ECONOMIC REVIEW

US Economy Marches Forward at Measured Pace; Hurricanes’ Impact Felt

• **Q2 GDP rebounded after a relatively weak first quarter.** Second quarter readings came in at a 3.1% annualized rate, driven by strong consumer spending. Although Hurricanes Harvey and Irma will impact third quarter growth, reconstruction activity and federal hurricane relief efforts should help boost the economy next quarter.

• Showing its first signs of life in several months, **core inflation ticked up 0.2% in August**, which may soothe some concerns of a broad slowing. It will take more readings, however, to determine if the pickup can be sustained.

• **Consumer confidence fell in the wake of the Texas and Florida hurricanes**, but remained relatively high at 119.8 in September. The labor market was a bright spot, with fewer saying jobs are hard to get.

• The headline **unemployment rate fell to 4.2%** in September despite the first decline in nonfarm payrolls in seven years, a dip largely attributed to hurricane effects. Wage growth, which had been stagnant much of this year, spiked 0.5% last month, another sign of a tightening job market.

• **The housing sector had trouble building momentum going into year-end**, and Harvey and Irma dampened the outlook further. Going into the fourth quarter, it seems unlikely housing will be a significant near-term contributor to economic growth.

• In early September, **Congress reached a deal to raise the debt ceiling** and extend government funding for three months. Next on the agenda is a tax reform bill; passage is highly uncertain, and views on its likely economic impact vary widely.

**The Fed Releases its Bond Tapering Schedule**

• The third quarter ended with the Fed leaving interest rates unchanged. Meanwhile, after months of speculation, the Fed formally announced its plan to shrink its $4.5 trillion balance sheet.

Starting in October, the central bank will begin reducing its bond holdings by up to $10 billion per month initially, growing to $50 billion per month over time.
These are big numbers, for sure, but actually represent a fairly gradual unwinding of the so-called Quantitative Easing (QE) program. At $50 billion per month, it would take more than 7 years for the bank to fully unload its holdings.

Policy makers hope that the market impact of unwinding QE will be minimal. QE sought to keep interest rates low, so its unwinding could ultimately put upward pressure on interest rates. However, its gradual nature, combined with soft inflation expectations and quantitative easing abroad, mean rate levels could remain low for some time to come.

The latest Fed forecasts still suggest one more rate hike this year, most likely to occur at December’s meeting. Despite inflation consistently undershooting the Fed’s target (a situation Fed Chair Janet Yellen calls an economic “mystery”), policy makers believe the economy remains on solid ground.

Europe Gains Strength and Japan’s Expansion Continues

Europe’s economy recorded a broad-based expansion of 0.6% in Q2, with all reporting countries posting a quarterly rise in GDP for the first time in the post-crisis period. Economic growth was spurred by solid domestic demand and an improving labor market. Eurozone unemployment was 9.1% as of August (down from a 12.1% peak) and continues to trend lower.

Despite expressing more confidence in the European economy, the European Central Bank (ECB) recommended no changes to its monetary policies. While inflation is showing some signs of pickup, the ECB doesn’t expect inflation to reach its 2% target until 2019. More clarity is expected to emerge from the Bank’s October meeting.

Japan’s economy showed continued growth, with GDP up 0.6% in Q2 and 1.4% in the past year. The Bank of Japan expects the expansion to continue and is supporting that aim with accommodative monetary policy.

China Slowing; Brazil Turns a Corner

Signs point to China cooling after a strong first half. While growth in the world’s second-largest economy may have peaked earlier this year, it is hoped that increased government spending will cushion any downturn.

Meanwhile, a majority of the Communist Party’s top leadership is expected to retire at the upcoming National Congress. All eyes will be on their replacements, as the new officials will play a key part in shaping the country’s future policies.
Although Brazil’s GDP grew for the first time in over three years, risks to recovery remain high. Critical legislation on austerity measures is still pending, and the country’s political sphere remains roiled by ongoing corruption scandals.

India’s economy slackened in the first half of the year following implementation of the new Goods and Services Tax. The impact of implementation should be temporary, though, and early indicators point to growth picking up in the second half of the year.

MARKET REVIEW

US Stocks Calmly Advance Amidst Turmoil

US stocks marched methodically higher during an eventful third quarter in which North Korea tested a hydrogen bomb and multiple hurricanes battered Texas, Florida, and Puerto Rico—all while political discord in Washington continued unabated. Little seems able to deter the S&P 500 stock index, which rose 4.5% on the period and has now posted gains for eight consecutive calendar quarters. Year-to-date, US stocks are up 14.2% since January.

The technology sector remained a key driver for the market, gaining 8.5% in the third quarter and putting year-to-date returns at 24.0%. The “FAANG” stocks of Facebook, Amazon, Apple, Netflix and Google (Alphabet) continue to lead the charge, collectively posting a 6.4% quarterly gain on a market capitalization weighted basis. Consumer staples moved in the opposite direction, dropping 1.1% on the period and was the only sector to decline in the third quarter.

Gains weren’t just limited to large cap technology companies, as mid and small cap stocks got in on the action, rising 5.0% on the quarter as measured by the Wilshire 4500 stock index. For the year-to-date, mid and small cap stocks have returned 12.5%, slightly behind their large cap siblings (up 14.2%), however over 3- and 5-year periods, smaller companies maintain a modest performance edge.

Markets remained relatively tranquil, which is not uncommon in a rising market. The VIX volatility index spent the majority of the quarter under 11, even dipping below 10 for a couple of prolonged periods. Saber rattling over North Korea caused some short-lived spikes in volatility. US markets seem primarily focused on US economic and corporate earnings growth, which continue to make steady, if unremarkable, gains, contributing to the low volatility environment. The Fed has yet to spook investors despite tapping the brakes on monetary policy.
International Stocks Move Higher, Outpacing the US, as the Dollar Weakens

- **International developed markets bested US stocks for the third straight quarter**, with the MSCI EAFE index rising 5.5% for the period. For the year-to-date, international developed stocks have risen a robust 20.5%, as the world economy continues to improve and show signs that the global recovery is gaining traction. A 1.7% decline in the US dollar in the third quarter provided a nice boost to international stocks. Recall that from the perspective of a US investor, foreign currency denominated corporate earnings become more valuable as the US dollar weakens (i.e., the foreign currency appreciates). Likewise, the price of a foreign stock, expressed in dollars, benefits from the currency translation effect. So far, the dollar has fallen 6.8% in 2017.

- **Emerging markets posted another stellar quarter** (up 8.0%), standing out as one of 2017’s best performers, up 28.1% year-to-date. Major emerging markets component China rose 14.5% in the third quarter amid upbeat economic news and a strengthening yuan. In South America, Brazil posted an eye-popping 23.8% in the third quarter, followed by Chile and Peru, which returned 17.2% and 14.5%, respectively.

Bonds Post Gains as Fed Eyes Balance Sheet and Potential December Rate Hike

- **US bonds posted positive returns on the quarter, with the Fed holding rates steady** after three consecutive quarters of hikes. The Bloomberg Barclays US Aggregate Bond index rose 0.9% on the period and is up a healthy 3.1% for the year-to-date. This return is derived from the interest on bonds, as well as bond price appreciation resulting from declining market interest rates. Despite tame inflation readings, the Fed continues to eye a possible December rate hike. In addition, beginning in October, the Fed plans to begin slowly reducing its balance sheet by not replacing maturing bond holdings.

- **The 10-year US Treasury yield was hardly changed**, rising from 2.31% to 2.33% on the quarter, while the 2-year Treasury yield rose from 1.38% to 1.47%. This continues a trend that has seen the yield curve flatten in 2017, with short-term rates rising in conjunction with falling or stable long-term rates. A flat or even inverted yield curve (where long rates are lower than short-term rates) could portend a recession, but we are still a ways away from that situation.

- **Both foreign and municipal bonds continued their strong performance in 2017**. Munis rose 1.1% in the third quarter and have gained 4.7% year-to-date—a strong return that likely reflects an expectation that munis will retain their tax-free status in any tax reform that emerges from Washington. Foreign bonds benefited from the weak US dollar, gaining 2.6% on the quarter and 8.6% on the year.
Alternative Investments Post Quarterly Gains, but Performance Still Mixed in 2017

• **All major alternatives asset classes moved higher on the quarter.** Energy stocks posted the largest gains on the period (up 7.0%), with the price of oil rebounding to finish September around $50 per barrel. The gains still couldn’t make up for losses incurred earlier in the year, with energy stocks having shed 6.6% since January. Commodities offer a similar story, rising 2.5% in the third quarter, but still 2.9% below where they started the year.

• **Gold continued to advance in 2017,** rising 3.3% in the third quarter and pushing year-to-date returns to 12.6%. A variety of factors seem to be contributing to gold’s rise, and include a weak US dollar, strong growth in emerging markets, as well as the low-yield environment. Geopolitical tensions may also be contributing to the demand for gold, since some investors view the precious metal as a safe harbor in times of strife.

• **Real estate investment trusts (REITs) posted modest gains** in the third quarter (up 0.9%) and seem content to take a bit of a breather in 2017 (up 3.6%) compared to the broader stock market indexes. For the 5 years ending September 30, REITs have returned 9.6% on an annualized basis, providing solid growth and diversification benefits.
## Market Summary

### Index Returns

<table>
<thead>
<tr>
<th>Q3 2017</th>
<th>STOCKS</th>
<th>BONDS/DOLLAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Large Cap</td>
<td>4.48%</td>
<td></td>
</tr>
<tr>
<td>US Mid/Small Cap</td>
<td>4.96%</td>
<td></td>
</tr>
<tr>
<td>International Developed</td>
<td>5.47%</td>
<td></td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>8.04%</td>
<td></td>
</tr>
<tr>
<td>US Bond Market</td>
<td>0.85%</td>
<td></td>
</tr>
<tr>
<td>US Dollar</td>
<td>-1.68%</td>
<td></td>
</tr>
</tbody>
</table>

### Since Jan. 2001

<table>
<thead>
<tr>
<th>Avg. Quarterly Return</th>
<th>1.8%</th>
<th>2.7%</th>
<th>1.6%</th>
<th>2.9%</th>
<th>1.2%</th>
<th>0.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Quarter</td>
<td>15.9%</td>
<td>21.4%</td>
<td>25.8%</td>
<td>34.8%</td>
<td>4.6%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Q2 2009</td>
<td>Q2 2003</td>
<td>Q2 2009</td>
<td>Q2 2009</td>
<td>Q3 2001</td>
<td>Q4 2008</td>
<td></td>
</tr>
<tr>
<td>Worst Quarter</td>
<td>-21.9%</td>
<td>-23.7%</td>
<td>-20.5%</td>
<td>-27.6%</td>
<td>-3.0%</td>
<td>-5.4%</td>
</tr>
<tr>
<td>Q4 2008</td>
<td>Q4 2008</td>
<td>Q3 2008</td>
<td>Q4 2008</td>
<td>Q4 2016</td>
<td>Q2 2009</td>
<td></td>
</tr>
</tbody>
</table>

*Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.*

Market segment (index representation) as follows: US Large Cap (S&P 500 Index), US Mid/Small Cap (Wilshire 4500 Completion Index), International Developed (MSCI Europe Australasia Far East Index), Emerging Markets (MSCI Emerging Markets Index), US Bond Market (Bloomberg Barclays US Aggregate Index), and US Dollar (Trade Weighted US Dollar Index: Broad).
It is not possible to invest directly in an index. Performance does not reflect the expenses associated with management of an actual portfolio. Past performance is not a guarantee of future results.
US stocks rose for an eighth straight quarter amid continued gains in economic output and corporate earnings. Mid and small cap stocks outperformed large cap stocks in the third quarter, however large caps retain a slight lead year-to-date. The technology sector remained a key driver for US stocks as market volatility remained muted.

Foreign equities outperformed domestic markets, as international developed and emerging markets stocks jumped in response to positive macroeconomic conditions. A 1.7% drop in the value of the US dollar also boosted returns on international stocks.

**Emerging Markets Stocks**
**MSCI Emerging Markets Index**

![Chart showing the performance of the MSCI Emerging Markets Index from Sep-12 to Sep-17.]

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: US Large Cap (S&P 500 Index), US Mid/Small Cap (Wilshire 4500 Completion Index), International Developed (MSCI Europe Australasia Far East Index), Emerging Markets (MSCI Emerging Markets Index), and Global Stocks (MSCI All Country World Index). Growth of $1,000 chart market segmentations as follows: US Stocks (Wilshire 5000 Index) and Foreign Stocks (All Country World Index ex US).
Bonds posted gains in the third quarter, with the Federal Reserve holding interest rates steady after three consecutive quarters of hikes. The yield on 10-year US Treasury bonds was relatively unchanged, starting the quarter at 2.30% and finishing at 2.33%. There was a slight flattening of the yield curve, however, as short-term rates rose modestly, as evidenced by the 2-Year US Treasury yield which rose from 1.38% to 1.47% on the quarter.

Weakness in the US dollar contributed to a good quarter for foreign bonds. Tax-exempt municipal bonds also moved higher and have outpaced taxable fixed income investments year-to-date.

### Returns for the Quarter (%)

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>YTD</th>
<th>1 Year</th>
<th>3 Years*</th>
<th>5 Years*</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Total Bond Market</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-Term Investment Grade Bonds</td>
<td>0.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-Term Investment Grade Bonds</td>
<td>1.53</td>
<td>1.06</td>
<td>3.94</td>
<td>2.06</td>
</tr>
<tr>
<td>Municipal Bonds</td>
<td>0.96</td>
<td>0.87</td>
<td>3.19</td>
<td>3.01</td>
</tr>
<tr>
<td>Mortgage-Backed Bonds</td>
<td>0.86</td>
<td>0.30</td>
<td>2.44</td>
<td>1.96</td>
</tr>
<tr>
<td>Treasury Inflation-Protected Bonds</td>
<td>2.57</td>
<td>-0.73</td>
<td>1.62</td>
<td>0.02</td>
</tr>
<tr>
<td>Foreign Bonds</td>
<td></td>
<td>-3.14</td>
<td>0.47</td>
<td>-1.07</td>
</tr>
</tbody>
</table>

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: US Total Bond Market (Bloomberg Barclays US Aggregate Index), Short-Term Investment Grade (Bloomberg Barclays US Govt/Credit 1-5 Year Index), Long-Term Investment Grade (Bloomberg Barclays US Govt/Credit Long Index), Municipal (Bloomberg Barclays Municipal Index), Mortgage Backed (Bloomberg Barclays US MBS Index), Treasury Inflated-Protected (Bloomberg Barclays US TIPS Index), and Foreign (Citi World Govt Bond Non USD Index). 10-Year Treasury Bond yield data obtained from Federal Reserve Economic Data.
Alternative asset classes posted gains in the third quarter, however year-to-date performance remains mixed.

Energy stocks rallied after a poor start to 2017, but remain in negative territory for the year.

Gold continued to push higher, aided by a weak dollar, strong growth in emerging markets and geopolitical concerns.

Real estate investment trusts posted modest gains compared to other alternative asset classes, as well as the broader equity market.

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>YTD</th>
<th>1 Year</th>
<th>3 Years*</th>
<th>5 Years*</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Real Estate Investment Trusts</td>
<td>3.61</td>
<td>0.54</td>
<td>9.67</td>
<td>9.58</td>
</tr>
<tr>
<td>US Energy Stocks</td>
<td>-6.59</td>
<td>0.19</td>
<td>-6.16</td>
<td>1.23</td>
</tr>
<tr>
<td>Commodities</td>
<td>-2.87</td>
<td>-0.29</td>
<td>-10.41</td>
<td>-10.47</td>
</tr>
<tr>
<td>Gold</td>
<td>12.55</td>
<td>-1.35</td>
<td>2.36</td>
<td>-5.98</td>
</tr>
</tbody>
</table>

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

Market segment (index representation) as follows: US Real Estate Investment Trusts (MSCI US REIT Index), US Energy Stocks (S&P 500 Energy), Commodities (Bloomberg Commodity Index), and Gold (London Bullion Market Association Gold P.M. Price). Gold spot price data obtained from Federal Reserve Economic Data.
The chart on the left shows corporate profits and expectations for the next four quarters. Earnings have begun to rebound from their recent pullback.

A strong US dollar has historically been a headwind to earnings. The recent increase in profits has coincided with a weakening dollar, as seen in the chart above.

Source: JP Morgan Asset Management
Europe's economy recorded a broad-based expansion in Q2. The top chart shows that economic growth has been driven by increased domestic demand, rather than from external demand in the form of exports.

Combined with stimulatory monetary policy from the ECB, this growth has led to a steady decline in the unemployment rate, as seen in the bottom chart.

Source: JP Morgan Asset Management
The chart below shows the downward trend in real and nominal interest over the past 30+ years. In recent years, between quantitative easing and zero-interest rate policies, central banks around the world have kept yields at historically low levels. With the Fed signaling another rate hike before year-end and an unwinding of QE, interest rates have started to creep up from their lowest levels. Other factors, such as weak inflation, are pulling rates lower, so a reversal of the long-term downtrend is far from certain at this point.