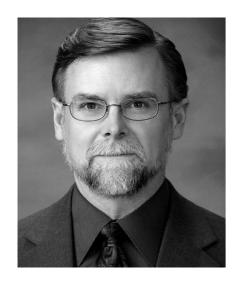
JULEXCAPITAL

Which strategies perform best during a bear?

Rob Brown, PhD, CFA

Julex Capital Advisory Board Member, Website www.robbrownonline.com



40 Grove Street, Suite 140, Wellesley, MA 02482
Phone 781-489-5398
Email info@julexcapital.com
Web www.julexcapital.com

How approach this question



- 100% data driven
- No forecasts, no predictions, no selling

• Just the numbers

The data



- Rock solid data exists back to 1919
- But . . . Only back to 1926 for most investment strategies
- SOURCE
 - Fama and French
 - Kenneth R. French data library
 - Dartmouth University
- Data spans 1926 to the present
- https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html



Bear markets for inflation-adjusted U.S. stocks since 1846

Median BEAR market

Mean BEAR market

Cumulative percentage return, unannualized	Duration in years	Start date	End date	Volatility, annualized standard deviation of monthly returns		Annualized return during BEAR market
-30	1.25	Aug 1853	Nov 1854	27.6	27	-25.1
-31	0.83	Dec 1856	Oct 1857	19.2	10	-36.4
-35	0.67	Jul 1864	Mar 1865	32.4	38	-47.1
-32	1.25	Mar 1876	Jun 1877	7.8	7	-26.2
-37	1.17	Sep 1906	Nov 1907	13.8	14	-32.7
-27	2.00	Oct 1912	Oct 1914	11.0	38	-14.8
-48	4.08	Nov 1916	Dec 1920	15.9	41	-14.8
-79	2.75	Aug 1929	May 1932	37.3	36	-43.7
-50	1.08	Feb 1937	Mar 1938	31.6	23	-47.1
-39	2.58	Sep 1939	Apr 1942	19.3	42	-17.3
-37	1.75	May 1946	Feb 1948	14.5	29	-23.4
-35	1.58	Nov 1968	Jun 1970	14.8	26	-24.1
-52	1.75	Dec 1972	Sep 1974	15.2	14	-34.2
-30	0.25	Aug 1987	Nov 1987	33.9	0	-76.3
-47	2.08	Aug 2000	Sep 2002	17.8	36	-26.4
-52	1.33	Oct 2007	Feb 2009	19.2	25	-42.1
?	?	Aug 2021	?	?	?	?
-37	1.46			18.5	26	-29.6
-41	1.65			20.7	25	-33.2

The most recent 9 bear markets



Cumulative percentage return, unannualized	Duration in years	Start date	End date	Volatility, annualized standard deviation of monthly returns	Percentage of monthly returns that were POSITIVE	Annualized return during BEAR market
-79	2.75	Aug 1929	May 1932	37.3	36	-43.7
-50	1.08	Feb 1937	Mar 1938	31.6	23	-47.1
-39	2.58	Sep 1939	Apr 1942	19.3	42	-17.3
-37	1.75	May 1946	Feb 1948	14.5	29	-23.4
-35	1.58	Nov 1968	Jun 1970	14.8	26	-24.1
-52	1.75	Dec 1972	Sep 1974	15.2	14	-34.2
-30	0.25	Aug 1987	Nov 1987	33.9	0	-76.3
-47	2.08	Aug 2000	Sep 2002	17.8	36	-26.4
-52	1.33	Oct 2007	Feb 2009	19.2	25	-42.1

No . . . 2020 was not a bear market



Bear markets

- Reset imbalance . . . correct imbalances
- Reduce use of "Buy the Dip"
- Modify investor's preference for risk
- Meaningfully affect fundamental valuation levels
- Go down and stay down for more than several weeks

2020 was <u>NOT</u> a bear market

- -8% Feb 2020
- -12% Mar 2020
- +13% Apr 2020

So we have 9 bear markets to consider



• 9 bear markets to consider in total

- We will also look at just the most recent 8
 - Excluding the first of these that most clearly reflected The Great Depression
 - The bear of 1929-1932



- Real estate
- Micro cap stocks
- Small cap
- Blend 50% Micro cap 50% Small cap
- S&P 500
- Very high dividend yields
- Mild value
- High dividend yields
- Pure value
- Tactical Asset Allocation



- Real estate . . . Fama French industry sector index
- Micro cap stocks
- Small cap
- Blend 50% Micro cap 50% Small cap
- S&P 500
- Very high dividend yields
- Mild value
- High dividend yields
- Pure value
- Tactical Asset Allocation



- Real estate
- Micro cap stocks . . . 20% of all stocks with the smallest size
- Small cap
- Blend 50% Micro cap 50% Small cap
- S&P 500
- Very high dividend yields
- Mild value
- High dividend yields
- Pure value
- Tactical Asset Allocation



- Real estate
- Micro cap stocks
- Small cap . . . 30% of all stocks with the smallest size
- Blend 50% Micro cap 50% Small cap
- S&P 500
- Very high dividend yields
- Mild value
- High dividend yields
- Pure value
- Tactical Asset Allocation



- Real estate
- Micro cap stocks
- Small cap
- Blend 50% Micro cap 50% Small cap
- S&P 500
- Very high dividend yields . . . 20% of all stocks with the highest dividend yield
- Mild value
- High dividend yields
- Pure value
- Tactical Asset Allocation



- Real estate
- Micro cap stocks
- Small cap
- Blend 50% Micro cap 50% Small cap
- S&P 500
- Very high dividend yields
- Mild value . . . 50% in Pure value and 50% in core stocks (neither growth nor value)
- High dividend yields
- Pure value
- Tactical Asset Allocation



- Real estate
- Micro cap stocks
- Small cap
- Blend 50% Micro cap 50% Small cap
- S&P 500
- Very high dividend yields
- Mild value
- High dividend yields . . . 30% of all stocks with the highest dividend yield
- Pure value
- Tactical Asset Allocation



- Real estate
- Micro cap stocks
- Small cap
- Blend 50% Micro cap 50% Small cap
- S&P 500
- Very high dividend yields
- Mild value
- High dividend yields
- Pure value . . . 30% of all stocks with the lowest price-to-book ratio
- Tactical Asset Allocation



- Real estate
- Micro cap stocks
- Small cap
- Blend 50% Micro cap 50% Small cap
- S&P 500
- Very high dividend yields
- Mild value
- High dividend yields
- Pure value
- Tactical Asset Allocation . . . 8 sectors drawn from 32 that are trending most strongly, equal-weight



The results

For the last 9 bear markets

For the most recent 8 . . . excluding The Great Depression



• Why?

• Anytime one examines returns during different inflationary environments . . . You end up with "crap" unless you first correct for inflation

 This is why economic growth (GDP growth) is always and only reported after inflation

Last 9 bear markets . . . median result



-63.9	Real estate
-58.6	Micro cap stocks
-56.9	Small cap
-55.2	Blend - 50% Micro cap 50% Small cap
-47.2	S&P 500
-40.6	Very high dividend yields
-39.1	Mild value
-39.0	High dividend yields
-38.7	Pure value
-7.6	Tactical Asset Allocation

Last 8 bear markets . . . median result . . . excludes The Great Depression



-59.9	Real estate
-54.3	Micro cap stocks
-53.1	Small cap
-52.0	Blend - 50% Micro cap 50% Small cap
-43.0	S&P 500
-37.9	Mild value
-37.8	Pure value
-36.0	Very high dividend yields
-35.9	High dividend yields
-7.7	Tactical Asset Allocation



Forward looking adjustments

Based on what we know about markets today versus in the past

Last 9 bear markets . . . median result



-63.9	Real estate
-58.6	Micro cap stocks
-56.9	Small cap
-55.2	Blend - 50% Micro cap 50% Small cap
-47.2	S&P 500
-40.6	Very high dividend yields
-39.1	Mild value
-39.0	High dividend yields
-38.7	Pure value
-7.6	Tactical Asset Allocation

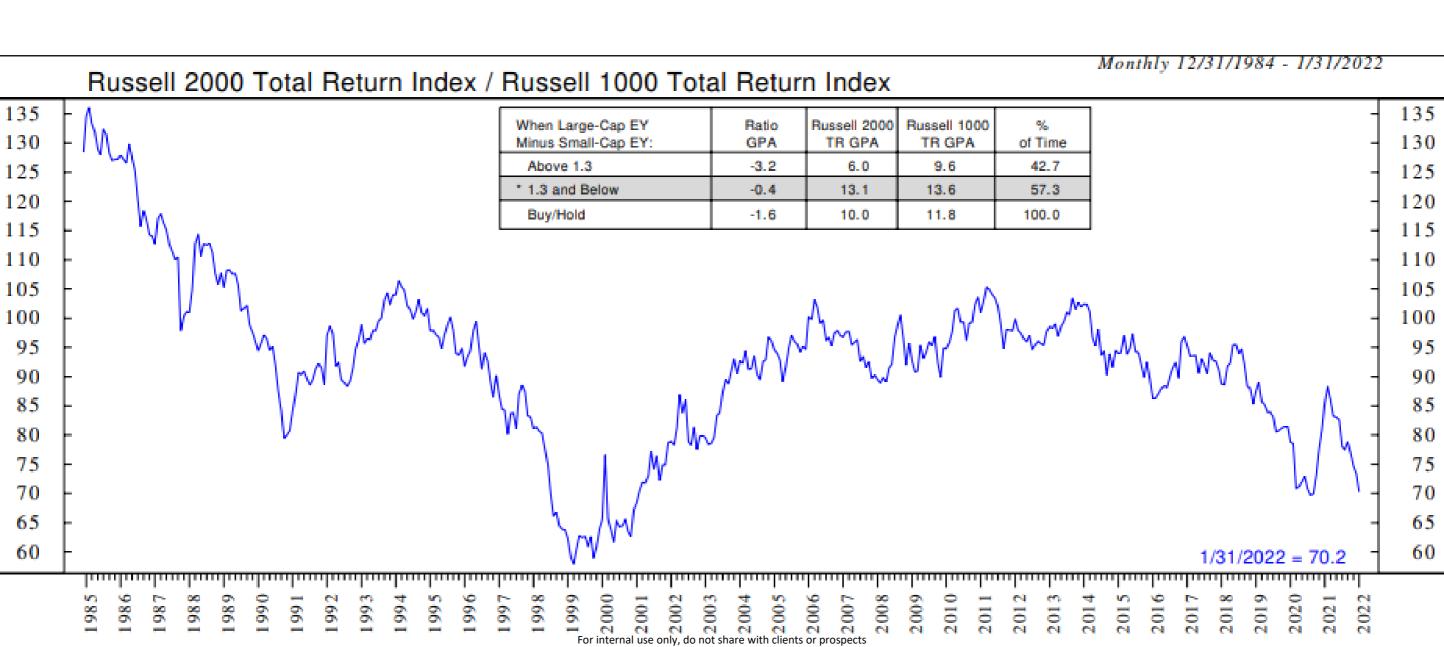
Next bear will be LESS severe because

• Over the last 16 bear markets, the median loss for the S&P was -37.2%

Next bear market will be MORE severe because

Fundamental valuations are considerably more stretched today than in the past





Record setting growth "bubble" . . . favors value



2005 2010 2015 2020

Monthly Data 1932-12-31 to 2022-01-31 (Log Scale) Long-Term Trends in Large-Cap Growth/Value Relative Performance 1,413 G/V 1,259 Bear **Bull?** 1,259 1,122 1,122 Periods of Value Outperformance 1,000 1,000 Ratio GPA | Growth GPA Value GPA Dates 891 891 12/31/1932 to 08/31/1933 -61.5 382.6 794 794 03/31/1935 to 03/31/1937 -28.3 39.9 95.3 708 708 -8.1 12.9 22.9 08/31/1939 to 06/30/1955 631 -6.4 11.3 18.9 12/31/1957 to 01/31/1969 631 07/31/1972 to 03/31/1978 -15.0-4.0 12.9 562 562 15.7 11/30/1980 to 08/31/1988 -5.8 8.9 501 501 12/31/1991 to 09/30/1993 -13.72.3 18.4 447 447 -14.302/29/2000 to 07/31/2006 -7.0 8.5 398 398 355 355 316 316 Ratio: Large-Cap Growth TR Index / 282 282 Large-Cap Value TR Index 251 251 (01/31/2022 = 124.9)224 224 200 200 178 178 Periods of Growth Outperformance 158 158 Growth GPA Dates Ratio GPA Value GPA 141 141 08/31/1933 to 03/31/1935 69.5 -0.5 -41.3 126 126 03/31/1937 to 08/31/1939 -8.2 -29.6 112 112 06/30/1955 to 12/31/1957 10.6 2.7 -7.1 100 100 01/31/1969 to 07/31/1972 8.9 9.8 8.0 89 03/31/1978 to 11/30/1980 10.0 31.7 19.7 79 79 08/31/1988 to 12/31/1991 9.9 24.4 13.2 71 09/30/1993 to 02/29/2000 25.7 15.1 63 63 07/31/2006 to 01/31/2022? 13.4 56 Shaded areas indicate Growth outperformance based on reversals of 20% or more in Growth/Value ratio. The Large-Cap Growth and Value indices reflect data provided by Kenneth French prior to 12/31/1978 50 Source: FTSE Russell and Russell data since.

1935 1940 1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000

Last 9 bear markets . . . median result



-63.9	Real estate
-58.6	Micro cap stocks
-56.9	Small cap
-55.2	Blend - 50% Micro cap 50% Small cap
-47.2	S&P 500
-40.6	Very high dividend yields
-39.1	Mild value
-39.0	High dividend yields
-38.7	Pure value
-7.6	Tactical Asset Allocation

Real estate

 Do much <u>better</u> because the industry has become more conservative and 2020 cleaned out considerable excess

Small cap

• Do worse due to the zombie problem (use Julex)

High dividend

• Do about the same, but avoid zombies (use Julex)

Value

 Do <u>better</u>, simply because of the extreme technology/innovation bubble

Tactical Asset Allocation

Do about the same (use Julex)

A last comment on real estate



- The Fama French data for real estate is correct
- But real estate has evolved to such an extent over the last hundred years . . . that the Fama French data paints a misleading picture

- In an attempt to repair this problem . . . let's consider the FTSE Nareit Equity REITs Index instead
- Unfortunately, this data only goes back to 1971 . . . so it covers 4 of the last 9 bear markets

Looking at ONLY the last 4 bear markets (using NAREIT for real estate)



-49.5	S&P 500
-47.1	Micro cap stocks
-45.9	Small cap
-45.1	Blend - 50% Micro cap 50% Small cap
-35.7	Mild value
-33.5	Pure value
-32.6	High dividend yields
-30.8	Very high dividend yields
-28.7	Real estate
-5.0	Tactical Asset Allocation

For more information contact





Jeff Megar, CFA Email jeff.megar@julexcapital.com Office 781-772-1378



Liam Flaherty
Email liam.flaherty@julexcapital.com
Office 781-489-5398



Investment strategies for short-term needs (years 0 to 5)

Friday

February 25th

11:00 a.m. EASTERN

Important Disclosures



All data and statistics were provided by Global Financial Data, Inc. and NDR, Inc. (unless otherwise indicated in the exhibit)

This information in this presentation is for the purpose of information exchange. This is not a solicitation or offer to buy or sell any security. You must do your own due diligence and consult a professional investment advisor before making any investment decisions. The use of a proprietary technique, model or algorithm does not guarantee any specific or profitable results. Past performance is not indicative of future returns. The performance data presented are gross returns, unless otherwise noted.

The risk of loss in trading securities can be substantial. You should therefore carefully consider whether such trading is suitable for you in light of your financial condition. All information posted is believed to come from reliable sources. We do not warrant the accuracy or completeness of information made available and therefore will not be liable for any losses incurred.

Some part of the investment performance shown is HYPOTHETICAL. It is based on the back tests of historical data. Hypothetical performance results have many inherent limitations, some of which are described below. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. In fact, there are frequently sharp differences between hypothetical performance results and the actual results subsequently achieved by any particular trading program.

One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, hypothetical trading does not involve financial risk, and no hypothetical trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or adhere to a particular trading program in spite of trading losses are material points which can also adversely affect actual trading results. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in the presentation of hypothetical performance results and all of which can adversely affect actual trading results.

The composition of a benchmark index may not reflect the manner in which a Julex portfolio is constructed in relation to expected or achieved returns, investment holdings, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility, or tracking error targets, all of which are subject to change over time.

No representation or warranty is made to the reasonableness of the assumptions made or that all assumptions used to construct the performance provided have been stated or fully considered.