MORNING BRIEFING
April 19, 2022

How Will the Fed Stop the Wage-Price Spiral?

Check out the accompanying chart collection.

Executive Summary: Can the Fed pull it off? Can it surgically subdue inflation without inflicting much collateral damage on the US economy? The now unanimously hawkish FOMC intends to try. Their current game plan seems to anticipate five increases of 50bps each, possibly at the next five FOMC meetings. … Meanwhile, we are on the lookout for signs of peaks in the latest inflation indicators; used car and truck prices are the first. … Rent and wages, on the other hand, are spinning upward along with prices in a mutually reinforcing spiral—calling into question the Fed's optimism. … Also: A look at the causation loop between inflation and fiscal policy. ... Movie review: "Super Pumped: The Battle for Uber" (+ + +).

YRI Monday Webcast. Every Monday morning at 11:00 a.m. EST, Dr. Ed holds a live Q&A webcast discussing his themes of the week; replays of yesterday's webcast along with past ones are available *here*. Please join him live every Monday via the link you will be emailed one hour before showtime. Dr. Ed's presentation lasts about 15 minutes with another 15 minutes for Q&A. A replay of Dr. Ed's recent one-hour webcast on "Predicting Inflation" is available *here*.

US Economy I: The Fed's Current Playbook. Fed officials seem to believe that by quickly pushing up the federal funds rate to the "neutral rate," they will be able to engineer a soft landing for the economy. They deem this rate currently to be around 2.50%. They've said they might have to take it up above that rate, say to 3.00%, for a while to rein in inflation before lowering it back to neutral. They seem to believe that by raising interest rates, they can moderate aggregate demand relative to aggregate supply, thus putting downward pressure on prices.

Prior to the Russian invasion of Ukraine, they were counting on supply-chain disruptions to abate, thus boosting aggregate supply. Now they realize that the supply-side of the equation may remain challenged and inflationary longer than they previously expected. That explains why they've turned more hawkish, squawking in unison that they will have to get the federal funds rate up to neutral faster than thought before.

As a result, the financial markets now expect a series of 50bps hikes in the federal funds rate rather than 25bps increases. The current target range for this rate is 0.25%-0.50%.

Five increases of 50bps each would get the range up to 2.75%-3.00%. If the FOMC announced such rate hikes at each of its next five meetings, officials would get to their goal by early November. That rate-hike trajectory would be "data dependent"—of course, as Fed officials constantly remind us—but currently seems plausible. Consider the following recent chronology:

(1) *March 16 SEP.* The FOMC's latest *Summary of Economic Projections* (SEP) shows that the committee's median projection for the federal funds rate this year was raised from 0.9% at the December 14-15 meeting to 1.9% at the March 15-16 meeting. The projection for next year was raised from 1.9% to 2.8%. (See the tables in our FOMC *Summary of Economic Projections*.) The latest SEP was released after the March meeting.

(2) *March 21 Powell.* In an important March 21 speech titled *Restoring Price Stability*, Fed Chair Jerome Powell reiterated that he and his colleagues had pivoted from the goal of attaining full employment (which has been achieved) to bringing down inflation. He said: "The labor market is very strong, and inflation is much too high." He believes that the Fed can raise interest rates to slow demand relative to supply without causing a recession. The goal is "a soft landing, with inflation coming down and unemployment holding steady."

Powell acknowledged that the odds of this happening aren't in the Fed's favor. However, he found "some grounds for optimism" in the three episodes when the Fed raised rates without causing a recession since 1960 (in 1965, 1984, and 1994). Then again, inflation wasn't as troublesome back then as it is now, partly because the Fed was more proactive back then versus reactive as it is now (*Fig. 1*). The Fed is much further behind the inflation curve now than it was during the past three soft landings. Furthermore, nine recessions have followed tightening cycles since 1960. So we wish the Fed lots of luck!

(3) *April 5 Brainard.* In a *speech* on Tuesday, April 5, Fed Governor Lael Brainard—who in the past has tended to side with the FOMC's doves—squawked like a hawk: "It is of paramount importance to get inflation down. Accordingly, the Committee will continue tightening monetary policy methodically through a series of interest rate increases and by starting to reduce the balance sheet at a rapid pace as soon as our May meeting."

She also sounded hawkish about running off the Fed's balance sheet: "Given that the recovery has been considerably stronger and faster than in the previous cycle, I expect the balance sheet to shrink considerably more rapidly than in the previous recovery, with significantly larger caps and a much shorter period to phase in the maximum caps compared with 2017–19. … Currently, inflation is much too high and is subject to upside

risks. The Committee is prepared to take stronger action if indicators of inflation and inflation expectations indicate that such action is warranted."

(4) *April 6 FOMC Minutes.* The very next day after Brainard spoke, the March FOMC *minutes* were released, indicating that the committee "generally agreed" to reducing the Fed's balance sheet by $95 billion per month. A maximum of $60 billion in Treasuries and $35 billion in mortgage-backed securities would be allowed to roll off, phased in over three months and probably starting in May. The minutes also suggested potential rate hikes of 50bps at upcoming meetings. In other words, the March meeting was much more hawkish than the previous one in January.

(5) *April 13 Waller.* In a CNBC *interview* on Wednesday, April 13, Fed Governor Christopher Waller said the economy could handle half-point increases in May and possibly June and July as well. "I don't see any value in trying to shock the markets; we are not in a Volcker kind of moment," he said. "We will do what it takes to get inflation back down, but we can do that in an orderly way without causing a lot of financial market stress." He added, "I think we want to get above neutral certainly by the latter half of the year, and we need to get closer to neutral as soon as possible," Waller said.

The CNBC article reports that Waller said he is confident inflation will start coming down, even though the Fed's powers are limited to control the lagging supply chains associated with the current round of higher prices. "All we can do is kind of push down demand for these products and take some pressure off the prices that people have to pay for these products," Waller said. "We can't produce more wheat, we can't produce more semiconductors, but we can affect the demand for these products in a way that puts downward pressure and takes some pressure off of inflation."

(6) *April 13 Bullard.* James Bullard, president of the St Louis branch of the Fed, has positioned himself as the most hawkish FOMC participant. In an April 13 *FT* *interview*, he said, "There's a bit of a fantasy, I think, in current policy in central banks. Neutral is not putting downward pressure on inflation. It's just ceasing to put upward pressure on inflation." He added, "We have to put downward pressure on the component of inflation that we think is persistent. Getting to neutral isn't going to be enough … because while some of the inflation may moderate naturally," some of it won't.

(7) *April 15 Williams.* New York Fed President John Williams *told* Bloomberg on April 15, "We do need to move policy back to more neutral levels." He voiced confidence in the Fed's ability to engineer a soft landing of the economy and said the Fed's forward-guidance

communications around its policy plans have already tightened credit conditions. “We have seen a dramatic, significant movement in yields and financial conditions over the past several months and that is already positioning policy well to get supply and demand back into balance,” he said. “On the balance sheet, I do expect we will get reductions underway in June if we take a decision in May,” he added.

(8) *Bottom line.* In our judgment, the current consensus view among the FOMC participants is to get the rate to neutral sooner rather than later and then assess what future actions may be needed. In other words, 50bps rate hikes at each of the next five FOMC meetings may be in the Fed’s current game plan (*Fig. 2*). The 2-year Treasury note yield is currently trading around 2.50%, which is consistent with this scenario.

US Economy II: Monitoring the Wage-Price Spiral. How does the current wage-price spiral compare to the one during the Great Inflation of the 1970s? Can the current one be stopped without a recession? Might productivity come to the rescue? Those are just a few of the questions investors have been grappling with since the inflation genie popped out of the bottle about a year ago.

History shows that the inflation genie is hard to stuff back in the bottle without a recession first slimming the scoundrel down (*Fig. 3*). Fed officials hope to achieve a Goldilocks soft landing by raising interest rates to cool off the demand side of the economy just enough so that the supply side of the economy isn’t forced to cut back production and employment. They must also be counting on some improvements in the supply-chain problem.

We think they might succeed. In our scenario, the PCED headline inflation rate peaks during H1-2022 between 6%-7% (*Fig. 4*). Led by consumer durable goods prices, it moderates to 4%-5% during H2-2022. Next year, it falls to 3%-4% as persistently rising rent inflation offsets moderation in other consumer prices. If that all pans out, we expect that Fed officials, led by born-again doves, will raise the Fed’s official inflation target to 3.0%.

Admittedly, other than in used car and truck prices, there are no additional signs of peaks in the latest batch of inflation indicators:

(1) *Commodity prices.* The CRB all commodities and raw industrials spot price indexes soared to fresh record highs last week (*Fig. 5*). Not surprisingly, the latter is highly correlated with the PPI for crude goods excluding food and energy, which has been soaring to new record highs since December 2020 (*Fig. 6*).

(2) *PPI final demand for personal consumption.* During March, the CPI and the PPI for personal consumption soared to 8.5% y/y and 10.1%. The PCED rose 6.4% during February and undoubtedly will show a higher reading for March when it is reported on April 29 (*Fig. 7*).

(3) *Trade services.* At the CPI and PCED level of services pricing, our main concern has been rent, as we discuss below. However, at the PPI level, just as worrisome are trade services, which are defined as markups by retailers and wholesalers. This component rose 17.1% y/y during March (*Fig. 8*). It suggests that these merchants have eliminated all discounts and are able to raise their prices aggressively without any resistance from their customers. The same can be said for transportation & warehousing services, which rose 21.0% during March.

(4) *New York prices.* In April's regional business survey conducted by the Federal Reserve Bank of New York, the prices-paid index rose to a new record high of 86.4, while the prices-received index eased to 49.1 after reaching a record high 56.1 in March (*Fig. 9*).

(5) *Rent.* Not surprisingly, rent inflation is highly correlated with wage inflation (*Fig. 10*). During March, the former rose to 4.4% y/y, while the latter rose 6.0% y/y. Causality runs both ways, as rising rents put upward pressure on wages, while higher wages boost rents. In other words, the wage-price spiral is actually a wage-price-rent spiral.

Melissa and I are mystified that various Fed officials have reiterated recently that they still expect inflation to moderate back down to their official 2.0% target over the next couple of years. They should know that rent inflation will continue to increase, frustrating their unwarranted optimism. One Fed official who seems to know that is the aforementioned Waller. In a March 24 *speech* on the "red hot housing market," he observed that rents in new leases are up 12%-15% y/y, and that "some recent research suggests that the rate of rent inflation in the CPI will double in 2022." It can take 12-24 months for inflation in new rental leases to be reflected in the CPI and PCED because these two measure rents that people are currently paying under leases that can be slow to reflect market conditions.

(6) *Amazon.* On Thursday, in a CNBC *interview*, Amazon CEO Andy Jassy said the company needed to add a fuel and inflation surcharge to deal with rising costs tied to inflation, the coronavirus pandemic, and the war in Ukraine. "At a certain point, you can't keep absorbing all those costs and run a business that's economic," he said. He noted that China's latest Covid-19 outbreak has disrupted tech supply chains. He concluded: "It's still more expensive and more time-consuming to get products into the country. So there's still

supply chain challenges."

Amazon along with Walmart and Costco were among the major "distributors" of disinflation in America since the 1990s. Now they are major participants in the current wage-price spiral!

Fiscal Policy: Inflationary Consequences. Debbie and I believe that the sharp increase in inflation over the past year was triggered by excessively stimulative fiscal policy combined with ultra-easy monetary policy. President Joe Biden's American Rescue Plan (ARP), enacted on March 11, 2021, provided a third round of pandemic-related relief checks to millions of Americans. The checks amounted to "helicopter money." The resulting inflation is boosting tax revenues as well as the net interest cost of the debt:

(1) *Outlays.* The 12-month sum of federal outlays rose from $4.6 trillion through February 2020 just before the pandemic lockdowns to peak at a record $7.6 trillion during March 2021 (*Fig. 11*). This series fell to $6.2 trillion through last month. Federal spending on income security rose from $0.5 trillion through February 2020 to a record high of $2.0 trillion through March 2021 and was back down to $1.1 trillion this March.

(2) *Receipts.* The 12-month sum of total federal tax revenue peaked at a record high of $3.6 trillion during March 2020 just when the pandemic started (*Fig. 12*). It dropped for three months to $3.1 trillion, before climbing to $3.4 trillion and holding there for six months, and then quickly recovering to a record $4.5 trillion through March of this year. Leading the way higher has been individual income-tax receipts, which have been boosted by inflation.

(3) *Debt and net interest.* While inflation boosts federal government revenues, it also increases the government's net interest costs on its debt as interest rates rise along with inflation. The amount of publicly held marketable Treasury debt outstanding rose from $15.0 trillion during February 2020 to a record $20.9 trillion during February and March 2022 (*Fig. 13*).

Net interest paid by the federal government totaled $394 billion over the 12 months through March. That implies that the government paid an average interest rate of 1.6% on the $23.9 trillion in publicly held marketable Treasuries during March.

Here are the net interest costs at higher average interest rates: 2.0% ($478 billion), 3.0% ($716 billion), 4.0% ($955 billion), and 5.0% ($1,194 billion) (*Fig. 14*).

Movie. “Super Pumped: The Battle for Uber” (+ + +) (*link*) is a fast paced, well written docudrama about the meteoric rise and fall of Travis Kalanick, the founder of Uber. His biggest booster was his original major investor, Bill Gurley, the head of Benchmark, a major venture capital firm in Silicon Valley. He along with fellow board member Arianna Huffington did their best to keep their boy wonder from spinning out of control. But at the end, they had to participate in his downfall for the good of the company. Gurley and I briefly worked together at Deutsche Bank in the late 1990s. He was a smart gentleman back then and remained so according to the portrayal in this Showtime series by Kyle Chandler. Joseph Leonard Gordon-Levitt does a great job exuding Kalanick’s high-energy entrepreneurial spirit and disruptive persona.

Calendars

US: Tues: Housing Starts & Building Permits 1.75mu/1.83mu; API Crude Oil Inventories; IMF Meetings, Evans. **Wed:** Existing Home Sales 5.80mu; MBA Mortgage Applications; Crushing Crude Oil Inventories; Beige Book; IMF/World Bank Spring Meetings, Evans. (Bloomberg estimates)

Global: Tues: Japan Industrial Production & Capacity Utilization; Japan Trade Balance -¥100.8b; China PBOC Loan Prime Rate. **Wed:** Eurozone Industrial Production 0.8%m/m/1.5%y/y; Eurozone Trade Balance; European Car Registrations; Germany PPI 2.3%m/m/27.9%y/y; Canada CPI 0.9%m/m/6.1%y/y; Nagel. (Bloomberg estimates)

Strategy Indicators

Global Stock Markets Performance (*link*): The US MSCI index posted its biggest drop in five weeks, falling 2.1% last week to 9.1% below its record high on December 27. The index ranked 40th of the 48 global stock markets we follow in a week when nine of the 48 countries rose in US dollar terms and the AC World ex-US index dropped 1.1% to 12.5% below its June 15, 2021 record high. EMEA was the best-performing region last week, with a gain of 0.7% followed by EM Eastern Europe (-0.4%). EM Latin America was the biggest underperformer with a decline of 1.6%, followed by BRIC (-1.5), EM Asia (-1.4), EMU (-1.1), and EAFE (-1.1). Jordan was the best-performing country last week, rising 6.0%, followed by Pakistan (5.0), Turkey (4.3), and Hungary (0.9). Among the 23 countries that

underperformed the AC World ex-US MSCI last week, South Africa, Egypt, and Denmark each fell 3.5%, followed by New Zealand and Sri Lanka with 3.1% declines. The US MSCI's ytd ranking dropped one spot to 29/49, with its 8.5% decline barely ahead of the 8.6% drop for the AC World ex-US. EM Latin America has risen 21.5% ytd and is the only region outperforming the AC World ex-US. The laggards: EM Eastern Europe (-79.6), EMEA (-22.5), EMU (-15.1), BRIC (-14.8), EM Asia (-11.4), and EAFE (-9.4). The best country performers so far in 2022: Colombia (32.9), Brazil (29.8), Chile (23.8), Turkey (21.9), and Peru (21.6). Apart from Russia, in which investors have lost 100.0%, here are the worst-performing countries ytd: Sri Lanka (-62.8), Hungary (-28.2), Egypt (-28.1), Ireland (-24.1), and Austria (-23.7).

S&P 1500/500/400/600 Performance (*link*): LargeCap was the only one of these indexes to fall last week as MidCap edged back out of a correction. SmallCap was the best performer with a gain of 0.9%, ahead of MidCap (0.4%) and LargeCap (-2.1). LargeCap is now 8.4% below its record high on January 3. MidCap ended the week 9.7% below its record high on November 16, and SmallCap improved to 12.4% below its November 8 record high. Eighteen of the 33 sectors rose last week, up from seven rising a week earlier. SmallCap Energy was the best performer for the week with a gain of 4.5%, followed by SmallCap Materials (3.7%), MidCap Energy (3.1), MidCap Materials (2.6), and SmallCap Consumer Discretionary (2.5). LargeCap Tech was the biggest underperformer last week with a decline of 3.8%, followed by SmallCap Utilities (-3.1), LargeCap Communication Services (-3.0), LargeCap Health Care (-2.9), and LargeCap Financials (-2.6). In terms of 2022's ytd performance, all three indexes are down ytd and swapped rankings. MidCap is down 7.5% ytd, less than the declines for SmallCap (-8.4) and LargeCap (-7.8). Eight of the 33 sectors are positive so far in 2022, unchanged from a week earlier. Energy continues to dominate the top performers: SmallCap Energy (56.1), LargeCap Energy (43.7), MidCap Energy (43.2), LargeCap Utilities (6.3), and LargeCap Consumer Staples (2.5). The biggest ytd laggards: SmallCap Consumer Discretionary (-17.8), SmallCap Tech (-17.1), LargeCap Communication Services (-16.3), LargeCap Tech (-15.7), MidCap Consumer Discretionary (-15.7), and MidCap Tech (-14.0).

S&P 500 Sectors and Industries Performance (*link*): Four of the 11 S&P 500 sectors rose last week and seven outperformed the composite index's 2.1% decline. That compares to a 1.3% decline for the S&P 500 a week earlier, when five sectors rose and seven outperformed the index. Materials was the top performer with a gain of 0.7%, ahead of Industrials (0.4%), Energy (0.3), Consumer Staples (0.2), Consumer Discretionary (-0.8), Utilities (-1.1), and Real Estate (-1.9). The worst performers: Tech (-3.8), Communication Services (-3.0), Health Care (-2.9), and Financials (-2.6). The S&P 500 is down 7.8% so far

in 2022, with three sectors in positive territory and eight ahead of the index. That compares to just two sectors positive ytd and seven ahead a week earlier. The best performers in 2022 to date: Energy (43.7), Utilities (6.3), Consumer Staples (2.5), Health Care (-1.7), Materials (-1.8), Industrials (-5.5), Financials (-5.6), and Real Estate (-6.1). The ytd laggards: Communication Services (-16.3), Tech (-15.7), and Consumer Discretionary (-12.7).

S&P 500 Technical Indicators (*link*): The S&P 500 fell 2.1% last week and weakened relative to its 50-day moving average (50-dma) and 200-day moving average (200-dma) for the seventh time in ten weeks. The index closed below its 50-dma for the first time in five weeks and closed below its 200-dma for the eighth time in ten weeks. It had been above its 200-dma for 81 straight weeks through early February. The S&P 500's 50-dma moved lower for the first time in three weeks as the index fell to 0.5% below its 50-dma from 1.4% above a week earlier. That's up from a 23-month low of 7.5% below its 50-dma in late February and compares to a 27-week high of 4.9% in early November. The index had been mostly trading above its 50-dma since late April 2020; in June 2020, it was 11.7% above, which was the highest since its record high of 14.0% in May 2009. That compares to 27.7% below on March 23, 2020—its lowest reading since it was 29.7% below on Black Monday, October 19, 1987. The price index fell to 2.4% below its barely rising 200-dma from 0.3% below its rising 200-dma a week earlier. That's up from a 23-month low of 6.8% below its falling 200-dma on March 14 and is down sharply from 10.8% above its rising 200-dma in early November. That also compares to 17.0% above in December 2020, which was the highest since November 2009 and up from the 26.6% below registered during the Great Virus Crisis on March 23, 2020—the lowest reading since March 2009. At its worst levels of the Great Financial Crisis, the S&P 500 index was 25.5% below its 50-dma on October 10, 2008 and 39.6% below its 200-dma on November 11, 2008.

S&P 500 Sectors Technical Indicators (*link*): Six of the 11 S&P 500 sectors traded above their 50-dmas last week, down from seven a week earlier. Consumer Discretionary fell below in the latest week and joined Communication Services, Financials, Industrials, and Tech in that club. During late February, Energy had been the only sector above its 50-dma. Six sectors have a rising 50-dma, down from seven a week earlier. Consumer Discretionary joined Communication Services, Financials, Industrials, and Tech as the only sectors in the falling 50-dma club. Looking at the more stable longer-term 200-dmas, six sectors are above, unchanged from a week earlier. The five sectors are trading below their 200-dmas: Communication Services, Consumer Discretionary, Financials, Industrials, and Tech. For perspective, at the depths of the Great Virus Crisis in April 2020, Health Care was the only sector trading above its 200-dma. Seven sectors have rising 200-dmas, down from eight a

week earlier, as Tech turned down in the latest week and joined Communication Services, Consumer Discretionary, and Industrials in the declining 200-dma club.

US Economic Indicators

Retail Sales (*link*): March retail sales rose 0.5% to a new record high, though higher consumer prices show real retail sales fell 1.6% last month (using the CPI), following a 0.4% dip during February. The control group—which excludes autos, gasoline, building material, and food—slipped for the second month since rebounding 6.8% in January to a new record high, contracting 0.1% m/m and 1.0% over the period. Of the 13 nominal retail sales categories, 10 rose during March while three fell, with higher gasoline prices boosting gasoline service station sales to the number-one spot again last month and several other categories also getting a boost from higher prices. Here's a snapshot of the sales performances of the 13 categories during March as well as the performances versus a year ago and relative to their pre-Covid levels: gasoline stations (8.9%, 37.0%, 53.4%), general merchandise stores (5.4, 5.2, 23.3), electronics & appliance stores (3.3, -9.7, 2.0), sporting goods & hobby stores (3.3, -5.1, 39.3), clothing & accessories stores (2.6, 7.3, 19.4), food services & drinking places (1.0, 19.4, 13.8), food & beverage stores (1.0, 8.4, 21.0), miscellaneous store retailers (0.8, 13.3, 33.6), furniture & home furnishing stores (0.7, 3.6, 23.0), building materials & garden equipment & supplies dealers (0.5, 0.6, 32.5), health & personal care stores (-0.3, 1.4, 11.9), motor vehicles & parts dealers (-1.9, -1.2, 26.7), and nonstore retailers (-6.4, 1.8, 37.7).

Consumer Sentiment Index (*link*): Consumer sentiment unexpectedly rebounded in mid-April from a decade low, as consumers anticipate a strong job market boosting wages, while Richard Curtin notes, "perhaps the most surprising change was that consumers anticipated a year-over-year increase in gas prices of just 0.4 cents in April, completely reversing March's surge to 49.6 cents. Retail gas prices have fallen since the March peak, and that fact was immediately recognized by consumers." The report mentions that the shift in gas expectations might also be partly tied to Biden's announced release of strategic oil reserves as well as the relaxing of some seasonal EPA rules. The expected inflation rate was unchanged at 5.4% in mid-April, while the expected rate over the next five years held at 3.0%. The Consumer Sentiment Index jumped 6.3 points in mid-April to 65.7 after tumbling 11.2 points (to 59.4 from 70.6) the first three months of this year; it peaked at 88.3 a year ago. The expectations component soared 9.8 points to 64.1 in mid-April, after tumbling from 68.3 in December to 54.3 in March—the lowest level since fall 2011—while the present

situation component was little changed at 68.1, after falling 7.0 points (to 67.2 from 74.2) the first three months of 2022. There are fears that the recent increase in sentiment could be short-lived—as the economy faces headwinds from both the war's impact on the domestic economy as well as the potential of another new Covid variant.

Business Sales & Inventories (*link*): Nominal business sales in February climbed to a new record high, while January real business sales (reported with a lag) also rebounded to a new record high, after remaining stalled around last March's record high through December. Nominal business sales advanced 1.0% in February after rebounding an upwardly revised 4.1% (vs 3.7%) during January from December's 0.7% shortfall—which was its first decline since last May. Meanwhile, real business sales jumped 2.0% in January—the biggest monthly gain since January 2021—after 11 months of ups and downs (five and six, respectively) from February through December of last year, culminating in a 1.0% decline over the period. Real sales for wholesalers continued to soar in January, advancing for the seventh time in eight months, up 1.9% m/m and 7.9% over the period to a new record, while real sales for retailers rebounded 4.7% at the start of this year, after dropping 8.7% from last March's record high through year-end. Real manufacturing sales continued to move sideways for the eighth month in January, after a string of declines early last year, and is down 5.1% y/y. Meanwhile, the real inventories-to-sales ratio (1.39) moved back down toward its recent low of 1.38 in January after edging up to 1.41 in December; it was at 1.45 last February. The nominal ratio ticked up to 1.26 after falling from 1.29 to 1.25 in January; it was at a record low of 1.24 in November.

Industrial Production (*link*): Industrial output in March reached its highest level in more than 100 years—going back to the January 1921 start of the data! Despite supply-chain disruptions and shortages driven by the war, headline production rose for the fifth time in six months, by 0.9% in March (more than double expectations) and 4.7% over the period, with manufacturing output up 0.9% and 4.5% over the comparable periods to its highest level since summer 2008. March's gain was driven by a 7.8% surge in motor vehicle & parts production, with the total number of autos produced climbing to 9.75 mu (saar), the highest since January 2021. Still, overall auto production remains subdued, 3.5% below its pre-pandemic level. By market group, consumer goods production remains on an accelerating trend, jumping 1.4% in March and 22.7% since its April 2020 bottom to its highest level since July 2008. Over the comparable periods, consumer durable goods production rose 3.9% and 96.5% to a new record high, while output of consumer nondurable goods climbed 0.7% and 10.1% to its highest levels since April 2018. Meanwhile, business equipment production climbed 1.8% in March and 51.5% since its April 2020 bottom to its highest level since the end of 2019. Within business equipment, production of information processing

equipment continues to reach new highs, though March's gain was a subdued 0.1% after February's 1.8% surge, while industrial equipment output remains on an upswing, jumping 0.9% in March and 34.7% since April 2020 to its highest level since January 2015. Transit equipment production remains in a volatile flat trend, with March output rebounding 5.2% to the top of the range, turning the yearly percent change (1.6%) positive for the first time in seven months.

Capacity Utilization (*link*): The headline capacity utilization rate in March jumped to its highest percentage since January 2019, with the manufacturing rate the best since the end of 2007. The headline capacity utilization rate climbed for the third month from 76.3% in December to 78.3% last month, with the rate 14.9ppts above April 2020's low of 63.4%; it's currently 1.2ppts below its long-run (1972-2021) average. The manufacturing rate climbed from 77.1% at the end of last year to 78.7% in March—3.2ppts above its pre-pandemic level and above its long-run average for the first time since August 2018. The capacity utilization for mining jumped 1.2ppts to a two-year high of 79.5%, while the rate for utilities ticked up from 75.0% to 75.1% last month, up from 71.6% a year ago—though both rates remain well below their long-run averages.

Regional M-PMI (*link*): The New York Fed has provided the first glimpse of manufacturing activity for April and shows business activity in the region moving from contraction to expansion, though firms were noticeably less optimistic about the six-month outlook. April's composite index rebounded 36.4 points (to 24.6 from -11. 8) in April, as both the orders (25.1 from -11.2) and shipments (34.5 from -7.4) gauges followed suit. Unfilled orders (17.3 from 13.1) continued to increase at a steady pace, while delivery times (21.8 from 32.7) lengthened—though at a slower rate than recently. Labor market indicators show employment (7.3 from 14.5) increased at half March's rate, while the average workweek's (10.0 from 3.5) pace was only a third of March's. Looking at prices, the prices paid (86.4 from 73.8) gauge jumped to a new record high this month, while the prices-received (49.1 from 56.1) measure retreated from March's record high. In the meantime, optimism deteriorated substantially, with the future business conditions measure plunging 21.4 points (15.2 from 36.6) to its lowest reading since April 2020 in the depths of the pandemic. According to the report, longer delivery times, higher prices, and increases in employment are all expected in the months ahead, while capital spending is expected to remain firm.

Import Prices (*link*): Import prices in March posted another big gain, recording its biggest monthly gain in 11 years as the war in Ukraine boosted petroleum prices. Headline prices jumped 2.6% in March and 6.3% over the three months through March, lifting the yearly rate to 12.5%—up from 1.0% at the start of 2021 and the highest since September 2011.

Imported fuel prices shot up 14.6% in March alone and 67.4% y/y, with petroleum prices rising 16.1% and 66.5%, respectively, over the comparable periods, though both are below recent highs. Nonpetroleum import prices haven't posted a decline since October 2020, climbing 1.1% in March and 11.0% over the period. The yearly rate accelerated to 8.1%, the fastest 12-month pace since mid-1988. Meanwhile, food prices were little changed in March, up 0.1% following gains of 1.6% and 3.3% the prior two months. The yearly rate slowed to 13.4% from 15.7% in February—which was the highest since July 2011. The yearly rate for industrial supplies & materials imports accelerated to 37.7% y/y in March, remaining below May 2021's record-high of 55.2%. The rate for capital goods has been on an accelerating trend since bottoming at -2.0% y/y in November 2019, climbing to 3.4% this March—which is the highest since fall 1992. The rate for consumer goods ex autos (3.0% y/y) is the highest since the end of 2011, while the rate for autos & parts (3.1) held steady at its highest rate since February 2012.

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