Student of the Market

October 2022



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Stock and bonds returns

Quarterly losing streak for stocks and bonds

Stock market volatility

Midterm elections and market performance

U.S. stock sectors and presidents

Bond returns and interest rate moves

Historic bear market in bonds

Peak inflation and performance

Source: Morningstar as of 9/30/22. Past performance is no guarantee of future results. Index performance is shown for illustrative purposes only. You cannot invest directly in an index.

Worst start to a year for bonds and 4th worst start for stocks

Worst ever start to a year for U.S. bonds

Since 1926, total return for 1/1 - 9/30 each calendar year, 10 worst periods

Year	First 9 months	Next 12 months
2022	-14.6	?
1981	-3.9	35.2
1994	-3.2	14.1
1987	-2.9	13.3
1958	-2.0	-0.3
2013	-1.9	4.0
2018	-1.6	10.3
1969	-1.6	11.1
2021	-1.6	-14.6
1959	-1.0	11.0
Avg.	-3.4	9.3

4th worst ever start to a year for U.S. stocks

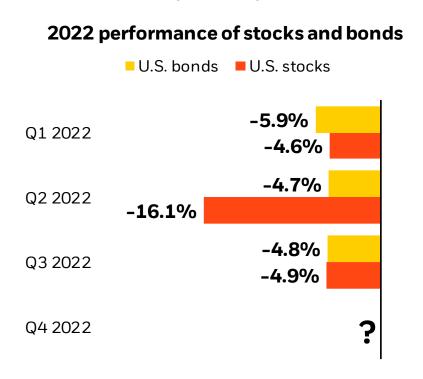
Since 1926, total return for 1/1 - 9/30 each calendar year, 10 worst periods

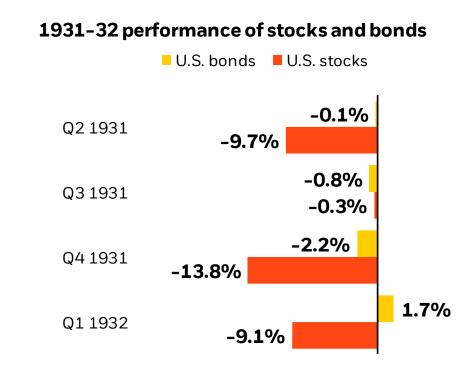
Year	First 9 months	Next 12 months
1931	-34.3	-9.6
1974	-32.8	38.1
2002	-28.2	24.4
2022	-23.9	?
2001	-20.4	-20.5
1962	-19.4	31.7
2008	-19.3	-6.9
1937	-17.3	-5.5
1966	-15.1	30.6
1946	-11.3	6.5
Avg.	-22.2	9.9

Source: Morningstar as of 9/30/22. U.S. bonds 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 9/30/22. U.S. stocks are represented by the IA SBBI US Gov IT 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 cannot invest directly in the index.

3rd consecutive quarter of both stock and bond losses

First in modern history and only other time since 1931





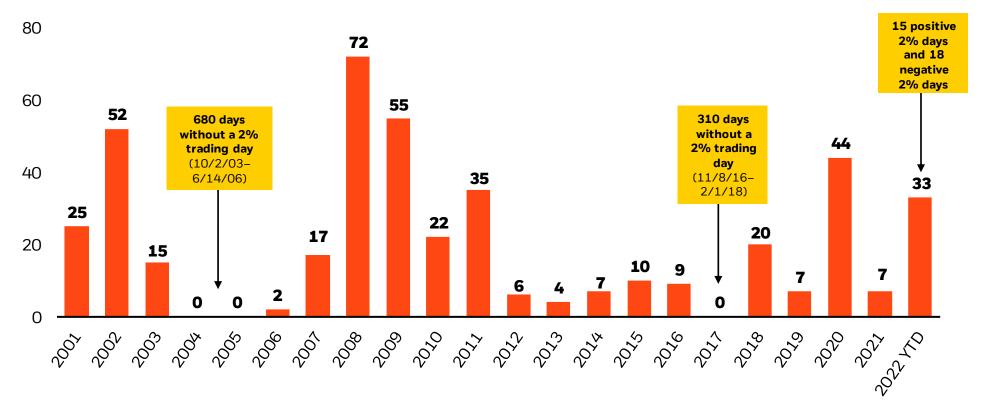
Bonds have only lost money in 4 consecutive quarters once ('54) & 3 consecutive quarters 3 times ('31, '80 and '22) Stocks have lost money in 6 consecutive quarters twice ('69-70, '08-'09), 5 quarters once ('31) & 4 quarters twice ('37-'38, '74-'75)

Source: Morningstar as of 9/30/22. U.S. bonds 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 9/30/22. U.S. stocks are represented by the S&P 500 Index from 3/4/57 to 9/30/22 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 cannot invest directly in the index.

Volatility picking up in 2022

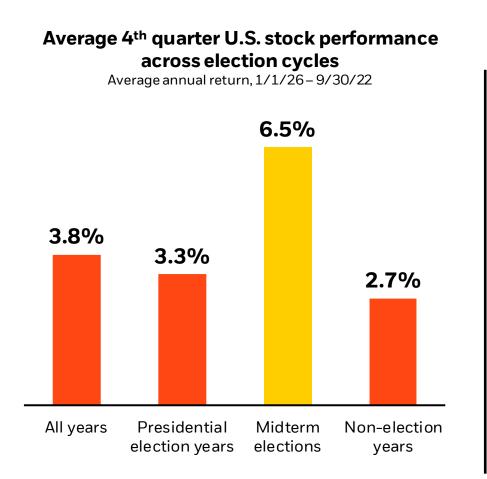
Number of single day stock market returns of +/-2% or more

S&P 500, past 20+ years by calendar year (1/1/01 - 9/30/22)

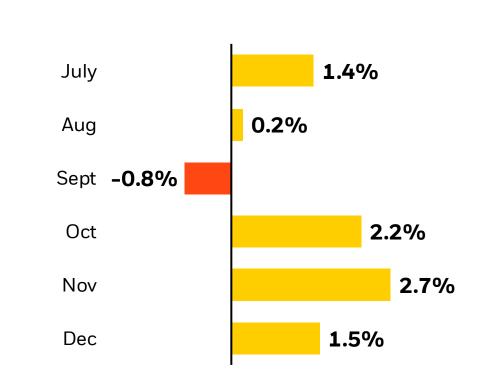


Source: Morningstar as of 9/30/22. Stock market represented by the S&P 500 Index. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

U.S. stocks across the election cycle



U.S. stock performance in midterm election yearsAverage monthly return in midterm election years, 1/1/26–9/30/22



Source: Morningstar as of 9/30/22. Stock market represented by the S&P 500 Index from 3/4/57 to 9/30/22 and IA SBBI U.S. Large Cap TR Index from 1/1/26 to 3/4/57. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

U.S. stock sectors by president

Sector performance

Average annual return for length of presidency, each sector of the S&P 500

Clinton	Bush	Obama	Trump	Biden
Technology 30.3%	Energy 9.9%	Consumer Disc. 18.6%	Technology 26.8%	Energy 68.8%
Financials 22.4%	Materials 6.6%	Technology 16.4%	Consumer Disc. 18.6%	Financials 13.8%
Health Care 21.8%	Cons. Staples 4.2%	Health Care 14.2%	Health Care 12.7%	Health Care 9.6%
Industrials 18.5%	Utilities -0.1%	Cons. Staples 12.8%	Utilities 9.9%	Cons. Staples 5.5%
Energy 16.0%	Industrials - 1.0%	Industrials 12.7%	Materials 9.9%	Real Estate 4.3%
Comm. Services 15.1%	Health Care -2.2%	Real Estate 12.7%	Comm. Services 9.1%	Utilities 3.9%
Consumer Disc. 14.0%	Consumer Disc2.3%	Utilities 10.9%	Industrials 8.5%	Materials 3.4%
Utilities 13.4%	Financials -4.4%	Materials 10.1%	Cons. Staples 7.4%	Industrials 3.4%
Cons. Staples 13.0%	Comm. Services -5.1%	Comm. Services 9.5%	Financials 6.8%	Technology 3.3%
Materials 6.6%	Technology-8.7%	Financials 7.2%	Real Estate 6.5%	Consumer Disc2.7%
		Energy 5.0%	Energy-16.4%	Comm. Services -9.6%

Biden's sector performance is looking like Bush's (Energy best, Technology and Comm. Services struggle)

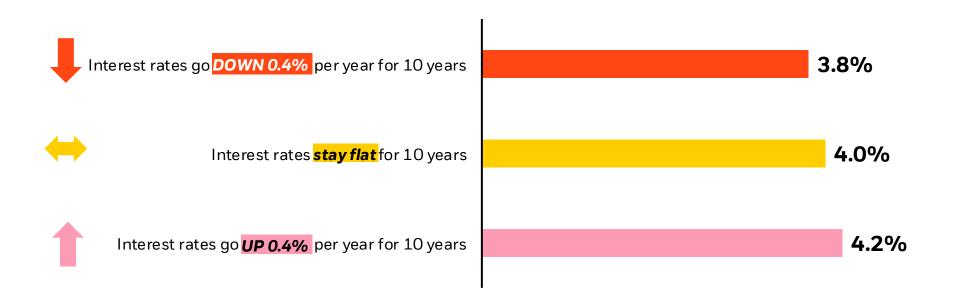
The top 3
performing
sectors were the
same under
Obama and
Trump, as well as
the worst
(Energy)

Source: Morningstar as of 9/30/22. Technology represented by the S&P 500 information technology sector index, Health care repesented by the S&P 500 health care sector index, Financials represented by the S&P 500 industrial sector index, Materials represented by the S&P 500 materials sector index, Consumer discretionary represented by the S&P 500 consumer discretionary sector index, Communication services represented by the S&P 500 communication services sector index, Real estate represented by the S&P 500 real estate sector index and Consumer staples represented by the S&P 500 consumer staples sector index. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index. Clinton period is from 11/4/192 to 12/13/2000, Bush time period from 12/14/2008, Obama time period from 11/4/2020 to 9/30/22.

Long-term bond returns driven more by starting yield than interest rate moves

Bond return scenario quiz?

 $Hy pothetical\ average\ annual\ bond\ return\ over\ 10-years\ for\ a\ traditional\ fixed\ income\ portfolio\ yielding\ 4\%\ yield\ with\ a\ 5-year\ duration$

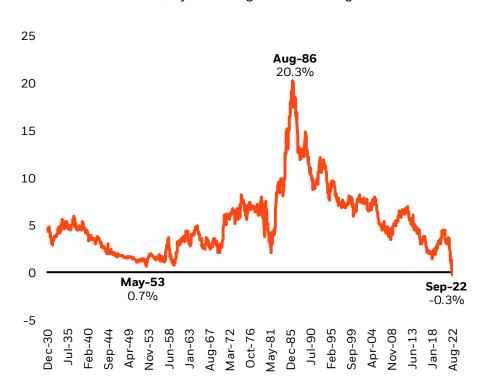


Source: BlackRock as of 9/30/22. Hypothetical example for illustrative purposes only. Past performance does not guarantee orindicate future results.

Bonds lose money over a 5-year period for the first time ever

Core bonds have lost money over the last 5 years for the first time in history

Since 1926, 5-year average annual rolling return



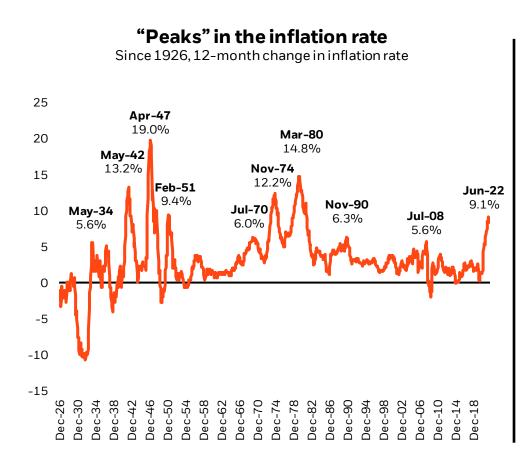
Range of returns for various bond categories

Average annual return

	Bond Bear cumulative return (9/1/20to 9/30/22)	1-year	3-year	5 -year
Bank Loan	3.9	-4.4	0.6	1.7
Nontraditional	-2.6	-8.1	-0.5	0.6
High Yield	-4.1	-13.1	-0.8	1.0
Short-Term	-5.1	-6.8	-0.6	0.7
Multisector	-6.3	-12.2	-1.5	0.5
Intermediate Core-Plus	-14.0	-15.1	-2.9	-0.2
Intermediate Core	-15.7	-14.9	-3.2	-0.4
U.S. Bonds (index)	-16.1	-14.6	-3.3	-0.3

Source: Morningstar as of 9/30/22. U.S. bonds represented by the IA SBBI US Gov IT Index from 1/1/26 to 1/3/89 and the Bloomlærg U.S. Agg Bond TR Index from 1/3/89 to 9/30/22. All bond categories represented by their respective Morningstar categories. **Past performance does not guarantee or indicate future results**. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Performance following peaks in inflation



Returns following "peak" inflation rates

Since 1926, returns for the next 12 months

Deals befletien	Next 12 months			
Peak Inflation	Stocks	Bonds		
May 1932	4.8%	6.3%		
May 1942	57.6%	2.0%		
Apr 1947	12.4%	1.2%		
February 1951	13.6%	0.3%		
July 1970	26.6%	10.4%		
November 1974	36.2%	7.7%		
March 1980	40.1%	13.1%		
November 1990	20.3%	14.4%		
July 2008	-20.0%	7.9%		
June 2022	?	?		
Avg.	21.3% 7.0%			

Source: Morningstar as of 9/30/22. U.S. bonds 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 9/30/22. U.S. stocks are represented by the S&P 500 Index from 3/4/57 to 9/30/22 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 cannot invest directly in the index.

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Returns as of 9/30/22	Total Ret 1 Year	Total Ret 5 Years	Total Ret 10 Years
Bloomberg US Agg Bond TR USD	-14.60	-0.27	0.89
IA SBBI US IT Govt TR USD	-11.85	-0.15	0.60
IA SBBI US Large Stock TR USD Ext	-15.47	9.24	11.70
S&P 500 Sec/Commun Services TR USD	-39.05	1.95	3.76
S&P 500 Sec/Cons DiscTR USD	-20.89	10.51	13.19
S&P 500 Sec/Cons Staples TR USD	-0.09	7.60	9.51
S&P 500 Sec/Energy TR USD	45.70	6.09	3.52
S&P 500 Sec/Financials TR USD	-17.65	5.47	11.38
S&P 500 Sec/Industrials TR USD	-13.87	4.87	10.39
S&P 500 Sec/Information Technology TRUSD	-20.00	16.74	17.09
S&P 500 Sec/Materials TR USD	-12.15	5.89	8.56
S&P 500 Sec/Real Estate TR USD	-16.37	5.79	7.76
S&P 500 Sec/Utilities TR USD	5.58	7.82	9.85
<u>S&P 500 TR USD</u>	-15.47	9.24	11.70
US BLS CPI All Urban NSA 1982-1984	8.26	3.82	2.54
US Fund Bank Loan	-4.43	1.68	2.56
US Fund High Yield Bond	-13.13	0.94	3.06
<u>US Fund Multisector Bond</u>	-12.02	0.56	2.14
US Fund Short-Term Bond	-6.80	0.66	0.94
US Fund Nontraditional Bond	-8.23	0.54	1.45
US Fund Intermediate Core Bond	-14.86	-0.40	0.77
US Fund Intermediate Core-Plus Bond	-15.09	-0.15	1.15

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 9/30/22 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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