

September 2023

Student of the Market



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Bonds and the Fed

Inflation adjusted returns



Fed Funds interest rate



Real yields and correlations



Peak yield curve inversion?



Stocks

September a tough month for stocks



Stocks and election years



Investing

Economic cycles and expected asset class returns



Investing rules of thumb

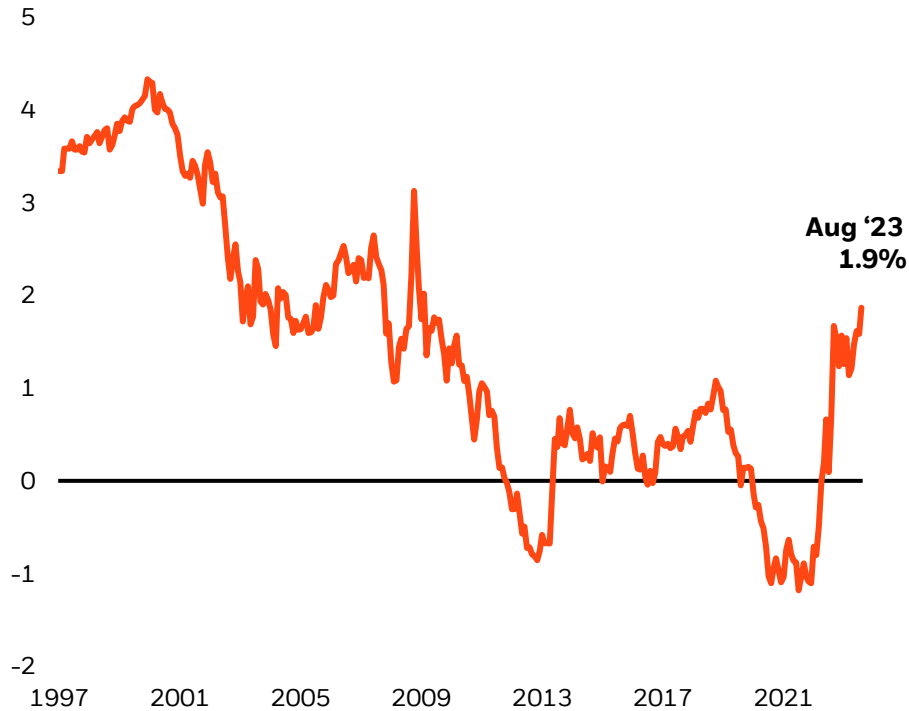


Source: Morningstar as of 8/31/23. **Past performance is no guarantee of future results.** Index performance is shown for illustrative purposes only. You cannot invest directly in an index.

Inflation adjusted (real yield) for bonds

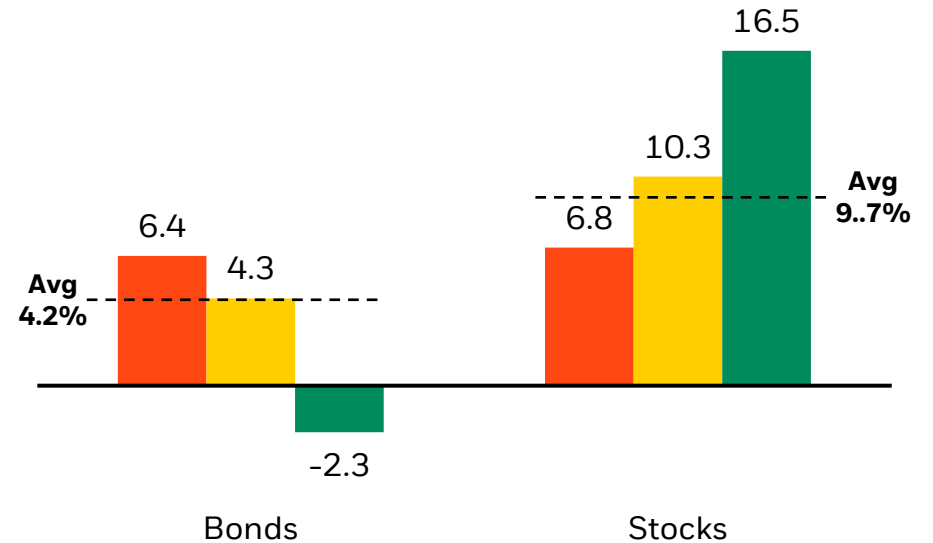
10-year real yields on bonds

(yield minus expected inflation, since January 1997)



12 month returns after real yield levels on bonds

■ 1.5% or more ■ 0 to 1.49% ■ Less than 0

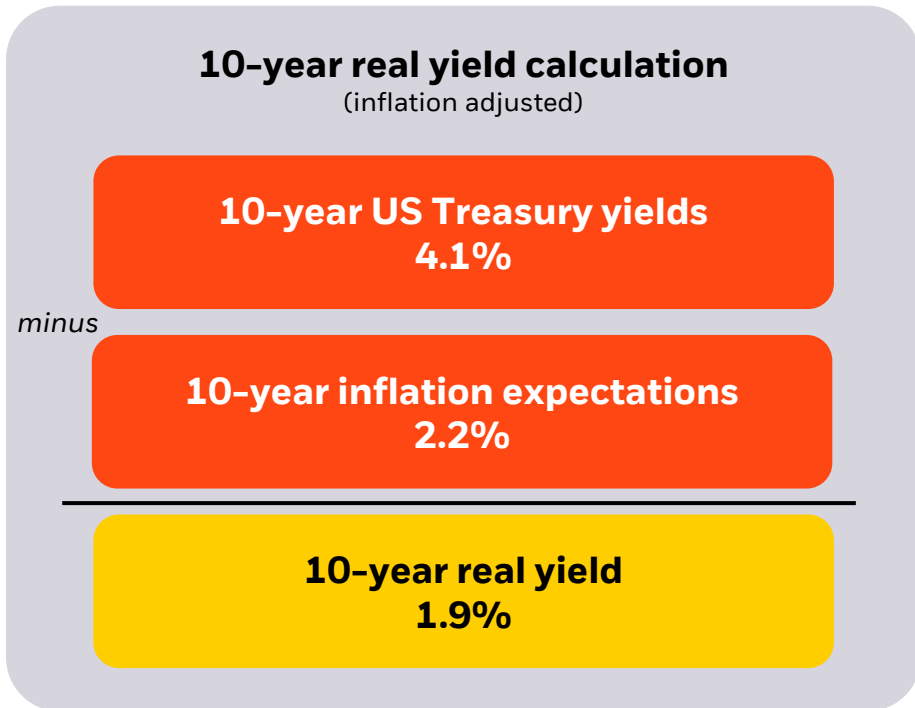


Source: Morningstar, Federal Reserve, Bureau of Labor Statistics as of 8/31/23. U.S. stocks are represented by the S&P 500 TR Index and U.S. bonds are represented by the Bloomberg U.S. Agg Bond TR Index. **Past performance does not guarantee or indicate future results.** Index performance is for illustrative purposes only. You can not invest directly in the index.

Real yield impact on stock and bond correlation

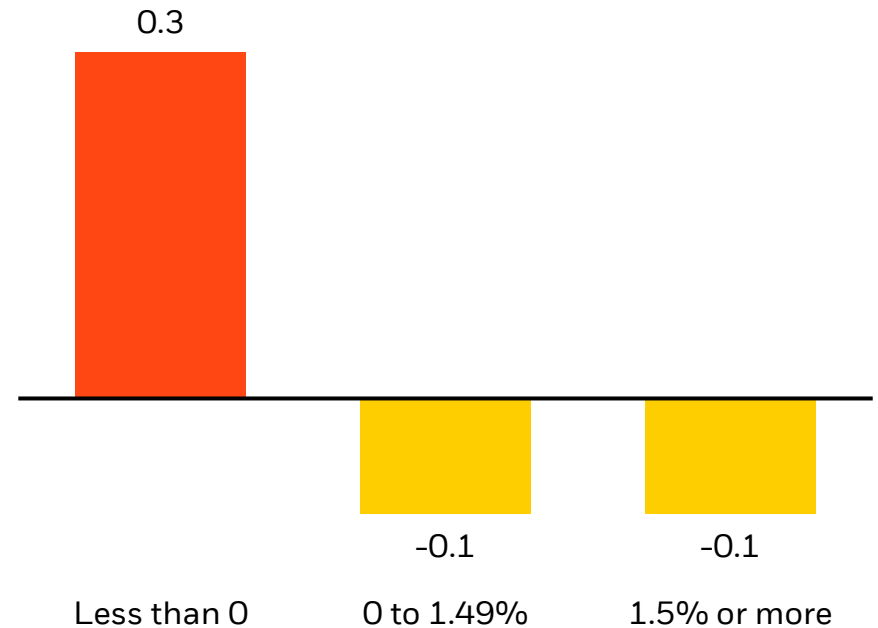
10-year real yields on bonds

(as of 8/31/2023)



Correlation for stocks and bonds at various real yield levels

(yield minus expected inflation, since 1/1997)

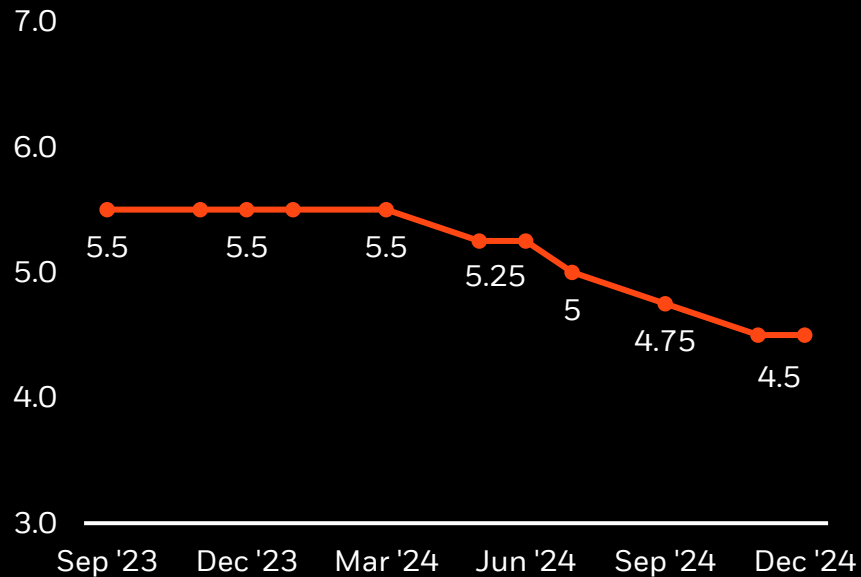


Source: Morningstar, Federal Reserve, Bureau of Labor Statistics as of 8/31/23. U.S. stocks are represented by the S&P 500 TR Index and U.S. bonds are represented by the Bloomberg U.S. Agg Bond TR Index. **Past performance does not guarantee or indicate future results.** Index performance is for illustrative purposes only. You can not invest directly in the index.

What is the market expecting for the Fed Funds interest rate going forward?

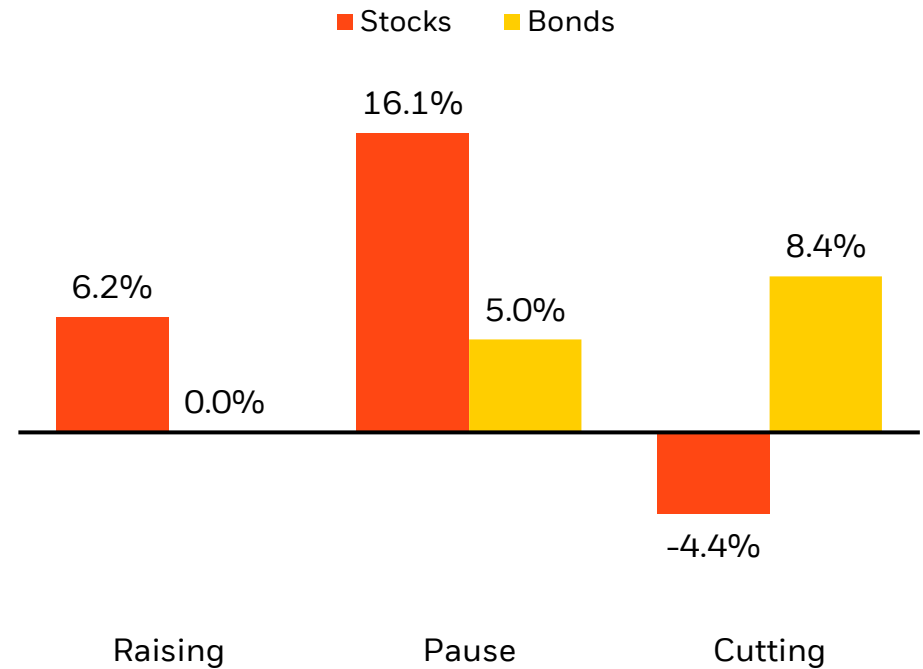
Fed Funds futures pricing

(yields from 6/1/23 - 8/31/23)



Performance in various Fed interest rate cycles

(since 1990, last 5 rate cycles)



Source: Morningstar as of 8/31/23. U.S. stocks are represented by the S&P 500 TR Index and U.S. bonds are represented by the Bloomberg U.S. Agg Bond TR Index. Fed funds future pricing from CME Fed Watch Tool at www.cmegroup.com/markets/interest-rates/cme-fedwatch-tool.html.

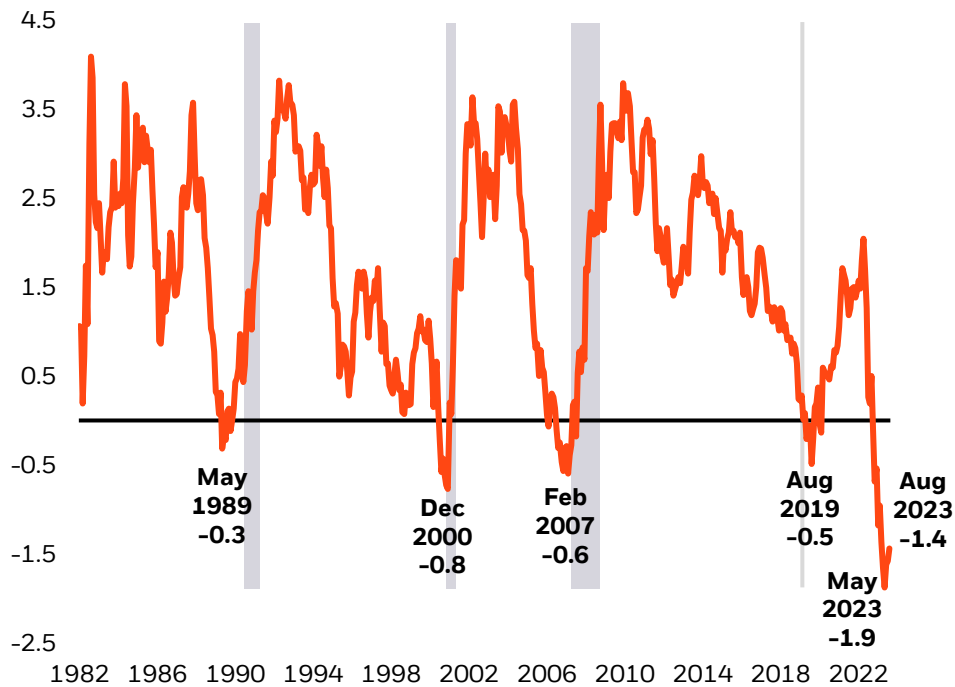
PEAK YIELD CURVE INVERSION?

The gap between short term and long-term interest rates is shrinking

Peak Yield curve inversion

(10yr U.S. Treasury – 3mo U.S. Treasury bill)

Recessions



Bond returns following peak yield curve inversions

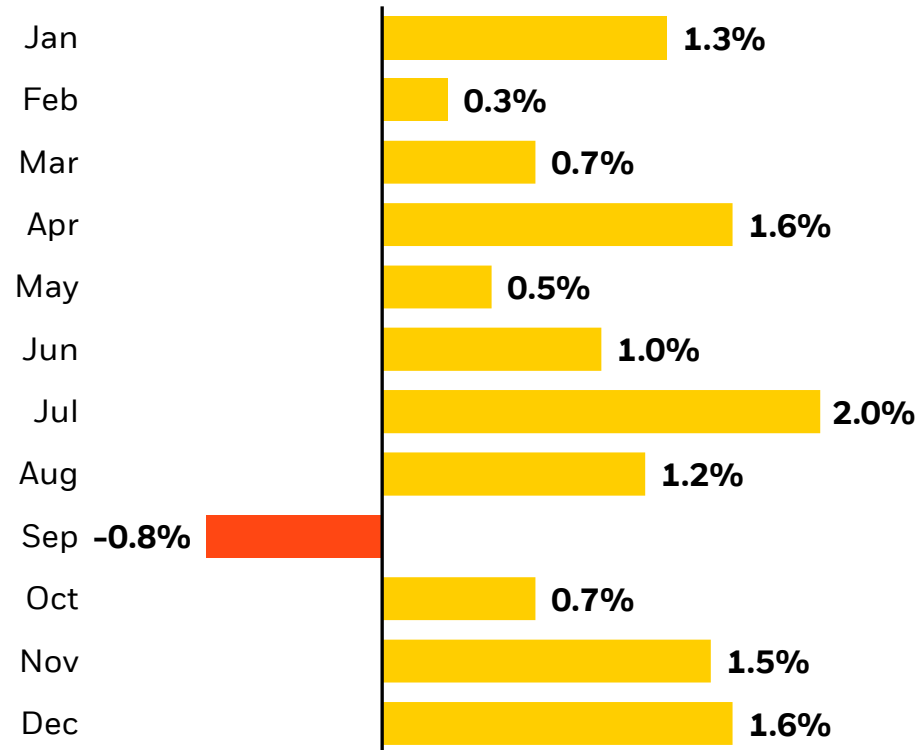
Peak yield curve inversion date	12 mo. return for bonds following	Months till the next recession
May 1989	9.4	15
Dec 2000	8.4	4
Feb 2007	7.3	11
Aug 2019	6.5	6
Avg	7.9	9

Source: Morningstar, Federal Reserve as of 8/31/23. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You can not invest directly in the index.

September historically the worst month for stocks

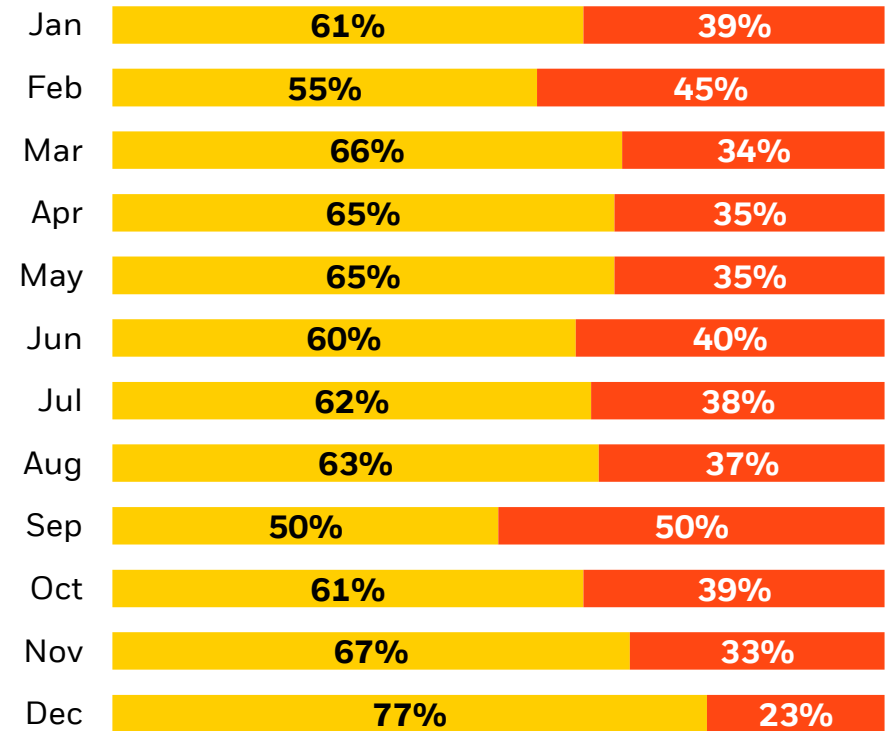
Avg stock market return by month

(since 1926)



Positive/Negative returns for stocks by month

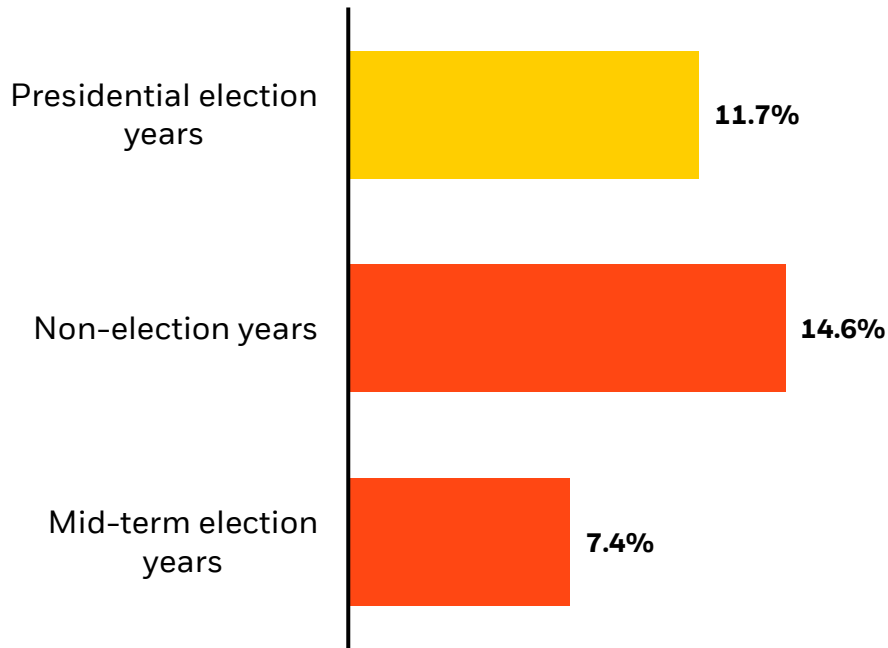
■ Positive ■ Negative



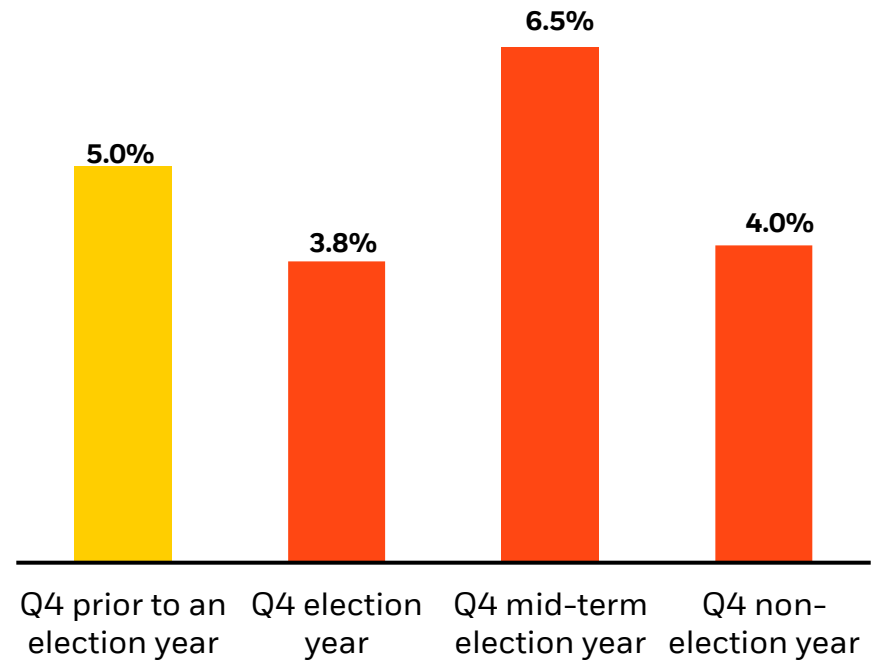
Source: Morningstar as of 8/31/23. U.S. stocks are represented by the S&P 500 Index from 3/4/57 to 8/31/23 and the IA SBBI U.S. Lrg Stock Tr USD Index from 1/1/26 to 3/4/57, unmanaged indexes that are generally considered representative of the U.S. stock market during each given time period. **Past performance does not guarantee or indicate future results.** Index performance is for illustrative purposes only. You can not invest directly in the index.

Upcoming election year and historical stock returns

U.S. stock performance since 1926 (average return since 1926)



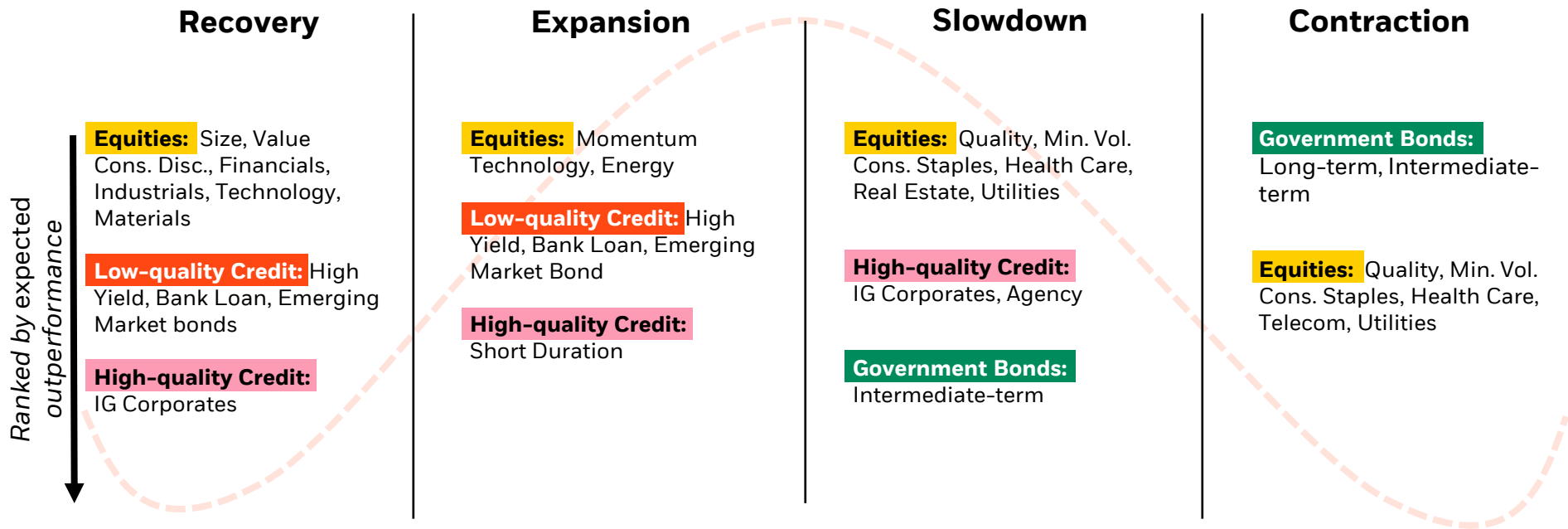
Average U.S. stock performance in Q4 before an election year (median return since 1926)



Source: Morningstar as of 8/31/23. U.S. stocks are represented by the S&P 500 Index from 3/4/57 to 8/31/23 and the IA SBBI U.S. Lrg Stock Tr USD Index from 1/1/26 to 3/4/57, unmanaged indexes that are generally considered representative of the U.S. stock market during each given time period. **Past performance does not guarantee or indicate future results.** Index performance is for illustrative purposes only. You can not invest directly in the index.

Economic cycles and expected asset class performance

Hypothetical economic cycles and expected market performance



Source: BlackRock as of 8/31/23. Illustration is purely hypothetical and for educational purposes only. Past performance does not guarantee or indicate future results.

Understanding the investment math

Rule of 72

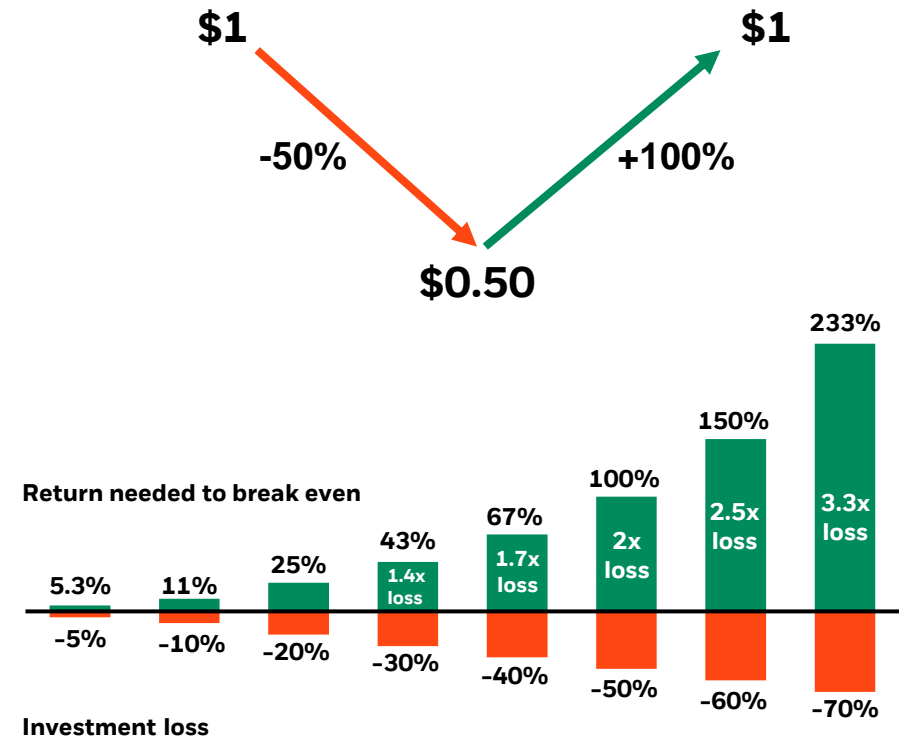
Approximately how long it will take to double your money, divide 72 by your rate of return

Rule of 115

Approximately how long will it take to triple your money, divide 115 by your rate of return

	Avg annual rate of return					
	3%	5%	8%	10%	12%	15%
Rule of 72 <i># of years to double money</i>	24	14.4	9	7.2	6	4.8
Rule of 115 <i># of years to triple money</i>	38.3	23	14.4	11.5	9.6	7.7

Loss and return needed to break-even



Source: BlackRock as of 8/31/23. Illustration is purely hypothetical and for educational purposes only. Past performance does not guarantee or indicate future results.

Student of the Market: September 2023

Returns as of 8/31/23	1 Year Return	5 Year Avg. Annual Return	10 Year Avg. Annual Return
Bloomberg US Agg Bond TR USD	-1.19	0.49	1.48
IA SBBI US IT Govt TR USD	-2.51	0.37	1.00
IA SBBI US Large Stock TR USD Ext	15.94	11.12	12.81
S&P 500 TR USD	15.94	11.12	12.81
US BLS CPI All Urban NSA 1982-1984	3.18	3.94	2.73

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 8/31/23 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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