

The Longbrake Letter*

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Author's Note: The March, 2018 Longbrake Letter includes only the “**Assessment of Outlook – 2018 and Beyond – Forecast Summary for the U.S. and the Rest of the World, Highlights of Key Issues, and Identification of Risks,**” which has been included in past monthly letters as an **Appendix**. In future editions of “The Longbrake Letter,” this monthly “**Assessment of Outlook**” will continue to be published separately. Additionally, beginning in April, analytical commentary of U.S. and global economic and political trends and developments will resume and will be published by the Center for Financial Policy separately.

March Outlook Summary: Optimism abounds across the globe and world economies are finally benefiting from years of easy monetary policy. Momentum is incredibly powerful and is currently self-reinforcing. Practically all economies are growing above potential and slack has already disappeared or is disappearing rapidly.

In the case of the U.S., there is no slack and the enormous fiscal stimulus embedded in the “Tax Cuts and Jobs Act,” disaster relief spending, and substantial increases in defense and discretionary spending caps will lift growth substantially above potential in both 2018 and 2019. When an economy has no slack and operates well above its potential, it risks overheating and that triggers upward pressures on prices and accelerates the buildup of imbalances in the economy. We are in the mature phase of the business cycle and the added stimulus will propel the economy higher in coming months.

Best to enjoy the good times now because we know from history that strong economic momentum, when the economy is operating at or above full capacity, eventually leads to recession and correction of the imbalances that built up during the euphoric period of strong growth.

**The information contained in this newsletter does not constitute legal advice. This newsletter is intended for educational and informational purposes only. Bill Longbrake is an Executive in Residence at the Robert H. Smith School of Business, University of Maryland.*

Assessment of Outlook – 2018 and Beyond – Forecast Summary for the U.S. and the Rest of the World, Highlights of Key Issues, and Identification of Risks

Observations about the 2018 U.S. and global economic outlook and risks to the outlook are listed below. As events unfold during 2018, this will enable the reader to track my analytical prowess. Observations which are on track are denoted by “+”; observations not on track are denoted by “-”; indeterminate observations are denoted by “?” and general observations are denoted by “√”.

In general, 2018 should be a good year economically both in the U.S. and globally. Economic growth accelerated in all parts of the world during 2017 and considerable momentum will carry over into 2018. In addition, the passage of the “Tax Cuts and Jobs Act” in late 2017 will provide strong fiscal stimulus in the U.S. over the course of 2018 and 2019. However, the U.S. economy begins 2018 operating at full capacity and many global economies are approaching full capacity. Strong, above trend momentum in economic activity, will result in a buildup in imbalances. Optimism and favorable feedback loops will contribute to growth momentum in 2018 but this will also contribute to larger and more worrisome imbalances as time passes. Thus, the potential severity of risks will build during 2018. Realization of risks may occur before the year ends, but past experience suggests that positive momentum could persist for a time longer than the next 12 months, with the consequence that the eventual and inevitable correction of large imbalances could be very painful.

Forecasting accuracy, which is always difficult, becomes much more so when the economy is strong and above the long-term sustainable trend level, which is the situation in which the U.S. economy finds itself currently. The difficulty in forecasting involves pinpointing the turning point. Almost no one does this well. Recession forecasting models are relatively crude and forecast lead times have been very short. What we know from experience is that recessions occur when the economy becomes overheated. The timing of onset, however, depends upon human psychology. And, when human psychology is highly positive, as it is currently, it tends to feed upon itself and sustain momentum.

- 1. U.S. – February Assessment:** U.S. stock markets began the year like a rocket blasting off. The S&P 500 set new records on 14 of 21 trading days and increased 5.6%. Prices soared on other classes of risk assets, such as the 10% increase in oil prices. Conversely, bond prices plunged; the 10-year Treasury note yield rose 32 basis points to 2.72% as investors responded to strong growth momentum and increased concern about the threat of rising inflation stemming from an overheated economy. As February began fear of an overheating economy, potential increases in inflation, but perhaps most importantly, a short

squeeze on inverse volatility products, clobbered the stock market and by the end of February the S&P 500 average was up only 1.5 percent since the beginning of the year, while long-term bond yields continued to rise to 2.87 percent by the end of the month. As March began, fears of a bear market in stocks subsided, but volatility remained. Importantly, confidence has not been adversely affected by increased volatility. Indeed, consumer and business confidence remains ebullient and has moved higher in the past month to levels reminiscent of the late 1990s during the technology boom.

- ✓ **The Business Roundtable's U.S. CEO Economic Outlook index soared to an all-time high of 118.6 in 2018 Q1**
- ✓ **The Chicago Federal Reserve's National Activity Index moved sideways to 0.12 in January from 0.14 in December (an index value greater than zero indicates that economic activity is accelerating); but the three-month average slowed from 0.43 to 0.17, suggesting acceleration is slowing (second derivative)**
- ✓ **The Conference Board's index of leading economic indicators rose 1.0% in January to 108.1, after rising 0.6% in December, 0.5% in November and 1.3% in October, reflecting considerable upward momentum in the U.S. economy**
- ✓ **On a negative note, turmoil in the White House and changes in Trump Administration leadership, could erode market confidence in the sustainability of economic growth; concerns are being voiced about the possibility of a debilitating trade war and risks entailed in President Trump's decision to negotiate personally with North Korea**
- **2018 real GDP Y/Y** growth projections range from 2.3% to 2.8%. The FOMC's central tendency Q4/Q4 projections range from 2.2% to 2.6%. (Q4/Q4 projections are highly dependent upon potential anomalies in Q4 data; therefore, Y/Y estimates, which average all four quarters, usually are more stable estimates.) Risks are tilted to the upside because of federal tax cuts and spending increases, robust optimism and strong momentum in global economic activity.
- ✓ **2018 and 2019 real GDP forecasts have been revised upwards to reflect passage of the federal budget resolution to raise spending**

caps for fiscal years 2018 and 2019; the revised forecast range for 2018 is 2.5% to 3.0%

- ✓ Q1 2018 real GDP data will not be released until late April
 - ✓ Q1 real GDP forecast = 2.0% (GS); 1.7% (B of A)
- ✓ GS's U.S. Current Activity Indicator (CAI) is well above the long-term potential level of 1.5% and GS's 2.7% 2018 forecast: December CAI = 4.0%; January = 3.7%; February = 4.5%; early March = 4.8%; the CAI is a proxy for real GDP growth
- ✓ B of A's revised 2018 forecast is 2.9% and GS's is 2.7%; my revised "BASE" scenario forecast is 2.4% and my "Strong Growth" scenario is 2.5%
- ✓ FOMC's unrevised 2018 Q4/Q4 central tendency range is 2.2%-2.6%; this projection is likely to be revised higher at the March FOMC meeting
- **Real GDP output gap**, which disappeared during 2017, will become positive, which means the economy will overheat during 2018. By the end of 2018 the positive output gap should be in a range of 0.7% to 1.1 %. (CBO will revise its estimates of potential real GDP growth, probably in February 2018 and again during the summer of 2018, which will change the forecast of the end of the year output gap.)
 - ✓ Based upon CBO's estimate of potential real GDP and Q4 2017 real GDP, the output gap at the end of 2018 was 0.0%; the economy was operating at exactly full capacity
 - + No change in the 2018 forecast of a positive output gap of 0.7% to 1.1%, indicating an overheating economy
- **Potential structural rate of real GDP growth** will remain well below actual real GDP growth during 2018 in a range of 1.5% to 1.7%. Long-term potential real GDP growth will edge up in coming years to between 1.7% and 1.9%.
 - + No change in forecast
- **Productivity** should rise during 2018 from approximately 1.2% in 2017 to a range of 1.3% to 1.5% as growth improves and investment increases; it will fall well short of the historical 2.1% average.
 - ✓ Productivity was 1.24% Y/Y in 2017 (1.10% Q4/Q4)
 - The revised 2018 forecast is a range of 1.1% to 1.3% Y/Y

- **Payroll and household employment** growth should slow during 2018 because employment is above its long-term natural level and converge closer to the natural rate of growth in the labor force which is about 80,000 to 100,000 new entrants monthly; however, given the strength in expected economic activity during 2018, payroll and household employment growth should average between 140,000 and 180,000 per month during 2018.
 - ✓ **Payroll employment data for the past two years was benchmarked in January which raised total payroll employment by 230,000; average monthly employment increased from 186,667 to 195,333 in 2016 and from 171,250 to 181,083 in 2017**
 - **January payroll employment increased 239,000; February's increased a blistering 313,000**
 - **January household employment increased 410,000; February's increase was a mind-boggling 784,000**
 - **Conference Board's difference between jobs plentiful and hard to get widened to 24.7% in February from 20.9% in January and 20.3% in December**
 - **Evercore ISI employee placement (average of temporary and permanent) index (upward pressure above 50; downward pressure below 50): December = 55.4; January = 54.9; February = 57.5; March 9th = 59.2%**
- **Employment participation** should remain relatively constant during 2018 in a range of 62.55% to 62.85%, as strong employment growth offsets the longer-term declining trend in participation due to demographically-embedded retirements of baby boomers.
 - ✓ **December 2017 participation rate = 62.71%**
 - + **January 2018 participation rate = 62.74%; but February's soared to 63.02%, which is why the unemployment rate did not fall even though employment growth was exceptionally strong**
- **Unemployment rate** should edge down slightly from 4.1% to between 3.5% and 3.9%.
 - ? **January unemployment rate = 4.1%; February = 4.1%**

- **Hourly wage** growth, reported by BLS for all employees and non-supervisory and production workers, should edge up slightly during 2018 to a range of 2.6% to 3.0%.
 - ✓ Q4 2017 employment cost index for wages and salaries = 2.61%
 - ✓ December 2017 12-month moving average hourly wage rate for non-supervisory and production workers was revised down from 2.35% to 2.33%
 - ? 12-month moving average hourly wage rate for non-supervisory and production workers: January = 2.34%; February = 2.35%
 - ✓ December 2017 12-month moving average hourly wage rate for all employees was revised down from 2.57% to 2.54%
 - ? 12-month moving average hourly wage rate for all employees: January = 2.57%; February = 2.56%
 - + Evercore ISI employee pricing power (average of temporary and permanent workers) index (upward pressure above 50; downward pressure below 50): December = 64.8; January = 64.0; February = 67.2; March 9th = 67.6
 - GS's wage tracker declined to 2.1% in December
 - The Atlanta Federal Reserve wage tracker declined to 2.9% in December, its lowest level in a year; January = 3.0%
 - + 18 states and 20 cities boosted the minimum wage rate at the beginning of 2018
- **Nominal consumer disposable income** growth, measured on a Y/Y basis should increase during 2018 because of strong employment growth, rising wage rates and tax cuts; growth should be in a range of 4.0% to 5.0%.
 - ✓ Disposable income increased 2.9% in 2017
 - ? Disposable income rose 3.1% Y/Y through January
 - + Disposable income is forecast to increase 4.6% in 2018
- **Nominal consumer spending** growth on the Y/Y basis should remain strong during 2018 because of strong employment growth, rising wage rates, tax

cuts, easier access to credit and high levels of optimism; growth should be in a range of 3.5% to 4.5%.

- ✓ **Consumer spending rose 4.5% in 2017**
- + **Consumer spending rose 4.5% Y/Y through January**
- **Consumer spending is forecast to increase 4.6% in 2018**
- ? **Auto sales were 17.1 million in 2017; 17.1 million annualized in January; 17.0 million in February; (B of A expects auto sales to decrease from a high of 17.5 million in 2016 to 13.0 million in 2021)**
- **February retail sales declined -0.1%, following a revised decline of -0.1% in January (weakness is probably temporary due to delayed tax refunds); however, the Y/Y growth rate rose from 3.9% in January to 4.0% in February; strong employment growth, rising wage rates, and tax cuts should result in strong retail sales growth in coming months**
- **Consumer confidence** in 2018 should be relatively stable near the cyclically high levels experienced in 2017.
 - ✓ **Reflecting tax cuts and strong stock market gains, consumer confidence rose in January and increased further in February**
 - **Conference Board = 123.1 in December 2017; January = 124.3; February = 130.8**
 - **University of Michigan = 95.9 in December 2017; January = 95.7; February = 99.7**
 - **Bloomberg = 53.5 in December 2017; January = 54.6; February = 56.2**
 - **Evercore ISI = 53.8 in December 2017; January = 54.1; February = 55.4; March 9th = 55.4**
- **Consumer credit growth** will remain relatively strong during 2018; growth should match or slightly exceed what occurred in 2017.
 - + **Total consumer credit rose 5.4% in 2017; January = 5.3%**
 - + **Revolving credit rose 6.0%; January = 6.1%**
 - + **Non-revolving credit rose 5.1%; January = 5.0%**

- ? According to the Federal Reserve's 2017 Q4 Senior Loan Officer Survey, credit standards for consumer and residential real estate loans did not change; demand weakened for auto loans and residential mortgages
- Lenders expect to tighten credit standards for credit card loans in 2018
- **Household personal saving rate** will rise slightly as growth in disposable income exceeds growth in consumer spending; historically, a good portion of tax cuts has been saved initially rather than being spend; the saving rate should improve to a range of 3.50% to 4.25%.
 - ✓ The saving rate averaged 3.4% in 2017, but was 2.5% in the month of December
 - ? January saving rate = 3.2%; 12-month average = 3.4%
 - The revised 2018 average saving rate forecast is 3.4%
- **Stock prices**, as measured by the S&P 500 average, should be between 10% higher or 10% lower: on the downside reflecting pressure on profits margins from rising labor costs and higher short-term interest rates and, perhaps fading speculative momentum in an overextended market; on the upside reflecting growth friendly fiscal policy; U.S. stock prices are probably overvalued as 2018 commences, but price momentum is strong and appears to be self-reinforcing for a while longer.
 - + Through March 14th, S&P 500 stock prices have increased 2.8% during 2018
 - ✓ 2017 Q4 annualized S&P 500 operating earnings expected to be \$140, up 15% from 2016
- **Business activity** will remain strong with both the PMI manufacturing and service indices averaging above 50.
 - + December manufacturing PMI = 59.3; January = 59.1; February = 60.8 (highest level since May 2004)
 - + December services PMI = 56.0; January = 59.9; February = 59.5
 - + December NFIB optimism index = 104.9; January = 106.9; February = 107.6 (all-time high was 108.0 in 1983)

- + December GS analyst index = 70.0; January = 72.7; February 68.0
- December industrial production = 107.5; January = 107.2
- December capacity utilization = 77.9%; January = 77.5% (80.0% and above typically leads to a sustained acceleration in business investment spending)
- ✓ 2017 Q4 manufacturers' survey – 94.6% somewhat or very positive about business prospects
- + Manufacturing employment has increased an average of 19,000 monthly over the past 14 months; employers report increasing difficulty in finding skilled workers
- + Auto production is forecast to increase 25% in Q1 2018 compared to Q4 2017
- + Spurred by tax cuts, the Duke CFO Optimism Index rose to an all-time high of 71.2 in February
- **Business investment** inflation-adjusted spending growth should increase because of strong demand and favorable tax incentives; growth in 2018 should be well above the long-term trend level in a range of 4.5% to 5.5%.
 - ✓ Business investment grew 4.7% in 2017
 - ✓ GS 2018 business investment growth forecast = 5.0%
 - + GS's capital expenditures tracker has accelerated sharply in the last several months to approximately 9%, reflecting strong global growth and domestic tax cuts; this implies that the risks to GS's business investment spending forecast are to the up side
 - ✓ B of A 2018 business investment growth forecast = 5.9%
 - ✓ Bill's combined business and residential 2018 investment growth forecast "BASE" scenario = 5.2%; Bill's "STRONG GROWTH" scenario = 5.9%
 - + Evercore ISI capital goods index (acceleration above 50; deceleration below 50): December = 61.0; January = 62.0; February = 64.7; March 9th = 65.9

- + December NFIB net percentage planning to increase capital spending = 27%; January = 29%; February = 29%
- + December NFIB percentage reporting capital outlays = 61%; January = 61%; February = 66%
- **Business credit** growth should continue to expand near levels experienced in 2018 to expand, but credit spreads should begin to widen; the impact of new tax provisions which will reduce the attractiveness of debt financing is uncertain, but could contribute to a slight slowing in business credit growth.
 - + The January 2018 Federal Reserve Senior Loan Officer Survey, covering 2017 Q4, indicated that credit standards were easier for commercial and industrial loans; demand was unchanged; lenders expect to ease credit standards for commercial and industrial loans in 2018 and also expect demand to strengthen as businesses increase capital expenditures in response to strong economic growth and tax incentives
 - Credit standards tightened for commercial real estate loans and demand weakened
 - Lenders expect to tighten credit standards for commercial real estate loans in 2018
 - ? Growth in total bank loans slowed to an annual rate of growth of 3.7% in February
- **Residential housing investment** should be a little stronger in 2018 in a range of 3% to 6%; housing starts should also rise in a range of 3% to 6%.
 - ✓ 2017 residential investment grew = 1.8%
 - ✓ GS 2018 forecast investment growth = 3.7%; growth in housing starts = 4.0%
 - ✓ B of A 2018 forecast investment growth = 3.0%; growth in housing starts = 5.6%
 - ? 2017 growth in housing starts = 2.6%; starts up 7.3% in January 2018 over January 2017, 12-month moving average up 0.2% in January (single family up 8.7%; multi-family down -9.8%)
 - ✓ Bill's "BASE" scenario 2018 growth in housing starts = -0.3%

- + Evercore ISI homebuilder index (expansion above 50; contraction below 50): December = 58.0; January = 58.4; February = 61.3; March 9th = 60.6
- December NAHB housing index = 74; January = 72; February = 72 (expansion above 50)
- **Residential housing prices** should rise more slowly in 2018 in a range of 3% to 5%.
 - ✓ Case-Shiller growth in national housing prices through November 2017 (12-month change) = 6.2%; December = 6.3%
 - ✓ FHFA 2017 Q3 growth in national housing prices (12-month change) = 6.7%
 - ✓ FHFA housing price index was 10.6% above its long-term trend in Q4 2017 compared to a trough of -8.3% below trend in Q1 2012
- **Trade deficit** should rise more rapidly in 2018 in a range of -3.0% to -3.5%.
 - ? December 2017 trade deficit = -2.88%; January = -2.89%
- The **dollar's value** on a trade-weighted basis should continue its recent moderate decline due to stronger global economic growth.
 - ✓ December major country trade-weighted dollar value = 88.75, down -7.0% in 2017
 - + Trade-weighted dollar declined YTD -2.7% in January; YTD -3.4% in February
- **Oil prices** are likely return to the long-term range of \$40 to \$55 that balances global supply and demand because abundant and flexible supply in the U.S. will constrain prices if global demand accelerates; however, strong global growth, OPEC production controls and speculative trading will cause oil prices to exceed this range during much of the year and perhaps for the entire year.
 - ✓ West Texas crude oil prices per barrel averaged \$58 in December 2017
 - Oil prices averaged \$64 per barrel (January); \$62 (February); \$62.70 YTD through March 12th

- **Monetary policy** – the Federal Reserve will raise the federal funds rate three to four times during 2017 in 25 basis point increments.
 - ? The FOMC did not raise rates at its January meeting
 - ✓ The University of Michigan consumer sentiment survey indicated that Inflation expectations 5-10 years ahead rose from 2.4% in December to 2.5% in January and February
 - ✓ The 5-year, 5-year forward inflation expectation rate, which is tied to CPI, was 2.14% on March 9th; adjusting for the CPI-CPE inflation differential of approximately 25 basis points translates to 1.89% long-term rate of increase in the PCE inflation rate
- **Total inflation** measures (CPI and CPE) will rise early in 2018 but then move lower later in the year as the impacts of the recent rise in energy prices falls out of the indices: CPI will rise 1.8% to 2.1% and CPE will rise 1.6% to 1.9%.
 - ✓ Total CPI rose 2.10% in 2017
 - ? Total CPI January = 2.14%; February = 2.26%
 - ✓ Total CPE rose 1.71% in 2017
 - + Total CPE rose 1.65% in January
 - GS total CPE revised forecast for 2018 = 2.0%
 - B of A total CPE revised forecast for 2018 = 2.0%
 - ✓ Bill's total CPE forecast "BASE" scenario = 1.9%; Bill's "STRONG GROWTH" scenario = 2.0%
- **Core PCE inflation** will rise from 2017's depressed level in a range of 1.7% to 1.9%, reflecting global disinflationary trends offset somewhat by overheating U.S. economic activity and employment.
 - ✓ Core CPI rose 1.75% in 2017
 - + Core CPI January = 1.85%; February = 1.86%
 - ✓ Core CPE rose 1.53% in 2017
 - ? Core CPE rose 1.52% in January
 - ✓ GS core CPE forecast for 2018 = 1.8%

- ✓ B of A core CPE revised forecast for 2018 = 1.9%
- Bill's revised core CPE forecast "BASE" scenario = 2.0%; Bill's "STRONG GROWTH" scenario = 2.1%
- The **10-year Treasury rate** is likely to rise somewhat during 2018 and fluctuate during the year in a range between 2.25% and 3.00%. Faster than expected real GDP and employment growth would push the rate toward the top end of the range; greater than expected declines in inflation and/or heightened financial instability would push the rate toward the bottom end of the range.
 - ✓ The 10-year Treasury Note yield was 2.40% on the last trading day of 2017
 - + The 10-year Treasury Note yield was up 41 basis points as of March 14th to 2.81%
- **Federal fiscal policy** involving tax cuts and spending increases will have a positive impact on real GDP growth during 2018, raising real GDP growth by approximately 0.3%.
 - ✓ Tax cuts and spending increases are expected to raise the level of GDP by 0.9% over 2018 and 2019, with more of the increase occurring in 2019
 - ✓ Federal government investment grew 0.2% in 2017
 - ✓ GS 2018 original forecast federal government investment growth = 4.1%; revised = 4.6%
 - ✓ GS original combined federal and state and local 2018 investment growth forecast = 1.9%; revised = 2.1%
 - ✓ B of A original combined federal and state and local 2018 investment growth forecast = 0.8%; revised = 1.4%
 - ✓ Bill's combined federal and state and local 2018 investment growth forecast "BASE" scenario = 1.4%; Bill's "STRONG GROWTH" scenario = 1.4%
- **State and local investment spending** growth will remain subdued below a growth rate of 1.0%, which will be well below the long-term trend.
 - ✓ State and local investment grew 0.1% in 2017

- ✓ **GS 2018 forecast state and local investment growth = 0.6%**
 - ? **Evercore ISI state tax revenues index (accelerating above 50; decelerating below 50): December = 56.5; January = 58.8; February = 50.3**
 - The **deficit** as a percentage of nominal GDP will increase from fiscal year 2017's level of 3.41% to a range of 3.75% to 4.25%. Stronger than expected growth would push the deficit toward the lower end of the range. Because the full effects of the "Tax Cuts and Jobs Act" will impact only approximately half of fiscal year 2018, significant negative consequences for the size of the federal deficit will not occur until fiscal 2019.
 - ✓ **GS original fiscal 2018 forecast federal budget deficit = 3.7%; revised = 3.9%**
 - ✓ **B of A original fiscal 2018 forecast federal budget deficit = 3.9%; revised = 4.1%**
 - ✓ **Bill's revised fiscal 2018 deficit forecast "BASE" scenario = 3.9%; Bill's revised "STRONG GROWTH" scenario = 3.8%**
 - ✓ **The 12-month budget deficit was 3.45% in December; January = 3.42%; February = 3.54%**
2. **Rest of the World: February Assessment:** Global economic activity continued to be very strong in January and February, led by developed economies and has strengthened a bit further in early 2018, with strong passthrough benefits to emerging markets; the outlook is for continued strength; however, nearly all economies are growing faster than potential, which is not sustainable over the longer run. 2018 growth forecasts for most countries have been raised.
- ✓ **GS's global current activity indicator (CAI) was 5.1% December, the highest level in seven years, and moved up to 5.3% in both January and February, exceeding potential growth of 3.6%**
 - ✓ **CAI for major advanced economies accelerated from 1.5% in mid-2017 to 3.8% in December; it slipped slightly to 3.6% in January, but rebounded to 3.9% in February, which greatly exceeds potential growth of 1.3% - this is not sustainable in the long run, but positive feedback loops will sustain momentum for the next one to two years**

- ✓ CAI for emerging markets accelerated from 4.3% at the beginning of 2017 to 6.2% in December; 6.7% in January; 6.5% in February, which exceeds potential growth of 5.4%
 - ✓ B of A's Global cycle indicator was unchanged in December, with improvement in emerging markets (Brazil, Turkey, Poland, China) offset by some slowing in developed markets; however, this indicator dropped sharply in January due to declines in industrial production in both Japan and the U.S., which B of A's believes are short-term statistical anomalies and not a harbinger of things to come
 - ✓ OECD's global index of leading economic indicators continued to rise in January and February
 - ✓ The JP Morgan Global Manufacturing PMI was 54.5 in December which was the highest level since February 2011 during the initial recovery from the Great Recession; this index edged down to 54.4 in January and 54.2 in February, signaling that global manufacturing activity may be plateauing at a relatively robust level
- **Global growth** is likely to improve to 3.8% in 2018 from 3.7% in 2017. This is a considerable improvement from slower growth in recent years. Global economic momentum built in the last few months of 2017 and this should carry over into 2018. However, downside risks, such as U.S. trade policies and an emerging global monetary tightening cycle, and, of course the low probability risks of significant eruption of political turmoil in the Middle East and Korea, are lurking in the background. These risks are not expected to dampen growth momentum in 2018, but prudence argues for monitoring them closely.
 - + **Global growth was in a range of 3.7% (IMF) to 3.8% (B of A) in 2017; forecasts for 2018 have been raised: 3.9% (B of A and IMF), 4.1% (GS)**
 - **Global inflation** is expected to rise from 2.7% in 2017 to 3.0% in 2018, reflecting strong economic growth and shrinking or closed output gaps.
 - + **Global inflation was in a range of 2.8% (B of A) to 3.1% (IMF) in 2017; the forecast for 2018 has been raised to a range of 3.1% (B of A) to 3.3% (IMF)**

- **European growth** will be positive but will slow to 1.4% (GS) to 2.0% (B of A) from 2017's stronger than expect pace. The potential for tighter monetary policy poses downside risk to growth
 - ? **2017 Euro area growth = 2.5%; GS revised its 2018 forecast to 2.2%; B of A revised its 2018 forecast to 2.4%**
 - + **Euro Area CAI = 4.1% in January; 3.7% in February**
- **European total inflation** in 2018 will remain stable at 1.5%, the same level as in 2017, but **core inflation** will rise from 0.9% to 1.1%; both measures will remain considerably below the ECB's 2.0% target.
 - ✓ **2017 total inflation = 1.5%; 2018 forecast remains at 1.5%**
 - ✓ **2017 core inflation = 1.0%; 2018 forecast has been revised down to 0.9% (GS)**
- **European financial markets** should be relatively stable, as long as economic growth remains solid; some volatility could occur depending upon the outcome of the Italian elections.
 - ? **Volatility has increased in concert with U.S. stock market volatility; interest rates have also begun to rise, which, if sustained, will impede the impact of the ECB's monetary policy intended to raise the inflation rate**
 - ? **The ECB dropped its easing bias for monetary policy; however, QE is expected to continue through September**
 - ? **European stock markets have had rough going in early 2018; MSCI EMU index is now below its 200-day moving average; the boost from faster European growth, which may have peaked, has been more than offset by the stronger euro and the return of political risk following the inconclusive Italian election; however, small and mid-market equities, which have less exposure to the value of the euro, have been outperforming**
 - ? **Although the Italian elections resulted populist and fringe parties gaining at the expense of centrist parties, no single party received enough seats to control the formation of the next government; this was a modest negative for financial markets because big changes are unlikely to occur in Italian policy near term with respect to the**

euro or the European Union; the Italian debt problem will probably continue to slumber, as long as European growth remains strong

- **European political dysfunction, populism and nationalism** should remain quiescent during 2018 as long as economic growth remains relatively strong. Countries to watch closely, however, Italy and Greece.
 - + Italian parliamentary elections decimated centrist parties; however, the muddled nature of the outcome, with no single party emerging in a dominant position, means that there will be no dramatic policy changes – the Italian threat to the European Union will remain muted as long as European growth remains strong and monetary policy continues to be accommodative; however, Italy’s economic underperformance and its debt problem remain and are not expected to improve – the day of reckoning has been postponed, not eliminated
 - + Even though centrist parties emerged from last year’s German elections greatly weakened, the resulting Grand Coalition government, forged by the Christian Democrats and the Social Democratic Party, will maintain a steady policy course, which will involve a shift from fiscal austerity to modest stimulus
- **U.K. growth** is expected to decline to 1.0% to 1.1% in 2018 compared to 1.5% to 1.7% in 2017 as the consequences of Brexit develop.
 - ✓ 2017 growth was 1.7%
 - 2018 growth forecasts have been revised higher as the U.K. benefits from strong global economic growth: GS = 1.7%; B of A = 1.2%; potential growth = 1.3%
 - U.K. CAI = 1.5% in January; 2.0 in February
 - ✓ 2017 total inflation = 2.7% (B of A); 2018 forecast revised higher to 2.3% (B of A)
 - ✓ 2017 core inflation = 2.4% (GS); forecast = 2.2% (GS)
- **China’s GDP growth** is expected to be in a range of 6.3% (GS) to 6.6% (B of A) but risks are to the downside as President Xi emphasizes the goal of a “better quality life” over GDP growth.
 - ✓ 2017 growth 6.9% (B of A and GS)

- ✓ 2018 growth forecasts have been revised higher: GS = 6.5%; B of A remains at 6.6%; potential growth = 6.6%
- + China's CAI = 7.3% in January; 7.2% in February
- **China's leadership** will continue implement **economic reforms** gradually; financial and political stability will be maintained.
 - + Financial market regulation has curtailed growth in risky wealth management products
 - + Political stability has been assured by the elimination of presidential term limits and President Xi's reorganization of government ministries to expedite implementation of his policy agenda for environmental protection, financial risk control, and poverty alleviation
- **Japan's** economic policies will continue to fall short of achieving the 2.0% inflation target; total inflation is expected to rise from 0.5% in 2017 to 1.0% in 2018; core inflation is expected to rise from 0.4% in 2017 to 0.6% in 2018. GDP growth will also continue to fall short of the policy target; implementation of market reforms will continue to weigh heavily on both growth and inflation.
 - ✓ 2017 growth is expected to be in a range of 1.6% (B of A) to 1.7% (GS)
 - ✓ 2018 growth forecasts = 1.6% (B of A); 1.7% (GS); potential growth = 1.0%
 - + Japan's CAI = 3.2% in January; 3.5% in February
 - ✓ 2017 total inflation = 0.5% (B of A)
 - ✓ 2018 revised forecast total inflation = 1.1% (B of A) vs. 1.0%
 - ✓ 2017 core inflation = 0.5% (GS)
 - ✓ 2018 revised forecast core inflation = 1.0% (GS) vs. 0.6%
 - + Japan appears to have emerged at long last from its deflation trap; wages are rising, albeit slowly, women participation in the labor force is rising; and labor reforms to cut the length of the work week are taking hold

- ? **The 10% decline in stock prices in early 2018, which reflects the strengthening of the yen, has not dented business confidence**
- **India** should continue to experience relatively strong real GDP growth in a range of 7.0% to 8.0% in 2018.
 - ✓ **2017 growth = 6.4% (GS)**
 - ✓ **2018 forecast growth = 7.6% (GS); potential growth = 7.1%**
 - + **India's CAI = 8.7% in January; 7.6% in February**
 - **Emerging market countries, excluding China**, should experience better growth in 2018 than in 2017. Growth is expected to improve from 3.6% in 2017 to 3.9% in 2018.
 - ✓ **2017 growth = 3.7%**
 - ✓ **2018 revised forecast growth = 4.0%**
 - **Brazil and Russia** will benefit from higher oil prices; Russian growth is expected to improve from 2.6% in 2017 to 3.0% in 2018; Brazilian growth is expected to improve from 0.6/1.0% in 2017 to 2.6% in 2018.
 - + **Brazil and Russia are benefiting from higher commodity and oil prices**
 - ✓ **Brazil's 2017 growth is expected to be in a range of 1.0% (B of A) to 1.1% (GS)**
 - ✓ **Brazil's 2018 revised forecast growth is expected to be in a revised range of 3.0% (B of A) to 2.7% (GS); potential growth = 2.4%**
 - + **Brazil's CAI = 4.6% in January; 4.7% in February**
 - ✓ **Russia's 2017 growth = 2.1% (GS)**
 - ✓ **Russia's 2018 revised forecast growth = 3.3%; potential growth = 3.3%**
 - + **Russia's CAI = 5.0% in January; 3.5% in February**
 - Although the rise in oil prices might save **Venezuela** from default and bankruptcy in 2018, this seems to be the likely outcome.
 - ? **Economic conditions continue to deteriorate**

3. **Risks** – stated in the negative relative to the forecast.

- **U.S. real GDP growth** falls short or exceeds expectations; falling short is the more serious risk as this is likely to happen only if recession occurs
 - ✓ **Too soon to evaluate; however, momentum at the beginning of the year has been very strong, but first quarter real GDP is expected to be weak**
- **U.S. productivity** falls below the bottom end of the 1.3% to 1.5% range
 - ✓ **First opportunity to evaluate will not occur until April**
- **U.S. employment growth** is slower or faster than expected; slower growth is the more serious risk as this is likely to happen only if recession occurs
 - + **Employment growth was very strong in January and even stronger in February**
- **Employment participation rate** falls below the bottom of the forecast range rather than remaining relatively stable or rising modestly
 - **Risk not realized; however, February's participation rate rose much more than expected**
- **U.S. hourly wage rate growth** is lower or higher than the forecast range of 2.6% to 3.0%; falling wage growth is the more serious risk
 - **Risk not realized; however, Y/Y wage growth is not accelerating as much as expected**
- **U.S. unemployment rate** rises above the forecast range or falls below it
 - **Risk not realized**
- **Nominal U.S. consumer disposable income** increases less or more than expected; a less than expected increase is the more serious risk
 - ✓ **Too soon to evaluate**
- **Nominal U.S. consumer spending** increases less or more than expected; a less than expected increase is the more serious risk

✓ **Too soon to evaluate**

- **U.S. stock prices** fall more than or rise more than the expected range of -10% to +10%

- **Risk not realized**

- **U.S. business activity** contracts or expands more than expected; contraction is the more serious risk

✓ **Too soon to evaluate; however, business activity has been very strong over the first two months of the year; confidence measures have been rising**

- **U.S. private business investment** does not improve as much as or more than expected; falling short of expectations is the more serious risk

✓ **Too soon to evaluate**

- **Growth rates in U.S. residential housing investment and housing starts** are less than or more than expected; below expectations is the more serious risk

✓ **Too soon to evaluate**

- **U.S. residential housing price increases** are stronger than or less than expected; stronger than expected price growth would be an indication of price speculation, while slower than expected price growth would most likely be caused by recession or deteriorating consumer confidence

✓ **Too soon to evaluate**

- **U.S. trade deficit** does not widen as much as expected

- **Risk not realized**

- **Value of the dollar** rises rather than falling as expected and triggers a global dollar squeeze

- **Risk not realized**

- **Oil prices** rise above or fall below the expected range; high oil prices is the greater concern because it would be indicative of unsustainable price speculation

+ **Risk realized, but prices could fall later in the year**

- ***U.S. monetary policy*** tightens more than 75 to 100 basis points, spawns financial market uncertainty and contributes to global financial instability
 - ✓ **Too soon to evaluate**
- ***Financial conditions*** tighten and cause financial market volatility
 - **Risk not realized; volatility has increased, but financial conditions have increased only modestly**
- ***U.S. inflation*** falls or rises more than expected
 - ✓ **Too soon to evaluate; however, forecasts have edged up a bit**
- ***U.S. long-term interest rates*** fall or rise more than expected
 - **Risk not realized**
- ***U.S. fiscal policy*** is more expansionary than expected due to larger than expected increases in spending
 - + **Risk realized; Congress increased spending caps**
- ***Federal budget deficit*** increases more than expected
 - ✓ **Too soon to evaluate**
- ***U.S. state and local spending*** does not rise as fast as expected
 - ✓ **Too soon to evaluate**
- ***Global GDP growth*** does not rise as fast as expected
 - ✓ **Too soon to evaluate**
- ***Global trade*** declines as the U.S. and other countries pursue protectionist policies
 - ✓ **Too soon to evaluate**
- ***European growth*** is considerably less than expected
 - **Risk not realized; forecast has been raised**
- ***ECB's*** quantitative easing program is not successful in raising inflation
 - ✓ **Too soon to evaluate**

- **Europe** – financial market turmoil reemerges
 - **Risk not realized**
- **Europe** – political instability and social unrest rises more than expected threatening survival of the Eurozone and the European Union
 - **Risk not realized**
- **Chinese** leaders have difficulty implementing **economic reforms**
 - ✓ **Too soon to evaluate; however, President Xi’s reorganization of governmental agencies, which is intended to expedite implementation of environmental protection, financial risk control, and poverty alleviation policy priorities, could divert attention from making progress in implementing economic reforms**
- **China’s growth** slows more than expected
 - ✓ **Too soon to evaluate**
- **Japan** – Abenomics and monetary policy are unsuccessful in raising inflation to the 2 percent target
 - ✓ **Too soon to evaluate**
- **Emerging economies** – a strong dollar leads to serious difficulties especially for countries with large amounts of dollar-denominated debt.
 - **Risk not realized**
- Severe and, of course, unexpected **natural disasters** occur, which negatively impact global growth
 - **Risk not realized**
- Political instability in the **Middle East** causes a spike in oil prices
 - **Risk not realized, but Israel-Iran hostilities were narrowly avoided early in the year**
- **North Korea** threatens global political stability and potential nuclear war by persisting in testing nuclear devices and intercontinental ballistic missiles
 - **Risk not realized; President Trump in a surprising move has agreed to meet with North Korea’s leader in May**

- **New Risk: Global trade war** threatens global economic growth
 - + **President Trump's imposition of steel and aluminum tariffs, termination of the proposed acquisition of Qualcomm by Broadcom, and prospective trade actions, such as tariffs and investment restrictions, specifically aimed at China involving intellectual property theft collectively raise the prospect of retaliation and the possibility of an escalating global trade war**