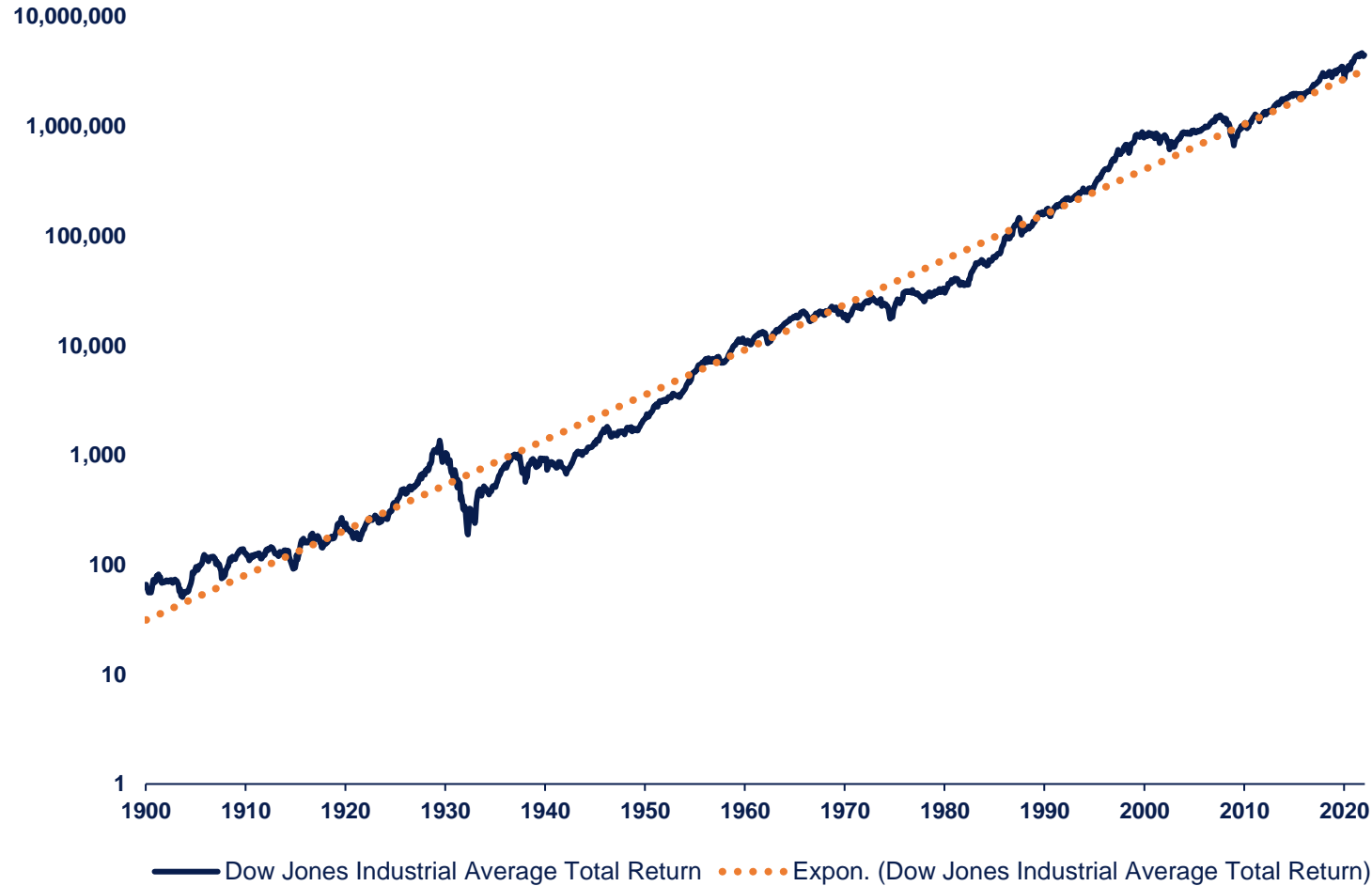# LPL Financial

FOCUS ON THE LONG TERM
LPL RESEARCH

MAY 2022

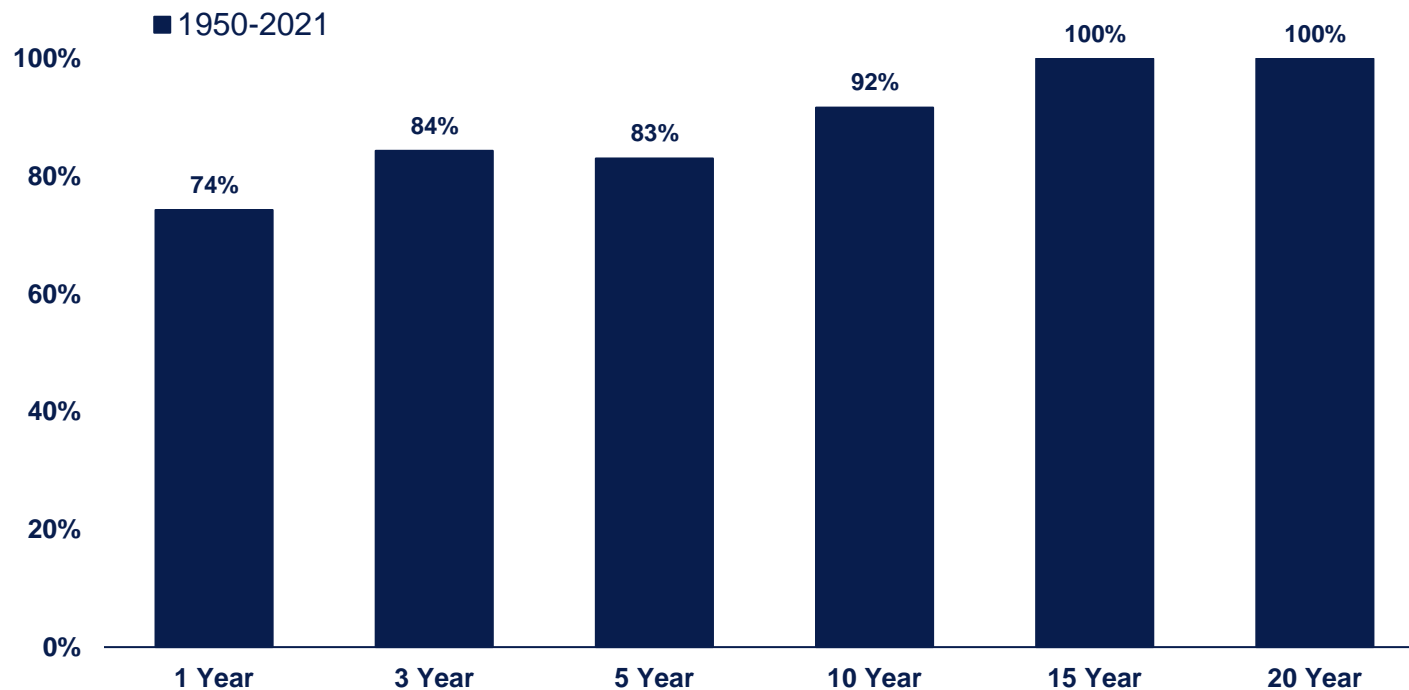# STOCKS HISTORICALLY RISE OVER THE LONG-TERM

Source: LPL Research, Ned Davis Research 4/29/22
All indexes are unmanaged and cannot be invested in directly. Past performance is no guarantee of future results.

STOCKS HISTORICALLY RISE OVER THE LONG TERM

Percentage of Time S&P 500 Has Risen Over Various Rolling Time Periods:

■ 1950-2021

| Time Period	Percentage
1 Year	74%
3 Year	84%
5 Year	83%
10 Year	92%
15 Year	100%
20 Year	100%

Source: LPL Research, FactSet 4/29/22

Analysis is based on monthly data. Dividends are excluded from the analysis.
Indexes are unmanaged and cannot be invested in directly. Past performance is no guarantee of future results.
S&P 500 Index performance before 1957 is based on the predecessor index, the S&P 90.

MARKET TIMING CAN BE COSTLY

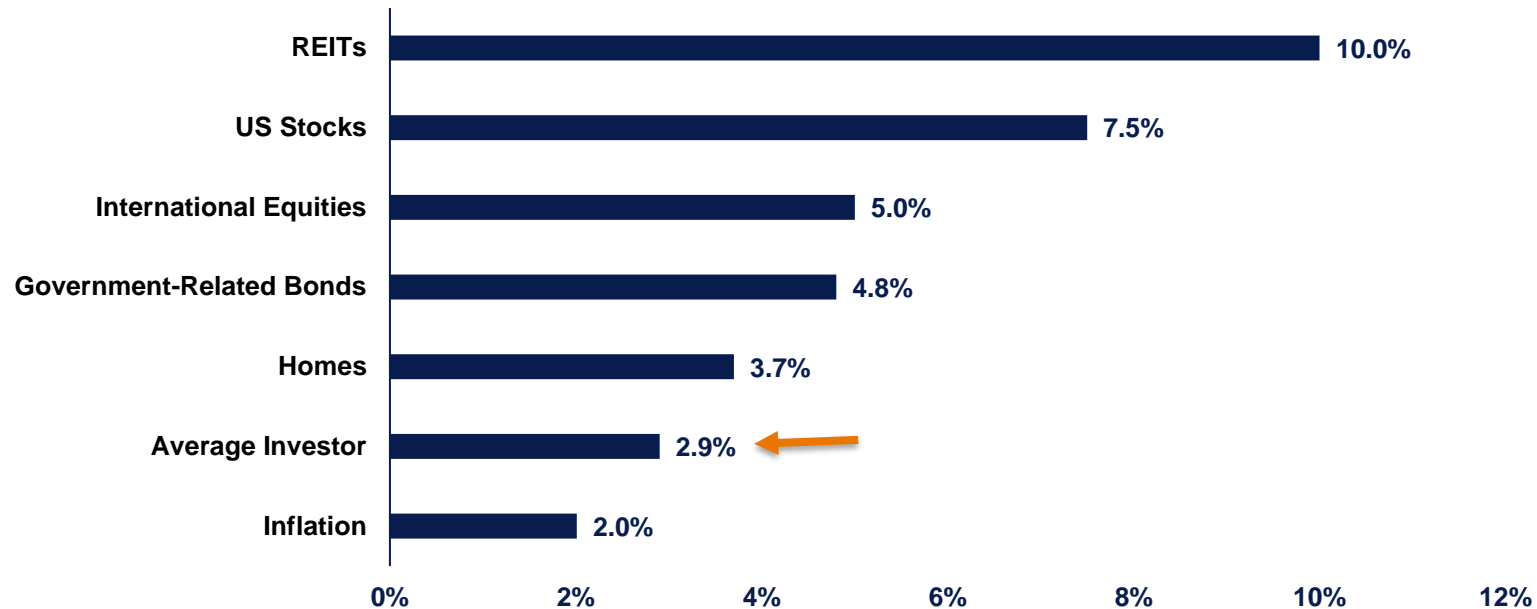## S&P 500 Index Annualized Performance (1990-2021)
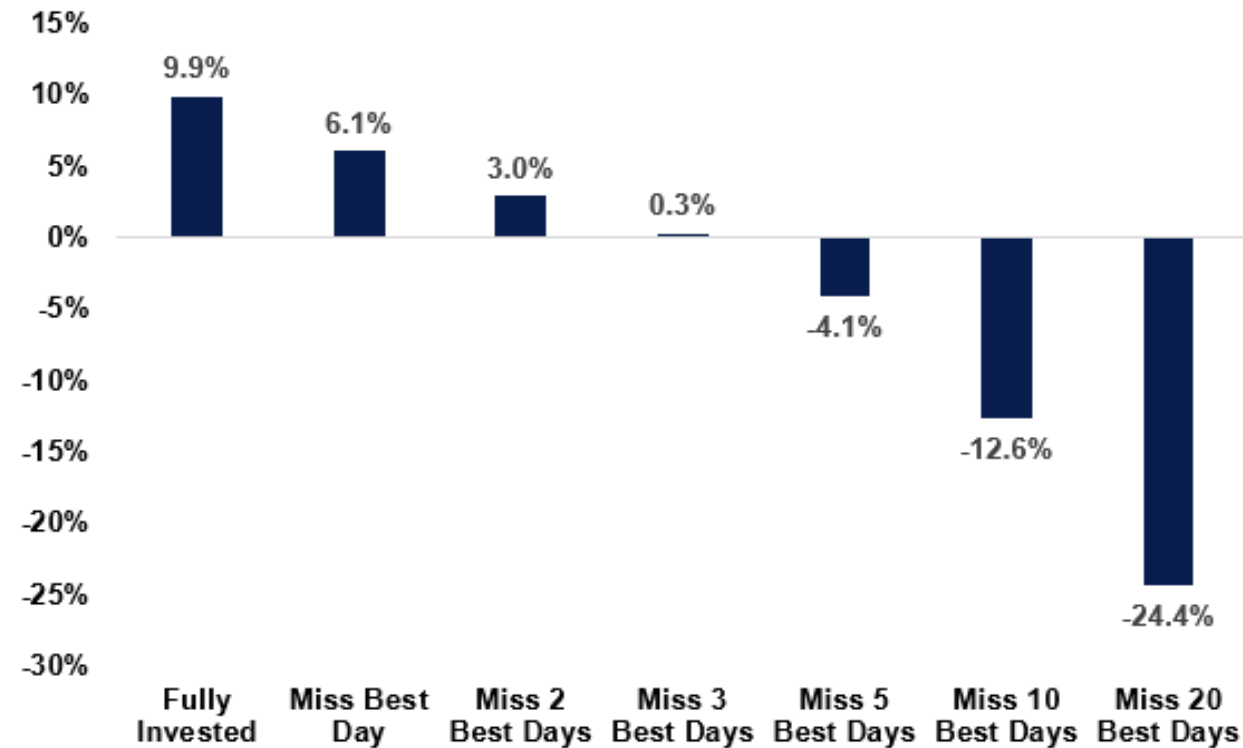
Source: LPL Research, FactSet 4/29/22
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S&P 500 Index performance before 1957 is based on its predecessor index, the S&P 90.

EFFECTS OF PANIC ATTACKS ON INVESTORS
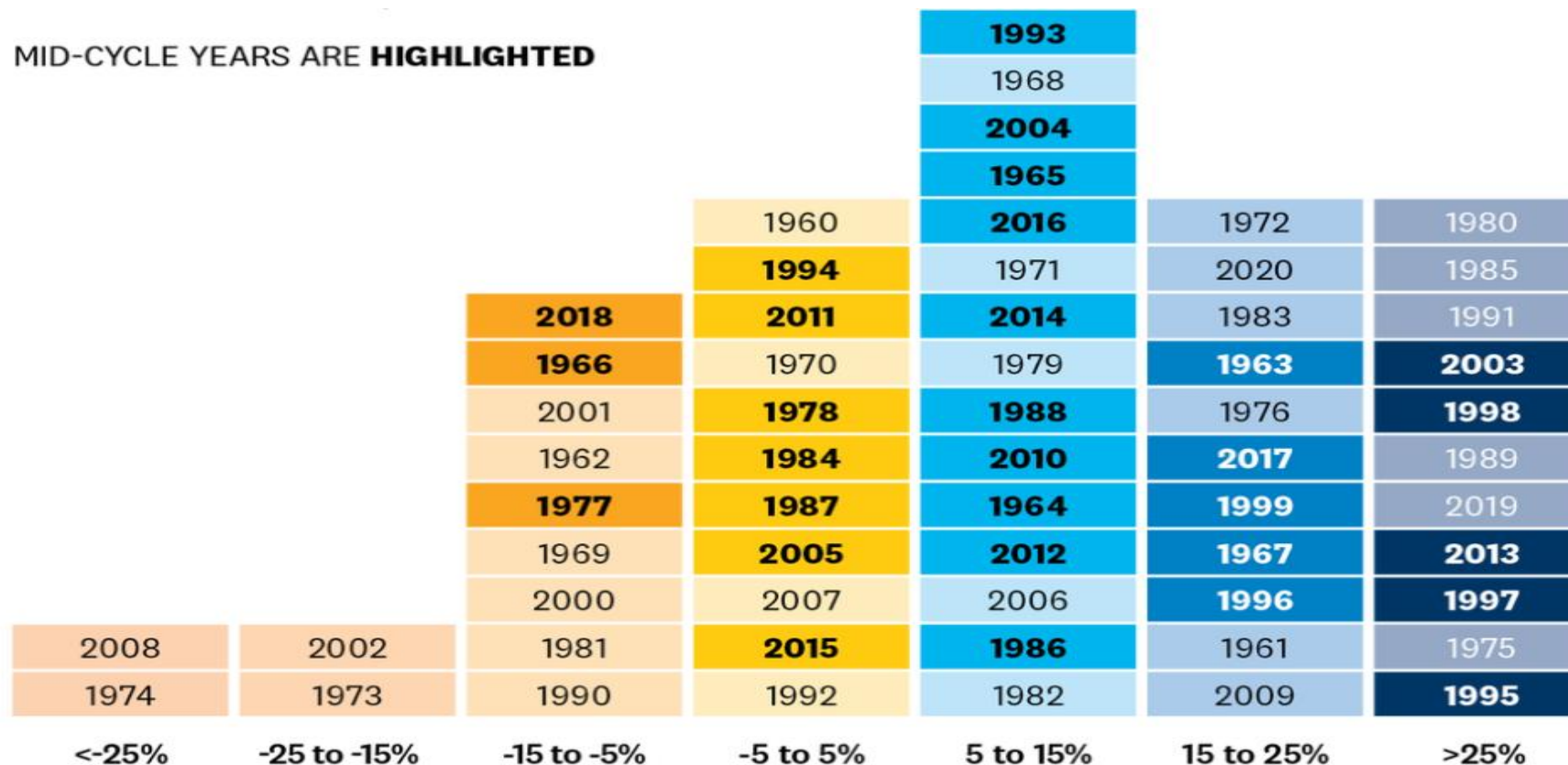
■ Annualized 20-Year Return (1999-2020)

Category	Return
REITs	10.0%
US Stocks	7.5%
International Equities	5.0%
Government-Related Bonds	4.8%
Homes	3.7%
Average Investor	2.9%
Inflation	2.0%

0% 2% 4% 6% 8% 10% 12%

Average asset allocation investor return is based on an analysis by DALBAR, Inc., which utilizes the net of aggregate mutual fund sales, redemptions, and exchanges each month as a measure of investor behavior. Indices shown are: REITs represented by the NAREIT Equity REIT Index, US stocks represented by the S&P 500 Index, International equities represented by the MSCI EAFE Index, Government-Related Bonds represented by the Bloomberg Barclays US Aggregate Bond Index, Homes are represented by US existing home sales median price, Inflation represented by the Consumer Price Index.

All indexes are unmanaged and cannot be invested in directly. Index performance is shown for illustrative purposes only and does not predict or depict the performance of any investment. Past performance is no guarantee of future results.

BIG ANNUAL DECLINES ARE RARE, ESPECIALLY MID-CYCLE
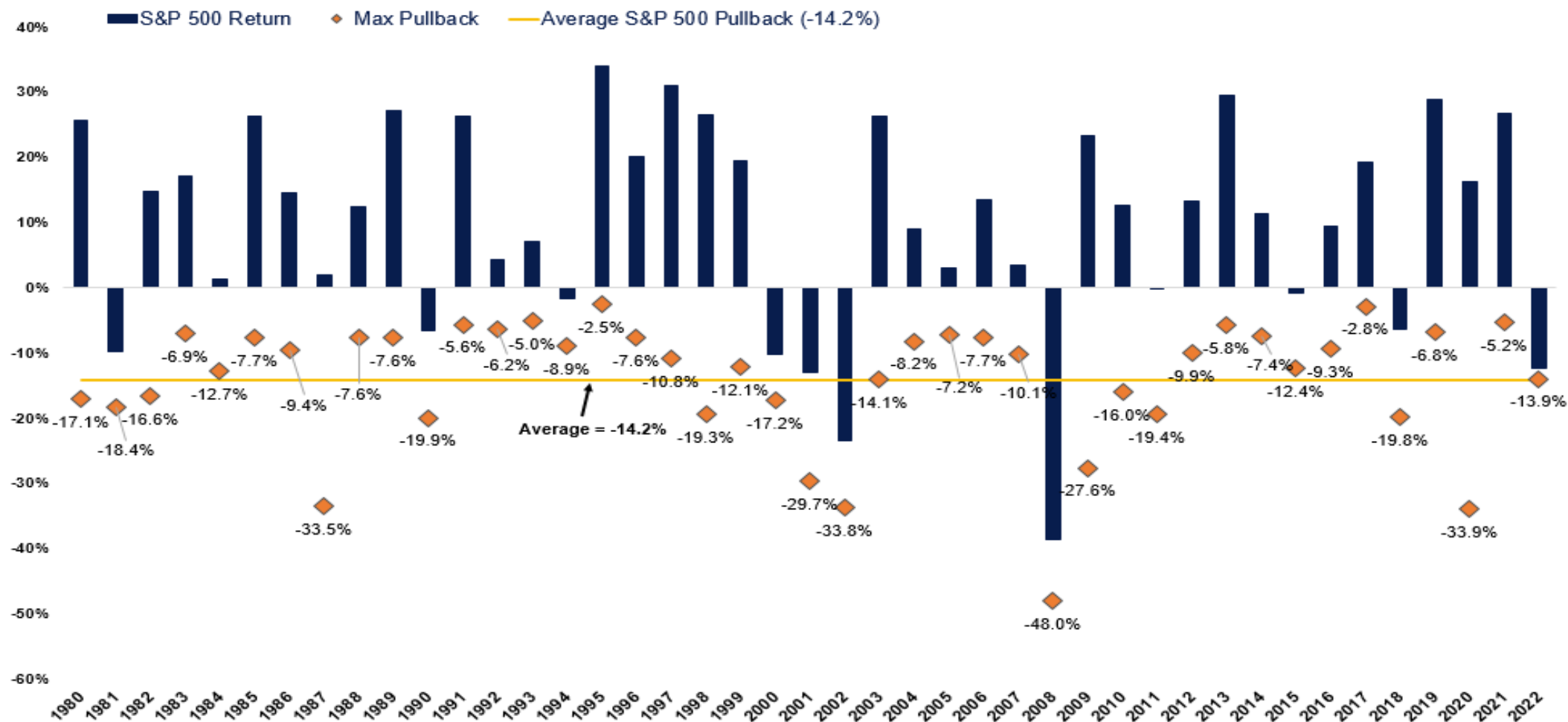
Annual S&P 500 Gains/Losses Excluding Dividends Since 1960

MID-CYCLE YEARS ARE **HIGHLIGHTED**

<-25%	-25 to -15%	-15 to -5%	-5 to 5%	5 to 15%	15 to 25%	>25%
				1993		
				1968		
				2004		
				1965		
			1960	**2016**	1972	1980
			1994	1971	2020	1985
2018		**2011**	**2014**	1983	1991	
1966		1970	1979	**1963**	**2003**	
2001		**1978**	**1988**	1976	**1998**	
1962		**1984**	**2010**	**2017**	1989	
1977		**1987**	1964	**1999**	**2019**	
1969		**2005**	**2012**	**1967**	**2013**	
2000		2007	2006	**1996**	**1997**	
2008	2002	1981	**2015**	**1986**	1961	1975
1974	1973	1990	1992	1982	2009	**1995**

VOLATILITY IS NORMAL

S&P 500 Index Max Pullback Per Calendar Year

Legend: S&P 500 Return | Max Pullback | Average S&P 500 Pullback (-14.2%)
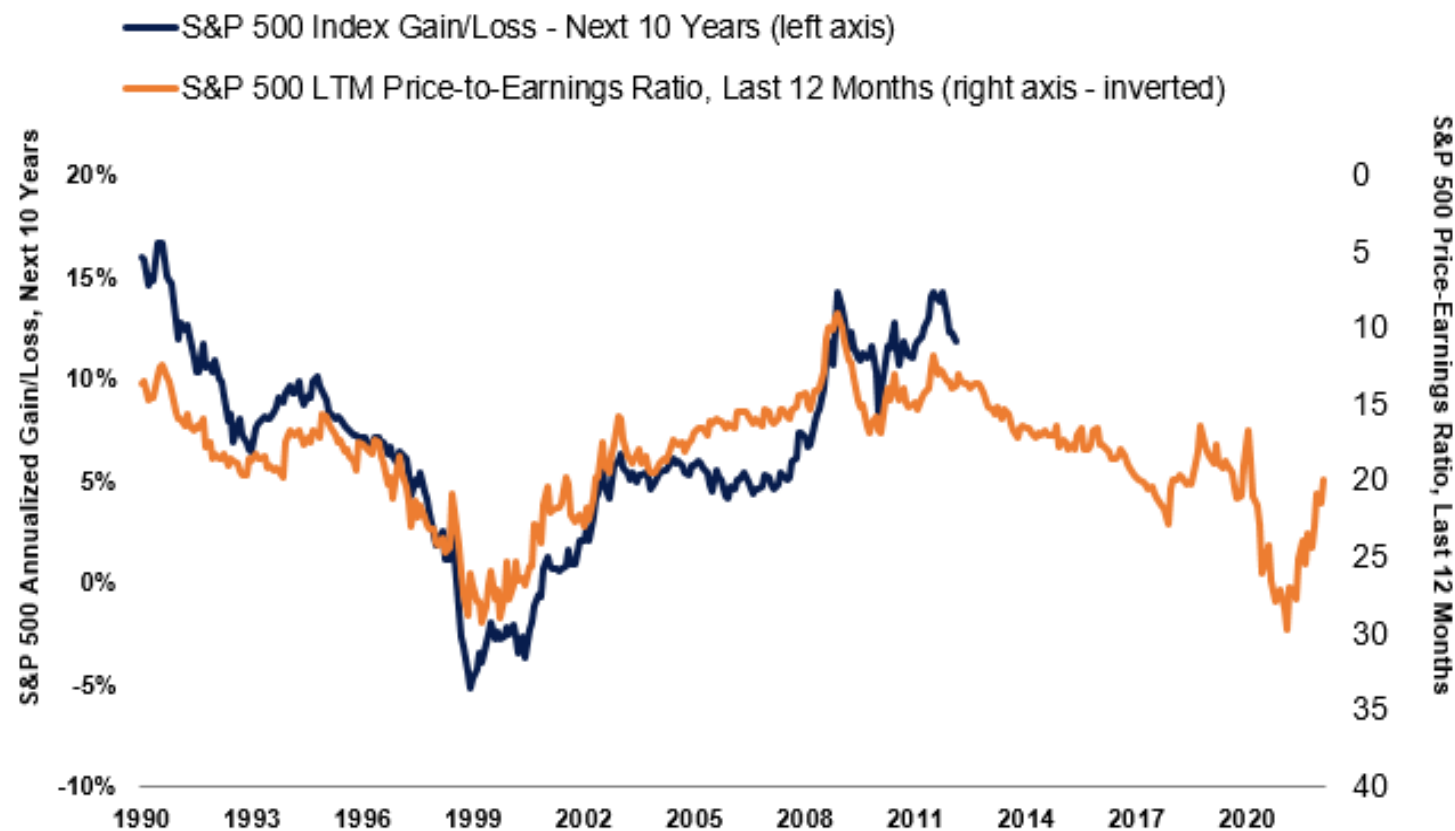
Source: LPL Research, FactSet 4/29/22 (1980-Current)
All indexes are unmanaged and cannot be invested in directly. Past performance is no guarantee of future results.

STOCK VALUATIONS IMPLY MODEST BUT NICELY POSITIVE FUTURE LONG-TERM RETURN POTENTIAL
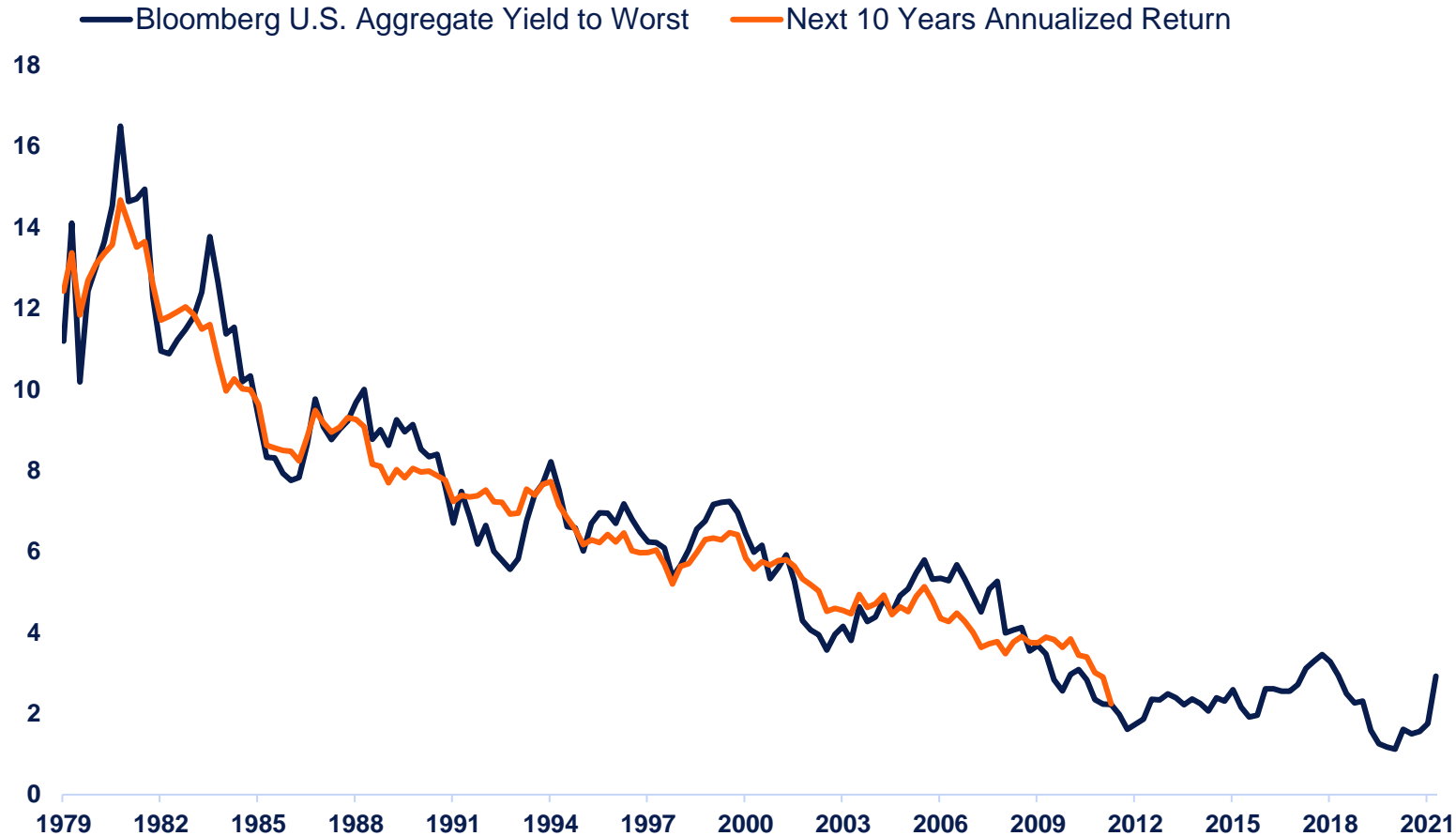
Tight Historical Relationship Between Price-to-Earnings Ratios and Subsequent 10-Year Returns

— S&P 500 Index Gain/Loss - Next 10 Years (left axis)
— S&P 500 LTM Price-to-Earnings Ratio, Last 12 Months (right axis - inverted)

Source: LPL Research, FactSet 4/28/22
All indexes are unmanaged and cannot be invested in directly. Past performance is no guarantee of future results.
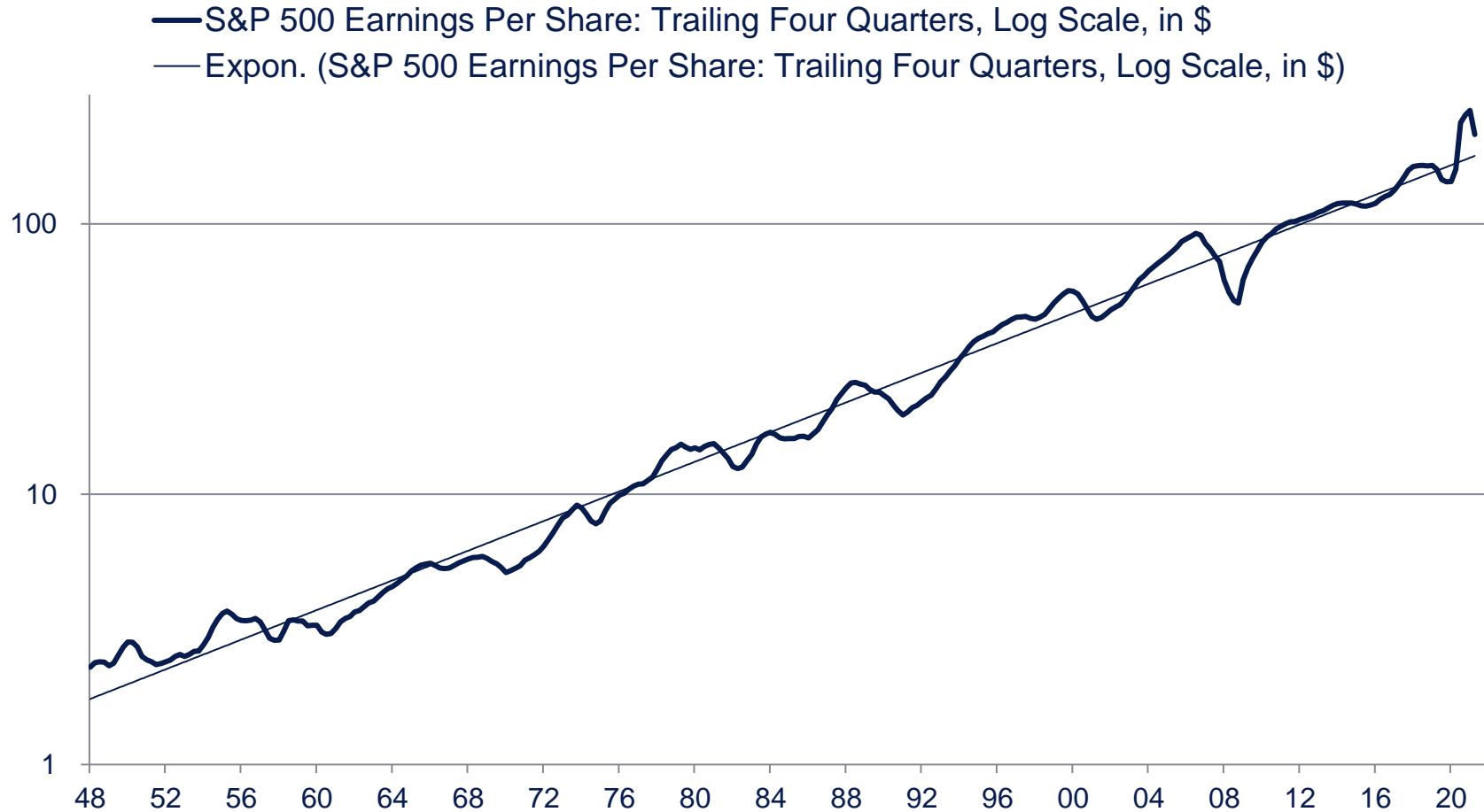
THE BEST PREDICTOR OF FUTURE LONG-TERM BOND PERFORMANCE IS YIELD, AND THE SIGNAL IS IMPROVING

Bloomberg U.S. Aggregate Yield to Worst — Next 10 Years Annualized Return

EARNINGS HAVE GROWN SOLIDLY OVER TIME

—— S&P 500 Earnings Per Share: Trailing Four Quarters, Log Scale, in $

—— Expon. (S&P 500 Earnings Per Share: Trailing Four Quarters, Log Scale, in $)

Source: LPL Research, FactSet, Refinitiv, 4/28/22
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RISING INTEREST RATES ARE HISTORICALLY BULLISH FOR STOCKS

S&P 500 Index returns when 10-year yield rises (Gains of more than 100 basis points)

Rising Rates Start Date	Rising Rates End Date	Duration (Months)	Change in 10-Year Treasury Yield	S&P 500 Gain/Loss
12/26/1962	8/29/1966	44.7	1.7%	18.3%
3/16/1967	12/29/1969	34.0	3.6%	1.3%
3/23/1971	9/16/1975	54.6	3.2%	-18.1%
12/30/1976	9/30/1981	57.8	9.0%	8.7%
5/4/1983	5/30/1984	13.1	3.9%	-7.9%
8/29/1986	10/16/1987	13.8	3.3%	11.8%
10/15/1993	11/7/1994	12.9	2.9%	-1.4%
1/19/1996	7/8/1996	5.7	1.5%	6.7%
10/5/1998	1/21/2000	15.8	2.6%	45.8%
6/13/2003	6/28/2006	37.0	2.1%	26.0%
12/30/2008	4/5/2010	15.4	1.9%	33.3%
7/24/2012	12/31/2013	17.5	1.6%	38.1%
7/8/2016	10/5/2018	27.3	1.9%	35.5%
3/9/2020	4/21/2022	25.8	2.4%	60.0%
	Average	26.8	3.0%	18.4%
	Median	21.6	2.5%	15.0%
	% Positive			78.6%

Source: LPL Research, FactSet 4/29/22
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STOCKS HAVE HISTORICALLY DONE WELL AFTER THE FIRST FED RATE HIKE

S&P 500 Index performance after the first Fed rate hike:

Date Of First Hike	S&P 500 Index Future Returns		
	Next Three Months	**Next Six Months**	**Next Twelve Months**
12/16/2015	-1.1%	0.1%	9.1%
6/30/2004	-2.3%	6.4%	5.2%
6/30/1999	-7.6%	6.6%	6.0%
3/25/1997	13.6%	20.6%	39.6%
2/4/1994	-5.9%	-2.5%	2.4%
5/11/1988	3.4%	8.6%	20.7%
4/1/1987	3.6%	10.1%	-11.7%
Average	0.5%	7.1%	10.2%
Median	-1.1%	6.6%	6.0%
% Positive	42.9%	85.7%	85.7%

Source: LPL Research, Bloomberg, Federal Reserve 12/31/21
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STOCKS HAVE HISTORICALLY DONE WELL DURING FED RATE HIKE CYCLES

S&P 500 Index performance during periods of multiple Fed rate hikes (WWII-2021):

First Hike	Last Hike	Starting Fed Funds Rate	Ending Fed Funds Rate	Total Hikes	S&P 500 Index Returns	
					% Return During Cycle	Annualized Return During Cycle
4/25/1946	1/16/1953	1.0%	2.0%	5	40.3%	5.2%
4/15/1955	8/23/1957	1.5%	3.5%	7	17.3%	7.0%
9/12/1958	9/11/1959	1.75%	4.0%	5	18.3%	18.4%
4/5/1972	7/5/1974	4.75%	12.0%	34	-23.2%	-11.1%
5/13/1977	12/19/1980	6.25%	21.5%	60	35.0%	8.7%
8/8/1983	6/25/1984	10.5%	13.0%	5	-3.3%	-3.7%
4/1/1987	2/24/1989	7.5%	11.5%	11	-1.8%	-0.9%
2/4/1994	2/1/1995	3.0%	6.0%	7	0.1%	0.1%
6/30/1999	5/16/2000	4.75%	6.5%	5	6.8%	7.8%
6/30/2004	6/29/2006	1.0%	5.25%	17	11.6%	5.6%
12/16/2015	12/19/2018	0.0%	2.25%	9	20.9%	6.5%
				Average	11.1%	4.0%
				Median	11.6%	5.6%
				% Higher	72.7%	

REBOUNDS FROM BIG EARLY-YEAR DROPS ARE COMMON

10 Worst S&P 500 Index Returns Year to Date Through the End of April:

| Year	S&P 500 Index Return	
	YTD Return End Of April	**Rest Of Year Return**
1932	-28.2%	18.7%
1939	-16.8%	14.0%
2022	-13.3%	?
1941	-12.0%	-6.7%
1942	-11.9%	27.5%
1970	-11.4%	12.9%
2020	-9.9%	29.0%
1973	-9.4%	-8.8%
1960	-9.2%	6.9%
1962	-8.8%	-3.3%
Average		10.0%
Median		12.9%
% Positive		66.7%
Average Rest of Year		4.8%
Median Rest of Year		6.0%

Source: LPL Research, FactSet 4/29/22 (1928-Current)
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PULLBACKS ARE NORMAL

Number of 5% pullbacks in the S&P 500 Index by year:
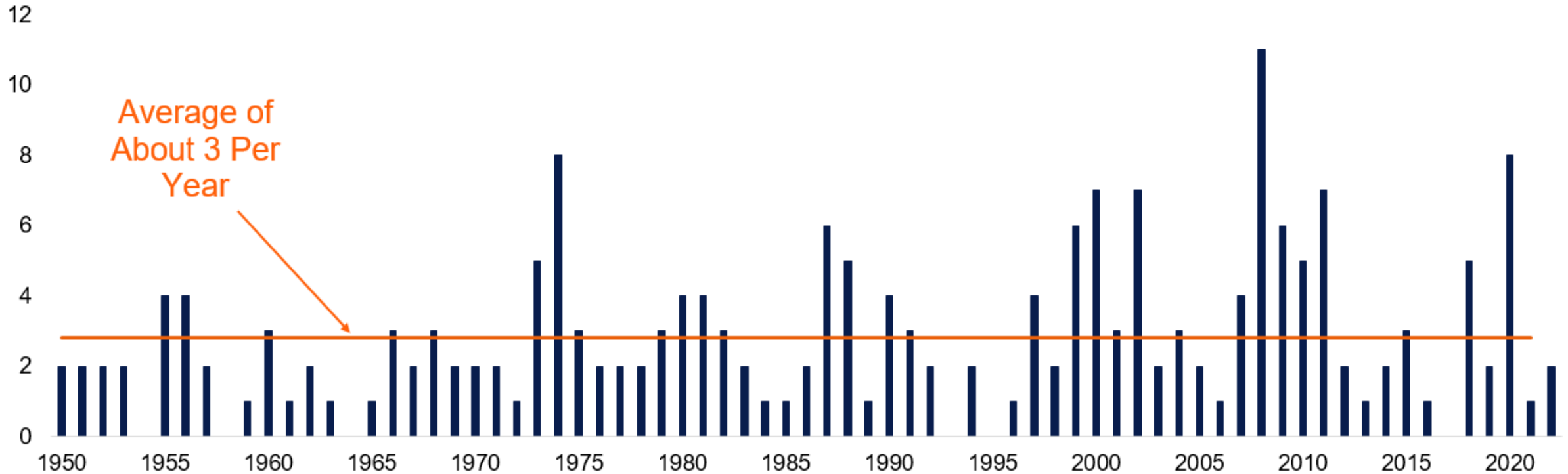
Average of About 3 Per Year

Source: LPL Research, Ned Davis Research, FactSet 4/29/22
All indexes are unmanaged and cannot be invested in directly. Past performance is no guarantee of future results.

CORRECTIONS ARE NORMAL

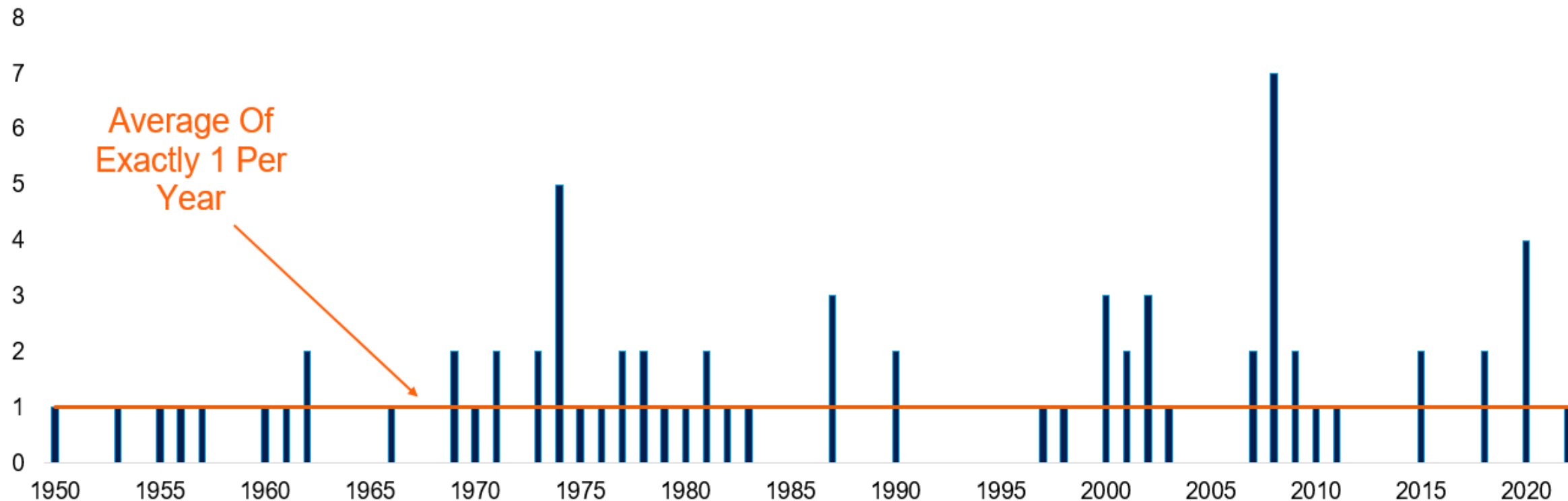*Number of 10% corrections in the S&P 500 Index by year:*

Source: LPL Research, Ned Davis Research, FactSet 4/29/22
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STOCKS HISTORICALLY RESILIENT TO GEOPOLITICAL EVENTS

S&P 500 and Geopolitical Events:

Market Shock Events	Event Date	% Change One-Day	% Change Total Drawdown	Calendar Days To Bottom	Calendar Days To Recovery
Russia Invades Ukraine	2/24/2022	0.4	?	?	?
U.S. Pulls out of Afghanistan	8/30/2021	0.4	-0.1	1	3
COVID-19	1/20/2020	-0.3	-33.9	63	148
Iranian General Killed in Airstrike	1/3/2020	-0.7	-0.7	1	5
Saudi Aramco Drone Strike	9/14/2019	-0.3	-4.0	19	41
North Korea Missile Crisis	7/28/2017	-0.1	-1.5	14	36
Bombing of Syria	4/7/2017	-0.1	-1.2	7	18
Boston Marathon Bombing	4/15/2013	-2.3	-3.0	4	15
London Subway Bombing	7/5/2005	0.9	0.0	1	4
Madrid Bombing	3/11/2004	-1.5	-2.9	14	20
U.S. Terrorist Attacks	9/11/2001	-4.9	-11.6	11	31
Iraq's Invasion of Kuwait	8/2/1990	-1.1	-16.9	71	189
Reagan Shooting	3/30/1981	-0.3	-0.3	1	2
Yom Kippur War	10/6/1973	0.3	-0.6	5	6
Munich Olympics	9/5/1972	-0.3	-4.3	42	57
Tet Offensive	1/30/1968	-0.5	-6.0	36	65
Six-Day War	6/5/1967	-1.5	-1.5	1	2
Gulf of Tonkin Incident	8/2/1964	-0.2	-2.2	25	41
Kennedy Assassination	11/22/1963	-2.8	-2.8	1	1
Cuban Missile Crisis	10/16/1962	-0.3	-6.6	8	18
Suez Crisis	10/29/1956	0.3	-1.5	3	4
Hungarian Uprising	10/23/1956	-0.2	-0.8	3	4
N. Korean Invades S. Korea	6/25/1950	-5.4	-12.9	23	82
Pearl Harbor Attack	12/7/1941	-3.8	-19.8	143	307
Average		-1.0	-5.9	22	48

Source: LPL Research, S&P Dow Jones Indices, CFRA 4/29/22
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BEAR MARKET RECOVERY TIMES VARY BUT MOST OF THEM DON'T TAKE TOO LONG

S&P 500 Index time to recover from bear markets.

Date of Peak	Date of Low	Bear Market Duration (Mos.)	Magnitude of Decline	Time to Recover (Mos.)	Recession (Y/N)
August 1956	October 1957	14	-22%	11	Yes
December 1961	June 1962	6	-28%	14	No
February 1966	October 1966	8	-22%	7	No
December 1968	May 1970	17	-36%	21	Yes
January 1973	October 1974	21	-48%	69	Yes
September 1976	March 1978	18	-19%	17	No
November 1980	August 1982	21	-27%	3	Yes
August 1987	December 1987	4	-34%	20	No
July 1990	October 1990	3	-20%	4	Yes
July 1998	August 1998	1	-19%	3	No
March 2000	October 2002	31	-49%	56	Yes
October 2007	March 2009	17	-56%	49	Yes
April 2011	October 2011	6	-19%	4	No
September 2018	December 2018	3	-20%	4	No
February 2020	March 2020	1	-34%	6	Yes
Average (All)		11.4	-30%	19.2	
Average (Recession)		15.6	-37%	27.4	
Average (No Recession)		6.6	-23%	9.9	

Source: LPL Research, FactSet 4/29/22

A bear market is when a stock index or security closes 20% or more below its 52-week high. We included 19% for this analysis.
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The PE ratio (price-to-earnings ratio) is a measure of the price paid for a share relative to the annual net income or profit earned by the firm per share. It is a financial ratio used for valuation: a higher PE ratio means that investors are paying more for each unit of net income, so the stock is more expensive compared to one with lower PE ratio.

Earnings per share (EPS) is the portion of a company's profit allocated to each outstanding share of common stock. EPS serves as an indicator of a company's profitability. Earnings per share is generally considered to be the single most important variable in determining a share's price. It is also a major component used to calculate the price-to-earnings valuation ratio.

The Standard & Poor's 500 Index is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

The Bloomberg Aggregate U.S. Bond Index represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment-grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.

Dow Jones Industrial Average (DJIA), or DOW, is the most widely used indicator of the overall condition of the stock market, a price-weighted average of 30 actively traded blue chip stocks, primarily industrials. The 30 stocks are chosen by the editors of the Wall Street Journal. The Dow is computed using a price-weighted indexing system, rather than the more common market cap-weighted indexing system.

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