



Fusion Forecasting: Leveraging Proprietary Fundamental & Technical Research

Presented by:



Sam Stovall, CFP, Chief Investment Strategist

cfraresearch.com

CFRA

Disclaimer

Disclaimer: This presentation is for informational purposes only and is not a recommendation to buy or sell securities or engage in any investment activity.

Fusion Analysis: Technicals & Fundamentals

- Prices Lead Fundamentals
- Fundamentals Tell You What...
- Technicals Tell You When and How far

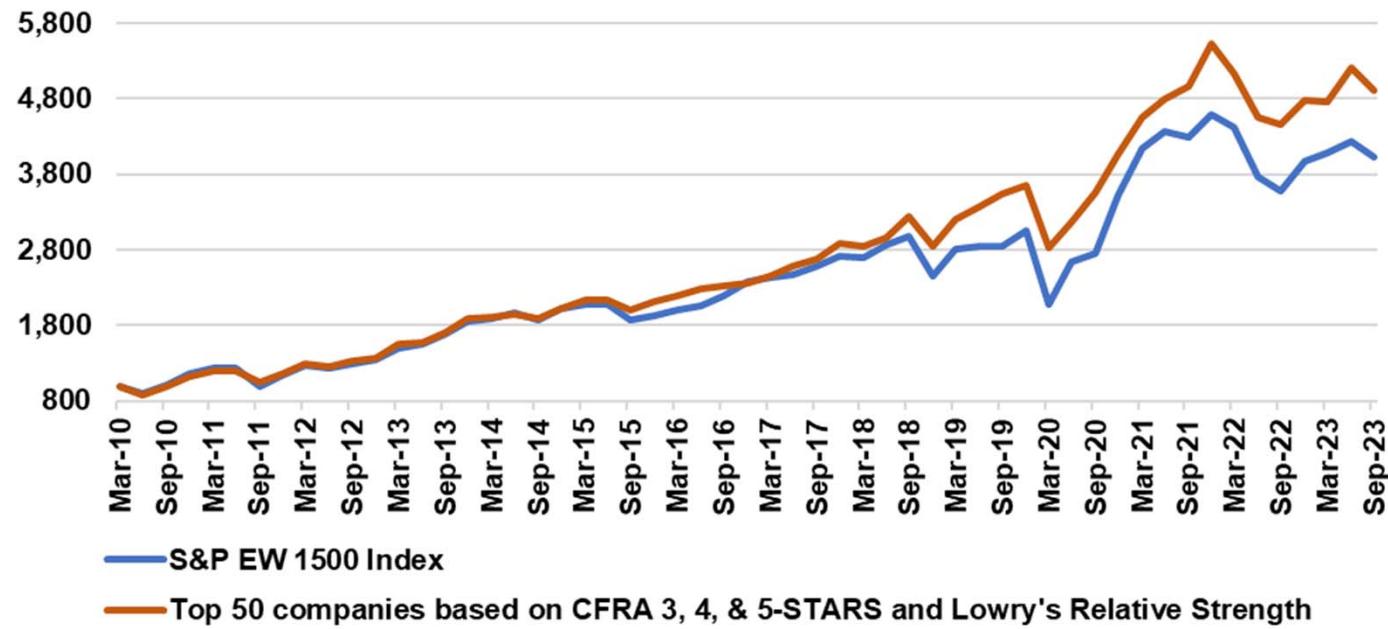
Goals of Portfolio Managers / Financial Advisors

- Above-Market Returns
- Reduced Volatility
- Improved Sharpe Ratios
- Increased Frequencies of Outperformance

Benefits of Merging Fundamentals with Technicals

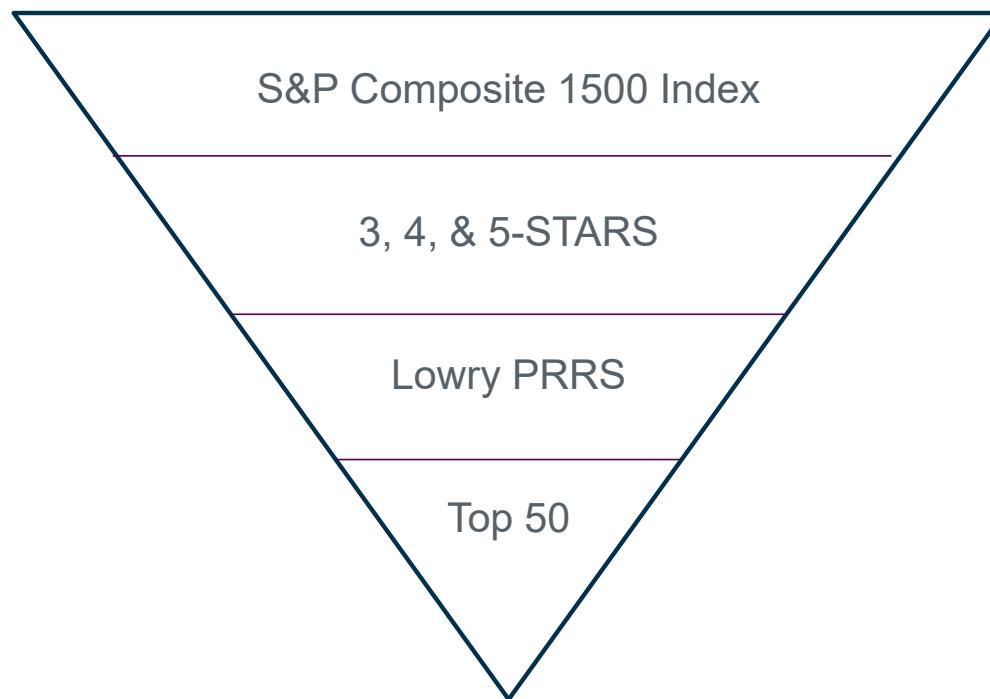
- ★ S&P Equal Weight 1500 average annual return of 11.70%
- ★ 3-, 4- or 5-STARS stocks return averaged 12.60% per year
- ★ Portfolio of top 50 companies based on STARS combined with Lowry's Power Ratings Relative Strength (PRRS) returned average of 13.20% per year, while also lowering volatility at the same time.

Fusion Returns



Source: CFRA, S&P Global. Past performance is no guarantee of future results. Data 3/31/2010-12/31/2023.

Selection Process



Annualized Returns: Know When to Hold 'Em

Progressive Return Comparisons

Period	Average Annualized Return				Since Inception
	1yr	3yr	5yr	10yr	
March 31, 2010 - December 29, 2023					
Benchmark: S&P 1500 Equal Weighted-Total Return	12.2%	12.5%	11.6%	11.9%	11.7%
Step 1: Hold all 3&4&5 Rated STARS within benchmark	13.1%	13.3%	12.3%	12.7%	12.6%
Step 2: Hold Top 50 based on Relative Strength	14.0%	14.6%	13.9%	14.0%	13.2%
Outperformance: (Top 50 vs S&P 1500)	1.8%	2.1%	2.3%	2.1%	1.6%

- The combination of CFRA's fundamental and technical data help clients invest in stocks with better returns.
- Starting universe / Benchmark: S&P 1500 Equal Weighted Total Return index (includes dividend income)
- Step 1: Holding portfolio of companies within S&P 1500 with 3/4/5 STARS ratings outperforms the full S&P 1500 benchmark
- Step 2: Holding portfolio of the top 50 companies, from within the 3/4/5 STARS ratings subset, based on Power Rating Relative Strength further outperforms the benchmark

Source: CFRA, S&P Global. Past performance is no guarantee of future results. Data 3/31/2010-12/31/2023.

Annualized Returns: Know When to Fold 'Em

Combining STARS with Relative Strength Also Reduced Risk Exposure

- Holding all companies with STARS rated 3/4/5, except for the bottom 50 based on Power Rating Relative Strength, improves the portfolio return

Period	Average Annualized Return				Since Inception
	1yr	3yr	5yr	10yr	
March 31, 2010 - December 29, 2023					
Benchmark: S&P 1500 Equal Weighted-Total Return	12.2%	12.5%	11.6%	11.9%	11.7%
Step 1: Hold all 3&4&5 Rated STARS within benchmark	13.1%	13.3%	12.3%	12.7%	12.6%
Step 2: Avoid Bottom 50 based on Relative Strength	13.6%	13.8%	12.9%	13.2%	12.9%
Outperformance: (Avoid Bottom 50 vs S&P 1500)	1.4%	1.3%	1.3%	1.3%	1.3%

- Holding portfolio of the bottom 50 companies based on Power Rating Relative Strength significantly underperforms the benchmark

Period	Average Annualized Return				Since Inception
	1yr	3yr	5yr	10yr	
March 31, 2010 - December 29, 2023					
Benchmark: S&P 1500 Equal Weighted-Total Return	12.2%	12.5%	11.6%	11.9%	11.7%
Step 1: Hold all 3&4&5 Rated STARS within benchmark	13.1%	13.3%	12.3%	12.7%	12.6%
Step 2: Hold Bottom 50 based on Relative Strength	7.5%	6.7%	4.8%	5.5%	6.2%
Underperformance: (Bottom 50 vs S&P 1500)	-4.7%	-5.8%	-6.8%	-6.4%	-5.4%

Source: CFRA, S&P Global. Past performance is no guarantee of future results. Data 3/31/2010-12/31/2023.

Annualized Sharpe Ratios

Combining STARS with Relative Strength Resulted in Improved Sharpe Ratios

- Sharpe ratio is a standardized measure that compares the returns achieved by an investment relative to the risk undertaken to make that investment (return divided by risk)
- A portfolio that holds the top 50 companies based on our technical score from within the 3/4/5 STARS rated fundamental universe significantly outperforms the benchmark in terms of risk-adjusted return.

Period	Average Annualized Sharpe Ratio				Since Inception
March 31, 2010 - December 29, 2023	1yr	3yr	5yr	10yr	
Benchmark: S&P 1500 Equal Weighted-Total Return	0.64	0.64	0.60	0.58	0.56
Step 1: Hold all 3&4&5 Rated STARS within benchmark	0.80	0.76	0.70	0.66	0.65
Step 2: Hold Top 50 based on Relative Strength	1.06	1.02	0.98	0.94	0.85
Outperformance: (Top 50 vs S&P 1500)	0.42	0.38	0.39	0.36	0.29

- A portfolio that holds the bottom 50 companies based on our technical score from within the 3/4/5 STARS rated fundamental universe significantly underperforms the benchmark in terms of risk-adjusted return.

Period	Average Annualized Sharpe Ratio				Since Inception
March 31, 2010 - December 29, 2023	1yr	3yr	5yr	10yr	
Benchmark: S&P 1500 Equal Weighted-Total Return	0.64	0.64	0.60	0.58	0.56
Step 1: Hold all 3&4&5 Rated STARS within benchmark	0.80	0.76	0.70	0.66	0.65
Step 2: Hold Bottom 50 based on Relative Strength	0.28	0.22	0.16	0.17	0.20
Underperformance: (Bottom 50 vs S&P 1500)	-0.36	-0.42	-0.44	-0.41	-0.35

Source: CFRA, S&P Global. Past performance is no guarantee of future results. Data 3/31/2010-12/31/2023.

Annualized Volatility

Finally, Combining STARS with Relative Strength Increased Frequency of Outperformance

- A portfolio of the top 50 companies based on our technical scores, from within the 3/4/5 STARS rated fundamental universe, outperforms the S&P 1500.

March 31, 2010 - December 29, 2023	Up Years	Beat S&P 1500
Benchmark: S&P 1500 Equal Weighted-Total Return	69%	n/a
Step 1: Hold all 3&4&5 Rated STARS within benchmark	77%	54%
Step 2: Hold Top 50 based on Relative Strength	85%	62%
Outperformance: (Top 50 vs S&P 1500)	15%	12%

- A portfolio that holds the bottom 50 companies based on our technical score, from within the 3/4/5 STARS rated fundamental universe, underperforms the S&P 1500.

March 31, 2010 - December 29, 2023	Up Years	Beat S&P 1500
Benchmark: S&P 1500 Equal Weighted-Total Return	69%	n/a
Step 1: Hold all 3&4&5 Rated STARS within benchmark	77%	54%
Step 2: Hold Bottom 50 based on Relative Strength	69%	31%
Underperformance: (Bottom 50 vs S&P 1500)	0%	-19%

Source: CFRA, S&P Global. Past performance is no guarantee of future results. Data 3/31/2010-12/31/2023.

Summary

- Prices Lead Fundamentals
- Fundamentals Tell You What
- Technicals Tell You When and How far
- Combining the Two Resulted in
 - Higher Returns
 - Lower Volatility
 - Improved Sharpe Ratios
 - Increased Frequencies of Outperformance



Is it Time to Buy or Bail? Equity Market Outlook 2024-2025



Sam Stovall, CFP, Chief Investment Strategist

CFRA

cfraresearch.com

Core Belief & Concerns

Positive and Negative Issues Facing Investors

Core Belief

- S&P 500 12-month target: 6145
- Slowing growth but no recession
- 75bps of cuts in 2024, 100bps in 2025
- Unemployment to peak at 4.4% in 2025
- Core PCE to approach 2.0% in 2026
- S&P 500 '25 & '26 EPS: 14.7% & 12.9%
- Bull market still intact

Concerns

- Near-term seasonality
- Normalization of yield curve
- Previously reliable indicators crying wolf
- Underestimating slowdown in economy
- Market/Sector valuations
- 3rd year bull market history
- Impact of stagnant China growth
- Geo-Political Tensions

Economic Projections

No Recession Expected for 2024 & 2025

Indicator	Year	Forecast	Year	Forecast
S&P 500 EPS	2024E	240.89	2025E	276.76
S&P 500 Rev. Growth	2024E	4.2%	2025E	6.0%
Real GDP Growth	2024E	2.8%	2025E	2.2%
Unemployment Rate	2024E	4.3%	2025E	4.5%
Retail Sales Growth	2024E	2.4%	2025E	3.6%
Core PCE Gr. (Q4)	2024E	2.7%	2025E	2.3%
Fed Funds Rate (Q4)	2024E	4.63%	2025E	3.63%
10-Year T-Note (Q4)	2024E	3.70%	2025E	3.60%
FRB Major \$ Index Chg	2024E	0.0%	2025E	-0.9%
WTI \$ Average	2024E	76.78	2025E	82.44

Source: S&P Global, Action Economics. Data as of 9/8/24.

Market Returns Before and After First Rate Cut

Stocks Typically Rose After the End of Rate Hikes with Large-Caps Outpacing Small-Caps

Fed Funds Rate			Price % Change		6M After First Cut		12M After First Cut		
Last Hike	First Cut	Months	S&P 500	Russell 2000	S&P 500	Russell 2000	S&P 500	Russell 2000	
02/24/89	06/01/89	3.2	12.1	11.8	8.9	(2.3)	12.8	(1.6)	
02/01/95	07/06/95	5.1	17.8	15.7	11.3	9.0	18.7	18.7	
03/25/97	09/02/98	17.3	32.9	4.3	24.9	13.4	25.7	21.2	
05/16/00	01/03/01	7.6	(8.1)	(4.3)	(8.4)	2.4	(13.5)	2.3	
06/29/06	09/18/07	14.7	19.4	12.9	(12.4)	(15.5)	(23.9)	(16.1)	
12/19/18	07/31/19	7.4	18.9	16.7	8.2	2.5	8.9	(5.0)	
07/26/23	9/4/2024*	13.4	20.9	8.3	?	?	?	?	
Average			9.8	16.3	9.3	5.4	1.6	4.8	3.2

Source: CFRA, S&P Global. Past performance is no guarantee of future results. *Period to date since last rate hike.

Earnings Expectations

Wall Street Consensus Estimates Still Point to an EPS Growth in 2024, 2025, and 2026

Sectors	Y/Y EPS % Changes		
	2024E	2025E	2026E
Communication Services	22.8	11.9	12.7
Consumer Discretionary	10.8	13.5	16.6
Consumer Staples	3.8	7.2	8.1
Energy	(12.3)	15.2	6.4
Financials	11.4	8.1	11.1
Health Care	6.2	22.2	9.7
Industrials	1.8	15.5	14.9
Information Technology	18.8	21.1	16.7
Materials	(4.0)	17.8	14.4
Real Estate	(1.2)	8.3	10.7
Utilities	7.6	8.3	9.9
S&P 500	9.3	14.9	12.8
S&P MidCap 400	2.9	17.9	16.6
S&P SmallCap 600	(3.6)	22.1	12.5

Source: S&P Global. Data as of 9/8/24.

Valuations

Absolute and Relative P/E Ratios Tell Different Stories

S&P 500 Sector	Absolute NTM P/E Ratios			Relative NTM P/E Ratios		
	Current	Average	Prem/Disc	Current	Average	Prem/(Disc)
Comm. Svcs.	17.5	15.4	14	0.84	0.94	(11)
Cons. Disc.	24.2	21.0	15	1.15	1.26	(8)
Cons. Staples	21.9	18.1	21	1.04	1.11	(6)
Energy	12.1	17.5	(31)	0.58	1.06	(46)
Financials	16.0	13.3	20	0.76	0.83	(8)
Health Care	19.4	15.5	25	0.92	0.94	(2)
Industrials	21.5	17.0	26	1.02	1.02	(0)
Info. Tech.	27.4	18.8	46	1.30	1.12	16
Materials	20.1	15.9	26	0.95	0.98	(3)
Real Estate	40.6	42.7	(5)	1.93	2.22	(13)
Utilities	18.2	16.2	12	0.87	1.00	(13)
S&P 500	21.0	16.5	27	NM	NM	NM
S&P EW 500	17.2	16.6	17	0.82	1.01	(19)
S&P 500 Growth	32.5	19.0	71	1.55	1.14	36
S&P 500 Value	16.8	14.6	15	0.80	0.89	(10)
S&P MidCap 400	16.0	17.3	(7)	0.76	1.07	(28)
S&P SmallCap 600	16.3	18.2	(11)	0.77	1.13	(31)
S&P Dev. Int'l.	13.6	13.6	0	0.65	0.84	(22)
S&P Emerg. Mkts.	4.4	10.2	(57)	0.21	0.61	(66)

Source: CFRA, S&P Global. Past performance is no guarantee of future results. Data as of 9/8/24.

Seasonal Slippage

Price Returns September & October of Election Years Since 1992

Regions/Sizes/Sectors	% Chg.	Best S&P 500 Sub-Industries	% Chg.
Consumer Staples	0.3	Agricultural Products & Services	7.5
Utilities	0.2	Air Freight & Logistics	4.0
Financials	(0.8)	Property & Casualty Insurance	3.6
Industrials	(2.0)	Leisure Products	3.2
Health Care	(2.1)	Drug Retail	2.5
S&P 500 Value	(2.7)	Passenger Airlines	2.4
Consumer Discretionary	(2.9)	Homebuilding	2.1
S&P MidCap 400	(3.3)	Household Products	1.7
S&P 500	(3.4)	Worst S&P 500 Sub-Industries	% Chg.
S&P SmallCap 600	(3.4)	IT Consulting & Other Services	(5.7)
Materials	(3.7)	Building Products	(5.8)
Communication Services	(3.8)	Automotive Parts & Equipment	(6.3)
Energy	(3.8)	Health Care Distributors	(6.7)
S&P 500 Growth	(5.2)	Communications Equipment	(7.6)
Information Technology	(5.5)	Gold	(7.9)
Real Estate*	(5.8)	Oil & Gas Equipment & Services	(9.2)
Nasdaq 100	(8.7)	Semiconductor Materials & Equip.	(10.0)
Positive Sectors	18%	Positive Sub-Industries	31%

Source: CFRA, S&P Global. Data: 1992-2020.

S&P 500 3-Month Returns Hint at Presidential Victor

July 31 – October 31 of Election Year: Advance = Reelection; Decline = Replacement

Election Year	Candidates		S&P 500 % Chg.	Correct Prediction?	
	Democrat	Republican		Reelection	Replacement
1944	FDR	Dewey	0.6	▲	
1948	Truman	Dewey	4.4	▲	
1952	Stevenson	Eisenhower	(3.5)		▲
1956	Stevenson	Eisenhower	(7.7)		▼
1960	Kennedy	Nixon	(3.8)		▲
1964	Johnson	Goldwater	2.0	▲	
1968	Humphrey	Nixon	5.8	▼	
1972	McGovern	Nixon	3.9	▲	
1976	Carter	Ford	(0.5)		▲
1980	Carter	Reagan	4.8	▼	
1984	Mondale	Reagan	10.2	▲	
1988	Dukakis	Bush	2.6	▲	
1992	Clinton	Bush	(1.3)		▲
1996	Clinton	Dole	10.2	▲	
2000	Gore	Bush	(0.1)		▲
2004	Kerry	Bush	2.6	▲	
2008	Obama	McCain	(23.6)		▲
2012	Obama	Romney	2.4	▲	
2016	Clinton	Trump	(2.2)		▲
2020	Biden	Trump	(0.04)		▲
20			Averages	82%	89%

Source: CFRA, S&P Global. Past performance is no guarantee of future results. Data: 12/31/43-5/31/24.

Post-Election Optimism

Price Returns November and December of Election Years Since 1992

Regions/Sizes/Sectors	% Chg.	Best S&P 500 Sub-Industries	% Chg.
S&P SmallCap 600	8.4	Oil & Gas Refining & Marketing	17.1
S&P MidCap 400	6.7	Agricultural Products & Services	15.8
Financials	6.4	Managed Health Care	13.6
Energy	5.7	Steel	12.9
Industrials	4.8	Construction & Engineering	11.9
Materials	4.8	Constr. Mach. & Heavy Trans. Equip	11.8
S&P 500 Value	4.2	Building Products	11.7
Communication Services	4.1	Footwear	10.7
Real Estate*	4.1		
Health Care	3.9	Worst S&P 500 Sub-Industries	% Chg.
Consumer Discretionary	3.4	Semiconductors	1.2
Consumer Staples	3.1	Electric Utilities	1.1
S&P 500	2.9	Other Specialty Retail	0.9
S&P 500 Growth	1.2	Health Care Equipment	0.9
Utilities	1.1	Gas Utilities	0.6
Information Technology	0.3	Personal Care Products	0.4
Nasdaq 100	(1.7)	Systems Software	(0.5)
Positive Sectors	100%	Computer & Electronics Retail	(6.0)
		Positive Sub-Industries	97%

Source: CFRA, S&P Global. Data: 1992-2020.

Post-Election Optimism

Price Returns by Quarter and Year During the Four-Year Presidential Cycle Since 1945

Pres. Cycle	Average Price % Changes					Frequency of Advance				
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year
Year 1	0.2	2.8	1.2	4.2	9.2	55%	60%	65%	80%	65%
Year 2	0.8	(2.6)	(0.8)	6.4	3.8	45%	50%	60%	85%	55%
Year 3	7.0	4.7	0.4	3.8	16.3	90%	75%	55%	75%	85%
Year 4	0.6	3.2	1.0	2.3	6.8	58%	68%	58%	79%	79%
All Years	2.0	2.0	0.5	4.2	9.1	62%	63%	59%	80%	71%

Source: CFRA, S&P Global. Past performance is no guarantee of future results.

Sector Weightings

12-Month Outlooks as of 9/8/24

S&P 500 Sector	Weights	Investment Outlook
Communication Services	O	AI to drive the ongoing shift to digital ad spending; big benefits likely from 2024 Presidential election and Olympics.
Consumer Discretionary	M	Earnings per share growth in 2024 should approximate that of the S&P 500; technicals now neutral from positive.
Consumer Staples	U	Below-average constituent count and cap-weighted average CFRA STARS ranking vs. all stocks in the S&P 500.
Energy	U	We think geopolitical tensions may be masking demand weakness since WTI oil prices remain below \$80/bbl.
Financials	O	The sector trades at a sharp discount to its long-term average relative P/E; we see sequential EPS growth in 2024.
Health Care	M	Earnings growth should be supported by existing products and new launches in key therapy areas during 2024.
Industrials	M	Rate cuts and progress on inventory reductions will likely be a tailwind for capital goods orders later this year.
Information Technology	O	Investors should stick with this group as EPS growth in 2024 is projected to outpace that of the S&P 500.
Materials	U	Softening economic growth and consumer spending should lead to lower demand for industrial and consumer goods.
Real Estate	M	The group should continue to benefit from the resulting conviction that the Fed would begin cutting rates this year
Utilities	U	Below-average constituent count and cap-weighted average CFRA STARS ranking vs. all stocks in the S&P 500.

Source: CFRA

©2024 CFRA Research

Happy Birthday, Bull

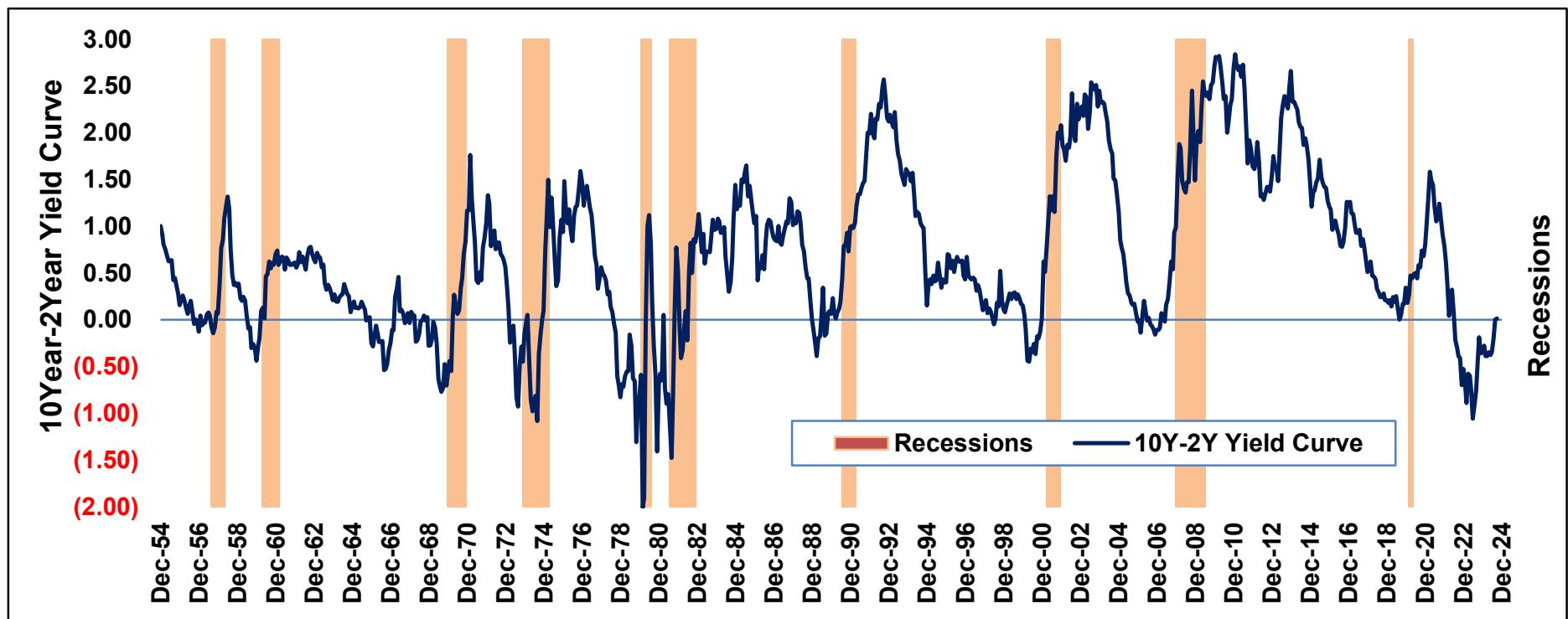
S&P 500 Bull Markets Posted Double-Digit Gains in Year 2 but Typically Struggled in Year 3

Bull Market		Full-Year S&P 500 Price Changes											Prior Bear Recovery
Start	End	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9	Yr. 10	Yr. 11	
5/17/47	6/15/48	19%	X										57%
6/13/49	8/2/56	42%	12%	13%	-2%	20%	39%	17%	X				1031%
10/22/57	12/12/61	31%	10%	-5%	28%	X							313%
6/26/62	2/9/66	33%	17%	2%	X								205%
10/7/66	11/29/68	33%	7%	X									169%
5/26/70	1/11/73	44%	11%	X									130%
10/3/74	11/28/80	38%	21%	-7%	6%	7%	18%	X					135%
8/12/82	8/25/87	58%	2%	13%	30%	37%	X						615%
12/4/87	7/16/90	21%	29%	X									129%
10/11/90	3/24/00	29%	6%	14%	1%	24%	21%	38%	2%	36%			1676%
10/9/02	10/9/07	34%	8%	7%	13%	16%	X						105%
3/9/09	2/19/20*	69%	16%	4%	13%	21%	11%	-4%	19%	18%	-2%	23%	305%
3/23/20	1/3/22	75%	X										223%
10/12/22	9/4/24	22%	26%										152%
Averages		39.1%	13.7%	5.2%	12.7%	20.8%	22.1%	16.9%	10.3%	26.7%	-1.6%	23.4%	375%

Source: CFRA, S&P Global. Past performance is no guarantee of future results. Data as of 9/4/24. *Within 20 days of a complete year.

10 Year-2 Year Yield Curve & Recessions

Recessions Typically Began After the Start of Yield-Curve Normalization



Source: CFRA, S&P Global, NBER. Past performance is no guarantee of future results.

Recessions and Presidential Terms

Every Republican President since McKinley had a recession start in their term in office

President	Term Years	Recession	
		Start	End
Roosevelt/Truman	1945-48	Feb 1945	Oct 1945
Truman	1949-52	Nov 1948	Oct 1949
Eisenhower	1953-56	Jul 1953	May 1954
Eisenhower	1957-60	Aug 1957	Apr 1958
Eisenhower	1957-60	Apr 1960	Feb 1961
Kennedy/Johnson	1961-64	--	--
Johnson	1965-68	--	--
Nixon	1969-72	Dec 1969	Nov 1970
Nixon/Ford	1973-76	Nov 1973	Mar 1975
Carter	1977-80	Jan 1980	Jul 1980
Reagan	1981-84	Jul 1981	Nov 1982
Reagan	1985-88	--	--
Bush (41)	1989-92	Jul 1990	Mar 1991
Clinton	1993-96	--	--
Clinton	1997-2000	--	--
Bush (43)	2001-04	Mar 2001	Nov 2001
Bush (43)	2005-08	Dec 2007	Jun 2009
Obama	2009-12	--	--
Obama	2013-16	--	--
Trump	2017-20	Feb-20	Apr-20
Biden	2021-24	?	?

Source: CFRA, S&P Global, NBER. Past performance is no guarantee of future results.

S&P 500 Returns During Congressional Makeups

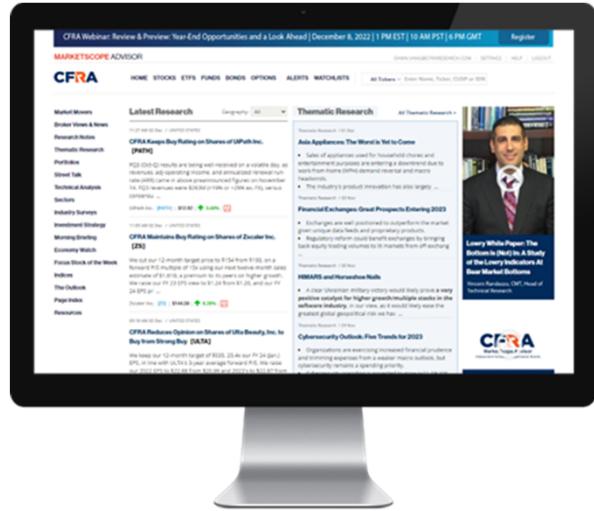
The Market Prefers a Unified Government or a Split Congress

Political Scenarios	Avg. Chg.	Years	FoA
Unified Government	10.2%	32	75%
>Democratic Pres. & Congress	9.3%	24	75%
>Republican Pres. & Congress	12.9%	8	75%
Unified Congress	7.4%	32	66%
>Dem. Pres./Rep. Congress	13.0%	10	60%
>Rep. Pres./Dem. Congress	4.9%	22	68%
Split Congress	10.4%	16	75%
>Democratic President	15.5%	6	83%
>Republican President	7.3%	10	70%
All Years	9.1%	80	71%

Source: CFRA, S&P Global. Past performance is no guarantee of future results. Data: 4/12/45-9/8/24.

Learn more!

Visit MarketScope Advisor



- Visit <https://advisor.marketscope.com> for more information on the research presented today.

CFRA Technical Research

- Acquired by CFRA in 2021, Lowry Research Corporation has provided market analysis based solely on the Law of Supply and Demand for more than 80 years.
- Our time-tested, data-driven methodology gives you factual and unbiased insight into the strength of markets, sectors, industries, and individual securities to help you generate alpha and reduce risk in any market environment.
- To take a no-obligation, complimentary trial to the Lowry Research website, please click on this link: [Lowry Research Trial](#).

For more information or a copy of today's presentation, please contact us at cservices@cfraresearch.com, or visit our website at www.cfraresearch.com.

For more information

+1 800-220-0502 | cservices@cfraresearch.com

Disclosures

The content of this Presentation and the opinions expressed herein are those of CFRA based upon publicly-available information that CFRA believes to be reliable but are subject to change without notice. This Presentation has not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. While CFRA exercised due care in compiling this Presentation, CFRA AND ALL RELATED ENTITIES SPECIFICALLY DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, to the fullest extent permitted by law, regarding the accuracy, completeness, or usefulness of the information contained herein and assumes no liability with respect to the consequences of relying on this information for investment or other purposes. No content herein (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of CFRA. This Presentation shall not be used for any unlawful or unauthorized purposes. CFRA and its third-party providers, as well as its and their directors, officers, shareholders, employees or agents, do not guarantee the accuracy, completeness, timeliness or availability of this Presentation.

CFRA's primary financial data provider is S&P Global Market Intelligence. FOR RECIPIENT'S INTERNAL USE ONLY.

Certain information in this presentation is provided by S&P Global, Inc. and/or its affiliates and subsidiaries (collectively "S&P Global"). Such information is subject to the following disclaimers and notices: "Copyright © 2024, S&P Global Market Intelligence (and its affiliates as applicable). All rights reserved. Nothing contained herein is investment advice and a reference to a particular investment or security, a credit rating or any observation concerning a security or investment provided by S&P Global is not a recommendation to buy, sell or hold such investment or security or make any other investment decisions. This may contain information obtained from third parties, including ratings from credit ratings agencies. Reproduction and distribution of S&P Global's information and third party content in any form is prohibited except with the prior written permission of S&P Global or the related third party, as applicable. Neither S&P Global nor its third party providers guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such information or content. S&P GLOBAL AND ITS THIRD PARTY CONTENT PROVIDERS GIVE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE AND ALL S&P INFORMATION IS PROVIDED ON AN AS-IS BASIS. S&P GLOBAL AND ITS THIRD PARTY CONTENT PROVIDERS SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, EXEMPLARY, COMPENSATORY, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, COSTS, EXPENSES, LEGAL FEES, OR LOSSES (INCLUDING LOST INCOME OR PROFITS AND OPPORTUNITY COSTS OR LOSSES CAUSED BY NEGLIGENCE) IN CONNECTION WITH ANY USE OF THEIR INFORMATION OR CONTENT, INCLUDING RATINGS. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes and should not be relied on as investment advice."

CFRA, CFRA Accounting Lens, CFRA Legal Edge, CFRA Score, and all other CFRA product names are the trademarks, registered trademarks, or service marks of CFRA or its affiliates in the United States and other jurisdictions. CFRA Score may be protected by U.S. Patent No. 7,974,894 and/or other patents. Copyright © 2024 CFRA. All rights reserved.

For more information

+1 800-220-0502 | cservices@cfraresearch.com

Disclosures continued

This Presentation is published and originally distributed by Accounting Research & Analytics, LLC d/b/a CFRA ("CFRA US"), with the following exceptions: In the UK/EU/EEA, it is published and originally distributed by CFRA UK Limited (company number 08456139 registered in England & Wales with its registered office address at New Derwent House, 69-73 Theobalds Road, London, WC1X 8TA, United Kingdom), which is regulated by the Financial Conduct Authority (No. 775151), and in Malaysia by CFRA MY Sdn Bhd having Company No. 683377-A and regulated by Securities Commission Malaysia, No. CMSL/A0181/2007 ("CFRA Malaysia"). CFRA Malaysia is a wholly-owned subsidiary of CFRA US. These parties and their subsidiaries maintain no responsibility for CFRA reports or materials redistributed by third parties such as brokers or financial advisors.

Past performance is not necessarily indicative of future results. This Presentation may contain forward-looking statements or forecasts; such forecasts are not a reliable indicator of future performance.

This Presentation is not intended to, and does not, constitute an offer or solicitation to buy and sell securities or engage in any investment activity. This Presentation is for informational purposes only. Recommendations in this Presentation are not made with respect to any particular investor or type of investor. Securities, financial instruments or strategies mentioned herein may not be suitable for all investors and this material is not intended for any specific investor and does not take into account any investor's particular investment objectives, financial situations or needs. Before acting on any recommendation in this material, you should consider whether it is suitable for your particular circumstances and, if necessary, seek professional advice.

Additional information on a subject company may be available upon request.

The Global Industry Classification Standard (GICS®) was developed by and/or is the exclusive property of MSCI, Inc. and S&P Global Market Intelligence. GICS is a service mark of MSCI and S&P Global Market Intelligence and has been licensed for use by CFRA.

Copyright © 2024 CFRA. All rights reserved. CFRA and STARS are registered trademarks of CFRA.