MORNING BRIEFING
September 14, 2017

What Is Real?

See the collection of the individual charts linked below.

(1) Reality: There's an app for that. (2) From X to AR. (3) Anemojis are coming to get you. (4) The Big Apple's market cap. (5) Hurricanes and bond yields clobber Financials, though asset managers are still standing. (6) Temer-ity is on the loose in Brazil. (7) Brazil's corrupt government spreads the wealth. (8) Brazil's recession is over. (9) Mexico's fiesta is still going on.

Augmented Reality: Seeing Things. When the iPhone first came out ten years ago, we all knew it was cool, but never in our wildest dreams did we imagine how dependent we'd become on smartphones and all the apps that would be designed for the gadgets. Now, here comes the iPhone X and the augmented reality (AR) features it enables. It isn't obvious yet how we're going to use AR, but developers are scrambling to develop apps that our future selves won't be able to live without.

The iPhone X is designed to enable AR apps. It contains Apple's A11 bionic neural engine chip, which runs machine-learning and artificial-intelligence software, including the facial recognition software used to unlock the phone. The phone also contains an Apple-created GPU, a graphics processing chip designed for 3D apps and games. Both chips help the phone run more quickly. And last summer, Apple rolled out its ARKit for developers to use in building AR apps for the Apple systems.

Apple appears to be ahead of the pack in AR. According to a 9/12 Business Insider article, "The company is already outpacing its rivals in the industry. Apple announced ARKit earlier this year, which lets developers more easily build augmented reality apps for iPhones, and the community has already grabbed ahold of the technology. A Twitter account documenting the cool apps that developers are creating has had several viral tweets showing off the new tech already. Google recently offered its own AR development kit, called ARCore. [Morgan Stanley analyst Katy] Huberty notes that the tech only works on Pixel and Samsung devices right now, which limits its potential user base."

Huberty also wrote in a report that in a bullish scenario, AR could add "$404 billion to [her] smartphone device and services revenue forecasts over the next three years," the Business Insider article reported.

Apple's presentation on Tuesday included a few examples of the AR programs that will be available on the new phone. Here's Jackie's brief run-down after she watched the action in the Apple presentation (where the augmented reality demonstrations begin at 71 minutes 50 seconds):

(1) *AR gaming*. Warhammer 40K Freeblade by Pixel Toys is a video game where the animated combatants look like they are in the real world, wherever you point the phone. And Directive Games has produced The Machines, a multiplayer game where players actually feel like they're in the game.

(2) *AR at the ballpark*. The MLB At Bat app is being enhanced using Apple's ARKit. The app will allow users to hold up their phones at a live baseball game and real-time stats and player information will pop up on the screen above the players in the game as they're playing.

(3) *AR in the sky*. Fifth Star Lab's Sky Guide shows constellations superimposed on the actual night

sky. In the earlier version, a user pointed the phone at the sky, and an animated sky popped up to show constellations and stars.

(4) *AR enlivens emojis*. "Anemojis," or animated emogis, come straight from Apple developers. The phone reads your facial expressions as you say something and gives the expressions and words to an emoji. You can then text the talking/emoting emojis to family and friends. This app may not improve productivity, but it will mean that kids will pester their parents for a $1,000 phone.

Apple shares slid a little on the day of the iPhone X unveiling, but they're up 38.9% ytd through Tuesday's close, trouncing the S&P 500's 11.5% return. The stock's importance to the market has grown tremendously over the past 13 years. Joe reports that Apple's market cap makes up 3.9% of the S&P 500's market capitalization today, up from less than 0.5% in 2004 (*Fig. 1*). As a result, Apple has boosted the S&P 500's return by almost a full percentage point so far this year.

The company's impact on the S&P 500 Tech sector is even more dramatic. The sector is up an amazing 25.9% ytd. Without Apple, the sector would be up roughly 23%. Despite the amazing run, Apple's shares still trade at reasonable valuations: 17.9 times analysts' consensus earnings estimate of $9.01 a share in FY2017 and 14.8 times FY2018's estimate of $10.85. The company's fiscal year ends 9/30. Those P/Es are both below the company's 20.4% earnings growth rate forecasted for 2018.

None of the other FAANG (Facebook, Apple, Amazon, Netflix, and Alphabet's Google) stocks carry P/Es that are below their earnings growth rates. Facebook shares sport a P/E of 26.8 on the consensus 2018 earnings estimate, which represents expected earnings growth of 21.9% y/y. Netflix shares trade at 92.1 times 2018's estimated earnings, which represents growth of 70.3% y/y. Amazon, has the fastest growth and the highest P/E. Its shares trade at 122.1 times the 2018 earnings estimate, which implies growth of 112.4% over the earnings expected for 2017. FAANGs make up 12.1% of the S&P 500's market cap, almost twice where that figure stood in 2013 (*Fig. 2*).

Financials Update: Turbulence. Financials got battered by Hurricane Irma. First, interest rates declined, pounding the yield spread between 10-year and 2-year Treasuries down to 84 bps from 134 bps late last year and from 177 bps during July 2015 (*Fig. 3*). Then insurance company stocks were socked on fears that the losses in Florida would be catastrophic. The two events left Financials barely in positive territory for the month so far (*Fig. 4*). As if that were not enough misfortune, some of the banks warned that their trading revenue would be down in Q3.

On a ytd basis, the sector is performing moderately better, but lags the S&P 500 nonetheless. Here's the ytd performance derby for the S&P 500 sectors: Tech (25.9%), Health Care (20.7), Materials (12.3), Utilities (12.1), S&P 500 (11.5), Consumer Discretionary (10.3), Industrials (9.2), Consumer Staples (7.0), Real Estate (7.0), Financials (6.2), Energy (-13.7), and Telecom Services (-13.7) (*Fig. 5*).

We've been optimistic about the sector in hopes that the yield spread would widen as the Fed raised the federal funds rate this year. We've also been expecting that the Trump administration's lifting of financial regulations would help boost the sector's bottom line. While we stand by our thesis, right now it feels like we're in the midst of a hurricane. Here's Jackie's quick look at some of the recent news flow:

(1) *Trading slump*. With volatility near record-low levels, trading revenue fell 12% in Q2 at the five of the biggest US banks, the 9/12 *WSJ* calculated (*Fig. 6*). The article continued: "What's more, many assets are trading within narrow price bands, meaning it is hard for brokers to make much money standing between buyers and sellers."

The environment is expected to put a damper on Q3 results as well. At a banking conference earlier this week, executives at Citigroup and Bank of America said trading revenue could fall roughly 15%, and J.P. Morgan Chase estimated the drop would be 20%. The environment has even pushed Goldman—the king of traders—to move into lending in a bid to grow revenue.

After many months of increasing earnings estimates, analysts trimmed expectations this summer. Net earnings revisions for the S&P 500 Diversified Banks industry were slightly negative in July and August, -3.5% and -0.4% (*Fig. 7*). That said, earnings are still expected to rise 12.1% this year, which is almost equal to the industry's 11.8 forward P/E (*Fig. 8*). If estimates come through, the index should add to its 4.4% ytd gains.

(2) *Darn Harvey and Irma.* The S&P 500 Property & Casualty Insurance stock index had been having a good year until hurricanes destroyed millions of homes and cars in Texas, Florida, and the Caribbean. Over the past four weeks, the S&P 500 Property & Casualty stock index fell 2.8%. However, the index enjoyed slight bounce this week on news that Irma was less powerful than feared. All told, the index is up 12.7% ytd (*Fig. 9*). The industry's recent decline has pushed its forward P/E down to a five-month low of 13.4, but the multiple remains near record-high levels (*Fig. 10*).

(3) *Thank the money managers*. The standout industry in Financials this year is asset management. The S&P 500 Asset Management & Custody Banks stock price index is up 12.9% ytd (*Fig. 11*). The industry benefitted from strong upward revisions to its earnings estimates this summer, and that has lifted its forecasted revenue growth estimate for the next 12 months to 5.3% and its forward earnings growth estimate to 11.0% (*Fig. 12*). At a recent 14.0, the industry's forward P/E remains in between the highest and lowest P/Es it has had over the past 20 years (*Fig. 13*).

Brazil Update: 'It's the Economy, *Estúpido*.' Battling corruption took a backseat to bolstering the beleaguered economy in Brazil's most recent quarter. Lawmakers in early August refrained from choosing to prosecute President Michel Temer on bribery charges, according to an 8/2 *NYT* article. Their preference: political stability rather than more upheaval in a bid to lift Latin America's largest economy out of its deepest recession in 25 years. It helped that to win their support, Temer approved $1.5 billion in pork-barrel spending, an 8/11 Reuters piece explained. Consumer spending jumped, providing the oomph that the economy needed to expand for the second straight quarter and deepening the sense that a recovery is slowly but surely underway. That provided more fuel to a stock market that's been rocketing higher since late June.

The Brazil MSCI stock price index (in dollars) is the top performer among emerging markets in Q3 to date through Tuesday, rising 25.1% (*Fig. 14*). That represents most of its ytd gain of 27.2%. In comparison, the US MSCI stock price index has gained 3.0% in Q3 to date, while the Emerging Markets MSCI index is up 9.0% and the Emerging Markets Latin America MSCI has advanced 16.9%. Brazil continues to look attractive, trading at a forward P/E of 12.1, with an earnings growth rate estimated at 24.3% for this year.

We noted in the 7/13 *Morning Briefing* that the worst appeared to be over for Brazil's economy. I asked Sandy Ward to have a closer look at developments since then:

(1) *Politics.* No sooner did Temer win a reprieve from possible impeachment than he returned to his promise of enacting structural reforms and announced a sweeping plan to privatize state-owned assets. Everything from oilfields, to highways, to the majority of Eletrobras—the region's biggest electrical producer—to even possibly the federal mint, Casa da Moeda do Brasil, and the lottery run by state-owned bank, Caixa Economica Federal, will be put on the auction block to raise revenue, noted an 8/24 story in the *FT*.

His government also expects to push through pension reforms by year-end and perhaps as early as November, according to a 9/4 piece in the *WSJ.* Under Brazil's current pension system, many workers can retire in their 50s at full salary for life. Its social security system represents more than half the annual budget of the federal government. The country's finance minister, Henrique Meirelles, also voiced plans to reform the bankruptcy code and tax system by yearend, according to the same *WSJ* story. "The idea is to create the conditions for Brazil to be able to grow for a longer period on a more sustainable basis," Meirelles was quoted as saying in the *WSJ* article.

Still, Temer's plan to open up a protected reserve in the Amazon forest to copper mining went too far and was temporarily blocked by a federal judge.

This was the political backdrop behind the economic expansion that occurred in Brazil's Q2.

(2) *GDP growth.* Brazil's economy expanded 0.3% y/y in Q2, better than expected and the first positive growth since Q1 2014, technically bringing the recession to an end (*Fig. 15*). Economists surveyed had expected GDP to stay flat y/y and gain 0.1% from the prior quarter. As a result of the improving economy, Brazil's finance minister said the government may raise its forecast for 2017 GDP growth to "around 1% from 0.5%," a 9/6 Reuters article reported. Currently, GDP is expected to increase by 0.4% in 2017 and 2.0% in 2018, according to economists surveyed by Brazil's central bank.

(3) *Consumer spending.* Consumers opened their wallets in the quarter, driving a 1.4% quarterly rise in spending, the first increase in 10 quarters. Lower prices and more disposable income played a role as inflation dropped to its lowest level since 1999. But a government decision to allow a one-time withdrawal from a federal unemployment insurance fund likely had a bigger impact, according to a 9/1 article in the *WSJ.* Indeed, consumer confidence continued to slip, despite the rise in spending (*Fig. 16*).

(4) *Retail sales.* Complicating the consumer-spending picture further, July retail sales came in flat with the previous month's level, disappointing forecasters who had expected a rise of 0.1%. Monthly growth in June was revised down to 0.9% from the previously reported 1.2%. The 3.1% y/y growth also was softer than the 3.5% forecast. A tax hike implemented mid-month on gasoline, diesel, and ethanol fuels led to a 1.6% drop in fuel and lubricant sales (*Fig. 17*).

(5) *Industrial production.* Output rose for the fourth month in a row in July, gaining 1.5% y/y (saar). Strong demand for big-ticket items such as machinery and equipment drove the gains, signaling rising business investment (*Fig. 18*).

(6) *Exports and imports.* Exports strengthened for the second straight quarter, up 2.5% y/y in Q2 following a rise of 1.4 y/y in Q1 (*Fig. 19*). Yet imports fell by 3.3%, a sign of continued weakness in the domestic economy and nosediving fixed investment.

(7) *Interest rates.* In response to consumer prices rising at the slowest pace in nearly 20 years, Brazil's central bank cut the benchmark Selic rate by a full percentage point to 8.25% on September 6. Rates are at their lowest level since July 2013, according to a 9/6 *WSJ* report, and the central bank suggested that it is approaching the end of the easing cycle, with future rate cuts expected to be more moderate.

For all the good news, there are offsets that cast doubt on the durability of Brazil's recovery, such as still-high unemployment, declining government spending, and falling foreign investment (*Fig. 20*).

That the economy could continue to make headway amid the uncertainty of political scandal is a hopeful sign. Another sign of strength: Of the BRIC countries, Brazil boasts the highest OECD Leading

Indicator reading—102.8—and it's been rising steadily for the past year, suggesting that the expansion will continue (*Fig. 21*).

Mexico Update: Endless Fiesta. Despite having been rocked last week by the most powerful earthquake to hit in 100 years, one that ravaged some of the most impoverished areas in the south, Mexico has remained undaunted, and its economy remains on solid footing.

Bolstering our bullish case for Mexico, which we discussed in our 8/23 *Morning Briefing*, that country's Finance Minister, Jose Antonio Meade, last week raised the government's outlook for 2017 GDP growth to between 2.0% and 2.6%, up from a previous estimate of 1.5%-2.5%. That marked the second time in less than six months that the government has lifted its outlook, according to a 9/8 *WSJ* article. The government cited solid domestic demand and rising manufacturing exports and noted that financial volatility has diminished as NAFTA renegotiation talks have proceeded in a constructive manner. The government sees GDP growth of between 2.0% and 3.0% in 2018.

Let the fiesta continue, come what Trump may or may not do!

CALENDARS

US. Thurs: Jobless Claims 302k, Headline & Core CPI 1.9%/1.6% y/y, Weekly Consumer Comfort Index, EIA Natural Gas Report. **Fri:** Retail Sales Total, Ex Autos, Ex Autos & Gas, and Control Group 0.1%/0.5%/0.3%/0.3%, Business Inventories 0.2%, Headline & Manufacturing Industrial Production 0.1%/0.1%, Capacity Utilization 76.7%, Consumer Sentiment Index 96.0, Empire State Manufacturing Index 19.0, Baker-Hughes Rig Count. (Bloomberg estimates)

Global. Thurs: European Car Sales, China Retail Sales 10.5% y/y, China Industrial Production 6.6% y/y, Japan Industrial Production, Australia Employment Change & Unemployment Rate 20k/5.6%, BOE Rate Decision, Asset Purchase Target, and Corporate Bond Target 0.25%/435b/10b. **Fri:** Eurozone Trade Balance (euros) 20.3b. (DailyFX estimates)

STRATEGY INDICATORS

Stock Market Sentiment Indicators (*link*): Our Bull/Bear Ratio (BBR) this week slipped to a 10-month low of 2.33 from 2.59 the prior two weeks. It was at 3.70 six weeks ago, which was the highest since the end of February. Bullish sentiment slumped to 47.1%—the lowest since just before the election—from 49.5% the previous two weeks; it was as high as 60.2% seven weeks ago. The correction count rose to 32.7% from 31.4% the prior two weeks, back near its high for this year of 33.6% recorded three weeks ago. Meanwhile, bearish sentiment climbed to a high for this year of 20.2%, moving further above the narrow 16.5%-18.3% range shown most of this year. The AAII Ratio advanced to 45.0% last week after sinking the prior two weeks from 51.0% to a low for this year of 38.5% over the period. Bullish sentiment rose from 25.0% to 29.3% last week, while bearish sentiment fell from 39.9% to 35.7%.

S&P 500 Earnings, Revenues & Valuation (*link*): Last week saw S&P 500 consensus forward revenues rise w/w—for the eighth time in nine weeks—to a record high for the first time in five weeks. Forward earnings rose w/w to a new record high as well. The forward profit margin forecast likewise rose w/w to a record high of 11.1% from 11.0%. The profit margin's record high was its first since September 2015 and up from a 24-month low of 10.4% in March 2016. Forward revenue growth for the S&P 500 ticked down to 5.3% from a 14-week high of 5.4% and is down from 5.8% in late January, which was the highest since May 2012 and compares to a cyclical low of 2.7% in February 2016. Forward earnings growth edged up to 10.8% from a five-month low of 10.7%, which compares to a six-month high of 11.3% in early July. It remains near January's 11.7%, which was the highest since October 2011 and compares to a cyclical low of 4.8% in February 2016. S&P 500 forward revenues and forward earnings growth are enjoying a tailwind now due to easy y/y comparisons for Energy and improving forward growth rate forecasts for revenues (STRG) and earnings (STEG) for Industrials, Materials, and Tech. However, Energy's contribution to forward growth peaked at the start of 2017. Looking at last week's results, the S&P 500 ex-Energy's STRG of 4.9% is 0.4ppt lower and STEG of 9.5% is 1.3ppts lower. The S&P 500 ex-Energy forward profit margin rose w/w to a record high of 11.7% from 11.6%, which is its first since August 2007. Although the index price rose w/w, the forward P/E remained steady at 17.6, which is down from late July's 13-year high of 18.0 and compares to a 15-month low of 14.9 in January 2016. The price-to-sales ratio was also steady at 1.95, slightly below late July's record high of 1.97. On an ex-Energy basis, valuation edged down to a 16-week low of 17.2 from 17.3, which compares to late July's 21-week high of 17.5 and a 13-year high of 17.6 in early March.

S&P 500 Sectors Earnings, Revenues & Valuation (*link*): Consensus forward revenue forecasts rose last week for 10/11 sectors, and forward earnings rose for 9/11. Real Estate had both measures decline w/w, and Materials' forward earnings was unchanged. Forward revenues and earnings are at or around record highs for 5/11 sectors: Consumer Discretionary, Consumer Staples, Health Care, Industrials, and Tech. Energy's forward revenues is stabilizing now near a 10-month low, and its forward earnings is around an eight-month low. The forward P/S ratio rose w/w for 5/11 sectors, and the P/E ratio rose w/w for 6/11 sectors. These three sectors posted notable w/w gains in both measures: Energy, Health Care, and Real Estate. Health Care has been improving recently; but its P/E of 16.4 and P/S of 1.76 remain well below their early 2015 highs of 17.9 and 1.88, respectively. Financials' P/E is up from 12.0 before the election to 13.3, but remains below the post-election high of 14.6 in early March. With Energy's forward revenues and earnings up from cyclical lows in early 2016, its valuations are coming back to Earth; its P/S ratio of 1.29 compares to a record high of 1.56 in May 2016, and its P/E of 27.0 is down from a record high of 57.5 then. Higher y/y margins occurred for only 7/11 sectors in 2016, but margins are expected to improve in 2017 for all but Real Estate and Utilities. However, Real Estate's forecasted margin should improve as the year progresses when gains on property sales are included in the forecasts. Energy and Financials had their forecasted forward profit margin improve 0.1ppt w/w, but Real Estate fell 0.2ppts. Here's how the 11 sectors rank based on their current 2017 forecasts: Information Technology (to 20.1% in 2017 from 19.2% in 2016), Real Estate (18.4, 24.9), Financials (15.6, 14.3), Telecom (11.3, 11.2), Utilities (11.1, 11.4), S&P 500 (10.6, 10.1), Health Care (10.5, 10.3), Materials (9.5, 9.1), Industrials (9.2, 8.9), Consumer Discretionary (7.4, 7.2), Consumer Staples (6.6, 6.4), and Energy (3.9, 1.1).

US ECONOMIC INDICATORS

US PPI (*link*): The PPI for final demand rose 0.2% in August after falling 0.1% in July—which was the first decline in 11 months. Prices for final demand goods rebounded 0.5% after falling two of the prior three months by a total of 0.6%, while final demand services edged up 0.1% after a 0.2% loss and a 0.2% gain the previous two months. A 9.5% surge in gasoline prices accounted for three-quarters of the advance in final demand goods last month, while over half of the increase for final demand services can be traced to prices for consumer loans. The yearly inflation rate for the headline series accelerated 2.4% after slowing steadily from April's 2.5%—which was the largest increase since February 2012—to 1.9% in July. The goods rate moved higher for the second month from 2.2% in June to 3.1% in August—within a percentage point of its five-year high of 4.1% posted in March and April; the services rate (2.1% y/y) was back up at its cyclical high. Meanwhile, the rates for the core (2.0% y/y) and the core ex trade services (2.0) both continued to bounce around recent highs.

GLOBAL ECONOMIC INDICATORS

Eurozone Industrial Production (*link*): Output edged up in July after falling in June from May's cyclical high. Industrial production (excluding construction) ticked up 0.1% after falling an unrevised 0.6% in June, which was only the second decline this year. Through the first seven months of 2017, Eurozone production rose 1.5% led by gains in capital (3.0%), intermediate (1.8) and consumer durable (1.8) goods production, with intermediate goods reaching a new cyclical high. Consumer nondurable goods production (0.2) was flat over the seven-month period, while energy output contracted 2.3%. The top four Eurozone economies show July production rose in France (0.6%) and Italy (0.1) and fell in Spain (-0.4) and Germany (-0.1), with Italy's reaching a new cyclical high. Of the remaining countries for which data are available, the biggest monthly gains were recorded in Portugal (1.9) and Ireland (1.8), while the largest losses were posted in Malta and Slovakia—both down 3.3% in July. Looking forward, August's M-PMI (57.4) showed Eurozone manufacturing sector growth remained among the strongest since 2011, with only Spain showing its rate of improvement slow last month. Here are the rankings by M-PMI for the largest Eurozone economies: Germany (59.3, 2-month high), Italy (56.3, 78-month high), France (55.8, 78-month high), and Spain (52.4, 11-month low).

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