

Economic and Strategic Research

Economic Developments – November 2016

Uncertainty Changes But Continues Post-Election

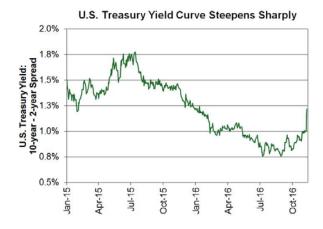
At the beginning of 2016, we noted the maturing of the U.S. expansion as well as housing inventory problems. Since then, the economy appears to have transitioned to a late-cycle phase, with a slowdown in job growth and business investment amid compressed corporate profit margins. The housing inventory problem continues unabated as demand from first-time buyers has increased with household formation and at a faster pace than supply, leading to strong real and nominal price increases and affordability challenges for entry-level buyers.

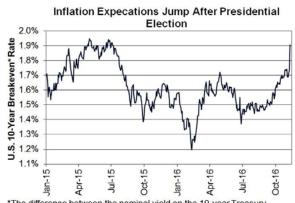
While the late stages of an economic cycle can last several years, growth tends to moderate over time, making the economy more vulnerable to shocks. The forthcoming change in the administration alters the aspect of uncertainty from one of an unknown election outcome to one of unknown legislative and regulatory priorities and their probability of enactment. Therefore, there may be increased market volatility in the medium term. Given campaign themes, we may see some changes in policies regarding corporate and individual tax rates, infrastructure investment, government spending, health care, and immigration.

At this point, we haven't changed the general tone of our forecast, but will incorporate new policy assumptions as they become more concrete. We continue to expect economic growth to pick up in the second half of the year, averaging 2.4 percent, following 1.1 percent growth during the first half. Our full-year 2016 growth forecast remains at 1.8 percent, and we expect to see a similar pace of growth in 2017. Depending on the incoming President's policy priority, our forecast for 2017 is subject to both upside and downside risks. For example, if there are tax cuts and spending increases, that would be expected to boost near-term growth, but if new policies result in sharply higher tariffs on China and Mexico, rethinking the Trans-Pacific Partnership, and renegotiating the North American Free Trade Agreement (NAFTA), that would be expected to drag on growth.

As with the Brexit vote, the outcome of the presidential election was not priced in by the financial markets. The immediate impact – an equity sell-off pushing S&P 500 futures down by 5.0 percent overnight – was reversed, and the stock market managed to trade higher by the next morning, a rare phenomenon. The 10-year Treasury yield jumped 20 basis points, the biggest one-day increase since July 2013, reaching 2.06 percent and closing above 2.0 percent for the first time since January. The 30-year Treasury yield jumped 23 basis points, the largest increase in more than five years, reaching 2.85 percent. At the time of this writing, the 10-year yield rose to 2.15 percent, bringing the two-day cumulative increase to 30 basis points. With the spike in long-term Treasury yields, the yield curve has steepened, with the gap between the 10- and 2-year Treasury yields widening to 124 basis points – the biggest difference since January.

Break-even inflation rates, a measure of expected inflation derived from Treasury Constant Maturity Securities and Treasury Inflation-Indexed Constant Maturity Securities of the same maturity, have moved higher following the election, reaching 1.91 percent on November 10, the highest level since July 2015. It is possible that the markets overreacted, and we will have to wait and see what the lasting impact on market conditions will be.





*The difference between the nominal yield on the 10-year Treasury and the yield on 10-year Treasury Inflation-Protected Securities.



Strong GDP Headline Masks Weakening Domestic Demand

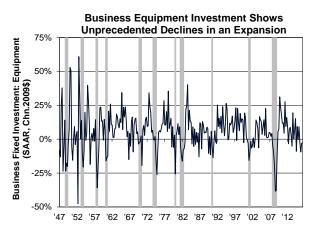
Looking back to the third quarter, while headline economic growth picked up to 2.9 percent annualized, more than doubling the pace in the second quarter, much of the improvement came from an inventory investment swing and from trade. Inventory building resumed in the third quarter following the drawdown in the second quarter, adding 0.6 percentage points to gross domestic product (GDP). Net exports added another 0.8 percentage points to GDP, largely due to a surge in soybean exports that is now fading. However, final sales to domestic purchasers, which is GDP excluding the impact from net exports and inventories, grew just 1.4 percent – one percentage point lower than the prior quarter – pointing to weakening underlying domestic demand.

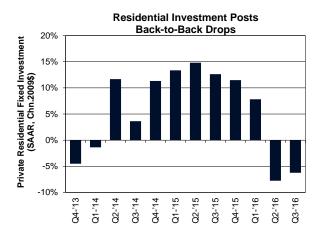
Consumers became significantly more cautious last quarter, with real consumer spending growth moderating substantially to 2.1 percent annualized from 4.3 percent in the second quarter. Business investment

Stronger Headline Growth Masks Weakening **Domestic Demand** 5% Final Sales to Domestic Purchasers Gross Domestic Product Real 0% Q1-'16 5 Q4-'15 2-1 9 8 93-Q2-'

Note: Final sales to domestic purchasers is gross domestic purchases less net exports and change in private inventories.

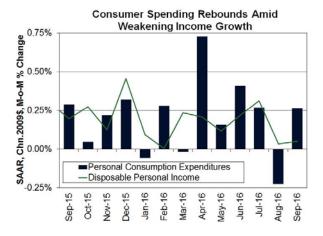
in structures increased last quarter for the first time in seven quarters, as oil and gas mining activity recovered. However, business investment in equipment contracted for the fourth consecutive quarter, which is unprecedented in an expansion. Meanwhile, housing remained in the red, as residential investment declined for the second consecutive quarter – the first such occurrence since late 2013 and early 2014, and only the second back-to-back drops in the current expansion.





Underlying Growth Should Strengthen

Our forecast points to a slowdown in real GDP growth to 1.9 percent annualized this quarter. An expected swing from a large, unsustainable increase in net exports during the third quarter to a large decline in the fourth quarter is the primary factor accounting for the expected slower economic growth. Despite moderating headline growth due to the expected drag from net exports, we expect final sales to domestic purchasers to strengthen in the fourth quarter. Business investment in equipment should rebound, given a recent improving trend in core durable goods orders – its forward-looking indicator. However, we do not anticipate a substantial turnaround going forward given enhanced uncertainty of government policy facing businesses. We also expect that residential investment will no longer drag on GDP, as single-family construction spending showed signs of stabilizing amid continued improving multifamily construction spending in September. Inventory investment should again drive growth as the inventory building phase is expected to continue.

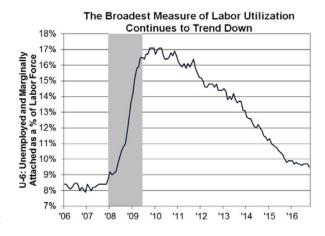


Consumer spending is also expected to drive growth. Real consumer spending ended the third quarter on a positive note, largely offsetting the drop in August. An upside surprise at the start of the fourth quarter was the pickup in auto sales to 18



million units annualized, suggesting another increase in durable goods spending in October. Nonetheless, we expect consumers to remain cautious, given recent weakening in real disposable income.

However, the October jobs report points to a decent gain in income. Nonfarm employment rose 161,000 on the heels of upward revisions of 44,000 jobs in the prior two months. The average workweek was unchanged, but average hourly earnings for all private workers rose 0.4 percent from September and 2.8 percent from last October, the strongest year-over-year rise since June 2009. While the unemployment rate ticked down to 4.9 percent, it was because the decline in the labor force outweighed the drop in household employment. On a positive note, the two-tenth drop in the broadest measure of labor underutilization – the U6 – to more than an eight-year low of 9.5 percent should overcome any concern that significant labor market slack remains.



The Fed Stands Ready for a December Rate Hike

As widely expected, the Fed kept the fed funds rate steady at the November Federal Open Market Committee (FOMC) meeting. The statement following the meeting noted that the case for a rate hike "continued to strengthen" and that the Fed will wait to see just "some further evidence of continued progress toward its objectives" before raising the target rate. We believe that the October jobs report provided "some further evidence" for a rate increase in December.

One notable removal from the November FOMC statement was the phrase that inflation is expected to remain low in the near term, in part because of earlier declines in energy prices. With this change, the Fed appears to be acknowledging that the disinflationary pressures from past declines in energy prices have run their course

Inflation Has Gradually Trended Up But Remains Below Target

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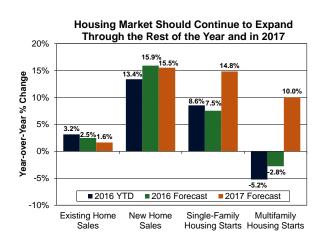
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and that inflation will gradually pick up. Inflation has firmed since earlier this year, but remains below the Fed's two-percent target. The personal consumption expenditures (PCE) deflator – the Fed's favored inflation measure – posted the highest annual growth rate since November 2014 in September, boosted by a jump in energy prices, while annual growth in the core PCE remained at a two-year best of 1.7 percent.

Given the October jobs report, we moved our expectation of the Fed's next rate hike to this December from June 2017 in our October forecast. We still believe that rate increases in coming years will be gradual – one hike every nine months. However, if there is fiscal stimulus in the near term from proposed tax cuts and infrastructure and defense spending increases, that would likely raise inflation expectations, potentially resulting in more frequent rate increases than our current assumption.

Housing Roundup

Recent housing activity has been mixed. Single-family starts rose only modestly in the third quarter after dropping in the second quarter, while multifamily starts fell for the third time in the last four quarters. Through the first three quarters, single-family starts rose nearly 9.0 percent from the same period in 2015, compared with a decline of about 5.0 percent for multifamily starts. Permits data suggest more room to grow for the single-family segment as year-to-date permits are about 8.0 percent above last year's level. By contrast, year-to-date multifamily permits are about 12 percent below the level during the same period in 2015. (For more information on multifamily market conditions, read the November 2016 Multifamily Market Commentary.)





Home sales during the third quarter were also mixed compared with the second quarter, with existing home sales declining but new home sales rising. Year to date, new and existing home sales have risen approximately 13 percent and 3.0 percent, respectively, compared with last year's levels.

One of the biggest challenges for housing remains the extremely lean inventory of homes for sale. The number of existing homes for sale declined 6.8 percent in the third quarter from a year ago, marking the sixth consecutive quarter of year-over-year decreases and the largest drop since the second quarter of 2013. CoreLogic data by price tier continued to show tighter supply and more rapid price gains in the lower tiers of the home sales market. For example, in September, inventories of homes for sales were below their year-ago levels in all price tiers, except the highest one. Meanwhile, annual home prices for the lowest price tier (up to 75 percent of the median price) and second lowest price tier (between 75 percent of the median and the median price) grew 8.8 percent and 7.6 percent, respectively – faster than the national average of 6.3 percent gain.

Tight inventory and strong home price appreciation at the lower end of the housing market will remain the biggest challenges for recently formed renter households to move into homeownership. Home purchase affordability will be constrained further if the recent pickup in mortgage rates persists, which would present a downside risk to our forecast of housing and mortgage activity. Lending standards for mortgages remain supportive, however. The Federal Reserve Senior Loan Officers Survey showed that lending standards for government-sponsored enterprise (GSE) and jumbo mortgages eased over the three months ending in October, while lending standards for government and subprime loans were unchanged. Encouragingly, the homeownership rate has recently shown signs of stabilization. The rate rose 0.6 percentage point in the third quarter, offsetting the drop in the prior quarter, and stood two-tenths below the rate in the third quarter of 2015.

We expect long-term interest rates to be volatile in the near term. While our mortgage rates forecast moved higher, our forecast for housing activity for 2016 is little changed, and we continue to expect improvement in housing starts and home sales in 2017. For mortgage production, we revised higher our projected refinance originations this year, largely in our estimate for the third quarter. For all of 2016, we expect total mortgage originations to increase about 8.0 percent to \$1.88 trillion with a refinance share declining one percentage point to 46 percent. Mortgage originations are projected to decline in 2017, falling about 14 percent to \$1.61 trillion, as a result of a drop in refinance originations, sending the refinance share lower to 34 percent.

Economic & Strategic Research (ESR) Group

November 10, 2016

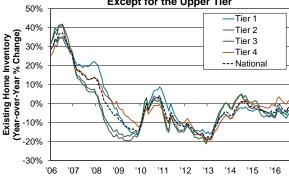
For a snapshot of macroeconomic and housing data between the monthly forecasts, please read ESR's <u>Economic and Housing Weekly</u> Notes.

Data source for charts: Federal Reserve Board, Bureau of Economic Analysis, Bureau of Labor Statistics, National Association of REALTORS®, Census Bureau, CoreLogic, and ESR forecast.

Housing Activity Shows Mix Results



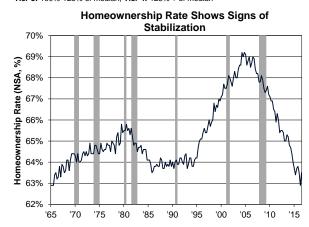
Inventory of Homes for Sale Falls Annually, Except for the Upper Tier



Note: Tier 1: 0-75% of median, Tier 2: 75%-100% of median, Tier 3: 100%-125% of median, Tier 4: 125% + of median

Home Price Growth for Starter Homes Accelerates Faster than the Rest of the Market 20% Corelogic House Price Index '00=100, Year-over-Year % Change) 15% 10% 5% 0% Tier 1 -5% Tier 2 -10% Tier 3 -15% Tier 4 -20% --- National HPI -25% '07 '08 '13 '06 '09 '10 '11 '12 '14

Note: Tier 1: 0-75% of median, Tier 2: 75%-100% of median, Tier 3: 100%-125% of median. Tier 4: 125% + of median





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