographics. Older workers tend to earn more than younger workers, due to skills, experience, and tenure. Data available from Ned Davis Research show that since 2000, their median weekly earnings have been nearly double those of the 16-24 age group, about 20% higher than those of the 25-34 age group, and about 5% higher than those of the entire 25-54 age group. Therefore, as older workers leave the labor force and are replaced by younger workers, the downward pressure on average wages from this demographic shift intensifies. This impact will be felt for another decade until the baby boomer cohort retires and is a logical explanation for the elusiveness of aggregate wage growth in this cycle.

The best news in the recent labor reports is found in the growth of the labor force as a whole. Whether due to greater opportunities, higher wages or even the end of many social benefit programs. The labor force has now grown by over 3MM workers over the preceding 12 months, a gain of almost 2% of the work force.



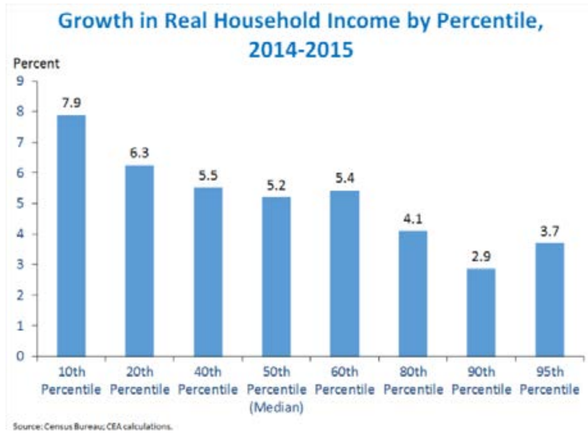
CONSUMER:

We often return back to our long held view that we are in the embryonic stages of a long shift from capital to labor as we feel the implications for the economy, markets and, obviously, politics should not be underappreciated. Following an over 40-year period of declining wages and salaries as a percentage of GDP (see chart on next page), the data is moving strongly towards corroboration of this thesis.

A major area of concern from much of the data we have shared has been that it is in aggregate and often obfuscates the uneven nature of the recovery for the American worker. We are more positive following the release from the Census Bureau in early September on income and poverty in the United States for 2015.

According to the report, real median household income in the United States increased by 5.2% in 2015, representing the fastest growth on record. Median household income grew $2,798 to $56,516 in 2015 (see chart below). This is the first time that annual real income growth exceeded 5% since the Census Bureau began reporting data on household income in 1967. These levels still remain 1.6% lower than the 2007 level prior to the recession and 2.4% below the all-time high recorded in 1999. Still, data from 2016 so far point to further strong gains in real household incomes, which depend on employment, nominal wages, and inflation.

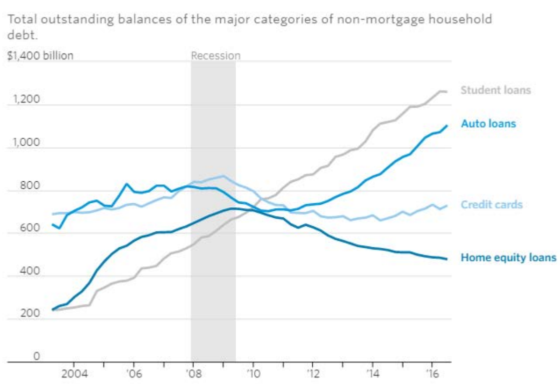
More important perhaps than the aggregate data, was the composition of these gains (see chart on next page). While real median household income increased 5.2%, the gains were even larger where they are most needed. The lower half of the income distribution ranged from an increase of 5.5% for households at the 40th percentile to an increase of nearly 8% for households at the lowest 10th percentile. Interestingly, though households at the top half of the income distribution also saw increases, their gains were smaller, with an increase of 2.9% in the 90th percentile of household income. The year 2015 marked the first time real household income grew at all percentiles reported by the Census Bureau since 2006, and real income growth in 2015 was the fastest since 1969 for the 10th, 20th, 40th, 50th, and 60th percentiles. Additionally, the strong improvement in incomes for the lower end of the distribution produced a notable drop in the overall poverty rate from 14.7% to 13.5%, the lowest in eight years.

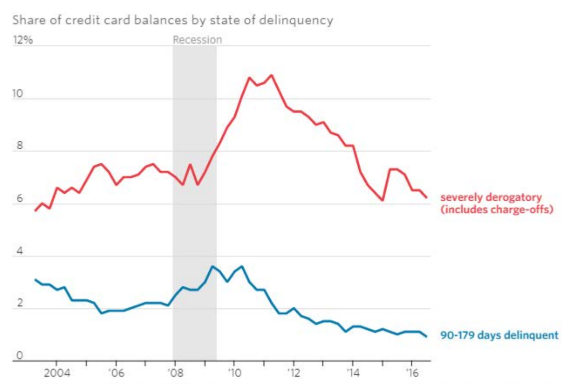


New York Fed's latest quarterly report on household debt released in August underscores how the nation's credit cycle has evolved. Following the worst of the financial crisis, the American consumer delevered especially in the areas of mortgage and credit card debt. Now, we are seeing a renewed, but still tentative, embrace of credit.

In the aftermath of the financial crisis from 2008 to 2013, total household debts dropped by more than $1.5 trillion. Initially, the rebound in consumer credit was centered almost exclusively in student-loans and auto-loans (see chart below left), and then mortgages and finally credit cards. Total household debt balances are still $400 billion below their 2008 peak.

Credit-card debt had declined about $200B during this period as households cut back on their use (and as financial institutions cut off credit). As expected the declining use of credit was particularly pronounced among people with low credit scores, where the number with a credit card declined by more than 10%, according to the report.





We often think of consumer debt in negative terms as it rarely is used to generate a stream of cash flows to pay the debt back but rather for consumption. However, credit is critical to assist households in smoothing out consumption if used judiciously. We must monitor delinquency rates but for now, credit shows few signs of distress and depict a positive trend in managing household debt. As shown in the chart above right, less than 1% of credit card balances are 90-180 days delinquent. This represents the lowest on record and the level of severely delinquent balances including write-offs are, at 6.2%, near the lowest on record. Overall, the consumer remains in an improving condition in both their income statement and balance sheet.

HOUSING & AUTOS:

We often focus on housing as a strong barometer of domestic economic activity. In total, housing is estimated to contribute between 15%-18% of total gross domestic product in two ways. The primary input is via housing services that includes rent and utilities. We rarely focus on this metric as it has a very small variance through economic cycles averaging between 12.2% and 12.8% of GDP over the last 35 years. The more critical input upon which to focus is residential investment.

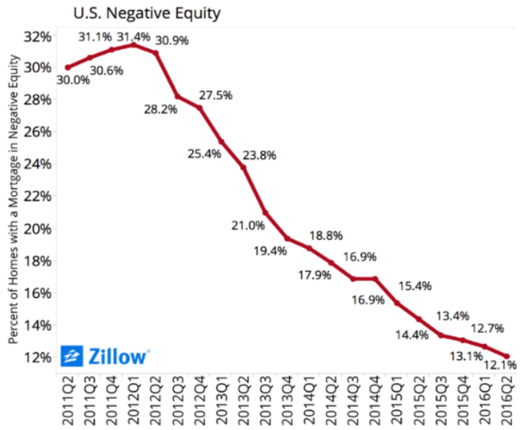
Residential investment includes all construction of new single and multi-family units along with remodeling, manufactured homes and all brokers' fees. Brokers fees also come from existing home sales but the balance is concentrated in new construction via housing starts of single and multi-family units. There is much greater economic sensitivity here as evidenced by the dramatic drop in the GDP contribution from a level of 6.1% of GDP in 2005 to a trough of around 2.6% in 2010. Hence a focus on housing starts is critical and is why we have focused on the first time homebuyer and their absence from the market.

Though housing starts in August declined -5.8% from July, this disappointing reading (impacted by flooding in the Gulf region) did follow a five-month high in homebuilding and still leaves the rate of starts in the 3Q up at an annual rate of 6.7%. This represents the best pace since early in 2015 and the third consecutive quarterly gain in activity. It is also consistent with the cycle high reading of builder sentiment from the National Association of Homebuilders (NAHB). That is the good news. Still historical perspective is required.

As one can see in the chart below left, the current level of combined housing starts (currently annualizing at 1.142MM units) is far below historical averages. In fact, the level of housing starts is consistent with levels rarely seen outside of a recession and this data is not population adjusted. Despite these low absolute levels, housing is continuing to be an increasing contributor to overall GDP growth. With residential investment currently 3.5% of GDP versus a 35-year average of 4.3%, there is ample runway for increasing contributions to growth. Though up 5.7% y/y, 2Q residential investment declined at a pace of -7.7% as housing appeared to hit a soft patch. We still anticipate a positive contribution for 2016 but for this to occur, the first time homebuyer is needed.

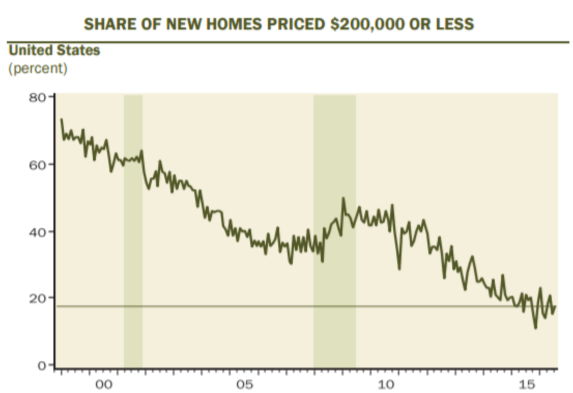
According to the Current Housing Report from the Census Bureau, homeownership in 2Q of 2016 tied record low levels of 62.9% last noted in 1965, the first year of the data. Homeownership for the critical 35 and under cohort fell to another record low of 34.1%. A major reason for this continues to be affordability that is more a function of supply than any other factor.

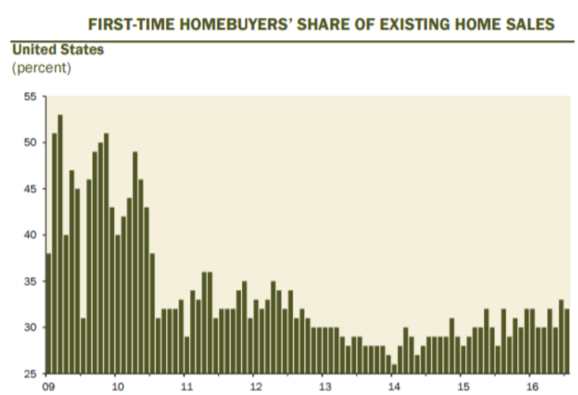
According to recent data compiled by Zillow, 5.9M borrowers still owe more on their mortgages than their homes are worth. As seen in the chart below, this total now represents about 12% of all homes with a mortgage and is way lower than the 31% level that characterized the depths of the housing crisis. However, this level is still very high relative to historical numbers of around 2%-3% and would have been expected to be much lower with national home prices rising near the peaks of 2005. Ironically, these high levels of negative equity are actually one of the driving forces of rising home prices. A homeowner with negative equity in their home is less likely to sell and move thus reducing the amount of inventory that would otherwise be available to offset rising demand.



The housing crash in many ways still casts a pall over the entire market. Mortgage underwriting remains stricter than it has in the past and appraisals are often too cautious as well. Though recently improving, new home construction has also been slow to come back online, worsening supply constraints. Moreover, the reluctance of homeowners to put their homes on the market has meant that home prices have risen much faster than income growth, reducing housing affordability.

Largely due to these factors, the impact on pricing is particularly acute at the lower end of the pricing spectrum. Currently, single family homes selling for less than $200,000 make up a near-record low of just over 15% of total inventory. This, along with the negative equity more prevalent in housing within this cohort, is the primary reason for the long absence of the first-time homebuyer. Pre-recession norms for this cohort put market share at 40%. Currently it is about 32% (see charts below).





The U.S. auto industry remains one of the strongest components of economic growth despite our anticipation of peak auto sales entering 2016. 2015 represented the best year ever for sales of new cars and light trucks at 17.5MM units and 2016 is on a pace of 17.2MM units based on data through September. Though sales growth is now slowing year over year (see chart on next page), the current pace still represents a strong level. We have noted before that easy lending has been a prime reason for the sales pace and concerns over a default wave in this area are rising.

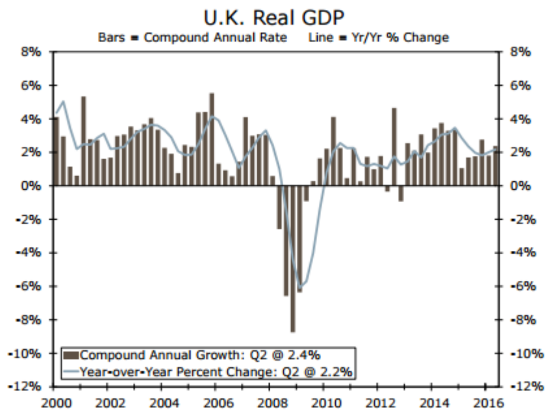
Though subprime auto loans are now being securitized and sold to investors similar to subprime mortgages, that is where the similarity ends in our financial sector. Mortgage-backed securities were and still are an integral part of our financial system with these securities used as risk-free collateral in various inter-bank lending. Even more importantly is the distinction in the household area. The bubble in housing increased consumer spending by multiples as home equity appreciation was being extracted to subsidize consumption increasing leverage that had to be repaid. Auto debt, on the other hand, actually crowds out other consumption so no additional leverage is created. Additionally, we are now seeing tightening standards in auto lending. This will both ameliorate such concerns while also impacting future sales growth.

INTERNATIONAL:

UK:

Following the passing of the referendum to initiate the departure of the United Kingdom from the European Union (known as Brexit), there was unanimity in the sphere of global economists of a negative impact to the U.K. economy. However, so far, the post-Brexit economic indicators have been relatively strong and certainly better than feared. Manufacturing indicators are now at the highest level in almost two years helped by the 17% decline in the value of the British pound versus the U.S. dollar since Brexit to 1985 levels. The Bloomberg economic surprise index for the U.K., which was in negative territory in June around the time of the referendum, recently rose to its highest level since 2013. While it is tempting to jump to the conclusion that the dire warnings were wrong, we think it is way too soon to signal the all-clear.

Though the 2Q GDP release depicted an economy growing at an annualized growth rate of over 2.4% and up 2.2% over the last year (chart on next page), this data was not impacted by the Brexit vote. We still perceive a strong possibility of a mild recession impacting the region over the latter part of 2016 into the first half of 2017. With Prime Minister Theresa May setting March 2017 as the date to invoke Article 50 of the EU's Lisbon Treaty and set in motion the formal negotiation for the U.K. exit, Brexit will exert its influence with a lag and concerns will now start to foment. The negative impacts will take some time to reveal themselves as foreign trade catches up with renegotiated trade pacts and that will likely exert a downward impact locally and even in Europe more broadly.

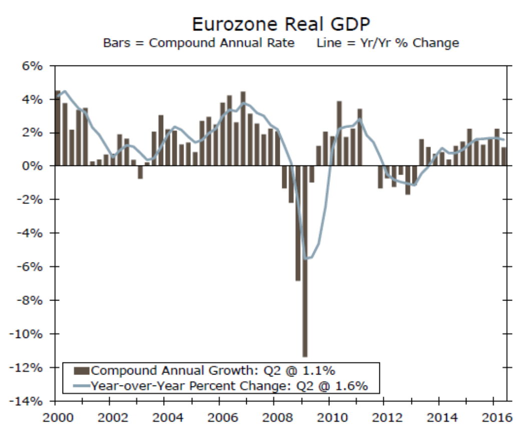


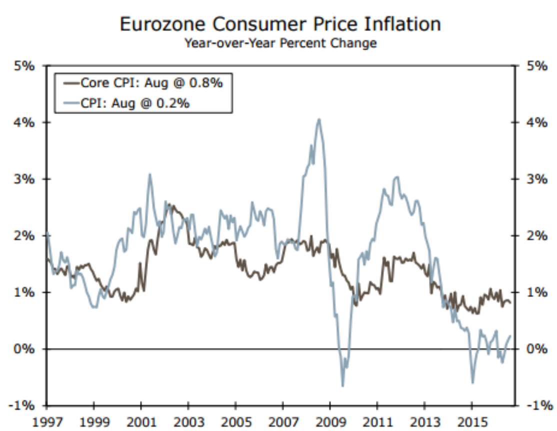
EUROZONE:

Though most investors will remain focused on the U.S. presidential election and a potential interest rate increase by the Fed in the last quarter of 2016, the rise of populist movements along with increased political instability across Europe require attention. The next few months will witness a referendum in Hungary on the EU refugee situation and presidential elections in Austria in early December. This will be followed shortly by a key presidential election in France in 2017 followed by general elections in the Netherlands and Germany. However, the Italian constitutional referendum in early December may be at the forefront of investor concerns.

Though the fourth largest country in the European Area in terms of GDP, Italy is a weak link with debt of over 132% of GDP and a banking sector burdened with bad debts. The instability in this country may be best illustrated by noting that in the 70 years following the vote for the country to flee the monarchy of Mussolini and become a republic, Italy has had 63 different governments.

While further stimulus remains a possibility, the ECB has refrained from any further easing since Brexit. Despite having rebounded from the crisis period of late 2011, the Eurozone remains mired in a slow growth economic environment along with the rest of the developed world. 2Q GDP growth expanded at a pace of 1.6% y/y, precisely the same growth rate as 1Q and has been stuck in a very narrow range over the last two years.

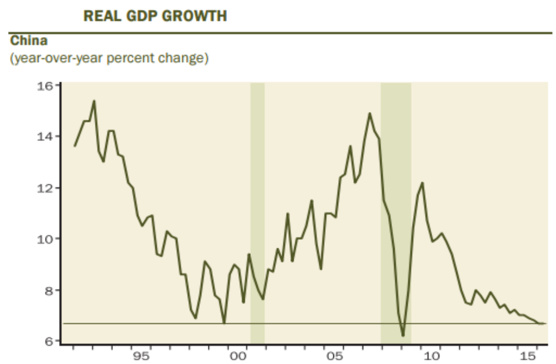




Though the August reading of +0.4% represented the highest headline inflation reading since 2014, CPI readings continue to stagnate. The core inflation rate (excluding food & energy) remain at less than 1% way below the desired target of central bankers and threatening further deflationary pressures. With the unemployment rate still north of 10%, the Eurozone remains a long way from pre-recession levels.

CHINA:

Led by a re-emergence of government-led credit growth and housing activity, real GDP in China grew 6.7% in 2Q on a year-over-year basis, continuing to reduce fears of a hard-landing. Concerns remain that the achievement of above expected growth came less from the desired service areas and that growth continues ever more reliant on government spending and debt.



As is widely known, China continues to transition from a growth model based on massive investment and construction, fueled by state-directed bank lending, to one based on household consumption and services. From this prism, the latest data shows that this rebalancing is moving at a glacial pace though this should be expected. Service sector growth slowed from 8.2%y/y in 2015 to a disappointing 7.5%y/y in 2Q of 2016. The service sector share of the economy, however, has moved from 52.3% in 2015 to over 54.1% so far in 2016. Consumer spending seems to have remained resilient as growth in nominal retail spending stayed above 10% in the second quarter and imports unexpectedly rose 1.5% y/y in August, the first increase since October of 2014.

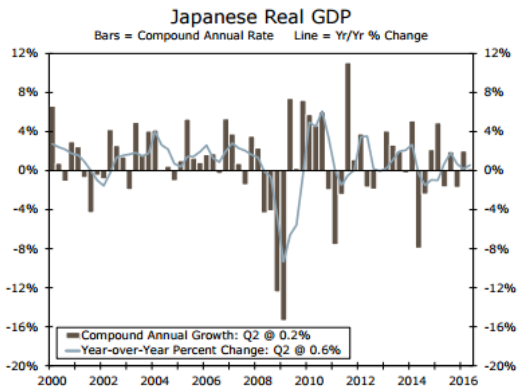
Though the balance of the trade data from China for August showed a slight rebound to a -2.8% year-over year decline in exports from -4.4% in July, the trend of this export-driven nation is unmistakable. As the chart below depicts, sluggish global demand will continue to weigh on the export and manufacturing outlook for China. With the transition to consumption unable to offset this decline in trade flows, we expect economic growth to slow further over time.

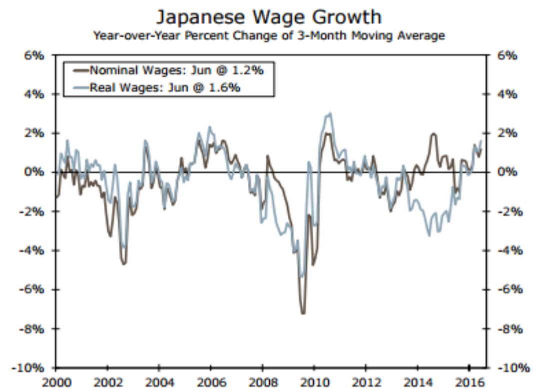
JAPAN:

The Bank of Japan (BOJ), following the adoption in January of a negative interest rate policy designed to further weaken the yen, has disappointingly seen the value of the currency rise by over 18% versus the U.S. dollar. Following more than 3 years of unprecedented easing, the BOJ on September 20th announced a major policy shift by moving the focus of its monetary stimulus away from a rigid target for expanding the supply of money, to controlling the shape of yields across different maturities.

Negative interest rates were introduced in January to spur economic activity by making it cheaper for consumers and businesses to borrow. Instead, the flat yield curve inhibited bank margins and profits and precipitated an almost 30% decline in stock prices. In now targeting a 0% 10-year yield, the BOJ would make the yield curve steeper (short rates are negative) and lending more profitable for the banks.

Growth in Japan continues to vacillate between expansion and contraction, since the initiation of Abenomics three years ago. Real GDP in Japan expanded at a scant 0.7% annualized rate in the second quarter as trade weighed on headline growth. Year over year, growth is not much stronger, rising by a modest 0.6%. Similar to the U.S., falling imports and exports are acting as a headwind. While there have been some positive signs from the consumer, spending is not yet commensurate with job and wage growth.





While the unemployment rate in July dropped to 3%, reflecting the strongest labor market in over 20 years, household spending dipped to -0.5% from year ago levels, the fifth consecutive month of decreases. As with the U.S., the Japanese economy is reliant on the consumer and spending comprises over 60% of GDP. The collective income of Japan's labor force is rising (see chart above right), but consumers don't feel like opening their wallets because of fears about the future. Mr. Abe has twice put off an increase in the national sales tax (designed to shore up the social security system) to 10% from the current 8%, but it still looms in 2019, representing an additional annual consumer burden of roughly $50 billion.

EMERGING MARKETS:

Emerging markets have enjoyed a bit of a bounce back year so far in 2016 stabilizing around 4.2% collective GDP growth (about the same as 2015 though down from 7.4% in 2010). We are encouraged by a seeming trend towards more structural reforms. Recent regime changes in Argentina and Brazil come with the promise of more market-oriented reforms and India launched a landmark national sales tax reform (replacing 17 state and federal levies) in early August. While these are very positive steps that should lower the risk premium for EM assets, these economies still remain primary beneficiaries of stable commodity prices and the U.S. dollar.

The corporate debt binge for emerging market countries that commenced in 2010 is shortly coming due according to the Bank for International Settlements (BIS). Between today and 2018 over $340B is estimated to be repaid (or refinanced), a total over 40% higher than the last three years combined.
The high levels of corporate debt have contributed to overheating in many of these economies following the global financial crisis and has remained a concern as much of the debt is denominated in U.S. dollars.

However, these concerns may be more exaggerated than reality would indicate. As the IMF notes, about "75% of emerging market government debt is now denominated in local currency, compared to zero in 1995, as is about 70% of emerging market corporate debt, compared to 5% in 1995. Flexible exchange rates appear to have helped some emerging markets mitigate the slowdown in capital flows so far by dampening the effects of global factors."

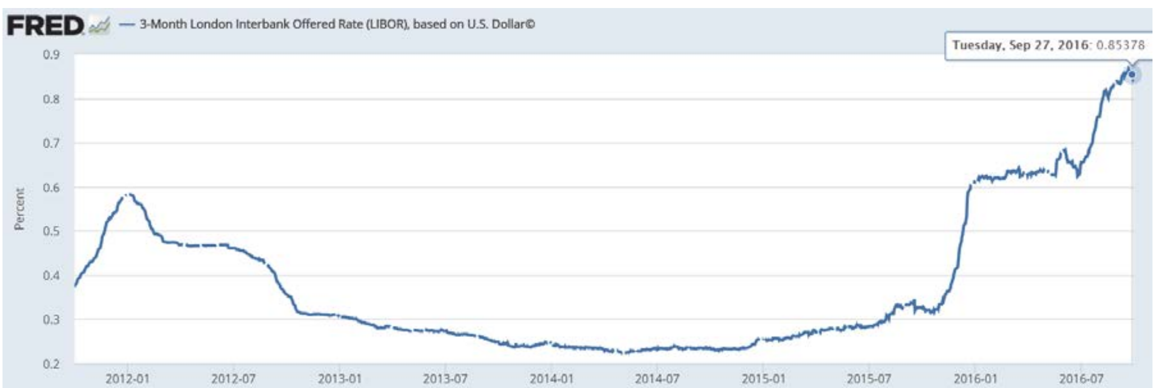
Still, the continued global chase for yield has moved international investors away from developed markets and back to developing economies. These investors must remain vigilant to how emerging market debt is tethered to the U.S. dollar and interest rates. It was only in January of this year that the yields on this debt jumped to five year highs as the Fed raised rates in January and looked increasingly likely to keep doing so. With a heavy refinancing calendar ahead and an estimated (market pricing odds) 60% probability of a December rate hike, the same thing could happen again.

MARKETS:

Despite the Federal Reserve abstaining from raising interest rates, monetary conditions have been tightening since the conclusion of QE in the latter part of 2014 as the balance sheet of the Federal Reserve has been modestly contracting. However, a pending SEC rule change has flown under the radar and effectively tightened monetary conditions by more than anyone intended.

The $2.6 trillion money market industry is facing a seismic overhaul that takes effect on October 14th. Money market funds that seek higher yields by investing primarily in corporate debt such as commercial paper are referred to as prime funds. These funds along with tax-exempt money market funds are at the epicenter of new rules that will end an over 30-year period of fixing these share prices at $1. Funds investing only in government debt will maintain the fixed $1 net asset value.

Prime money market funds are among the largest buyers of bank commercial paper and short term municipal debt. This is a huge structural shift in investor demand for short-term paper. This has and will continue to cause a significant cost of capital increase for both corporations and local governments along with funding in the international US dollar markets. As a result, banks' unsecured lending rates (primarily LIBOR-London Interbank Offered Rates) have soared from 30 basis points (0.30%) to 85 basis points (0.85%) as shown in the chart below.



Though this is a technical response to a regulatory change and not a signal of credit stress, higher short term borrowing rates can affect longer rates in the U.S. and foreign investors now face higher costs for currency hedging. Additionally, commercial paper issuance is declining impacting the short term funding of many corporations. Consumers with adjustable rate mortgages (often tied to LIBOR) may also face higher resets on the interest rate for their monthly payments.

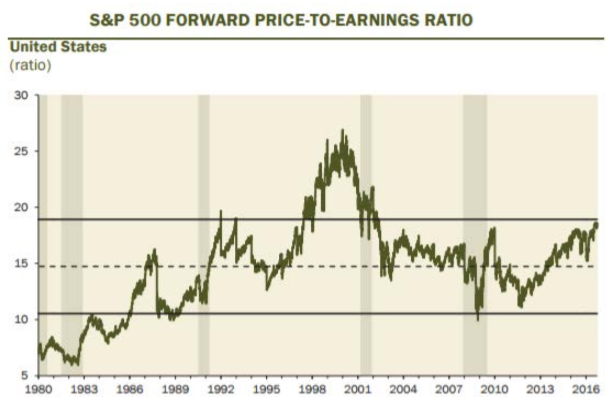
Stocks, bonds and real estate are considered long duration investments as their current value is based on the sum of all future cash flows (dividends, earnings, interest payments and rents) discounted back to the present. This discounting is predicated upon the risk free rate so as global central banks lower interest rates to 0%, the present value of all of these financial assets rise. Each of these asset classes have been major beneficiaries of global central bank policies as they have moved near all-time highs.

Our long noted concerns about current valuations in the markets stems from this pronounced increase in the present value of these assets without a commensurate increase in expected future cash flows. Asset prices have not risen based on rapidly rising earnings or dividends or the future expectation of this. We have brought forward expected future returns to the present virtually assuring that future returns will be much lower than they otherwise would be.

Despite slowing economic growth, the S&P 500 enjoyed a strong quarter with a gain of 3.85% bringing the year-to-date (YTD) return to 7.84%. Reflecting a return to risk-on during the quarter, the small cap Russell 2000 and Nasdaq indices returned 9.05% and 9.69% respectively and are now ahead 11.46% and 6.08% each YTD. Foreign markets have strengthened as the dollar has halted its advance with the MSCI EAFE index of developed markets up 6.43% in 3Q bringing the YTD into the black with a gain of 1.73%. The biggest beneficiary of dollar softening though have been emerging markets. The MSCI Emerging Markets index gained 9.03% in 3Q and is now up 16.02% for the year.

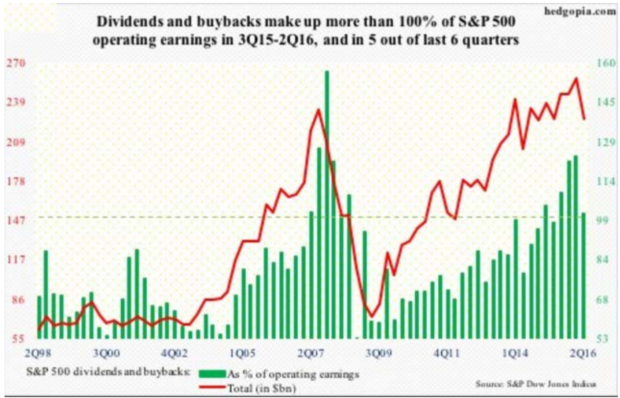
Again surprising the majority, fixed income markets have provided some of the strongest returns so far this year. As investors globally rummage through the microscopic yields offered, U.S. bonds have shocked strategists who for much of the prior four years have pounded the table on the bubble in bonds. The Barclays US Aggregate Bond index and the Barclays High Yield index are up 5.8% and 15.11% respectively now in 2016. The Barclays US Aggregate Long Treasury index enjoyed among the greatest gains for the few who were contrarian enough to invest returning over 14.7% so far this year.

Corporate profits, as defined by S&P 500 operating earnings, rose at an annual rate of over 24% from 2009-2011. Since the beginning of 2012, earnings have grown just over 3% per year. The over 60% increase in the S&P 500 since the end of 2011, has been driven entirely by the expansion in the P/E multiple from 11x to almost 18.5x forward expected earnings (chart below). This metric compares to a 10-year average of 15x. We expect S&P earnings per share (EPS) to decline modestly for the full year of 2016 and will be no higher than the level of 2014.



The headwinds of a strong U.S. dollar and extremely weak energy prices have long since abated and are now basically flat with year ago levels. Additionally, we will soon anniversary the worst of the earnings picture for the energy sector. During 2015, the collapse in oil prices and the impact on energy sector earnings shaved over 10% from total profits for the index. While only a moderate contributor in the quarters ahead, the worst of the decline in energy profits appears to have passed leading analysts to estimate an increase in second half earnings around 4% with full year 2017 gaining 13%. We remain more circumspect as nominal GDP growth plumbs the lowest levels of the recovery.

Despite this flattening of earnings growth over the last 3 years, S&P 500 companies have continued to utilize an aggressive capital allocation strategy in both share count reduction along with increasing dividends (though at a slowing rate recently). As noted in the chart on the following page, the sustainability of such cash flows is clearly at risk. The total shareholder payout (buybacks plus dividends) is indicated below in red in total dollars to the right hand scale. In green are the annual totals as a percentage of operating earnings. The dotted line indicates the level of 100% where payouts equal earnings. One can see that payouts have exceeded earnings over the last 18 months in five of six quarters and is at levels only seen in recessions when earnings collapse much quicker than payouts.



S&P 500 companies spent $127.5 billion buying back shares in the second quarter of 2016, a -21% drop from the first quarter and a -3.1% decrease from the same period of 2015, according to a report by S&P Dow Jones Indices. In fact, it's the least that the S&P 500 companies have spent on repurchases in two years. Additionally, dividend growth has slowed to mid-single digits. These shareholder payouts cannot be maintained and the support of share prices from share count reduction is waning. The light is flashing yellow.

A slowing economy alongside elevated valuations present greater challenges for investors. This is precisely why we at Coho Partners always strive to construct a differentiated portfolio populated with high quality companies with resilient earnings streams, growing dividends, strong balance sheets and reasonable levels of expectations and valuations.

Sincerely,

Rick S. Wayne, CFA