

WEALTH ADVISORS

TRUST MATTERS.

April 2023

Point of View – Economy – Markets

Important Information

The views and opinions expressed are those of the speaker and are subject to change based on factors such as market and economic conditions. These views and opinions are not an offer to buy a particular security and should not be relied upon as investment advice. Past performance cannot guarantee comparable future results.

Important Information

Performance quoted is past performance and cannot guarantee comparable future results; current performance may be higher or lower.

Results shown assume the reinvestment of dividends.

An investment cannot be made directly in an index.

Investments with higher return potential carry greater risk for loss.

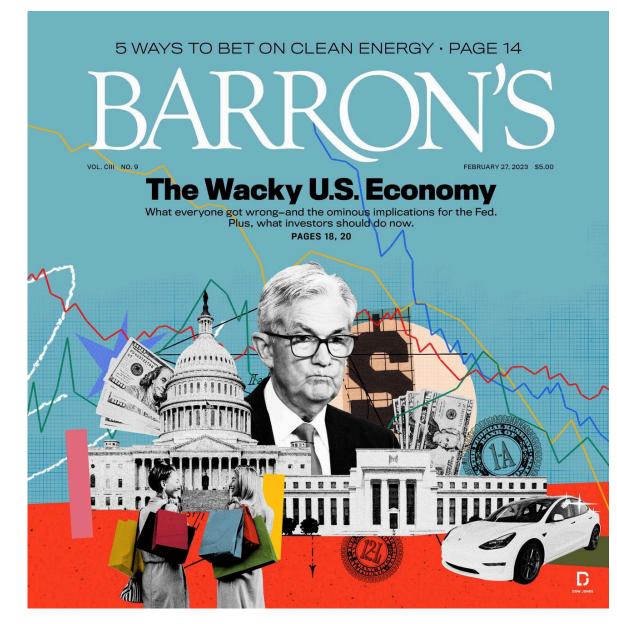
Investing in small companies involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations and illiquidity.

Foreign securities have additional risks, including exchange rate changes, political and economic upheaval, the relative lack of information about these companies, relatively low market liquidity and the potential lack of strict financial and accounting controls and standards.

Investing in emerging markets involves greater risk than investing in more established markets such as risks relating to the relatively smaller size and lesser liquidity of these markets, high inflation rates, adverse political developments and lack of timely information.

Fluctuations in the price of gold and precious metals often dramatically affect the profitability of the companies in the gold and precious metals sector. Changes in political or economic climate for the two largest gold producers, South Africa and the former Soviet Union, may have a direct effect on the price of gold worldwide.





Source: Barron's, February 27, 2023.

Point of View April 2023

The Split-Personality Economy

Bad news

- > LEI
- Inverted yield curve
- Weak manufacturing
 PMI
- Weakening services PMI
- Cooling retail sales
- Weak housing starts

Good news

 \geq

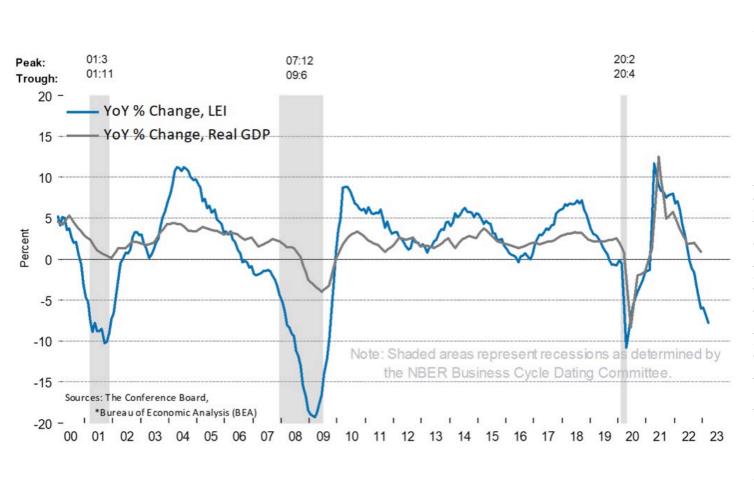
- Strong hiring data
- Strong Q4 GDP
- Strong Q1 GDPNow
- Strong March car sales
- Oil down
- Consumers still have cash
- Strong corporate balance sheets
- Strong bank capital
- Inflation is moderating

Point of View April 2023

Bad news

- \succ LEI
- Inverted yield curve
- Weak manufacturing PMI
- Weakening services PMI
- AAAAA Cooling retail sales
- Weak housing starts

Economic data U.S. index of leading economic indicators – signaling recession



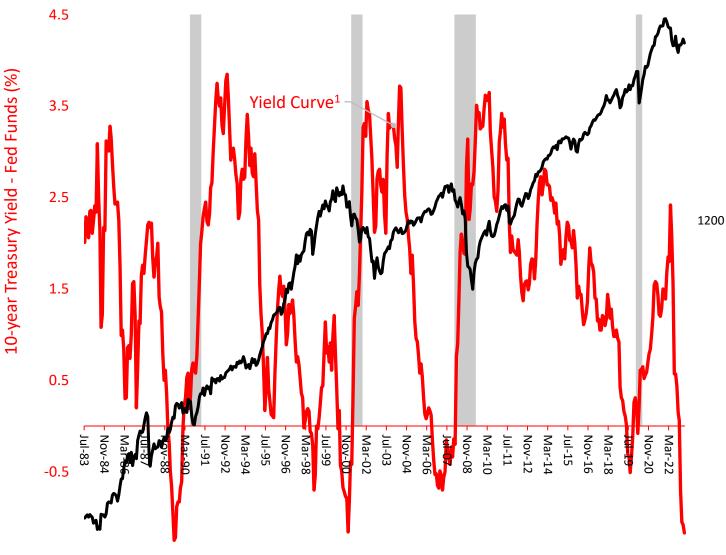
"The weaknesses among the index's components were widespread in March and have been so over the past six months, which pushed the growth rate of the LEI deeper into negative territory. ... The Conference Board forecasts that economic weakness will intensify and spread more widely throughout the US economy over the coming months, leading to a recession starting in mid-2023."

This chart shows how the LEI has definitively rolled over well in advance of the last recessions.

The Conference Board Leading Economic Index® (LEI) components: 1) average weekly hours worked, manufacturing; 2) average weekly initial unemployment claims; 3) manufacturers' new orders – consumer goods and materials; 4) ISM index of new orders; 5) manufacturers' new orders, nondefense capital goods; 6) building permits – new private housing units; 7) stock prices, S&P 500; 8) Leading Credit Index[™]; 9) interest rate spread; 10-year Treasury minus fed funds; 10) index of consumer expectations.

Source: ©The Conference Board. Data through February released April 20, 2023.

Federal Reserve policy Yield curve vs. the S&P 500



When the yield curve has inverted the economy has usually turned down into recession with a lag of a year or more.

Today, the yield curve is inverted.

S&P 500

-1.5

Sources: NBER, Federal Reserve and Standard & Poor's. Data through March 2023.

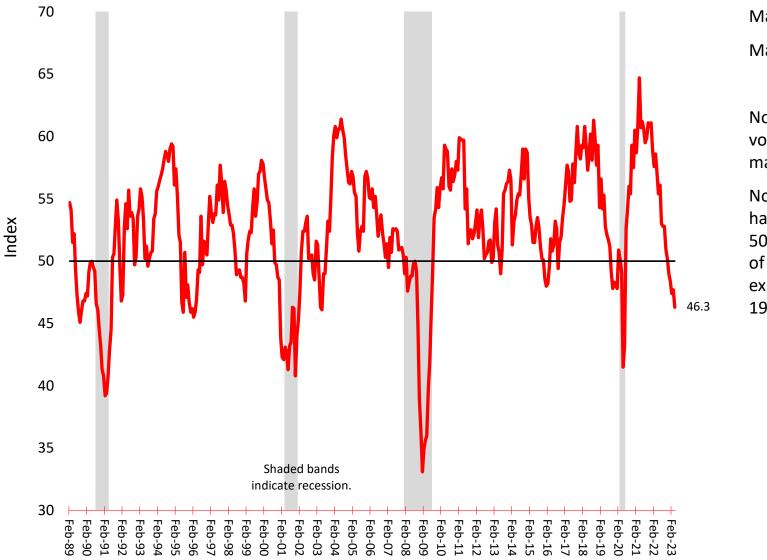
¹The interest rate on the 10-year Treasury bond (long term) minus the fed funds rate (short term).

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Consumers Again Scale Back Retail Spending

American consumers cut their retail spending for the second straight month in March, adding to signs of a slowing economy.

Economic data ISM manufacturing PMI



March at 46.3. March new orders 44.3.

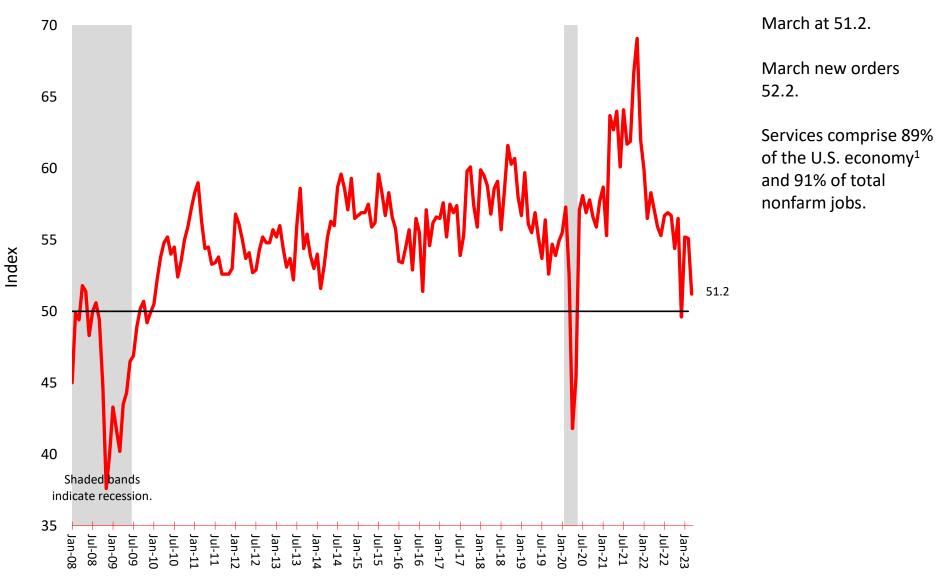
Note the historic volatility in the manufacturing PMI.

Note how this indicator has slumped well below 50 even during periods of strong economic expansion, eg. 1995, 1999, 2003, 2013, 2016.

Source: Copyright 2023, Institute for Supply Management. Data through March 2023.

ISM: "A reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally contracting. A Manufacturing PMI[®] above 48.7 percent, over a period of time, generally indicates an expansion of the overall economy."

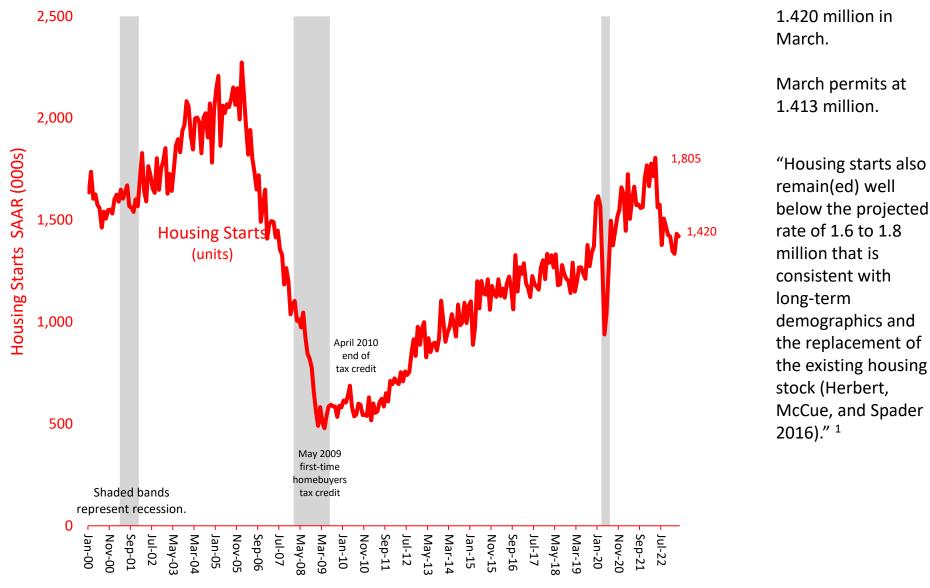
Economic data ISM services PMI



Source: Copyright 2023, Institute for Supply Management; data through March 2023. This data series was created in 2008. ISM: "A reading above 50 percent indicates that the services sector economy is generally expanding; below 50 percent indicates that it is generally contracting." "A Services PMI[®] above 50.1 percent, over time, generally indicates an expansion of the overall economy." ¹Value added as a percent of GDP.

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Economic data Housing starts



Sources: BEA and U.S. Census Bureau. Data through March 2023. ¹ Economic Report of the President, Council of Economic Advisors, February 2018

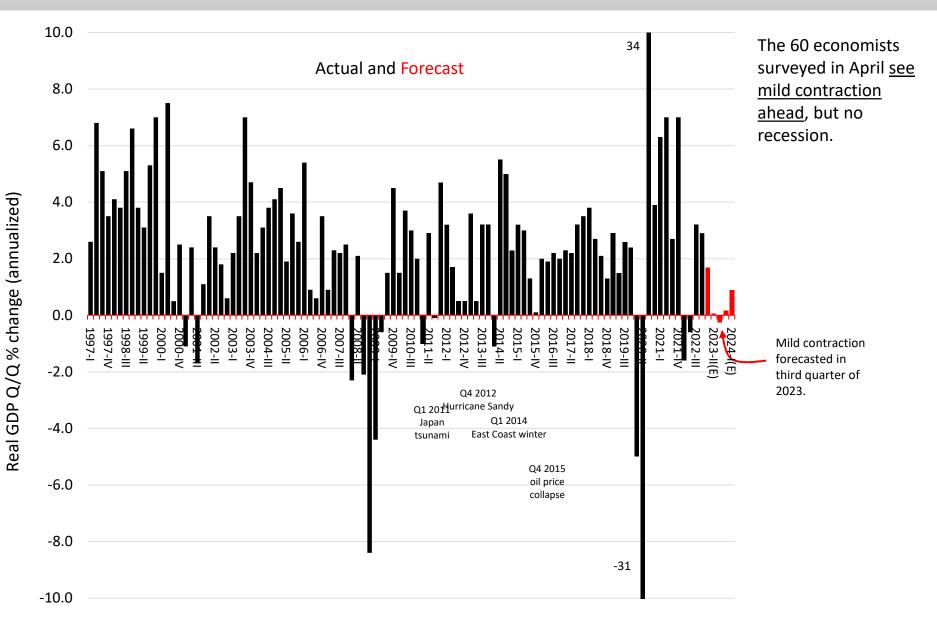
Point of View April 2023

Good news

- \triangleright Strong hiring data
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- Strong Q1 GDPNow
- AAAA Strong March car sales
- Oil down
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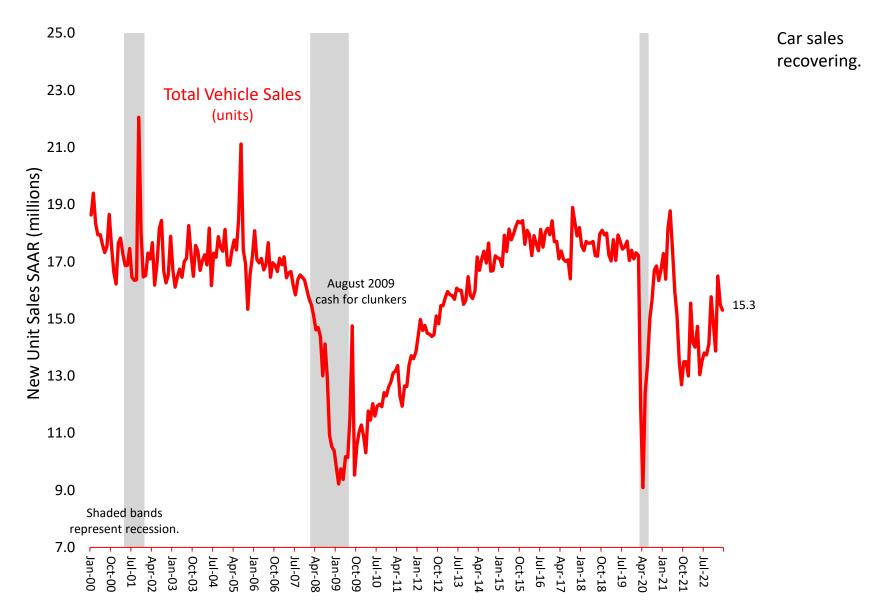
Consensus GDP forecast

GDP



Sources: Bureau of Economic Analysis, actual quarterly data through December 2022. The Wall Street Journal survey released April 2023.

Economic data Vehicle sales



GDP forecast Atlanta Fed's GDPNow forecast

Latest estimate: 2.5 percent — April 18, 2023

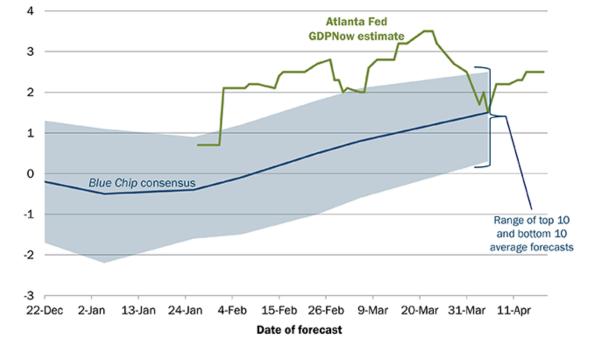
The GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the first quarter of 2023 is **2.5 percent** on April 18, unchanged from April 14 after rounding. After this morning's housing starts report from the US Census Bureau, the nowcast of first-quarter real residential investment growth increased from -5.8 percent to -5.5 percent.

The next GDPNow update is **Wednesday, April 26**. Please see the "Release Dates" tab below for a list of upcoming releases.

GDPNow is much higher than Blue Chip consensus.

Actual fourth quarter GDP growth: +2.9%

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



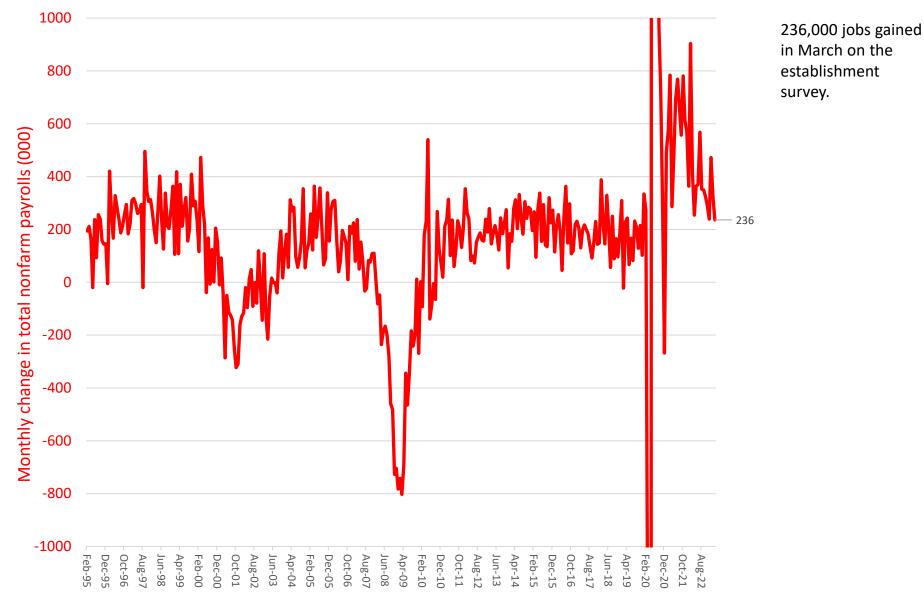
Quarterly percent change (SAAR)

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.

Source: Federal Reserve Bank of Atlanta, April 18, 2023.

Economic data Net new job formation



Source: Bureau of Labor Statistics. Data through March 2023.

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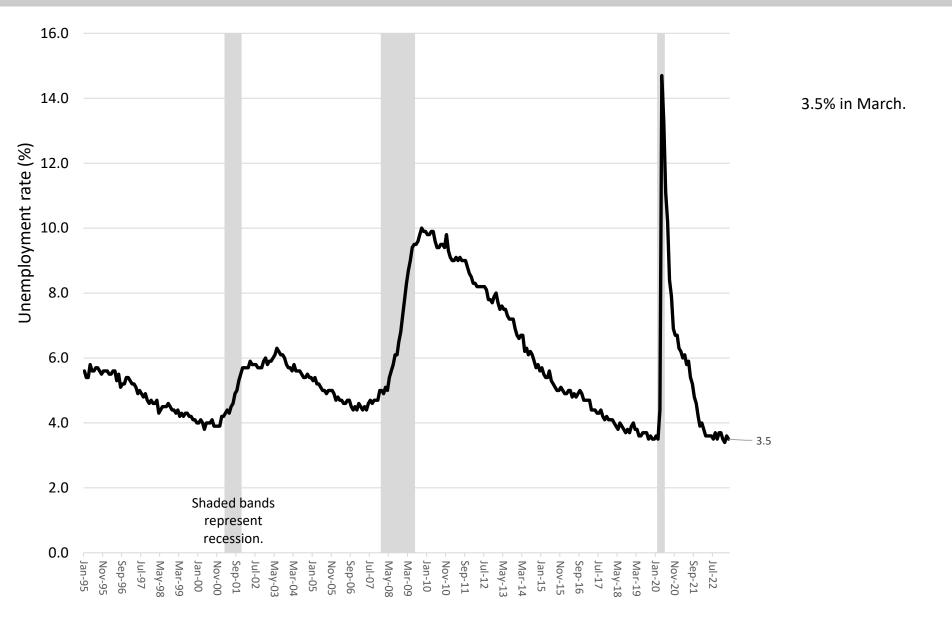
Jobs, Wages Show Signs of Easing

Still-strong report reveals unemployment dipped to 3.5%, more people sought work.

The red-hot labor market cooled some in March, with hiring gains moderating and wage growth easing as more workers sought jobs.

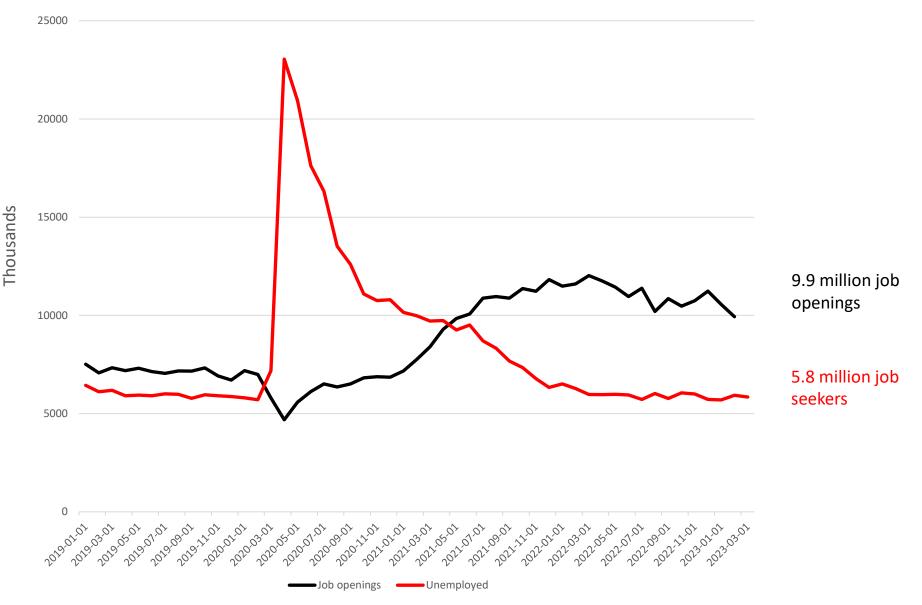
Economic data

Unemployment rate



Source: Bureau of Labor Statistics. Data through March 2023.

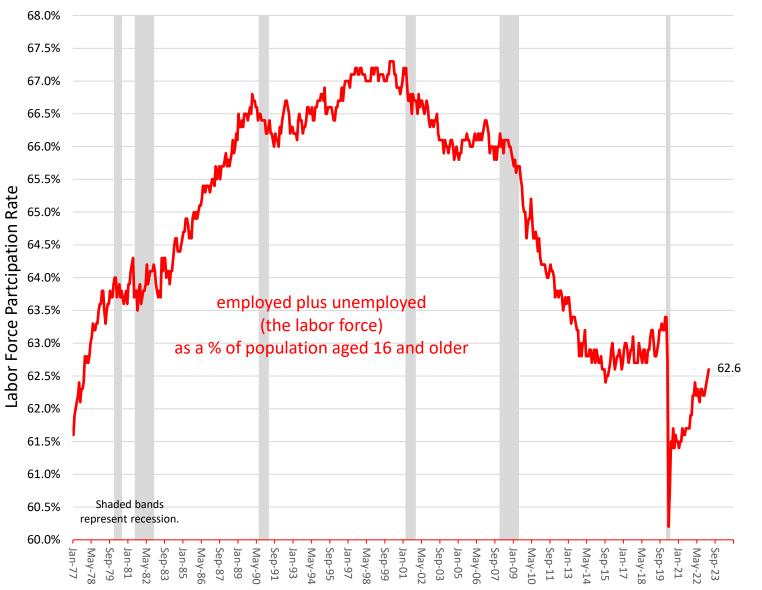
Economic data Job openings vs. unemployed job seekers



Source: Bureau of Labor Statistics. Data through February 2023 for job openings, March 2023 for unemployed.

Economic data - jobs

Labor force participation rate¹ – recovering from Covid



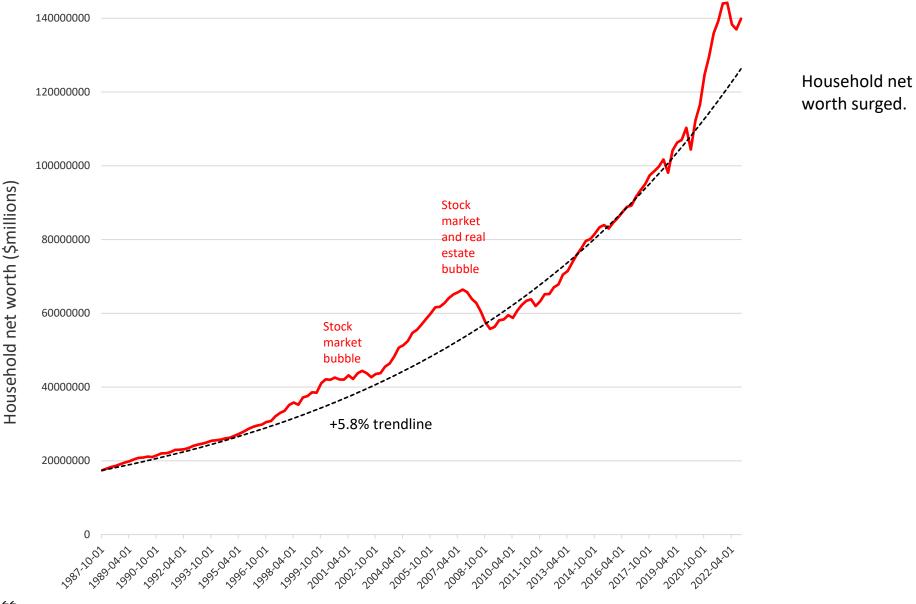
Americans were joining and staying in the labor force in increasing numbers ... until Covid-19.

A reduction in immigration and a surge in retirements have subtracted from the labor force.

Source: BLS. Data through March 2023.

¹Labor force participation rate: the proportion of the civilian noninstitutional population 16 years of age and older either at work or actively seeking work.

Household balance sheets Household net worth – the wealth effect



Source: Federal Reserve, FRBSL. Quarterly data through December 2022, released March 9, 2023.

Household balance sheets Financial obligations ratio

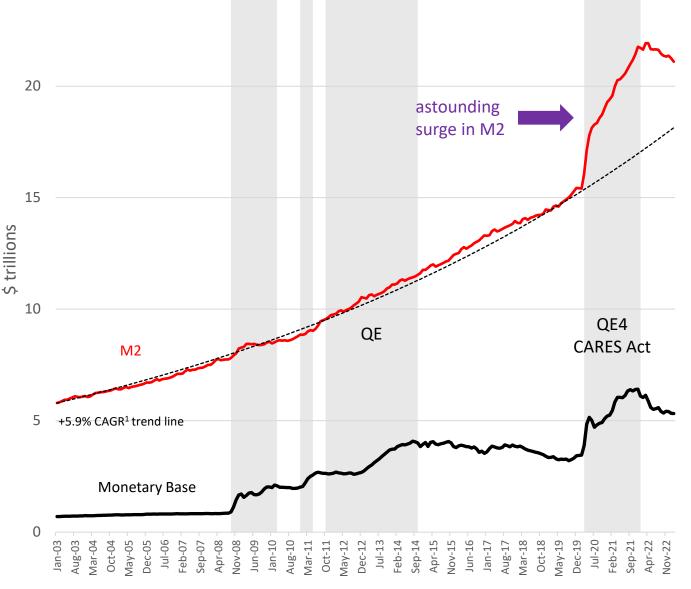
19.0



This measure shows that percent of monthly after-tax income that the average household pays for fixed recurring monthly obligations, such as a mortgage, car payment, utilities, real estate taxes, etc.

Source: Federal Reserve. Quarterly data through December 2022.

Federal Reserve policy The monetary base and the money supply



M2: currency held by the public plus checking, savings and money market accounts.

A quadrupling of the monetary base with QE did not affect M2 growth. <u>The CARES Act and</u> <u>subsequent stimulus did</u>... by putting money directly into consumers' and businesses' accounts.

Monetary base: currency in circulation plus reserve balances (deposits held by banks in their accounts at the Federal reserve).

Source: Federal Reserve, statistical release H.6. Data through February 2023. ¹CAGR = compound annual growth rate.

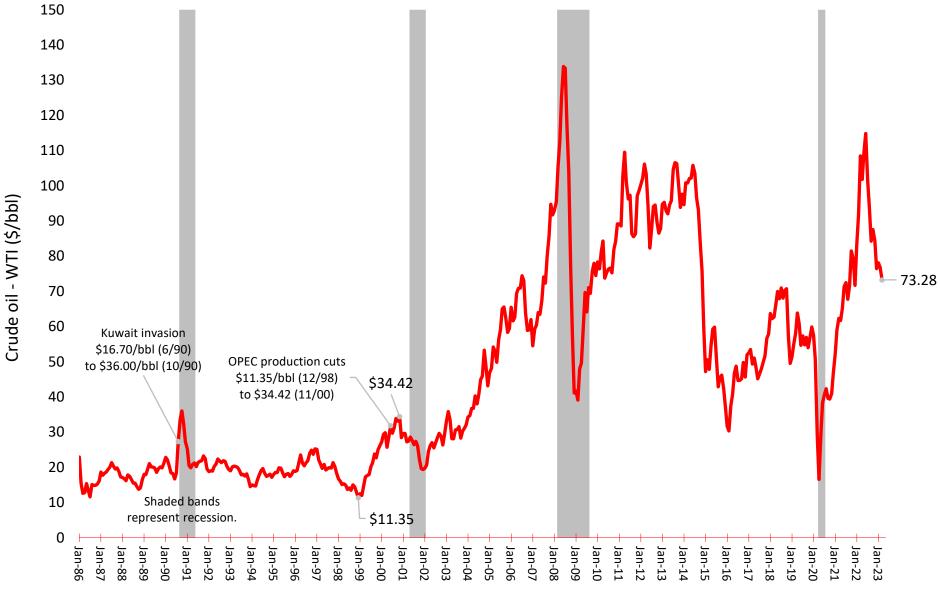
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As Savings Shrink, Spending at Risk

It is the \$1.7 trillion question for the U.S. economy: How long can the savings consumers built up during the pandemic keep their spending going? The answer: about nine to 12 more months.

Economists estimate that headed into the third quarter of this year, households still had about \$1.2 trillion to \$1.8 trillion in "excess savings"— the amount above what they would have saved had there been no pandemic.

Oil WTI spot crude oil prices



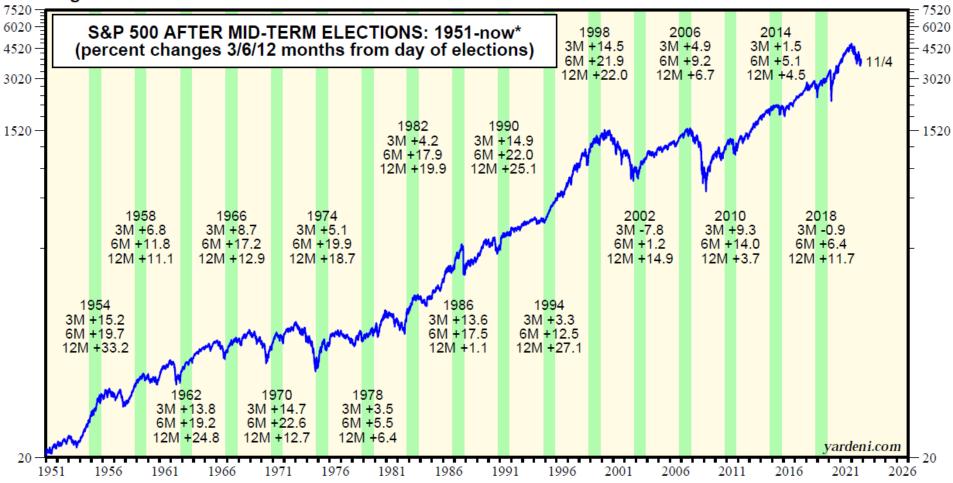
Point of View April 2023

Stock Market

- mid-term election years
- bear market
- stocks vs. recessions
- "parabolic" is normal
- > 2023/2024 earnings estimates
- P/E multiple

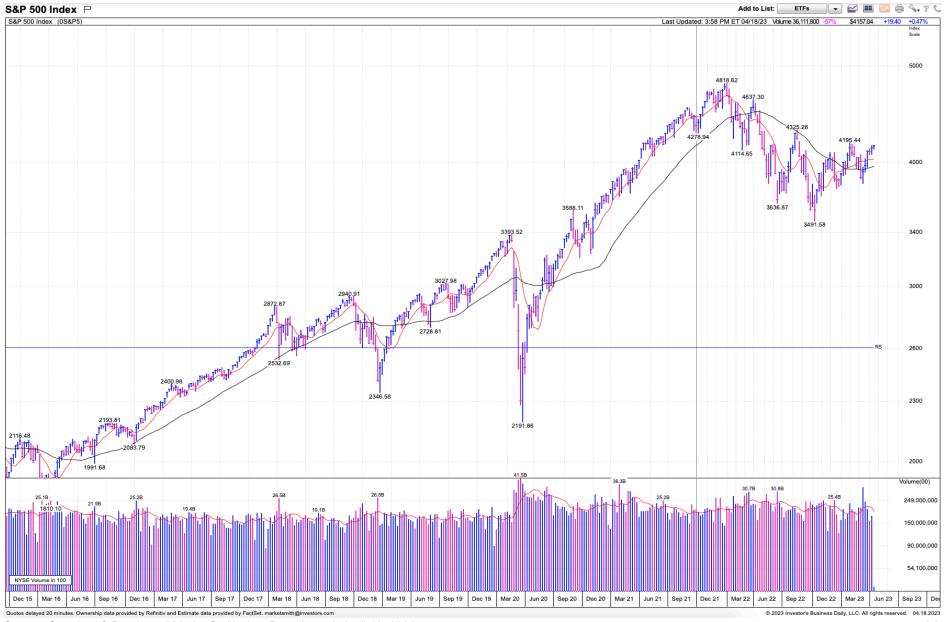
Stock market S&P 500 and mid-term elections

Figure 3.



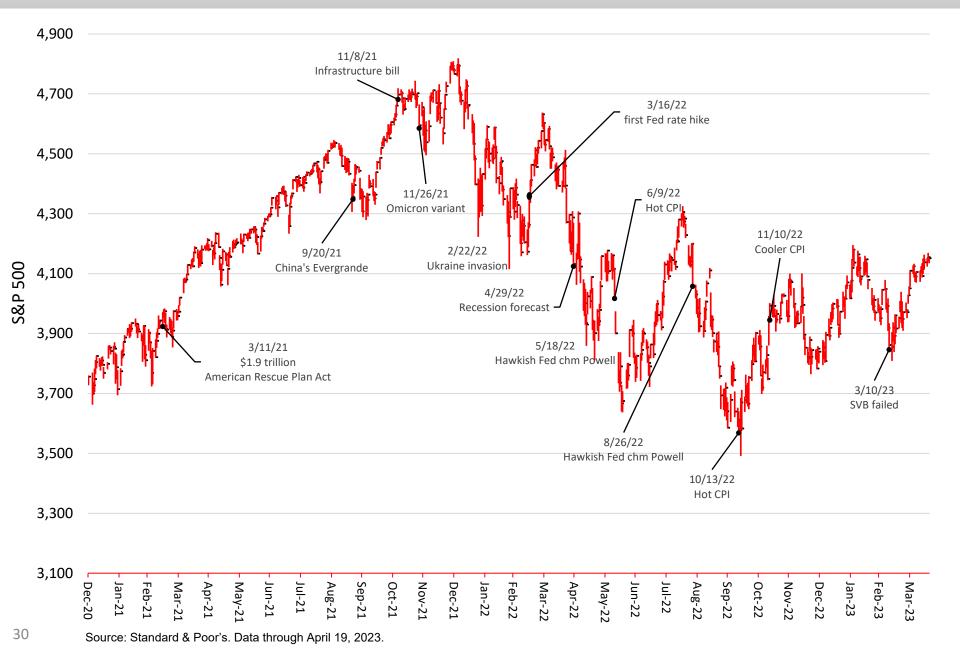
* S&P 500 up (down) during 12-month span following election day in green (red) shaded area. Prior to 1969, markets were closed on election day, therefore used "latest close" for those dates. Source: Haver Analytics, Standard & Poor's, YRI calculations.

Stock market S&P 500

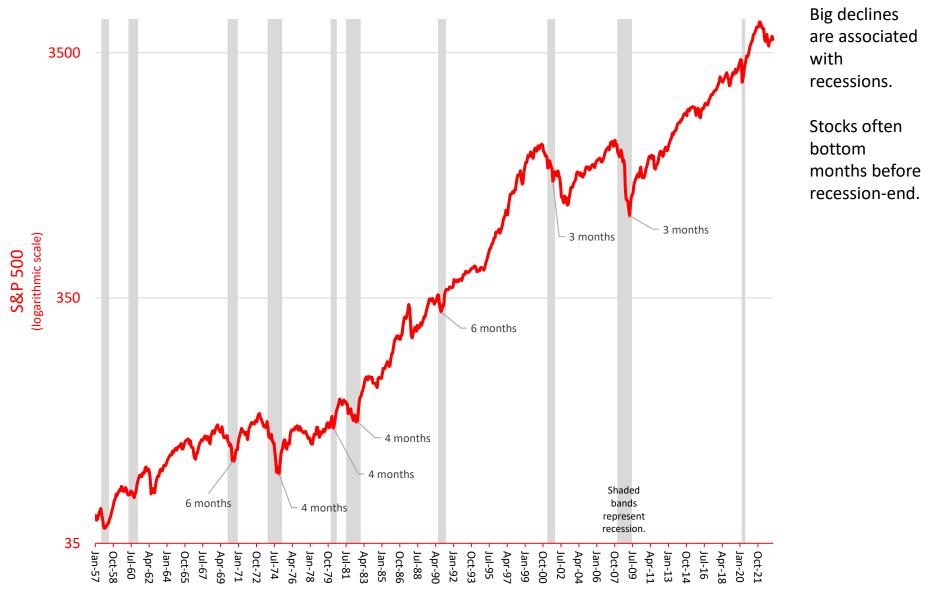


Source: Standard & Poor's and MarketSmith, Inc. Data through April 18, 2023.

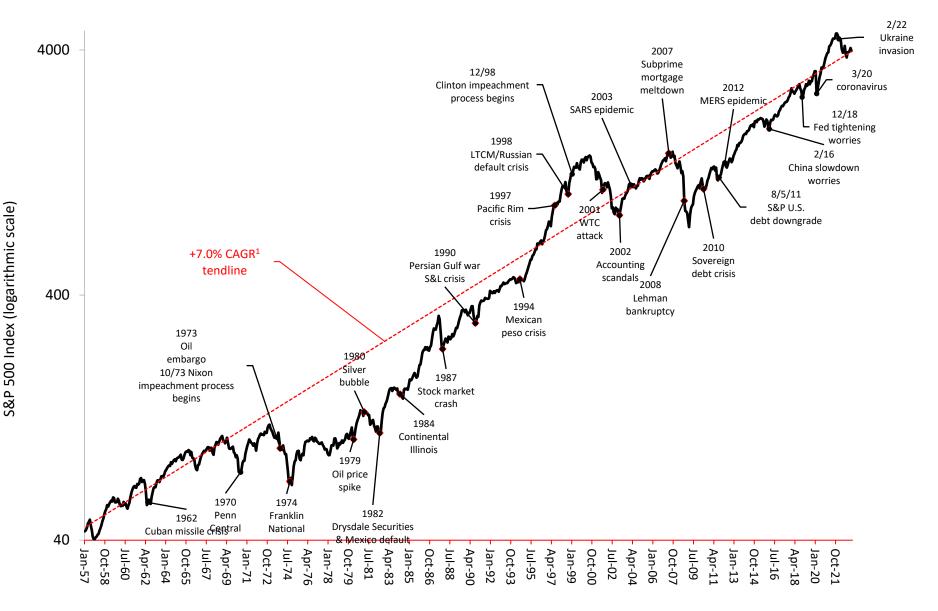
Stock market S&P 500



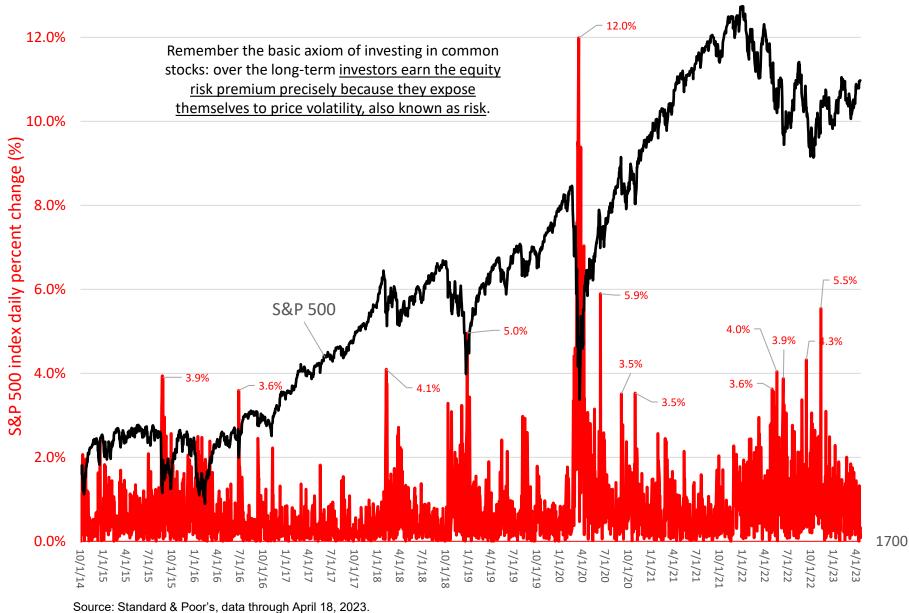
Stock market S&P 500 vs. recessions



Stock market S&P 500 and crises

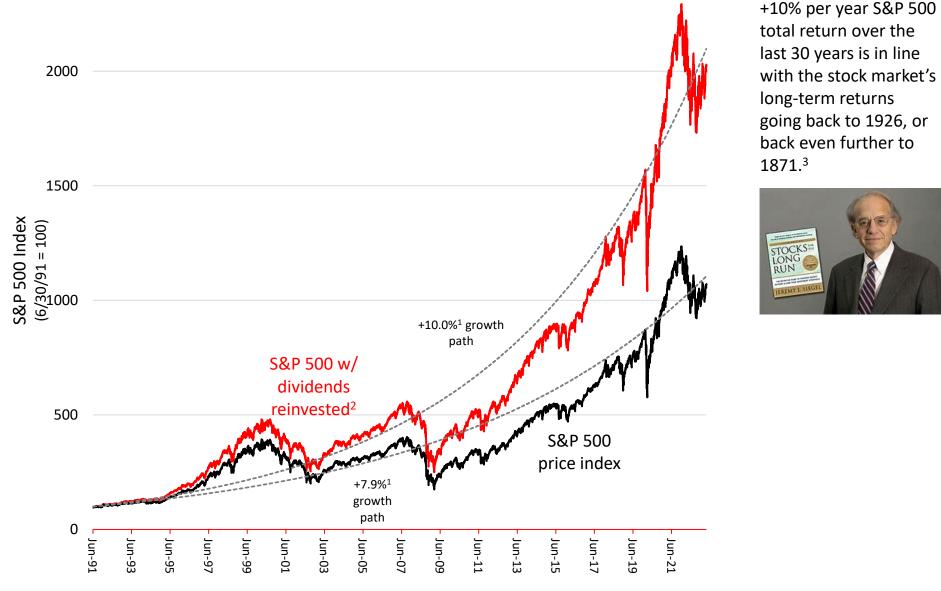


Stock market S&P 500 volatility



Stock market arithmetic

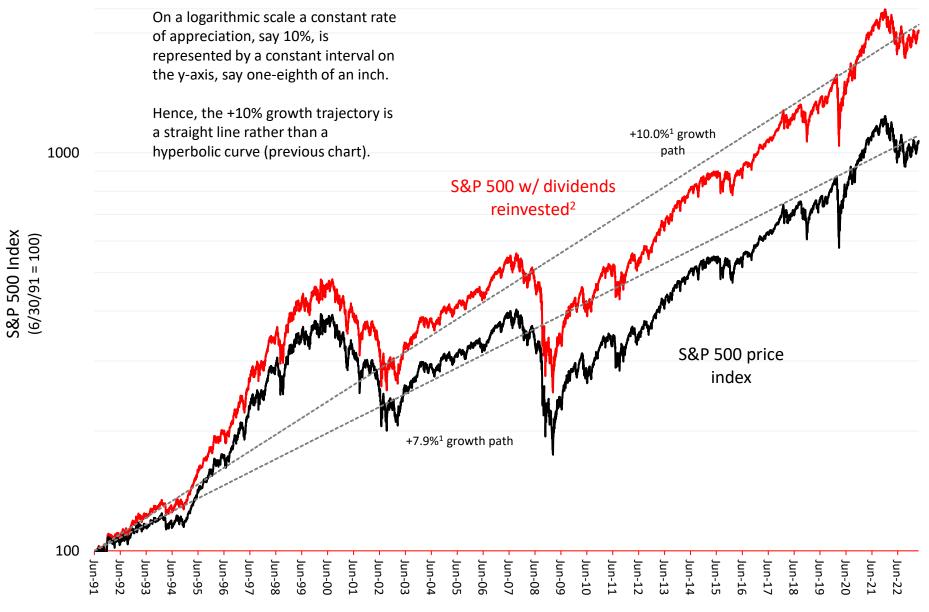
Total return = 7.9% earnings-driven price + 2.1% dividends reinvested



Source: Standard and Poor's. Data through April 18, 2023.¹ Compound annual growth rate. ² S&P 500 total return index. ³ per Professor Jeremy Siegel's seminal *Stocks for the Long Run*, first published in 1994.

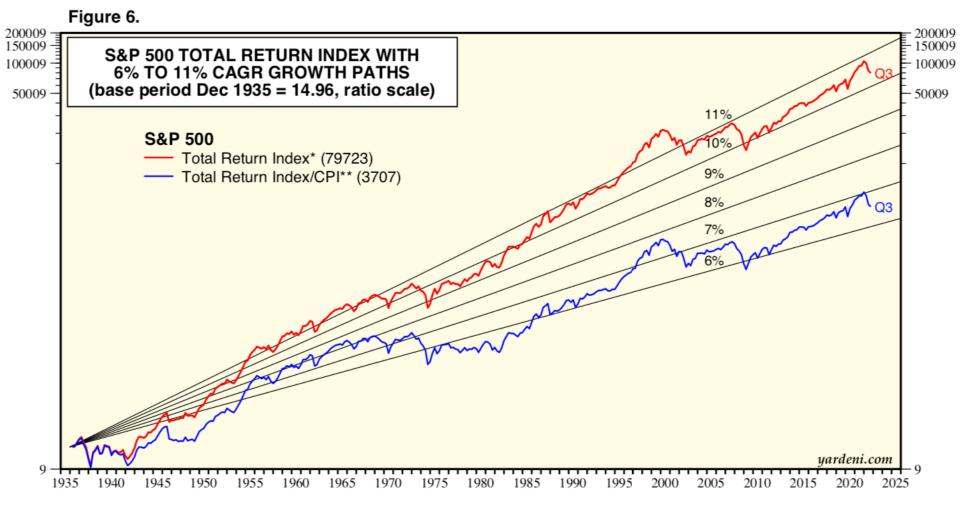
Stock market arithmetic

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Stock market arithmetic Total return and real total return



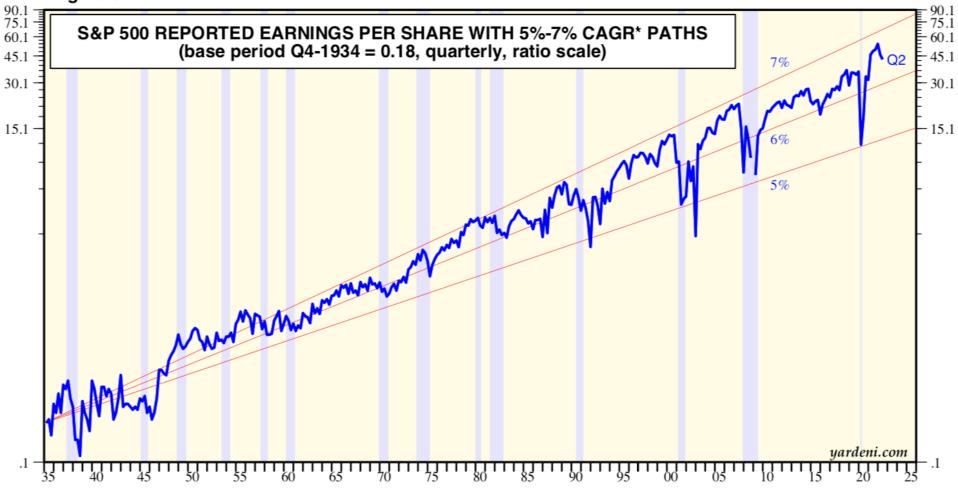
* Includes reinvested dividends.

** Using last month of quarter CPI. Compounded monthly using base value. Source: Standard & Poor's.

Stock market arithmetic

85 years of S&P 500 earnings growth



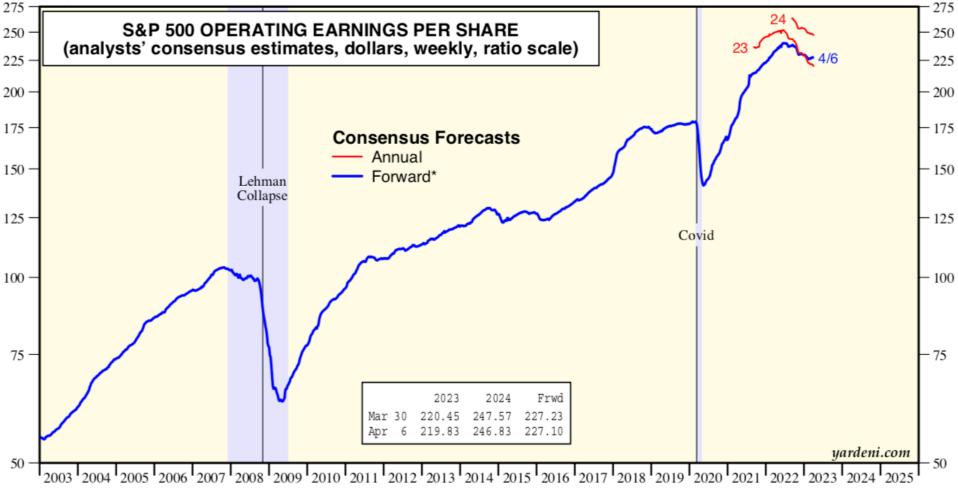


* Compounded annual growth rate from base value using monthly data. Q4-2008 not shown because of large negative value. Note: Shaded areas denote recessions according to the National Bureau of Economic Research. Source: Standard & Poor's.

Valuation

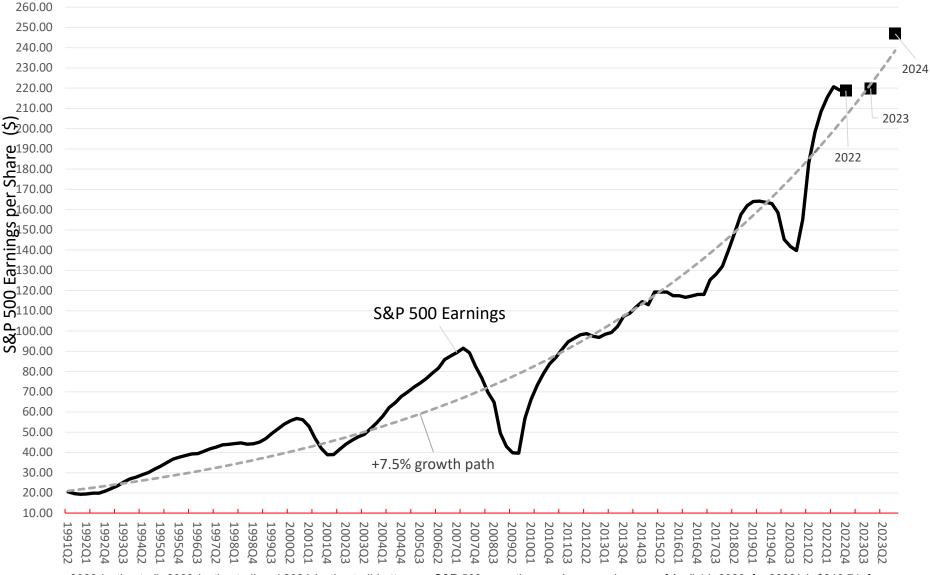
S&P earnings estimates

Figure 4.



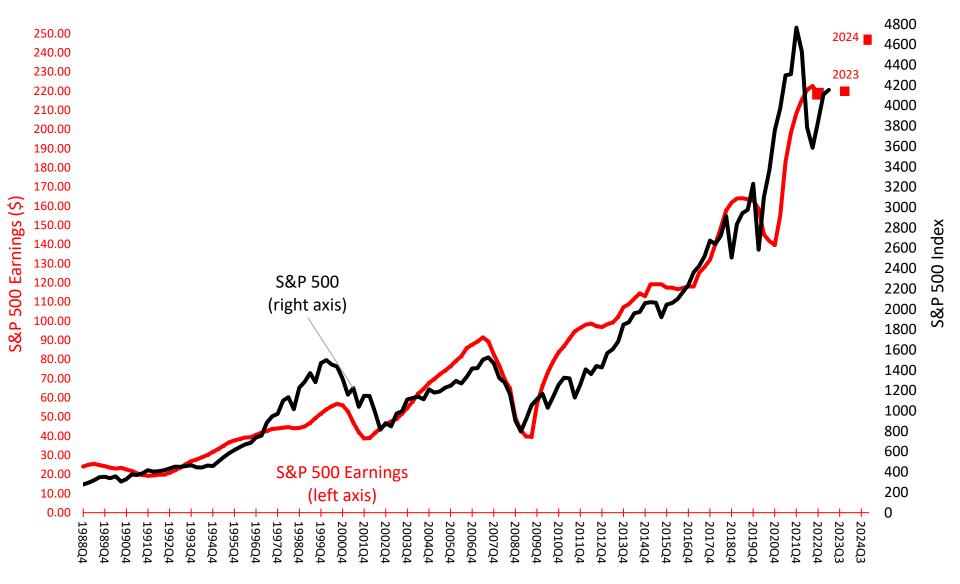
* Time-weighted average of analysts' consensus estimates for S&P 500 operating earnings for current year and next year. Note: Shaded areas are recessions according to the National Bureau of Economic Research. Note: Lehman collapsed 9/15/2008. COVID-19 = WHO declares global pandemic on 3/11/2020. Source: I/B/E/S data by Refinitiv.

Stock market arithmetic S&P 500 earnings – actual and I/B/E/S estimates



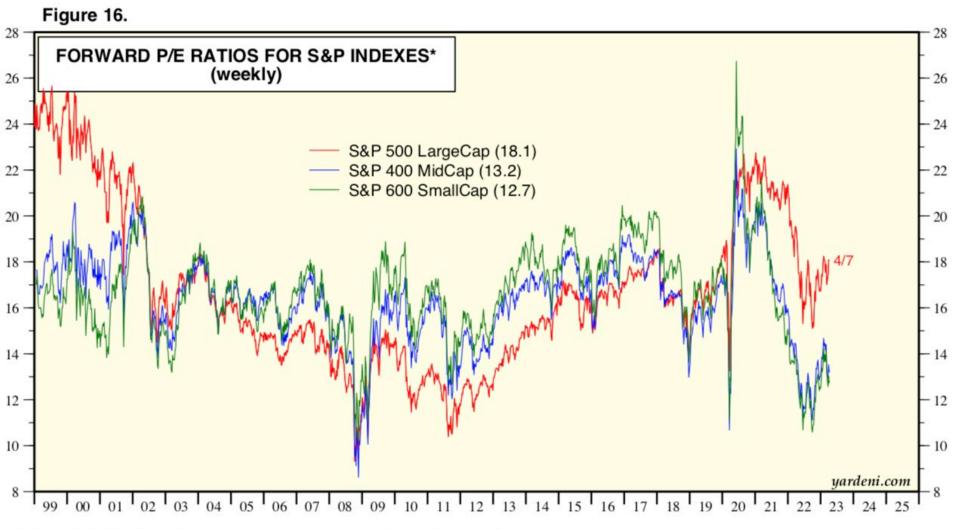
2022 (estimated), 2023 (estimated) and 2024 (estimated) bottom-up S&P 500 operating earnings per share as of April 14, 2023: for 2022(e), \$218.71; for 2023(e), \$219.83; for 2024(e), \$246.83. Sources: Yardeni Research, Inc. and Thomson Reuters I/B/E/S for actual and estimated operating earnings from 2015. Standard and Poor's for actual operating earnings data through 2014.

Valuation S&P 500 vs. actual and I/B/E/S estimated earnings



2022 (estimated), 2023 (estimated) and 2024 (estimated) bottom-up S&P 500 operating earnings per share as of April 14, 2023: for 2022(e), \$218.71; for 2023(e), \$219.83; for 2024(e), \$246.83. Sources: Yardeni Research, Inc. and Thomson Reuters I/B/E/S for actual and estimated operating earnings from 2015. Standard and Poor's for actual operating earnings data through 2014; index price data through April 18, 2023.

Valuation S&P 500 index forward P/E ratio



* Price divided by 52-week forward consensus expected operating earnings per share. Source: I/B/E/S data by Refinitiv.

Valuation S&P 500 index forward P/E ratio



Source: I/B/E/S data by Refinitiv and Standard & Poor's.

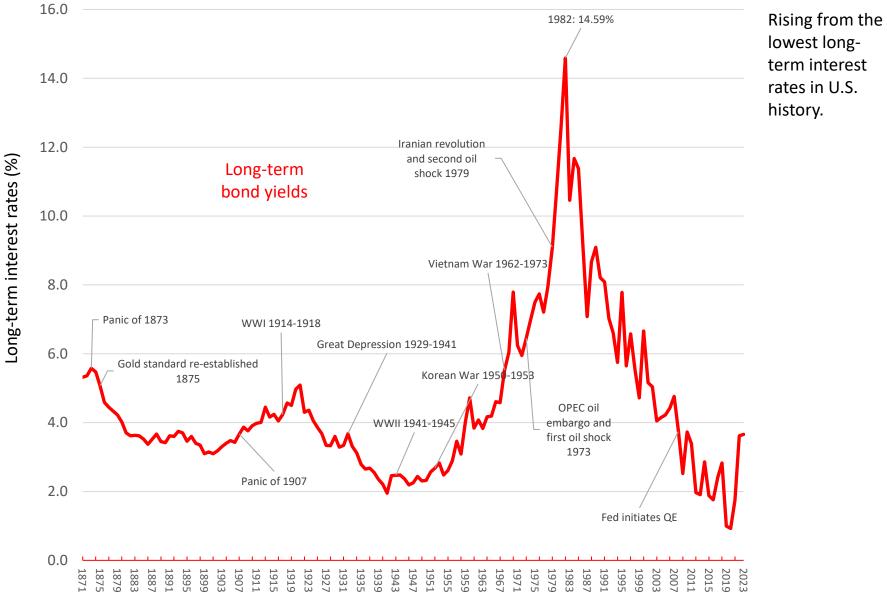
Source: Yardeni Research, Inc., with permission, April 14, 2023.

Point of View April 2023

Bond Yields

Normal yields by historic comparison

Bond yields U.S. Treasury bond yields



Source: Online Data Robert Shiller, data through 2016; 10-year U.S. Treasury bond yield data from 2017; data through March 2023.

Point of View April 2023

Federal Reserve

- Hiked rates
- Inverted the yield curve
- Special liquidity facility
- Forecasting no growth

Federal Reserve policy Quarter-point hike on March 22, 2023

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Fed Boosts Rates Amid Bank Turmoil

Quarter-point increase comes with signal that hikes could end sooner than recently expected.

Federal Reserve Central tendency forecast

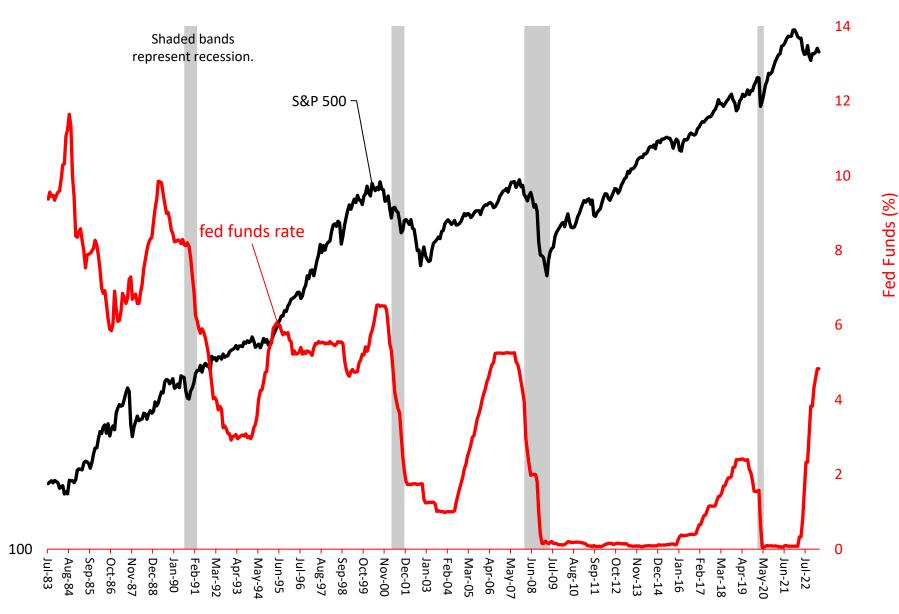
For release at 2:00 p.m., EDT, March 22, 2023

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, under their individual assumptions of projected appropriate monetary policy, March 2023

Percent

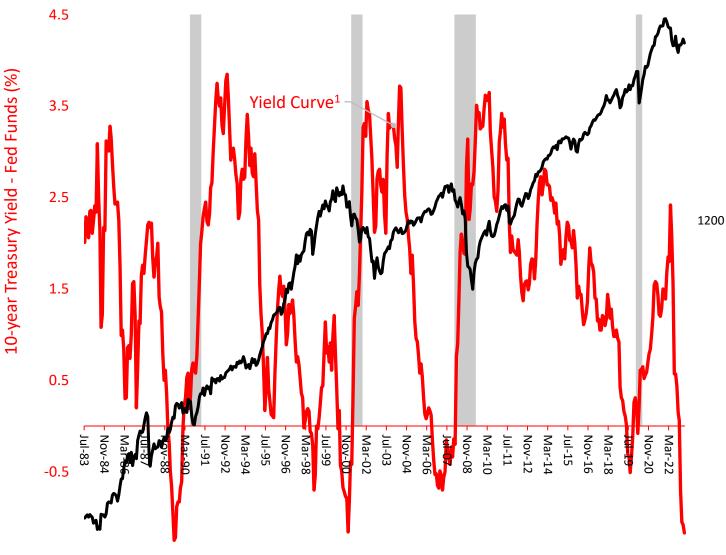
Variable	Median ¹				Central Tendency ²				Range ³			
	2023	2024	2025	Longer run	2023	2024	2025	Longer run	2023	2024	2025	Longer run
Change in real GDP December projection	0.4 0.5	1.2 1.6	1.9 1.8	1.8 1.8	0.0-0.8 0.4-1.0	1.0-1.5 1.3-2.0	1.7 - 2.1 1.6 - 2.0	1.7-2.0 1.7-2.0	-0.2-1.3 -0.5-1.0	0.3-2.0 0.5-2.4	1.5-2.2 1.4-2.3	1.6-2.5 1.6-2.5
Unemployment rate December projection	4.5 4.6	$4.6 \\ 4.6$	$4.6 \\ 4.5$	4.0 4.0	4.0-4.7 4.4-4.7	$\begin{array}{c} 4.3 - 4.9 \\ 4.3 - 4.8 \end{array}$	4.3 - 4.8 4.0 - 4.7	3.8 - 4.3 3.8 - 4.3	3.9 - 4.8 4.0 - 5.3	4.0-5.2 4.0-5.0	3.8 - 4.9 3.8 - 4.8	3.5 - 4.7 3.5 - 4.8
PCE inflation December projection	3.3 3.1	$2.5 \\ 2.5$	$2.1 \\ 2.1$	2.0 2.0	3.0 - 3.8 2.9 - 3.5	2.2-2.8 2.3-2.7	2.0-2.2 2.0-2.2	2.0 2.0	2.8 - 4.1 2.6 - 4.1	2.0 - 3.5 2.2 - 3.5	2.0 - 3.0 2.0 - 3.0	2.0 2.0
Core PCE inflation ⁴ December projection	$3.6 \\ 3.5$	$2.6 \\ 2.5$	$2.1 \\ 2.1$	1 1 1	3.5 - 3.9 3.2 - 3.7	2.3 - 2.8 2.3 - 2.7	2.0-2.2 2.0-2.2		3.5 - 4.1 3.0 - 3.8	2.1 - 3.1 2.2 - 3.0	2.0 - 3.0 2.0 - 3.0	
Memo: Projected appropriate policy path				- 				1				1
Federal funds rate December projection	$5.1 \\ 5.1$	$4.3 \\ 4.1$	$3.1 \\ 3.1$	2.5 2.5	5.1 - 5.6 5.1 - 5.4	3.9 - 5.1 3.9 - 4.9	2.9 - 3.9 2.6 - 3.9	2.4-2.6 2.3-2.5	$\begin{array}{c} 4.9 - 5.9 \\ 4.9 - 5.6 \end{array}$	3.4 - 5.6 3.1 - 5.6	2.4 - 5.6 2.4 - 5.6	2.3 - 3.6 2.3 - 3.3

Stock market S&P 500 vs. fed funds rate



Sources: Federal Reserve, Standard & Poor's. Data through March 2023.

Federal Reserve policy Yield curve vs. the S&P 500



When the yield curve has inverted the economy has usually turned down into recession with a lag of a year or more.

Today, the yield curve is inverted.

S&P 500

-1.5

Sources: NBER, Federal Reserve and Standard & Poor's. Data through March 2023.

¹The interest rate on the 10-year Treasury bond (long term) minus the fed funds rate (short term).

Banking crisis Bank Term Funding Program

March 12, 2023

Federal Reserve Board announces it will make available additional funding to eligible depository institutions to help assure banks have the ability to meet the needs of all their depositors

For release at 6:15 p.m. EDT

Share A

To support American businesses and households, the Federal Reserve Board on Sunday announced it will make available additional funding to eligible depository institutions to help assure banks have the ability to meet the needs of all their depositors. This action will bolster the capacity of the banking system to safeguard deposits and ensure the ongoing provision of money and credit to the economy.

The Federal Reserve is prepared to address any liquidity pressures that may arise.

The additional funding will be made available through the creation of a new Bank Term Funding Program (BTFP), offering loans of up to one year in length to banks, savings associations, credit unions, and other eligible depository institutions pledging U.S. Treasuries, agency debt and mortgage-backed securities, and other qualifying assets as collateral. These assets will be valued at par. The BTFP will be an additional source of liquidity against high-quality securities, eliminating an institution's need to quickly sell those securities in times of stress.

Banking crisis Economic fallout



5

THE WALL STREET JOURNAL.

Fed Boosts Rates Amid Bank Turmoil

Estimates of just how much any credit contraction could reduce hiring, economic activity and inflation were "rule-of thumb guesswork, almost, at this point. But we think it's potentially quite real, and that argues for being alert as we go forward," Mr. Powell said at a news conference after the conclusion of the Fed's policy meeting. Later, he said, "it could easily have a significant macroeconomic effect."

THE WALL STREET JOURNAL.

Banking Mess Raises Recession Risk

Main Street businesses and American families are likely to find it harder to get a loan because of turmoil in the banking industry, denting economic growth and raising the risk of a recession.

Smaller banks are likely to respond by tightening standards and slowing lending to raise capital ratios, said Torsten Slok, chief economist at Apollo Global Management Inc., a private-equity firm. <u>"If it's suddenly much harder to get an auto loan, a consumer loan, a mortgage for commercial real estate simply because smaller regional banks have to reorganize balance sheets," Mr. Slok said, "then you run the risk that many people won't get the financing to buy that car, to buy that washer, and that corporate lending takes a hit."</u>

Goldman Sachs economists increased the probability that the economy enters a recession in the next 12 months to 35%, from 25% before the SVB failure.

Federal Reserve Central tendency forecast

For release at 2:00 p.m., EDT, March 22, 2023

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, under their individual assumptions of projected appropriate monetary policy, March 2023

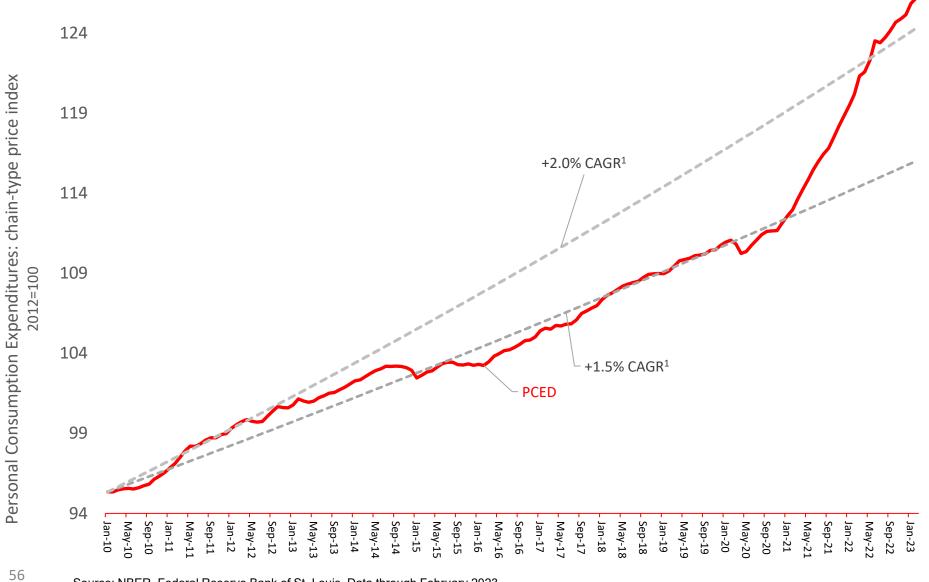
Percent

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Change in real GDP December projection	0.4 0.5	1.2 1.6	1.9 1.8	1.8 1.8	0.0-0.8 0.4-1.0	1.0-1.5 1.3-2.0	1.7 - 2.1 1.6 - 2.0	1.7-2.0 1.7-2.0	-0.2-1.3 -0.5-1.0	0.3-2.0 0.5-2.4	1.5-2.2 1.4-2.3	1.6-2.5 1.6-2.5
Unemployment rate December projection	4.5 4.6	$4.6 \\ 4.6$	$4.6 \\ 4.5$	4.0 4.0	4.0-4.7 4.4-4.7	$\begin{array}{c} 4.3 - 4.9 \\ 4.3 - 4.8 \end{array}$	4.3 - 4.8 4.0 - 4.7	3.8 - 4.3 3.8 - 4.3	3.9 - 4.8 4.0 - 5.3	4.0-5.2 4.0-5.0	3.8 - 4.9 3.8 - 4.8	3.5-4.7 3.5-4.8
PCE inflation December projection	3.3 3.1	$2.5 \\ 2.5$	$2.1 \\ 2.1$	2.0 2.0	3.0 - 3.8 2.9 - 3.5	2.2-2.8 2.3-2.7	2.0-2.2 2.0-2.2	2.0 2.0	2.8-4.1 2.6-4.1	2.0 - 3.5 2.2 - 3.5	2.0 - 3.0 2.0 - 3.0	2.0 2.0
Core PCE inflation ⁴ December projection	$3.6 \\ 3.5$	$2.6 \\ 2.5$	$2.1 \\ 2.1$	1 1 1	3.5 - 3.9 3.2 - 3.7	2.3-2.8 2.3-2.7	2.0-2.2 2.0-2.2		3.5 - 4.1 3.0 - 3.8	2.1 - 3.1 2.2 - 3.0	2.0 - 3.0 2.0 - 3.0	
Memo: Projected appropriate policy path				- 								1
Federal funds rate December projection	$5.1 \\ 5.1$	$4.3 \\ 4.1$	$3.1 \\ 3.1$	2.5 2.5	5.1 - 5.6 5.1 - 5.4	3.9 - 5.1 3.9 - 4.9	2.9 - 3.9 2.6 - 3.9	2.4-2.6 2.3-2.5	$\begin{array}{c} 4.9 - 5.9 \\ 4.9 - 5.6 \end{array}$	3.4 - 5.6 3.1 - 5.6	2.4 - 5.6 2.4 - 5.6	2.3 - 3.6 2.3 - 3.3

Inflation

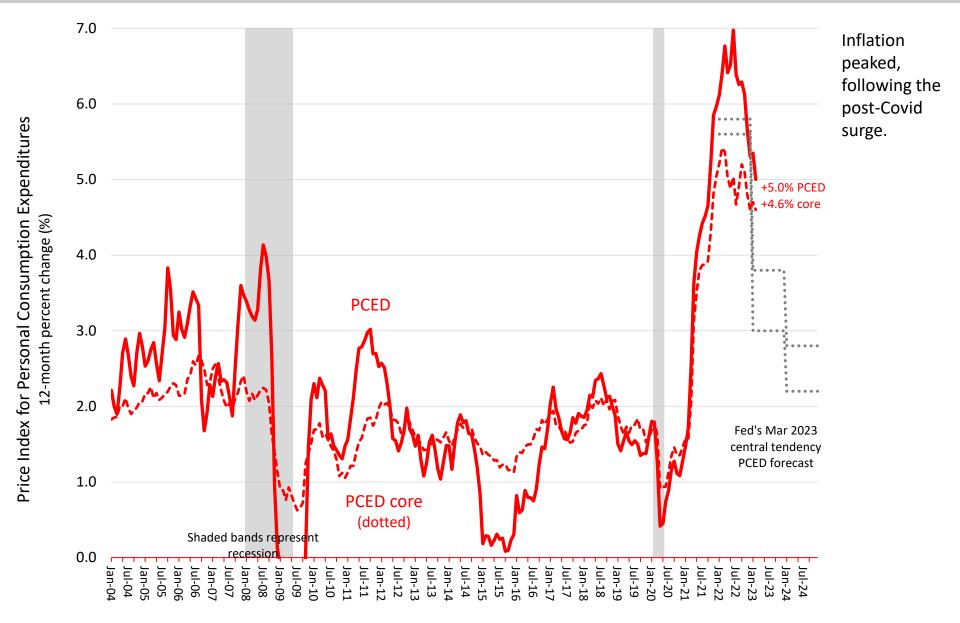
- Year-over-year headline PCED +5.0%, +4.6% core
- M2 driving inflation
- Inflation expectations (TIPS spread) falling

Inflation PCED – headline



Source: NBER, Federal Reserve Bank of St. Louis. Data through February 2023.

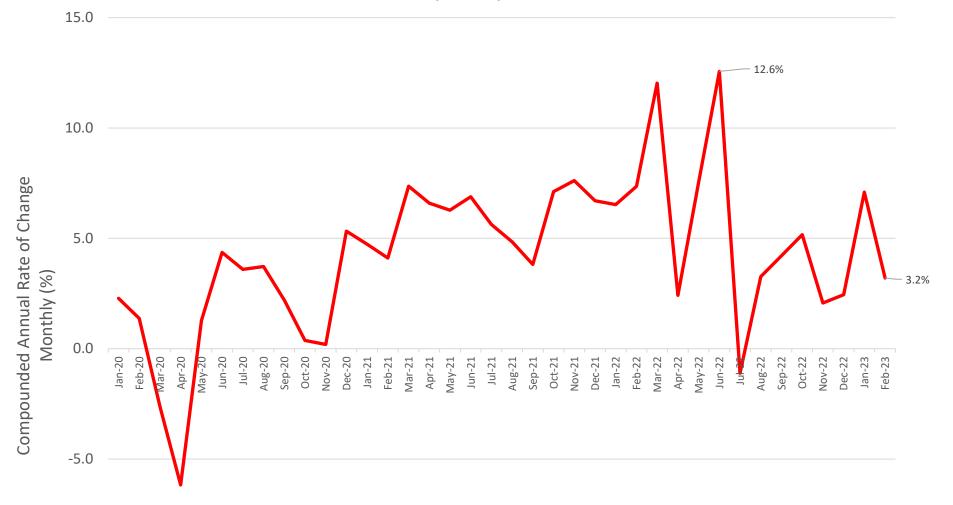
Inflation PCED – headline and core



Source: NBER, Federal Reserve Bank of St. Louis. Data through February 2023.

Inflation PCED – monthly rate of change annualized

Personal Consumption Expenditures Deflator



Inflation CPI – headline and core

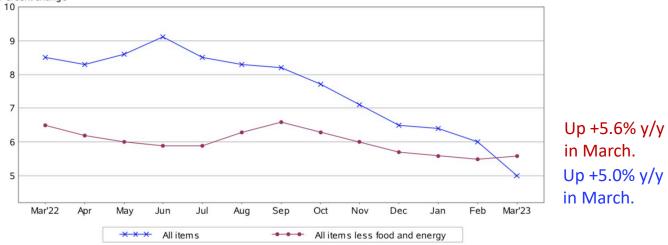


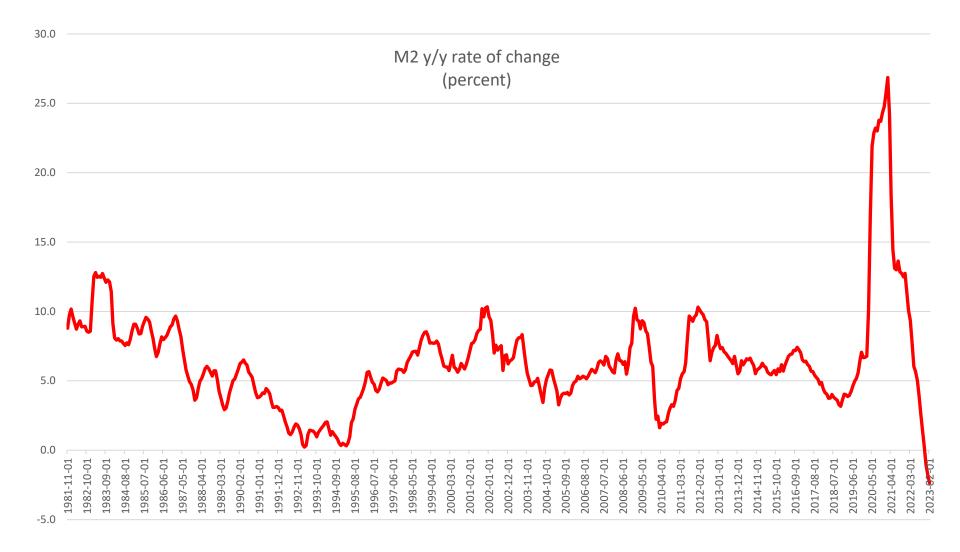
Chart 2. 12-month percent change in CPI for All Urban Consumers (CPI-U), not seasonally adjusted, Mar. 2022 - Mar. 2023 Percent change

Table A. Percent changes in CPI for All Urban Consumers (CPI-U): U.S. city average

	Seasonally adjusted changes from preceding month							
-	Sep. 2022	Oct. 2022	Nov. 2022	Dec. 2022	Jan. 2023	Feb. 2023	Mar. 2023	12-mos. ended Mar. 2023
All items	0.4	0.5	0.2	0.1	0.5	0.4	0.1	5.0
Food	0.8	0.7	0.6	0.4	0.5	0.4	0.0	8.5
Food at home	0.7	0.5	0.6	0.5	0.4	0.3	-0.3	8.4
Food away from home1	0.9	0.9	0.5	0.4	0.6	0.6	0.6	8.8
Energy	-1.7	1.7	-1.4	-3.1	2.0	-0.6	-3.5	-6.4
Energy commodities	-4.1	3.7	-2.1	-7.2	1.9	0.5	-4.6	-17.0
Gasoline (all types)	-4.2	3.4	-2.3	-7.0	2.4	1.0	-4.6	-17.4
Fuel oil ¹	-2.7	19.8	1.7	-16.6	-1.2	-7.9	-4.0	-14.2
Energy services	1.2	-0.7	-0.6	1.9	2.1	-1.7	-2.3	9.2
Electricity	0.8	0.5	0.5	1.3	0.5	0.5	-0.7	10.2
Utility (piped) gas service	2.2	-3.7	-3.4	3.5	6.7	-8.0	-7.1	5.5
All items less food and energy	0.6	0.3	0.3	0.4	0.4	0.5	0.4	5.6
Commodities less food and energy								
commodities	0.0	-0.1	-0.2	-0.1	0.1	0.0	0.2	1.5
New vehicles	0.7	0.6	0.5	0.6	0.2	0.2	0.4	6.1
Used cars and trucks	-1.1	-1.7	-2.0	-2.0	-1.9	-2.8	-0.9	-11.2
Apparel	0.0	-0.2	0.1	0.2	0.8	0.8	0.3	3.3
Medical care commodities ¹	-0.1	0.0	0.2	0.1	1.1	0.1	0.6	3.6
Services less energy services	0.8	0.5	0.5	0.6	0.5	0.6	0.4	7.1
Shelter	0.7	0.7	0.6	0.8	0.7	0.8	0.6	8.2
Transportation services	1.9	0.6	0.3	0.6	0.9	1.1	1.4	13.9
Medical care services	0.8	-0.4	-0.5	0.3	-0.7	-0.7	-0.5	1.0

Source: BLS. Data through March 2023.

Federal Reserve policy The money supply - y/y rate of change



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Why Inflation Is on the Way Down

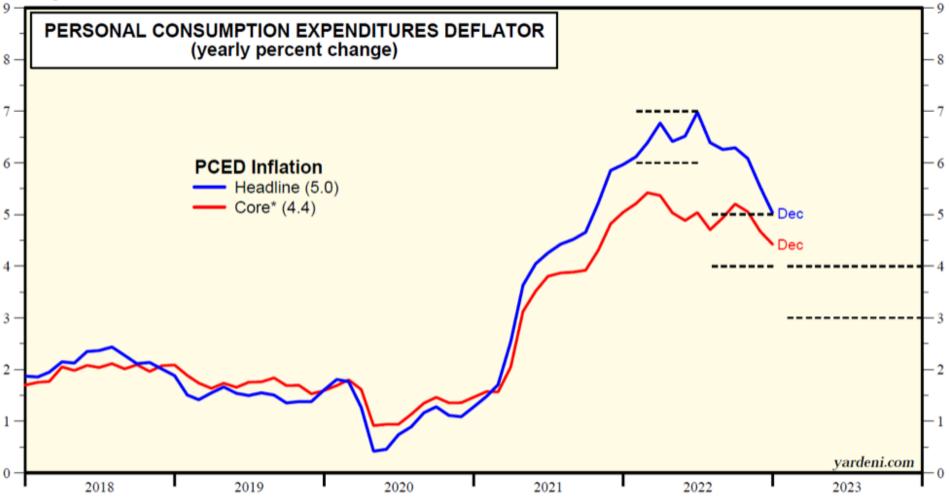
Yet the relationship between money-supply growth, as measured by M2 and subsequent inflation has been statistically near-perfect in the pandemic era, with a 13-month lag. Year-over-year M2 growth began to accelerate during the pandemic recession in April 2020, and core inflation started to accelerate 13 months later, in May 2021. M2 growth peaked at a history making, off-the-charts 27% in February 2021, and core CPI peaked 13 months later, in March 2022. Both M2 growth and core CPI have been falling every month since their respective peaks.

Experience is proving, 40 years after Friedman taught Volcker, that inflation is still a monetary phenomenon.

If the relationship with inflation continues, core inflation will be at only 2.3% in 13 months, in June 2023.

Inflation Ed Yardeni's inflation forecast





* Excluding food & energy. Note: Dashed ranges are YRI forecasts for headline PCED inflation rate.

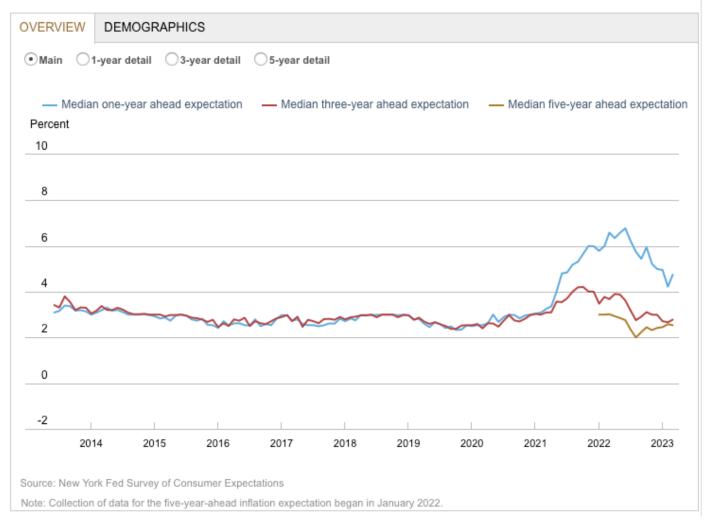
Source: Bureau of Economic Analysis.

Source: Yardeni Research, Inc., with permission, January 30, 2022.

Inflation Inflation expectations

Inflation expectations

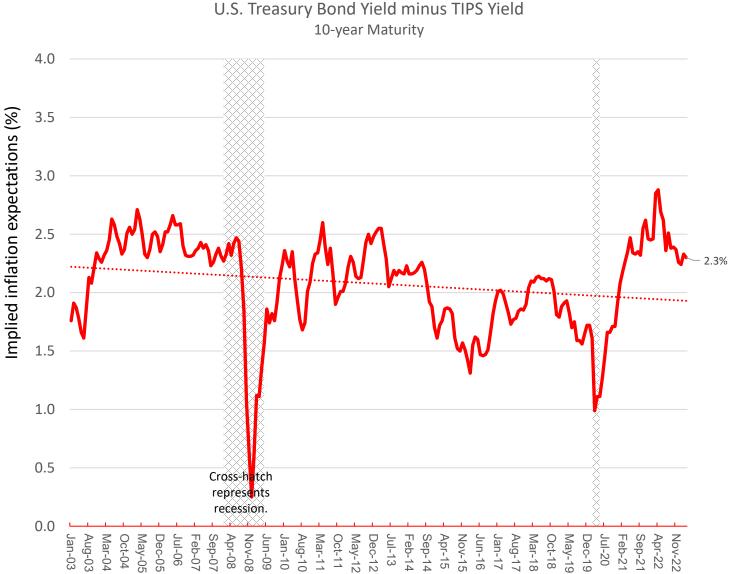
Median one-, three-, and five-year ahead expected inflation rate



Consumers expect substantially moderating inflation.

Source: Federal Reserve Bank of New York, Survey of Consumer Expectations. Data through February 2023.

Inflation Inflation expectations

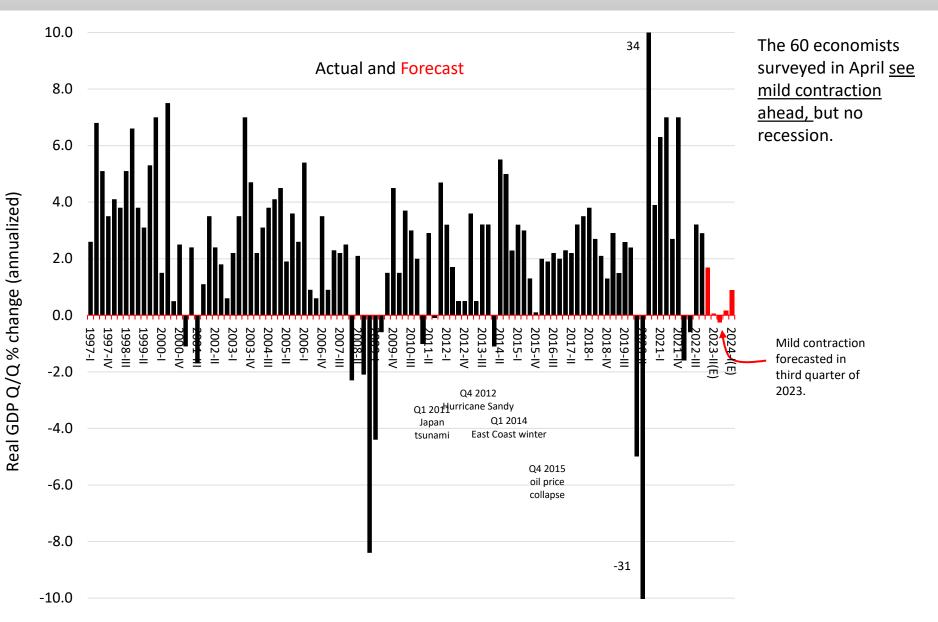


The difference between the nominal 10-year Treasury bond yield and the TIPS yield gives the market's opinion for a 10year inflation forecast.

It had been trending lower for 15 years but has moved higher post-Covid.

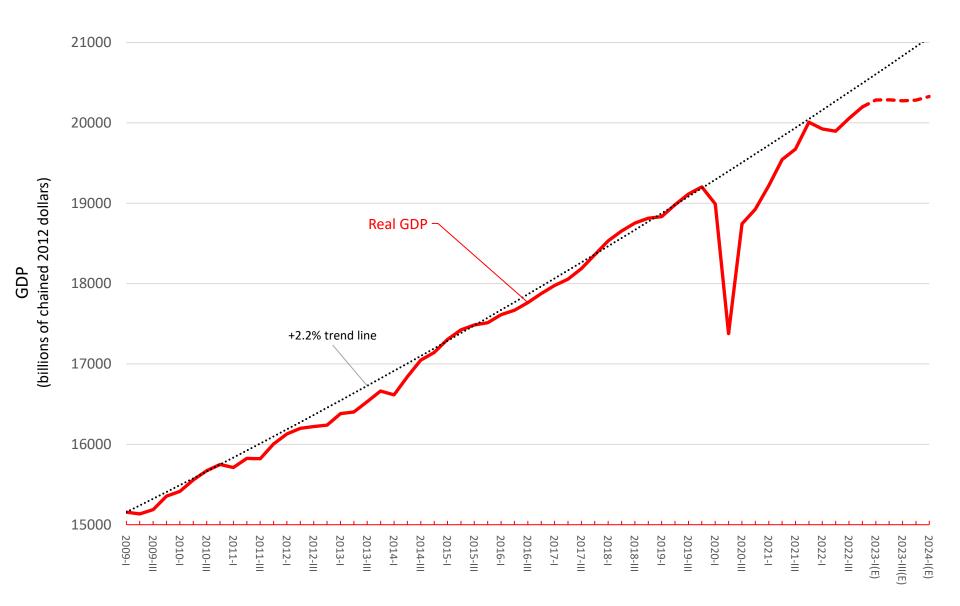
Consensus GDP forecast

GDP



Sources: Bureau of Economic Analysis, actual quarterly data through December 2022. The Wall Street Journal survey released April 2023.

GDP forecast V-shaped recovery from Covid, followed by slowing growth



GDP growth potential = Δ productivity + Δ labor force CBO's potential growth calculations

Figure 2-6.

Composition of the Growth of Real Potential GDP

Percent 4 4.0 Projected 3.2 3.2 3.2 3 2.3 0.7 1.6 2.4 2.0 Average Annual Growth in: 2 1.9 1.8 1.4 **Real Potential GDP** 1.7 2.5 1.6 1.4 1.2 **Potential Labor Force** 1 1.6 1.6 Productivity 1.2 1.0 0.5 0.4 Potential Labor Force 0.3 0 2022-2027-1950 -1974 -1982-1991-2002-2008-1973 1981 1990 2001 2007 2021 2026 2032

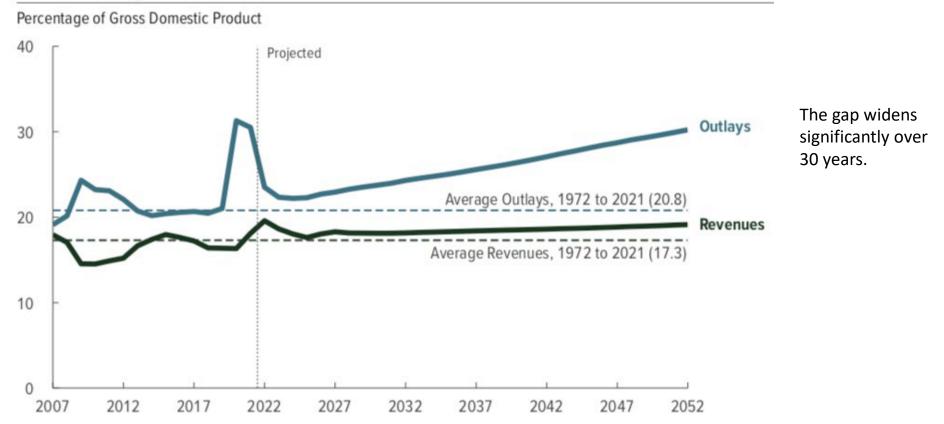
Source: Congressional Budget Office, The Budget and Economic Outlook: 2022 to 2032, released May 2022.

Federal budget

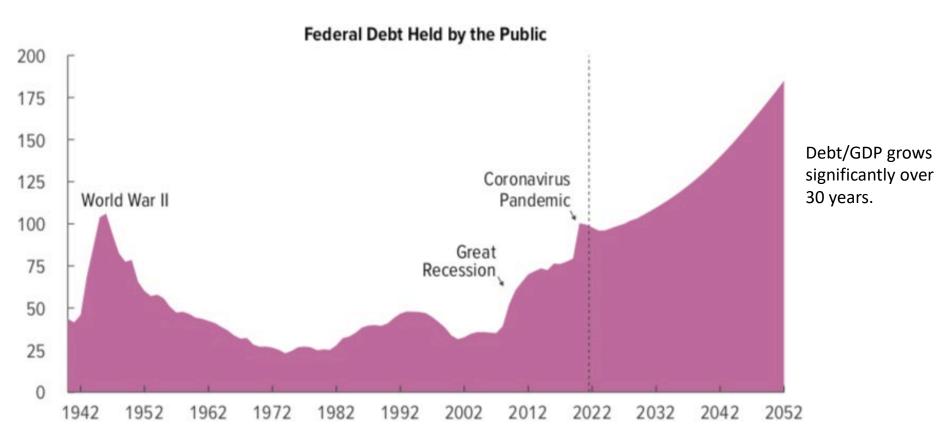
- CBO's July 2022 projections
- Go Big! Huge new spending programs.
- "pay their fair share"
- increasing deficits, rising debt
- Could we fix it?
- Iow U.S. tax burden allows flexibility to solve longterm entitlements problem

Federal deficit and debt through 2052 Federal revenues and outlays through 2052

Total Outlays and Revenues

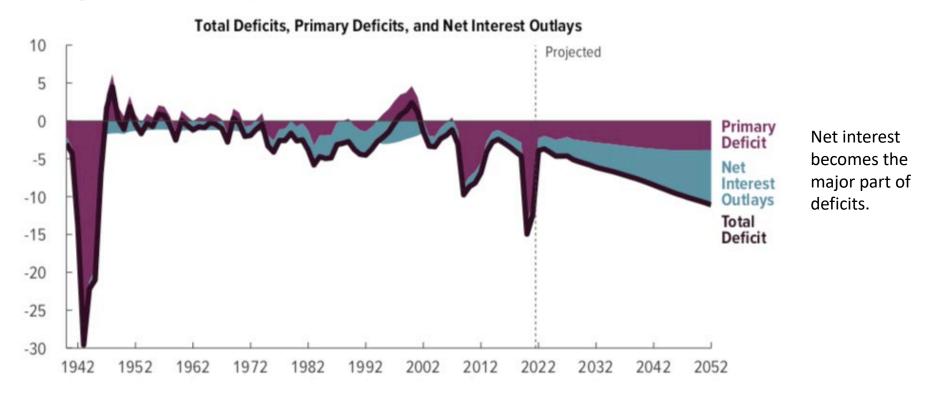


Federal deficit and debt through 2052 Federal debt % of GDP though 2052

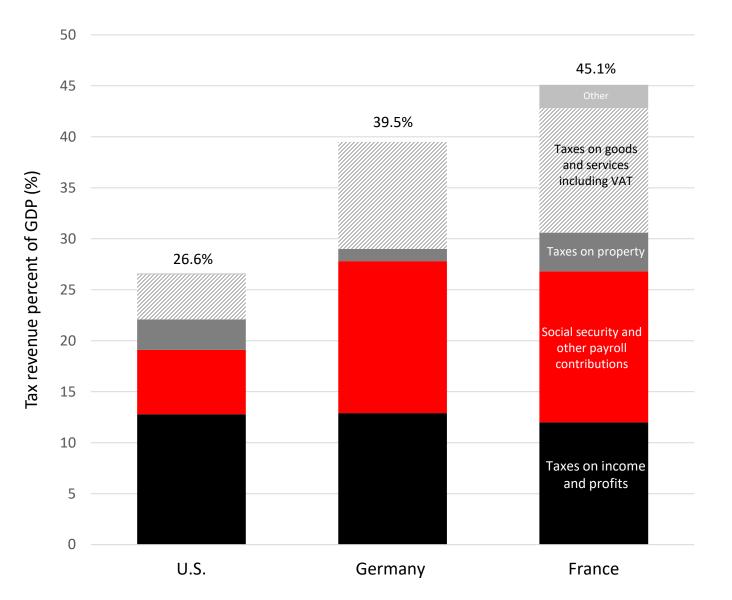


Federal deficit and debt through 2052 Federal deficits % of GDP though 2052

Percentage of Gross Domestic Product



Taxes Tax structure U.S. vs. France and Germany



The U.S. has a much lower total tax burden and takes a very different approach to raising tax revenues compared to most other developed economies.

Source: OECD Revenue Statistics 2022, published November 30, 2022. Data for 2021.

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Default on U.S. Debt Is Impossible

In reality, the U.S. *can't* default on its debt.

Section 4 of the 14th Amendment is unequivocal on that point: "The validity of the public debt of the United States, authorized by law, . . . shall not be questioned." This provision was adopted to ensure that the federal debts incurred to fight the Civil War couldn't be dishonored by a Congress that included members from the former Confederate states.

The Public Debt Clause isn't limited to Civil War debts. As the Supreme Court held in *Perry v. U.S.* (1935), it covers all sovereign federal debt, past, present and future.

Those who warn of default confuse debt payments with other spending obligations.

There's no question enough money would be available: The government collects roughly \$450 billion a month in tax revenue, more than enough to cover the \$55 billion or so in monthly debt service.

Important Information

All material presented is compiled from sources believed to be reliable and current, but accuracy cannot be guaranteed. This is not to be construed as an offer to buy or sell any financial instruments and should not be relied upon as the sole factor in an investment making decision. As with all investments there are associated inherent risks. Please obtain and review all financial material carefully before investing.

The opinions expressed are those of the author, are based on current market conditions and are subject to change without notice.

These materials may contain statements that are not purely historical in nature but are "forward-looking statements." These include, among other things, projections, forecasts, estimates of income, yield or return or future performance targets. These forward-looking statements are based upon certain assumptions, some of which are described herein. Actual events are difficult to predict and may substantially differ from those assumed. All forward-looking statements included herein are based on information available on the date hereof and Fritz Meyer assumes no duty to update any forward-looking statement. Accordingly, there can be no assurance that estimated returns or projections can be realized, that forward-looking statements will materialize or that actual returns or results will not be materially lower than those presented.

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