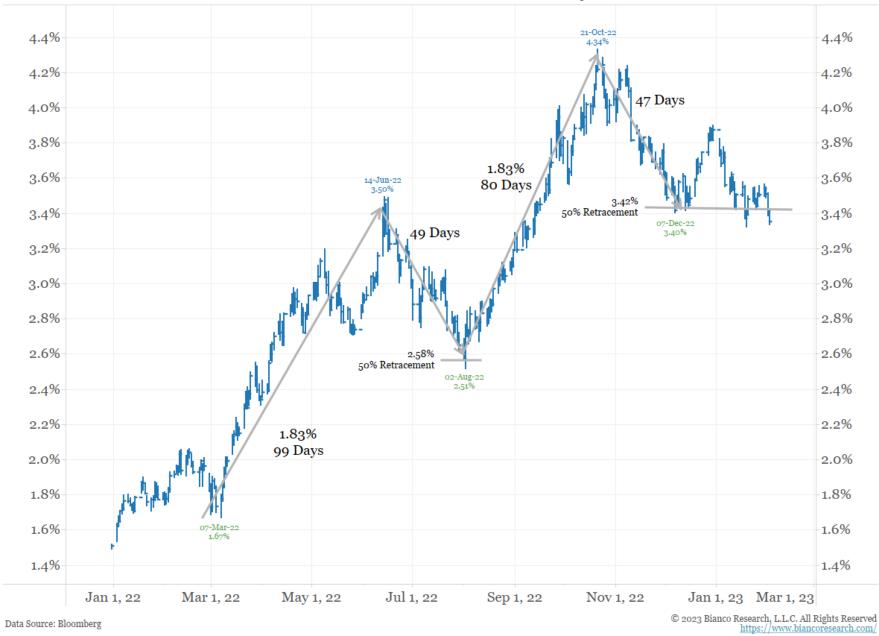


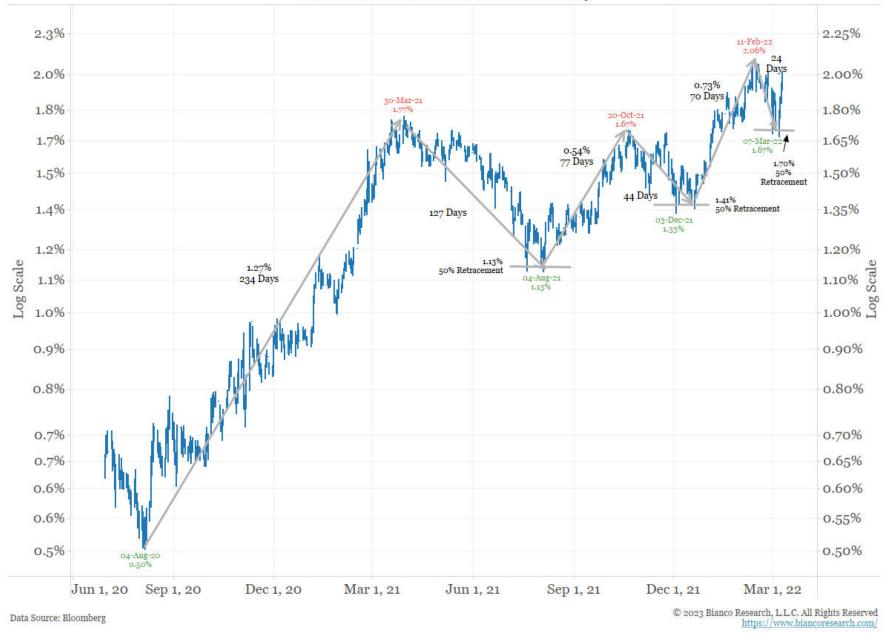
Q: Thank you, Chair Powell. Greg Robb from MarketWatch. In the minutes of the December meeting, there was a couple sentences that struck people as important when the committee said -- participants talked about this unwarranted easing of financial conditions was a risk and it would make your life harder to bring inflation down. Haven't seen -- heard you talk much about that today, or in the statement. So I was wondering, has that concern eased among members? Or is that still something you're concerned about? Thank you.

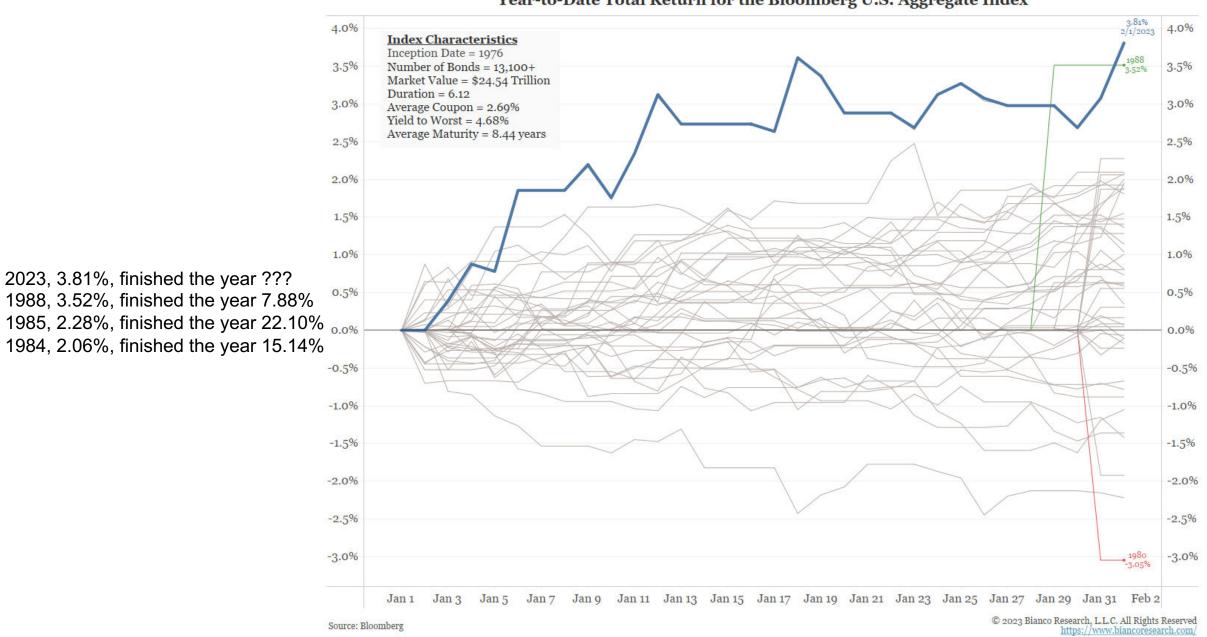
MR. POWELL: I would put it this way, it's something that we monitor carefully. Financial conditions didn't really change much from the December meeting to now. They mostly went sideways or up and down, but came out in roughly the same place. It's important that the markets do reflect the tightening that we're putting in place. As we've -- as we've discussed a couple times here, there is a difference in perspective by some market measures on how fast inflation will come down. We're just going to have to see. I mean, I'm not going to try to persuade people to have a different forecast, but our forecast is that it will take some time and some patience, and that we'll need to keep rates higher for longer. But we'll see.

The Yield of the 10-Year US Treasury



The Yield of the 10-Year US Treasury





Year-to-Date Total Return for the Bloomberg U.S. Aggregate Index

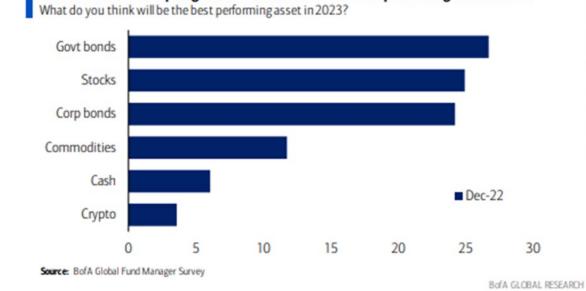


Chart 14: Investors expect government bonds to be the best performing asset in 2023

27% of FMS investors expect government bonds to be the best performing asset of 2023 (followed by stocks at 25%, corp bonds 24%, commodities 12%, cash 6%, crypto 4%).

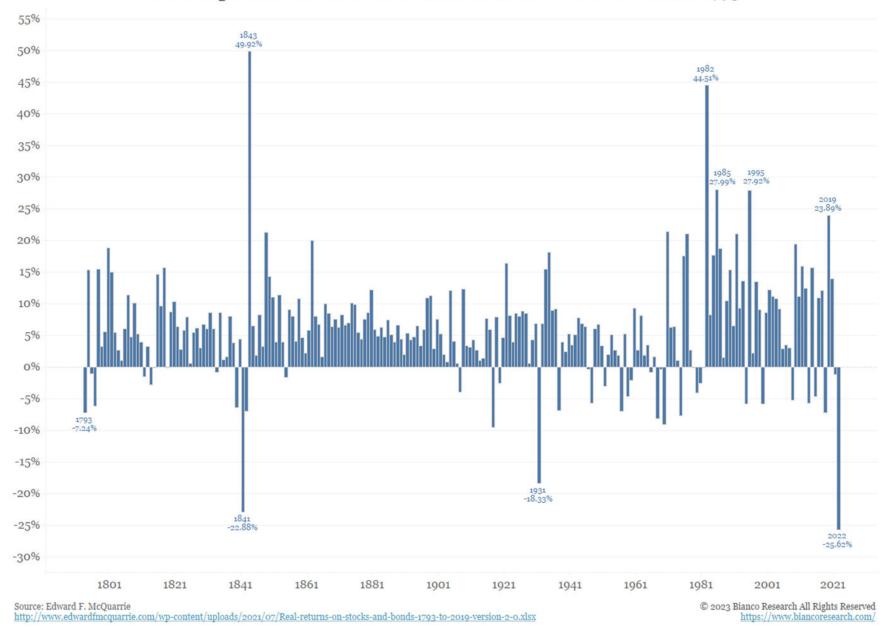
Note we are long US government bonds in H1'23...hard landing & credit event risks underpriced (see <u>Year Ahead 2023: long</u> <u>Bonds H1, long Stocks H2</u>).



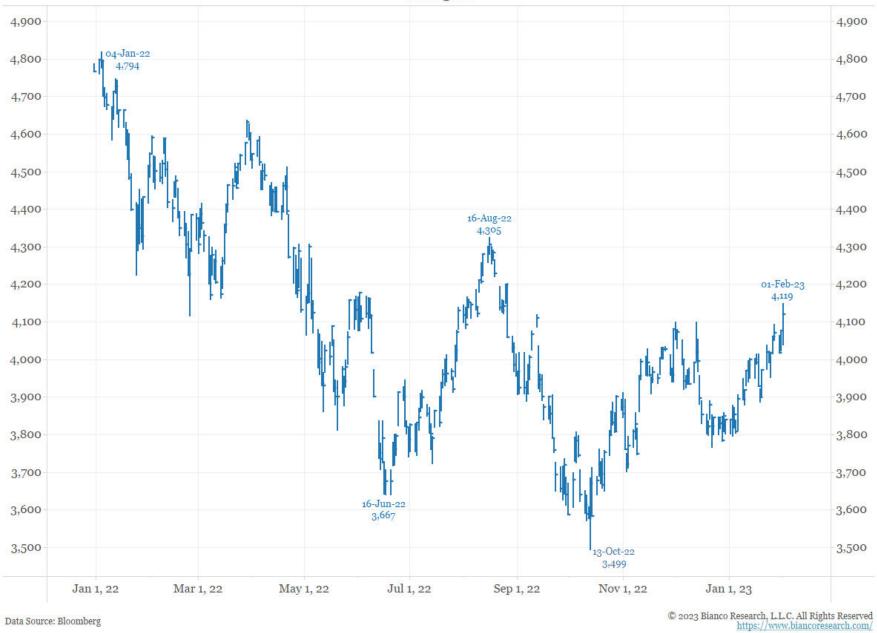


Allocation to bonds surged in December with FMS investors net 10% OW bonds (up 29ppt MoM), the first time investors have been net OW bonds since Apr'09.

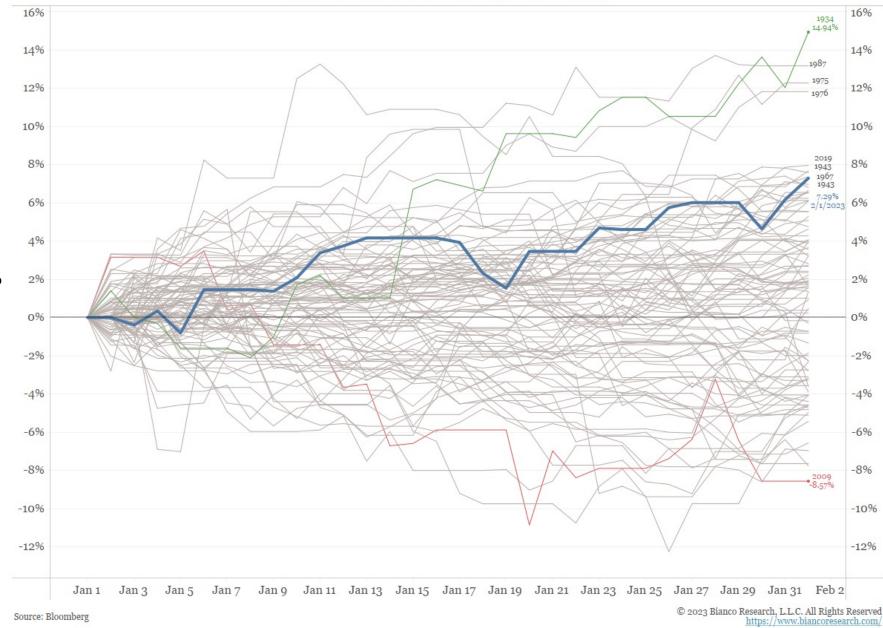
Bianco Research L.L.C



U.S. Long-Term Nominal (Before Inflation) Bond Total Returns Since 1793



Bianco Research L.L.C

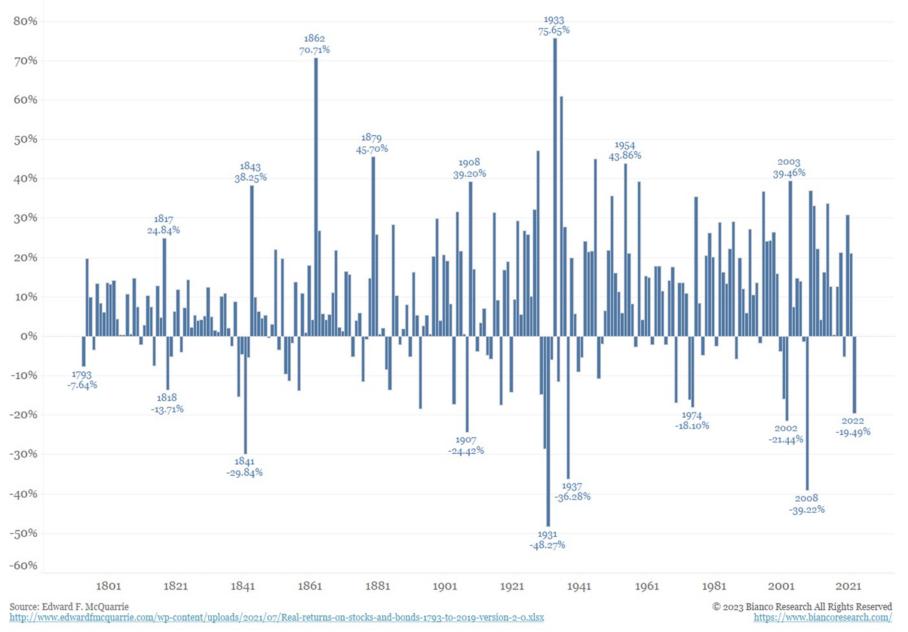


Bianco Research L.L.C

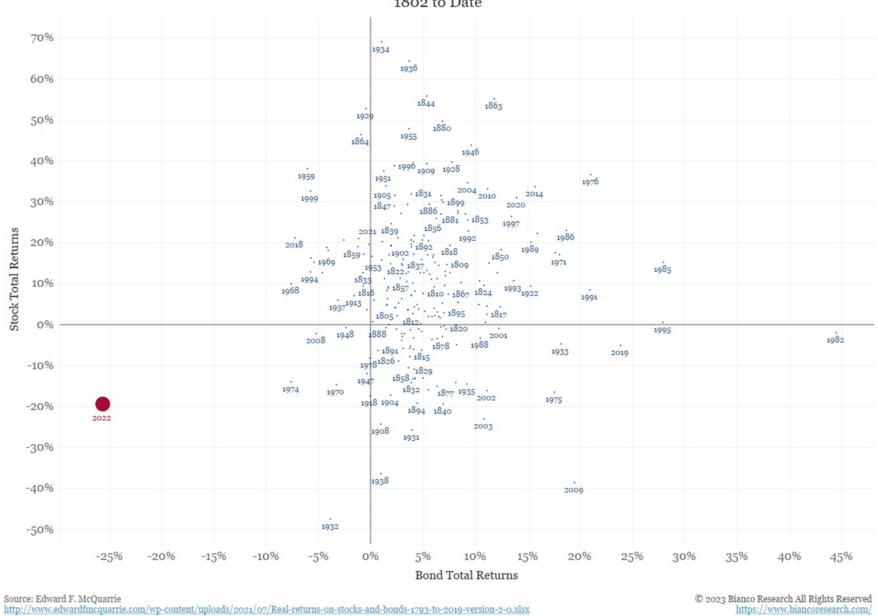
1934, +14.94%, finished the year -4.71% 1987, +13.18%, finished the year +098% 1975, +12.28%, finished the year +31.55% 1976, +11.83%, finished the year +13.62% 2019, +7.97%, finished the year +28.88% 1943, +7.68%, finished the year +19.44% 1967, +7.59%, finished the year +20.09% 1946, +7.37%, finished the year -11.87% 2023, +7.29%, finished the year ???

February 3, 2023

Year-to-Date for the S&P 500 Price Only

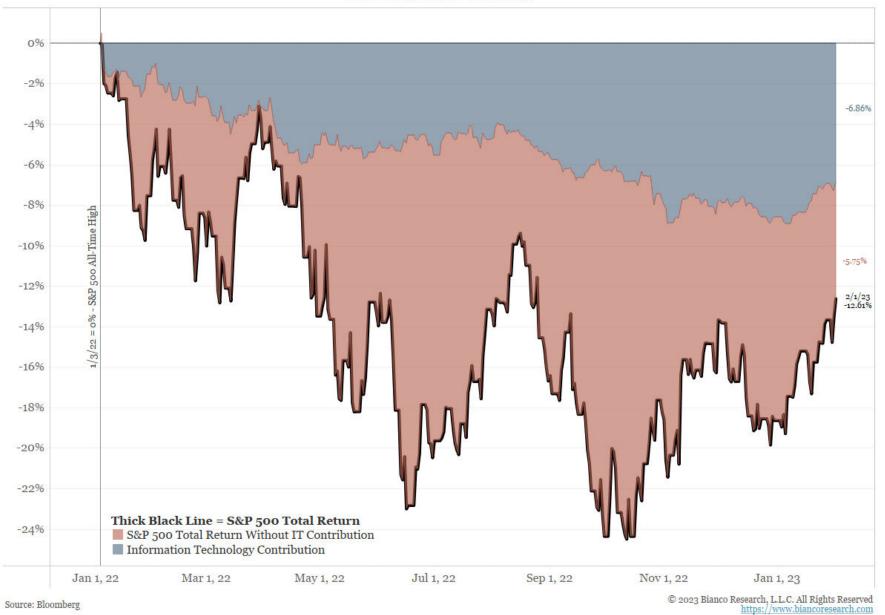


Nominal (Before Inflation) U.S. Stock Total Returns Since 1793

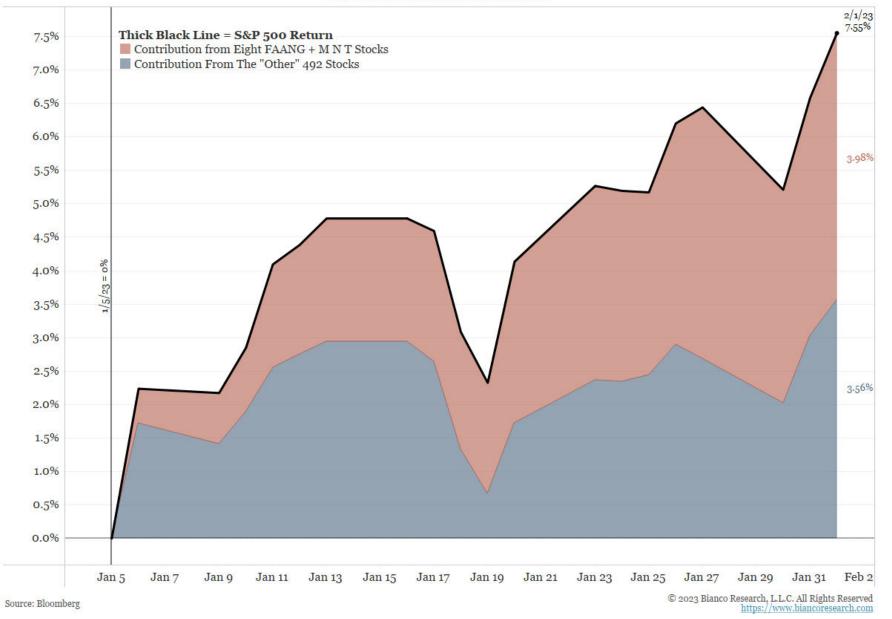


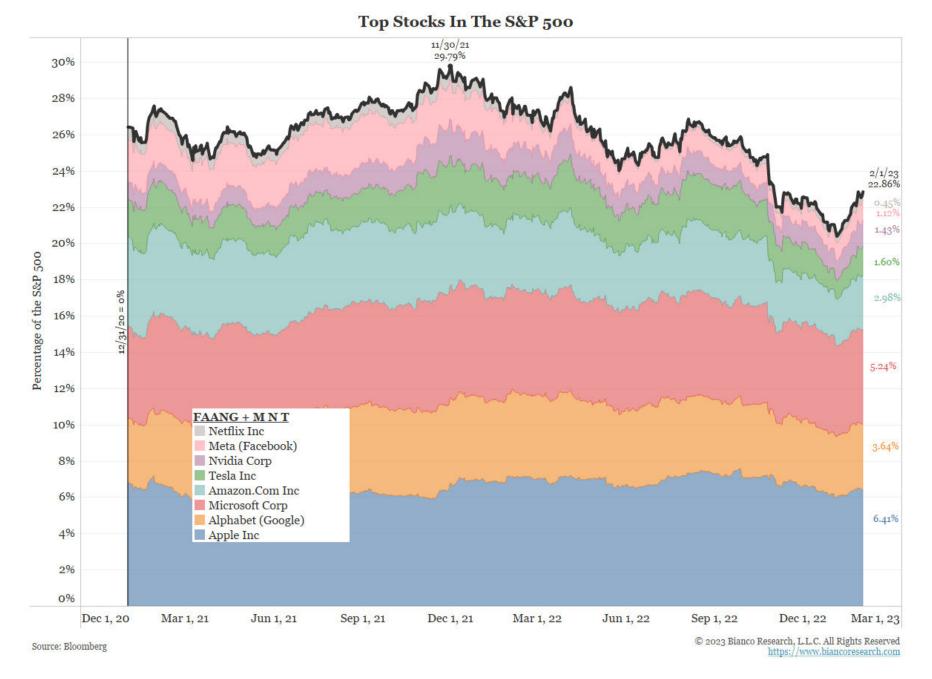
Stocks versus Bonds Nominal (Before Inflation) Returns 1802 to Date

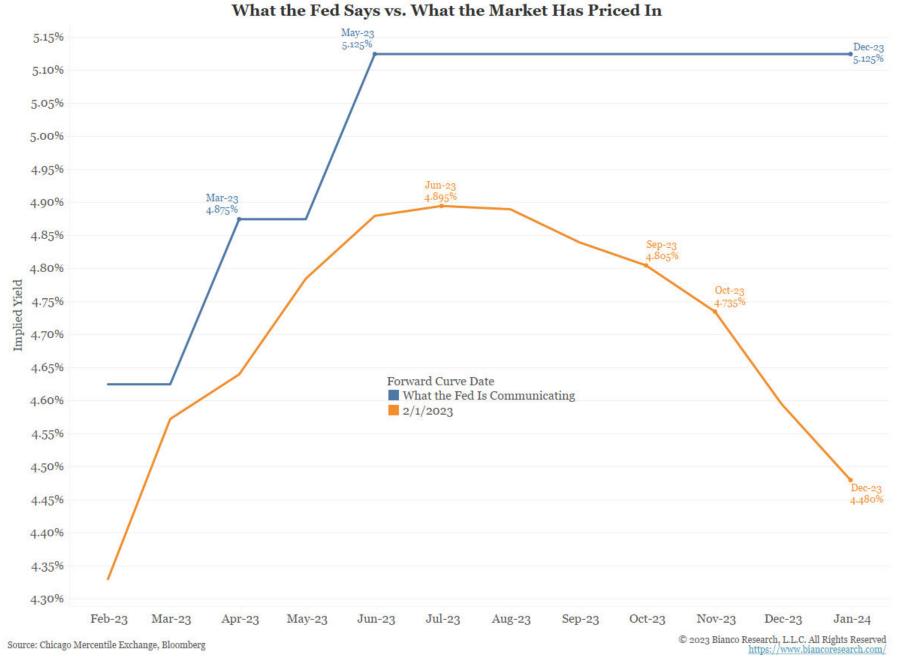
Information Technology's Impact on S&P 500 Sector Contribution To Total Return



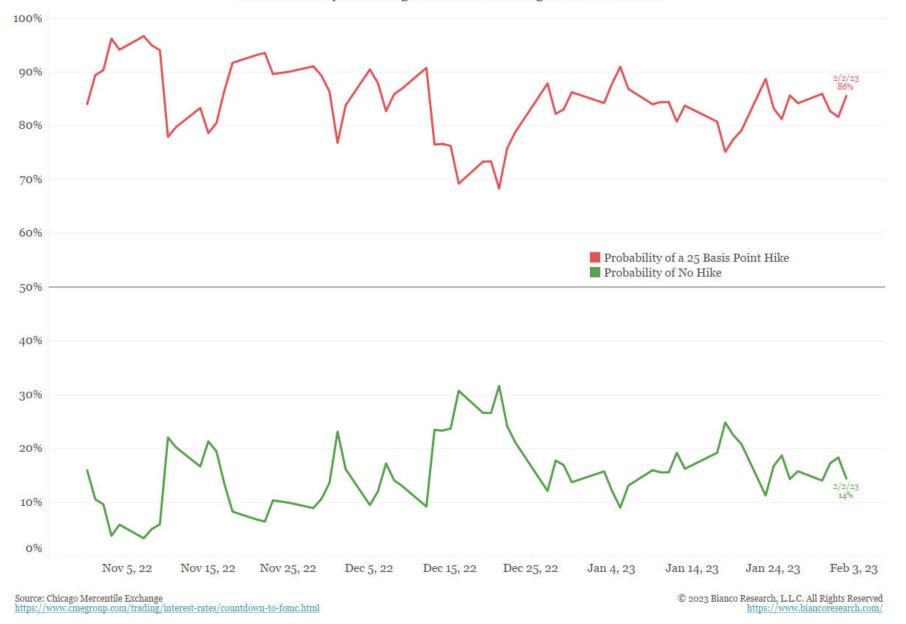
FAANG + MNT Stocks Impact on S&P 500 Top 8 Stocks Contribution to Total Return

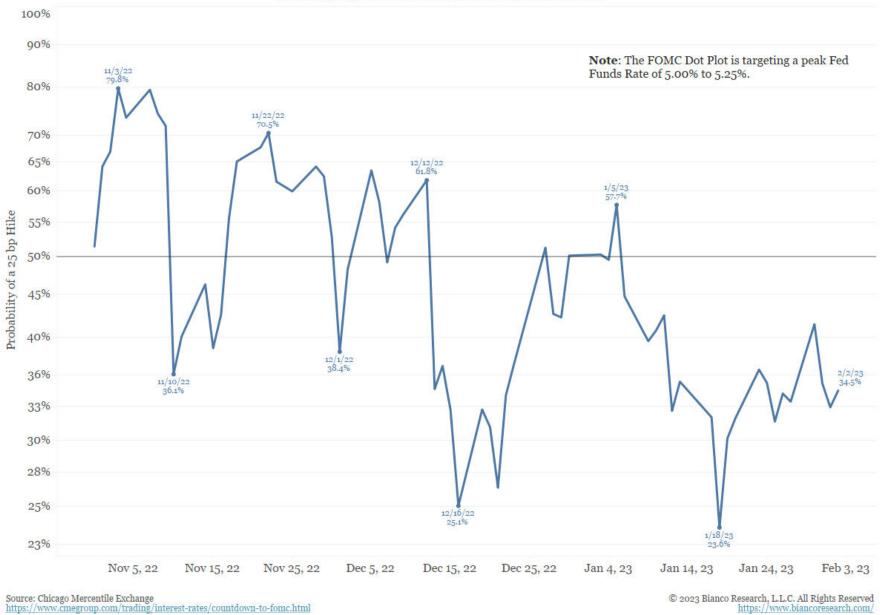




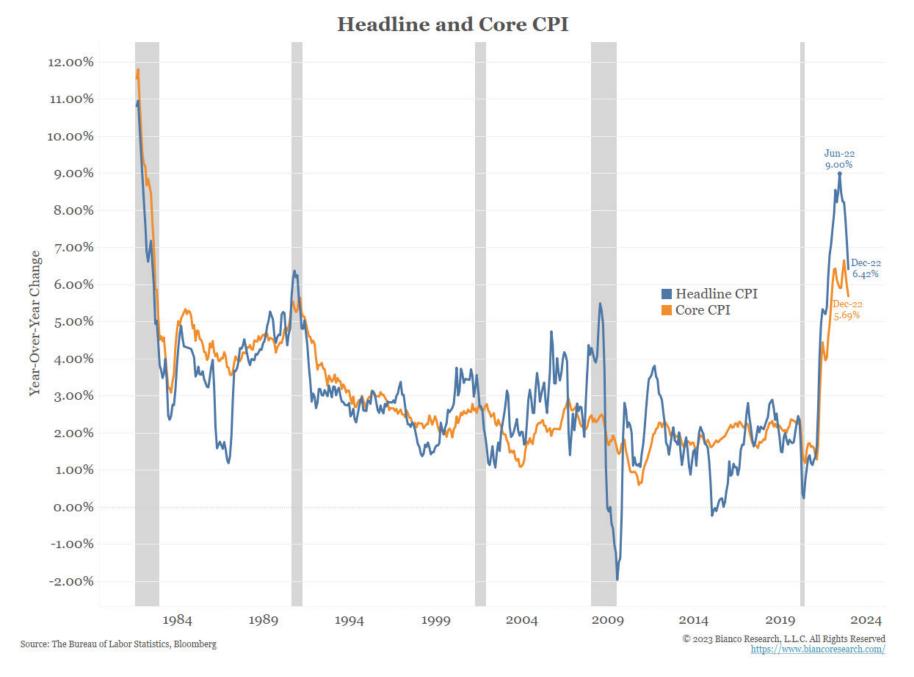


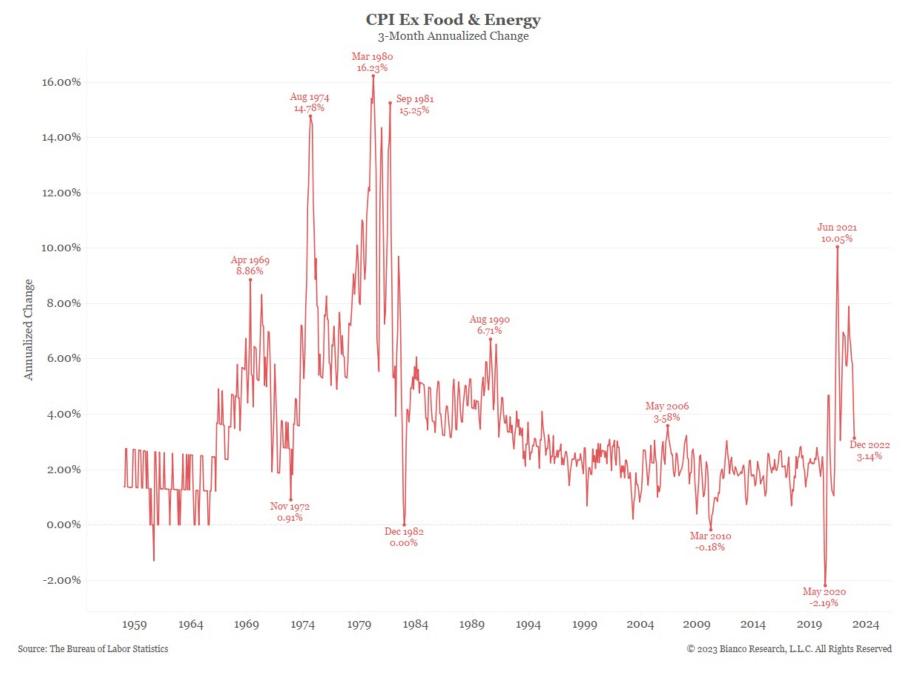
What Will the Fed Do on March 22, 2023? As Calculated by the Chicago Mercantile Exchange's Fed Watch Tool

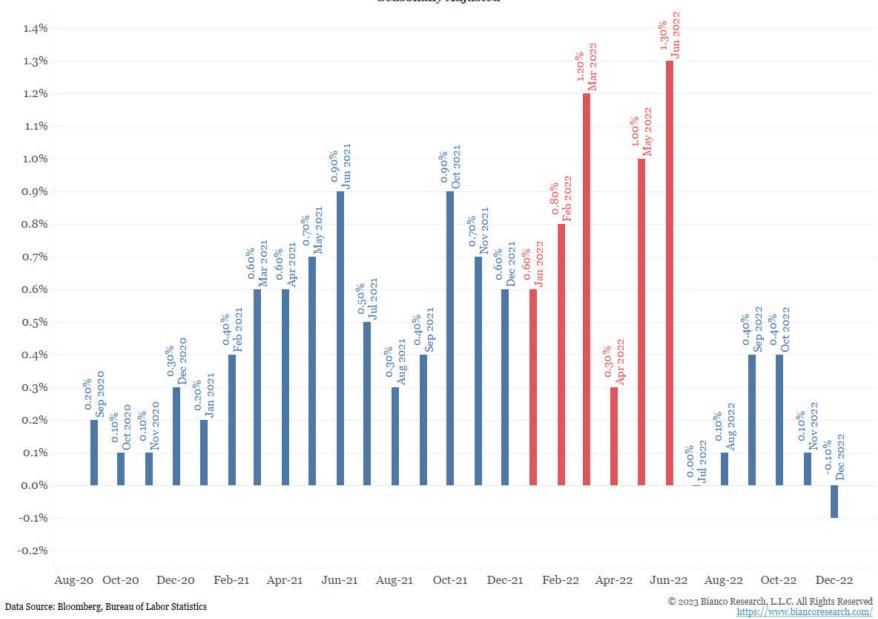




Probability of 25 Basis Point Hike at the May 3, 2023, FOMC Meeting, to 5.00% - 5.25% Assuming a 25 Basis Point Hike At The March FOMC Meeting







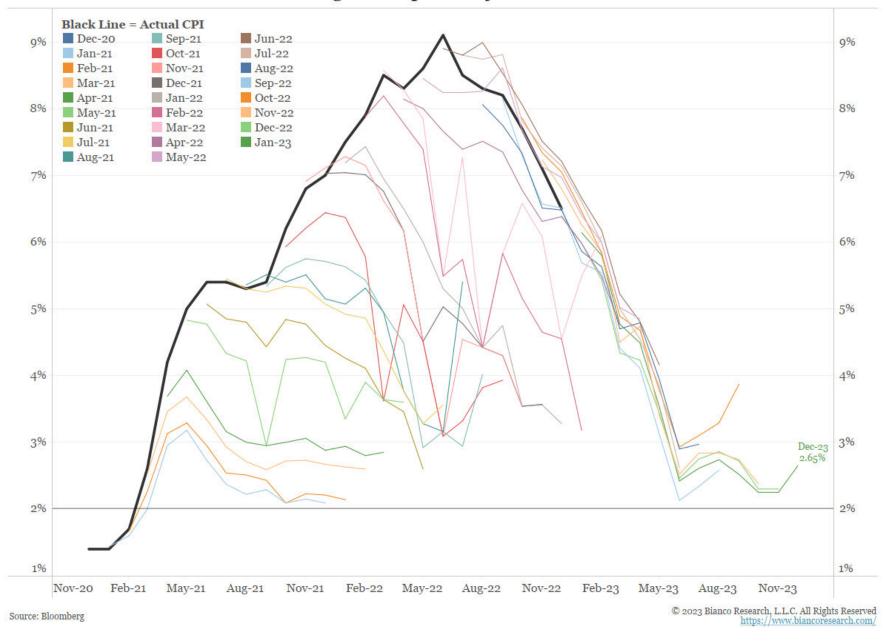
Month-Over-Month CPI Seasonally Adjusted

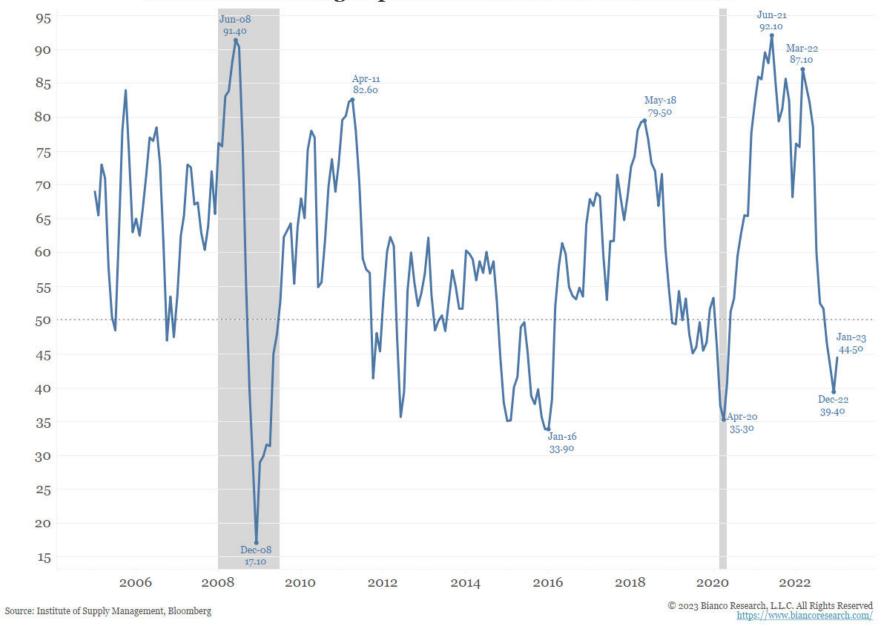
Wall Street US Inflation Forecasts Always Return to ~2%

Black = Actual CPI, Colors = Monthly Wall Street Forecasts 9.0% 9.0% May-22 Mar-19 May-21 May-20 Aug-22 8.0% 8.0% Jul-19 Sep-21 Oct-22 Sep-20 Nov-22 Sep-19 Dec-22 7.0% 7.0% Jan-23 Jan-22 Nov-18 Jan-20 Mar-22 6.0% 6.0% Jan-19 Mar-21 5.0% 5.0% 4.0% 4.0% 3.0% 3.0% 2.0% 2.0% 2.0%, Fed Target 1.0% 1.0% 0.0% 0.0% Mar-18 Sep-18 Mar-19 Mar-20 Sep-20 Mar-21 Sep-21 Mar-22 Sep-22 Mar-23 Sep-19 Sep-23 Mar-24 © 2023 Bianco Research, L.L.C. All Rights Reserved https://www.biancoresearch.com/ Data Source: Bloomberg, Bureau of Labor Statistics

Monthly from January 2018 to Date

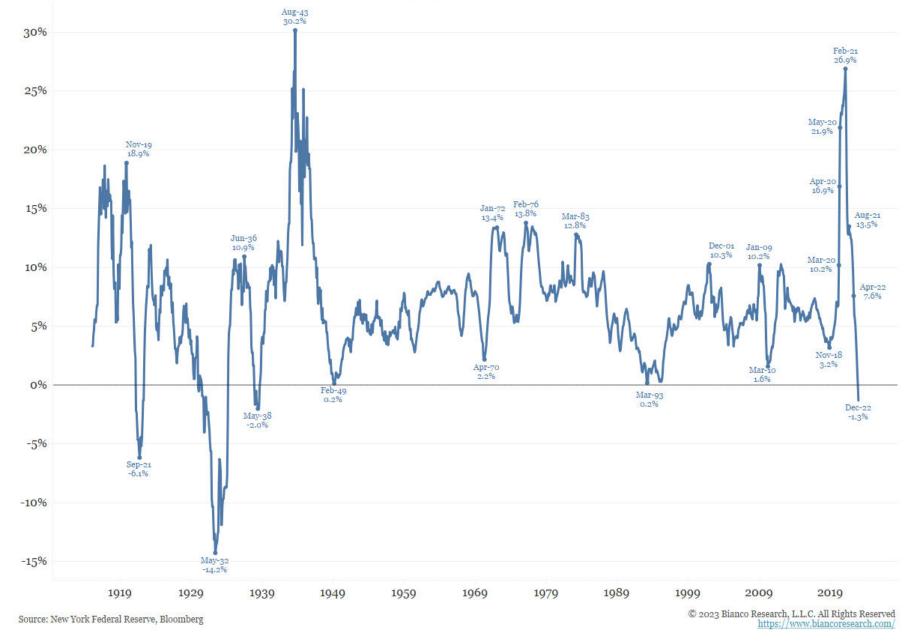
Using CPI Swaps To Project Inflation





ISM Manufacturing Report on Business Prices Index NSA

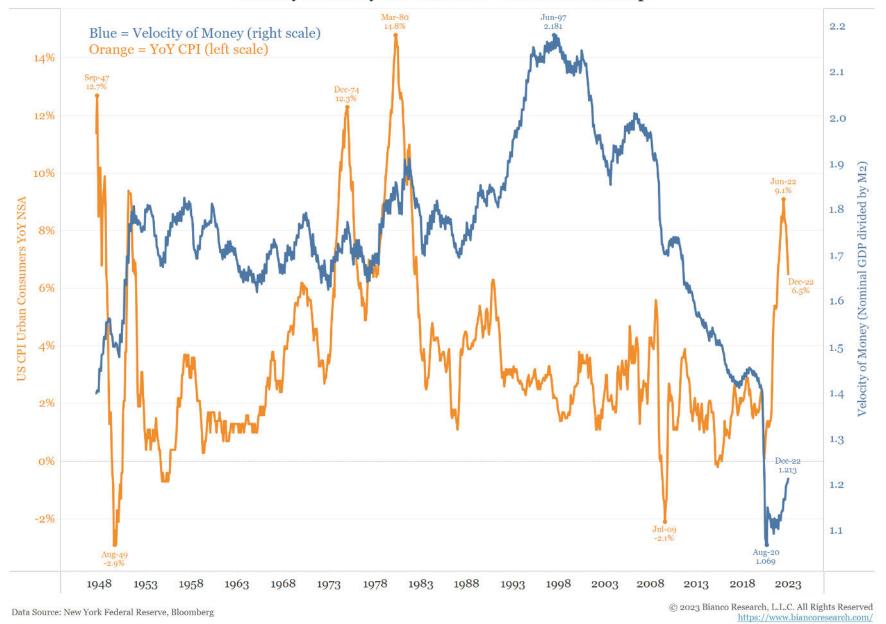
Money Supply M2 YoY % Change



Global Money Supply Excluding the U.S. Combined M2 of the Eurozone, China, Japan, South Korea, Australia, Canada, Brazil, Switzerland, Mexico, Russia, and Taiwan



Velocity of Money and Inflation - Little Relationship



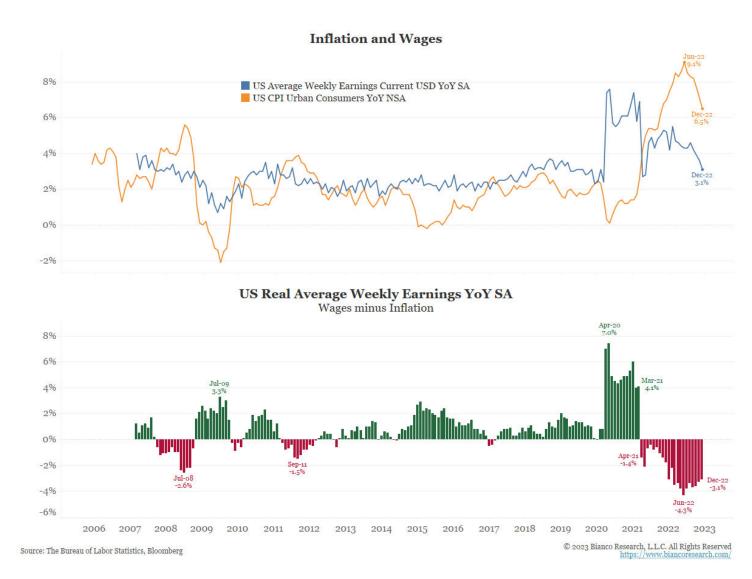
Fortune - 57% of Americans can't afford a \$1,000 emergency expense, says new report. A look at why Americans are saving less and how you can boost your emergency fund

Good afternoon, and welcome. My colleagues and I understand the hardship that high inflation is causing, and we are strongly committed to bringing inflation back down to our 2 percent goal.

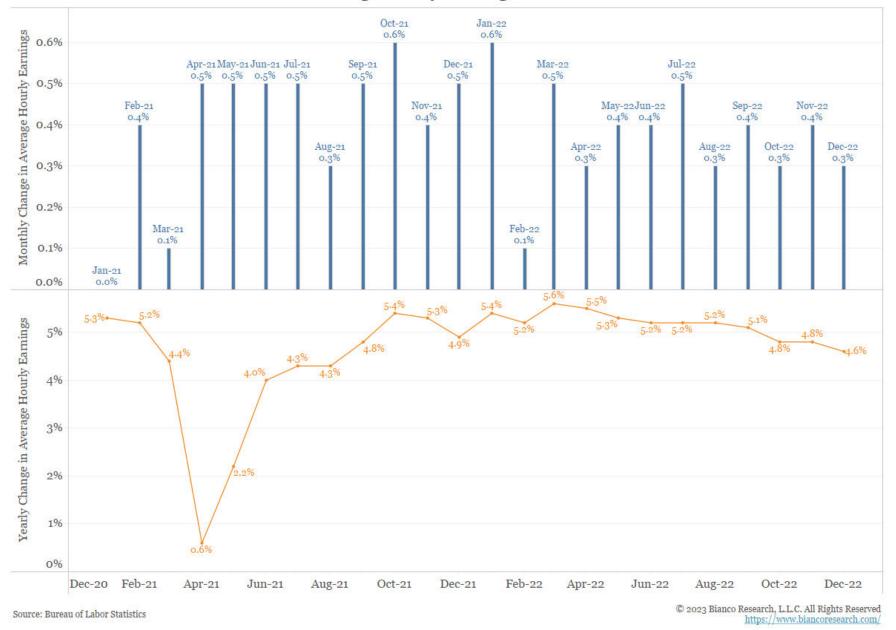
Over the past year, we have taken forceful actions to tighten the stance of monetary policy. We have covered a lot of ground, and the full effects of our rapid tightening so far are yet to be felt. Even so, we have more work to do.

Price stability is the responsibility of the Federal Reserve and serves as the bedrock of our economy.

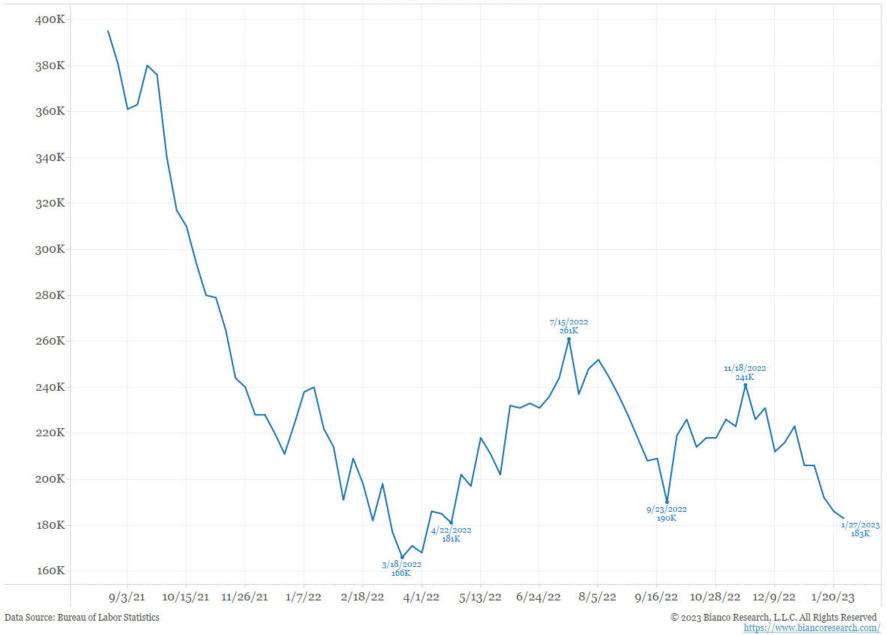
Without price stability, the economy does not work for anyone. In particular, without price stability, we will not achieve a sustained period of labor market conditions that benefit all.



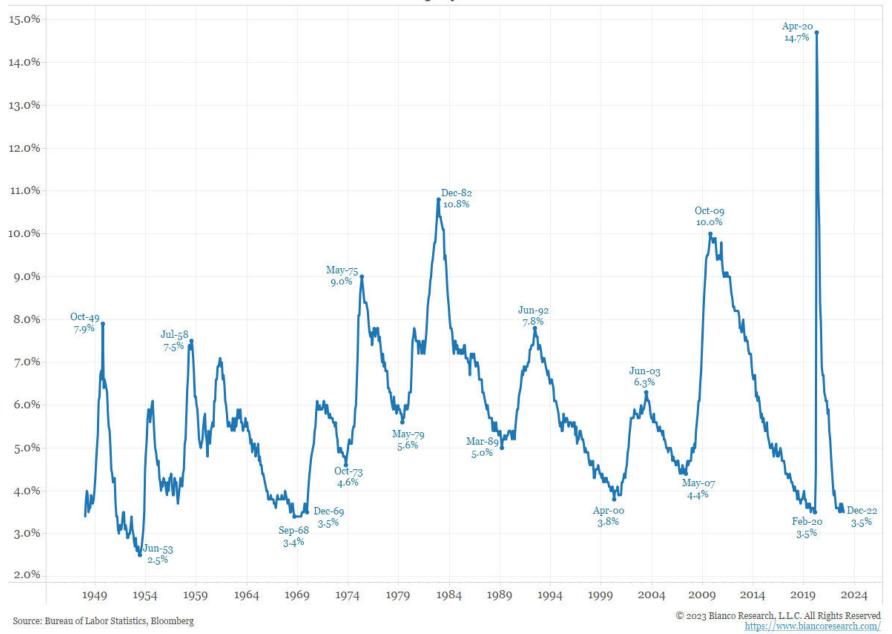
Average Hourly Earnings Growth



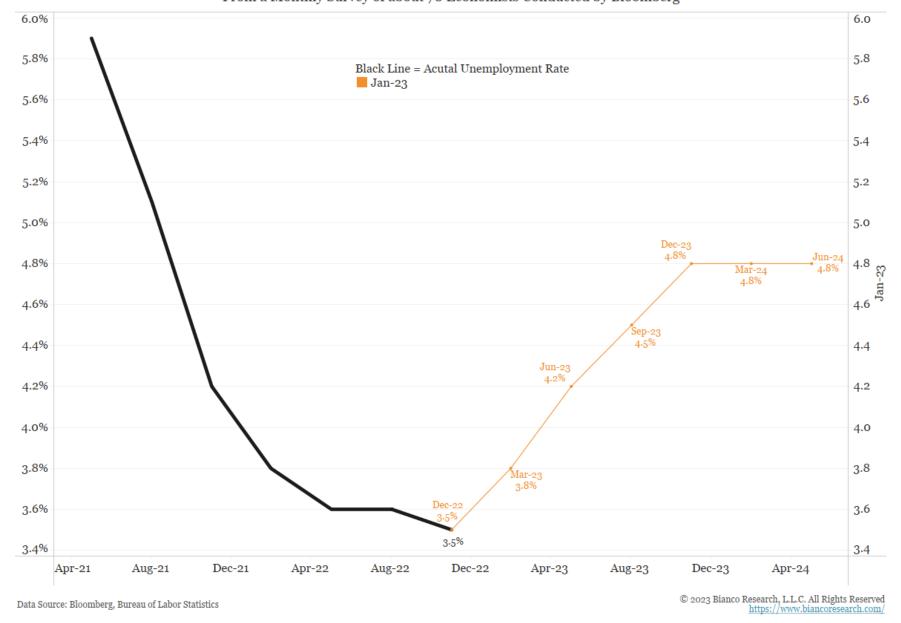
Weekly Initial Claims



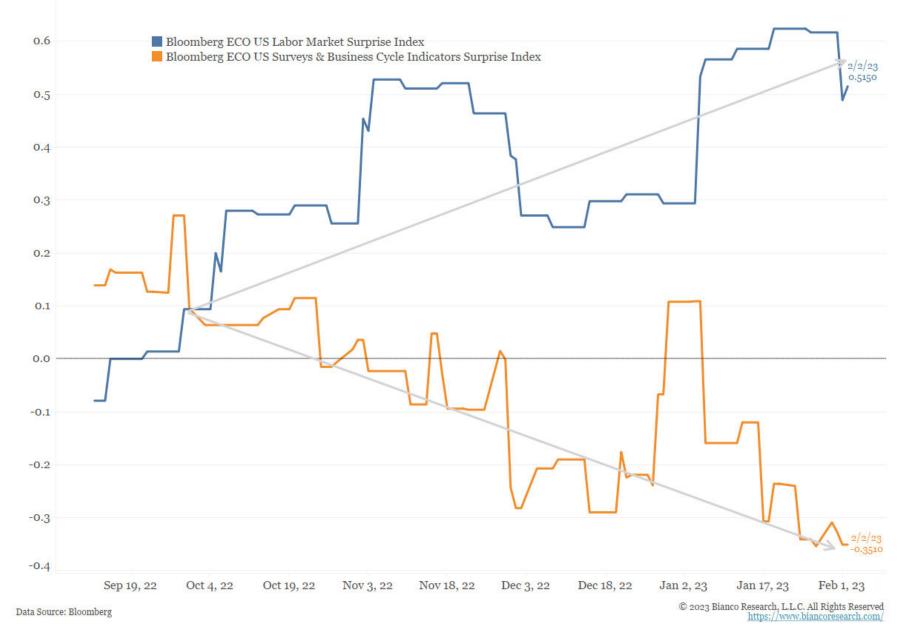
US Unemployment Rate



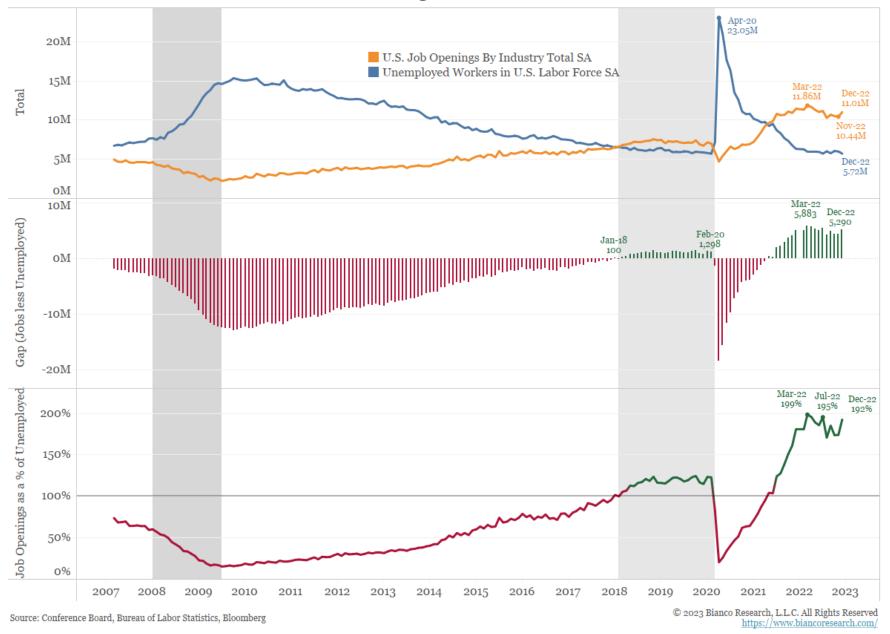
Latest - Economists U.S. Unemployment Forecasts From a Monthly Survey of about 70 Economists Conducted by Bloomberg

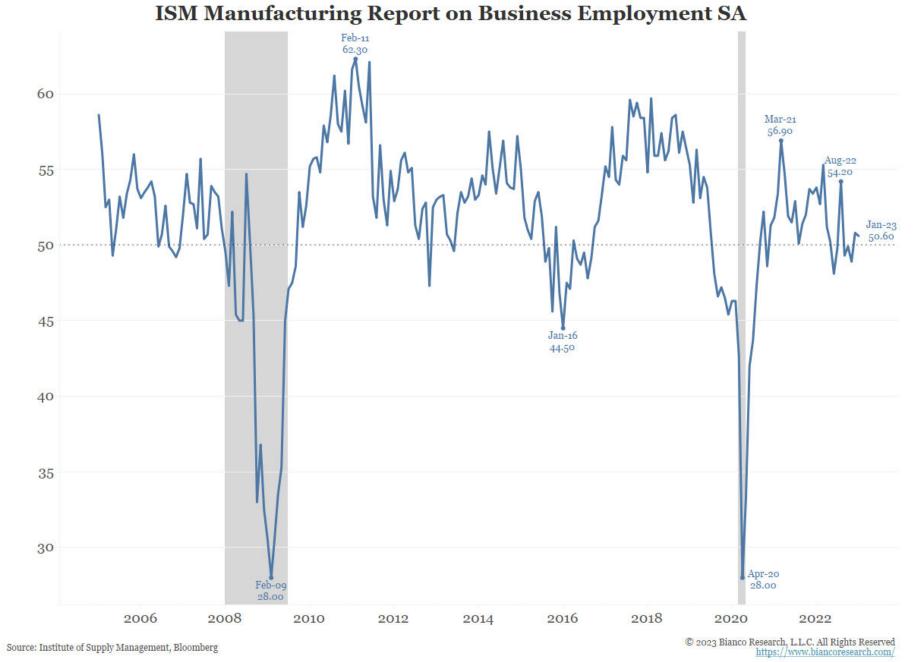


Bloomberg Surprise Indices



A Shortage of Workers?





February 3, 2023

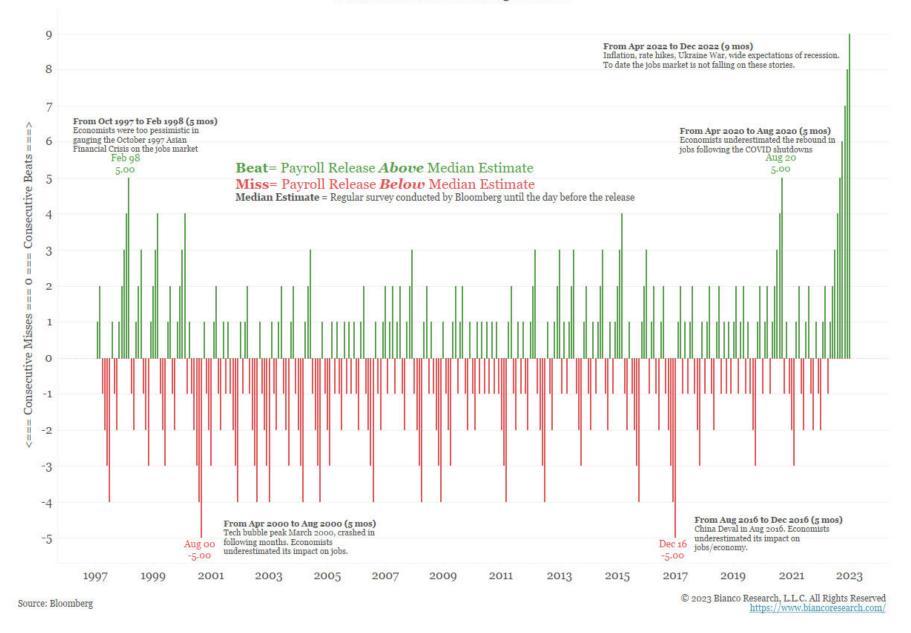
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Payroll Beats/Misses Initial Release Minus Bloomberg's Median Estimate



Payroll Beats/Misses Streaks

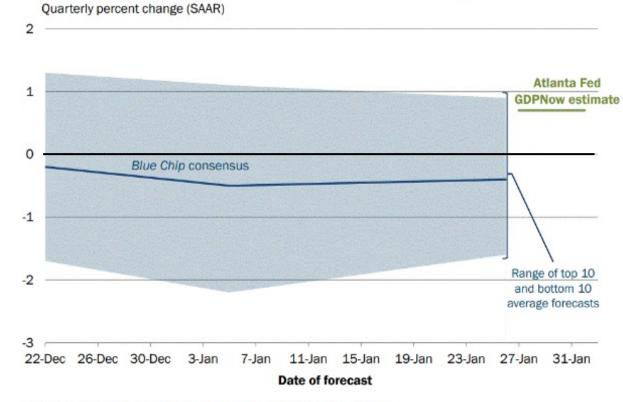
Initial Release Minus Bloomberg's Estimate



Latest estimate: 0.7 percent — February 1, 2023

The GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the first quarter of 2023 is 0.7 percent, unchanged from January 27 after rounding. After this morning's construction spending release from the US Census Bureau and the Manufacturing ISM Report On Business from the Institute for Supply Management, the nowcast of the contribution of inventory investment to first-quarter real GDP growth increased from -1.43 percentage points to -1.40 percentage points.

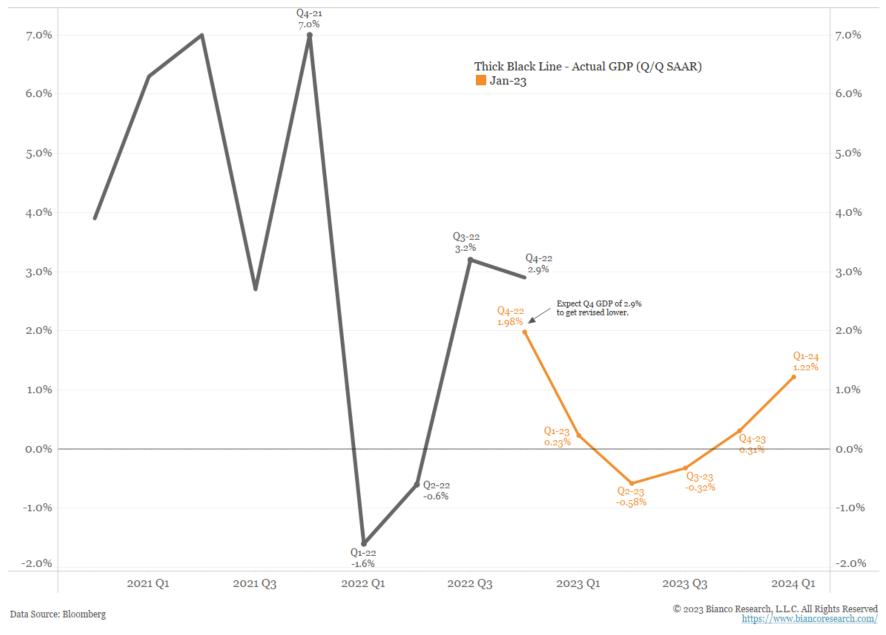
The next GDPNow update is **Tuesday, February 7**. Please see the "Release Dates" tab below for a list of upcoming releases.

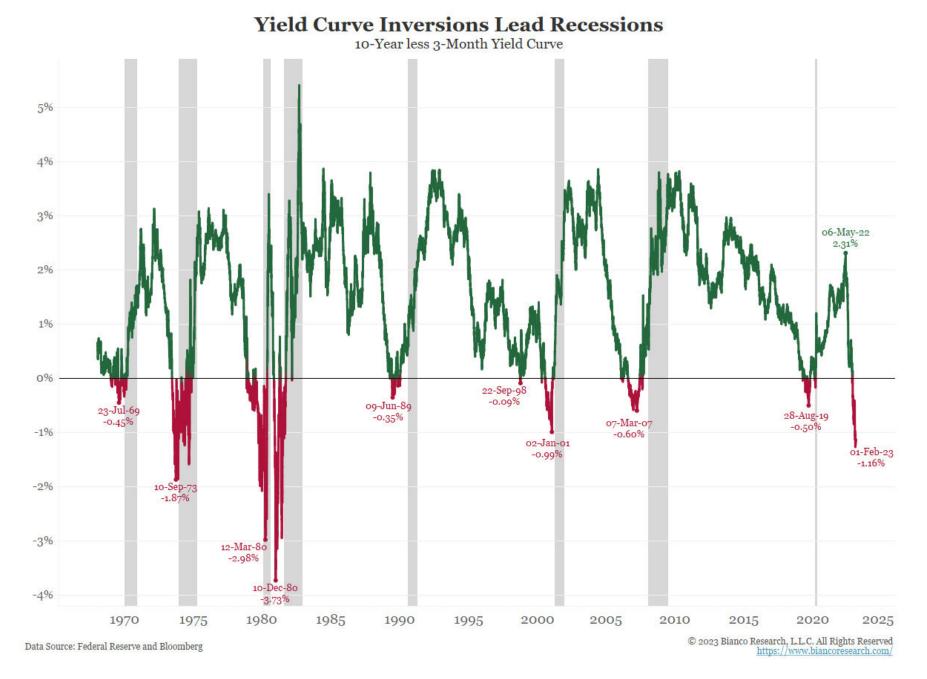


Evolution of Atlanta Fed GDPNow real GDP estimate for 2023: Q1

Sources: Blue Chip Economic Indicators and Blue Chip Financial Forecasts Note: The top (bottom) 10 average forecast is an average of the highest (lowest) 10 forecasts in the Blue Chip survey.

Latest US GDP Forecasts - United States





How Long Until the Recession?

Date of Inversion	Consecutive Trading Days Inverted	Date of Next Recession	Calendar Days to Next Recession
1/10/1969	24	Dec-69	325
6/14/1973	177	Nov-73	140
12/8/1978	91	Jan-80	389
11/7/1980	102	Jul-81	236
6/6/1989	30	Jul-90	390
7/31/2000	135	Mar-01	213
8/1/2006	217	Dec-07	487
6/6/2019	41	Feb-20	268
11/22/2022	?????	????	????
Average	111		311

When the 3-month to 10-year yield curve inverts for 10 consecutive trading days

1/10/1969 = inverted for 24 calendar days, went positive for 33 days, then inverted again for 53 days

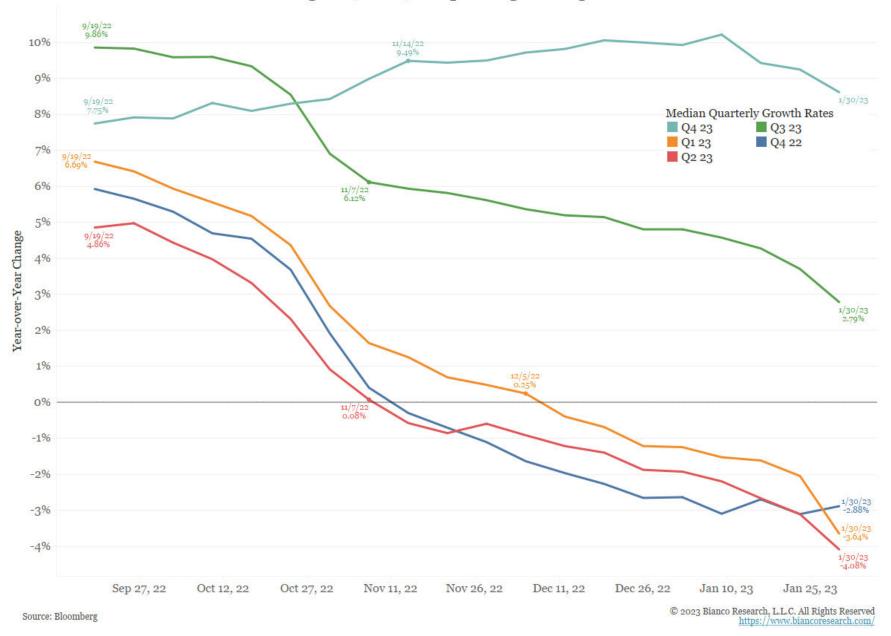
6/6/1989 = inverted for 30 calendar days, went postive for 9 days, inverted again for 26 days

6/6/2019 = As of July 31 the inversion has been 41 consecutive trading days. Positive for 1 day, then inverted again for 67 days (through October 10)

311 days after the curve inverted (November 22, 2022) is September 29, 2023.

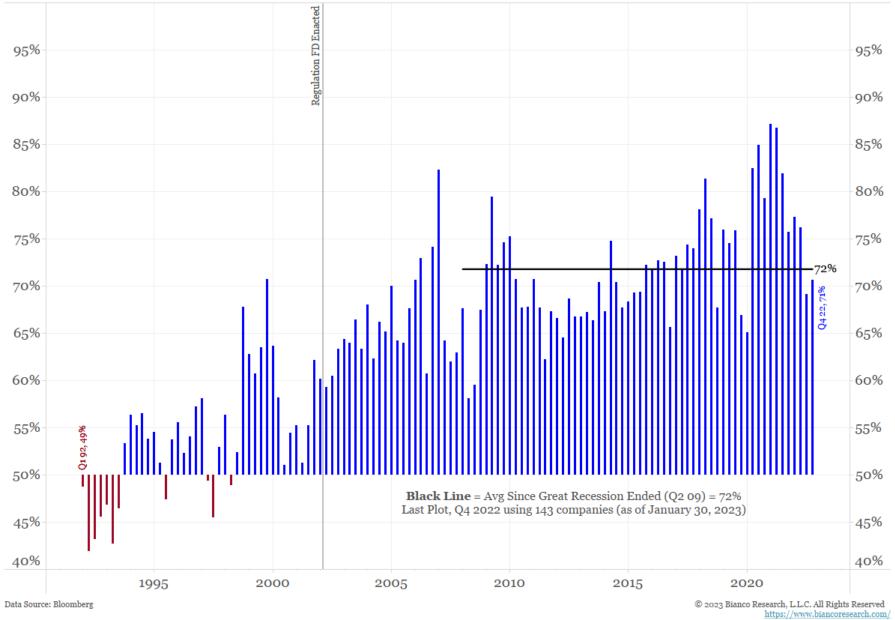
487 days later (the record amount of time to date) is March 23, 2024.

Question: does this market have the patience to wait until March 2024 before solid signs emerge that the Fed can pivot?

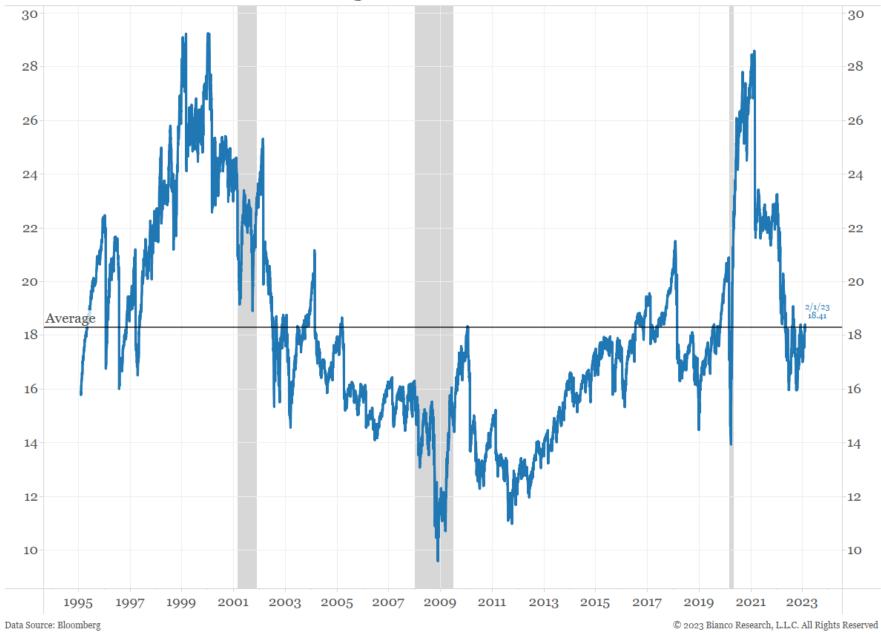


Forecasting 2023 S&P 500 Operating Earnings Growth

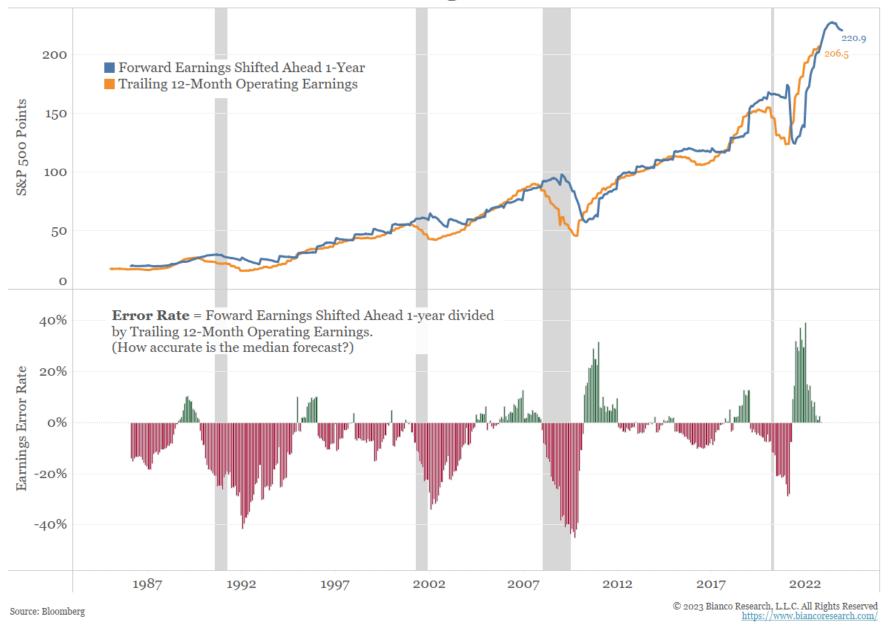
Percent Of The S&P 500 That Beat Quarterly <u>Earnings</u> Expectations (Compared To The Last Median Estimate According to Bloomberg)



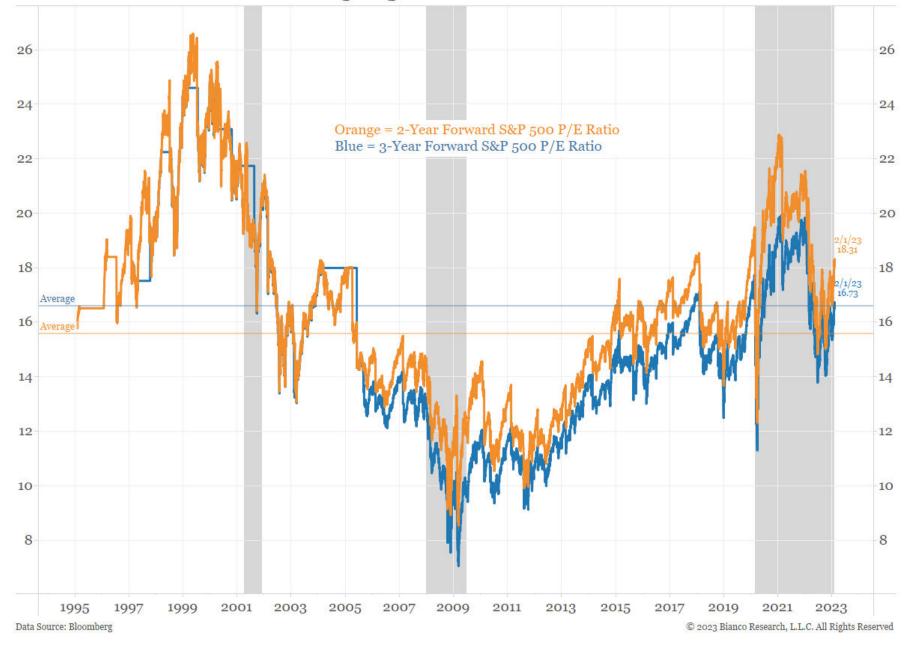
S&P 500 Forward PE Ratio



1-Year Earnings Error Rate



S&P 500 3 Yr Forward PE Ratio



3-Year Forward Earnings Error Rate

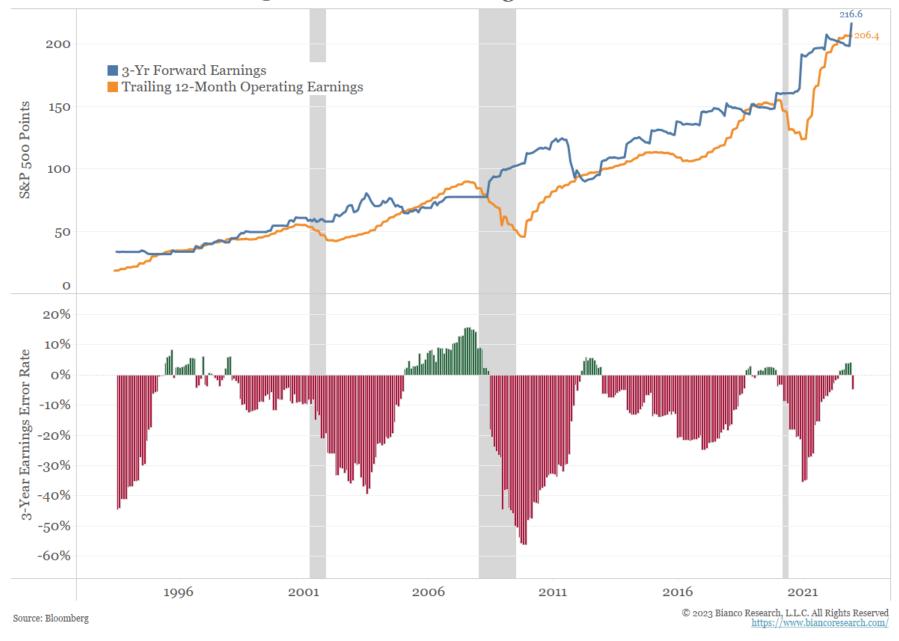


Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, under their individual assumptions of projected appropriate monetary policy, December 2022

Variable	Median ¹					Central Tendency ²				Range ³					
	2022	2023	2024	2025	Longer run	2022	2023	2024	2025	Longer run	2022	2023	2024	2025	Longer run
Change in real GDP September projection	0.5 0.2	0.5	1.6	1.8 1.8	$1.8 \\ 1.8$	0.4–0.5 0.1–0.3	0.4 - 1.0 0.5 - 1.5	1.3-2.0 1.4-2.0		1.7-2.0 1.7-2.0	0.2-0.5 0.0-0.5	-0.5–1.0 -0.3–1.9	0.5-2.4 1.0-2.6		1.6-2.5 1.6-2.2
Unemployment rate September projection	3.7 3.8	4.6	4.6 4.4	4.5 4.3	4.0 4.0	3.7 3.8–3.9	4.4-4.7 4.1-4.5	4.3 - 4.8 4.0 - 4.6		3.8-4.3 3.8-4.3	3.7 - 3.9 3.7 - 4.0	4.0-5.3 3.7-5.0	4.0-5.0 3.7-4.7		3.5-4.8 3.5-4.5
PCE inflation September projection	5.6 5.4	3.1	2.5 2.3	2.1 2.0	2.0 2.0	5.6 - 5.8 5.3 - 5.7	2.9 - 3.5 2.6 - 3.5	2.3-2.7 2.1-2.6	2.0-2.2 2.0-2.2	2.0 2.0	5.5 - 5.9 5.0 - 6.2	2.6-4.1 2.4-4.1	2.2 - 3.5 2.0 - 3.0	2.0-3.0 2.0-2.5	2.0 2.0
Core PCE inflation ⁴ September projection	4.8 4.5	3.5 3.1	2.5 2.3	2.1 2.1		4.7 - 4.8 4.4 - 4.6	3.2–3.7 3.0–3.4	2.3-2.7 2.2-2.5	2.0-2.2 2.0-2.2		4.6-5.0 4.3-4.8	3.0 - 3.8 2.8 - 3.5	2.2–3.0 2.0–2.8	2.0-3.0 2.0-2.5	
Memo: Projected appropriate policy path															
Federal funds rate September projection	4.4 4.4	5.1) 4.6	4.1 3.9	3.1 2.9	2.5 2.5	4.4 4.1-4.4	5.1 - 5.4 4.4 - 4.9	3.9 - 4.9 3.4 - 4.4		2.3-2.5 2.3-2.5	4.4 3.9–4.6	4.9-5.6 3.9-4.9	3.1 - 5.6 2.6 - 4.6		2.3-3.3 2.3-3.0

Percent

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