MORNING BRIEFING
June 15, 2023

Hawkish Pause, Rotation & Tech

Check out the accompanying chart collection.

Executive Summary: The FOMC voted not to tighten further for now, as we had expected, and raised its real GDP projection for this year to 1.0%—suggesting a soft landing. … June has seen a dramatic rotation in stock market leadership: Tech has underperformed the S&P 500 this month to date after outperforming since October; the mtd performance winners are Consumer Discretionary and Materials, previous underperformers. Jackie unpacks why. … Also: A look at what's been driving up valuations in various Tech sector industries. … And: Will genetically altering food to make it more delicious have unforeseen consequences?

The Fed: A Hawkish Skip. In Sunday's *QuickTakes* we wrote: "On Wednesday, Fed Chair Jerome Powell will update us on the committee's latest views. Odds are the FOMC will skip another rate hike, but hint that rate hiking might not be over." Sure enough, the FOMC skipped, and the committee's *statement* noted: "Holding the target range steady at this meeting allows the Committee to assess additional information and its implications for monetary policy."

The FOMC's latest *Summary of Economic Projections* (SEP) shows that committee members now see the federal funds rate rising to 5.6%, up from the 5.1% projected in the December and March SEPs. That implies two more 25bps rate hikes before the end of this year. No one on the committee expects a rate cut this year. In his press conference today, Powell said that the core inflation rate remains sticky and too high. He wants to see more progress in getting it down. The SEP shows the core PCED at 3.9% this year, up from the March SEP projection of 3.6%. However, the committee still expects this inflation rate to fall to 2.2% in 2025.

At the May meeting, the Fed's staff projected a mild recession. However, the committee actually raised its June projection of economic growth, now expecting real GDP to be up 1.0% this year versus the March estimate of 0.4%. That's a soft landing, in our view, and is consistent with our forecast.

Initially, the S&P 500 swooned briefly yesterday on the Fed's hawkish skip. However, the next FOMC meeting isn't until July 25-26. We expect another skip at that meeting, as the lagged impact of the Fed's tightening should continue to cool the labor market and inflation. We are still projecting 4600 on the S&P 500 by the end of this year.

Strategy: Broader Is Better. As investors have gained more confidence in the economy, the nature of the stock market's rally has changed dramatically, with cyclical sectors and industries appreciating and leaving the previous leaders—all things tech and AI-related—in the dust. The rotation began around the start of this month, just as the May employment report confirmed that jobs remained plentiful and that a recession was far from imminent.

Consider the performance derby for the S&P 500 and its 11 sectors mtd through Tuesday's close: Consumer Discretionary (8.9%), Materials (8.2), Industrials (7.7), Energy (5.5), Financials (4.9), S&P 500 (4.5), Information Technology (4.0), Real Estate (3.5), Health Care (2.9), Communication Services (2.3), Utilities (1.9), and Consumer Staples (1.2) (*Fig. 1*).

That best-to-worst performance order is almost the polar opposite of the sectors' rankings measured from the S&P 500's October 12 bottom through Tuesday's close, when anything related to technology vastly outperformed the rest of the stock market: Information Technology (47.5%), Communication Services (33.9), Industrials (22.6), S&P 500 (22.1), Materials (18.1), Consumer Discretionary (18.0), Financials (9.8), Real Estate (9.6), Consumer Staples (8.7), Health Care (7.7), Utilities (7.0), and Energy (0.3).

In terms of performance by market capitalization, large-cap stocks have been the winners measured since mid-October. But June's stock market has been rewarding small- and mid-capitalization stocks. This is evident from looking at the S&P 500's market-cap weighted and equal weighted performances for the two time periods. From the S&P 500's low on October 12 through Tuesday's close, the market-cap weighted S&P 500 index rose 22.1%, while the equal weighted S&P 500 index gained only 14.9%. But since the start of June, the market-cap weighted index has underperformed, advancing 4.5%, while the equal weighted index has gained 5.6% (*Fig. 2*).

As you'd expect, the S&P 500 outpaced the S&P MidCap 400 and the S&P SmallCap 600 from the market's October low through Tuesday's close (22.1% versus 14.6% and 11.6%), but the S&P 500 underperformed the indexes with smaller stocks since the start of June through Tuesday's close (4.5% versus 7.3% and 7.9%) (*Fig. 3*).

Let's take a look at the worries that have faded away over the last month, restoring investors' confidence in the business prospects for smaller companies and helping to propel this major rotation in the S&P 500's performance:

(1) *Recession fears abated.* The stock market has been benefiting from a run of economic data strong enough to reassure investors that the economy is growing but not so strong as to worry them that the growth might be throttled by aggressive Federal Reserve tightening. Most recently, the May employment report came in far stronger than expected, with 339,000 jobs added in the month (*Fig. 4*).

(2) *Inflation slowly decelerates.* While inflation data remain above the Fed's target, they have been slowly falling from elevated levels. May's CPI jumped 4.0% y/y but only 0.1% m/m (*Fig. 5*). Likewise, producer prices rose 1.1% y/y in May according to yesterday's release, but they fell 0.3% m/m.

(3) *No Fed rate cuts in '23.* Just as the likelihood of a recession this year has faded away, so too have the odds that the Fed will cut interest rates further by year-end. On May 4, the federal funds rate was 5.13%, while the two-year Treasury yield hit a low of 3.75%, reflecting investors' belief that the economy was headed for a recession and the Fed would cut interest rates by the end of the year. Since then, the two-year Treasury yield has popped up to 4.67%, and the prospect of rate cuts by year-end is largely off the table (*Fig. 6*).

Perhaps the only thing to worry about is that nothing much is being worried about—for now anyway.

Technology: A Look at Valuations. The S&P 500 Information Technology sector's market-leading advance since October 12 has lifted its valuation disproportionately relative to the other S&P 500 sectors'. Some of Tech's outsized advance is rooted in fundamental improvements. Customers are clamoring for updated software that uses artificial intelligence (AI). These programs are expected to increase demand for cloud computing services handled by servers filled with GPU semiconductors. We laid out what some of the biggest bulls in the industry are saying about the benefits of AI in last Thursday's *Morning Briefing*. Bears, however, contend that AI-related stocks have risen more than the fundamentals justify.

The forward P/E of the S&P 500 Information Technology sector has risen to 26.5 as of June 8, up from 20.7 a year earlier. That's the largest earnings multiple increase that any S&P 500 sector has experienced over the past year. Here's the performance derby for the S&P 500 sectors' current forward P/E and where it stood last year: Real Estate (34.4, 37.9), Information Technology (25.6, 20.7), Consumer Discretionary (24.9, 23.3), Consumer Staples (19.3, 20.2), S&P 500 (18.5, 17.3), Industrials (18.0, 17.2), Utilities (17.2, 20.5), Communications Services (16.9, 15.7), Materials (16.7, 14.4), Health Care (16.7, 15.9), Financials (13.0, 12.3), and Energy (10.5, 10.9) (*Table 1*). (FYI: The forward P/E is the multiple based on forward earnings, which is the average of analysts' consensus operating earnings-per-share estimates for the current year and upcoming one.)

Four of the 15 industries with the highest forward P/Es in the S&P 500 reside in the Information Technology sector: Systems Software, Application Software, Technology, Hardware, Storage & Peripherals, and Semiconductors. Let's take a look at what's been driving their multiples ever higher:

(1) *Serving returns.* The S&P 500 Systems Software industry has the highest forward earnings multiple of any industry in the Technology sector. It also has the fourth highest forward P/E of all the industries that we track in the S&P 500. The industry's forward P/E is 28.9, up from 24.9 a year ago. Only the Personal Care Products, Diversified Support Services, and Water Utilities industries have higher forward P/Es, at 33.7, 32.3, and 29.7, respectively.

Investors have grown excited about the demand for cloud services that System Software members Microsoft and Oracle provide to customers. AI services require lots of computing power sourced from the cloud. Oracle *reported* earlier this week that cloud-related revenue grew 54% y/y to $4.4 billion in the fiscal Q4 ending May 31, far above its total revenue growth of 18%. Microsoft also offers cloud computing services to customers that should benefit from AI uptake. The company is also an investor in ChatGPT and is infusing many of its software services with AI capabilities.

AI excitement has boosted Microsoft shares 39.4% ytd through Tuesday's close and Oracle's shares by 42.8%. Google and Amazon shares are in other industries, but they too offer cloud services, and their shares have climbed 40.2% and 50.8% ytd as well.

(2) *Pricey software*. The Application Software industry's forward P/E of 27.8 might be lofty relative to others in the S&P 500, but it's lower than 31.4, where it stood a year ago. The industry had forward earnings multiples of 35 to 45 over the past decade (*Fig. 7*).

Some of the well-known stocks in this industry include Salesforce, which has enjoyed a 57.6% stock price increase ytd through Tuesday's close, and Adobe, which has jumped 42.3% ytd. Both are rapidly adding AI capabilities to their software offerings. Some of the top performers are benefiting from the bottoming of the semiconductor cycle. Shares of Cadence Design Systems, which makes hardware and software used in semiconductor design, have climbed 48.8% ytd, and Synopsys shares have advanced 40.9% ytd. Synopsys also creates software that allows engineers to design semiconductors.

It's notable that the S&P 500 Application Software stock price index is still 25.3% off the high it hit in November 2021 (*Fig. 8*). The industry's margins have improved nicely over the past three years, helping it to post solid double-digit earnings increases: 12.7% in 2022, an expected 20.9% this year, and 15.1% in 2024 (*Fig. 9* and *Fig. 10*).

(3) *Apple leads the way.* Apple hit a new 52-week high earlier this week, for the first time since December 2021. The company, with its 27.8 multiple on forecasted earnings of $6.60 per share in its fiscal year ending September 2024 has helped make the S&P 500 Technology Hardware, Storage & Peripherals industry one of the priciest in the S&P 500. The industry's forward P/E of 26.7 is the seventh highest in the S&P 500, and it has expanded from 21.1 last year (*Fig. 11*).

The multiple expansion has occurred even though net earnings revisions for the industry have been decidedly negative over the past year (*Fig. 12*). The industry's earnings are forecast to drop 7.6% this year and return to 10.6% growth in 2024 (*Fig. 13*). Apple and others who make computers and related items have had a tough year, as consumers who stocked up on new tech equipment during the pandemic haven't had a reason to buy new merchandise this year. But computers and iPhones wear out and grow obsolete; so at some point, the company's fortunes will change as a new upgrade cycle arrives.

(4) *Semis shine.* Always looking ahead, investors have sent shares of semiconductor companies soaring just as sales in the industry appear to be turning up after an 11-month-long decline. The prospect of increased demand in addition to the excitement surrounding AI and its voracious demand for chips have pushed the S&P 500 Semiconductor industry stock price index up 73.5% ytd to a new record high (*Fig. 14*). The industry's forward P/E has climbed to 26.0, up from 15.6 a year ago, higher than all but three other Tech sector industries and 14 other industries in the S&P 500 (*Fig. 15*).

Worldwide semiconductor sales have fallen 22.7% from their May 2022 peak to $39.9 billion, based on the three-month moving average (*Fig. 16*). But month-over-month sales were positive in April for the second consecutive month, raising hopes that sales have bottomed and a new semi cycle has begun. The World Semiconductor Trade Statistics organization forecasts record industry sales of $576.0 billion next year. That would mark a rebound from projected sales of $515.1 billion this year and an improvement over the prior peak of $574.1 billion in 2022, a June 6 Semiconductor Industry Association *press release* states.

There's also excitement over the prospect of soaring demand for certain semiconductor chips as companies and individuals adopt AI, which requires massive computing power. Shares of Nvidia, which makes GPU chips and software used in AI servers, have rallied 180.7% ytd through Tuesday's close. Shares of its competitor, Advanced Micro Devices, aren't far behind, climbing 92.3% ytd.

Nvidia may have been first to focus on AI, but AMD announced on Tuesday that it is targeting the market too, with a "superchip" offering that combines a central processor, GPU, and memory in one package. It's also offering a GPU-based "accelerator" for AI uses in data centers, a June 14 *WSJ* *article* reported. Nvidia will retain its AI dominance for a while longer because AMD's AI chip production isn't expected to begin until Q4, pushing shipments into next year.

Still, the AI opportunity will be measured in years, not quarters. The market for AI chips in data centers is worth about $30 billion this year and "over the next three or four years it's going to grow over 50% every year," forecasted AMD CEO Lisa Su, according to a June 14 Yahoo Finance *article*. Analysts expect the S&P 500 Semiconductor industry's earnings to grow 34.4% in 2024 after declining 16.9% this year and falling 1.7% in 2022 (*Fig. 17*).

Disruptive Technologies: CRISPR Comes to Dinner. Foods that are genetically altered using CRISPR gene editing technology are getting US regulatory approval and will likely become more prevalent in grocery stores soon. CRISPR altered foods aren't the same as genetically modified foods (GMOs). CRISPR edits an organism's existing genes, turning them on and off, and speeds up the process traditionally used when breeding crops or animals to have specific traits. Genetically modified foods have had the genetic material of other organisms inserted into the target food's genes.

US regulators require genetically modified foods to have specific labeling. Right now, CRISPR edited foods aren't required to include any special labeling; but some wonder whether more regulation is needed. The "speed and power of the modifications have some scientists concerned that CRISPR may have the potential to be a Pandora's Box of unintended consequences let loose on the fields just when the world can poorly withstand shocks to the food system. CRISPR is here to stay—but are we ready to manage the risks?" asks a February 27 *article* in *Fortune*.

The article speculates that the technology could bring unforeseen ripple effects, e.g., a new CRISPR crop might trigger new allergies or a crop designed to foil an insect might unexpectedly cause an ecosystem to collapse. And, the author notes, once a modified plant is introduced into an ecosystem, it can be difficult to remove it from the environment.

Nonetheless, CRISPR modified foods are heading to our tables. Here are some recent foods that have been approved by the Food & Drug Administration (FDA) for sale in the US after undergoing CRISPR editing:

(1) *CRISPR sausages.* The FDA has approved the sale of German sausages made from pigs that had their genes edited by the scientists at Washington State University using CRISPR gene editing tools. "The FDA authorization is investigational, and limited to these particular pigs, but shows that gene-editing livestock to quickly produce desirable traits for improved food production is a viable strategy for helping feed the planet's growing population," a May 1 *press release* from Washington State University stated.

The pigs' genes were edited so that they were sterile and could be implanted with the sperm from other male pigs that had desired traits. Through this accelerated version of selective breeding, the scientists hope to improve the pigs' health and resilience. The FDA has not reviewed the safety of the meat from the pigs' babies.

(2) *CRISPR salads.* Pairwise has taken the bitter out of mustard greens using CRISPR technology to turn off the gene responsible for their strong taste. The company hopes consumers will opt for these better tasting mustard greens, which are known for their high vitamin and mineral content, a May 16 *Wired* *article* explained. The company hopes the modified mustard greens will be available this summer in grocery stores in the Pacific Northwest. Up next: Pairwise aims to improve fruits. It's using CRISPR to develop seedless blackberries and pitless cherries.

(3) *CRISPR tomatoes.* US companies are following the success of Sanatech Seed, a Tokyo-based firm, and the University of Tsukuba, which together developed a CRISPR edited tomato that contains high amounts of y-aminobutyric acid, or GABA. GABA is believed to relieve stress and lower blood pressure. The partners used CRISPR to reduce the production of enzymes that naturally break down GABA. These tomatoes are already on Japan's grocery store shelves.

Calendars

US: Thurs: Retail Sales -0.1%m/m/2.2%y/y; Total & Manufacturing Industrial Production 0.1%/-0.1%; Capacity Utilization 79.7%; Business Inventories 0.2%; NY Empire State Manufacturing Index -16.0; Philadelphia Fed Manufacturing Index -13.5; Import Price Index -0.6%; Initial & Continuous Jobless Claims 250k/1.761m; Natural Gas Storage. **Fri:** University of Michigan Consumer Sentiment Headline, Current Conditions and Expectations 60.0/61.6/56.5; University of Michigan One-Year & Five-Year Inflation Expectations 4.4%/3.1%; Baker Hughes Rig Count; Waller; Bullard. (Bloomberg estimates)

Global: Thurs: Eurozone CPI -0.1%m/m/5.1%y/y; Eurozone Trade Balance €21.5b; Eurogroup Meetings; ECB Interest Rate Decision 4.00%; BOJ Interest Rate Decision -0.10%; Lagarde; Nagel. **Fri:** Eurozone Headline & Core CPI 0.0%m/m/6.1%y/y & 0.2%m/m/5.3%y/y; Core UK Inflation Expectations; ECOFIN Meetings; Nagel. (Bloomberg estimates)

Strategy Indicators

Stock Market Sentiment Indicators (*link*): The *Bull-Bear Ratio* rose for the fourth week to 2.59 this week, the highest since the week of November 23, 2021. *Bullish* sentiment rose for the fifth week by 8.8ppts (to 53.4 from 44.6) to its highest percentage since November 2021. *Bearish* sentiment edged down for the fourth week to 20.6% this week—the fewest bears since early January 2022. The correction count moved down for the fifth week to 26.0%, an eight-week low—remaining well below its late September 2022 peak of 40.3%. Turning to the *AAII Sentiment Survey* (as of June 8), optimism shot up and is above average for the first time since February 2023, while bearish sentiment sank to its lowest level since November 11, 2021. Neutral sentiment also moved lower. The *percentage expecting stock prices to rise* over the next six months climbed for the third week by 21.6ppts (to 44.5 from 22.9), with 15.5ppts occurring during the current week! The *percentage expecting stocks to fall* over the next six months fell for the second week by 15.4ppts (to 24.3% from 39.7%), with 12.5ppts of the decline occurring during the current week. The *percentage expecting stock prices will stay essentially unchanged* over the next six months decreased 3.0ppts to 31.2%—neutral sentiment is below its historical average of 31.5% for the fourth time out of the past 23 weeks.

S&P 500 Earnings, Revenues, Valuation & Margins (*link*): The S&P 500's forward profit margin was steady w/w at 12.5% during the June 8 week, up from a 24-month low of 12.3% during the March 30 week. That's down 0.9pt from its record high of 13.4% achieved intermittently in 2022 from March to June. It's now 2.2pts above its seven-year low of 10.3% during April 2020. Forward revenues edged down less than 0.1% w/w from its record high during the June 1 week. Forward earnings also edged down less than 0.1% w/w, but to 3.1% below its record high during the June 16, 2022 week. Both had been steadily making new highs from the beginning of March 2021 to mid-June; prior to that, they peaked just before Covid-19 in February 2020. The consensus expectations for forward revenues growth was steady w/w at a seven-month high of 3.4% and is now up 1.1pts from its 33-month low of 2.3% during the February 23 week. That's down from a record high of 9.6% growth at the end of May 2021 and compares to 0.2% forward revenues growth during April 2020, which was the lowest reading since June 2009. Forward earnings growth was unchanged w/w at an eight-month high of 6.9% and is now 3.4pts above its 31-month low of 3.5% in mid-February. That's down from its 23.9% reading at the end of April 2021, which was its highest since June 2010 and up substantially from its record low of -5.6% at the end of April 2020. Analysts expect revenues to rise 1.9% in 2023 (unchanged w/w) and 4.6% in 2024 (unchanged w/w) compared to a revenues gain of 12.2% in 2022. They expect earnings growth of 0.3% in 2023 (down 0.1ppt w/w) and an 11.4% rise in 2024 (unchanged w/w) compared to an earnings gain of 7.2% in 2022. Analysts expect the profit margin to drop 0.2ppt y/y to 12.0% in 2023 (unchanged w/w), compared to 12.2% in 2022, and to rise 0.8ppt y/y to 12.8% in 2024 (unchanged w/w). The S&P 500's weekly reading of its forward P/E rose 0.4pt w/w to a 14-month high of 18.5. That's up from a 30-month low of 15.3 in mid-October. It also 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 rose 0.05pt w/w to a nine-month high of 2.31. That's up from a 31-month low of 1.98 in mid-October and down from a four-month high of 2.38 in mid-August; it also compares to a record high of 2.88 at the end of 2021 and a 49-month low of 1.65 in March 2020.

S&P 500 Sectors Earnings, Revenues, Valuation & Margins (*link*): Looking at the 11 S&P 500 sectors, the June 1 week saw consensus forward revenues rise for two sectors and forward earnings rise for three sectors. The forward profit margin rose w/w for five sectors. Two sectors have forward revenues at a record high this week: Communication Services and Health Care. Among the remaining seven sectors, only Energy and Financials have forward revenues more than 5.0% below their post-pandemic highs. No sectors have forward earnings at a record high this week, but these three remain less than 0.3% below their recent records: Consumer Staples, Industrials, and Utilities. Among the remaining eight sectors, just two have forward earnings down more than 10.0% from their post-pandemic highs: Energy and Materials. Since mid-August, all but the Industrials sector have seen forward profit margins retreat from their record highs, but eight of the 11 sectors are showing early signs of recovering from their lows in early 2023. Industrials' forward profit margin is at a record high again this week, but Consumer Staples and Health Care are at record lows. Those of Communication Services, Consumer Discretionary, Financials, Real Estate, and Tech remain close to their post-pandemic highs. Energy and Industrials were the only two sectors to have their profit margins improve y/y for full-year 2022, and these five sectors are expected to see them improve y/y in 2023: Communication Services, Consumer Discretionary, Financials, Industrials, and Utilities. Here's how the sectors rank based on their current forward profit margin forecasts along with their record highs: Information Technology (23.9%, down from its 25.4% record high in June 2022), Financials (18.5, down from its 19.8 record high in August 2021), Real Estate (17.0, down from its 19.2 record high in 2016), Communication Services (15.2, down from its 17.0 record high in October 2021), Utilities (12.9, down from its 14.8 record high in April 2021), S&P 500 (12.5, down from its record high of 13.4 achieved intermittently in 2022 from March to June), Energy (11.3, down from its 12.8 record high in November), Materials (11.1, down from its 13.6 record high in June 2022), Industrials (10.6, new record high this week), Health Care (9.5, down from its 11.5 record high in February 2022), Consumer Discretionary (7.6, down from its 8.3 record high in 2018), and Consumer Staples (6.7, down 0.1pt w/w and down from its 7.7 record high in June 2020).

S&P 500 Sectors & Industries Forward Profit Margin Since March 30 Bottom (*link*): The S&P 500's forward profit margin was unchanged w/w at 12.5% as of the June 8, 2023 week. It's now up 0.2ppts from a two-year low of 12.3% during the March 30 week. Eight of the 11 sectors' margins have improved since then, with the S&P 500's gain paced by five sectors. It's still down 7.2%, or 0.9ppt, from its record-high 13.4% during the June 9, 2022 week, as 10 of the 11 sectors' margins have declined since then, with the S&P 500's drop paced by just three of the 11 sectors. Here's the sector performance since the S&P 500's forward profit margin bottom on March 30: Communication Services (up 6.0% to 15.4%), Consumer Discretionary (up 4.1% to 7.6%), Industrials (up 3.7% to 10.6%), Information Technology (up 3.5% to 24.1%), Real Estate (up 2.1% to 17.0%), S&P 500 (up 1.6% to 12.5%), Financials (up 0.8% to 18.6%), Consumer Staples (up 0.5% to 6.7%), Materials (up 0.4% to 11.1%), Health Care (down 0.7% to 9.5%), Utilities (down 0.8% to 13.0%), and Energy (down 3.5% to 11.3%). These are the best performing industries since the March 30, 2023 bottom: Casinos & Gaming (up 60.7% to 6.2%), Publishing (up 24.8% to 3.0%), Multi-Sector Holdings (up 13.9% to 10.5%), Passenger Airlines (up 13.5% to 6.0%), Commodity Chemicals (up 11.8% to 6.6%), Wireless Telecommunication Services (up 11.6% to 12.8%), Hotels, Resorts & Cruise Lines (up 10.3% to 12.6%), Interactive Media &

Services (up 9.8% to 21.9%), Home Furnishings (up 9.4% to 5.9%), and Semiconductors (up 8.5% to 28.5%).

US Economic Indicators

Producer Price Index (*link*): May's *headline PPI* fell for the third time in four months, pushing the yearly rate down to its lowest reading since December 2020. Final demand fell 0.3% in May and 0.6% during the four months through May. The yearly rate has been in a freefall since peaking at a record-high 11.7% last March, sinking to 1.1% this May. *Core prices*—which excludes food, energy, and trade services—was flat in April, following gains of 0.1%, 0.2%, and 0.3% the prior three months; it started the year with a 0.5% gain. The yearly rate eased to a 27-month low of 2.8%, down from March 2022's record-high of 7.1%. *Final demand goods* fell for the third time in four months, by 1.6% in May and 2.9% over the period—with the yearly rate easing from a record high of 17.6% last June to -2.4% in May—the first negative reading since November 2020 and the steepest since June of that year. *Final demand services* rose 0.2% following a 0.3% gain and a 0.1% loss the prior two months, with the yearly rate hovering between 2.7% and 2.8% the past three months after plummeting from its record high of 9.4% last March. The PPI for *personal consumption* fell 0.4% in May, following a 0.4% gain and a 0.5% loss the prior two months—posting only two gains during the past six months. The yearly rate slowed to a 29-month low of 1.4% from its record high of 10.4% last March. The yearly rate for *personal consumption excluding food & energy* ticked down to 3.2% in May, after ticking up from a two-year low of 3.1% in March to 3.4% in April. During the first five months of this year, it averaged a steady 0.2% monthly gain. Looking at *pipeline prices*, the yearly rate for intermediate goods prices slipped further below zero in May (-6.9% y/y) after dropping below in March for the first time since November 2020 (-1.0); it was at a cyclical high of 26.6% during November 2021. The yearly crude goods rate was in negative territory for the fourth successive month, falling 27.5% y/y in May, the steepest yearly decline since spring 2020; the rate was at a recent peak of 50.3% last June.

Global Economic Indicators

Eurozone Industrial Production (*link*): Headline production, which excludes construction, climbed 1.0% in April after plunging 3.8% in March to its lowest level since October 2021. It remains at a relatively high level . Among the *main industrial groups*, capital goods production accounted for most of April's gain after accounting for most of March's decline—rebounding 14.7% in April from March's 15.2% loss. Energy was also in the plus column in April, rising 1.0% after falling 1.4% in March. Consumer nondurable goods output fell for the fourth time in five months since reaching a record high in November, sliding 3.0% in April and 7.6% over the period. Consumer durable goods production contracted 2.6% in April following a 2.5% gain and a 0.4% loss the prior two months, while intermediate goods output posted declines of 1.0% in both April and March. *Compared to a year ago*, headline production was up 0.2% after falling 1.4% in March. Capital goods (8.3% y/y) production recorded the strongest gain over the 12-month period, followed by consumer nondurable goods (0.6), which was on the weak side. Meanwhile, energy (-7.4) output posted the strongest decline, followed by intermediate (-6.2) and consumer durable goods (-4.6) production. Production data are available for the *top four Eurozone economies* and show only France (0.8) recorded a gain in April, while Germany showed no growth and Spain (-1.8) and Italy (-1.9) were in the red. Over the 12 months through April, production was in the plus column in France (1.4) and Germany (1.3), while below year-ago levels in Spain (-2.1) and Italy (-7.2). In the *overall Eurozone*, Ireland posted the biggest gain both on a monthly (21.5) and yearly (22.5) basis, as the country's statistical office has been reviewing its seasonal adjustment methodology for industrial production.

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, 570-228-9102