Yardeni Research, Inc.



MORNING BRIEFING

March 22, 2018

Correcting Tech & Editing Genes

See the collection of the individual charts linked below.

(1) Trifecta of bad headlines for Tech sector. (2) Facebook is in our faces. (3) Tech M&A will continue. (4) Earnings remain bullish for Tech, and valuations are reasonably high. (5) Tech IPOs still attracting buyers. (6) Crispr 101. (7) Cutting diseases out of our DNA. (8) Is there method in Trump's March tariff madness?

Technology: Tumbling. The S&P 500 Technology sector was bombarded by bad news from all directions over the past week: Facebook's lack of control over its customers' data created a firestorm, the government's prohibition of Broadcom's bid for Qualcomm disappointed investors, and the future of autonomous cars was thrown into doubt after one of Uber's cars hit and killed a pedestrian. It's hard to sugarcoat that trifecta of headlines.

Up until last week, the Tech sector had been a workhorse, leading the stock market higher. The Tech sector is up 7.8% ytd through Tuesday's close, outperforming all other S&P 500 sectors as well as the S&P 500 itself, which is up 1.6% over the same period (<u>Fig. 1</u>). Tech is also the leading sector y/y, up 31.8%, compared to the S&P 500's 14.5% appreciation.

Since the Tech sector peaked on March 12, the picture is bleaker. Here's the performance derby for the S&P 500's sectors from the tech peak through Tuesday's close: Utilities (0.9%), Real Estate (-0.2), Industrials (-1.3), Energy (-1.6), Consumer Discretionary (-1.7), Health Care (-2.1), S&P 500 (-2.4), Financials (-2.7), Telecom Services (-2.8), Consumer Staples (-3.2), Tech (-3.3), and Materials (-4.5). One of the worst-performing industries over that period, among those we track, is Internet Software & Services, home to Facebook and others, which is down 6.8%.

That said, the declines over roughly the past week are a drop in the bucket compared to the gains over the past year. For example, Internet Software and Services rose 25.0% y/y. Our hunch is that while Facebook may need to spend more on lobbying and complying with regulations, consumers won't drop their Facebook habit in the wake of this week's revelations because no one assumes that their Facebook postings are private.

Likewise, investors have a short memory, and the failed Broadcom/Qualcomm deal was quickly overshadowed by <u>Salesforce.com</u>'s deal on Tuesday to buy MuleSoft for \$6.5 billion. And while the march toward autonomous vehicles may be temporarily stalled, it's highly likely development and testing ultimately will continue. Let's take a look at where some of the S&P 500 and Tech sector's data stands after this rough week:

(1) Earnings holding steady. It's early days, but so far earnings estimates for the Tech sector and the S&P 500 have held up after accelerating early this year, thanks to the boost from the lower tax rate companies are enjoying (<u>Fig. 2</u> and <u>Fig. 3</u>). The Tech sector had among the fastest earnings growth of all the sectors in 2017, and its expected earnings growth in 2018 and 2019 places the sector in the middle of the pack compared to other S&P 500 sectors.

Here are analysts' estimates for the S&P 500 sectors' 2018 earnings growth: Energy (69.9%),

Financials (29.3), Materials (23.3), S&P 500 (19.5), Tech (19.1), Industrials (18.8), Consumer Discretionary (16.8), Telecom Services (15.0), Consumer Staples (11.7), Health Care (11.5), Utilities (4.8), and Real Estate (-16.1).

S&P 500 net forward earnings revisions, which were in positive territory for most of 2017, grew even more positive over the past three months for both the S&P 500 broadly and its Tech sector (*Fig. 4* and *Fig. 5*).

(2) Earnings support P/Es. Despite last year's 19.4% increase in the S&P 500 price index, valuations for most sectors and for the broader market still look reasonable assuming the forecasted earnings growth materializes. The S&P 500's forward P/E was 17.2 as of March 15, down slightly from 17.9 a year ago. That's only slightly higher than the 16.2% forward earnings growth analysts are forecasting for the S&P 500.

The Tech sector's forward P/E has risen slightly over the past year, to 19.1 from 18.0 (*Fig. 6*). That doesn't seem horribly high relative to the 14.4% forward earnings growth forecasted.

Investors shouldn't count on much more multiple expansion because next year, earnings should grow at slower, more typical rates as the tax cuts are anniversaried. Here are the 2019 earnings growth rates by sector that analysts currently project: Industrials (12.5%), Consumer Discretionary (12.4), Energy (11.3), Tech (10.9), Financials (10.6), S&P 500 (10.3), Health Care (9.7), Materials (9.7), Real Estate (9.6), Consumer Staples (8.5), Utilities (5.4), and Telecom Service (1.2).

(3) *IPO resurgence*. The current bumpiness in the market comes as the IPO market was just getting warmed up, especially for some of the unicorns in the Tech sector. There have been 34 IPOs priced so far this year through Monday, which is up 47.8% from the same period last year, according to Renaissance Capital. And ytd through Tuesday's close, Renaissance's <u>IPO index</u> remains in positive territory, up 3.8% compared to the 1.9% gain in the S&P 500.

There are some very large IPOs waiting to be priced in upcoming days. Most notably, Dropbox, a cloud storage company, is slated to raise more than \$600 million in an IPO scheduled to price tonight and trade Friday. Despite the market turmoil, the company raised the range within which it hopes to price its shares to \$18-\$20 from \$16-\$18. That IPO follows last week's \$192 million offering from Zscaler, a cybersecurity company, which has rallied by 102.8%. And music-streaming company Spotify is planning to do a "direct listing" of its stock on April 3, eschewing the traditional IPO process. Shares will be sold directly to retail investors.

All three companies are in the red. Spotify lost €1.24 billion last year, while Zscaler lost \$35 million in the fiscal year ending July 31 and Dropbox's bottom line was negative by \$112 million in 2017. Many a banker must be crossing fingers that the market's volatility calms down so that the window for IPOs doesn't slam shut.

Health Care: Gene Editing. One of the most interesting advancements in medicine is the potential to edit genes to cure illnesses, and this is the year that US scientists are finally expected to embark on human trials to test their theories. Though gene-editing technology was developed in the West, it is already being tested in China. Here's a look at what your doctor may be able to offer you in the future:

(1) Crispr 101. CRISPR-Cas9 uses a bacterial protein, Cas9, as if it were a pair of scissors. It cuts strands of DNA in a specific space so that scientists can replace an unwanted gene with a corrected gene. Human tests using this gene-altering method are expected to start any day at the University of Pennsylvania and the Parker Institute for Cancer Immunotherapy, ARK Investment Management

reported on 1/22.

The trial is small, with up to 18 patients suffering from various types of cancer, including multiple myeloma, sarcoma, and melanoma. The gene editing will occur outside the body. "In this trial, CRISPR will make two genetic changes in patients' immune cells, the first removing gene coding for the PD-1 checkpoint protein that allows cancer cells to evade detection, and the second replacing a regular receptor molecule with a chimeric receptor that detects cancer cells," ARK reported.

The FDA also approved a trial by Novartis and Kite Pharmaceuticals for a procedure that will change a patient's own immune system to target and kill cancerous cells. Earlier this month, researchers announced they'd discovered a new CRISPR system that targets RNA instead of DNA. The new system would allow doctors to reverse edits. Using this method, the Salk Institute claims to have discovered Cas13d, which corrects protein expression associated with dementia, ARK stated.

- (2) Potential problems. Some people may already have immunity to the Cas9 protein, which could have been developed after being infected with Cas9-carrying staph and strep bacteria, a 1/23 Bloomberg article reported. The immunity could lead to a dangerous reaction in patients. However, if immunity is detected, another protein could be used for the corrective gene editing.
- (3) Race is on. US trials are still awaiting FDA approvals, but the WSJ estimates there are 11 human trials going on in China, where there's less regulation. "In a quirk of the globalized technology arena, Dr. Wu can forge ahead with the tool because he faces few regulatory hurdles to testing it on humans. His hospital's review board took just an afternoon to sign off on his trial. He didn't need national regulators' approval and has few reporting requirements," the 1/21 WSJ reported.

The stocks of three small companies specializing in Crispr gene editing have had extremely sharp rallies over the past year, and all of them are losing money. Over the past year through Tuesday's close, Editas Medicine is up 70.2%, Intellia Therapeutics has risen 65.6%, and Crispr Therapeutics racked up the largest one-year gain, 147.5%.

All three stocks have sold off with the market in recent days. Since March 9, Editas is down 13.5% and Intellia has plummeted 32.0%. Crispr has held up the best, with its shares losing only 9.6% since its peak on March 14.

Tariffs: Just Getting Warmed Up? It looks like tariffs on steel and aluminum were President Trump's starting hand. This week's focus has been on placing trade restrictions on China, which we had expected because the country has by far the largest trade deficit with the US.

The 3/20 WSJ reported that the administration plans to release today a package of punitive measures worth at least \$30 billion that are aimed at China and include tariffs, restrictions on the transfer of US technology, and limits on Chinese firms' investment in US companies. US companies are being asked to comment on the plan before details are rolled out.

As you'd expect, China is already planning to counter with tariffs targeting US agricultural exports, the 3/21 WSJ reported. The paper quoted a Chinese official involved with policymaking, who said: "Any Chinese response to new US tariffs would be measured and proportional."

The impact tariffs will have on the market is tough to gauge because S&P 500 companies' disclosures about where their goods are sold geographically are mediocre at best. That said, let's take a look at them to see which areas of the market might be most affected by a trade war:

(1) *Tracking sales geographically*. Only about half of the S&P 500 companies, or 257, disclose whether they have foreign sales. Of those making disclosures, 43.2% of their 2016 sales were generated overseas, Joe reports, citing data from S&P Global. That percentage has actually declined since 2014, when it hit 47.8%.

Not all companies that break out foreign sales go the next step and state from which country or continent those foreign sales are generated. But for those that do, Asia represented 8.5% of foreign sales in 2016, Europe 8.1%, Africa 4.0%, and North America (excluding the US) 3.3%.

(2) Sales by sector. Sectors have a wide variety of exposures to foreign sales. Here are the S&P 500 sectors' foreign sales as a percentage of the sectors' total sales: Energy (58.9%), Tech (57.2), Materials (53.0), Utilities (46.3), Industrials (45.0), Health Care (37.4), Consumer Discretionary (35.1), Consumer Staples (33.7), Financials (30.8), Telecom Services (17.4), and Real Estate (N/M).

CALENDARS

US. Thurs: Leading Indicators 0.3%, Jobless Claims 225k, C-PMI, M-PMI, and NM-PMI Flash Estimates 55.2/55.4/55.7, Kansas City Manufacturing Index, FHFA Price Index, Weekly Consumer Comfort Index, EIA Natural Gas Report. **Fri:** Durable Goods Orders Total, Ex Transportation, and Core Capital Goods 1.7%/0.6%/0.7%, New Home Sales 620k, Baker-Hughes Rig Count, Bostic. (*Wall Street Journal* estimates)

Global. Thurs: Germany IFO Business Climate, Current Assessment, and Expectations Indexes 114.6/125.6/104.4, Eurozone, Germany, and France C-PMI Flash Estimates 56.8/57.0/57.0, Eurozone, Germany, and France M-PMI Flash Estimates 58.1/59.8/55.5, Eurozone, Germany, and France NM-PMI Flash Estimates 56.0/55.0/57.0, UK M-PMI Flash Estimate 58.1, UK Retail Sales Including & Excluding Fuel 1.4%/1.2% y/y, Japan Headline, Core, and Core-Core CPI 1.5%/1.0%/0.5%, Japan M-PMI Flash Estimate, Australia Employment Change & Unemployment Rate 20k/5.5%, BOE Rate Decision and Asset Purchase Target 0.50%/435b, ECB Publishes Economic Bulletin, EU Leaders Meet in Brussels. **Fri:** Canada Headline & Core CPI 2.0%/1.9% y/y, Canada Retail Sales 1.2%, US Tariff Grace Period Ends, EU Leaders Meet in Brussels. (DailyFX estimates)

STRATEGY INDICATORS

Stock Market Sentiment Indicators (*link*): Our Bull/Bear Ratio (BBR) fell to 3.30 this week after climbing from 3.14 (which was the lowest reading since last September) to 3.50 last week; nine weeks ago, the BBR was at 5.25, which was the highest since early April 1986. Bullish sentiment rose for the third week to 55.5% this week after plummeting the prior four weeks, from 66.0% to 48.1%; bearish sentiment rose from 14.4% to 16.8% the past three weeks, after little change the prior few weeks. Over the latest three-week period, the correction count dropped 9.8ppts—from 37.5% to 27.7%—with 7.4ppts moving into the bullish camp and 2.4ppts into the bearish camp. The AAII Ratio rebounded last week to 63.3% after falling the previous three weeks from 69.4% to 48.2%, with bullish sentiment rising from 26.4% to 36.8% and bearish sentiment falling from 28.4% to 21.3% last week.

AC World ex-US MSCI (*link*): This index is down 0.2% ytd in dollar terms after rising 24.1% in 2017 and 1.7% in 2016. In local-currency terms, the index is down 2.0% ytd compared to gains of 15.3% and 4.1% for all of 2017 and 2016, respectively. Local-currency forward revenues has risen 10.2% from a five-year low in March 2016 to near its highest level since November 2014. Forward revenues has been more stable longer term and is down just 1.0% from its October 2014 record high. Local-currency forward earnings has performed better, with a 28.2% rise from its six-year low in March 2016 to only 0.3% below its September 2008 record. Revenues are expected to rise 5.3% in 2018 following an 8.3%

gain in 2017, and earnings are expected to rise 9.6% (2018) after surging 20.6% (2017). Analysts are forecasting STRG of 5.1%, up from 4.9% a month ago. Their STRG forecast compares to a seven-year high of 6.8% in March 2017 and is up from a cyclical low of 2.3% in March 2016. Their STEG forecast of 9.2% is down from 9.6% a month earlier and from a four-year-high forecast of 14.1% in March 2017, but up from their 6.3% forecast in January 2016, which was the lowest in seven years. The implied profit margin is expected to rise to 8.1% in 2018 from 7.7% in 2017. The forward profit margin forecast of 8.2% is at a nine-year high now. NERI was positive in March for a sixth straight month, but barely so as it weakened m/m to 0.2% from 1.3%, and is down from a 76-month high of 2.7% in May 2017. That compares to a 51-month low of -11.3% in March 2016. The P/E fell to a 21-month low of 13.4 in March from a 31-month high of 14.8 in January, which compares to a recent bottom of 12.4 in February 2016 and a six-year high of 15.3 in April 2015. The index's 12% discount to the World P/E remains close to its record-low 13% discount during March 2017.

EMU MSCI (link): The EMU's MSCI price index has gained 0.6% ytd in dollar terms after rising 25.3% in 2017 and falling 1.2% in 2016. In euro terms, the price index is down 1.6% vtd following gains of 10.2% in 2017 and 1.8% in 2016. Euro-based forward revenues is 5.2% above its six-year low in May 2016 and now exceeds its prior cyclical high from August 2015, but remains 6.0% below its record high (September 2008). Euro-based forward earnings had stalled from 2011 to 2016 but is now 12.7% above its prior cyclical high in September 2015 and at its highest level since November 2008. It remains 18.8% below its record high in January 2008, but has improved 20.4% from its 23-month low in June 2016. Analysts expect revenues to rise 3.0% in 2018 after a 5.2% gain in 2017, and think earnings will rise 7.7% (2018) following a 12.4% increase in 2017. Forecasted STRG of 3.1% is down m/m from 3.4% and a six-year high of 5.0% in April 2017, but up from 2.0% in May 2016. Forecasted STEG of 8.1% is down m/m from 9.3% and from a 78-month high forecast of 21.0% during February 2017, which compares to a seven-year low of 5.7% in April 2016. STEG had been higher than LTEG (currently 10.5%) from July 2016 to May 2017, but is trailing now. The forward profit margin ticked back up to an eight-year high of 7.7%, which is up from a cyclical bottom of 6.2% in May 2013. The implied profit margin is expected to improve to 7.6% in 2018 from 7.1% in 2017. NERI was negative in March for an eighth month following eight straight positive readings, falling to -3.1% from -2.0%. Those readings are the lowest among the world's regions and down from an 11-year high of 8.1% in May 2017, which compares to a 24-month low of -13.2% in April 2016. The P/E of 13.5 is at a 23-month low and down from a nine-month high of 14.9 in January, which compares to a 13-year high of 16.4 in April 2015 and a 30-month low of 12.2 in February 2016. That represents an 11% discount to the World MSCI's P/E now, up from a record-low 25% discount during 2011. But the current reading is still well below the 1% premium during April 2015—the post-euro-inception record high.

Emerging Markets MSCI (*link*): The EM MSCI price index is up 4.4% ytd in US dollar terms after surging 34.3% in 2017 and rising 8.6% in 2016. In local-currency terms, EM has gained a lower 3.9% ytd compared to gains of 27.8% (2017) and 7.1% (2016). Local-currency forward revenues is up 13.0% from a four-year low in June 2016 to 4.8% below its November 2014 record. Local-currency forward earnings has fared substantially better, rising to record highs recently for the first time since January 2014; it has improved 35.9% from April 2016's six-year low. Revenues are expected to rise 9.1% in 2018, down from an 11.1% gain in 2017. That's expected to lead to an earnings gain of 14.9% in 2018, which follows a 23.0% surge in 2017. Forecasted STRG rose to 8.7% in March from 7.8% in February, but that's down from a four-year high of 9.6% in January 2017. STEG improved to 13.8% in March from 13.3% in February, which is down from a cyclical peak of 17.5% in March 2017 and is below LTEG (21.9%) again. The implied profit margin is expected to improve to 7.3% in 2018 from 7.0% last year. The forward profit margin of 7.3% is the highest since March 2012 and up from a record low of 6.0% in February 2016, but remains 3ppts below its 10.3% record high in December 2007. NERI declined to -0.5% in February from 1.6% in January, which had been its third month of positive readings after 80 months of negative readings through October. The February reading compares to an 83-month low of -

10.2% in March 2016. Emerging Markets' valuation has been more stable recently than that of the rest of the world, falling only to a seven-month low of 12.2 from an eight-year high of 13.1 in January. The index is trading at a 20% discount to the World MSCI P/E, its best reading in 15 months and compares to a 22% discount in January and a 10-year-low 30% discount in August 2016.

MSCI World & Region Net Earnings Revisions (link): Analysts' recent earnings revisions through March point toward waning optimism about profits across the world. Powered by the US, in the lead among regions, the AC World MSCI's NERI was positive for a 14th month, but weakened 0.5ppt m/m to 6.6% from a 93-month high of 7.1% in February. The US was positive for an 11th straight month as its NERI rose 1.1 ppts to a record high of 21.8% from 20.7%. The AC World Ex-US was positive for a sixth month, but barely so, as it ticked down 1.1ppts to 0.2% from 1.3%, which compares to a 76-month high of 2.6% in May 2017. Emerging Markets' NERI fell 1.0ppt m/m to a seven-month low of -1.5% from -0.5%, which compares to December's 83-month high of 1.7%. EM Latin America was steady at -0.2% in March, which is down from a barely positive 19-month high of 0.03% in January; EM Asia was the weakest among emerging markets as it slipped 0.6ppt to -1.5% from -0.9%; EM Eastern Europe dropped 0.6ppt too, but its 4.4% reading compares to a 96-month high of 5.0% a month earlier; Europe (down 1.0ppt to -1.7%) was negative for an eighth month following 10 positive readings; EAFE (down 1.3ppts to 1.1%) was positive for a 19th month; EMU (down 1.1ppts to -3.1%) was negative for an eighth straight month following eight positive readings. March's scores among the regional MSCIs: US (21.8% in March, up from 20.7% in February), AC World (6.6, 7.1), EM Eastern Europe (4.4, 4.9), EAFE (1.1, 2.5), AC World ex-US (0.2, 1.3), EM Latin America (-0.2, -0.2), Emerging Markets (-1.5, -0.5), EM Asia (-1.5, -0.9), Europe (-1.7, -0.6), Europe ex-UK (-2.5, -1.4), and EMU (-3.1, -2.0).

MSCI Countries Net Earnings Revisions (link): NERI was positive for 24/44 MSCI countries in March. the most since June 2017's 29/44 (which was the highest number since June 2010). March's count is up from 23/44 in February and compares to 24/44 in January, 23/44 in December, 22/44 in November, 16/44 in October, and 12/44 in September (the lowest since July 2016). NERI improved m/m in March in 14/44 countries, the fewest since August, compared with 22/44 countries that had rising NERIs in February and 28/44 in each of the months from November to January. Those levels, however, aren't as high as the 32/44 seen in May, which was the most since June 2016. The United States' NERI was at a record high in March, followed by Canada's at a 165-month high, Russia's (155 months), Czech Republic's (147), Egypt's (13), and Hong Kong's (10). On the flip side, Hungary's was at a 36-month low, followed by those of Korea (23), Chile (15), China (13), and the Philippines (12). Austria's 22month positive NERI streak is the best among countries, followed by the positive streaks of China (19), Hong Kong (17), Poland (17), Turkey (17), and Japan (16). South Africa's NERI has been negative for 46 straight months, followed by the negative streaks of New Zealand (22), Mexico (17), Pakistan (16), and Israel (12). NERI turned positive in March for two countries: Egypt (for the first time in 12 months) and Malaysia (2). Two countries slipped back into negative territory this month: Hungary (for the first time in 25 months) and Portugal (2). The highest NERI readings in March: US (record high of 21.8%), Argentina (17.1), Russia (13-year high of 15.3), Austria (12.6), Hong Kong (11.9), Peru (8.6), Canada (four-year high of 8.3), Czech Republic (12-year high of 8.1), and Japan (5.9). The weakest NERIs occurred this month in Denmark (-12.1), Ireland (-9.6), Korea (two-year low of -8.9), Israel (-6.3), Mexico (-6.0), and Portugal (-5.9).

US ECONOMIC INDICATORS

Existing Home Sales (*link*): Existing home sales bounced back in February, after a two-month slump from November's cyclical high, as sizeable gains in the West (11.4%) and South (6.6) more than offset declines in the Northeast (-12.3) and Midwest (-2.4). These sales—tabulated when a purchase contract closes—jumped 3.0% to 5.54mu (saar) after falling the previous two months by a total of 5.9%; the level is within 3.1% of November's high of 5.72mu. NAR's chief economist noted, "The very healthy

U.S. economy and labor market are creating a sizeable interest in buying a home in early 2018. However, even as seasonal inventory gains helped boost sales last month, home prices – especially in the West – shot up considerably. Affordability continues to be a pressing issue because new and existing housing supply is still severely subpar." Single-family sales jumped 4.2% to 4.96mu (saar) after a two-month slide of 5.7%, while volatile multi-family sales fell 6.5% to 580,000 units after a 1.6% rise and 9.0% fall the prior two months. Single-family sales were 1.8% above a year ago, while multi-family sales were 4.9% below; overall sales were up 1.1% y/y after turning negative in January. The number of existing single-family homes on the market at the end of February climbed for the second month from 1.29mu to 1.41mu over the period. Still, inventory was 7.2% below a year ago—recording y/y declines for the 33rd consecutive month; unsold inventory remained at 3.4 months' supply, holding near December's record low of 3.1 months. The median existing single-family home price was \$243,400 last month, up 5.9% y/y.

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