



MORNING BRIEFING

November 12, 2018

The Hysteresis Hypothesis

See the [pdf](#) and the [collection](#) of the individual charts linked below.

(1) Deep recessions can damage economy's potential output and weaken recoveries. (2) In 2016 speech, Yellen explained the benefits of running a "high-pressure economy" to reverse the damage done to potential output by severe recessions. (3) Powell isn't convinced about benefits of "positive hysteresis." (4) Five main channels of hysteresis. (5) Labor force participation rate showing signs of recovering finally, especially for prime-age workers. (6) Job openings exceed unemployed workers by 1.0 million. (7) A good explanation for flat yield curve and punk productivity growth. (8) Potential output has the potential to be greater again. (9) Trump to Powell: Stop tapping on the brakes! (10) A Powell press conference after every FOMC meeting should give Fed more flexibility in scheduling rate hikes.

The Fed: Powell vs Yellen. "Hysteresis" is the controversial concept that the sharp downturns in aggregate demand that occur during recessions can have a persistent negative impact on aggregate supply. When demand takes an extended and deep dive, the supply of labor and the skills of the labor force, as well as the long-term productivity of business capital, all may deteriorate.

Hysteresis is one possible explanation for why the latest recovery has been relatively weak for so long. The Great Recession ended in June 2009, meaning that the recovery is the second-longest on record, at 113 months old through November. The current expansion will become the longest on record if it surpasses 120 months through July 2019 ([Fig. 1](#)). Notwithstanding its longevity, the current expansion is the second weakest of the seven since 1961 ([Fig. 2](#)).

In a 10/14/16 [speech](#), former Fed Chair Janet Yellen wondered: "If we assume that hysteresis is in fact present to some degree after deep recessions, the natural next question is to ask whether it might be possible to reverse these adverse supply-side effects by temporarily running a 'high-pressure economy,' with robust aggregate demand and a tight labor market. One can certainly identify plausible ways in which this might occur." She was suggesting that prolonging monetary easing would allow the economy to overcome the negative consequences of hysteresis with positive ones. As always, Yellen supported her comments with a plethora of footnotes and corresponding studies that are worth a skim.

So far, Fed Chairman Jerome Powell doesn't seem to have bought into the concept. In a 6/20 [speech](#) this year, Powell stated: "While persistently strong economic conditions can pose risks to inflation and perhaps financial stability, we can also ask whether there may be lasting benefits." He added: "The persistence of any such 'positive hysteresis' benefits is uncertain, since, again, the historical evidence is sparse and inconclusive."

To be fair, Powell's statement didn't completely dismiss the hysteresis hypothesis. Nor did Yellen's statement completely endorse it. But the trajectory of the monetary policy path under Powell (tightening) versus Yellen (accommodating) speaks louder than words. Who is right? Melissa and I side with Yellen on this one. There are a lot of issues to discuss. But stay with us, we think it's worth it. Here we go:

(1) *Hysteresis channels*. London Economist Rhys Williams neatly described the effects of hysteresis in a 2015 [blog](#) post. He explained: “Hysteresis is the argument that [negative] short-term [economic] effects manifest themselves into long term problems which inhibit growth and make it difficult to return to pre-recession growth trends.” The long-term effects occur through these main channels: skills atrophy (unemployed workers lose productive skills), signaling effects (employers are reluctant to hire unemployed workers with a time gap), cognitive dissonance (discouraged would-be-workers exit the labor force), capital depreciation (capital goods deteriorate beyond repair if not maintained or upgraded), and beachhead effects/trade penetration (domestic producers lose ground to foreign competitors).

(2) *Labor hysteresis*. In our view, several of these effects persisted following the Great Recession, especially in the labor market. Two key pieces of evidence come to mind:

The labor force participation rate dropped sharply since the Great Recession, falling from 65.8% at the end of 2008 to 62.9% during October, holding near lows not seen since 1977 ([Fig. 3](#)). Granted, a good portion of that is because of Baby Boomer retirements. However, as a result of the previous recession and weak recovery, lots of discouraged unemployed people exited the labor force. More recently, the labor force participation rate has picked up, especially for prime-age workers who are 25-54 years old ([Fig. 4](#) and [Fig. 5](#)).

During September, the number of job openings exceeded the number of unemployed workers by 1.05 million ([Fig. 6](#)). Previously sidelined workers who are looking for work may be having a difficult time getting hired because of a skills mismatch to available jobs (i.e., skills atrophy) and an employment time gap (i.e., signaling effects). Geographical mismatches may also be a reason why job openings well exceed unemployed workers.

(3) *Hysteresis flattens the Phillips curve*. Labor hysteresis may be an important reason why the natural rate of unemployment, i.e., the nonaccelerating inflation rate of unemployment (NAIRU), seems to have fallen to a lower level than predicted by the Fed’s models. Employers may be unwilling to pay up for new hires who lack the exact right skills. In other words, labor hysteresis may have contributed to the flattening Phillips curve, the inverse relationship between unemployment and inflation.

As we discussed in our 11/6 [Morning Briefing](#), the Phillips *wage* curve may finally be making a long-awaited comeback now that the unemployment rate is the lowest since December 1969. The wage inflation rate for production and nonsupervisory workers is up from 2.2% a year ago to 3.2% last month ([Fig. 7](#)). However, that may not boost price inflation if productivity makes a long-awaited comeback.

(4) *Productivity puzzle solved by hysteresis*. Last week, we noted that the tight labor market may be boosting productivity growth, which would allow wages to increase without boosting price inflation. To tie that point into today’s discussion, consider the damage to productivity following the Great Recession, which the hysteresis thesis explains.

Nonfarm business (NFB) productivity growth may be just starting to recover after a long lull. It peaked at 6.1% (y/y) during Q4-2009, then fell to a post-recession low of -0.7% during Q3-2011 ([Fig. 8](#)). Since then, productivity growth hasn’t risen above 1.9%. However, the q/q growth rates in productivity for Q2 and Q3 are more promising, with gains of 3.0% (saar) and 2.2%, respectively ([Fig. 9](#)). Yellen had said that positive hysteresis effects resulting from running a high-pressure economy with prolonged monetary easing could eventually lead to more productive job matches as job-to-job transitions are encouraged. Maybe that’s starting to happen. If so, then Powell needs to consider raising interest rates even more gradually than he has been signaling.

(5) *Potential output boosted by hysteresis.* Real NFB output growth during Q3 was solid at 3.7% y/y. However, the growth was driven largely by an increase in hours worked (2.4%) and relatively weak productivity growth (1.3%). The growth rates of real NFB output and real GDP are highly correlated on a y/y basis. Real GDP rose 3.0% y/y during Q3 ([Fig. 10](#)).

The key question for monetary policy is: How far off is actual output from potential output? Potential output growth is the rate at which the economy could grow if it were operating at full capacity. The spread between actual and potential output is an important variable in Taylor Rule models for setting the federal funds rate. If it is positive, then the Fed should continue to increase interest rates. That's because as actual output rises toward, or exceeds, potential output, the demand for the factors of production rises, with potential inflationary consequences. (That's in theory, of course.)

(6) *Fiscal boost vs Fed restriction.* However, potential economic output is a moving target. If "negative" hysteresis explains why the recession dampened long-term potential output, then "positive" hysteresis could restore it. The two primary policy tools that could do so are stimulative fiscal policy combined with accommodative monetary policy.

Even better, a combination of supportive fiscal and monetary policies could boost potential output so that there is a wider gap between potential output and actual output. In other words, there is room for further supportive policies without risking a rise in inflation! (That too is in theory, of course.)

No wonder the Trump administration has voiced objection to the Fed's interest-rate hikes. And besides the monetary tightening of higher rates, there's also quantitative tightening occurring in the background. We've previously described the current mix of policies as akin to stepping on the economy's accelerator with fiscal policy while tapping on the brakes with monetary policy. No wonder stock prices have been so volatile this year.

The administration's fiscal stimulus is working, in our opinion. There is mounting evidence that prime-age workers are starting to return to the labor force, wage growth and productivity are starting to pick up, and output is improving while price inflation remains low. So why are Fed officials already talking about moving to restrictive monetary policy?

In his 9/26 [press conference](#), Fed Chair Powell said that he could see the Fed making a couple of hikes beyond the neutral rate of interest, the rate where monetary policy is neither stimulative nor accommodative. He hammered the point home, and hammered the stock market, in a 10/3 [interview](#), when he said: "So interest rates are still accommodative but we're gradually moving to a place where they will be neutral, not that they'll be a restraint on the economy. We may go past neutral but we're a long way from neutral at this point, probably."

In fairness, it's possible that Powell's game plan is a pragmatic one: raise the federal funds rate as high as possible without causing a recession so that the Fed will have more room to lower rates come the next recession. That's fine as long as the pace of rate hikes includes relatively long pauses of, say, six months (rather than three months) to assess the reaction of the economy to tightening. Alternately, Powell may simply be convinced that running a high-pressure economy is bound to boost inflation.

(7) *Reversing the damage.* We aren't very concerned about inflationary risks, because we think that the damage done to aggregate supply following the recession is reversible under the right fiscal and monetary conditions. We believe that the right mix of policies can create more room for the US economy to run.

In her speech, Yellen observed: “Hysteresis effects—and the possibility they might be reversed—could have important implications for the conduct of monetary and fiscal policy. [I]f strong economic conditions can partially reverse supply-side damage after it has occurred, then policymakers may want to aim at being more accommodative during recoveries than would be called for under the traditional view that supply is largely independent of demand.”

(8) *More flexible Fed?* As it so happens, there was a (very) faint hint of support for the Fed to pause its rate hikes in the FOMC's 11/8 [Monetary Policy Statement](#). The language was adjusted to say: “Household spending has continued to grow strongly, while growth of business fixed investment has moderated from its rapid pace earlier in the year.” Positive hysteresis would justify running a high-pressure economy to further boost household spending to stimulate business spending.

It's possible that Fed officials could come around to the hysteresis thesis, especially if price inflation remains low and productivity shows more signs of rebounding. But the damage from “restrictive” talk may already have been done. The Fed may opt to stay the course to maintain credibility as well as the appearance of independence from fiscal policymakers. Further hikes might weigh on the upside potential of potential output.

We are watching for more evidence of “positive” hysteresis and hope that members of the FOMC are too. We are encouraged that Powell now intends to hold a press conference after each of the FOMC's eight meetings a year, rather than just four of them (the prior pattern of holding press conferences after every other meeting was instituted by former Fed Chairman Ben Bernanke). As our good friend Mike O'Rourke, the Chief Market Strategist of Jones Trading, recently observed in an email commentary:

“Here we are today 8 interest-rate hikes into a cycle, and the FOMC has fallen into the pattern of each hike occurring at a press conference meeting, just as the next one will. The FOMC has unintentionally limited its flexibility by only making half of its meetings live for a policy move. How did anyone survive the days when the policy statement was released with or without an interest-rate move or even the days of a surprise move? Back then, investors had to discern the FOMC's intentions on their own. That small amount of policy uncertainty was healthy because it kept investors honest. There had to be a certain level of conviction in order to allocate capital to an investment. Instead, a decade of predictability fostered a structural environment of ‘set it and forget it’ passive investing. Although the FOMC will still be providing multiyear forecasts of interest-rate policy, Chair Powell's decision to hold press conferences at every meeting is a small step in the right direction. The FOMC will be able to make a policy move based upon need, as opposed to a press schedule.”

CALENDARS

US. Mon: Daly. **Tues:** NFIB Small Business Optimism Index 108.0, Treasury Budget -\$111.8b, Daly. (Econoday estimates)

Global. Mon: Japan Machine Tool Orders. **Tues:** Eurozone ZEW Economic Sentiment, Germany ZEW Current Situation & Expectations, Germany CPI, UK Employment Report, Japan GDP (annualized) - 1.1% q/q, Australia Business & Consumer Confidence. (DailyFX estimates)

STRATEGY INDICATORS

Global Stock Markets Performance ([link](#)): The US MSCI index rose 2.0% last week, ranking ninth out of the 49 markets in a week when 22 countries rose in US dollar terms. That compares to the prior week's 35/49 ranking when the US MSCI rose 2.5% and 44 markets rose. The AC World ex-US index fell 0.4% for the week; that compares to a 3.9% gain a week earlier, which was its best in eight months.

EM Eastern Europe and EMEA were the best performers for the week with gains of 0.3%, ahead of EAFE (0.2%) and EMU (-0.1). EM Latin America (-3.7) was the worst performer, followed by BRIC (-3.1) and EM Asia (-2.2). Hungary was the best-performing country, rising 5.2%, followed by Israel (4.5), Greece (4.5), and Egypt (3.2). Of the 23 countries that underperformed the AC World ex-US MSCI last week, Sri Lanka fared the worst, falling 4.7%, followed by Brazil (-4.6), Mexico (-4.1), and China (-4.0). The US MSCI's ytd ranking improved two places w/w to an astounding 2/49 ytd, with its 3.9% gain far ahead of the AC World ex-US (-11.7). Nearly all countries—45/49—and all regions are in negative territory ytd. Falling less on a ytd basis than the AC World ex-US are: EM Eastern Europe (-5.7), EM Latin America (-7.2), EMEA (-9.5), and EAFE (-10.2). EM Asia (-16.6) is the biggest laggard relative to the AC World ex-US's performance, followed by BRIC (-15.0) and EMU (-12.5). The best country performers ytd: Israel (12.0), the US (3.9), Peru (1.4), and Finland (0.2). The worst-performing countries ytd: Argentina (-49.9), Turkey (-44.6), Greece (-32.4), Pakistan (-27.0), and South Africa (-26.3).

S&P 1500/500/400/600 Performance ([link](#)): LargeCap and MidCap rose for a second straight week, but SmallCap was down for the seventh time in eight weeks. LargeCap gained 2.1% for the week, ahead of MidCap (1.1%) and SmallCap (-0.1). SmallCap remains in a correction at 11.4% below its August 29 record high. MidCap exited its correction a week earlier, but remains 8.2% below its August 29 record. LargeCap barely avoided slipping into a correction during the recent selloff and ended the week 5.1% below its record high on September 20. Twenty-three of the 33 sectors moved higher in the latest week, compared to 29 rising a week earlier. The best performers in the latest week: SmallCap Utilities (4.3), MidCap Utilities (4.2), and LargeCap Health Care (4.0). SmallCap Materials was the biggest decliner last week, falling 3.4%, followed by SmallCap Consumer Staples (-1.7) and SmallCap Health Care (-1.4). LargeCap is up 4.0% ytd and now leads SmallCap (3.9) again, but both are ahead of MidCap (-0.9). Eighteen sectors are now positive to date in 2018, up from 17 a week earlier and compared to just three in early February. The best-performing sectors ytd: SmallCap Health Care (28.7), MidCap Health Care (23.2), SmallCap Communication Services (15.8), LargeCap Health Care (12.4), and MidCap Communication Services (11.3). The worst performers ytd: SmallCap Energy (-14.0), LargeCap Materials (-11.2), and LargeCap Communication Services (-9.9).

S&P 500 Sectors and Industries Performance ([link](#)): Ten of the 11 sectors rose last week, and five outperformed the S&P 500's 2.0% gain. That compares to ten rising a week earlier, when four outperformed the S&P 500's 2.4% rise. Health Care was the best-performing sector with a gain of 4.0%, ahead of Real Estate (3.6%), Utilities (3.1), Consumer Staples (2.9), and Financials (2.6). Communication Services (-0.2) was the sole decliner, followed by the also-underperforming Energy (0.9), Tech (1.4), Materials (1.9), Consumer Discretionary (2.0), and Industrials (2.1). Five sectors are in the plus column so far in 2018, up from four a week earlier and down from nine in mid-September, which had matched the best ytd count also achieved in early March. These three sectors are outperforming the S&P 500's 4.0% ytd gain: Health Care (12.4), Consumer Discretionary (10.9), and Tech (10.6). The eight ytd underperformers: Communication Services (-9.9), Materials (-9.3), Energy (-5.2), Industrials (-4.6), Financials (-3.2), Consumer Staples (-0.5), Real Estate (0.4), and Utilities (3.9).

Commodities Performance ([link](#)): Last week, the S&P GSCI index fell 2.2% as just four of the 24 commodities moved higher. That was the lowest count since mid-July and compares to a 3.8% decline a week earlier when 13/24 commodities rose. Last week's strongest performers: Natural Gas (13.3%), Corn (1.5), Cotton (0.5), and Cocoa (0.2). Unleaded Gasoline (-5.4) was the biggest decliner, followed by Sugar (-5.3), Crude Oil (-4.5), and Feeder Cattle (-4.0). The S&P GSCI commodities index is now down 0.4% ytd, and is in a correction now with its current level down 12.3% from its four-year high on October 3, which was just half of its record high in July 2008 before the financial crisis. The top performer so far in 2018 is now Natural Gas (26.0), followed by Cocoa (20.1), Wheat (19.0), Kansas Wheat (17.2), and GasOil (8.6). The biggest laggards of 2018 to date: Zinc (-23.8), Lead (-20.5), Lean Hogs (-19.2), Silver (-17.1), and Copper (-16.2).

Assets Sorted by Spread w/ 200-dmas ([link](#)): Spreads between prices and 200-day moving averages (200-dmas) rose last week for 6/24 commodities, 5/9 global stock indexes, and 23/33 US stock indexes, compared to 11/24 commodities, 7/9 global stock indexes, and 24/33 US stock indexes rising a week earlier. Commodities' average spread fell w/w to -4.0% from -3.0%, and eight commodities ended the week trading above their 200-dmas, unchanged from a week earlier. Commodities took home all the trophies among the asset classes last week (highest and lowest trading relative to 200-dmas as well as best- and worst-performing): Natural Gas leads all commodities and all assets at 28.9% above its 200-dma, after logging the best performance among all assets last week—up 14.5ppts w/w—relative to its 200-dma. Unleaded Gasoline (-19.5%) now trades at the lowest relative to its 200-dma among commodities and all assets, while Sugar (5.5) fell 5.7ppts w/w for the worst performance among commodities and all assets. The global indexes trade at an average of 4.4% below their 200-dmas, down from -4.0% in the prior week. Just one of the nine global indexes trades above its 200-dma, unchanged from a week earlier. Brazil (6.0) leads the global indexes, but fell 3.5ppts w/w for the worst performance among global assets. Chile (-4.1) was the best global index performer with a gain of 1.4ppts w/w. China (-12.4) now trades at the lowest point relative to its 200-dma among global assets. The US stock indexes trade at an average of 0.8% below their 200-dmas, with 15 of the 33 sectors above, up from -2.0% a week earlier, when 13 sectors were above. MidCap Communication Services (10.2) now leads the US stock indexes, but SmallCap Utilities (6.2) rose 4.1ppts last week for the best gain among US stock indexes. SmallCap Energy (-16.0) now trades the lowest among all US stock indexes and all assets relative to 200-dmas, but SmallCap Materials (-10.4) dropped 2.9ppts w/w for the worst performance among US stock indexes last week.

S&P 500 Technical Indicators ([link](#)): The S&P 500 price index rose 2.1% last week, but remained solidly below its short-term 50-day moving average (50-dma). However, it moved back above its 200-dma for the first time in five weeks. The index remained in a Golden Cross (50-dma higher than 200-dma) for a 133rd straight week (after 17 weeks in a Death Cross) as the S&P 500's 50-dma relative to its 200-dma fell for a fifth straight week. The current Golden Cross reading of 2.5% is at a 14-week low; it's down from 2.9% a week earlier and a 27-week high of 4.1% in early October. That's well below its 55-month high of 7.2% in early February; these compare to its 25-month low of 1.0% at the end of May and four-year low of -4.5% in March 2016. The S&P 500's 50-dma fell for a fourth week following 19 straight weekly gains, which compares to declines during eight of the 10 weeks from mid-March to late May in what was then the worst performance since before the 2016 election. The index improved to 1.7% below its falling 50-dma from 4.2% below a week earlier and a 33-month low of 7.0% below at the end of October. That 33-month low had surpassed the then-25-month low of 5.6% below the index's falling 50-dma near the end of March, and is down from a two-year high of 6.2% above its rising 50-dma on January 29. The 200-dma rose for the first time in four weeks after falling for the first time since May 2016, when it had been slowly declining for nine months. The S&P 500 had successfully tested its 200-dma in early April and may be doing so again. It ended the week at 0.7% above its rising 200-dma, up from 1.4% below its falling 200-dma a week earlier. That's up from a 32-month low of 3.9% below its falling 200-dma at the end of October and down from a six-month high of 6.4% above its rising 200-dma during the week ending September 21. Last week's reading remains well below the seven-year high of 13.5% above its rising 200-dma on January 29.

S&P 500 Sectors Technical Indicators ([link](#)): All 11 S&P 500 sectors improved last week relative to their 50-dmas and 200-dmas. Four are now trading above their 50-dmas, compared to just one a week earlier. All 11 had been below at the end of October for the first time since late March and only the second time since February 2016. In late July, all 11 sectors had traded above their 50-dmas, the most since early December. Health Care, Real Estate, and Utilities moved above their 50-dmas in the latest week and joined Consumer Staples in that club. The longer-term picture—i.e., relative to 200-dmas—shows five sectors trading above currently, up from four a week earlier. That compares to three at the

end of October in the lowest count since all 11 were below in January 2016. That's a relatively swift reversal from the September 26 alignment, when all 11 sectors were above their 200-dmas. Two long-term 200-dma leaders left the building during October, one of them returning last week: Tech fell below its 200-dma for the first time in 121 weeks last month, and Consumer Discretionary fell below its 200-dma in October for the first time in 102 weeks, rejoining the above-200-dma club last week after just a two-week absence. Also in the club: Health Care (24 straight weeks), Utilities (20), Consumer Staples (4), and Real Estate (2). Nine sectors are still in a Golden Cross (with 50-dmas higher than 200-dmas), unchanged from a week earlier. Among the laggards, Financials has been out of Golden Cross territory for four weeks but in during 16 of the past 20 weeks, while Materials has been out for 28 straight weeks. All 11 sectors had been in a Golden Cross back in mid-January (for the first time since a 26-week streak ended in October 2016). Three sectors have rising 50-dmas now, up from one a week earlier, as Health Care and Utilities joined Consumer Staples. That's down from eight sectors with rising 50-dmas in early October and compares to all 11 sectors with falling 50-dmas during late October and early April (the worst counts since before the election in November 2016). Six sectors had rising 200-dmas at the end of last week, up from two the week before, in the lowest count since January 2016, when all 11 sectors had falling 200-dmas. Joining Tech and Utilities in the rising 200-dma club last week are Consumer Discretionary, Consumer Staples, Health Care, and Real Estate.

US ECONOMIC INDICATORS

Consumer Sentiment ([link](#)): Consumer sentiment was virtually unchanged in early November from its October reading, remaining higher thus far in 2018 (98.4) than in any prior year since 2000. The midterm elections had no impact on sentiment—with the split between the House and Senate widely anticipated. The Consumer Sentiment Index (CSI) ticked down for the second month to 98.3 in mid-November from 98.6 in October and 100.1 in September—which was only the third time in the past 14 years it exceeded 100.0; it's within 3.1 points of March's 14-year high of 101.4. The present situation ticked up from 113.1 to 113.2 in mid-November, holding near its record high of 121.2 in March, while the expectations component edged down to 88.7 from 89.3 in October—not far from its recent high of 90.5 posted this September and last October.

PPI ([link](#)): The Producer Price Index for final demand in October posted its biggest increase in six years! Prices jumped 0.6%, after recording only a 0.1% uptick during the three months through September. Prices for final demand services accelerated 0.7%—the biggest monthly gain since January 2016—after only a 0.2% increase over the prior three-month period. Final demand goods jumped 0.6%—its first increase in four months. For final demand services, nearly three-quarters of its broad-based gain in October can be traced to margins for final demand trade services—which advanced 1.6%—while over 60% of the gain in final demand goods was attributable to a 7.6% jump in the gasoline index. The yearly inflation rate for the headline series accelerated 2.9% y/y, after easing the previous two months from 3.3% to 2.6%, as final demand goods picked up to 3.6% y/y, after slowing from 4.5% to 3.2% over the prior two-month span. The yearly rate for final demand services was unchanged at 2.4% y/y. The core rate accelerated for the second month, to 2.6% y/y last month from 2.3% in August, while the rate for core ex trade services eased slightly to 2.8% y/y from 2.9% the previous two months.

GLOBAL ECONOMIC INDICATORS

UK GDP ([link](#)): Real economic growth during Q3 expanded at the fastest pace in nearly two years, though growth slowed throughout the quarter, with real GDP flat in both September and August, following July's 0.3% gain. UK real GDP was in line with forecasts last quarter, climbing 2.4% (saar), after a steady acceleration from Q1's 0.4% pace. However, the acceleration in economic growth last quarter was caused by some temporary factors, including a heatwave, the World Cup, and the Royal

Wedding early in the quarter. Looking forward, the uncertainty of Brexit is likely to be a drag on economic activity. The pickup in real economic growth last quarter was led by exports and household consumption. The former expanded for the first time in three quarters, by a double-digit rate of 11.4% (saar), while imports were flat after contracting the prior three quarters; real household spending accelerated at a six-quarter high of 2.2% (saar). Real government spending advanced 2.5% (saar) after falling -1.5% during Q2. Meanwhile, Q3 real business investment (-4.7%, saar) contracted for the third consecutive quarter—the first time that's happened since the global financial crisis a decade ago—matching anecdotal evidence of firms' caution ahead of Brexit.

UK Industrial Production ([link](#)): Industrial output in September remained stalled around recent highs. Production ticked down -0.1% after showing no change in August (first reported as a 0.3% gain), following a two-month rebound of 1.4%. Manufacturing output climbed 0.3% in September after falling -0.1% and -0.2% the prior two months; it too is stalled around recent highs. Looking at the main industrial groupings, only capital goods production is showing any real signs of life—climbing for the fifth straight month, by a total of 1.2%, to within 0.9% of its record high recorded earlier this year. Production of consumer durable goods is the weakest, falling for the third time in four months by -2.2%, while consumer nondurable goods output edged up 0.4% after a two-month slide of -2.3%. Production of intermediate goods has flattened out the past couple of months, below its recent high. The UK's IHS Markit M-PMI showed the manufacturing sector slowed sharply during October, falling to a 27-month low of 51.1 as output growth weakened, while new order inflows and employment both declined for the first time since July 2016.

France Industrial Production ([link](#)): Output in France contracted more than expected during September, partly due to a drop in auto output as the car industry grapples with new registrations; it remains in a volatile flat trend, at the bottom of the range. Headline production, which excludes construction, sank -1.8% in September after a three-month gain of 1.6%; it had contracted -1.8% during the five months through May. Over the same periods, manufacturing output slumped -2.0% m/m, after increasing 1.6% during the three months through August and falling -1.6% the first five months of the year. So far this year, production of consumer durable goods is down a whopping -12.0%, with more than half of that decline (-6.3%) taking place in September, impacted by the car registration issues. Production in the remaining industrial groupings are also in the red ytd, but not as dramatically: intermediate goods (-3.3% ytd), energy (-2.2), consumer nondurable goods (-1.7), and capital goods (-0.6). France's M-PMI for October dropped to a 25-month low of 51.1 as output contracted for the first time in 27 months.

Spain Industrial Production ([link](#)): Output is weakening in Spain, though remains at relatively high levels. Production, excluding construction, fell -0.7% in September after rising by the same amount during the two months through August; it's down -2.6% from its cyclical high at the end of last year. Manufacturing production fell -0.6% during the two months ending September, and -1.2% ytd. Looking at output for the main industrial groupings, all are down ytd, led by energy (-8.4% ytd) and consumer durable goods (-4.9); declines are smaller for capital (-2.4), intermediate (-1.1), and consumer nondurable (-1.0) goods production—with the former bouncing around its cyclical high. Meanwhile, Spain's IHS Markit M-PMI (to 51.8 from 51.5) for October continued to show modest growth—considerably below the pace around the turn of 2018.

Contact us by [email](#) or call 480-664-1333.

Ed Yardeni, President & Chief Investment Strategist, 516-972-7683
Debbie Johnson, Chief Economist, 480-664-1333
Joe Abbott, Chief Quantitative Strategist, 732-497-5306

Melissa Tagg, Director of Research Projects & Operations, 516-782-9967

Mali Quintana, Senior Economist, 480-664-1333

Jackie Doherty, Contributing Editor, 917-328-6848

Valerie de la Rue, Director of Institutional Sales, 516-277-2432

Mary Fanslau, Manager of Client Services, 480-664-1333

Sandy Cohan, Senior Editor, 570-775-6823

Copyright (c) Yardeni Research, Inc. Please read complete [copyright and hedge clause](#).