



## MORNING BRIEFING

October 28, 2021

### Margins, FAANMGs, and Batteries

Check out the accompanying [chart collection](#).

(1) Margin pressure is on. (2) Companies boost sales and raise prices to fight back. (3) Technology helps reduce costs and boost productivity. (4) Meet Flippy, a chicken-wings-cooking robot. (5) Many robots and four humans pick, pack, and ship 200,000 packages a day in one warehouse. (6) FAANMG's gains slow. (7) Facebook, Amazon, and Apple hold back the gang. (8) Panasonic moves forward with bigger, better Tesla battery. (9) Honeywell utility-scale battery provides power for 12 hours and doesn't use lithium. (10) Form Energy offers up a 100-hour battery. (11) Bill Gates' firm invests in ESS. (12) FleetZero wants cargo ships to use batteries, too.

**Strategy: The Pressure To Overcome Margin Pressure.** Third-quarter earnings results are separating the haves and the have-nots. The haves are companies that are successfully growing their bottom lines despite rising wages, escalating inflation, and disrupted supply chains that are jacking up costs. Some are enjoying sales growth and pricing power, which are offsetting cost increases. Others are employing technology to cut costs and improve productivity. The have-nots are not as lucky.

So far, the haves are outnumbering the have-nots. Since earnings season began, analysts have increased their Q3 earnings estimates by \$1.46 per share, bringing the quarterly consensus up to \$50.57, a 30.7% y/y increase ([Fig. 1](#)). According to Joe, 38% of the S&P 500 companies have reported as of mid-day Wednesday. All 11 of the S&P 500 sectors are beating estimates. Here's the early read so far on the aggregate earnings-per-share surprise performance derby for the S&P 500 and its 11 sectors: Real Estate (65.5%), Financials (20.2), Consumer Discretionary (16.4), S&P 500 (12.8), Communication Services (11.6), Information Technology (11.6), Health Care (10.2), Industrials (7.4), Consumer Staples (5.1), Energy (4.9), Materials (4.0), and Utilities (2.9).

Fortunately, many S&P 500 companies are entering this difficult period with record-high operating profit margins. Here's the performance derby for the S&P 500 and its sectors' operating profit margins based on trailing four-quarter results: Financials (23.2%), Information Technology (21.7), Real Estate (18.0), Communication Services (15.8), Utilities (13.9), S&P 500 (12.0), Materials (11.1), Health Care (8.8), Consumer Staples (7.7), Consumer Discretionary (7.6), Industrials (6.4), and Energy (-0.4) ([Fig. 2](#)).

Let's take a look at how some companies are absorbing the effects of higher costs and inflation and still coming out ahead:

(1) *Pricing and sales growth.* Like everyone in the food industry, Chipotle has felt the impact of the tight US labor market. The company has increased the minimum wage it pays US employees to \$15 an hour, and its labor expense rose 23.9% y/y in Q3. The prices of supplies and shipping have also increased, the Mexican restaurant chain's executives noted in their October 21 earnings [conference call](#). The company's expense line for food, beverage, and packaging rose 14.4% y/y in the quarter. Some of that jump occurred because Chipotle opened new stores and increased sales. But the company also experienced "mid-single-digit type inflation" in the quarter, CFO John Hartung said.

Chipotle's sales surged 21.9% in Q3 y/y, bolstered by 41 new restaurants opened in Q3, the rollout of drive-throughs for digital orders, and new menu items. The company raised prices by about 10% in Q3 and 7.5% in Q4. Before Chipotle raises prices next year, it will be evaluating which cost price increases are permanent and which are temporary, explained CEO Brian Niccol. Wage increases are likely to be permanent, while higher shipping and other costs may be temporary, he said.

(2) *Selling more provides a buffer.* Tesla surprised investors by delivering 72.9% more vehicles in Q3 than the year-ago quarter. The jump in car sales helped the auto manufacturer report \$1.6 billion in Q3 profit, its third consecutive quarterly profit and up from \$331 million a year ago. Tesla said that it cut expenses and improved efficiency to more than offset higher commodity and labor costs, a lower average price of vehicles, and parts shortages that meant factories couldn't run at full capacity, an October 20 [WSJ article](#) reported. Recent news that Hertz Global Holdings has put in an order for 100,000 Teslas by the end of 2022 pushed Tesla's market capitalization above the \$1 trillion marker.

(3) *Cost-saving technology.* With workers in high demand and wages on the rise, companies have a growing incentive to find ways that technology can replace labor and increase productivity. That's particularly true for labor-intensive businesses like restaurants and retailers. The replacement of labor with technology is one of the reasons that productivity has started to climb, we believe, and may continue to do so for the next few years ([Fig. 3](#)).

Buffalo Wild Wings is testing a robotic chicken-wing fryer from Miso Robotics called "Flippy Wings," which allows kitchen staff to cook more and spend less time attending to the deep fryer, a October 22 [Chain Store Age article](#) reported. Flippy's cousin—which flips burgers

and makes fries—was successfully tested in a White Castle last year and is being added in 10 more locations.

Many other robots are looking for restaurant jobs too. Peanut Robotics cleans and sanitizes restrooms; SoftBank Robotics makes Whiz, which vacuums floors; Makr Shakr makes robotic bartenders; and Servi delivers food to customers' tables, an October 19 *NYT* [article](#) reported. Servi was developed by Bear Robotics and is being brought to market by SoftBank.

Robots increasingly are replacing humans in warehouses too, and soon they're likely to make deliveries. Amazon has largely automated its warehouses, but still uses humans for the final packing stage. Ocado, a UK online supermarket, also has humans packaging the goods, but a robotic picking arm is "learning the task" so it can eventually replace humans. In addition to using the robots in its own warehouses, Ocado has deals to provide its technology to supermarket companies in eight countries, including the US, Japan, and France, according to an October 25 Reuters [article](#), which includes an amazing video of the robots at work.

Chinese companies appear to be leading the trend. In 2017, JD.com opened a fully automated warehouse in Shanghai, with robots picking, packing, and sending orders off for shipment, according to this YouTube [video](#). It requires just four workers but ships 200,000 packages a day. JD's next goal: deploying 30 autonomous delivery vehicles in Changshu. The technology was tested during the Covid-19 outbreak, when the robot was used to deliver more than 13,000 packages in Wuhan.

"Eventually, autonomous delivery vehicles will become a part of the city's infrastructure, 'like subways,'" said Dr. Qi Kong, chief scientist and head of JD's autonomous driving technology in a June 15 Traffic Technology Today [article](#).

(4) *Not everyone is so lucky.* Even as Kimberly-Clark's Q3 sales rose 7% y/y, its adjusted earnings per share fell to \$1.62, down from \$1.72 a year ago and below analysts' consensus forecast of \$1.65. The company also lowered its full-year adjusted earnings target to \$6.05-\$6.25 a share, down from the company's prior outlook of \$6.65-\$6.90, an October 25 *Barron's* [article](#) reported.

The poor showing was due to "significant inflation and supply-chain disruptions that increased our costs beyond what we anticipated," said CEO Mike Hsu. "We are taking further action, including additional pricing and enhanced cost management, to mitigate

these headwinds, as it is becoming clear they are not likely to be resolved quickly.”

**Technology: Has FAANMG Stalled?** For most of the past decade, the stocks that make up FAANMG—Facebook, Amazon, Apple, Netflix, Microsoft, and Google (Alphabet)—have risen sharply, driven by expanding businesses and earnings growth. But that has changed. Since it peaked at a record high in early September, the group’s collective market cap has dropped 3.5%, while the S&P 500 has risen 1.2% and the S&P 500 excluding FAANMG has gained 3.1% ([Fig. 4](#)). Likewise, FAANMG’s market-cap share of the S&P 500 is a lofty 24.7%, but it too has moved sideways since peaking at a record-high 26.7% during August 2020 ([Fig. 5](#)).

Here’s a quick look at what’s taking a bite out of the FAANMG stocks’ momentum:

(1) *Blame FAA*. Looking back over the past three years, each of the FAANMG crowd’s members easily trounced the S&P 500’s performance. The same cannot be said over the past year or the past three months, when Facebook, Apple, and Amazon have sharply underperformed.

Here are the stock price performances of the FAANMG stocks and the S&P 500 over the past three years: Microsoft (203.1%), Google (165.9), Netflix (121.5), Apple (117.7), Facebook (116.3), Amazon (102.9), and S&P 500 (72.2).

The picture isn’t as rosy ytd, with only three of the six FAANMG members outperforming the S&P 500: Google (69.6%), Microsoft (45.9), Netflix (23.4), S&P 500 (21.8), Facebook (15.6), Apple (12.5), and Amazon (4.6).

(2) *Why the worry?* Amazon’s shares have been under pressure for the past year, perhaps because the company faces very tough comparisons now that Covid-19 cases have diminished and consumers have grown comfortable leaving their homes, an October 27 *Barron’s* [article](#) suggested. Most recently, Q2 revenues rose 27% y/y but missed Wall Street’s expectations. Investors may be in a wait-and-see mode—waiting to see whether supply-chain problems and product shortages hurt the company’s results and watching to see the actions of the company’s first new CEO after founder Jeff Bezos recently stepped down.

Fortunately, Amazon stands to benefit from its market-leading cloud-hosting business. Also, it may gain advertising dollars if advertisers flock to Amazon from other apps now that Apple requires apps to ask users whether they want to be tracked—making it harder for

advertisers to target ads and get data. Analysts have been trimming their quarterly and full-year estimates for Amazon, perhaps setting the shares up to rally when earnings are announced today. The consensus earnings forecast for Q3 is \$8.90 a share, down from \$12.89 three months ago.

Facebook cited Apple's new advertising rules when explaining why its Q3 revenue was lower than Wall Street analysts expected. The company has also suffered reputational blows recently, as a whistle blower produced internal Facebook documents and testified before legislators that the company knows that its products are harmful to certain populations and has failed to, or can't, fix the problem.

Investors are also waiting to hear how much supply-chain disruptions are affecting the production of Apple's products.

The good news is that the forward P/E multiples for Facebook, Amazon, and Apple have declined this year, helping the FAANMG group's collective forward P/E to drop to a more reasonable 35.8 from 44.7 at its peak in 2020 ([Fig. 6](#) and [Fig. 7](#)).

**Disruptive Technologies: The Search for a Better Battery.** Roughly 30,000 people—government representatives, negotiators, scientists, businesspeople, and activists—are heading to Glasgow to attend COP26 in an effort to get countries around the globe to agree to net zero emissions by 2050. US President Joe Biden will attend. China's President Xi Jinping won't. The skeptic in us wonders how many attendees are flying in on private jets and how many plastic cups and cutlery will be used during the two-week event that starts on Sunday.

The world's ability to replace CO<sub>2</sub>-producing fuels with renewable energy sources has taken a reputational hit in recent months. Less wind power generation and limited natural gas supplies partially explain why the UK faced a recent spike in electricity prices. It quickly became clear that even industrial batteries that can generate enough power to keep a town's lights on can only do so for a matter of hours—not days.

Still, improvements in battery technology are important. Stronger batteries might not save the world, but they can extend the range on electric vehicles (EVs) and make consumers more comfortable ditching their gasoline-powered cars. Companies are also working on batteries that can keep a town's lights on for one to four days. So I asked Jackie to recap some of the recent developments in battery technology:

(1) *Tesla brainchild gets developed.* On Battery Day in 2020, Tesla introduced the 4680, a new battery that CEO Elon Musk promised would offer six times the power of Tesla's previous cells and five times the energy capacity. The battery was expected to increase a car's range by 16% and reduce its fuel cost per kWh by 14%, a September 22, 2020 *Electrek* [article](#) reported at the time of the announcement. The batteries are also expected to charge faster.

Panasonic announced this week that it has mostly solved the technology challenges of manufacturing the 4680 battery and is moving ahead with plans to commercialize it, an October 25 *WSJ* [article](#) reported. Panasonic plans to start test production in Japan by March 2022, and Tesla has said it expects vehicles with the 4680 batteries to be delivered next year.

We've always thought that range would be a key determinant of winners and losers in the EV space. Tesla vehicles have offered the longest battery range in their price bracket; but with many new competitors entering the auto market over the next year or two, Tesla's new battery should help it retain its advantage.

(2) *Really big batteries.* Honeywell is introducing a utility-scale battery that it says can replace lithium-ion batteries and last for up to 12 hours. While the battery would cost more upfront, it would last more than 20 years, which brings down its overall cost of ownership. And it doesn't use any rare earth materials, an October 26 [article](#) in *Energy Storage* reported.

While few details are available, Honeywell says its "flow battery" uses a non-flammable electrolyte that converts chemical energy to electricity to store for later use. The technology is being tested by Duke Energy next year. Honeywell claims that when the battery is used in conjunction with renewable energy sources, it can be a cost-effective alternative to coal-fired plants.

Form Energy is also developing an interesting utility-scale, static battery with solid electrolytes. The battery "can store and dispatch energy for up to 100 hours at a cost which is competitive with existing thermal power plants and could be up to 10 times cheaper than lithium-ion." The battery turns iron into rust as it's discharged and rust back to iron as it's charged. All that's emitted is oxygen, a July 21 [article](#) in *Energy Storage* reported.

Another utility-scale battery alternative that can run from four to 12 hours has been developed by ESS. "The ESS battery technology is a stack of carbon plates that has salt

water with iron flowing through each layer. Iron comes out of the salt water solution and sticks to one side of the plates. When the polarity of the plates is changed, the iron dissolves back into the water solution,” an October 11 CNBC [article](#) explained. By switching the flow of ions, electricity can be moved onto and off of the grid. Bill Gates’ clean energy investment firm has invested in the company, which went public via merger with a SPAC (special purpose acquisition company) earlier this month.

(3) *Batteries on the high seas.* The International Maritime Organization set a 2050 deadline for shipping companies to cut their CO2 emissions, but figuring out how to do so has proved difficult. FleetZero believes the answer is batteries. The company, which started in July, has designs to build electric batteries in standard 20-foot shipping containers. When a ship comes into port, the container holding the drained batteries would be swapped out for a new container with fully charged batteries, the company’s [website](#) explains.

FleetZero plans to use smaller cargo ships that carry 2,000 containers instead of using the giant cargo ships that can hold 20,000 containers. Smaller ships would require fewer batteries. They would be able to access a larger number of ports than the large cargo ships that require deep ports. Smaller ships are also less expensive to manufacture and would generate cash flow and profit faster. FleetZero is building its first battery prototype in Alabama and plans to convert a small diesel ship to use it by the end of next year, an October 26 CNBC [article](#) reported.

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## Calendars

**US: Thurs:** Real GDP & GDP Price Index 2.7%/5.5%, Core PCE 4.5%, Initial Jobless Claims 290k, Kansas City Fed Composite Index, Pending Home Sales 0.5%, Natural Gas Storage. **Fri:** Personal Income & Consumption -0.2%/0.5%, Core PCE 0.2%/m/m3.7%/y/y, Consumer Sentiment Index 71.4, Employment Cost Index 0.9%, Chicago PMI 63.5, Baker-Hughes Rig Count. (Bloomberg estimates)

**Global: Thurs:** Eurozone Business & Consumer Survey 116.9, Germany Unemployment Change & Unemployment Rate -20k/5.4%, Germany CPI 0.5%/M/M/4.4%/y/y, Italy Consumer & Business Confidence 118.4/112.2, Japan Industrial Production -3.2%, Japan Unemployment Rate 2.8%, Japan Core CPI 0.3% y/y, Australia Retail Sales 0.2%, ECB Interest Rate Decision, BOJ Press Conference, Balz. **Fri:** Eurozone GDP, Eurozone Headline & Core CPI 3.7%/1.9% y/y, Germany GDP 2.2%q/q/2.4%/y/y, Germany Retail

Sales 1.5%*m/m*/1.9%*y/y*, France GDP 2.1%, France Consumer Spending 0.3%, France CPI, Italy GDP 2.0%*q/q*/3.0%*y/y*, Italy CPI 0.4%*m/m*/2.6%*y/y*, UK Nationwide HPI 0.4%*m/m*/9.3%*y/y*, Canada GDP 0.7%*m/m*, Japan Housing Starts 7.5%. (Bloomberg estimates)

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## Strategy Indicators

**Stock Market Sentiment Indicators** ([link](#)): The Bull/Bear Ratio (BBR) climbed to 2.05 this week after falling from 1.85 to 1.81 last week, moving above 2.00 for the first time since the final week of September. It was as high as 4.00 in mid-July—which was the highest since late January 2018. Bullish sentiment increased for the third week this week to 48.9%, after falling 12.2ppts (to 40.4% from 52.6%) the prior four weeks—which was its lowest percentage since early April 2020. The corrections count fell for the third week to 27.3% this week, after climbing by 10.8 ppts (to 37.1 from 26.3) the prior four weeks to its highest percentage since early March 2020. Bearish sentiment was little changed at 23.8% this week after moving up the prior three weeks from 22.1% to 23.9% (the highest since mid-May 2020). The AAI Ratio increased last week for the second week, climbing from 40.9% to 62.8%—the highest since the end of June. Bullish sentiment rose from 25.5% to 46.9% over the two-week period, while bearish sentiment fell from 36.8% to 27.8%.

**S&P 500 Earnings, Revenues, Valuation & Margins** ([link](#)): The S&P 500's forward profit margin remained steady last week at a record high of 13.2%. Since the end of April, it has exceeded its prior record high of 12.4% in September 2018. It's now up 2.9ppts from 10.3% during April 2020, which was the lowest level since August 2013. Forward revenues and earnings per share both rose w/w. They've both been making new record highs since the beginning of March and for the first time since February 2020. Since the Q2-2021 earnings season came in way better than expected, analysts have been playing catch-up with their lowball estimates from the Covid-19 shutdown period. Prior to this catch-up period, consensus S&P 500 forecasts had been falling at rates paralleling the declines during the 2008-09 financial crisis. Forward revenues growth was steady w/w at 8.0%, up from a 10-month low of 7.9% in early October. That's down from a record high of 9.6% growth at the end of May and should continue to move lower due to base effects. Still, that's up from 0.2% forward revenues growth during April 2020, which was the lowest reading since June 2009. Forward earnings growth dropped 0.3ppt to a 14-month low of 12.8%, and should also continue to move lower due to base effects. That's down from its 23.9% reading at the end of April, which was its highest since June 2010, and up substantially from its record low



of -5.6% at the end of April 2020. On a positive note, analysts have been raising their forecasts this year for 2021 and 2022 revenues and earnings growth and the profit margin. They expect revenues to rise 15.1% in 2021 (up 0.2ppt w/w) and 6.9% (steady w/w) in 2022 compared to the 2.1% decline reported in 2020. They expect earnings gains of 47.6% in 2021 (up 1.0ppt w/w) and 8.8% in 2022 (down 0.5ppt w/w) compared to a 13.4% decline in 2020. Analysts expect the profit margin to rise 2.9ppts y/y in 2021 to 13.0% (up 0.1ppt w/w) from 10.1% in 2020 and to improve 0.2ppt y/y to 13.2% in 2022 (unchanged w/w). The S&P 500's weekly reading of its forward P/E rose 0.7pt w/w to 21.1 from a 17-month low of 20.4. That compares to 23.1 in early September 2020, which was the highest level since July 2000 and up from a 77-month low of 14.0 in March 2020. The S&P 500 weekly price-to-sales ratio surged 0.11pt to 2.80 from a four-month low of 2.69. That compares to a record high of 2.81 at the beginning of September and a 49-month low of 1.65 in March 2020.

**S&P 500 Sectors Earnings, Revenues, Valuation & Margins ([link](#)):** Last week saw consensus forward revenues rise for nine of 11 S&P 500 sectors. Consumer Staples had both measures decline w/w. Seven sectors are at or near record highs in their forward revenues, earnings, and profit margin: Communication Services, Consumer Discretionary, Consumer Staples, Health Care, Industrials, Information Technology, and Materials. Energy still has all measures below record highs. Financials, Real Estate, and Utilities have forward earnings at or near record highs, but their forward revenues and margins are lagging. Only three sectors posted a higher profit margin y/y in 2020: Consumer Staples, Tech, and Utilities. For 2021, a y/y improvement is expected for all but Utilities. Four sectors are expected to see margins decline y/y in 2022: Financials, Health Care, Materials, and Real Estate. The forward profit margin was at record highs during 2018 for 8/11 sectors, all but Energy, Health Care, and Real Estate. Currently, three sectors are at record highs. Here's how they rank based on their current forward profit margin forecasts along with their record highs: Information Technology (24.7%, down from its 24.9% record high five weeks earlier), Financials (19.1, down from its 19.8 record high in early August), Communication Services (16.9, down from its 17.0 record high several weeks earlier), Real Estate (16.3, down from its 19.2 record high in mid-2016), Utilities (14.6, down from its 14.8 record high in early May), Materials (13.4, record high this week), S&P 500 (13.2, new record high this week), Health Care (11.1, down from its record high of 11.2 in April 2018), Industrials (10.1, down from its record high of 10.5% in mid-December), Consumer Staples (7.6, down from its 7.7 record high in early June), Consumer Discretionary (8.0, down from its 8.3 record high in mid-2018), and Energy (8.5, down from a record high 11.2 in mid-2007).

**S&P 500 Sectors Forward Revenues and Earnings Recovery from Covid-19 Trough ([link](#)):** The S&P 500's forward revenues and earnings as well as its implied forward profit

margin bottomed at cyclical lows on May 28, 2020 after 14 weeks of Covid-19-related declines. Forward revenues and earnings have risen 19.2% and 53.9%, respectively, since then to new record highs. The forward profit margin has risen 3.1ppts to 13.2%, exceeding its prior record high of 12.4% in late 2018. During the latest week, five of the 11 sectors posted gains or remained steady at new highs in either their forward revenues, earnings, or profit margin. Here's how the S&P 500 and its 11 sectors rank by their changes in forward revenues and forward earnings since May 28, 2020: Energy (forward revenues up 30.9%, forward earnings up 1,846.4%), Materials (28.9, 95.7), Information Technology (26.2, 43.6), Industrials (23.9, 70.9), Communication Services (23.1, 55.9), S&P 500 (19.2, 53.9), Financials (18.3, 67.5), Health Care (15.0, 27.1), Consumer Discretionary (14.3, 95.7), Consumer Staples (11.6, 19.0), Real Estate (10.1, 26.4), and Utilities (0.6, 5.5).

**S&P 500 Q3 Earnings Season Monitor** ([link](#)): With nearly 40% of S&P 500 companies finished reporting revenues and earnings for Q3-2021, revenues are beating the consensus forecast by a well-above-trend 2.3%, and earnings have exceeded estimates by 12.8%. At the same point during the Q2 season, revenues were a higher 4.6% above forecast and earnings beat by a greater 18.5%. For the 192 companies that have reported Q3 earnings through mid-day Wednesday, the aggregate y/y revenue and earnings growth rates and the percentage of companies reporting a positive revenue and earnings surprise have slowed considerably from their Q2 measures. The Q3 reporters collectively have a y/y revenue gain of 15.1% and an earnings gain of 40.6%. That compares to y/y growth of 22.4% for revenues and 111.7% for earnings at the same point during Q2. Just over 83% of the Q3 reporters so far has reported a positive earnings surprise, and 79% has beaten revenues forecasts. Fewer companies have reported positive y/y earnings growth in Q3 (83%) than positive y/y revenue growth (90). These figures will change markedly as more Q3-2021 results are reported in the coming weeks. With the US economy largely re-opened compared to a year earlier, we expect the y/y growth rates to ease in Q3 compared to Q2. The revenue and earnings surprises are expected to moderate as well due to missed deliveries and higher costs.

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## US Economic Indicators

**Durable Goods Orders & Shipments** ([link](#)): Both core capital goods orders and shipments continued to set new record highs yet again in September. Nondefense capital goods orders ex aircraft (a proxy for future business investment) has increased every month but one since bottoming last April, climbing 0.8% in September and 29.8% over the 17-month

period. Core capital goods shipments (used in calculating GDP) has also climbed every month but one since last April's bottom, jumping 1.4% in September and 27.8% over the period. Orders for total durable goods dipped 0.4% last month, after rebounding 5.9% during the four months through August, as declines in both autos and aircraft pushed total durable goods orders lower last month. Excluding transportation, durable goods orders has increased 16 of the past 17 months, up 0.4% in September and 33.1% since bottoming last April, to a new record high. Orders for machinery (1.1%), fabricated metals (0.7), and primary metals (0.6) all moved higher in September—machinery and primary metals orders to new record highs. Orders for electrical equipment (-0.5) held close to August's record high. Looking ahead, the IHS Markit flash estimate for October's M-PMI (to 59.2 from 60.7) showed manufacturing activity was the slowest since March—still a reading that “was among the strongest on record and sharp overall,” according to the report.

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