



MORNING BRIEFING

January 31, 2019

Technology Today & Tomorrow

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

(1) S&P 500 no longer predicting a recession. (2) Consumer expectations are depressed, but that's likely to be temporary. (3) Fed back on right track for bulls. (4) Tech companies may be facing saturated markets for smartphones and cloud servers, and a China slowdown. (5) Nevertheless, the future remains bright for tech hardware and software. (6) Bloomberg's must-see video on China's great leap into the future. (7) China is becoming a Digital Orwellian State (DOS).

Strategy: Something for Worriers. The S&P 500 is one of the 10 components of the Index of Leading Economic Indicators (LEI). The LEI stalled during the last three months of 2018—falling 0.3% in October, rising 0.2% in November, then falling again by 0.1% in December. The drop in stock prices accounted for much of that weakness. The rebound in the S&P 500 so far in January is a relief.

However, the selloff late last year and the partial government shutdown early this year depressed the expectations sub-index of the Consumer Optimism Index (COI) during January ([Fig. 1](#)). This is the average of the expectations components of the Consumer Sentiment Index (CSI) and the Consumer Confidence Index (CCI). That average is also one of the LEI indicators, and it has fully reversed the jump it took after Trump was elected president.

The good news is that the current conditions component of the COI remains at a cyclical high, edging down only slightly during January. That reflects the continued strength in the labor market. So does the 213,000 increase in ADP payrolls during January.

However, if you are a worrier, then you can certainly worry about the ratio of the current conditions and expectations components of the CCI, which tends to spike higher at the start of recessions, as it did this month ([Fig. 2](#)). It also tends to spike after a bear market has started ([Fig. 3](#)).

Debbie and I expect that expectations will rebound along with stock prices, assuming that there isn't another government shutdown in the offing. We also expect that an amicable resolution in the US-China trade talks will boost stock prices and consumer confidence.

Helping to boost sentiment for both stock investors and consumers is yesterday's decision by the FOMC to pause rate-hiking. Yesterday's FOMC [statement](#) didn't include the 12/19 [statement's](#) language that "further gradual increases" in interest rates were warranted. Instead, a more cautious approach was signaled: "In light of global economic and financial developments and muted inflation pressures, the Committee will be patient as it determines what future adjustments to the target range for the federal funds rate may be appropriate to support these outcomes."

In a separate [statement](#) released yesterday too, the FOMC also signaled a more flexible approach to QT, i.e., the paring of the Fed's balance sheet: "The Committee is prepared to adjust any of the details for completing balance sheet normalization in light of economic and financial developments." At 2681,

the S&P 500 is now up 14.0% from the 12/26 low of last year, and is only another 9.3% gain away from its 9/20 record high of 2930. Our year-end target of 3100 is looking more achievable.

Tech I: A Slowdown Arrives. Wall Street was braced for bad news from the Titans of Tech, and they got it this week. Apple phone sales slowed. Intel's forecast for chip sales into the cloud servers disappointed, as did AMD's Q1 revenue forecast. Much of the blame was laid on a stronger dollar, excess inventory, and slower sales in China. Meanwhile, Nvidia warned that Q4 would come in far shy of expectations.

The damage has been intense. Intel's share price is down 18.5% from its June high through Tuesday's close. Apple's has lost about a third of its value since October. AMD's has dropped 41%, and NVIDIA's has suffered the most damage, having dropped 54% since October. Some of the shares did rally after the earnings reports hit the market this week, indicating that much of the negative news was already baked into share prices.

Given the severe drops, one must still wonder whether all the bad news is priced into the shares. The slowdown in China could continue. China's GDP has slowed from 12.2% y/y during Q1-2010 to 6.4% during Q4-2018, and the China MSCI stock price index (in yuan) is down 22.7% y/y ([Fig. 4](#) and [Fig. 5](#)). The slowdown in smartphone and server sales could reflect saturated markets for these devices. Even if the US-China trade war is resolved amicably, tech companies may have concluded that they need to spend more on diversifying their supply chains out of China.

Our guess is that things often take longer to unwind than expected. And these shares, while down sharply from their highs, are still up tremendously over the past three years: AMD (825.5%), NVIDIA (369.2), Apple (64.4), and Intel (55.3) as of Tuesday's close.

Semiconductor sales have just begun to fall on a m/m basis using a three-month moving average (-1.1% in November) and are still up y/y (9.8% in November), according to the Semiconductor Industry Association [report](#) ([Fig. 6](#)). Month-over-month declines are occurring in two geographic areas: The Americas (-2.2% to \$9.5 billion) and China (-2.7% to \$14.0 billion). Some managements weren't sounding very optimistic on their conference calls this week. Let's take a quick look at some of the highlights:

(1) *Intel* reported that Q4 revenues rose 9% but came in shy of analysts' expectations (\$18.7 billion vs \$19.0 billion). Intel's Q1 forecast of around \$16 billion also disappointed compared to analysts' forecast for \$17.4 billion of revenue. Analysts were expecting Q1 EPS of \$1.01, and the company said 87 cents a share was likely. For the full year, Intel warned investors to expect revenue growth of less than 1%.

Intel, which is still looking for a CEO, blamed the shortcoming on a number of factors including "dramatically weakening modem demand, lower overall growth in China, cloud service providers absorbing capacity and a weakening NAND pricing environment," said Interim CEO and CFO Bob Swan. He pinned the weaker modem demand on weaker smartphone demand and expected sales into cloud service providers to pick up in H2-2019.

Swan also noted that the environment had worsened since October: "Since that time, trade and macro concerns, especially in China have intensified. Cloud service providers shifted from building capacity to absorbing capacity and the demand pricing environment has further deteriorated. Those incremental headwinds are impacting our revenue expectations and slightly reducing our operating margin percentage forecast."

(2) *AMD*. While Intel told investors to expect 2019 revenue growth of less than 1%, AMD forecast a

high-single-digit revenue increase for this year. Granted, that's slower than the 23% revenue growth AMD posted in 2018, and much of the projected improvement would come in H2, which is always dangerous to count on. Nonetheless, investors jumped on the news and sent AMD shares up 20% on Wednesday.

The company warned that Q1 revenue could drop about 24% y/y due to excess inventory in the graphics channel, a lack of blockchain-related revenue, and lower memory chip sales. The company didn't call out the weakness in the cloud business that Intel mentioned. Server unit shipments more than doubled in Q4, boosting the company's server unit share to mid-single-digit levels.

Amazon announced it will offer AMD's chip as an option in its Elastic Compute Cloud service. "Businesses can easily migrate ... to AMD and save 10% or more based on the technology advantages of our platform," said CEO Lisa Su in the Q4 [conference call](#). AMD's new line of seven nanometer chips may give it a technological advantage over Intel for the first time in a decade, a 1/30 MarketWatch [article](#) stated. Intel, conversely, has had difficulty rolling out its 10 nanometer chips.

"Our story is really a share gain story. ... We feel very good about the opportunity to gain share as we go through the year, particularly given how competitive the product set is," said Su.

(3) *Nvidia*, the chip maker, reduced its fiscal Q4 revenue forecast to roughly \$2.2 billion from prior guidance of \$2.7 billion. That news followed company guidance in November that was below analysts' expectations. CEO Jensen Huang cited in a [letter](#) to shareholders three areas that resulted in the disappointing fiscal Q4 results: Cryptocurrencies, China, and data centers.

Nvidia already had warned investors in November that Q4 results would be hurt by excess inventory of chips sold to customers in the cryptocurrency business. It expects the inventory overhang to be depleted between February and April. The price of bitcoin is down 82% from its high of \$18,961 on December 18, 2017, putting a damper on the craze ([Fig. 7](#)).

As the economy decelerated in China and around the world, Huang told shareholders, consumer demand for Nvidia's gaming chips declined. "China accounts for about 20% of Nvidia's revenue," the 1/28 *WSJ* [reported](#). Finally, "[a]s the quarter progressed, [data center] customers around the world became increasingly cautious due to economic uncertainties. A number of deals did not close in the last month of the quarter," the CEO explained.

(4) *Apple*. Investors were braced for the worst, and that's what they got when Apple reported its fiscal Q1 earnings on Tuesday night. However, because the results weren't worse than expected, the shares rallied almost 7% on Wednesday.

The December quarter's revenue dropped 4.5% y/y to \$84.5 billion, and operating income dipped to \$23.3 billion from \$26.3 billion a year earlier. The company also forecast weaker-than-expected results for its March quarter: revenue of \$55 billion to \$59 billion, versus analysts' consensus estimate of \$59 billion and the year-ago \$61.1 billion.

Sales of the iPhone dropped to \$51.98 billion in the December quarter, down from \$61.1 billion in the year-ago quarter. The drag came from Greater China, where total sales fell 27% and iPhone shipments 22% per a 1/29 *WSJ* [article](#). Blamed were iPhone launch timing, consumers holding onto their iPhones for longer periods, the strong dollar, supply constraints on certain products, macroeconomic conditions in emerging markets, and fewer iPhone subsidies for consumers. The JP Morgan trade-weighted dollar was up 4.9% at the end of Q4 versus a year ago ([Fig. 8](#)).

The bright spots of the quarter included services revenue growth of 19%, with a 40% jump in cloud services revenue.

(5) *Much damage done.* The S&P 500 Semiconductors stock price index is down 31% from its March 12, 2018 high, but the index is still 155% above the lows in hit in 2015 ([Fig. 9](#)). Analysts have cut earnings estimates over the past three months and now expect the industry's earnings to decline by 6.2% this year ([Fig. 10](#) and [Fig. 11](#)).

The one thing the S&P 500 Semiconductors industry has going for it is valuation. The industry's forward P/E is 12.0, down sharply from a high of 16.5 in November 2017 ([Fig. 12](#)). In years past, that has often been a profitable level at which to buy this industry's shares ([Fig. 13](#)).

(6) *Future is bright.* Future technologies that require semiconductors and should fuel the industry's growth include the 5G rollout, artificial intelligence, and autonomous driving. Intel's Swan noted that the demand for computing power, storage, and retrieval continues to grow. The bad news is that demand still might take a while to catch up with supply.

Tech II: The Future Is Now. Many of the technologies we have written about are already being used in Shenzhen, a Chinese city with 13 million people that's just across a river from Hong Kong. A 1/24 [video](#) by Bloomberg BusinessWeek's Ashlee Vance does a great job showing the pros and the cons of a future that has already arrived in this high-tech hub. Some salient points:

(1) *Payments.* Cash is a thing of the past in Shenzhen. So are credit cards. Purchases are made by scanning QR codes with a smartphone. It works for groceries, at restaurants, for bike rentals, and even to pay street performers.

The drawback: The transactions occur over two dominant payment systems—Alipay and WeChat—which the Chinese government can access. The government will use the data from these payment systems to track behavior, presumably as part of their Social Credit Score system to rank people on their “obedience.”

A foreigner working in China told Vance a disconcerting anecdote: The face-recognition software in the Chinese government's camera surveillance system had spotted him jaywalking; within 20 seconds, a fine was taken directly out of his WeChat account—without the jaywalker's authorization!

(2) *Robots.* Vance visited Zowee's huge smartphone manufacturing facility, which has company-sponsored housing right next door. Some employees are developing robots that can manufacture smartphones from start to finish, requiring only one human to inspect the final product. By using robots, Zowee aims to improve product quality, decrease costs, and fend off low-priced competition from Southeast Asia. Just how China's large labor force will adjust to the onslaught of robots is not addressed.

(3) *Internet freedom?* The Chinese government also controls much of the Internet. Most US websites are blocked, and in their places are Chinese equivalents that the government can monitor. Instead of shopping on Amazon, Chinese go to JD.com or Taobao. There are Baidu instead of Google, Youku and iQiyi instead of YouTube, and WeChat instead of Facebook.

The government can be bypassed by using a VPN to access Instagram and other western sites. Some young Chinese are reportedly using this route. It will be interesting to see how long they're given the freedom to do so.

Tech III: Dystopia. Last year in a 10/4 [speech](#), Vice President Mike Pence observed: “And by 2020, China’s rulers aim to implement an Orwellian system premised on controlling virtually every facet of human life—the so-called ‘Social Credit Score.’ In the words of that program’s official blueprint, it will ‘allow the trustworthy to roam everywhere under heaven, while making it hard for the discredited to take a single step.’”

China is barreling headlong into the future, led by technological innovations. Sadly, the government sees its role expanding dramatically. Instead of a tech-led Utopia, China is heading toward a tech-led Dystopia. Bill Gates invented the Disk Operating System (DOS). China is creating the Digital Orwellian State (DOS).

CALENDARS

US. Thurs: Jobless Claims 220k, Employment Cost Index 0.8% q/q, Chicago PMI 62.5, Challenger Job-Cut Report, EIA Natural Gas Report. **Fri:** Total, Private, and Manufacturing Payroll Employment 158k/160k/15k, Unemployment Rate 3.9%, Average Hourly Earnings 0.3% m/m/3.2% y/y, Average Workweek 34.5hrs, ISM M-PMI 54.0, Motor Vehicle Sales 17.0mu, Consumer Sentiment 91.4, Baker-Hughes Rig Count. (Econoday estimates)

Global. Thurs: Eurozone GDP 0.2% q/q/1.2% y/y, Eurozone Unemployment Rate 7.9%, Germany Unemployment Change & Unemployment Rate -10k/5.0%, Germany Retail Sales -0.5% m/m/1.5% y/y, Italy GDP -0.1% q/q/0.3% y/y, Canada GDP -0.1% m/m/1.5% y/y, Japan Jobless Rate 2.5%, China M-PMI & NM-PMI 49.3/53.9. **Fri:** Eurozone CPI Flash Estimate 1.4%/1.0% y/y, Eurozone, Germany, France, and Italy M-PMIs 50.5/49.9/51.2/48.8, UK M-PMI 53.5, China Caixin M-PMI 49.7. (DailyFX estimates)

STRATEGY INDICATORS

Stock Market Sentiment Indicators ([link](#)): The Bull/Bear Ratio (BBR) climbed further above 2.00 this week, after moving above last week for the first time since early December. The BBR advanced for the fourth week, to 2.22, since falling to 0.86 four weeks ago—which was the lowest since mid-February 2016. The BBR’s bullish sentiment component jumped 15.9ppts over the past four weeks, to 45.8% from 29.9%—which was the fewest bulls since February 2016; bullish sentiment was as high as 61.8% in early October. Meanwhile, bearish sentiment dropped 14.0ppts over the same period, to 20.6% from 34.6%—which was the most bears since March 2016; it’s back down near the narrow band (below 20.0%) in which it had fluctuated for most of H2-2018. The correction count edged up for the second week, to 33.6% this week, after falling from 39.3% to 32.7% the previous three weeks; it was at 41.1% eight weeks ago—which was the highest percentage since late September 2015. The AAI Ratio climbed from 48.1% to 53.8% last week, with bullish sentiment up from 33.5% to 37.7% and bearish sentiment down to 32.3% from 36.3% during the week.

S&P 500 Earnings, Revenues, Valuation & Margins ([link](#)): Consensus S&P 500 forward revenues and earnings forecasts both moved lower last week. Forward revenues dropped 0.3% w/w and is now down 1.1% from a record high in early January. Forward earnings is now 2.3% below its record high in early December after dropping 0.5% w/w. Analysts expect forward revenues growth of 5.5% and forward earnings growth of 6.6%. Forward revenues growth is down from a seven-year high of 6.3% last February to a 13-month low, and forward earnings growth is down from a six-year high of 16.9% in February to a 33-month low. Prior to the passage of the Tax Cuts and Jobs Act (TCJA), forward revenues growth was 5.5% and forward earnings growth was 11.1%. Turning to the annual growth expectations, analysts expect revenue growth to slow from 8.8% in 2018 to 5.4% in 2019 and 5.2% in

2020. They're calling for earnings growth to slow sharply from 23.6% in 2018 to 5.7% in 2019 before improving to 11.1% in 2020. The forward profit margin edged down w/w to a nine-month low of 12.1%, and is down 0.3ppt from a record high of 12.4% in mid-September. Still, that's up from 11.1% prior to the passage of the TCJA in December and compares to a 24-month low of 10.4% in March 2016. The S&P 500's forward P/E rose to a seven-week high of 15.5 from 15.3. That's up from 14.3 during December, which was the lowest reading since October 2013 and down 23% from a 16-year high of 18.6 at the market's valuation peak in late January. The S&P 500 price-to-sales ratio of 1.88 is up from 1.85 a week earlier and 1.75 during December, which was the lowest since November 2016 and down 19% from a record high of 2.16 in late January.

S&P 500 Sectors Earnings, Revenues, Valuation & Margins ([link](#)): Consensus forward revenues fell w/w for eight of the 11 sectors, and forward earnings rose for just one sector. Utilities was the only sector to have both measures rise w/w. Forward revenues and earnings are at or around record highs for 4/11 sectors: Consumer Discretionary, Health Care, Industrials, and Tech. The forward profit margin appears to be rolling over from recent highs for all but Financials and Utilities. They were at record highs during 2018 for 8/11 sectors, all but Energy, Health Care, and Real Estate. Energy's forward earnings had about tripled from the 18-year low in April 2016 through early November, but has tumbled 24.3% since then following a 3.0% drop in the latest week. Forward P/S and P/E ratios are now well below their 2018 highs for all sectors, and had been at multi-year lows during December for five sectors: Energy, Financials, Industrials, Materials, and Tech. Energy's forward P/E of 16.4 is on the rise again as earnings deteriorate. Due to the TCJA, higher margins are expected y/y in 2018 for all sectors but Real Estate, but that sector's forward earnings includes gains from property sales and typically improves as the year progresses. The outlook for 2019 shows lower margins are now expected y/y for 4/11 sectors: Communication Services, Energy, Health Care, and Real Estate. During the latest week, the forward profit margin fell for two of the 11 sectors, and nine are now down from record highs just a few months ago. Here's how the sectors rank based on their current forward profit margin forecasts versus their highs during 2018: Information Technology (22.3%, down from 23.0%), Financials (18.9, down from 19.2), Real Estate (15.4, down from 17.0), Communication Services (14.7, down from 15.4), Utilities (at a record high of 13.0%), S&P 500 (12.1, down from 12.4), Materials (11.0, down from 11.6), Health Care (10.6, down from 11.2), Industrials (at a record high of 10.3), Energy (6.5, down from 8.0), Consumer Staples (7.5, down from 7.7), and Consumer Discretionary (7.5, down from 8.3).

S&P 500 Q4 Earnings Season Monitor ([link](#)): With over one-third of the S&P 500 companies finished reporting earnings and revenues for Q4-2018, y/y revenue and earnings growth remains strong, but the surprise metrics have weakened relative to Q3's results due to Q4's trading turmoil and rising loan loss provisions in the Financials sector. Of the 168 companies in the S&P 500 that have reported through mid-day Wednesday, just 73% exceeded industry analysts' earnings estimates. Collectively, the reporters have averaged a y/y earnings gain of 13.5% and exceeded forecasts by an average of 2.3%. On the revenue side, just 61% of companies beat their Q4 sales estimates so far, with results coming in 0.7% above forecast and 7.4% higher than a year earlier. Q4 earnings growth is positive y/y for 79% of companies, vs a higher 94% at the same point in Q3, and Q4 revenues have risen y/y for 79% vs a higher 84% during Q3. Looking at earnings during the same point in the Q3-2018 reporting period, a higher percentage of companies (82%) in the S&P 500 had beaten consensus earnings estimates by a greater 4.1%, and earnings were up a higher 25.3% y/y. With respect to revenues at this point in the Q3 season, a higher 63% had exceeded revenue forecasts by a slightly lower 0.6%, and sales rose a tad greater 8.3% y/y. The results for Q4 are still early, but the slowdown in revenue and earnings growth from Q3 should come as no surprise to investors. Q4-2018 should mark the tenth straight quarter of positive y/y earnings growth and the 11th for revenue growth. Looking at the Q4 results ex-Financials and Real Estate, the earnings surprise improves to 3.0% from 2.3%, but earnings growth falls to 11.7% from 13.5%. The ex-Financials and Real Estate revenue surprise would be 0.8% instead of 0.7%, with revenue growth improving to 8.1% from 7.4%.

US ECONOMIC INDICATORS

ADP Employment ([link](#)): “The job market weathered the government shutdown well. Despite the severe disruptions, businesses continued to add aggressively to their payrolls. As long as businesses hire strongly the economic expansion will continue on,” according to ADP’s January report. Private industries added 213,000 to payrolls, with significant growth in nearly all industries. There were downward revisions to both December (to 263,000 from 271,000) and November (148,000 from 157,000) gains, for a net loss of 17,000. This month, service-providing industries increased payrolls by 145,000, slowing from December’s 30-month high of 219,000, while goods-producing companies added 68,000—the most in nearly a year. The increase in service-providing industries was widespread, led by professional & business services (46,000), health care & social assistance (37,000), and leisure & hospitality (31,000). Within goods-producing, construction (35,000) companies hired at their best pace since February 2017, while manufacturing’s (33,000) was the fastest in more than four years. Meanwhile, employment at natural resources/mining (-1,000) companies fell for the first time since September 2017. Medium-sized companies (84,000) retained the number-one spot for job gains in January, while large companies (66,000) moved up to the number-two spot—beating small companies (63,000) by a small margin.

Pending Home Sales ([link](#)): The Pending Home Sales Index (PHSI)—measuring sales contracts for existing-home purchases—dropped to its lowest since April 2014. December’s PHSI sank for the third month, contracting by 9.8% y/y and falling short of year-ago levels for the 12th straight month. Regionally, sales rose in two regions last month and fell in two, though sales in all four regions were below year-ago levels—by double digits in the West and South. Here’s a tally: Northeast (2.0%/m/m & -2.5%/y/y), West (1.7 & -10.8), South (-5.0 & -13.5), and Midwest (-0.6 & -7.2). According to Lawrence Yun, NAR’s chief economist, “The stock market correction hurt consumer confidence, record high home prices cut into affordability and mortgage rates were higher in October and November for consumers signing contracts in December,” though he is confident that the housing market will see improvement in 2019. Yun notes: “The longer-term growth potential is high. The Federal Reserve announced a change in its stance on monetary policy. ... This has already spurred a noticeable fall in the 30-year, fixed-rate for mortgages. As a result, the forecast for home transactions has greatly improved.” (Note: The partial government shutdown has not caused any obvious damage to home sales. “Seventy-five percent of Realtors® reported that they haven’t yet felt the impact of the government closure. However, if another government shutdown takes place, it will lead to fewer homes sold,” according Yun.)

GLOBAL ECONOMIC INDICATORS

Eurozone Economic Sentiment Indicators ([link](#)): The Economic Sentiment Index (ESI) fell markedly, once again, in both the Eurozone (-1.2 points to 106.2) and the EU (-1.4 to 106.1) in January, with both down 8.3 points since reaching 18-year highs of 114.5 and 114.4, respectively, during December 2017. It’s the lowest reading since November 2016 for the Eurozone and the lowest since October 2016 for the EU. ESIs were mixed among the five largest Eurozone economies in January: France’s (0.5 points to 101.0) was the only one to post an increase, while Spain’s (0.1 to 104.4) remained broadly unchanged. Meanwhile, ESIs for the Netherlands (-4.1 to 103.5, 28-month low), Italy (-1.3 to 102.8, 25-month low), and Germany (-0.8 to 108.5, 22-month low) all continued to slide. At the sector level, sentiment fell in three of the five industries included in the ESI: industry (-1.8 points to 0.5, 26-month low), retail trade (-1.8 to -1.9, 47-month low), and services (-1.2 to 11.0, 28-month low), while sentiment in the consumer (0.4 to -7.9) and construction (0.9 to 8.2) sectors ticked up—with the latter holding around record highs. (Note: As of this month, the composition of the consumer confidence indicator is revised. Since consumer confidence is one of five ESI components, the latter is slightly revised

accordingly. In addition, Irish survey data is included in the European aggregates for the first time in more than ten years. For past observations, the Irish data partly consists of reconstructed series.)

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