



MORNING BRIEFING

April 24, 2023

Yalies Yelling

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

Executive Summary: Banks were tightening lending standards before the banking crisis, and the crisis has escalated that. We don't think a credit crunch will ensue, though we're monitoring the situation closely. But we agree with Treasury Secretary Yellen that banks' tightening of credit conditions effectively can substitute for further Fed tightening. ... To monitor the crisis, we keep tabs on the Fed's assets and liabilities, commercial banks' assets and liabilities, and particularly the amount of loans being made by both. ... Also: Dr. Ed reviews "A Spy Among Friends" (+ + +).

YRI Weekly Webcast. Join Dr. Ed's live webcast with Q&A on Mondays at 11 a.m. EST. You will receive an email with the link one hour before showtime. Replays of the weekly webcasts are available [here](#).

The Fed I: *Cri de Coeur*. US Treasury Secretary Janet Yellen and I have a lot in common. Our last names start with "Y." I worked at the Fed and the US Treasury Department many years ago. She was Fed chair prior to her current position at Treasury. We both have PhDs from Yale's graduate school of economics. Professor James Tobin chaired both our dissertation committees. She graduated in 1971. I graduated in 1976. Yellen took such meticulous notes in Tobin's macroeconomics class that they became the unofficial textbook for future graduate students. I studied from those Xeroxed notes.

On the other hand, Yellen tends to be a liberal, while I tend to be a conservative. Nevertheless, we currently both agree that the Fed should stop raising interest rates. On April 15, in a "Fareed Zakaria GPS" interview, she said the following about the current banking crisis: "Banks are likely to become somewhat more cautious in this environment. We already saw some tightening of lending standards in the banking system prior to that episode, and there may be some more to come." She said that the crisis would lead to a restriction in credit in the economy that "could be a substitute for further interest rate hikes that the Fed needs to make."

Nevertheless, Yellen added that the Fed's response to the crisis had caused "deposit outflows to stabilize ... And things have been calm." She said she was not yet seeing anything "dramatic enough or significant enough" in this area to alter her economic outlook.

“So, I think the outlook remains one for moderate growth and [a] continued strong labor market with inflation coming down,” she said.

As Treasury secretary, the former Fed chair meets regularly with Fed Chair Jerome Powell. She undoubtedly has shared her views about monetary policy under the current circumstances with her replacement. Powell was a governor at the Fed when Yellen was the chair.

The next meeting of the Fed’s Federal Open Market Committee (FOMC) will be held May 2-3. Whether the committee votes for another 25bps hike in the federal funds rate at this meeting or not, Melissa and I expect Powell to say at his post-meeting press conference that the committee is likely to pause rate hiking for a while since the federal funds rate is clearly in “restrictive” territory given the banking crisis, which is tightening lending standards further. Continuing to raise interest rates would risk converting a banking crisis that’s been contained so far into an economy wide credit crunch.

Last week, on Wednesday, March 19, Federal Reserve Bank of New York President John Williams, who is a voting member of the FOMC, said that “inflation is still too high” and that the Fed will act to lower it. However, he also acknowledged that the recent stress in the banking sector will likely weigh on economic activity: “Conditions in the banking sector have stabilized, and the banking system is sound and resilient.” But he added that the troubles are bound to make credit more expensive and harder to get, which in turn will depress growth. “It is still too early to gauge the magnitude and duration of these effects, and I will be closely monitoring the evolution of credit conditions and their potential effects on the economy,” Williams said.

The Fed II: Watching the Fed’s Loans. Melissa and I also are monitoring the evolution of the banking crisis very closely. It appears to be contained so far. We are watching the weekly H.4.1 report showing the Fed’s assets and liabilities and the weekly H.8 report showing the assets and liabilities of the commercial banking system. The former, which is released on Thursdays, showed that the Fed’s total assets edged down to \$8.7 trillion during the April 19 week after rising since early March when banks scrambled to borrow from the Fed’s liquidity facilities to offset deposit outflows during the SVB-induced banking crisis ([Fig. 1](#)).

Meanwhile, the Fed’s QT (quantitative tightening) program continues apace as maturing securities roll off the Fed’s balance sheet. Total securities held outright by the Fed fell \$635 billion since the amount peaked in mid-May 2022 down to \$7.9 trillion as of the April 19

week. The Fed's holdings of Treasuries and agency debt plus mortgage-backed securities are down \$494 billion and \$141 billion over this period ([Fig. 2](#)).

The Fed's holdings of total loans to the banking system spiked up dramatically during March as the banks scrambled to borrow at the discount window (a.k.a. "primary credit" in the H.4.1) and through the new Bank Term Funding Program (BTFP) ([Fig. 3](#)). These loans have edged down slightly over the past two weeks, as borrowing at the discount window declined sharply while BTFP borrowing leapt. "Other credit extensions" has remained elevated, as the FDIC needs the funds to work out the resolution of the SVB and Signature Bank implosions.

The Fed III: Watching the Commercial Banks. The Fed's latest H.8 report is jampacked with weekly data on commercial bank credit, securities, loans, deposits, and borrowings. Let's review the latest developments through the April 12 week ([Fig. 4](#)):

(1) *Bank assets.* Over the past five weeks, bank credit is down \$239.3 billion including a \$22.7 billion decline during the April 12 week. Over this same period, securities are down \$225.0 billion including a decline of \$36.5 billion during the latest week, while loans are down \$14.4 billion including a \$13.8 billion increase during the latest week ([Fig. 5](#)).

(2) *Bank liabilities.* Over the past five weeks, deposits are down \$422.4 billion including a \$76.2 billion drop in the latest week, while borrowings are up \$480.8 billion including a \$29.3 billion increase during the latest week.

The Fed IV: Watching Bank Loans. Of course, the most important item on banks' balance sheets for assessing a looming credit crunch is their loan portfolios. The H.8 release provides this information for various types of loans. To monitor them on a weekly basis, Mali Quintana and I have compiled [Commercial Bank Loans](#) to supplement our [Commercial Bank Book](#) chart publication. Here are some of our findings:

(1) *Commercial & industrial (C&I) loans.* While C&I loans are down \$32.6 billion over the past five weeks through April 12, they remain near their all-time high of \$3.1 trillion the week of May 13, 2020 ([Fig. 6](#)).

(2) *Commercial real estate (CRE) loans.* Widespread concerns about a CRE crash may be starting to weigh on CRE lending by the banks. These loans peaked at a record \$2.9 trillion during the March 15 week and are down \$35.3 billion since then through April 12 ([Fig. 7](#)).

Within this category, construction, multi-family property, and nonfarm nonresidential properties loans are all looking topy relative to their recent record highs ([Fig. 8](#), [Fig. 9](#), and [Fig. 10](#)).

(3) *Residential real estate (RRE) loans*. RRE loans rose to a record high of \$2.5 trillion in late March and remain around that level currently ([Fig. 11](#)). That's quite surprising given that housing has been in a recession since early last year. Then again, these loans rose even during the Great Financial Crisis!

(4) *Consumer loans*. Consumer loans rose to a record high on April 12 ([Fig. 12](#)). The same can be said about consumer credit card loans ([Fig. 13](#)). Auto loans have stalled near their record high around \$520 billion since October ([Fig. 14](#)).

(5) *Bottom line*. There's no sign of a credit crunch in bank loans so far. However, the banking crisis is relatively young, having started in early March, and lending terms undoubtedly have tightened already. It ain't over until it's over.

Movie. "A Spy Among Friends" (+ + +) ([link](#)) is a fascinating docudrama about Kim Philby, the British double agent who defected to the Soviet Union in 1963 after spying for the KGB in London and Washington since World War II. His close friend and colleague was Nicholas Elliott, who was aghast to learn that Philby was a traitor for so many years. The two of them were members of an elite group of spies who worked for MI6. Elliott, played flawlessly by Damian Lewis, is determined to protect his old-boy network of British spies while also punishing his friend for his duplicity.

Calendars

US: Mon: Dallas Fed Manufacturing Index; Chicago Fed National Activity Index. **Tues:** Consumer Confidence 104.0; Richmond Fed Manufacturing Index; New Home Sales 634k; S&P/CS Composite 20 House Price Index -0.4%; API Weekly Crude Oil Inventories. (Bloomberg estimates)

Global: Mon: Germany Ifo Business Climate Index, Current Conditions, and Expectations 94.0/96.091.5; Buba Monthly Report; Panetta. **Tues:** Spain PPI; UK CBI Industrial Trends; Japan CPI; Enria; Broadbent; Australia CPI. (Bloomberg estimates)

Strategy Indicators

Global Stock Markets Performance ([link](#)): The US MSCI index edged down 0.1% last week and remained out of a bear market in a 15.1% correction from its record high on December 27, 2021. The US MSCI ranked 20th of the 48 global stock markets that we follow in a week when 18 of the 48 countries rose in US dollar terms. The AC World ex-US index fell 0.4% and also remained out of a bear market, but at 15.6% below its June 15, 2021 record high. EM Eastern Europe was the best regional performer with a 1.7% gain, ahead of EMEA (0.9%), EAFE (0.0), and EMU (0.0). EM Latin America was the worst performing region last week with a decline of 3.3%, followed by BIC (-2.1) and EM Asia (-1.8). Pakistan was the best-performing country last week with a gain of 10.1%, followed by Poland (2.9), Hungary (2.0), Ireland (2.0), and Portugal (1.9). Among the 28 countries that underperformed the AC World ex-US MSCI last week, the 6.6% decline for Egypt was the biggest, followed by Argentina (-6.0), Brazil (-4.7), Chile (-4.7), and the Czech Republic (-3.2). Looking at 2023's performance so far, the US MSCI is up 7.7% as its ytd ranking dropped one place w/w to 21/48. The AC World ex-US's ytd gain of 7.9% was ahead of the US for a second week, with 33/48 countries now in positive territory. EMU is the best performer ytd, with a gain of 17.1%, followed by EM Eastern Europe (13.8) and EAFE (10.4). The regional laggards so far in 2023: BIC (-1.2), EMEA (1.6), EM Asia (2.6), and EM Latin America (4.7). This year's best ytd country performers: the Czech Republic (44.2), Ireland (24.3), Greece (22.5), Mexico (21.3), and France (19.7). Here are the worst-performing countries of the year so far: Pakistan (-18.7), Turkey (-9.0), Norway (-6.5), Thailand (-5.9), and Malaysia (-5.5).

S&P 500/400/600 Performance ([link](#)): Only one of these three indexes moved higher last week. MidCap rose 0.4% w/w, ahead of the 0.1% and 0.3% declines for LargeCap and SmallCap. By Friday's close, SmallCap was still in a bear market while LargeCap and MidCap remained in a correction. LargeCap finished the week at 13.8% below its record high on January 3, 2022, MidCap at 14.2% below its record high on November 16, 2021, and SmallCap at 20.9% below its November 8, 2021 record high. Twenty of the 33 LargeCap and SMidCap sectors moved higher for the week compared to 24 rising a week earlier. SmallCap Consumer Staples was the best performer with a gain of 2.2%, ahead of SmallCap Health Care (2.0%), LargeCap Consumer Staples (1.7), and LargeCap Real Estate (1.6). Among the worst performers for the week were SmallCap Energy (-5.3), MidCap Energy (-4.8), LargeCap Communication Services (-3.1), SmallCap Communication Services (-2.9), and SmallCap Tech (-2.7). Looking at performances so far in 2023, LargeCap, with a 7.7% gain, remains well ahead of MidCap (2.8) and SmallCap (0.2); 22 of

the 33 sectors are higher ytd. The top sector performers in 2023: LargeCap Communication Services (19.9), LargeCap Tech (19.1), LargeCap Consumer Discretionary (14.4), SmallCap Consumer Discretionary (11.2), and SmallCap Consumer Staples (10.4). Here are 2023's biggest laggards: SmallCap Financials (-14.4), MidCap Energy (-11.5), SmallCap Energy (-10.2), SmallCap Real Estate (-8.2), and MidCap Financials (-7.8).

S&P 500 Sectors and Industries Performance ([link](#)): Six of the 11 sectors rose last week, and six outperformed the composite index's 0.1% decline. That compares to a 0.8% gain for the S&P 500 a week earlier, when seven sectors rose and five outperformed the index. Consumer Staples was the best performer, with a gain of 1.7%, followed by Real Estate (1.6%), Utilities (1.1), Financials (1.0), Industrials (0.8), and Consumer Discretionary (0.5). Communication Services was the worst performer, with a 3.1% decline, followed by Energy (-2.5), Tech (-0.5), Materials (-0.3), and Health Care (-0.2). Looking at 2023's performance so far, the S&P 500 is up 7.7% ytd, with just three sectors outperforming the index and seven now higher for the year. The best ytd performers: Communication Services (19.9), Tech (19.1), and Consumer Discretionary (14.4). These are 2023's worst performers: Financials (-3.0), Energy (-2.8), Health Care (-1.3), Utilities (-1.3), Real Estate (0.4), Industrials (2.4), Consumer Staples (2.5), and Materials (3.8).

S&P 500 Technical Indicators ([link](#)): The S&P 500 fell 0.1% last week and weakened slightly relative to its 50-day moving average (50-dma) and 200-day moving average (200-dma). The index was above its 50-dma for a fourth week and its 200-dma for a fifth week. It had been above its 200-dma for eight weeks through early March in its longest positive 200-dma streak since it was above for 81 straight weeks through January 2021. The S&P 500 edged down to 2.5% above its 50-dma from a nine-week high of 2.6% above its 50-dma a week earlier and compares to a 20-week low of 3.6% below at the beginning of March. That also compares to a four-month low of 10.6% below at the end of September, a 23-month high of 8.7% above the index's rising 50-dma in early August, and a 27-month low of 11.1% below its falling 50-dma in mid-June. The index had been mostly trading above its 50-dma from late April 2020 to early April 2022; 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 closed Friday at 4.3% above its rising 200-dma, down from a 10-week high of 4.6% a week earlier, and compares to a nine-week low of 0.3% in early March. That also compares to a 13-month high of 5.1% above in early February. The S&P 500 is well above its 26-month low of 17.1% below its falling 200-dma in mid-June and compares to 10.8% above its rising 200-dma in November 2021. 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. The 50-dma and 200-dma each moved higher for a fifth week, but the 200-dma has risen in just 10 of the past 49 weeks.

S&P 500 Sectors Technical Indicators ([link](#)): Nine of the 11 S&P 500 sectors are trading above their 50-dmas, up from eight sectors above a week earlier. Industrials moved above in the latest week, leaving Financials and Real Estate as the only sectors still trading below their 50-dmas. Five sectors have a rising 50-dma, down from six a week earlier, as Energy reversed back out of the rising 50-dma club. These other five sectors still have a falling 50-dma: Consumer Discretionary, Financials, Industrials, Materials, and Real Estate. Looking at the more stable longer-term 200-dmas, the positive club improved w/w to nine members as Utilities moved above their 200-dmas and left Financials and Real Estate as the only two sectors still trading below their 200-dmas. The rising 200-dma club rose to nine members from eight a week earlier with the addition of Consumer Discretionary. Real Estate and Utilities are the only two sectors with a falling 200-dma.

US Economic Indicators

Leading Indicators ([link](#)): The Leading Economic Indicators (LEI) index fell in March for the 12th straight month, sinking 1.2% m/m and 7.8% over the period to the lowest level since November 2020. While the leading index continues to point to recession, the US economy continues to expand, with coincident indicators reaching yet another record high. The weakness in March's LEI was widespread, with seven of the 10 components contributing negatively, only two positively, and the average workweek unchanged. Over the six months through March, the LEI dropped 4.5%, steeper than the 3.5% drop over the previous six-month period through September. Over the past six months, only two components, stock prices and real manufacturers' new orders for consumer goods & materials, have posted positive growth. The biggest *negative contributors* to March's LEI were building permits (-0.28ppt), new orders diffusion index (-0.24), and consumer expectations (-0.23), followed by stock prices (-0.12), the interest rate spread (-0.12), leading credit index (-0.12), and jobless claims (-0.08). Real core capital goods (+0.02) and real consumer goods orders (+0.01) contributed positively.

Coincident Indicators ([link](#)): The Coincident Economic Indicators (CEI) index rose for the eighth time in nine months, up 0.2% in March and 1.9% over the period to yet another new

record high. It exceeds its previous record high, just before the pandemic, by 2.7%. All four components of the CEI rose in March: 1) Real personal income less transfer payments (+0.07ppt) hasn't posted a decline since last June, climbing 0.2% in March and 2.6% over the nine-month period; it had contracted 1.2% during the first half of 2022. 2) Industrial production (+0.07) in March rose for the third successive month, by 0.4% m/m and 1.5% over the period, after contracting 2.0% the final three months of 2022. It's within 1.1% of a new record high. 3) Payroll employment (+0.05) in March continued to rise, but was weaker than expected, climbing 236,000, following gains of 326,000 and 472,000 the prior two months. February's gain was revised up by 15,000, while January's was revised down by 32,000, for a net loss of 17,000. Total payroll employment has moved above its pre-pandemic level by 3.2 million. 4) Real manufacturing & trade sales (+0.04) climbed for the fourth month, by 0.2% in March and 2.4% over the period, to a new record high.

Regional M-PMIs ([link](#)): Tale of two regions: The New York Fed provided the first glimpse of economic activity for April last Monday and showed a big swing in manufacturing growth from contraction to expansion, followed on Thursday by the Philadelphia Fed's report that manufacturing activity in that region contracted at the fastest pace since the height of the pandemic. Combining the two, manufacturing activity continued to contract, though at a slower pace, with the decline narrowing to -10.3 this month from -23.9 last month—which was the weakest since May 2020. New York's (to 10.8 from -24.6) measure expanded for the first time since last November and at the fastest pace since last July (recording a 35.4-point swing), while Philadelphia's (-31.3 from -23.2) continued to tumble. New orders (1.2 from -24.9) moved back into expansionary territory (though barely) after contracting the prior 10 months, as billings in the New York (25.1 from -21.7) region rebounded sharply, while Philadelphia's (-22.7 from -28.2) continued to contract at a fast pace. Employment (-4.1 from -10.2) contracted for the third month, though at a slower pace, as hirings in the Philadelphia (-0.2 from -10.3) area were basically flat, while hirings in New York (-8.0 from -10.1) factories continued to decline though at a slightly slower pace. Looking at prices-paid indexes, the Philadelphia (8.2 from 23.5) measure slowed dramatically to its lowest percentage since mid-2020, while New York's (33.0 from 41.9) saw price pressures ease back to January's 26-month low of 33.0 after a slight tightening in February. The former was at a recent high of 83.6 in November 2021, while the latter was at a record high of 86.4 in April 2022. Prices-received indexes were mixed: New York's ticked up to 23.7 after easing to 22.9 in March, remaining above January's two-year low of 18.8; it was at a record high of 56.1 in March 2022. The Philadelphia measure moved down for the third month to -3.3 this month from 29.9 at the start of the year; it was at a record high of 65.8 in November 2021.

Existing Home Sales ([link](#)): “Consumers appear to be very sensitive to changes in

mortgage rates,” noted Lawrence Yun, NAR’s chief economist. “The week-to-week changes in mortgage rates are having a big impact.” Existing home sales in March contracted 2.4% to 4.44mu (saar) after soaring 13.8% in February to 4.55mu, which was the first increase since the start of 2022. Sales are down 22.0% y/y. Single-family sales in March slumped 2.7% to 3.99mu (saar) after skyrocketing 14.2% to 4.10mu in February, down 21.2% y/y. Total existing and single-family home sales sank to 4.00mu and 3.59mu, respectively, in January—the lowest since fall 2010. Multi-family sales were unchanged in March at 450,000 units (saar), after a 9.8% jump in February and flat sales in January; these sales had plummeted 10 of the prior 11 months by 43.1% to 410,000 units. Regionally, sales in March fell in three regions and were unchanged in the Northeast, though were below a year ago in all four regions. Here’s a tally: Northeast (0.0% m/m & -21.2 y/y), South (-1.0 & -20.4), West (-3.5 & -30.5), and Midwest (-5.5 & -17.6). Total housing inventory at the end of March was 980,000 units, up 1.0% from February and 5.4% from last March’s 930,000 units—with unsold inventory at 2.6 months’ supply at the current sales rate, unchanged from February but up from 2.0 months’ supply last March.

Global Economic Indicators

US PMI Flash Estimates ([link](#)): The US private-sector activity saw growth in April strengthen to an 11-month high, according to flash estimates, but also saw an acceleration in rates of both input and output cost inflation. The C-PMI increased the first four months of this year, climbing to 53.5 in April after falling in eight of the prior nine months, from 57.7 last March to 45.0 by December. The NM-PMI advanced for the fourth month, from 44.7 at the end of last year to 53.7 this month, the highest since last April, while the M-PMI rose from 46.2 to 50.4 over the four-month period, moving back into expansionary territory for the first time since last October. Turning to prices, the rates of both input and output costs picked up after softening the prior two months. Operating expenses rose at an accelerated pace this month, boosted by an incremental increase in material costs. Both manufacturers and service providers recorded sharp increases in cost burdens. Meanwhile, output prices accelerated at the fastest pace in seven months as more accommodative demand conditions enabled firms to partly pass through these costs to clients.

Eurozone PMI Flash Estimates ([link](#)): Economic activity in the Eurozone was the strongest in 11 months this month, according to flash estimates, as the service sector expanded at its fastest pace since last April, after contracting the final five months of last year, while the manufacturing sector contracted for the 10th successive month, slumping to a 35-month low. The Eurozone’s C-PMI rose for the sixth successive month, to 54.4, after falling

steadily from 55.8 last April to a 23-month low of 47.3 by October. The M-PMI slipped for the third month to 45.5 this month after advancing the prior three months, from 46.4 to 48.8, while the NM-PMI increased for the fifth month from 48.5 in November to a 10-month high of 56.6 over the period. Looking at the two largest Eurozone economies, Germany's C-PMI moved further into expansionary territory, improving for the sixth straight month, from 45.1 in October to 53.9 this month—the highest since last April; Germany's NM-PMI climbed during six of the past seven months from 45.0 last September to a 12-month high of 55.7 this month. Meanwhile, Germany's M-PMI deteriorated for the third month, to a 35-month low of 44.4, after increasing from 45.1 in October to 47.3 in January. Meanwhile, France's C-PMI advanced for a third month, to an 11-month high of 53.8 this month, after sliding seven of the previous nine months from 57.6 last April to 49.1 by this January. France's NM-PMI climbed for a third month, moving further above the 50.0 breakeven point, to an 11-month high of 56.3. Prior to the three-month climb, it had slid all the way from 58.9 last April to 49.4 this January. Meanwhile, France's M-PMI was in contractionary territory for the seventh time in eight months, dropping to a 35-month low of 45.5 this month; this followed a brief move up to 50.5 in January, before falling back below the next three months. Elsewhere across the region, activity continued to expand at a healthy pace, led by services; manufacturing activity continue to decline. Looking at inflation for the entire Eurozone, the report noted that price developments in the service sector are likely to continue to worry the ECB, “as neither input prices nor sales prices are showing any significant slowdown in the upward momentum of prices.” Meanwhile, the trend in falling manufacturing prices continues.

Japan PMI Flash Estimates ([link](#)): “Service economy drives further upturn in business activity in April” was the headline of this month’s survey. Japan’s C-PMI slowed slightly to 52.5 this month, according to flash estimates, after advancing the prior four months 48.8 last November to a nine-month high of 52.9 in March, as the NM-PMI was little changed at 54.9 this month after climbing from 50.3 last November to 55.0 in March—posting its best performance since October 2013. Meanwhile, the M-PMI remained below the 50.0 breakeven point for the sixth month but moved nearer to breakeven, climbing to 49.5 this month; it has risen during three of the first four months of this year from 48.9 in December. Turning to prices, the rate of input price inflation rose at the slowest pace in 15 months this month, while sustained and strong increases in expenses pushed output price inflation to record highs.

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

Copyright (c) Yardeni Research, Inc. Please read complete [copyright and hedge clause](#).

