Yardeni Research, Inc.



MORNING BRIEFING February 12, 2018

Algorithms Behaving Badly

See the pdf and the collection of the individual charts linked below.

(1) Get a neck brace. (2) ETF-led flash crash. (3) S&P 500 down slightly from when taxes were cut at the end of last year. (4) The differences between the 2016 and 2018 tightening tantrums. (5) Bouncing off the 200-dma. (6) Consensus expected S&P 500 earnings for 2018 now almost \$11 more than before tax cut. (7) Latest correction wasn't a Black Swan event, strictly speaking. (8) Bond Vigilantes are saddling up. (9) Dudley's small potatoes. (10) Fed is starting to taper its balance sheet just as fiscal policy is ballooning the federal budget deficit. (11) Raising our bond yield forecast to 3.00%-3.50%.

Strategy I: Flash Crash? Joe and I are still bullish on stocks, but experiencing whiplash from watching February's wild market action so far. We attribute most of it to computerized trading systems and a flash crash in some cockamamie algorithm-driven ETFs. We remain focused on the outlook for earnings, which remains fundamentally sound for stocks, in our opinion.

With the benefit of hindsight, we are thinking that perhaps the meltup scenario in the S&P 500, which we had been anticipating since early 2013, might have ended at this year's January 26 record high, when the index was up 57.1% measured from February 11, 2016 (that year's low) (*Fig. 1*). The forward P/E of the S&P 500 stock price index rose from 14.8 to 18.6 over this period (*Fig. 2*). It then plunged back to 16.3 this past Thursday. That's a significant meltup and meltdown in the P/E.

Joe and I are experiencing future shock. At the start of this year, we thought that the meltup might be sustainable for a while since it was driven by rapidly rising earnings expectations following the December 22 passage of the Tax Cuts and Jobs Act (TCJA). Last year, in our 9/6 *Morning Briefing*, we did mention the possibility of a meltdown led by an ETF flash crash, but it took us by surprise when it happened in February despite all the giddiness over the outlook for earnings. We still are giddy about the earnings outlook meltup.

Now that the market's meltup/meltdown scenario may have played out, what's next? We are lowering the odds of another meltup in stocks to 30% from the 70% meltup odds we have held since January 16 (when we had raised the odds from 55%). We are keeping the meltdown scenario at 25%. So the odds of a more leisurely paced bull market are now the greatest of the three scenarios, at 45%, in our opinion. Consider the following:

- (1) From meltup to meltdown. The S&P 500 hit a record high of 2873 on January 26 (<u>Fig. 3</u>). That put the index up 7.5% ytd, 25.1% y/y, 7.1% since the December 22 tax cut, and 34.3% since Trump was elected POTUS. It then experienced a flash crash, which brought it down 8.8% through Friday's close. It is now down 2.4% since the tax cut, but up 22.4% since Election Day 2016.
- (2) Another tightening tantrum. Granted, there were some good fundamental reasons for the plunge, which was triggered by the February 1 Employment Report showing a pickup in wage inflation. January's average hourly earnings rose 2.9% y/y, the fastest pace since June 2009 (*Fig. 4*). However, the same measure for production and nonsupervisory workers rose only 2.4%. Nevertheless, the report

triggered another "tightening tantrum" on fears that the Fed will raise interest rates at a faster pace. A similar tantrum occurred at the start of 2016.

Back then, both the 10-year Treasury bond and TIPS yields actually fell (*Fig. 5*). This time, both yields have risen sharply since the start of the year. The spread between the two, which is widely viewed as a proxy for expected inflation, fell in early 2016 (*Fig. 6*). It has been rising during the current tantrum. That's because the labor market is tighter now than it was back then, and fiscal policy has turned much more stimulative, as discussed below.

- (3) Hitting the 200-dma. On January 29, the S&P 500 exceeded its 200-day moving average by 13.5%, the greatest divergence since February 2011 (Fig. 7 and Fig. 8). On Friday, the index fell slightly below this average on an intraday basis but then rallied dramatically by the end of the day to close slightly above this average. Could it be that computer trading algorithms precipitated the recent freefall in stock prices, but will reverse course now that the S&P 500 has held its 200-day moving average? We think so, but Joe and I are fundamental analysts, not chart-watching technicians. So we take more comfort in the strong outlook for earnings.
- (4) Earnings continue to melt up. While the S&P 500's forward P/E took a dive, the forward revenues and earnings of the S&P 500 companies continued to rise to new highs last week (<u>Fig. 9</u>). Again, we are especially impressed by the strength of the former since it shouldn't have much to do with Trump's tax cut, unless industry analysts have all turned into supply-siders, believing that lower tax rates in the US will boost sales. Our hunch is that the strength in revenues expectations is attributable to strong global economic growth.

The time-weighted average of analysts' consensus expected operating earnings for this year and next year rose to a record \$158.70 during the February 8 week. Over the past eight weeks since the enactment of the TCJA, analysts have raised their 2018 and 2019 earnings estimates for the S&P 500 by \$10.62 to \$156.88 and \$11.60 per share to \$172.67, respectively, implying growth rates of 18.5% and 10.1%.

Strategy II: Swans & Potatoes. Now let's consider some of the fundamental risks to the bull market. While the recent correction came as a surprise, it wasn't attributable to a Black Swan event. Such events are deemed to be total surprises, springing from conditions that materialized out of the blue. It is no surprise that the Fed is normalizing monetary policy. It is no surprise that the labor market is tight. It is no surprise that Trump's agenda will provide a great deal of fiscal stimulus from tax cuts, and more spending on defense and infrastructure. The jury is still out on whether all that fiscal stimulus will revive inflation. Debbie and I don't think so, but the Bond Vigilantes are saddling up. Let's have a closer look at the monetary and fiscal policy issues that may be behind the recent selloff in the stock market:

(1) *Dudley's small potatoes*. Among the worst days for the stock market this month was last Thursday, when the Dow dropped 1033 points. It was the second-worst single-day point drop in history, beaten only by the record set after last Monday's 1175-point drop. FRB-NY President Bill Dudley might have contributed to the selloff that day when he said in a Bloomberg interview that recent market moves are "small potatoes." He added, "The little decline that we've had in the equity market today has virtually no implications for the economic outlook." The market proceeded to give Mr. Dudley bigger potatoes over the rest of that day.

The big worry for the stock market is the bond market. As widely expected, the Fed remains on course to raise the federal funds rate three times this year from 1.50% to 2.25%. Perhaps even more troublesome is that the Fed started to taper its balance sheet last October at an announced pace that will reduce its holdings of US Treasury securities and mortgage-backed securities (MBS) by \$300 billion

over the current fiscal year (through September 2018) and then by \$600 billion during the following fiscal years (*Fig. 10* and *Fig. 11*). At this pace, the Fed's balance sheet will be back down to where it was in August 2008 by June 2024 (*Fig. 12*). Over the 2018 and 2019 fiscal years, the Fed is scheduled to reduce its holdings of Treasuries by \$540 billion and MBS by \$360 billion (*Fig. 13* and *Fig. 14*).

(2) *Trump's big potatoes*. A related big worry for the bond market (and therefore the stock market) is that fiscal policy is turning extremely stimulative as a result of tax cuts enacted at the end of last year. Furthermore, deeply divided Republicans and Democrats in Congress set their differences aside last Wednesday. They agreed that the only way to avoid a government shutdown was to agree to spend lots more money, i.e., \$300 billion over the next two years! This means larger deficits and raises the risks of overheating the economy with inflationary consequences.

The federal deficit, which was \$666 billion (there's that devilish number again!) during fiscal 2017, is set to widen again—back to over \$1.0 trillion this fiscal year and next—just as the Fed is set to reduce its holdings of US Treasury securities by \$180 billion this fiscal year and \$360 billion in fiscal 2019 (*Fig.* 15). It's no wonder that the Bond Vigilantes are getting agitated. Debbie and I are raising our 10-year Treasury bond yield forecast to 3.00%-3.50% for this year.

CALENDARS

US. Mon: Treasury Budget -\$51.0b. **Tues:** NFIB Small Business Optimism Index 105.8, Mester. (*Wall Street Journal* estimates)

Global. Mon: China New Yuan Loans 2050b. **Tues:** UK Headline & Core CPI 2.9%/2.6% y/y, Japan GDP (annualized) 1.0% q/q, Japan Machine Tool Orders. (DailyFX estimates)

STRATEGY INDICATORS

Global Stock Markets Performance (link): The US MSCI index tumbled 5.1% last week for its worst decline since January 2016 and only its third drop in the past 12 weeks. The index ranked 18th out of the 49 markets in a week when all 49 countries fell in US dollar terms. That compares to 37th a week earlier, when it fell 3.8% as seven countries moved higher. The AC World ex-US index fell for just the second time in nine weeks, but its 6.4% decline was the worst since September 2011. It has outperformed the US MSCI in five of the past eight weeks. All regions fell for a second straight week, the first time that's happened since January 2016. These three declined less than the AC World ex-US: EM Latin America (-6.0%), EAFE (-6.2), and EMEA (-6.2). BRIC performed the worst among regions with a decline of 8.0%, followed by EM Asia (-7.7), EM Eastern Europe (-6.9), and EMU (-6.5). Pakistan was the best-performing country, albeit with a decline of 0.4%, followed by Sri Lanka (-1.0), Egypt (-1.8), Jordan (-1.9), Morocco (-2.5), and Denmark (-2.5). Of the 31 countries that underperformed the US MSCI last week, China fared the worst, falling 10.0%, followed by Taiwan (-7.9), Greece (-7.7), Korea (-7.6), and Hong Kong (-7.5). On a ytd basis, the US MSCI fell to a decline of 2.0% from a 3.4% gain, but the index improved in the performance ranking last week to 28/33 from 33/33 and now leads the AC World ex-US (-2.8) in a period when most emerging market regions and 19/49 countries are positive ytd. EM Latin America has risen 4.4% ytd and leads EM Eastern Europe (2.4), EMEA (1.6), BRIC (0.2), EM Asia (-2.2), and EMU (-2.4). EAFE (-2.9) is the only laggard relative to the AC World ex-US's performance.

S&P 1500/500/400/600 Performance (*link*): All three market-cap indexes suffered their worst weekly decline in two years, since January 2016, as LargeCap entered correction territory on Thursday. LargeCap performed worst with a decline of 5.2% for the week, behind the drops for MidCap (-5.0%) and SmallCap (-4.3). LargeCap is now down 8.8% from its record high in January, worse than the

declines of MidCap (-8.7) and SmallCap (-7.8) since then. Not a single sector among the 33 was spared in the latest week: All fell w/w for a second straight week, making for the broadest decline in two years. The smallest declines were recorded by SmallCap Consumer Staples (-1.0), MidCap Utilities (-1.0), SmallCap Utilities (-2.2), SmallCap Consumer Discretionary (-2.7), and LargeCap Utilities (-2.8). Energy dominated last week's biggest laggards: MidCap Energy (-10.0), LargeCap Energy (-8.5), and SmallCap Energy (-8.1). Due to the carnage, LargeCap is now down 2.0% so far in 2018, ahead of the ytd declines for SmallCap (-3.6) and MidCap (-4.2). Just three sectors remain positive to date in 2018: SmallCap Health Care (3.6), LargeCap Consumer Discretionary (2.2), and MidCap Health Care (2.0). Energy, Utilities, and Real Estate dominate the 10 worst performers ytd: MidCap Energy (-14.4), MidCap Telecom (-12.6), SmallCap Real Estate (-12.4), MidCap Real Estate (-10.6), SmallCap Utilities (-9.0), LargeCap Real Estate (-8.7), SmallCap Energy (-8.1), LargeCap Utilities (-7.9), LargeCap Energy (-7.9), and MidCap Utilities (-7.4).

S&P 500 Sectors and Industries Performance (*link*): All 11 sectors fell last week for a second straight week, and six outperformed the S&P 500's 5.2% decline. That compares to all 11 sectors rising a week earlier, when seven outperformed the S&P 500's 3.9% decline. Utilities was the best-performing sector, with a shallower 2.8% decline than the drops experienced by Materials (-3.4%), Real Estate (-4.1), Tech (-4.4), Consumer Discretionary (-4.6), and Consumer Staples (-5.1), which fell the most since October 2008. Energy (-8.5) was the biggest underperformer for a second week and suffered its worst decline since August 2016. It was followed by Financials (-5.8), Telecom (-5.7), Health Care (-5.6), and Industrials (-5.4). Consumer Discretionary is the only sector in the plus column so far in 2018, down from seven sectors a week ago. These four sectors are ahead of the S&P 500's 2.0% ytd decline: Consumer Discretionary (2.2), Tech (-0.3), Health Care (-0.8), and Financials (-1.1). The sectors that are underperforming the S&P 500 ytd: Real Estate (-8.7), Utilities (-7.9), Energy (-7.9), Telecom (-6.5), Consumer Staples (-5.9), Materials (-3.4), and Industrials (-2.7).

Commodities Performance (*link*): The commodities markets chilled considerably last week: Just five of the 24 commodities we follow rose for the week as the S&P GSCI commodities index tumbled 6.1% for its biggest decline since November 2014. That compares to a 1.5% decline in the prior week, when 9/24 commodities rose. Last week's strongest performers were primarily agriculture-related: Kansas Wheat (2.4), Coffee (2.2), Wheat (2.1), Corn (1.4), and Soybeans (1.1). Oil-related commodities dominated last week's biggest decliners: Heating Oil (-9.8), Crude Oil (-9.7), Natural Gas (-8.9), GasOil (-8.9), and Brent Crude (-8.7). The S&P GSCI commodities index is now down 3.1% ytd after having been up by as much as 4.7% ytd on January 26. The best performers so far in 2018: Kansas Wheat (11.1), Cocoa (8.3), Wheat (6.8), Corn (4.1), and Feeder Cattle (3.1). The laggards of 2018 to date: Natural Gas (-12.1), Heating Oil (-10.4), Sugar (-10.3), GasOil (-7.5), and Copper (-6.8).

Assets Sorted by Spread w/ 200-dmas (<code>link</code>): Spreads between prices and 200-day moving averages (200-dmas) rose last week for 6/24 commodities, 0/9 global stock indexes, and 0/33 US stock indexes, compared to 8/24 commodities, 0/9 global stock indexes, and 0/33 US stock indexes rising a week earlier. Commodities' average spread fell w/w to 3.5% from 7.4%. However, 18 commodities trade above their 200-dmas, unchanged from a week earlier. Nickel now leads all commodities and all assets at 17.9% above its 200-dma, but Kansas Wheat (5.5%) rose 2.4ppts w/w for the best performance of all commodities and all assets. Nickel is followed closely by Crude Oil (12.3), which tumbled 13.0ppts w/w for the worst performance all commodities and indeed all assets. The global indexes trade at an average of 1.5% above their 200-dmas, down sharply from 7.5% in the prior week. Four of the nine global indexes trade above their 200-dmas, down from seven a week earlier. Brazil (13.1) still leads the global indexes, followed by Indonesia (8.8), which fell just 2.5ppts w/w for the best performance among global indexes. Germany (-5.2) trades the lowest among its country peers, but China (-0.4) dropped 11.6ppts for the worst performance among global indexes. The US indexes trade at an average of 0.8% below their 200-dmas, with 18 of the 33 sectors above, down from an average of 4.4% a week earlier.

when 24 sectors were above. SmallCap Health Care (11.2) still leads all US stock indexes relative to their 200 dmas, followed by LargeCap Consumer Discretionary (7.8), LargeCap Financials (6.5), and LargeCap Tech (6.0). MidCap Utilities (-6.7) dropped only 0.8ppts w/w for the best performance among the US indexes last week. MidCap Telecom trades at a sharp discount relative to its 200-dma of 19.5%, the lowest among not just the US stock indexes but all assets. MidCap Energy (-4.2) weakened 10.5ppts w/w, for the worst performance of the US stock indexes.

S&P 500 Technical Indicators (*link*): The S&P 500 index suffered damage to its short-term technical readings last week, but the long-term trend remained intact after bouncing off the 200-dma on Friday. The index remained in a Golden Cross (50-dma higher than 200-dma) last week for a 93rd straight week (after 17 weeks in a Death Cross), even as both the short-term and long-term trends weakened for a third straight week. The index's 50-day moving average (50-dma) relative to its 200-dma dropped to 7.0% from a 55-month high of 7.2% a week earlier; this reading compares to a four-year low of -4.5% in March 2016. The S&P 500's 50-dma fell for the first time since mid-August, but the 200-dma continued to rise as it has done since May 2016. The index closed below its 50-dma for the first time since August, tumbling to a two-year low of -3.8% below its falling 50-dma from 3.7% a week earlier and down from a two-year high of 6.2% on January 29. The S&P 500 ended the week 2.9% above its rising 200-dma, the lowest since the election and down from 11.1% a week earlier and a seven-year high of 13.5% on January 29. That compares to a prior post-election low of 3.0% in mid-August and a four-year low of -10.1% in August 2015.

S&P 500 Sectors Technical Indicators (*link*): Last week saw all 11 of the sectors weaken relative to their 50-dmas and 200-dmas for a second straight week. All 11 sectors now trade below their 50-dmas for the first time since November 2016, and down from six sectors above their 50-dmas a week earlier. Utilities was below its 50-dma for a ninth week and Real Estate below its for an eighth week. The longer-term picture—i.e., relative to 200-dmas—shows six sectors trading above, down from nine a week earlier as these three fell below w/w: Consumer Staples, Energy, and Telecom. Real Estate was below for a sixth week and Utilities below for an eighth week. All 11 had been above in mid-December for the first time since mid-February 2017. Nine sectors are in a Golden Cross (50-dmas higher than 200-dmas), down from 10 a week earlier. All 11 had been in a Golden Cross in mid-January for the first time since a 26-week streak ended in October 2016. Real Estate left the Golden Cross club last week for the first time since last April and Utilities left the Golden Cross club several weeks ago for the first time in 46 weeks, but Telecom was in the Golden Cross club for a third week after being out for 45 weeks. Four sectors have rising 50-dmas, the lowest since February 2017 and down from nine a week earlier as these sectors started falling: Consumer Staples, Energy, Health Care, Materials, and Telecom. Real Estate fell for a sixth time in eight weeks, and Utilities was out for a fourth straight week—for the first time since March 2017. Six sectors have rising 200-dmas, the lowest since May 2017 and down from nine rising a week earlier, as these three started falling w/w: Consumer Staples, Energy, and Telecom. The 200-dmas for Real Estate and Utilities fell for a fifth week.

US ECONOMIC INDICATORS

Consumer Credit (*link*): Consumer credit slowed in December after rising at its fastest pace on record in November. Credit advanced a still strong \$18.5 billion in December, but that was nearly half the pace of November's revised \$31.0 billion (up from an initially reported \$28.0 billion gain). Nonrevolving credit, which includes student and auto loans, climbed \$13.3 billion in December after gains of \$20.0 billion and \$14.7 billion the prior two months—making for the best three-month gain in more than a year. Meanwhile, revolving credit rose \$24.4 billion during the three months through December—the best quarterly pace in a decade. Credit card debt set another new record high, exceeding \$1.0 trillion in September for the first time in the history of the series going back to 1968.

GLOBAL ECONOMIC INDICATORS

Global Leading Indicators (*link*): In December, the OECD's composite leading indicators (CLIs)—designed to anticipate turning points in economic activity relative to trend six to nine months ahead—once again pointed to stable growth momentum in the OECD (100.2) as a whole. CLIs for the United States (99.8), Japan (100.2), Canada (100.6), and the Eurozone (100.6), including France (100.4), continued to show stable growth momentum, with Germany (101.0) and Italy (100.7) now joining the pack. The UK's (99.3) CLI, on the other hand, continued to point to an easing in growth. As for the emerging economies, India's (100.3) CLI indicates signs of growth gaining momentum, while Brazil's (103.8) continued to signal firming growth, which is now also the assessment for Russia (101.7). Stable growth momentum is now anticipated for China's (99.3) industrial sector, according to the latest gauge.

France Industrial Production (<u>link</u>): Industrial production rose four of the final six months of 2017 to a new cyclical high. Headline production, which excludes construction, expanded 0.5% in December and 3.4% during the second half of last year, while factory output advanced 0.3% and 3.1% over the comparable periods, holding just south of its cyclical high. During the last six months of 2017, output of consumer durable goods soared 11.8%, followed by capital (5.0), intermediate (3.2), and consumer nondurable (0.4) goods production. Meanwhile, France's January M-PMI (to 58.4 from 58.8) showed manufacturing activity held close to December's pace, which was the fastest since September 2000, with output, new orders, and employment all rising at marked rates.

Italy Industrial Production (*link*): Output in Italy advanced in seven of the last eight months of 2017 to its highest level since August 2011. Production, excluding construction, jumped at a two-year high of 1.6% in December, and 4.4% during the final eight months of last year. Manufacturing output followed a similar script, soaring 2.1% during December and 5.2% over the eight-month period, also to its highest reading since August 2011. Output of capital goods accelerated 8.9% over this time period, followed by intermediate (5.2) and consumer goods (3.8)—with the latter led by a 10.2% surge in consumer durable goods production. Italy's M-PMI (59.0) showed the best growth in manufacturing activity in nearly seven years, with production growing its fastest since February 2011.

Spain Industrial Production (<u>link</u>): After a slow start to the year, Spain's industrial production finished 2017 strong. Production, excluding construction, advanced 0.9% in December and 4.1% the final five months of 2017, with manufacturing up 0.7% and 3.6% over the same periods—to the highest readings since fall 2008 for both measures. The strength was widespread: capital (6.2%), intermediate (3.8), and consumer (1.6) goods output all contributed to the latest upswing. Markit reports that Spain's manufacturing sector continued to expand at a fast pace the first month of this year, with its M-PMI (55.2) remaining at an elevated level. Output rose sharply, fueled by strong domestic and foreign new orders.

UK Industrial Production (*link*): UK industrial output in December posted its biggest decline since September 2012, but manufacturing output continued to climb to new cyclical highs. Headline production sank 1.3% in December as a 19.1% plunge in mining and quarrying output—due to the temporary shutdown of the Forties pipeline—more than offset gains in other industries. December's decline followed an eight-month surge of 3.2%, to a new cyclical high, after falling 1.9% the first three months of 2017. Factory output climbed for the eighth straight month, by 0.3% m/m and 3.5% over the period, to a new cyclical high. The latest move up in manufacturing production was led by gains of 7.0% and 5.6%, respectively, in production of capital and consumer durable goods over the eight-month period—the former representing yet another new record high. Looking ahead, Markit reports growth in the UK manufacturing sector continued to ease from November's 51-month high of 58.1 to 55.3 in January, which still is well above its long-run average of 51.7. Factory output continued to expand at a healthy pace, though eased to a six-month low. Sector data signaled solid increases in output and new

orders across the consumer, intermediate, and investment goods sectors—with the latter continuing to outpace the other two.

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