Investment Newsletter

February 2017

CLIENT INVESTMENT UPDATE NEWSLETTER

2016 MARKET SUMMARY

By: OBS Financial

In the fourth quarter, the spotlights were on the US presidential election which became one of the most polarizing US presidential races in history. Investors around the globe dealt with uncertainty which was ultimately reflected in global markets. Major world markets experienced a roller coaster of results throughout the quarter. Major stock indices outside of the US were negative for the quarter, while US markets were largely positive, as reflected by major indices reaching all-time highs in December.

OBS Financial routinely advocates that switching your investment strategy due to speculation or conjecture is not a prudent or wise strategy. As events begin to unfold throughout the year it may be difficult for some to not alter, or at least question their investment philosophy. This human response illustrates why it is critical to have in place a structured investment plan at the onset with clear communication on risk, goals, and expectations. In the last three months, advisors may have experienced some of these negative sentiments with clients. As it turns out, modifying your strategy may have adversely impacted portfolio returns given impressive post-election results in the US. While most markets started the quarter in negative territory during October, results in the US quickly turned positive during the months of November and December as US stocks ended the quarter with impressive gains. Post-election results saw large upswings in various asset types. Commodities, which overall have experienced losses in recent years, posted gains largely driven by oil, gas, and livestock. US stock were also impressive, led by small cap and value asset classes posting double digit gains; while financial, industrial, and energy sectors also surged. Conversely, sectors such as REITs and healthcare were negative for the quarter.

In overseas markets, equities were mostly negative with emerging markets experiencing the largest drop but was positive for the year. The US, represented by the Russell 3000, posted a positive return of 4.21%, while non-US developed, represented by the MSCI EAFE Index, posted a -0.72% in USD. Emerging markets, represented by the MSCI Emerging Market Index, posted a -4.16% loss, in USD. Due to the strengthening of US Dollar to most foreign currencies, losses were enhanced on foreign indices when converted to US Dollars.

Small capitalization stocks were mixed across major markets, outperforming large capitalization stocks in the US by 5.0% for the quarter. While a size premium was evident in US markets, non-US developed and emerging markets did not experience a positive size premium as small capitalization stocks underperformed large capitalization stocks by -2.62% and -2.64%, respectively.

Across the relative price spectrum, high book-to-market stocks (value) compared to low book-to-market stocks (growth) outperformed across each market and across all sizes. In the US, value stocks outperformed growth by 5.66% across large caps and 10.50% across small caps. In non-US developed markets, value securities outpaced growth in both the large-cap and small-cap space by 10.49% and 5.15%, respectively. In emerging countries, value outperformed growth in large caps by 6.57%, and by 4.80% in small caps.

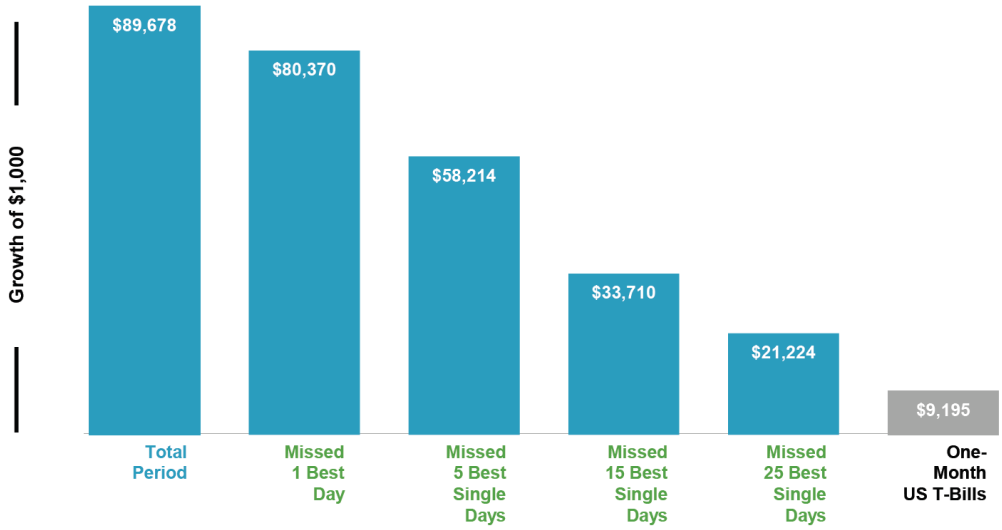
Canandaigua National Bank & Trust

Fixed income posted mostly negative results across the globe as treasury curve rates increased from the third quarter across all segments of the yield curve. Three-month nominal yields increased by 22 basis points to 0.51%, while the five-year nominal yield increased 79 basis points to 1.93% and 30-year yield increased 74 basis points to 3.06%. Three-Month US T-Bills posted the only positive return at 0.09%, while global bonds (hedged to USD) with 1-3 year terms were slightly negative at -0.05%. Intermediate US Government bonds posted a -2.18% return while TIPS were down -2.41% for the quarter. The Federal Reserve also increased rates 25bps in December, the first increase of the year.

Throughout the year, capital markets overall have been quite resilient. Withstanding a historically disastrous opening in the first quarter; accompanied by falling oil prices, concerns over China devaluing the yuan and Fed policy; to the UK's referendum vote to leave the European Union in the second quarter and a very peculiar US Presidential election in the fourth quarter. It is quite notable that both the S&P 500 and DJIA would close at all-time highs in the third quarter and then again in the fourth quarter. OBS Financial continually emphasizes discipline, while maintaining consistent exposure in order to fully reap the benefits in which your investment portfolio is designed to capture.

As made evident in the fourth quarter and throughout 2016, we never know exactly when and by how much these premiums that we highlight in our investment strategy will appear. Missing out on this outperformance can prove to be detrimental to the end investor, even over a span of a couple days. The below chart illustrates how missing out on only a few of the best days in the S&P 500 alone can create great opportunity costs to an investor. Accordingly, we always encourage any OBS Financial client to remain steadfast in their structured investment plan, designed specifically for the client to attain their goals.

Performance of the S&P 500 Index, 1970-2015



In US dollars. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Performance data for January 1970–August 2008 provided by CRSP; performance data for September 2008–December 2015 provided by Bloomberg. S&P data provided by Standard & Poor's Index Services Group. US bonds and bills data © Stocks, Bonds, Bills, and Inflation Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield).

MODELS, UNCERTAINTY, AND THE IMPORTANCE OF TRUST

Source: Dimensional Fund Advisors
January 2017

Models are approximations of the world. They are simplifications of reality. Models can be useful for gaining insights that help us make good decisions. But they can also be dangerous if someone is overconfident and does not understand the limitations of models. Bringing financial research to life requires the expertise to distinguish what is worth pursuing vs. what opens the door to unnecessary risks. This column highlights (1) the tradeoffs that we believe must be considered when evaluating models and (2) research ideas in order to build robust portfolios for clients.

A well-known financial model is Harry Markowitz's relation between expected return and volatility. It is a simple model that gives insights about the importance of diversification. However, when using this framework to inform asset allocation decisions, placing a high degree of faith in

inherently imprecise inputs can expose the user to extreme outcomes. Bad financial outcomes have been blamed on modern portfolio theory when actually the fault should be placed on the misuse of that theory.

A researcher working on asset pricing might propose a model or hypothesis about the drivers of expected returns. A good model is one that is testable with data and that yields useful insights about financial markets. However, no model is a perfect representation of reality. Market prices depend on much richer an information set than can be captured by any model. This means that instead of asking "Is this model true or false?" (to which the answer is always false), it is better to ask "How does this model help me better understand markets?" and "In what ways can the model go wrong?"

TYPE I VS. TYPE II ERROR

For example, consider the decision facing the Food and Drug Administration when they assess a new drug. If they do not approve the drug, they give up the potential benefit that the drug may be able to help people. On the other hand, if they approve the drug, the risk is that the drug may not have sufficient health benefits that offset the risk of dangerous side effects.

This tradeoff can be framed as a balance between type I and type II error. Type I error, or a false positive, occurs if researchers approve a drug that is not beneficial or has high risk of harmful side effects. Type II error, or a false negative, occurs if a beneficial drug fails to get approval. If you minimize one error, the chance of the other becomes larger.

Different people may look at the same data and come to different conclusions depending on how much weight they give to type I vs. type II error. Uncertainty about the outcomes may also lead different people to different conclusions. For example, some patients might be happy to try an experimental drug without a proven track record, while others may be less willing.

INVESTMENT APPLICATIONS

When evaluating asset pricing research, we need to evaluate a similar tradeoff. What is the potential benefit a new premium or enhancement can bring to the portfolio? What are the potential costs, and how might we reduce those costs through implementation? How much uncertainty is there around these estimates?

This tradeoff can be reframed in terms of type I and type II error. Type I error occurs if something gets added to the portfolio but does not have an expected net benefit. It is the risk of implementing a bad idea. Type II error occurs if a research idea is not implemented but would have a net benefit to the portfolio. It is the risk of not implementing a good idea. Type I error can be minimized by never making portfolio enhancements. This might describe a traditional index fund approach. Type II error is minimized by having a low bar for the implementation of new ideas. This might describe a quant approach that uses many signals with the hope that there are enough good signals to offset the bad.

If you have to pick one type of error to minimize, the evidence from many performance studies suggests that it should be to minimize the risk of implementing a bad idea. It is difficult for active managers to beat benchmark indices, suggesting that performance-enhancing ideas are not that easy to come by.[1] However, the question should not be which error to minimize. We believe more robust portfolios and better investment outcomes can result from balancing both types of errors.

TYPE I: DEFENDING AGAINST BAD IDEAS AND UNNECESSARILY HIGH COSTS

There are a number of ways to reduce the risk of implementing a bad idea. One way is to defend against data mining by considering whether a premium is sensible and backed by robust empirical evidence. However, even good economic rationale combined with solid empirical research cannot completely eliminate uncertainty. We may have confidence a premium is positive, but expected returns are still only estimates and never guarantee a particular outcome.

Even with a good idea, type I error can result from poor implementation. This is why it is important to make sure the costs of pursuing the idea are low. Costs might come in the form of trading costs, which is why we look at whether an idea can be implemented with low turnover. Costs can also come in the form of reduced diversification, which is why we examine whether an idea can be implemented in portfolios that are well diversified across issuers, sectors, and countries, when relevant.

Pushing too hard on a model or idea can magnify the risk of type I error and increase the probability of catastrophic outcomes. An investor can have high conviction in the size premium but may still not want to have a portfolio of the 10 smallest companies. The momentum premium is robust in historical simulations, but do you have enough conviction that it will be high enough in the future to warrant high turnover? Quant managers, in particular those using multiple (and often times frequently changing) signals, have higher probability of maximizing false positives due to uncertainty about their models and their inputs.

Dimensions of expected returns are premiums in which we have the highest level of confidence because they are sensible, persistent, pervasive, robust, and cost-effective to pursue in well-diversified portfolios. Other examples of financial research might not rise to the level of a dimension but may still be considered as a portfolio enhancement if

costs are low. For example, using momentum as a reason to delay trades does not increase the level of turnover. The cost per unit of turnover should not increase because traders can be even more patient when trading. And if momentum disappears in the future, the portfolios will still have potential expected outperformance over benchmarks because they target size, value, and profitability premiums.

WHAT ARE WE MISSING (TYPE II ERROR, FALSE NEGATIVES)?

Type II error occurs when we pass on research that may have benefited the portfolio. But how large are these forgone benefits? Given that the majority of active managers fail to beat passive benchmarks, it seems reasonable to conclude that value-enhancing ideas are hard to come by. We believe this suggests that one should be more cautious about implementing a bad idea than worrying about missing out on a good idea.

There is also reason to believe type II error is small, relative to type I error, for Dimensional strategies that already incorporate several value adds. Market, size, relative price, and profitability dimensions already explain a substantial portion of differences in average returns. Exclusions such as small low profitability and enhancements such as the momentum screens further improve expected returns. There is diminishing marginal benefit associated with each addition to a portfolio, and the probability that the benefits from additions will overcome costs becomes smaller. We are committed to continually investigating new enhancements to the strategies, and we work hard to extract every basis point of value add and cost savings for our clients. But we must also be vigilant against adding potentially detrimental changes to the portfolio. This is why we are skeptical when evaluating new research. Given the quality of our current strategies, we keep a high bar to approve any perceived enhancements since the marginal benefit is likely small, while the probability of harmful consequences due to type I errors likely increases.

UNDERSTANDING HOW RISK IS MANAGED ALLOWS FOR TRUST AND LONG-TERM INVESTOR DISCIPLINE

In order for investors to stick with their investment choices over the long term and through varying market conditions, they must have confidence that their managers (or advisors) are making wise investment decisions. However, an investor's ability to evaluate a manager depends greatly on the transparency of the investment process. If it is difficult for investors to understand what investment decisions are being made and why, investors will only be able to evaluate on past performance. We believe investors attracted by past performance alone are likely to redeem when returns are poor.

Investors who are unwilling to trust the decisions of an investment manager might instead put their trust in the market. One way to do this is by holding market cap-weighted portfolios, which are often approximated with investments in index funds or ETFs. The goal of an index fund manager is to minimize tracking error relative to a specified benchmark, leaving the manager with close to zero investment decision-making authority. By outsourcing the portfolio construction, an index fund manager can achieve high levels of transparency while requiring little to no trust on the part of the investor. When investment returns are poor, investors can blame it on the market, rather than on a bad call by the manager.

Trust in the market can be implemented in a less rigid way than an index fund. Dimensional's investment process relies on current market prices to identify differences in expected returns across securities. We apply discretion when we weigh the risk of type I and type II error in deciding what premiums to pursue. We must apply expertise when designing portfolios to target the premiums we determine are worthwhile and when managing the tradeoffs that arise as prices move every day—all done with an eye toward reducing execution costs.

Our clients place trust in our ability to exercise good judgment in each of these steps, and we work hard to earn and retain that trust by making decisions based on solid economic rationale and robust empirical research. To place trust in Dimensional is to place trust in market prices and in the collective wisdom of thousands of market participants. It is to place trust in robust research that is well accepted throughout the academic community. Unlike the blind trust that is required of an opaque stock picker or quant manager, we earn clients' trust through reason, research, and 35 years of experience. We believe this trust helps clients be better equipped to weather periods of underperformance and is the key for fostering the discipline needed to seek better investment outcomes.

Source: Dimensional Fund Advisors LP. There is no guarantee investment strategies will be successful. US-domiciled mutual fund data is from the CRSP Survivor-Bias-Free US Mutual Fund Database, provided by the Center for Research in Security Prices, University of Chicago. Certain types of equity funds were excluded from the performance study. Index funds, sector funds, and funds with a narrow investment focus, such as real estate and gold, were excluded. Funds are identified using Lipper fund classification codes. Correlation coefficients are computed for each fund with respect to diversified benchmark indices using all return data available between January 1, 2001, and December 31, 2015. The index most highly correlated with a fund is assigned as its benchmark. Winner funds are those whose cumulative return over the period exceeded that of their respective benchmark. Loser funds are funds that did not survive the period or whose cumulative return did not exceed their respective benchmark. All expressions of opinion are subject to change. This article is distributed for informational purposes, and it is not to be construed as an offer, solicitation, recommendation, or endorsement of any particular security, products, or services. Ken French is a member of the Board of Directors for and provides consulting services to Dimensional Fund Advisors LP.

DEMOGRAPHICS HOLDING BACK GROWTH

by Robert Johnson, CFA
Morningstar Advisors

This week's market activity remained relatively lethargic despite a plethora of news, both good and bad. This week is the heart of earnings season, and the results so far haven't been clear cut or shown much of a pattern, with a combination of beats, misses, and changed outlooks for the year.

Barring a disaster in the back part of earnings season, the S&P 500 will have likely patched together two successive quarters of earnings growth, with a real possibility of fourth-quarter growth topping 5%. Still, there have been a lot of misses and outlook downgrades. Overall earnings-growth rates are neither breaking out in a big way nor collapsing. Instead, earnings are showing modest upticks despite individual company issues.

While earnings were prominently featured this week, the economy is still looking a bit anemic, with the fourth quarter's 1.9% GDP growth rate falling below target. However, large inventory swings and net export changes continue to distort the results. Furthermore, both existing- and new-home sales missed predictions by wide margins in the month of December, a month that is admittedly volatile and not terribly indicative of long-term trends. It does seem, though, that a combination of higher mortgage rates, sharply higher home prices, and low inventories are all weighing on the housing market, which should be benefiting from improved demographics.

The manufacturing sector, both in the U.S. and abroad, is poised to continue recuperating, with flash purchasing manager data and real-world orders both looking a bit better in this week's releases.

In general, the economic data and earnings data both support our theme of modest economic growth that very strong demographic headwinds continue to hamper. Our biggest worry remains the consumer, who has seen slightly higher wage gains but now faces sharply higher prices on many key purchases.

We don't think the economy is going to fall apart, but growth of 1.75%-2.00% seems more likely to us than the current consensus forecast of 2.4%. Yes indeed, federal government policy changes could certainly help matters, possibly by a lot if structured properly and enacted quickly. Still, policy and tax changes aren't likely to have the hoped-for impact until later in the year at best. In the meantime, current trends aren't great, with higher interest rates and more elevated inflation already beginning to take a bite out of growth rates. For now, we will stand on the sidelines with our old forecasts until policy changes become more concrete.

Underlying GDP Growth Still Modest, but not as Volatile as Quarterly Data Suggest
Sequential real GDP growth in the fourth quarter was 1.9%, down from abnormally high growth of 3.5% in the third quarter but still below the consensus of 2.2% and the Atlanta Fed GDP Now forecast of 2.9%.

However, looking at GDP on a quarter-to-quarter basis and then annualizing that figure has been a very dicey proposition. Getting inventory, sales, and imports into the correct and matching quarters is always tough. Seasonal adjustments can account for average weather and events but not for big one-time storms or lasting temperature extremes. And even small changes get amplified when small quarterly changes are annualized. For instance, lowly soybean exports soared in the third quarter and collapsed in the fourth quarter, severely punishing short-term net exports and GDP growth.

The middle column in the table below shows a huge range of quarter-over-quarter results over the past year. The year-over-year data, comparing the current quarter with the same quarter a year ago, is much tamer. The good news is this data is also finally beginning to show an improving trend that may lead full-year numbers higher. However, that hasn't happened just yet.

Real Gross Domestic Product

Actual	Real GDP	Q/Q Growth	Q 1-Year Ago	Full Year
Q3 2014	16,095	5.0%	2.9%	
Q4 2014	16,187	2.3%	2.5%	2.4%
Q1 2015	16,269	2.0%	3.3%	
Q2 2015	16,374	2.6%	3.0%	
Q3 2015	16,455	2.0%	2.2%	
Q4 2015	16,491	0.9%	1.9%	2.6%
Q1 2016	16,525	0.8%	1.6%	
Q2 2016	16,583	1.4%	1.3%	
Q3 2016	16,727	3.5%	1.7%	
Q4 2016	16,805	1.9%	1.9%	1.6%
Estimates				
Q1 2017	16,880	1.8%	2.2%	
Q2 2017	16,956	1.8%	2.3%	

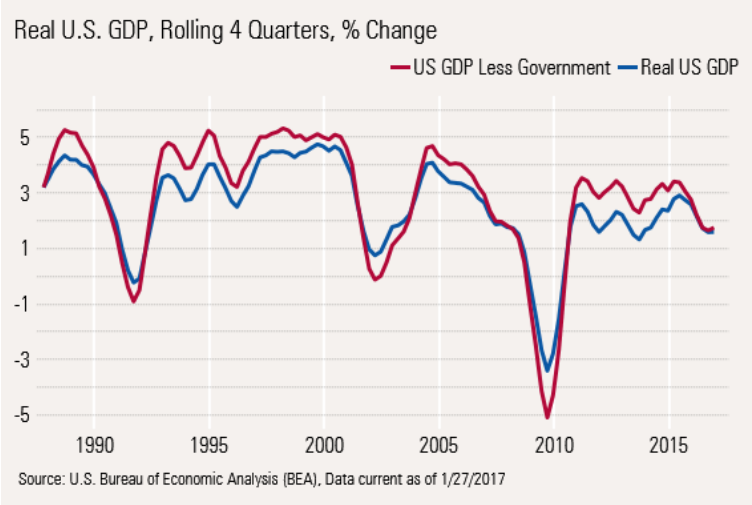
Source: Bureau of Economic Analysis, Morningstar Calculations

The normally least-volatile data set, a full four quarters of results, looks a bit worse, suffering from a larger-than-normal inventory swing this year. With inventories already moving modestly higher, 2017 GDP growth should normally look better than 2016, based solely on a less dramatic inventory swing. In any case, we believe current data suggests core GDP growth rates of 2% or less.

GDP Growth Is Still Slower Than Usual

It's possible to make a lot of short-term excuses for the economy. From time to time we have fallen into the trap of using some of these excuses. However, the long-term rolling four-quarter growth rate for the economy is not what it used to be, even with inventory and export data aside.

The graph, to the right, speaks for itself. Past rebounds have been sharper and the post recovery rates look anemic this time, too, even after the worst post-World War II recession. We have drawn in GDP growth excluding government spending, which has dogged the GDP calculation during this recovery. The graph shows that excluding the declining/slow-growth government sector, GDP growth has been better but still not great. We don't want to get into the politics of whether this is a good or bad thing, but soft government spending is hurting the growth calculation.



Contributions to GDP Growth by Category, Annualized, Seasonally Adjusted	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Total Consumer	1.8	1.5	1.1	2.9	2.0	1.7
Consumer Goods	0.9	0.5	0.3	1.5	0.8	1.1
Consumer Services	0.9	1.1	0.9	1.4	1.3	0.6
Business Structures	-0.1	-0.5	0.0	-0.1	0.3	-0.1
Equipment	0.5	-0.2	-0.6	-0.2	-0.3	0.2
Intellectual Property	0.1	0.2	0.2	0.4	0.1	0.3
Residential Construction	0.4	0.4	0.3	-0.3	-0.2	0.4
Inventory	-0.6	-0.4	-0.4	-1.2	0.5	1.0
Exports	-0.4	-0.3	-0.1	0.2	1.2	-0.5
Imports	-0.2	-0.1	0.1	0.0	-0.3	-1.2
Government	0.3	0.2	0.3	-0.3	0.1	0.2
Total GDP Growth (annualize	2.0	0.9	0.8	1.4	3.5	1.9

Source: Bureau of Economic Analysis

Fourth-Quarter GDP Calculation Dominated by Inventories and Net Exports

Each quarter the government calculates the contribution to overall GDP growth of the major underlying components. The segment contribution amounts to a relative weight for the category times a growth rate. Because consumption is 70% or so of GDP, it's usually a top contributor to growth even if the consumption growth rate is relatively stable and small. On the other hand, housing is a tiny 4% of GDP but can have swings of 20% change or more in each direction. A 20% move in housing, which is not unheard of, could add almost 0.8% to GDP, which is not small potatoes in a world of 2% growth. All of the individual contributions in the table below add up to the total GDP growth.

This quarterly GDP contribution table shows that consumption dominated the GDP calculation, accounting for 1.7% of GDP growth of 1.9%. The figure is a bit less than in the past, and with higher inflation (potentially offset with higher wages), we suspect the contribution will be smaller in the future.

What is noticeable in the overall table this time around is that inventories and exports had a huge impact on GDP, with inventories adding a full percent to GDP and net exports (imports and exports, combined) taking a huge 1.7% off the calculation. Even offsetting these two figures, growth would have been 0.7% higher excluding the negative impact of exports and the positive role of inventories, or a more respectable 2.6% growth rate overall.

Inventory and Export Data Less Volatile in Annual Data Sets

Over longer periods of time, as little as a year, the ups and downs of inventories tend to cancel out (exports have more of a trend tendency but still show less volatility measured over longer periods). Frequently an extreme good quarter for inventories is followed by a bad one and vice versa. However, over the course of a full year, the inventory swings are seldom large, as shown below. That longer-term pattern is the reason a lot of economists ignore the volatile inventory swings in the quarterly data.

Private Inventories Real GDP Contribution, Annualized, Seasonally Adjusted	Quarterly Inventory Contribution	Annual Inventory Contribution
Q3 2013	1.6	
Q4 2013	-0.1	0.2
Q1 2014	-1.9	
Q2 2014	0.7	
Q3 2014	0.3	
Q4 2014	0.2	-0.1
Q1 2015	1.0	
Q2 2015	-0.5	
Q3 2015	-0.6	
Q4 2015	-0.4	0.2
Q1 2016	-0.4	
Q2 2016	-1.2	
Q3 2016	0.5	
Q4 2016	1.0	-0.4

Source: BEA

Annual Data Shows Consumer Still Dominates; Businesses and Even Housing Not Much Help in 2016

The table below is identical to the one we used earlier but shows full-year data. The consumer remains the dominate feature of the table, with the role of inventories and net exports greatly reduced. In 2016 business spending on structures, equipment, and software didn't add much of anything to growth after adding 0.8% to GDP growth as recently as 2014. On a positive note, business spending did look a bit better sequentially in the fourth quarter of 2016, suggesting an end to the capital spending draught.

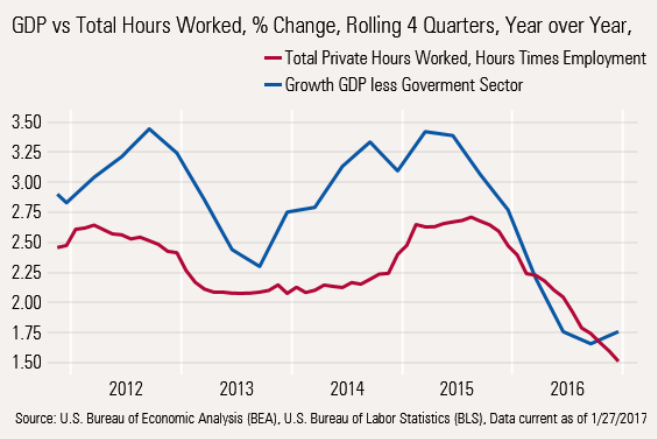
Contributions to GDP Growth by Category, Annualized, Seasonally Adjusted	2013	2014	2015	2016
Total Consumer	1.0	2.0	2.2	1.8
Consumer Goods	0.7	0.9	0.9	0.8
Consumer Services	0.3	1.1	1.3	1.0
Business Structures	0.0	0.3	-0.1	-0.1
Equipment	0.3	0.3	0.2	-0.2
Intellectual Property	0.1	0.2	0.2	0.2
Residential Construction	0.3	0.1	0.4	0.2
Inventory	0.2	-0.1	0.2	-0.4
Exports	0.5	0.6	0.0	0.0
Imports	-0.2	-0.7	-0.7	-0.2
Government	-0.6	-0.2	0.3	0.2
Total GDP Growth (annualized)	1.7	2.4	2.6	1.6

Source: Bureau of Economic Analysis

Total Hours Worked and GDP Growth Have Moved Down in Tandem

One exercise we do every quarter is to compare the total hours worked in the economy with the GDP growth rate. Because of productivity, GDP should generally run ahead of hours worked. That has been the case for most of the recovery. However, for most of 2016, GDP fell faster than hours, suggesting potential issues with employment and hours growth, which materialized late in 2016.

However, with GDP growth excluding government now moving up again, the worst of the employment belt tightening might be nearing an end, which would be good news for the consumer. The improvement is even more dramatic in quarter-over-quarter data (versus rolling four quarters shown below).

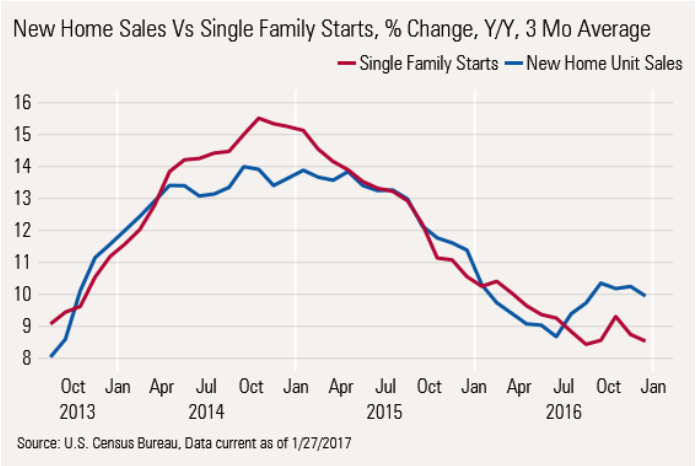


Housing Trends Intact, New Homes Outperforming Existing Homes; Steady Growth

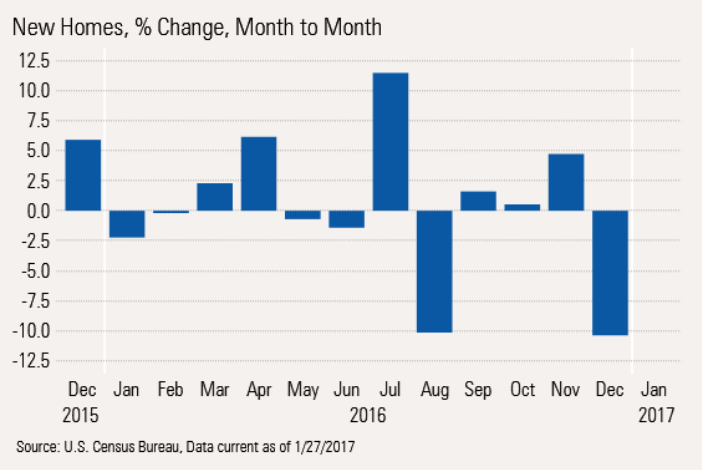
Data on both existing homes and new homes for December were disappointing and are consistent with last week's relatively poor housing starts and permits report.

Starting with the long-term view of the more important (economically and job-wise) new home segment, growth slowed modestly in 2016 and has now stabilized. New home sales peaked at around 12% annual growth rates early in 2016 before dropping to around 9% before moving back into the double-digit range again, recently. That's a healthy number, but not enough to swing the economy wildly in either direction.

Relatively similar moves in starts and new-home sales suggest the slowing but stabilizing trend is for real. Keep in mind that starts includes more types of builders including homes built on single sites for the builders' own account or commissioned by a land owner or tract homes. New home sales include primarily tract homes.



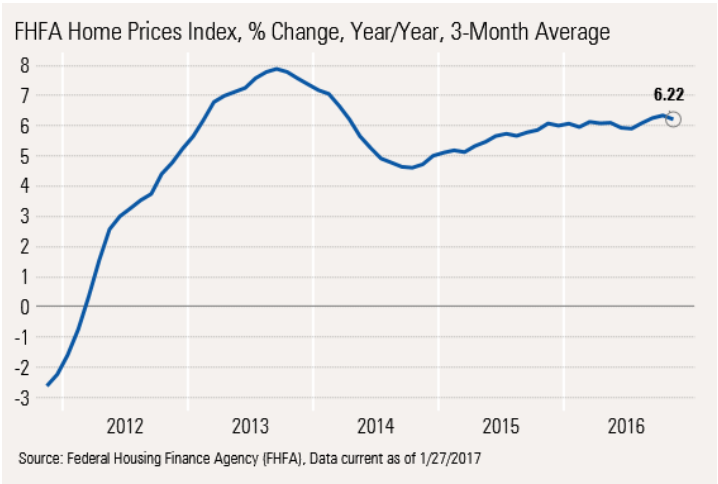
Monthly New Home Sales Slump to 10-Month Low, not Indicative of Trends
Just to prove I was paying attention this week, I am showing the volatile monthly new home sales data, to the left.



True, the graph shows big monthly drops in new home sales. Still monthly data, especially December data, is highly volatile. It is nearly impossible to discern a pattern in the monthly data, which is why we prefer to use quarterly or annual year-over-year data and not the silly monthly data that the press had a field day with earlier this week.

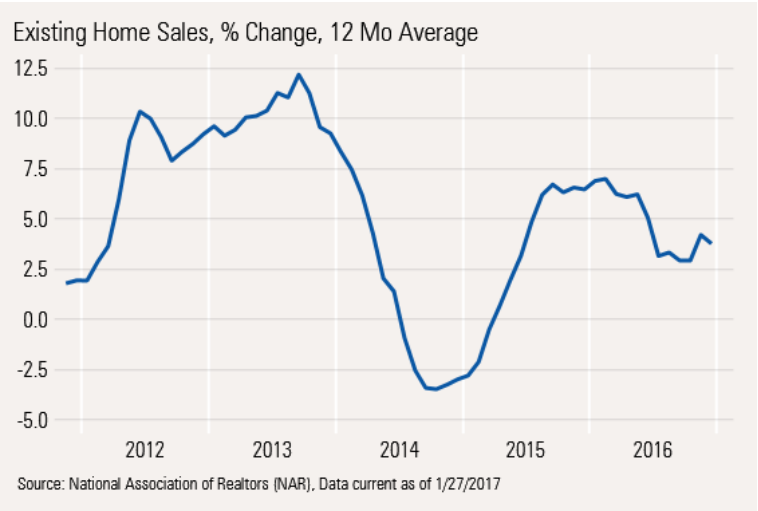
Higher Home Prices Continue to Pressure Buyers
Before we talk about existing-home sales, we thought we would show home price data, which is now accelerating again after a brief pause. We think that price pressures, along with higher interest rates, are restraining the existing-home market.

After mortgage rates plunged in 2013, the housing market began its recovery in earnest, pushing prices sharply higher, as much as 8% at one point. That, combined with higher interest rates (the Taper Tantrum) and higher prices, caused sales to again drop off. When rates dropped back and home prices increased a more manageable 4%-5%, sales again accelerated.



So if we know 4% appreciation is good and that 8% is too much, what about the current price increases of 6% or so? I don't think 6% is a problem, but 7% increases with higher mortgage rates would likely stop the housing recovery in its tracks.

We do note that price appreciation rates between geographic regions are beginning to converge, with just a handful of markets growing faster than 10%. Some formerly hot markets such as the West Coast are seeing slowing price appreciation while Texas and the Southeast and even some conventional Rust Belt cities are looking better.

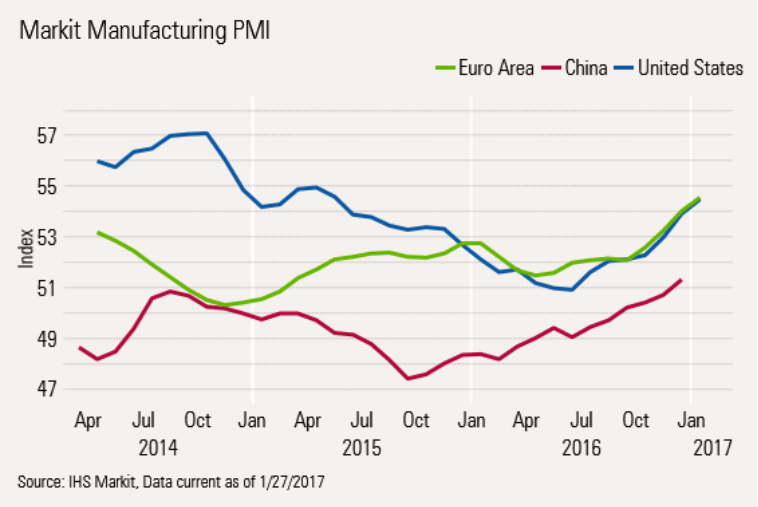


Existing-Home Sales Have a Bad Month, Too
Like new home sales, existing-home sales had a bad month, likely because of the combination of much higher interest rates, low inventories, and high prices. These issues have been brewing since mid-2015 when growth rates stopped accelerating. Unlike new home sales, we don't believe this is just a single-month issue. Existing-home sales struggle to grow even 5% while new home sales are increasing at closer to a 10% rate.

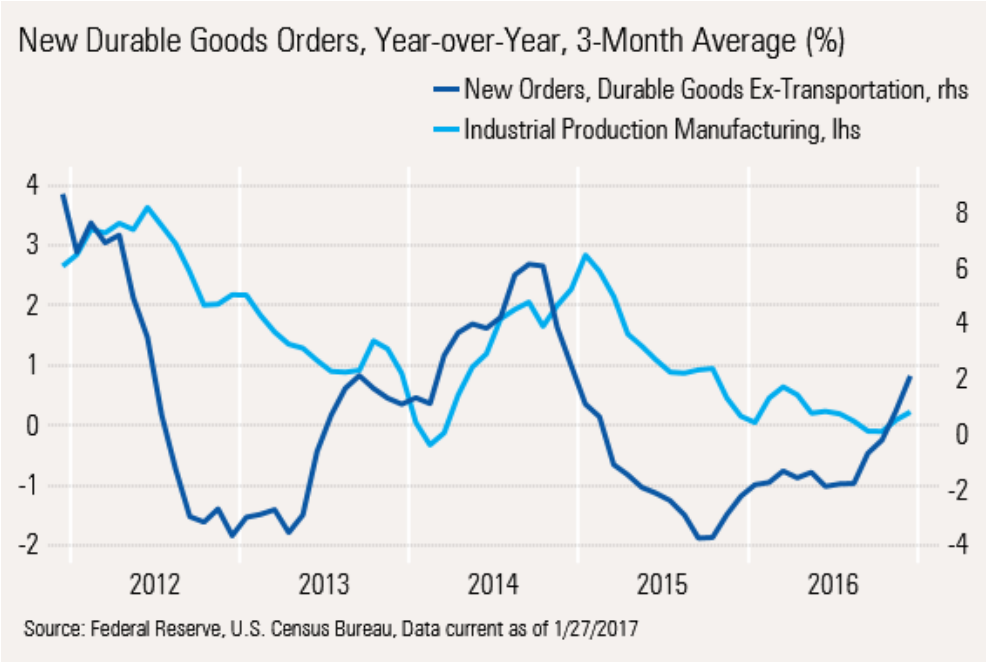
Purchasing Manager Data Better Again: Is It Real This Time?
The levels of purchasing manager optimism continue to improve, even in the face of the uncertainty created by Brexit and other elections around the world. While the U.S. and European data was resoundingly better, we will have to wait for next week to get the all-important Chinese data.

Real-World U.S. Data Continues to Inch Forward

Purchasing Manager data has been looking bullish for some time with little improvement in real world shipment data or even order data. We debated whether to stop discussing PMI metrics at all anymore because they didn't seem to add much value. However, in a close reading of the fourth-quarter GDP report, equipment sales were up sequentially in the fourth quarter, a rather novel event. European industrial production numbers, though a bit dated, have been looking better, too.



Now this week the durable goods numbers continued to pull themselves out of the gutter. New orders for durable goods (excluding transportation) have been acting better since late summer. Industrial production has taken a little longer to improve, and the movement is relatively hard to see. While not exactly surging, better orders, even at low-single-digit growth rates, are encouraging. We will need to have better business capital spending in 2017 to offset what is likely to be a slightly worse-performing consumer. Business capital and investment spending had been on its back most of 2016, so we welcome any help we can get.



Disclosure