

August 2023

Student of the Market



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Market overview

**Hot start for
tech stocks**



**60/40 portfolio
bounces back**



Bonds, the Fed and housing

**Bonds don't
fight the Fed**



**Core and
service inflation**



**Timing of
Fed pivots**



**Housing market
resilience**



Stocks

**Bull market
rebound**



**Artificial
Intelligence**

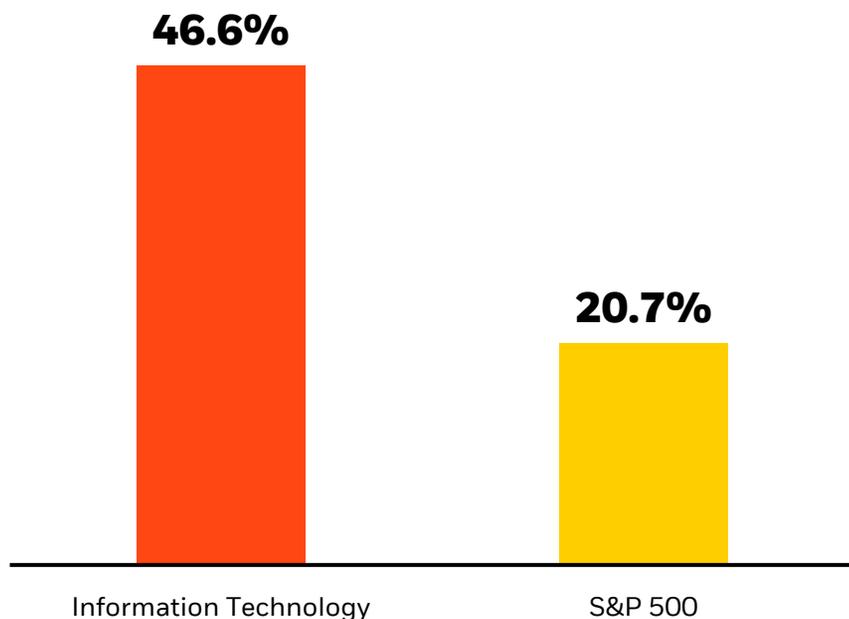


Source: Morningstar as of 7/31/23. Past performance is no guarantee of future results. Index performance is shown for illustrative purposes only. You cannot invest directly in an index.

3rd best start to a year for technology stocks

2023 stock market performance

YTD returns



Best starts to a year for tech stocks

Top 10 periods for tech stock performance since 1990

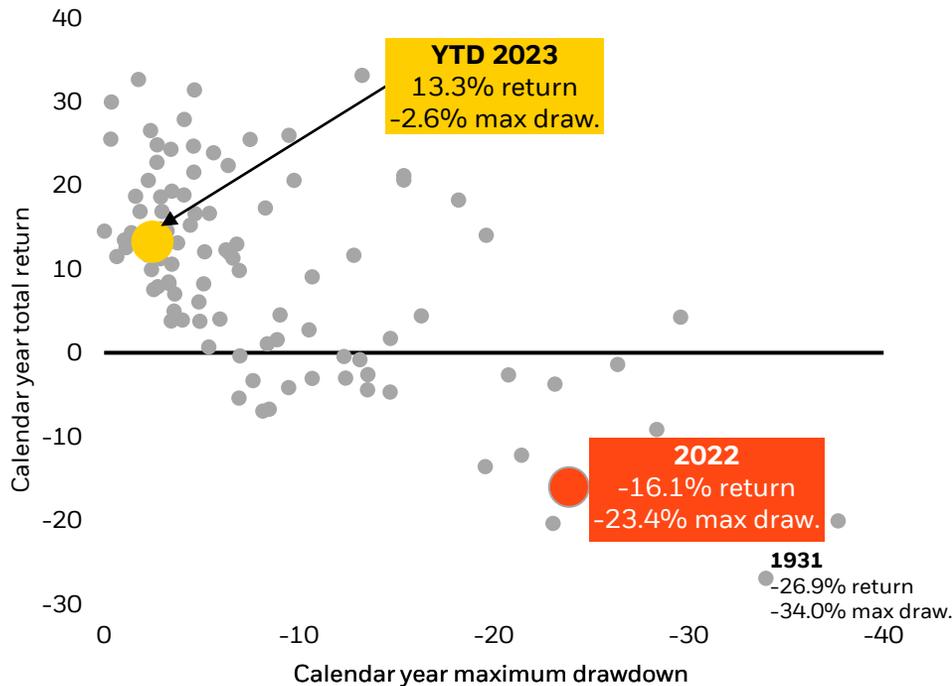
Year	First 7 months		Next 5 months	
	Info. Tech.	S&P 500	Info. Tech.	S&P 500
1995	49.0	24.2	-6.4	10.8
1997	47.5	30.2	-12.8	2.4
2023	46.6	20.7	?	?
1998	37.8	16.5	29.3	10.4
2009	36.3	11.0	18.6	14.0
2019	31.4	20.2	14.4	9.4
1999	24.5	8.9	43.6	11.2
2003	24.2	13.7	18.6	13.1
2017	22.3	11.6	13.5	9.2
2020	21.4	2.4	18.5	15.6

Source: Morningstar as of 7/31/23. U.S. stocks are represented by the S&P 500 Index and information technology stocks by the S&P 500 information technology sector index. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You can not invest directly in the index.

16th best start to a year for a 60/40 portfolio

Calendar year return and max drawdown for a 60/40 portfolio

Since 1926, calendar year return and maximum drawdown for each year



Top 20 starts to a calendar year for a 60% stock and 40% bond portfolio

Since 1926

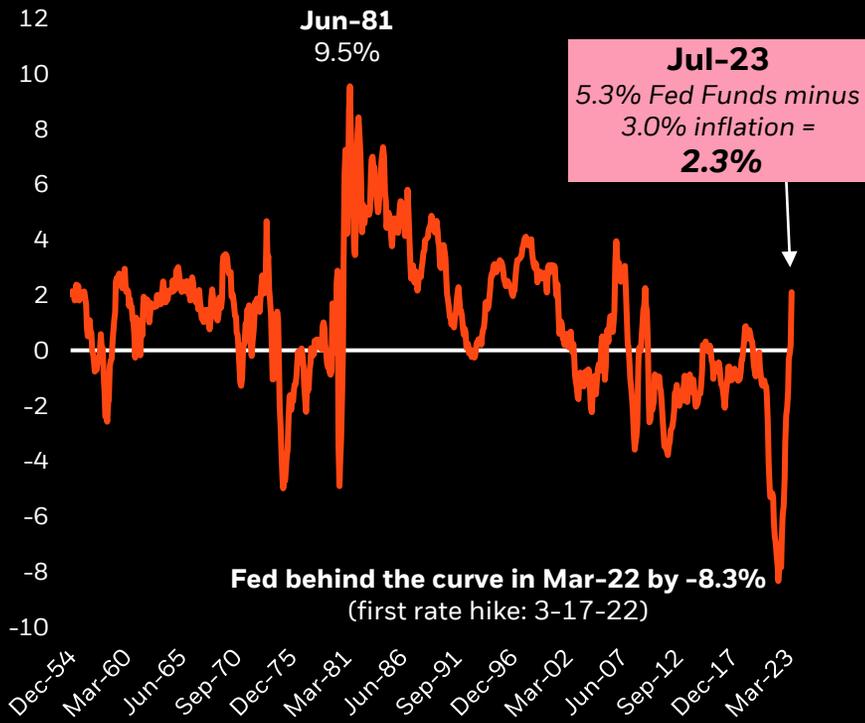
Year	60% stocks and 40% bonds	
	First 7 months	Next 5 months
1933	30.3	2.1
1989	20.9	3.3
1997	20.5	2.8
1975	20.5	4.2
1987	20.2	-13.3
1995	19.0	9.2
1954	17.9	12.5
2019	14.7	6.7
1943	14.6	1.8
1938	14.5	5.8
1985	14.4	11.7
1991	14.1	9.3
1935	14.0	15.3
1955	13.5	4.6
1936	13.3	7.3
2023	13.2	?
1958	13.1	11.0
1929	13.1	-13.9
1976	12.9	6.9

Source: Morningstar as of 7/31/23. U.S. stocks are represented by the S&P 500 Index from 3/4/57 to 7/31/23 and the IA SBBI U.S. Lrg Stock Tr USD Index from 1/1/26 to 3/4/57. Bonds are represented by the IA SBBI US Gov IT Index from 1/1/26 to 1/3/89 and the Bloomberg U.S. Agg Bond TR Index from 1/3/89 to 7/31/23. **Past performance does not guarantee or indicate future results.** Index performance is for illustrative purposes only. You can not invest directly in the index.

Fed funds rate has surpassed inflation, which has historically benefited bonds

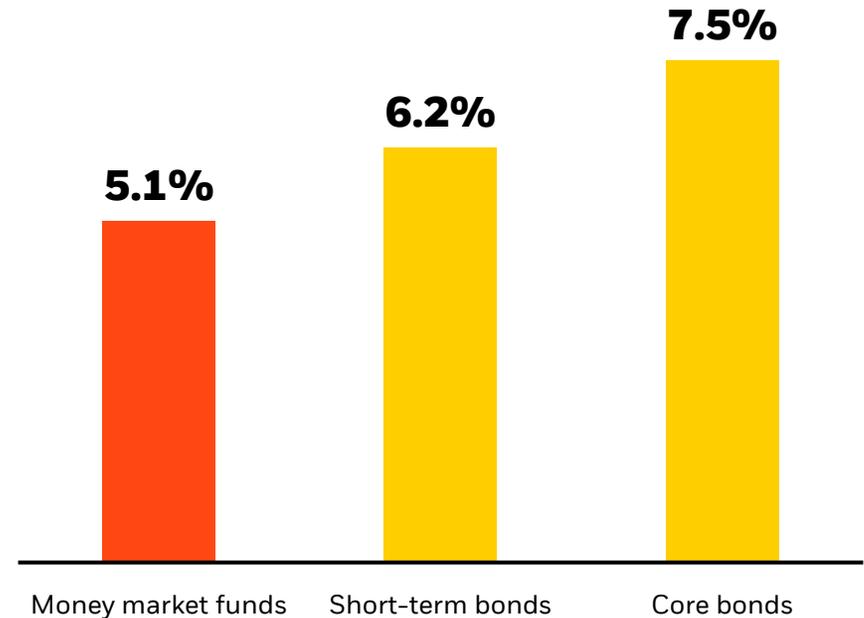
Effective fed funds rate minus inflation

FFR & CPI since 1955



Bonds historically performed their best when the Fed funds rate was greater than inflation

Average returns, periods where FFR was greater than inflation, since 1955



Source: Morningstar, St. Louis Federal Reserve as of 7/31/23. U.S. bonds represented by the IASBBI US Gov IT Index from 1/1/55 to 1/3/89 and the Bloomberg U.S. Agg Bond TR Index from 1/3/89 to 7/31/23. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

The last interest rate hike to the first cut

Average time between the last Fed rate hike and the first Fed rate cut

1/1/94 – 7/31/23

10.5 months

The range of time has been as short as 6 months ('95 was the last time they quickly raised rates) and as long as 18 months.

Specific periods the last Fed increase to the first cut

1/1/94 – 7/31/23

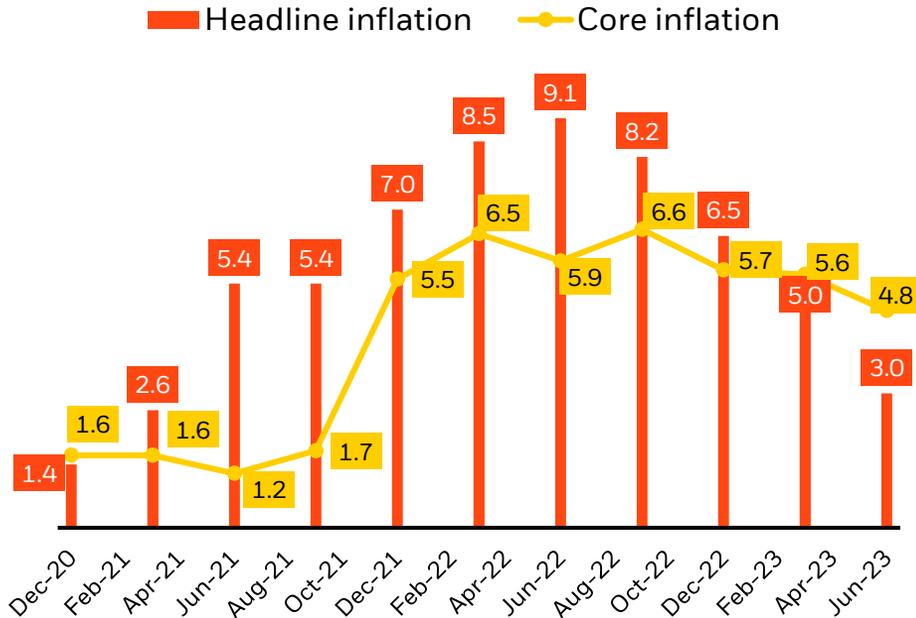
Last Federal Reserve rate increase	First Federal Reserve rate cut	Time in between
2/1/95	7/6/95	6 months
3/25/97	9/29/98	18 months
5/16/00	1/3/01	7.5 month
6/29/06	9/18/07	14.5 months
12/20/18	8/1/19	7.5 months
Average		10.5 months

Source: Morningstar, Federal Reserve as of 7/31/23. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Core inflation has trailed headline inflation

Core inflation is now above headline inflation, but the gap should shrink in coming months

1/1/20 – 7/31/23



Shelter is a heavy weight in “core” and “service” inflation

Shelter is 35% of headline inflation

44%

Of core inflation
(less food and energy)

56%

Of service inflation

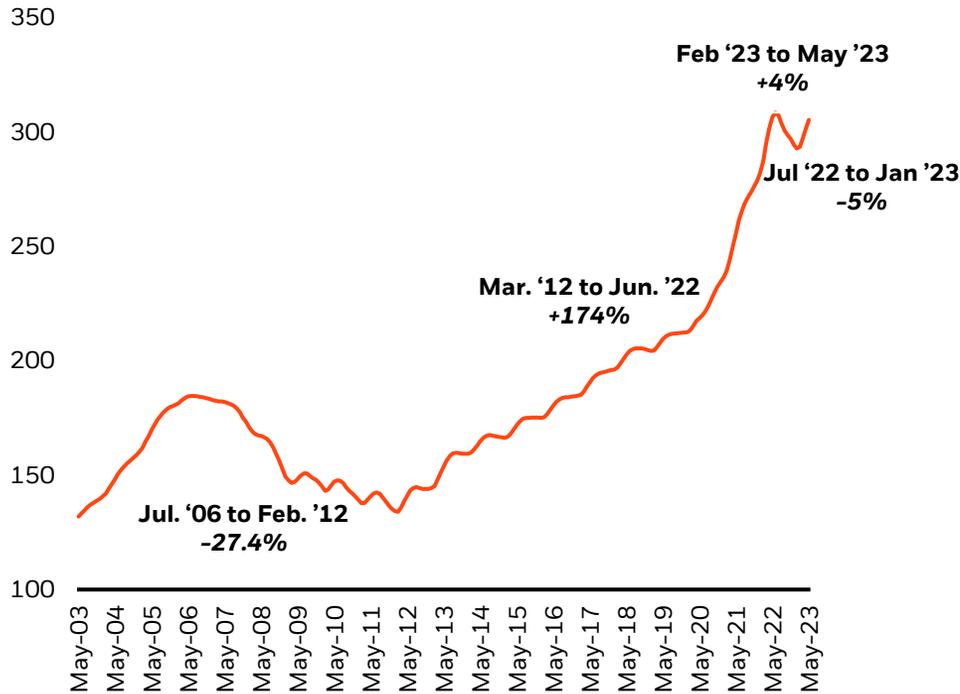
Shelter inflation did not peak until the 2nd half of '22. **This will help core and service inflation come down** as it rolls off the calculation in the 2nd half of 2023.

Source: Morningstar, Federal Reserve and the Bureau of Labor Statistics as of 7/31/23. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Housing market has been resilient

Housing prices have held up surprisingly well

Case-Shiller housing price index, last 20 years



Factors helping and hurting housing prices

Mortgage rates (30 year)	Houses listed for sale	Housing starts (# of properties that broke ground)
June 2023		
6.8%	614,000	1.4M

Key historical milestones

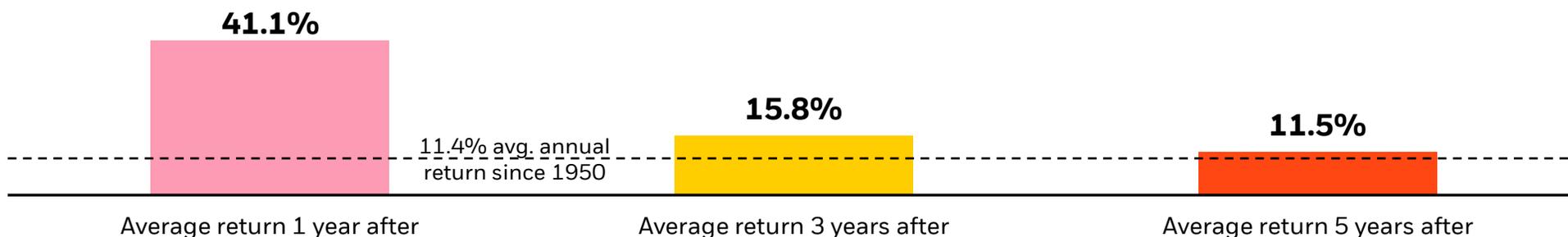
Low: 2.7% December 2020	High: 1.5M July 2016	Low: 480K April 2009 Avg. since 1959: 1.4M
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Source: Morningstar, Federal Reserve and the Bureau of Labor Statistics as of 7/31/23. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Anatomy of bull markets

Average performance following a bear markets

Since 1950 (12 bull markets)



Rebounds from bear markets since 1950												
Bear Market Low	10/22/57 -21.5%	6/26/62 -28.0%	10/7/66 -22.2%	5/26/70 -36.1%	10/3/74 -48.2%	3/6/78 -19.4%	8/12/82 -27.1%	12/4/87 -33.5%	10/9/02 -49.1%	3/9/09 -56.8%	3/23/20 -33.9%	10/12/22 -25.4%
Return needed to break-even	27.3%	38.8%	28.5%	56.4%	93.1%	24.1%	37.2%	50.4%	96.6%	129.5%	51.3%	34.1%
Days to break-even	233	299	143	451	1,462	366	58	414	1,166	1,008	101	?
1-yr after	31.0%	32.4%	32.9%	43.7%	38.0%	12.6%	58.3%	22.5%	33.7%	68.6%	77.8%	30.0%*
3-yr after	15.2%	16.7%	8.3%	15.9%	15.8%	14.3%	22.4%	16.4%	15.5%	10.4%	22.8%	?
5-yr after	9.9%	11.9%	6.4%	5.5%	12.0%	2.1%	26.6%	17.4%	15.0%	7.9%	?	?

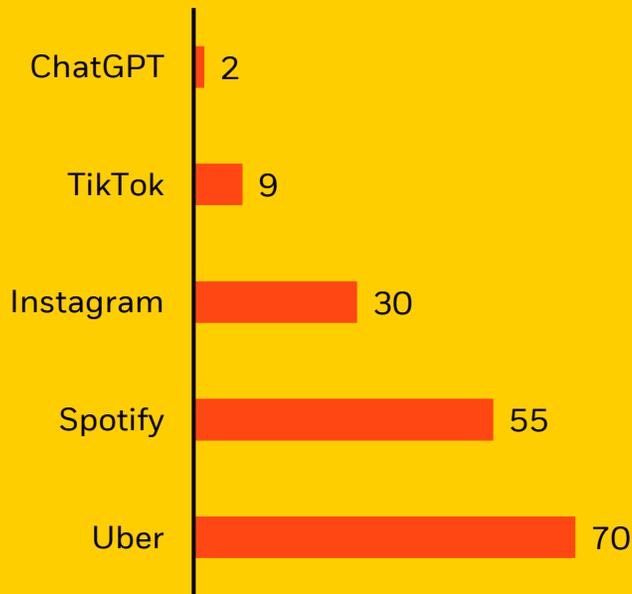
Morningstar as of 7/31/23. Stock market represented by S&P 500. Stocks PR Index. *not a full one-year period. Principal return only, dividends not included. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

All eyes on artificial intelligence

We have seen AI enthusiasm drive strong performance in tech stocks, but its impact could be even broader: AI breakthroughs may lead to greater productivity and reduced costs across a wide range of industries.

ChatGPT's rise demonstrates that generative AI has arrived, along with major implications for our society & economy.

Months it took to reach 100M users¹



Marketing



By 2025, 30% of outbound marketing messages will be artificially generated (up from 2% in 2022)²

Healthcare



AI-trained healthcare models review & translate mammograms ~30x faster than traditional methods³

Education



The \$1.2T U.S. education market, with spending equivalent to 6.4% of GDP, is at risk of being disrupted⁴

Customer Care



As companies leverage AI for self-serve inquiries, 3rd party customer service providers need to innovate⁵

Source: **1** CBS News, "ChatGPT user base is growing faster than TikTok," February 1, 2023. BBC News, "Netflix's history: From DVD rentals to streaming success," February 23, 2018. **2** Gartner, "Beyond ChatGPT: The Future of Generative AI for Enterprises," January 2023. **3** Science Alert, "AI Can Analyse Mammogram Results 30 Times Faster Than Doctors, And With 99% Accuracy," September 2016. **4** Vantage Market Research, "U.S. Education Market Size & Share to Surpass \$1.5 Trillion by 2028," March 2023. **5** McKinsey, "The next frontier of customer engagement: AI-enabled customer service," March 2023.

Student of the Market: August 2023

Returns as of 7/31/23	1 Year Return	5 Year Avg. Annual Return	10 Year Avg. Annual Return
S&P 500 TR USD	13.02	12.20	12.66
Bloomberg US Agg Bond TR USD	-3.37	0.75	1.50
IA SBBI US IT Govt TR USD	-2.52	0.94	1.13
IA SBBI US Large Stock TR USD Ext	13.02	12.20	12.66
US BLS CPI All Urban NSA 1982-1984	2.97	3.90	2.71
S&P 500 Sec/Information Technology TR USD	26.85	21.96	21.69

Source: Morningstar. Performance data quoted represents past performance and is no guarantee of future results. Current performance may be lower or higher than that shown. This material is not intended to be relied upon as a forecast, research or investment advice, and is not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. The opinions expressed are as of 7/31/23 and may change as subsequent conditions vary. The information and opinions contained in this material are derived from proprietary and nonproprietary sources deemed by BlackRock to be reliable, are not necessarily all-inclusive and are not guaranteed as to accuracy. Past performance is no guarantee of future results. There is no guarantee that any forecasts made will come to pass. Reliance upon information in this material is at the sole discretion of the reader.

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