Principal Global Investors

Principal

Economic Insights

Commentary by Bob Baur, Robin Anderson, and the Economic Committee

Topic summaries:

- **What's After Peak Momentum?**

  Confidence, activity, and survey data have surged relentlessly higher over the last few months. At some point, the growth acceleration will slow as momentum peaks. The cyclical upturn seems widespread enough to last well into 2018.

- **Trump's Trade Tactics:**

  President Trump is serious about trade. Ultimate policy and growth outcomes are hard to predict, but some are clearly negative.

- **Is the Bull Market in Bonds Over?**

  After 35 years of falling interest rates, at the moment it does seem to be over. The next move higher in U.S. Treasury bond yields, if it comes, should be signaled by a rebound of inflation and sovereign bond yields in Germany and Japan

- **Asset Allocation: Transition**

  The key to financial markets is the transition from a decade of crisis, fear, and slow growth to an era of better growth with mild inflation. The higher interest rates that will likely evolve from that trend may bring a significant correction to world stock markets.

For the month of February 2017

What Happens after Peak Momentum?

At the end of 2015 and beginning of 2016, the confluence of two trends, collapsing commodity prices and a surging dollar, came to a head. Broad commodity prices had been falling for about five years as excess capacity built up in China and elsewhere. Oil prices started to fall in June 2014 and overproduction was behind its precipitous 20-month collapse too. At the same time, the dollar surged because markets anticipated the beginning of normalizing interest rates and investors wanted a safe haven. The dearth of dollars added to the deflationary shock and also translated into tighter financial conditions. As a result, global nominal gross domestic product (GDP) denominated in U.S. dollars shrank in 2015 at the fastest pace since the 1930s. But, it was not just prices that drove the plunge in GDP, it was also anemic growth. Many countries had manufacturing PMIs (purchasing manager indices) firmly contracting. The U.S. economy escaped recession, but its manufacturing and industrial sectors did not.

Finally, commodity prices began to bottom. Copper and other raw industrial commodities hit a trough in late 2015; then broad commodities and oil hit their lows in February 2016. At the same time, the dollar peaked in January and fell back. The global upturn started shortly and was clearly evident by summer. 2016 marked, perhaps, the end of deflation. By fall, prices were no longer dropping and activity was firmly recovering not only in the United States, but around the world. Nominal growth picked up as the deflation threat faded. As detailed below, the latest fourth quarter and January data confirm this synchronized uptrend.

The second derivative:

At some point, though, the global economy will reach peak momentum. The base effects from late 2015 and early 2016 should roll off the data by spring. At that time, the acceleration in growth may be over and the second derivative, or the rate of change of growth (for you math majors), may turn flat. That's the time when we'll learn

> The initial print of U.S. fourth-quarter growth was a disappointment, up only 1.9% over the prior quarter.
>
> Bob Baur • Chief Global Economist, Principal Global Investors

how strong the fundamentals of this global upturn really are. We think the underpinnings of the current above-trend growth are robust enough to carry the expansion at the current pace into 2018. But, we won't really know until the acceleration peaks and the second derivative hits zero. We'll keep you posted…

A mild miss for U.S. GDP:

The initial print of fourth-quarter growth was a disappointment, up only 1.9% over the prior quarter. So with the energy and dollar drags of the first half, 2016 was the weakest year for growth since 2011! Sometimes, though, looks can be deceiving. There were some negatives, but the underlying details were strong.

Net exports subtracted a massive 1.7 percentage points from growth, the biggest drag since 2010. Exports plunged 4.3%, likely part was some giveback from the surge in soybean exports in the third quarter. Imports soared, up 8.3%, contributing to the overall subtraction from growth. But, strong imports mean somebody's buying something in the United States, a real positive for demand. Inventory gains added a full percentage point on growth, the first advance in over a year. At $48.7 billion, the pace of company stocking may have finally normalized at the recent average gain. Inventories could still be a drag, though, this quarter.

Solid U.S. domestic demand:

Final sales to private domestic purchasers increased 2.8%, a robust number. Consumer spending rose 2.5%. While services spending increased only 1.5%, that initial estimate will likely be upwardly revised with more accurate data. Fixed business investment grew 4.2% as equipment spending turned positive for the first time since third-quarter 2015. Investment in housing plus state and local government spending recovered from strange drops the last two quarters, now up 10.2% and 2.6%, respectively.

Other U.S. activity and survey numbers pointed to excellent growth momentum. Capital goods orders, which lead future business investment, were strong. Business surveys by regional Federal Reserve (Fed) banks stay robust; the Richmond Fed manufacturing index jumped to the highest level in 10 months; the Kansas City Fed index remained at a healthy 9. The Michigan Consumer Confidence index surged 11 points over the last two months, reaching a 13-year high of 98.5. Home sales were soft, existing-home sales fell 2.8% and new-homes sales contracted 10.4%. The inventory of homes for sale is very tight, which may be keeping sales low. Existing homes for sale total 1.65 million, the lowest since data began in 1999, giving only a 3.6 months available supply, matching the record low of January 2005.

Global activity notching higher too:

Eurozone business surveys remained strong with the manufacturing index up to 55.1 and the services index at 53.7. Germany's services company index softened slightly, but France's jumped a point to 53.9. Euro area consumer confidence rose nicely, while German and French business confidence index edged a bit softer. The UK economy ended 2016 on a high note, with fourth-quarter GDP up 2.2%, the fastest in the G10. Italian courts did reject some key electoral changes proposed by former Prime Minister Renzi. So, elections could be held by summer, rather than into 2018. However, it will now take a 40% plurality by any one party to receive bonus seats in the Parliament, which will make it very difficult for anti-European Union parties to seize control of the government.

In China:

The growth of nominal GDP (before inflation adjustments) surged in the fourth quarter. It was up nearly 10%, far above the low of 6% several quarters ago. Faster nominal growth is good for profits, keeping defaults or debt problems at bay a while longer. While questions remain about the reality of Chinese statistics, hard data about things like railway freight, airline passengers, and electricity consumption do confirm the strength in GDP. Capital spending by private companies has picked up a bit; consumer spending stays strong at just under 11% growth year-over-year.

Japan:

With China, Europe, and the United States firmly in reflation mode, Japan will likely be next. Japan's preliminary survey of manufacturing companies was decent, rising to 52.8. Exports grew 5.4% in December and have been steadily rising since summer. While some of the surge likely results from a weaker yen, it is also more validation of the global upturn underway. There are tentative signs that Japan's core inflation could turn positive in early 2017. Core consumer-price inflation was at a slower pace in December versus the last few months. But, the early reading of January's core consumer-price inflation for Tokyo showed a slowing pace of deflation. Lastly, the year-over-year changes in the Nikkei's tracking index of consumer price inflation has clearly turned around in the last few months.

The outlook:

The global economy is recovering from the dollar-denominated recession of 2015. That recession was hopefully the last trauma of a decade of incessant crises, slow growth, deflation worries, relapse fears, zero interest rates, and central-bank hyperactivity. Stock prices and interest rates have been rising; nominal growth is accelerating; profits are rising; and cyclical reflation is firmly entrenched across much of the world. While the fourth-quarter U.S. growth estimate was disappointing, the underlying details and other activity data point to robust domestic demand, business and consumer confidence is surging. Around the world, confidence indicators and business surveys continue to accelerate upward. As noted earlier, the pace of reflation might slow, but solid above-trend growth could persist into 2018.

The key to that persistence is how consumers and businesses respond to the new environment. A tighter U.S. labor market supports wage growth and broader consumer spending. Business and consumer confidence may stop surging, but at overall high levels, that assurance adds strong support to growth. For the upturn to continue, the virtuous circle of expansion has to emerge: solid wage growth leading to improving profits, which generate capital spending, which results in even more job and wage growth, which in turn brings even higher consumer spending. If this virtuous circle of expansion emerges, it could sustain the current above-trend growth for some time yet. European consumer spending stays resilient despite political headwinds, and labor markets are healing as unemployment falls. Social pressures and key leadership changes will keep Chinese growth on target. Debt problems are clearly there in China, but will likely remain in check until a later date. The weaker yen will support Japanese growth, and maybe even add a little inflation. We look for the cyclical upturn to continue into early 2018 when some deceleration will surely occur.

President Trump's Trade Tactics

One threat to the current cyclical upturn comes from potential problems in international trade. President Trump's inauguration speech and initial executive actions on trade have had a strong protectionist tone. Some of the potential trade scenarios to consider may have untoward consequences. Any type of border tax on Mexican or other country's retail goods would ultimately be passed onto U.S. consumers in the form of higher prices. That type of broad punitive tax seems unlikely because it would surely need Congressional authorization.

A broader tax, called a border adjustment tax, may be more likely and is already part of the House of Representatives plan of tax reform. A border adjustment tax means that businesses would pay a tax on imported goods, but would not be taxed on the value of exported goods. The theoretical offset to the higher prices of

imported goods would be a sizeable adjustment upward of the U.S. dollar. This would be a significant shift in U.S. corporate tax policy and extremely negative for large retailers like Costco or Wal-Mart. While such a tax would raise a lot of revenue and offset the loss from a lower corporate tax rate, it would entail significant adjustments throughout the economy. Select tariffs on certain Chinese goods, like steel or aluminum, are plausible and President Trump can accomplish some of that via executive action, similar to steel and tire tariffs imposed by former Presidents George W. Bush and Barack Obama.

The biggest risk is through much broader trade problems with China. One way China could retaliate to punitive U.S. tariffs is through a sharp plunge in its currency. China is already using its foreign exchange reserves and implementing strict capital controls just to keep the renminbi stable. For China to allow a significant devaluation in the yuan would be a true global deflationary shock. The dollar would be forced higher and other countries that compete with Chinese exports would surely try to devalue their currency in response. Global trade would shrink in that situation hurting all countries.

Globalization has been the underpinning of world trade since the late 1980s. The UK vote to exit the European Union and the U.S. election of Donald Trump may represent a broad belief that the benefits of that open trade have been too narrowly based. It is true that not all countries have borders as open as those of the United States and Europe. If the goal of President Trump's trade policy is to have reciprocal free trade or to balance that openness, the resulting trade issues should be manageable. It's hard to find examples of real trade wars in any recent history. Let's hope it stays that way. The ultimate economic impact from pivots away from the easy flows of goods, people, and services across countries are unclear and could take a long time to play out. And they likely will not be positive.

Is the Bull Market in Bonds Over?

For 35 years, U.S. interest rates have moved relentlessly lower. After a high tick of 15.84% on September 30, 1981, yields on 10-year U.S. treasury bonds slid seemingly inexorably until hitting 1.43% on July 25, 2012. But even that wasn't the end. Yields rebounded to close out 2013 at 3.04% on December 31st, but sank once again under unremitting deflationary pressure to an ultimate (?) low of 1.37% on July 5, 2016. Does that mark the bear market low in yields? It would seem so.

Back at that low day in July, the consensus was strongly bullish on yields. The crowd said "lower for longer" with some suggesting 1.25% wasn't out of the question. Investors were said to own bonds for appreciation and stocks for income, not suggestions typically found in finance textbooks. Unless another severe deflationary shock occurs, which we're surely not expecting, bond market attitudes last summer seemed to exhibit classic signs of a bull market top. The consensus believed. Second, safe-haven bonds were heavily over-owned. Money had moved out of equity mutual funds and into bond mutual funds for years. Third, almost no one believed that there was any risk in owning U.S. treasury bonds. After all, central banks were too scared to raise rates, deflation would always be with us, potential growth had fallen drastically, so yields could never rise much. That was the mantra.

› But, rise they could/did:

From that July floor, 10-year U.S. treasury yields shot up to 2.6% in mid-December and ended Friday, January 27th at 2.48%. See the table on the following page for recent rate history. It's likely that the ultra-low yields on 10-year German bunds and Japanese government bonds (JGBs) will keep downward pressure on U.S. yields at least for a while. The signal for U.S. rates to step up another notch would be more inflation and higher yields in the Eurozone and Japan.

German bund yields are already on the move as inflation trends higher. From a July 8th low of -0.19%, yields jumped to 0.39% in mid-December coincident with the United States. Since then, however, bund yields made a one-year high at 0.48%. The Bank of Japan (BOJ) has been pegging the yield on 10-year JGBs at 0.0%, but JGB yields keep trying to push above the peg. With deflation fading, the BOJ may have to raise its peg at some point, which would release some of the down pressure on U.S. yields. The next push up for U.S. yields could be as early as mid-2017 or at least in the second half.

Interest Rates

	12/31/2014	12/31/2015	12/30/16	12/15/2016 (High)*	07/08/2016 (Low)*	1/27/2017 Current
2 year	0.66%	1.05%	1.19%	1.27%	0.61%	1.22%
10 year	2.17%	2.27%	2.44%	2.60%	1.36%	2.48%
10-2 spread	1.51%	1.22%	1.25%	1.33%	0.75%	1.26%
30 year	2.75%	3.02%	2.06%	3.16%	2.10%	3.06%

*Twelve month high and low, based on the 10-year Treasury bond over the prior 12 months
Source: Bloomberg

So, how high is high?

There still are limits to how high sovereign bonds yields can rise. There is lots of industrial and labor market slack around the world, which will keep growth slow and inflation under control. After a fierce and intense 10-year battle with deflation, central banks will not be inclined to give up their hard-won success and will likely be very slow to remove their accommodation and normalize interest rates. Potential growth has certainly slowed from the heady pace of the 1960s, 1980s, or 1990s in the United States. Demographics pinch growth lower through slower growth in the labor force. And with companies reticent to lift capital spending, productivity growth is weak too.

So, yields on 10-year U.S. treasury bonds are not at all likely to return to the 4% to 5% averages of past decades anytime soon. The transition from a decade of slow growth, deflation worries, zero interest rates, high savings rates, and fears of a relapse to one of better growth with mild inflation will also take some time and adjustment. Our thoughts about yields for yearend 2017 and beyond are in the table to the right.

Interest Rates	Yearend 2017	Yearend 2018
Federal Funds	1.38%	1.88%
2-Year UST Yield	1.75%	2.0%-2.5%
10-Year UST Yield	3.0%-3.5%	3.0%-3.5%
2-10 Year Spread	1.25-1.75%	1.0%-1.5%

Asset Allocation: Transition

After a decade of slow or slowing growth, deflation worries, relapse fears, austerity, deleveraging, zero interest rates, punctuated by an incessant series of financial crises, the global economy is in a transition to a period of better growth with mild inflation. We've not changed our view, reflation is the order of the day. Nominal growth is picking up, bringing a revival of profits and with that, some green shoots of capital spending. Both S&P 500 index earnings and economy-wide U.S. profits are up year-over-year for the first time in seven quarters. Consumer and business confidence is surging. Interest rates and stock prices have been rising together since July because the drivers of both are the same.

Since last summer, the financial assets and sectors that have had the best performance have been those that benefit the most from faster growth and improving profits, i.e., cyclical securities. That is what usually happens when an economy emerges from a recession. And in some sense, that is indeed what is happening; in dollar-denominated terms, global output in 2015 fell the most of any recession since the 1930s. The recovery began shortly after the price of oil hit its final trough on February 11, 2016 and cyclical assets have outperformed dramatically since then.

A Trump rally?

CSome call it that even though before the election most pundits predicted a market collapse if Trump won. Now, those same commentators suggest that the rally may soon fade as the bold predictions of tax and regulatory relief from the new administration come to naught. Besides, they say, the cyclical revival already failed in January. And it is true that the Russell 1000 value lost to the Russell 1000 growth index by 2.75% though January 27th. The Russell 2000 value trailed its growth counterpart by 2.35%; and Russell large caps blew by Russell small caps by 1.59%.

That correction in the cyclical rally is likely just a consolidation after the blistering cyclical returns since the U.S. election. In fact, the cyclical rally really began last March, far predating the U.S. election. Our take on the rally is slightly different: the underlying economic environment is quite solid regardless of whatever stimulus, if any, comes from the new administration. The stock market is responding to those fundamentals. So the good performance of cyclical assets should persist.

In fact, looking at sectors rather than at growth, value, large cap, or small cap, the cyclical rally is indeed still intact. The sectors that will benefit the most from fast growth and improving profits did have better returns than sectors with more defensive characteristics. In both U.S. and global MSCI sector indices, materials, tech, industrials, and financials all outperformed utilities, health care, consumer staples, and telecoms in January through the 27th.

What will stop the rally?

It will likely be interest rates. While stocks and yields can rise together for a while, eventually higher rates will be a drag on the stock market. That point of drag is somewhere perhaps a bit north of a 3% yield on 10-year U.S. Treasury bonds. As noted above, the signal for the next upturn in Treasury bond yields should be a revival of inflation and higher 10-year sovereign bond yields in Germany and Japan. That would encourage the central banks to be less accommodative and begin the return of official rates to something much less extraordinary than zero or below.

In the meantime, there is likely more upside to global stock markets on the order of 5% to 8% or so. But we would suggest watching developed-country interest rates as a signal to turn more cautious.

Disclosures

Unless otherwise noted, the information in this document has been derived from sources believed to be accurate as of February 2017. Information derived from sources other than Principal Global Investors or its affiliates is believed to be reliable; however, we do not independently verify or guarantee its accuracy or validity. Past performance is not necessarily indicative or a guarantee of future performance and should not be relied upon to make an investment decision.

The information in this document contains general information only on investment matters. It does not take account of any investor's investment objectives, particular needs or financial situation and should not be construed as specific investment advice, an opinion or recommendation or be relied on in any way as a guarantee, promise, forecast or prediction of future events regarding a particular investment or the markets in general. All expressions of opinion and predictions in this document are subject to change without notice. Any reference to a specific investment or security does not constitute a recommendation to buy, sell, or hold such investment or security, nor an indication that Principal Global Investors or its affiliates has recommended a specific security for any client account.

Principal Financial Group, Inc., Its affiliates, and its officers, directors, employees, agents, disclaim any express or implied warranty of reliability or accuracy (including by reason of negligence) arising out of any for error or omission in this document or in the information or data provided in this document.

Any representations, example, or data not specifically attributed to a third party herein, has been calculated by, and can be attributed to Principal Global Investors. Principal Global Investors disclaims any and all express or implied warranties of reliability or accuracy arising out of any for error or omission attributable to any third party representation, example, or data provided herein.

All figures shown in this document are in U.S. dollars unless otherwise noted.

This document is issued in:

• The United States by Principal Global Investors, LLC, which is regulated by the U.S. Securities and Exchange Commission.
• Europe by Principal Global Investors (Europe) Limited, Level 1, 1 Wood Street, London EC2V 7JB, registered in England, No. 03819986, which has approved its contents, and which is authorised and regulated by the Financial Conduct Authority.
• Singapore by Principal Global Investors (Singapore) Limited (ACRA Reg. No. 199603735H), which is regulated by the Monetary Authority of Singapore and is directed exclusively at institutional investors as defined by the Securities and Futures Act (Chapter 289).
• Australia by Principal Global Investors (Australia) Limited (ABN 45 102 488 068, AFS License No. 225385), which is regulated by the Australian Securities and Investment Commission.
• This document is issued by Principal Global Investors LLC, a branch registered in the Dubai International Financial Centre and authorized by the Dubai Financial Services Authority as a representative office and is delivered on an individual basis to the recipient and should not be passed on or otherwise distributed by the recipient to any other person or organisation. This document is intended for sophisticated institutional and professional investors only.
• Japan by Principal Global Investors (Japan) Ltd. (Kanto Local Finance Bureau (Kinsho) No. 462, Japan Investment Advisers Association; Membership No. 011-01627).
• In the United Kingdom this presentation is directed exclusively at persons who are Eligible Counterparties or Professional Clients (as defined by the rules of the Financial Conduct Authority). In connection with its management of client portfolios, Principal Global Investors (Europe) Limited may delegate management authority to affiliates who are not authorized and regulated by the FCA. In any such case, the client may not benefit from all the protections afforded by the rules and regulations enacted under the Financial Services and Markets Act 2000.
• India by Principal Pnb Asset Management Company Private Limited (PPAMC). PPAMC offers only the units of the schemes of Principal Mutual Fund, a mutual fund registered with SEBI.

This material is not intended for distribution to, or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation. Investing involves risk, including possible loss of principal.

Insurance products and plan administrative services provided through Principal Life Insurance Co. Principal Funds, Inc. is distributed by Principal Funds Distributor, Inc. Securities offered through Principal Securities, Inc., 800-547-7754, Member SIPC and/or independent broker/dealers. Principal Life, Principal Funds Distributor, Inc. and Principal Securities are members of the Principal Financial Group®, Des Moines, IA 50392.

©2016 Principal Financial Services, Inc.
Principal, Principal and the symbol design and Principal Financial Group are trademarks and service marks of Principal Financial Services, Inc., a member of the Principal Financial Group. Principal Global Investors is the asset management arm of the Principal Financial Group.

t17013007g7

MM8299-51

Baseline Economic Forecasts for 2017-2018, by Quarter

Baseline Forecasts

A. Growth in Real GDP - Qtr-Qtr (% Change, Annualized):

	1st QUARTER 17 Forecast		2nd QUARTER 17 Forecast		3rd QUARTER 17 Forecast		4th QUARTER 17 Forecast		2015 ACTUAL		2016 FORECAST	
Real GDP	**16,921.3**	**2.8%**	**17,041.5**	**2.9%**	**17,156.5**	**2.7%**	**17,270.3**	**2.7%**	**16,397.2**	**2.6%**	**16,660.0**	**1.6%**
Personal Consumption Expenditures	**11,757.6**	**4.1%**	**11,834.1**	**2.6%**	**11,911.2**	**2.6%**	**11,988.7**	**2.6%**	**11,214.7**	**3.2%**	**11,514.9**	**2.7%**
Durable Goods	1,662.6	4.0%	1,679.0	4.0%	1,695.5	4.0%	1,712.3	4.0%	1,498.1	6.9%	1,584.2	5.7%
Non-Durables	2,535.2	3.0%	2,554.0	3.0%	2,572.9	3.0%	2,592.0	3.0%	2,439.3	2.6%	2,498.9	2.4%
Services	7,574.8	2.3%	7,616.2	2.2%	7,657.7	2.2%	7,699.5	2.2%	7,310.3	2.8%	7,475.6	2.3%
Gross Private Domestic Invest.	**2,874.3**	**-0.4%**	**2,913.5**	**5.6%**	**2,945.2**	**4.4%**	**2,975.1**	**4.1%**	**2,869.0**	**5.0%**	**2,826.8**	**-1.5%**
Bus. Fixed Invest.	2,230.9	4.7%	2,253.3	4.1%	2,275.9	4.1%	2,296.6	3.7%	2,200.2	2.1%	2,190.7	-0.4%
Structures	441.9	2.0%	444.1	2.0%	446.3	2.0%	446.3	0.0%	452.1	-4.4%	438.3	-3.1%
Equipment	1,053.0	5.0%	1,065.9	5.0%	1,079.0	5.0%	1,092.2	5.0%	1,072.5	3.5%	1,042.1	-2.8%
Intellectual Property Products	738.0	5.0%	745.3	4.0%	752.7	4.0%	760.1	4.0%	680.0	4.8%	714.1	5.0%
Residential Invest.	608.4	8.0%	620.2	8.0%	629.3	6.0%	638.5	6.0%	564.5	11.7%	592.2	4.9%
Change in Inventory	35.0	-	40.0	-	40.0	-	40.0	-	84.0	-	21.8	-
Net Exports	**-602.5**	**-**	**-606.9**	**-**	**-609.6**	**-**	**-612.3**	**-**	**-540.0**	**-**	**-561.7**	**-**
Exports	2,155.8	3.3%	2,171.8	3.0%	2,186.3	2.7%	2,200.9	2.7%	2,120.6	0.1%	2,128.4	0.4%
Imports	2,758.3	3.0%	2,778.8	3.0%	2,796.0	2.5%	2,813.3	2.5%	2,660.6	4.6%	2,690.1	1.1%
Gov't Purchases of Goods & Services	**2,921.0**	**0.8%**	**2,929.9**	**1.2%**	**2,938.9**	**1.2%**	**2,947.9**	**1.2%**	**2,883.7**	**1.8%**	**2,908.9**	**0.9%**
Federal	1,122.3	0.4%	1,124.5	0.8%	1,126.8	0.8%	1,129.0	0.8%	1,113.9	0.0%	1,120.5	0.6%
National Defense	664.5	1.0%	666.1	1.0%	667.8	1.0%	669.4	1.0%	672.0	-2.1%	667.0	-0.7%
Non-Defense	457.9	0.5%	458.4	0.5%	459.0	0.5%	459.6	0.5%	441.3	3.3%	452.7	2.6%
State & Local	1,798.7	1.5%	1,805.4	1.5%	1,812.1	1.5%	1,818.9	1.5%	1,768.2	2.9%	1,786.6	1.0%
Real Final Sales	16,886.3	3.6%	17,001.5	2.8%	17,116.5	2.7%	17,230.3	2.7%	16,300.6	2.4%	16,624.0	2.0%
Real Domestic Final Sales	17,488.8	3.5%	17,608.4	2.8%	17,726.1	2.7%	17,842.6	2.7%	16,841.7	3.1%	17,187.1	2.1%
y/y	2.4%		2.8%		2.6%		2.8%					

	1st QUARTER 18 Forecast		2nd QUARTER 18 Forecast		3rd QUARTER 18 Forecast		4th QUARTER 18 Forecast		2017 FORECAST		2018 FORECAST	
Real GDP	**17,387.5**	**2.7%**	**17,504.1**	**2.7%**	**17,592.3**	**2.0%**	**17,635.9**	**1.0%**	**17,097.4**	**2.6%**	**17,529.9**	**2.5%**
Personal Consumption Expenditures	**12,066.8**	**2.6%**	**12,145.5**	**2.6%**	**12,211.2**	**2.2%**	**12,262.2**	**1.7%**	**11,872.9**	**3.1%**	**12,171.4**	**2.5%**
Durable Goods	1,729.1	4.0%	1,746.2	4.0%	1,757.0	2.5%	1,765.7	2.0%	1,687.4	6.5%	1,749.5	3.7%
Non-Durables	2,611.2	3.0%	2,630.6	3.0%	2,646.9	2.5%	2,660.0	2.0%	2,563.5	2.6%	2,637.2	2.9%
Services	7,741.5	2.2%	7,783.7	2.2%	7,822.3	2.0%	7,851.5	1.5%	7,637.0	2.2%	7,799.8	2.1%
Gross Private Domestic Invest.	**3,007.6**	**4.4%**	**3,040.5**	**4.4%**	**3,058.9**	**2.5%**	**3,049.5**	**-1.2%**	**2,927.0**	**3.5%**	**3,039.1**	**3.8%**
Bus. Fixed Invest.	2,319.7	4.1%	2,343.0	4.1%	2,366.6	4.1%	2,377.2	1.8%	2,264.2	3.4%	2,351.6	3.9%
Structures	448.5	2.0%	450.7	2.0%	453.0	2.0%	453.0	0.0%	444.6	1.4%	451.3	1.5%
Equipment	1,105.6	5.0%	1,119.2	5.0%	1,132.9	5.0%	1,135.7	1.0%	1,072.5	2.9%	1,123.4	4.7%
Intellectual Property Products	767.6	4.0%	775.1	4.0%	782.8	4.0%	790.5	4.0%	749.0	4.9%	779.0	4.0%
Residential Invest.	647.9	6.0%	657.4	6.0%	662.3	3.0%	662.3	0.0%	624.1	5.4%	657.5	5.3%
Change in Inventory	40.0	-	40.0	-	30.0	-	10.0	-	38.8	-	30.0	-
Net Exports	**-615.3**	**-**	**-619.8**	**-**	**-620.9**	**-**	**-624.0**	**-**	**-607.9**	**-**	**-620.0**	**-**
Exports	2,218.9	3.3%	2,235.3	3.0%	2,251.9	3.0%	2,263.1	2.0%	2,178.7	2.4%	2,242.3	2.9%
Imports	2,834.2	3.0%	2,855.2	3.0%	2,872.9	2.5%	2,887.1	2.0%	2,786.6	3.6%	2,862.3	2.7%
Gov't Purchases of Goods & Services	**2,957.5**	**1.3%**	**2,967.1**	**1.3%**	**2,972.2**	**0.7%**	**2,977.4**	**0.7%**	**2,934.4**	**0.9%**	**2,968.5**	**1.2%**
Federal	1,131.8	1.0%	1,134.6	1.0%	1,137.5	1.0%	1,140.3	1.0%	1,125.7	0.5%	1,136.1	0.9%
National Defense	671.1	1.0%	672.8	1.0%	674.4	1.0%	676.1	1.0%	666.9	0.0%	673.6	1.0%
Non-Defense	460.7	1.0%	461.9	1.0%	463.0	1.0%	464.2	1.0%	458.7	1.3%	462.5	0.8%
State & Local	1,825.7	1.5%	1,832.5	1.5%	1,834.8	0.5%	1,837.0	0.5%	1,808.8	1.2%	1,832.5	1.3%
Real Final Sales	17,347.5	2.7%	17,464.1	2.7%	17,562.3	2.3%	17,625.9	1.5%	17,058.6	2.6%	17,499.9	2.6%
Real Domestic Final Sales	17,962.8	2.7%	18,083.9	2.7%	18,183.2	2.2%	18,249.9	1.5%	17,666.5	2.8%	18,120.0	2.6%
y/y	2.8%		2.7%		2.5%		2.1%					

Source: Historical Statistics - U.S. Dept. of Commerce, Bureau of Economic Analysis (http://www.bea.gov/bea/dn1.htm), Projections - Internal Estimates.

Baseline Economic Forecasts for 2017-2018, by Quarter

Baseline Forecasts

A. **Growth in Real GDP - Qtr-Qtr (% Change, Annualized):**

	1st QUARTER 17 Forecast		2nd QUARTER 17 Forecast		3rd QUARTER 17 Forecast		4th QUARTER 17 Forecast		2015 ACTUAL		2016 FORECAST	
Real GDP	**16,921.3**	**2.8%**	**17,041.5**	**2.9%**	**17,156.5**	**2.7%**	**17,270.3**	**2.7%**	**16,397.2**	**2.6%**	**16,660.0**	**1.6%**
Personal Consumption Expenditures	**11,757.6**	**4.1%**	**11,834.1**	**2.6%**	**11,911.2**	**2.6%**	**11,988.7**	**2.6%**	**11,214.7**	**3.2%**	**11,514.9**	**2.7%**
Durable Goods	1,662.6	4.0%	1,679.0	4.0%	1,695.5	4.0%	1,712.3	4.0%	1,498.1	6.9%	1,584.2	5.7%
Non-Durables	2,535.2	3.0%	2,554.0	3.0%	2,572.9	3.0%	2,592.0	3.0%	2,439.3	2.6%	2,498.9	2.4%
Services	7,574.8	2.3%	7,616.2	2.2%	7,657.7	2.2%	7,699.5	2.2%	7,310.3	2.8%	7,475.6	2.3%
Gross Private Domestic Invest.	**2,874.3**	**-0.4%**	**2,913.5**	**5.6%**	**2,945.2**	**4.4%**	**2,975.1**	**4.1%**	**2,869.0**	**5.0%**	**2,826.8**	**-1.5%**
Bus. Fixed Invest.	2,230.9	4.7%	2,253.3	4.1%	2,275.9	4.1%	2,296.6	3.7%	2,200.2	2.1%	2,190.7	-0.4%
Structures	441.9	2.0%	444.1	2.0%	446.3	2.0%	446.3	0.0%	452.1	-4.4%	438.3	-3.1%
Equipment	1,053.0	5.0%	1,065.9	5.0%	1,079.0	5.0%	1,092.2	5.0%	1,072.5	3.5%	1,042.1	-2.8%
Intellectual Property Products	738.0	5.0%	745.3	4.0%	752.7	4.0%	760.1	4.0%	680.0	4.8%	714.1	5.0%
Residential Invest.	608.4	8.0%	620.2	8.0%	629.3	6.0%	638.5	6.0%	564.5	11.7%	592.2	4.9%
Change in Inventory	35.0 -		40.0 -		40.0 -		40.0 -		84.0 -		21.8 -	
Net Exports	**-602.5 -**		**-606.9 -**		**-609.6 -**		**-612.3 -**		**-540.0 -**		**-561.7 -**	
Exports	2,155.8	3.3%	2,171.8	3.0%	2,186.3	2.7%	2,200.9	2.7%	2,120.6	0.1%	2,128.4	0.4%
Imports	2,758.3	3.0%	2,778.8	3.0%	2,796.0	2.5%	2,813.3	2.5%	2,660.6	4.6%	2,690.1	1.1%
Gov't Purchases of Goods & Services	**2,921.0**	**0.8%**	**2,929.9**	**1.2%**	**2,938.9**	**1.2%**	**2,947.9**	**1.2%**	**2,883.7**	**1.8%**	**2,908.9**	**0.9%**
Federal	1,122.3	0.4%	1,124.5	0.8%	1,126.8	0.8%	1,129.0	0.8%	1,113.9	0.0%	1,120.5	0.6%
National Defense	664.5	1.0%	666.1	1.0%	667.8	1.0%	669.4	1.0%	672.0	-2.1%	667.0	-0.7%
Non-Defense	457.9	0.5%	458.4	0.5%	459.0	0.5%	459.6	0.5%	441.3	3.3%	452.7	2.6%
State & Local	1,798.7	1.5%	1,805.4	1.5%	1,812.1	1.5%	1,818.9	1.5%	1,768.2	2.9%	1,786.6	1.0%
Real Final Sales	16,886.3	3.6%	17,001.5	2.8%	17,116.5	2.7%	17,230.3	2.7%	16,300.6	2.4%	16,624.0	2.0%
Real Domestic Final Sales	17,488.8	3.5%	17,608.4	2.8%	17,726.1	2.7%	17,842.6	2.7%	16,841.7	3.1%	17,187.1	2.1%
y/y	2.4%		2.8%		2.6%		2.8%					

	1st QUARTER 18 Forecast		2nd QUARTER 18 Forecast		3rd QUARTER 18 Forecast		4th QUARTER 18 Forecast		2017 FORECAST		2018 FORECAST	
Real GDP	**17,387.5**	**2.7%**	**17,504.1**	**2.7%**	**17,592.3**	**2.0%**	**17,635.9**	**1.0%**	**17,097.4**	**2.6%**	**17,529.9**	**2.5%**
Personal Consumption Expenditures	**12,066.8**	**2.6%**	**12,145.5**	**2.6%**	**12,211.2**	**2.2%**	**12,262.2**	**1.7%**	**11,872.9**	**3.1%**	**12,171.4**	**2.5%**
Durable Goods	1,729.1	4.0%	1,746.2	4.0%	1,757.0	2.5%	1,765.7	2.0%	1,687.4	6.5%	1,749.5	3.7%
Non-Durables	2,611.2	3.0%	2,630.6	3.0%	2,646.9	2.5%	2,660.0	2.0%	2,563.5	2.6%	2,637.2	2.9%
Services	7,741.5	2.2%	7,783.7	2.2%	7,822.3	2.0%	7,851.5	1.5%	7,637.0	2.2%	7,799.8	2.1%
Gross Private Domestic Invest.	**3,007.6**	**4.4%**	**3,040.5**	**4.4%**	**3,058.9**	**2.5%**	**3,049.5**	**-1.2%**	**2,927.0**	**3.5%**	**3,039.1**	**3.8%**
Bus. Fixed Invest.	2,319.7	4.1%	2,343.0	4.1%	2,366.6	4.1%	2,377.2	1.8%	2,264.2	3.4%	2,351.6	3.9%
Structures	448.5	2.0%	450.7	2.0%	453.0	2.0%	453.0	0.0%	444.6	1.4%	451.3	1.5%
Equipment	1,105.6	5.0%	1,119.2	5.0%	1,132.9	5.0%	1,135.7	1.0%	1,072.5	2.9%	1,123.4	4.7%
Intellectual Property Products	767.6	4.0%	775.1	4.0%	782.8	4.0%	790.5	4.0%	749.0	4.9%	779.0	4.0%
Residential Invest.	647.9	6.0%	657.4	6.0%	662.3	3.0%	662.3	0.0%	624.1	5.4%	657.5	5.3%
Change in Inventory	40.0 -		40.0 -		30.0 -		10.0 -		38.8 -		30.0 -	
Net Exports	**-615.3 -**		**-619.8 -**		**-620.9 -**		**-624.0 -**		**-607.9 -**		**-620.0 -**	
Exports	2,218.9	3.3%	2,235.3	3.0%	2,251.9	3.0%	2,263.1	2.0%	2,178.7	2.4%	2,242.3	2.9%
Imports	2,834.2	3.0%	2,855.2	3.0%	2,872.9	2.5%	2,887.1	2.0%	2,786.6	3.6%	2,862.3	2.7%
Gov't Purchases of Goods & Services	**2,957.5**	**1.3%**	**2,967.1**	**1.3%**	**2,972.2**	**0.7%**	**2,977.4**	**0.7%**	**2,934.4**	**0.9%**	**2,968.5**	**1.2%**
Federal	1,131.8	1.0%	1,134.6	1.0%	1,137.5	1.0%	1,140.3	1.0%	1,125.7	0.5%	1,136.1	0.9%
National Defense	671.1	1.0%	672.8	1.0%	674.4	1.0%	676.1	1.0%	666.9	0.0%	673.6	1.0%
Non-Defense	460.7	1.0%	461.9	1.0%	463.0	1.0%	464.2	1.0%	458.7	1.3%	462.5	0.8%
State & Local	1,825.7	1.5%	1,832.5	1.5%	1,834.8	0.5%	1,837.0	0.5%	1,808.8	1.2%	1,832.5	1.3%
Real Final Sales	17,347.5	2.7%	17,464.1	2.7%	17,562.3	2.3%	17,625.9	1.5%	17,058.6	2.6%	17,499.9	2.6%
Real Domestic Final Sales	17,962.8	2.7%	18,083.9	2.7%	18,183.2	2.2%	18,249.9	1.5%	17,666.5	2.8%	18,120.0	2.6%
y/y	2.8%		2.7%		2.5%		2.1%					

Source: Historical Statistics - U.S. Dept. of Commerce, Bureau of Economic Analysis (http://www.bea.gov/bea/dn1.htm), Projections - Internal Estimates.