MORNING BRIEFING
August 15, 2019

Another Curve Ball

See the collection of the individual charts linked below.

(1) Inverted yield curve panics algos. (2) Our research shows it's credit crunches that cause recessions, not inverted yield curves. (3) So far, credit is flowing freely and the Fed is easing. (4) Inverted yield curves don't invert net interest margins for the banks. (5) China's version of Amazon thrives despite slowing growth. (6) Semis get battered on global growth fears. (7) Tesla's stock going nowhere, but its business is still growing. (8) Plummeting battery prices and tough European regulations making renewable energy and electric cars viable.

Strategy: Blaming Algos. The 10-year US Treasury yield fell below the two-year yield on Wednesday. That triggered a stock-market stampede for the exits in fear that the inverted yield curve signals an impending recession. The S&P 500 fell nearly 86 points yesterday, bringing the market's decline to 6.1% since its peak of 3025.86 on 7/26.

We aren't joining the hysteria, which we blame mostly on computer-driven algorithms programmed to sell stocks on bearish headlines such as those about the inversion of the yield curve. Our research has shown that inverted yield curves do not cause recessions. In the past, they've predicted credit crunches caused by Fed tightening. So investors on the lookout for a recession should instead pay attention to credit availability. We laid out our case in the 4/7 *Topical Study #83*: "The Yield Curve: What Is It Really Predicting?"

Credit remains amply available. The Fed has been back in easing mode since the end of July, when the federal funds rate was cut by 25bps. Fed officials are likely to respond to the inversion with more rate cuts.

Recession-watchers should keep an eye on bank credit metrics—specifically, net interest margin, charge-offs and dividends, and business loans. Right now, those metrics aren't signaling a credit crunch (*Fig. 1*, *Fig. 2*, and *Fig. 3*). In our study, we observed:

"One widely held view is that banks stop lending when the rates they pay in the money markets on their deposits and their borrowings exceed the rates they charge on the loans they make to businesses and households. So an inverted yield curve heralds a credit crunch, which inevitably causes a recession. …The widely held notion that a flat or an inverted yield curve causes banks to stop lending doesn't make much sense. The net interest margin, which is reported quarterly by the Federal Deposit Insurance Corporation (FDIC), has been solidly positive for banks since the start of the data in 1984."

Nonetheless, the S&P 500 Financials sector has been the second-worst-performing S&P 500 sector since the broad index peaked. Here's the performance derby from 7/26 through Wednesday's close: Real Estate (2.1%), Utilities (0.2), Consumer Staples (-2.9), Health Care (-3.3), Materials (-5.9), S&P 500 (-6.1), Communication Services (-6.6), Information Technology (-7.0), Industrials (-7.1), Consumer Discretionary (-7.3), Financials (-9.5), and Energy (-9.8).

China: Consumers Spending at JD. In addition to an inverted yield curve, investors were spooked by the latest data out of China, which shows the country's economic growth continues to slow. China's industrial production grew 4.8% in July y/y, the slowest pace since February 2009. That's below China's industrial production growth in June (6.3%) and in May (5.0) (*Fig. 4*). Chinese retail sales growth also slowed, to 7.6% y/y in July, down from June's 9.8% growth rate (*Fig. 5*).

Despite the latest dour news, the Q2 earnings of JD.com—widely considered to be China's Amazon.com—soundly beat expectations. Revenue jumped 23% y/y, active customers increased 3.5% in the 12 months through June, and adjusted, diluted earnings per share of 2.30 yuan beat analysts' expectations. JD.com upped its guidance for 2019 adjusted net income to between 8.0-9.6 billion yuan. Better-than-expected results, combined with postponed US tariffs on certain Chinese goods, helped JD shares jump 12.9% on Tuesday to $30.66.

JD's earnings report doesn't signal "all clear" for the Chinese consumer, however. The Internet retailer cited several factors that had nothing to do with the economy when explaining how it turned in such a strong report:

(1) *Logistics pulling its weight.* The company credited the maturity and profitability of its logistics business, which after years of investment has finally reached the break-even point. JD delivers its own packages to customers' front doors.

(2) *Market share expanding.* JD is expanding its customer base and isn't solely dependent on its existing customers spending more. The company noted it has moved beyond large markets and into third- to sixth-tier cities. It's also growing faster than its market because it continues to take market share. "We remain optimistic about the Chinese consumer market and JD.com's competitive market position despite uncertainties with the macro environment," said JD's CFO Sidney Xuande Huang during the Q2 earnings call.

(3) *VAT-cut benefit domino-ing.* Also mentioned as a sales propellant was China's Value Added Tax (VAT) cut, though JD couldn't quantify the benefit. China cut the VAT rate for manufacturers to 13% from 16% effective 4/1, representing an estimated 2 trillion yuan in 2019 and benefiting the manufacturing, transportation, and construction sectors. Many of JD's suppliers and clients responded by lowering their prices—Apple and luxury brands such as Gucci among them, according to a 4/1 Reuters article. JD's Chinese consumers likely were enticed to snap up products at lower prices, boosting JD's sales.

(4) *Combining bricks and clicks.* Lei Xu, CEO of JD Retail, sounded one positive and one negative note: First, he said that because of the "overall macro environment," China's advertising market is "under great pressure." More optimistically, he said China's real estate

market is “recovering, especially, in the third to fourth tier cities.” Like US Internet retailers, JD has expanded into brick-and-mortar stores. In 2018, it opened its first 7Fresh Supermarket, with plans to have 1,000 stores in the next three to five years. The stores both sell food and act as a showcase for other items that customers can order online from JD.com.

While JD’s results were a pleasant surprise, their strength appears to have more to do with company-specific issues and less to do with a resurgent Chinese consumer.

Semiconductors: Fried Chips. The S&P 500 Semiconductor and Semiconductor Equipment stock price indexes were battered Wednesday on renewed fears of a global economic slowdown. They dropped 3.0% and 3.1%, respectively. Their drubbing wiped out the gains they enjoyed the previous day on news that some of the US tariffs on Chinese goods would be postponed until December.

Semiconductor sales worldwide have been tumbling all year. The Semiconductor Industry Association reports that worldwide semiconductor sales in June were down 0.9% m/m and down 16.8% y/y (*Fig. 6*). Using a three-month moving average, the drop in industry sales measures 22.3% from the $42.1 billion peak last October.

Until recently, investors seemed to be anticipating the end of the downturn. The S&P 500 Semiconductor Equipment industry index is up 44.4% ytd through Wednesday’s close (*Fig. 7*). A bit further behind is the S&P 500 Semiconductors stock price index, up 13.5% ytd and narrowly beating the S&P 500 over the same period (*Fig. 8*).

Until the recent selloff, perhaps investors were focusing on the improved earnings analysts are forecasting for both industries next year. Analysts expect the Semiconductor Equipment industry’s revenue to drop 11.3% this year and rise 6.3% in 2020 (*Fig. 9*). Likewise, earnings are forecast to drop 22.2% this year and to bounce by 9.8% next year (*Fig. 10*).

The revenue and earnings rebounds aren’t nearly as strong in the S&P 500 Semiconductors industry. Analysts call for the industry’s revenue to fall 6.3% this year and increase 3.9% in 2020 (*Fig. 11*). Earnings are expected to drop 14.0% this year before improving by 1.0% in 2020 (*Fig. 12*).

Disruptive Technology: Tesla Still a Leader. Investors in Tesla want to have their cake and eat it too. They want Tesla to be both successful and profitable, and that’s not what’s happening—not yet anyway. Tesla reported a $1.12 adjusted loss per share in Q2, even as revenue climbed more than 50% to $6.4 billion.

While Ford Motor shares have climbed 17.7% ytd and GMs shares are up 11.2% ytd, Tesla’s stock has fallen 34.0% so far this year. That painful decline may mean that investors’ high expectations haven’t been met, but it doesn’t mean Tesla’s business isn’t making progress.

Tesla remains a market-share leader in the electric car industry. Utilities are experimenting with how they can use Tesla’s batteries and solar panels to provide electricity. And the cost of batteries is tumbling, which should make further adoption of Tesla’s products easier. Here’s

Jackie's look at some of the progress Tesla is making, even if that progress isn't fast enough or producing enough profits to appease investors:

(1) *Plummeting prices*. The economics of renewable energy are moving in the right direction, thanks in part to the declining cost of batteries. The price of large-storage batteries—those used to store large amounts of energy for utilities—has dropped nearly 40% since 2015, according to Wood Mackenzie data quoted in an 8/11 *WSJ* article. Getting battery prices down is key to the broad adoption of solar and wind energy because of the need to store energy that can be used when the wind isn't blowing and the sun isn't shining. Wood Mackenzie expects spending on high-capacity batteries to grow six-fold to $71 billion by 2024.

(2) *Utilities going virtual*. The idea of having solar panels on, and batteries in, homes is powerful; but if the utility can link all those homes, the idea becomes exponentially powerful. The idea of linking them is being tested in South Australia, where solar panels and Tesla's Powerwall 2 battery storage units have been installed in 1,100 low-income households.

"The homes are linked together to form a virtual grid which can both ease power demands from the main grid during peak consumption times and act as a backup power source during blackouts," an 8/12 article on Teslarati.com explained. The project's next phase will give another 50,000 households solar panels and batteries, creating a 250 MW virtual power plant. After solar energy fills the battery, the electricity can then be sent back to the utility. Customers are offered a 20% discount on their electric bills.

In the US, a VPP (virtual power plant) is being proposed for the Los Angeles Department of Water and Power (LADWP). LA Mayor Eric Garcetti's Green New Deal wants LADWP to close its three remaining natural gas plants and get 80% of its power from renewables by 2036, according to an 8/13 article in *Utility Dive*. Sunrun, a residential solar provider, has proposed replacing one of the plants with a VPP. Doing so will be a big push, because only 2.5% of homes in the utility's coverage area have solar panels generating 182 MW. To replace the plant, 862 MW of energy would need to be generated by solar panels on homes and the utility would need to modernize its distribution grid.

In Massachusetts and Rhode Island, National Grid allows homeowners with a Tesla Powerwall home battery to sell their energy back to the grid at peak demand times, a 6/21 article on Inverse.com reported.

(3) *Europe getting greener*. Electric vehicle (EV) sales are staying hot even as combustion engine car sales are cooling off. Battery EV sales in Europe were up 98%, or 34,000 units, y/y in June, according to a 7/29 *InsideEVs* article. Europe's sales of battery and hybrid cars have topped US sales for each month this year.

Tesla, which has a 17% share of the European EV market, had the best-selling model, the Model 3. The Model 3 sold 37,780 cars in Europe in the first half of the year, with the Renault Zoe (24,288), the Mitsubishi Outlander hybrid (18,982), BMW's i3 (16,370), and the Nissan Leaf (16,348) trailing behind.

Car manufacturers will need to offer more EVs over the next year if they hope to comply with Europe's new emissions. Only 95% of an EU car company's fleet on average must emit 95 grams of carbon dioxide per kilometer driven, down from 120.5 g/km last year. And by 2021, the entire car fleet must meet that standard. Those who don't meet the standard will have to pay fines, which a 6/26 Bloomberg article reports could hit 34 billion euros through 2021, citing a projection by Jato Dynamics. Based on its 2018 reported emissions, Volkswagen AG could face the largest fine, of about 9 billion euros, followed by Peugeot, 5.4 billion euros.

In the past, car makers were able to meet lower emissions standards by adding new technology to small cars with combustion engines. But companies may not be able to make that work this time around while also keeping small car models profitable. Many car companies likely will stop selling small internal combustion cars as a result, instead selling small EVs to offset the CO2 spewed by internal combustion SUVs. The problem is that small electric cars, at 18,000-20,000 euros, cost more than mini combustion engine cars, at 12,000-14,000 euros, a 6/22 *Automotive News* article states. The higher price of an EV could dent consumer demand, and the slimmer margins on EVs could dent manufacturers' bottom lines.

The good news for Tesla is electric cars will become even more accepted in Europe. The bad news is that every car maker is coming out with new EVs, so EV competition is only just starting to heat up.

CALENDARS

US. Thurs: Retail Sales Total, Ex Autos, Ex Autos & Gas, and Control Group 0.3%/0.4%/0.5%/0.4%, Industrial Production Headline & Manufacturing 0.1%/-0.3%, Capacity Utilization 77.8%, Business Inventories 0.1%, Nonfarm Productivity & Unit Labor Costs 1.4%/1.8%, Jobless Claims 212k, NAHB Housing Market Index 66, Empire State Manufacturing Index 1.9, Philly Fed Manufacturing Index 10, Treasury International Capital, EIA Natural Gas Report. **Fri:** Housing Starts & Building Permits 1.255mu/1.270mu, Consumer Sentiment Index 97.2, Baker-Hughes Rig Count. (DailyFX estimates)

Global. Thurs: UK Retail Sales Ex Auto Fuel 2.3% y/y, Japan Industrial Production, Australia Employment Change & Unemployment Rate 14k/5.2%. **Fri:** None. (DailyFX estimates)

STRATEGY INDICATORS

Stock Market Sentiment Indicators (*link*): The Bull/Bear Ratio (BBR) improved this week, as bullish sentiment moved back up toward 50.0%. The BBR rose to 2.73 this week after falling to 2.69 last week; it had increased seven of the prior eight weeks from 2.31 (lowest since mid-February) to 3.35. Bullish sentiment ascended to 49.5% this week after plunging 9.1ppts (48.1% from 57.2%) last week to an eight-week low. Following the pattern so far this year, the moves continue to be between the bullish and correction camps, with the correction count falling to 32.4% this week after rising 8.3ppts (34.0 to 25.7) last week. Over the prior eight-week period, bullish sentiment (57.2 from 42.7) jumped 14.5ppts, while the correction count (25.7 from 38.8) sank 13.1ppts. Bearish sentiment rose for the third week to 18.1% from 16.8% three weeks ago; it had fluctuated in a small band from 18.0% to 18.5% from early June through early July. The AAII Ratio slumped to 31.0% last week after rebounding from 49.8 to 61.5% the previous week, as bullish sentiment (to 21.7% from 38.4%) fell and bearish sentiment (48.2 from 24.1) rose.

S&P 500 Earnings, Revenues, Valuation & Margins (*link*): Consensus S&P 500 forward revenues and earnings dropped w/w from their record highs. Analysts expect forward revenues growth of 5.3% and forward earnings growth of 8.0%, unchanged and down 0.1ppt, respectively, from a week earlier. Forward revenues growth is now down 1.0ppt from a seven-year high of 6.3% in February 2018, but is up from a 31-month low of 5.0% in mid-February. Forward earnings growth is down 8.9ppts from a six-year high of 16.9% last February, but has improved steadily from a 34-month low of 5.9% in late February. 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 revenues growth to slow from 8.5% in 2018 to 4.5% in 2019 and 5.3% in 2020. They're calling for earnings growth to slow sharply from 24.1% in 2018 to 2.1% in 2019 before improving to 10.4% in 2020. The forward profit margin was steady w/w at 12.1%, and is down just 0.3ppt from a record high of 12.4% in mid-September. That compares to 11.1% prior to the passage of the TCJA in December 2017 and a 24-month low of 10.4% in March 2016. Analysts are expecting the profit margin to fall from 12.0% in 2018 to 11.7% in 2019 before rising to 12.2% in 2020. The S&P 500's forward P/E was down 0.5pt w/w to a nine-week low of 16.5 and from an 18-month high of 17.4 in late July. That's up from 14.3 during December, which was the lowest reading since October 2013 and down 23% from the 16-year high of 18.6 at the market's valuation peak in January 2018. Similarly, the S&P 500 price-to-sales ratio was down w/w to 1.99 from 2.06 and from an 11-month high of 2.10 in late July. That's up from 1.75 during December, when it was the lowest since November 2016, and down 19% from its then-record high of 2.16 in January 2018.

S&P 500 Sectors Earnings, Revenues, Valuation & Margins (*link*): Consensus forward revenues rose w/w for just three of the 11 S&P 500 sectors and forward earnings did so for just one sector. Real Estate 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. Forward P/S and P/E ratios have declined from recent multi-year or record highs for four sectors: Communication Services, Real Estate, Tech, and Utilities. However, all sectors remain well above their multi-year lows during December 2018. Due to the TCJA, the profit margin for 2018 was higher y/y for all sectors but Real Estate. The outlook for 2019 shows higher margins are expected y/y for just one sector now: Financials. The forward profit margin rose to record highs during 2018 for 8/11 sectors, all but Energy, Health Care, and Real Estate. Since then, it has moved lower for nearly all of the sectors. Here's how the sectors rank based on their current forward profit margin forecasts versus their highs during 2018: Information Technology (21.9%, down from 23.0%), Financials (18.6, down from 19.2), Real Estate (15.8, down from 17.0), Communication Services (14.9, down from 15.4), Utilities (13.0, matching its record high in May), S&P 500 (12.1, down from 12.4), Materials (10.1, down from 11.6), Health Care (10.5, down from 11.2), Industrials (10.3, down from its record high of 10.4 in early July), Consumer Discretionary (7.5, down from 8.3), Consumer Staples (7.4, down from 7.7), and Energy (6.9, down from 8.0).

US ECONOMIC INDICATORS

Import Prices (*link*): Import prices in July edged up after falling in June for the first time this year. Prices increased 0.2% last month following a revised 1.1% decline in June—which was steeper than the 0.9% preliminary loss. Petroleum prices rebounded 1.9% after sliding 7.0% in June, which was the first decline since the end of last year. Nonpetroleum import prices were flat in July following a three-month drop of 1.1%. Compared to a year ago, import prices slumped 1.8% y/y, narrowing slightly from June's 2.0% decrease—which was the largest since August 2016. The yearly rate for petroleum prices continues to fluctuate around zero, falling back into negative territory in June (-7.2% y/y) and July (-5.9); over the first five months of this year, the yearly rate was negative the first two months and positive the following three. Nonpetroleum prices have been below a year ago every month this year, with July prices down 1.3% y/y; the yearly rate turned negative in January for the first time since November 2016. The rate for capital goods imports (-1.3% y/y) was in negative territory in July for the 10th consecutive month, while the rate for industrial materials & supplies (-4.7) was negative for the fifth time this year. Prices for consumer goods ex autos (-0.6) remained below year-ago levels, while the yearly change in auto prices was fractionally below zero for the seventh time this year. The rate for food prices (2.1% y/y) jumped further above zero, posting its biggest gain since April 2018. Looking at our Asian trading partners, we're importing more deflation than inflation, with import prices for goods from China (-1.6% y/y) and the NICs (-1.1) falling and those from Japan flat y/y. Meanwhile, there's no sign of inflation in EU (-0.1% y/y) import prices, decelerating sharply from last May's 4.1%, while import prices for goods from Latin America (-2.6) were negative for the eighth month.

GLOBAL ECONOMIC INDICATORS

Eurozone Industrial Production (*link*): Output in June posted its biggest monthly decline since February 2016, falling to within 0.2% of December's 20-month low. Industrial production (excluding construction) sank 1.6% in June, its third decline this year, with the ytd gain near zero. Production began this year with a 1.7% jump, though quickly lost momentum. Production of capital (-4.0%), consumer nondurable (-2.8), and consumer durable (-1.2) goods all posted sizeable declines in June, with intermediate goods (-0.8) and energy (-0.2) output also in the red. Since peaking in December 2017, industrial production has dropped 3.7%, with capital goods (-7.7), intermediate goods (-4.8), consumer durable goods (-4.4), and energy (-3.8) output all sliding over the 18-month period. Consumer nondurable goods production, on the other hand, reached a new record high in May, though lost some ground in June. Output fell for the top four Eurozone economies in June, though only German production is down on a ytd basis. Spain (-0.2% m/m & 3.5% ytd) and Italy (-0.2 & 1.5) posted the smallest declines in June and the biggest gains ytd. France (-2.3 & 0.6) recorded the biggest monthly decline in output, though remained above water ytd. Meanwhile, Germany's (-1.8 & -3.8) industrial sector remains in a free-fall, posting the biggest yearly decline (-6.2% y/y) of all the Eurozone economies.

Contact us by email or call 480-664-1333.

Ed Yardeni, President & Chief Investment Strategist, 516-972-7683
Debbie Johnson, Chief Economist, 480-664-1333
Joe Abbott, Chief Quantitative Strategist, 732-497-5306
Melissa Tagg, Director of Research Projects & Operations, 516-782-9967
Mali Quintana, Senior Economist, 480-664-1333
Jackie Doherty, Contributing Editor, 917-328-6848
Valerie de la Rue, Director of Institutional Sales, 516-277-2432
Mary Fanslau, Manager of Client Services, 480-664-1333
Sandy Cohan, Senior Editor, 570-775-6823