

**JULEX** CAPITAL

# Deep value - Opportunity, problems, solutions

**Rob Brown, PhD, CFA**

**Julex Capital Advisory Board Member, Website [www.robrownonline.com](http://www.robrownonline.com)**



**40 Grove Street, Suite 140, Wellesley, MA 02482**

**Phone 781-489-5398**

**Email [info@julexcapital.com](mailto:info@julexcapital.com)**

**Web [www.julexcapital.com](http://www.julexcapital.com)**

- The opportunity in value
  - As good as it will ever be . . . ever
  - Deep value
    - Greatest opportunity
    - But . . . it has to be **risk-managed**

## Value vs Growth . . . . it is not like a light-switch

- Value and growth . . . Lie along a continuum
- Most value/growth products are
  - Watered-down
  - Diluted things
  - Lie somewhere in the vast middle
- **The greatest opportunity**
  - Deep value
  - But not the ultra extreme end

# The watered down, diluted industry products

- **RPV . . . Invesco S&P 500 Pure Value**

- Factor loading to value of 1.12x
- Factor loading to growth of -0.53x

- **SPYV . . . SPDR S&P 500 Value**

- Factor loading to value of 0.14x
- Factor loading to growth of -0.28x

- **SPYG . . . SPDR S&P 500 Growth**

- Microsoft 6.2%
- Amazon 2.1%
- Johnson & Johnson 1.7%

- **SPYV . . . SPDR S&P 500 Value**

- Microsoft 4.9%
- Amazon 2.7%
- Johnson & Johnson 1.2%

## Summary statistics for the total market, growth, value, and alternate deep value definitions

Index	Return (geometric annualized mean)	Risk adjusted return (return divided by standard deviation)	Risk (annualized standard deviation of monthly returns)	Autocorrelation (from one month to the next)	Probability of earning at least 5% (annualized) over a 12.5-year investment time period
Total market	10.81	0.54	20.0	0.133	87.1
Growth	9.66	0.52	18.5	0.078	80.4
Value	12.74	0.51	25.0	0.150	88.1
Value risk premium	2.81	0.21	13.6	0.177	30.7
Traditional commonly-used value	11.85	0.53	22.5	0.151	88.0
Conservative deep value	12.26	0.47	26.3	0.156	86.4
Moderate deep value	12.74	0.51	25.0	0.150	88.1
Moderately aggressive deep value	12.98	0.47	27.8	0.157	89.4
Aggressive deep value	11.74	0.37	31.5	0.147	82.3

Based on the time period spanning 6/30/1926 through 12/31/2022

## Summary statistics for when interest rates surprise to the upside or downside

Statistic	Total market	Growth	Value	Value risk premium	Traditional commonly-used value	Conservative deep value	Moderate deep value	Moderately aggressive deep value	Aggressive deep value
<b>During 25% of the months when interest rates surprised to the UPSIDE the most</b>									
Return	0.89	-1.08	5.33	6.48	3.17	4.75	5.33	5.82	4.95
Risk-adjusted return (return divided by risk)	0.06	-0.07	0.27	0.51	0.18	0.23	0.27	0.27	0.19
Risk (standard deviation)	16.15	16.57	19.90	12.64	17.83	20.92	19.90	21.86	25.80
<b>During 50% of the months when interest rates surprised to the UPSIDE the most</b>									
Return	5.58	3.42	8.88	5.29	7.39	8.29	8.88	9.23	8.16
Risk-adjusted return (return divided by risk)	0.32	0.20	0.43	0.44	0.39	0.38	0.43	0.40	0.31
Risk (standard deviation)	17.27	17.41	20.75	11.93	18.84	21.77	20.75	22.82	26.37
<b>During 50% of the months when interest rates surprised to the DOWNSIDE the most</b>									
Return	16.30	16.28	16.73	0.39	16.50	16.36	16.73	16.86	15.44
Risk-adjusted return (return divided by risk)	0.73	0.84	0.59	0.03	0.64	0.54	0.59	0.53	0.43
Risk (standard deviation)	22.26	19.45	28.54	15.05	25.64	30.09	28.54	31.93	35.95
<b>During 25% of the months when interest rates surprised to the DOWNSIDE the most</b>									
Return	17.45	18.56	14.87	-3.12	16.12	14.18	14.87	14.10	11.51
Risk-adjusted return (return divided by risk)	0.76	0.95	0.50	-0.19	0.60	0.45	0.50	0.42	0.30
Risk (standard deviation)	23.02	19.63	29.87	16.33	26.77	31.68	29.87	33.76	38.30

Statistic	Total market	Growth	Value	Value risk premium	Traditional commonly-used value	Conservative deep value	Moderate deep value	Moderately aggressive deep value	Aggressive deep value
<b>During 25% of the months when interest rates surprised to the UPSIDE the most</b>									
Return	0.89	-1.08	5.33	6.48	3.17	4.75	5.33	5.82	4.95
Risk-adjusted return (return divided by risk)	0.06	-0.07	0.27	0.51	0.18	0.23	0.27	0.27	0.19
Risk (standard deviation)	16.15	16.57	19.90	12.64	17.83	20.92	19.90	21.86	25.80
<b>During 50% of the months when interest rates surprised to the UPSIDE the most</b>									
Return	5.58	3.42	8.88	5.29	7.39	8.29	8.88	9.23	8.16
Risk-adjusted return (return divided by risk)	0.32	0.20	0.43	0.44	0.39	0.38	0.43	0.40	0.31
Risk (standard deviation)	17.27	17.41	20.75	11.93	18.84	21.77	20.75	22.82	26.37

Statistic	Total market	Growth	Value	Value risk premium	Traditional commonly-used value	Conservative deep value	Moderate deep value	Moderately aggressive deep value	Aggressive deep value
<b>During 25% of the months when interest rates surprised to the UPSIDE the most</b>									
Return	0.89	-1.08	5.33	6.48	3.17	4.75	5.33	5.82	4.95
Risk-adjusted return (return divided by risk)	0.06	-0.07	0.27	0.51	0.18	0.23	0.27	0.27	0.19
Risk (standard deviation)	16.15	16.57	19.90	12.64	17.83	20.92	19.90	21.86	25.80
<b>During 50% of the months when interest rates surprised to the UPSIDE the most</b>									
Return	5.58	3.42	8.88	5.29	7.39	8.29	8.88	9.23	8.16
Risk-adjusted return (return divided by risk)	0.32	0.20	0.43	0.44	0.39	0.38	0.43	0.40	0.31
Risk (standard deviation)	17.27	17.41	20.75	11.93	18.84	21.77	20.75	22.82	26.37



But . . . there is RISK that comes with “deep value”

**Comparative knockout risk**

**Seven worst-ever non-overlapping 12-month windows**

Total market	Growth	Value	Value risk premium	Traditional commonly-used value	Conservative deep value	Moderate deep value	Moderately aggressive deep value	Aggressive deep value
-72.9%	-62.7%	-72.2%	-45.3%	-73.9%	-73.1%	-72.2%	-69.9%	-80.5%
-50.7	-47.2	-64.8	-36.6	-57.9	-68.2	-64.8	-68.4	-74.6
-49.2	-46.1	-54.4	-33.2	-52.5	-57.5	-54.4	-59.9	-62.6
-46.4	-42.7	-54.1	-31.6	-51.1	-56.0	-54.1	-59.2	-60.2
-34.7	-37.1	-48.4	-27.1	-38.3	-52.5	-48.4	-47.8	-59.6
-26.6	-33.8	-30.8	-23.5	-29.9	-32.3	-30.8	-35.9	-42.8
-24.4	-26.5	-28.5	-21.7	-26.9	-29.1	-28.5	-32.7	-42.0

# Current day opportunity

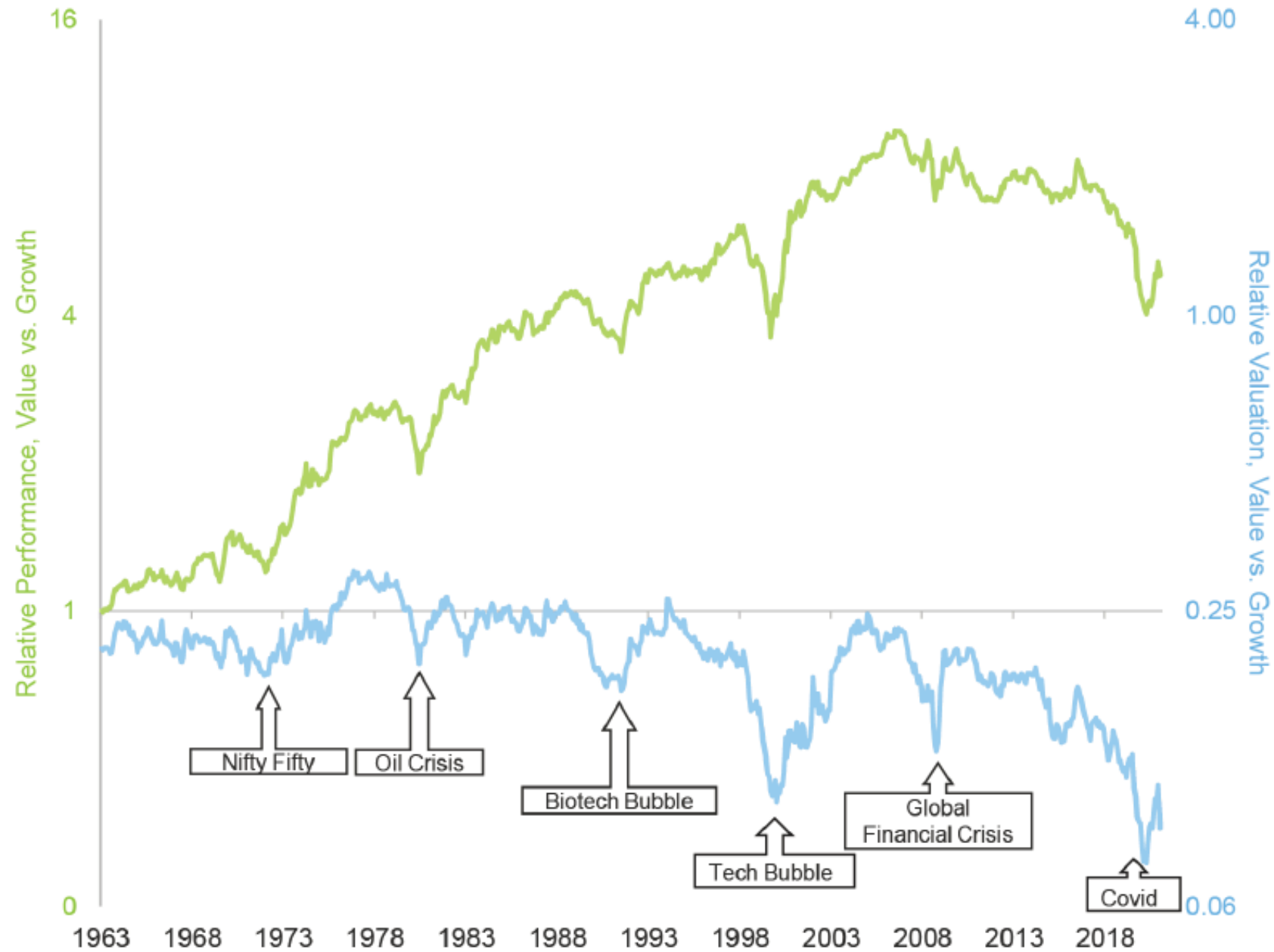
Why right now ?

## FORWARD P/E ratios as of 03/24/2023

- Russell 1000 Growth
  - P/E = 24.1x
- Russell 1000 Value
  - P/E = 14.5x

From January 2007 to September 2020, the relative valuation of value stocks to growth stocks moved from the most expensive quartile (22nd most expensive percentile) to the cheapest percentile in history (100th percentile), explaining more than 100% of value's underperformance.

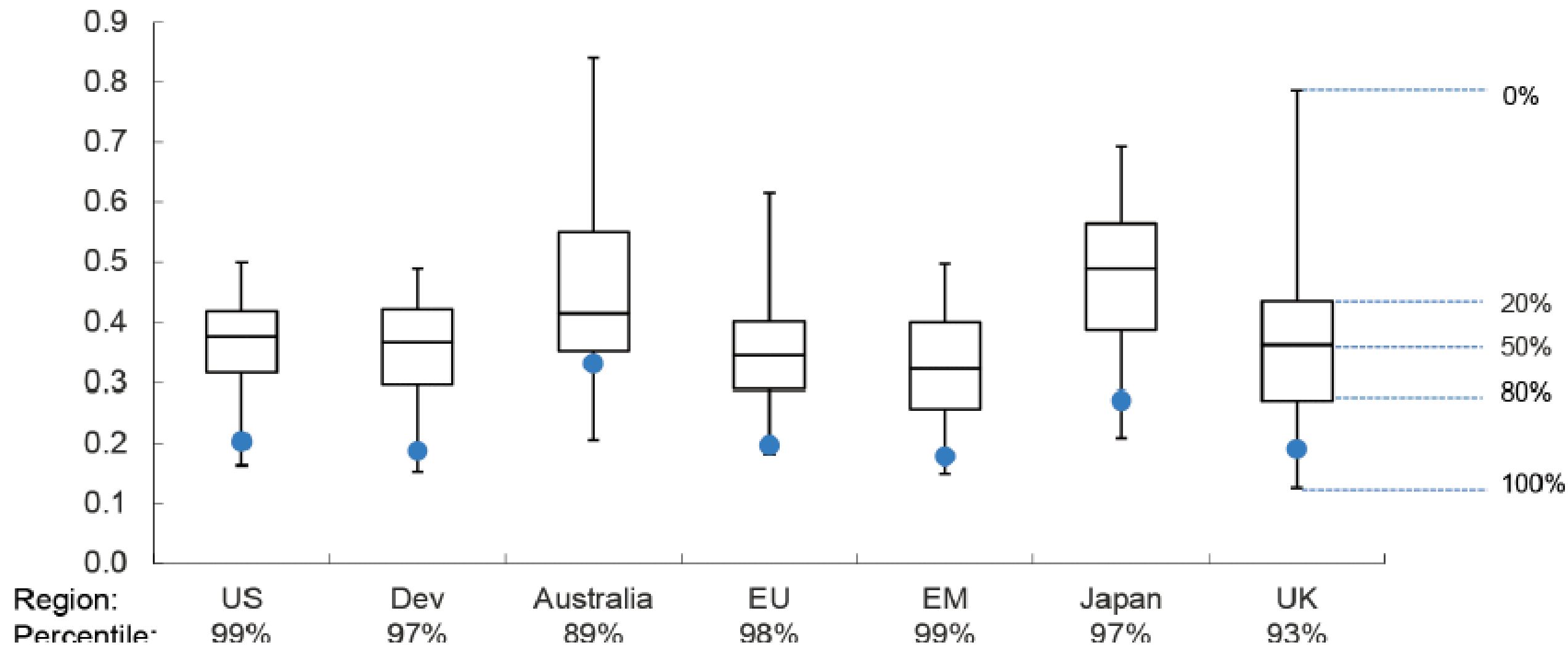
Performance of Value and Value vs. Growth Relative Valuations, United States, Jul 1963–Jun 2021



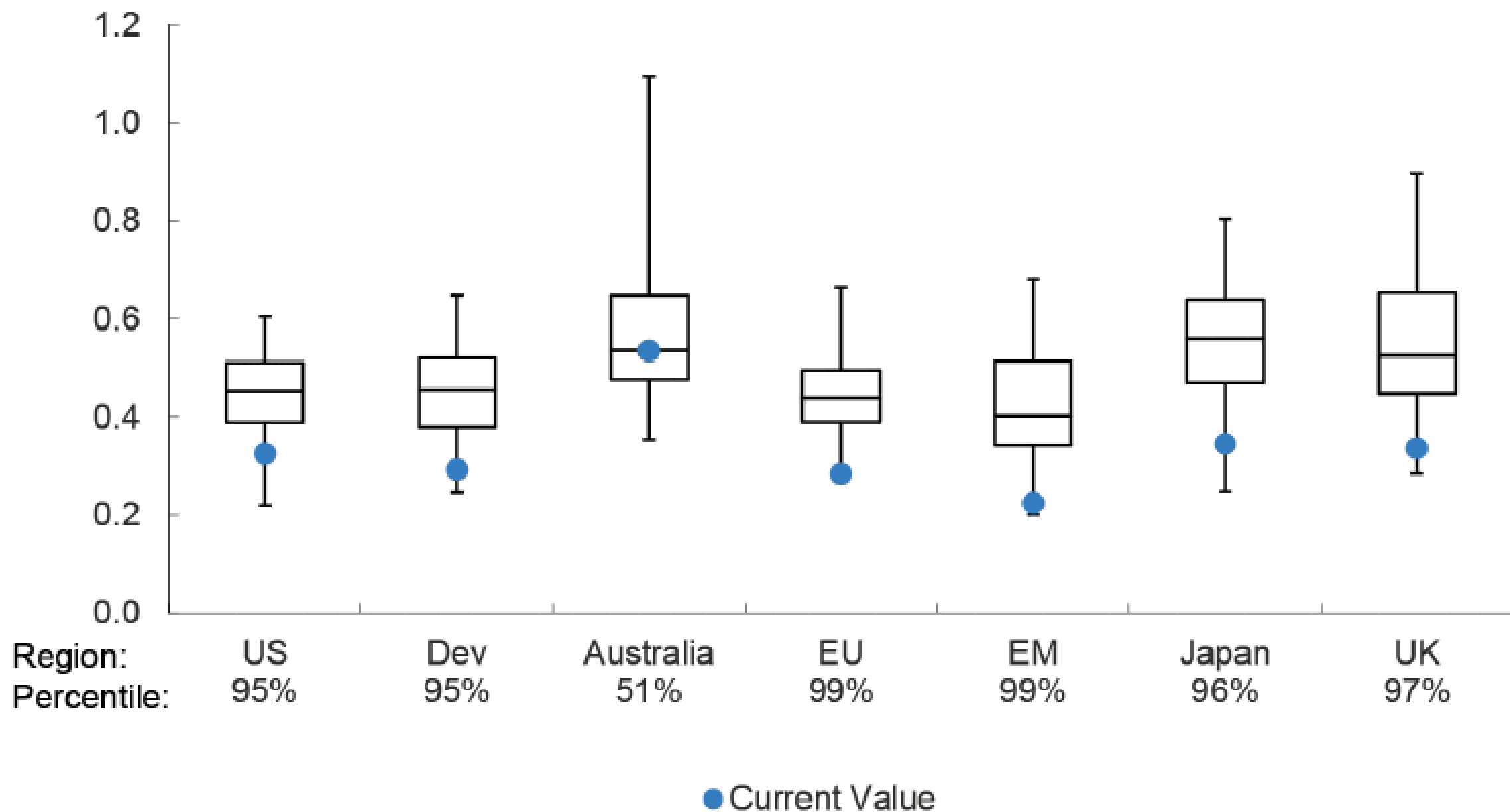
Value remains impressively cheap across all regions in our analysis, with the sole exception of Australia (where value is quite cheap based on price-to-book value ratio and neutral based on composite valuation).

## Relative Valuations of Value vs. Growth, as of June 30, 2021

### Panel A. Relative Valuation Using Price-to-Book Value Ratio



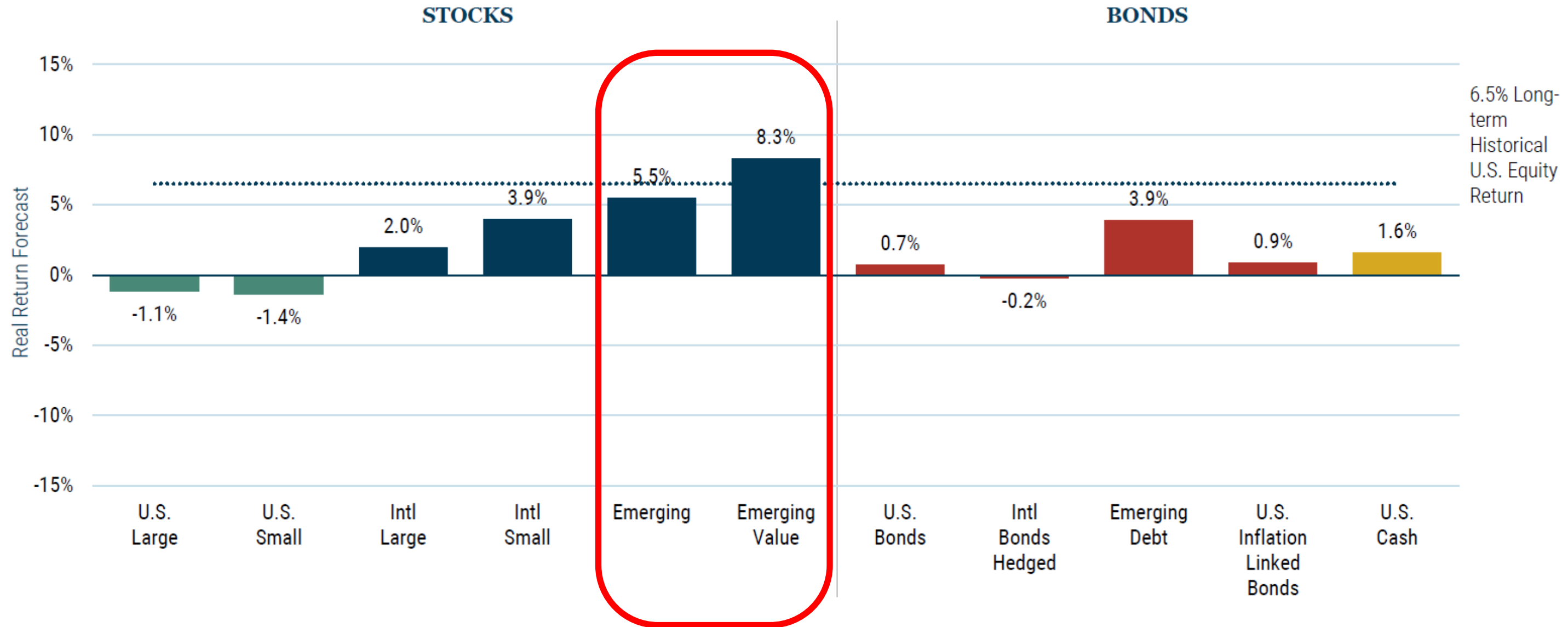
**Panel B. Relative Valuation Using an Average of Four Valuation Ratios**



# Research Affiliates expected future returns . . . as of 03/26/2023

Asset class	Expected 10-year total return (before inflation)	Expected 10-year total return (after inflation)
MSCI EAFE Value	12.2	8.9
MSCI EM	11.4	8.1
MSCI EAFE	10.3	6.9
Russell 2000	8.6	5.3
FTSE NAREIT All Equity REIT	7.9	4.6
Russell 1000 Value	7.3	4.0
MSCI EAFE Growth	7.1	3.8
MSCI World	6.8	3.4
MSCI EAFE Small Cap	6.5	3.2
S&P 500	5.5	2.2
Russell 1000 Growth	5.0	1.6

# GMO 7-year return forecast . . . as of March 1, 2023





# How did we get here?

# Growth . . . grew to the sky . . . **how, why, to what extent**

- Bull and bear markets for the value risk premium
- Spanning 1926 . . . Through today

## Bull and bear markets for the value risk premium since 1926

	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
	-52	5.25	Feb 1927	May 1932	16.1	32	-13.1
	78	0.25	May 1932	Aug 1932	42.3	100	902.9
	-38	0.33	Aug 1932	Dec 1932	13.2	0	-76.4
	94	0.67	Dec 1932	Aug 1933	33.0	75	170.7
	-50	1.58	Aug 1933	Mar 1935	23.6	26	-35.5
	86	2.00	Mar 1935	Mar 1937	15.4	71	36.3
	-46	2.42	Mar 1937	Aug 1939	15.4	34	-22.5
	2376	49.25	Aug 1939	Nov 1988	10.6	54	6.7
	-28	3.08	Nov 1988	Dec 1991	5.7	38	-10.1
	49	6.42	Dec 1991	May 1998	8.3	57	6.4
	-33	1.58	May 1998	Dec 1999	10.2	26	-22.4
	162	7.00	Dec 1999	Dec 2006	11.2	69	14.7
	-37	2.17	Dec 2006	Feb 2009	16.1	27	-19.0
	28	0.58	Feb 2009	Sep 2009	11.8	86	51.7
	-58	11.00	Sep 2009	Sep 2020	11.0	40	-7.7
	75	2.25	Sep 2020	?	18.1	63	28.2

Median BULL market	86	2.00			11.8	71	36.3
Median BEAR market	-42	2.29			14.3	29	-20.7

Bull and bear markets are defined as moves of at least 25% using month-end stock index total returns

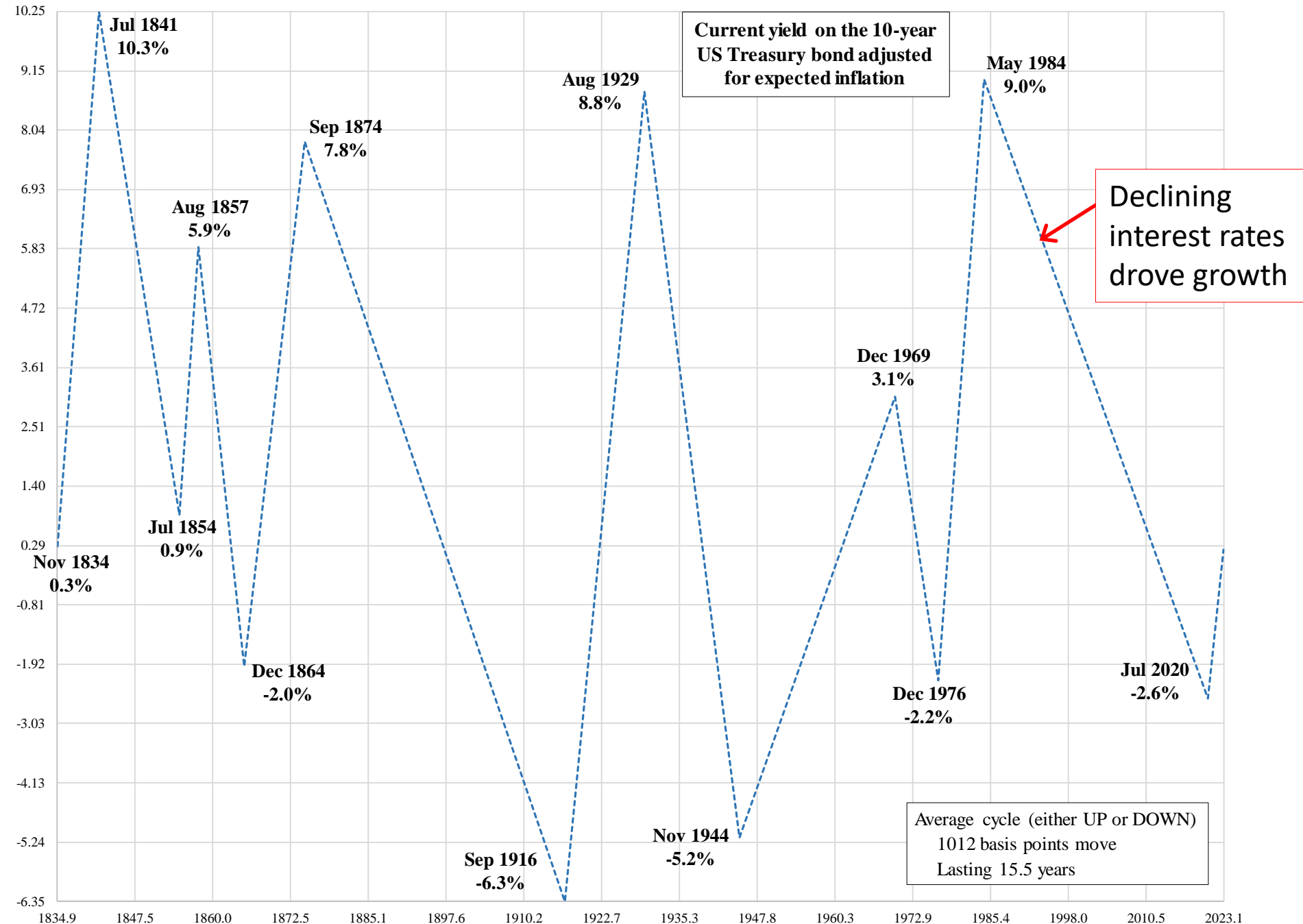
Data spans the time period June 1926 through Dec 2022

## The longest cycle favoring growth

- Since 1926
- The **longest** cycle favoring growth
  - 11.0 years
  - Started Sep 2009
  - Ended Sep 2020
- Value **underperformed** growth by a cumulative -58% during this 11 years
- Or -7.7% per year . . . for 11 uninterrupted years

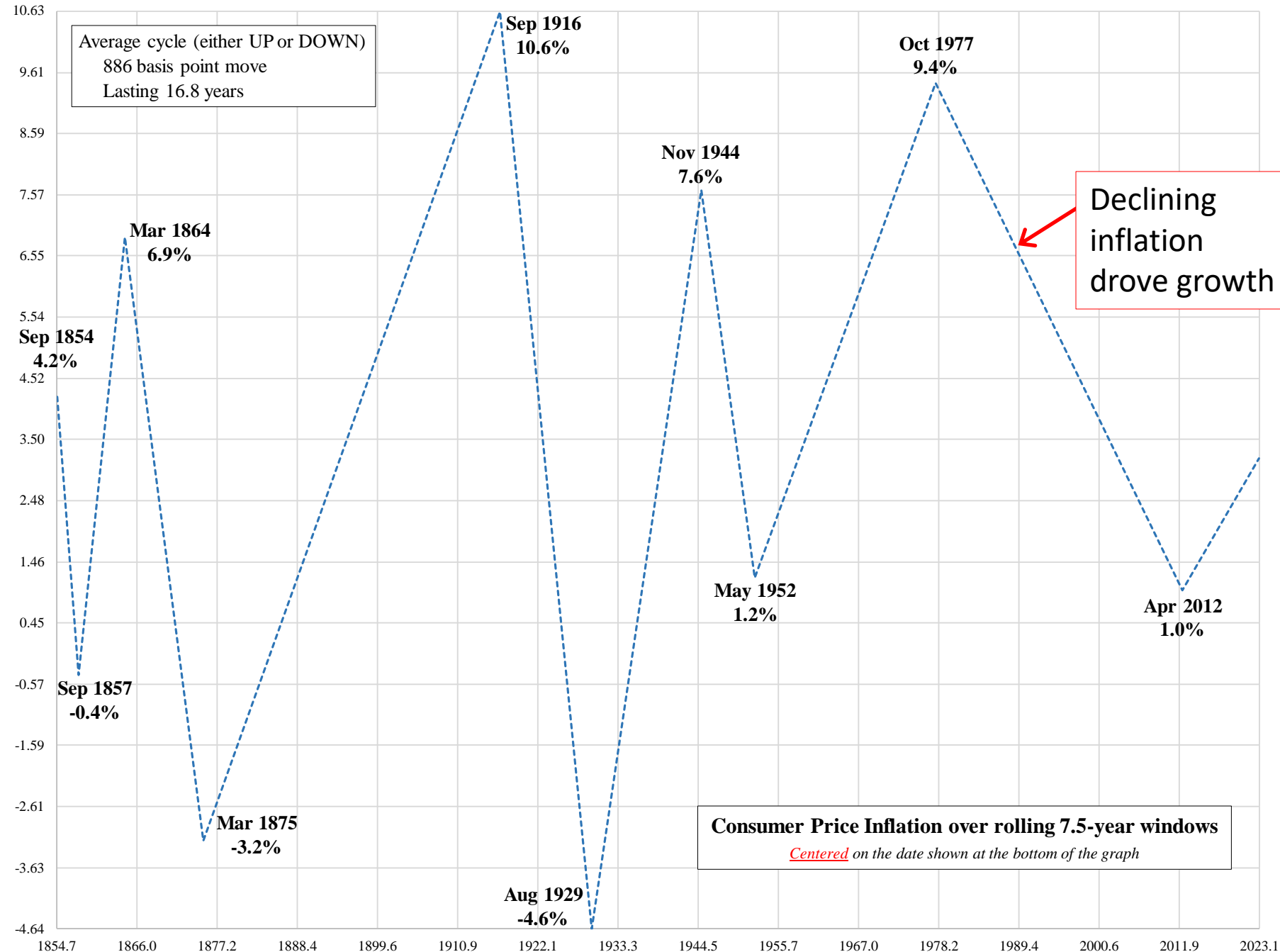
# Interest rates fell for over 36 years . . . this drove growth

## Real interest rate cycles - large and long-lasting



# Inflation fell for over 34 years . . . this also drove growth

## Expected inflation cycles - large and long-lasting



## But why . . . why did growth grow to the sky . . . 5 reasons

- Interest rates . . . fell
- Inflation . . . fell
- 2<sup>nd</sup> wave of the tech boom
- COVID
  - Hitting the capital- and labor-intensive sectors associated with value stocks the hardest
  - The virtual economy (frothy growth stocks) was largely unscathed
  - Legitimate bankruptcy fears drove investors to shun these value stocks and pursue growth stocks
- Tech was allowed to grow without regulation . . . or controls
  
- Each of these has now ended . . . and reversed direction

## Current . . . value bull market

- The current cycle favors value
- Started Sep 2020
- Through Dec 2022 . . . Value has outperformed growth by a cumulative **+75%**
  
- For comparison . . . consider how value performed immediately following the Tech Wreck of Dec 1999
  - Value outperformed growth for 7.0 years
  - Started on Dec 1999
  - Ended on Dec 2006
  - Cumulative outperformance for value (over growth) was **+162%**
  - Or 14.7% of outperformance per year . . . for 7 years



Research

Financial Analysts Journal | A Publication of CFA Institute  
<https://doi.org/10.1080/0015198X.2020.1842704>

 OPEN ACCESS

# Reports of Value's Death May Be Greatly Exaggerated

**Robert D. Arnott** , **Campbell R. Harvey** , **Vitali Kalesnik** ,  
**and Juhani T. Linnainmaa** 

*Robert D. Arnott is a partner and chairman of the board at Research Affiliates, LLC, Newport Beach, California. Campbell R. Harvey is a professor of finance at the Fuqua School of Business, Duke University, Durham, North Carolina, and a research associate at the National Bureau of Economic Research, Cambridge, Massachusetts. Vitali Kalesnik is a partner and director of research for Europe at Research Affiliates Global Advisors Ltd., London. Juhani T. Linnainmaa is a professor of business administration at Dartmouth College, Hanover, New Hampshire, and a research associate at the National Bureau of Economic Research, Cambridge, Massachusetts.*



ARTICLE

# Did I Miss the Value Turn?

September 2021

In mid-March 2020, we wrote in “This Too Shall Pass” that disruptions such as the Covid-19 pandemic are not permanent and that investors can look beyond immediate travails to an eventual return to normalcy. Who knew that 17 months later the world would still be dealing with the pandemic and its fallout? Yet, the truism remains: This too shall pass.



## AUTHORS



**Rob Arnott\***  
*Partner, Chair*



**Vitali Kalesnik, PhD**  
*Partner, Director of Research, Research  
Affiliates Global Advisors (Europe) Limited*

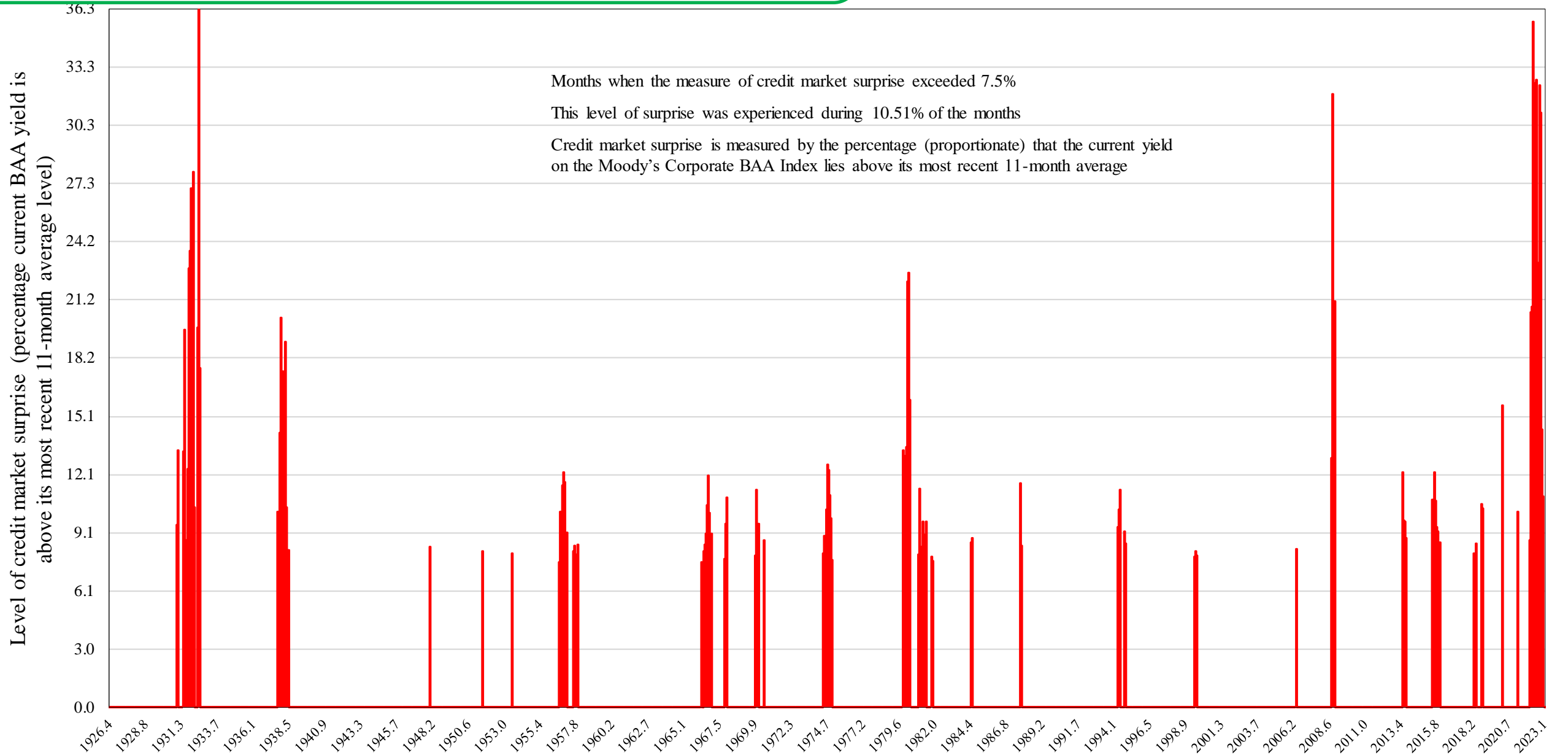
## Recap . . . Summary . . . Why value now

- Interest rates going up
- Inflation going up
- Economy growing extra slowly
- Just ended the longest cycle favoring growth . . . in all of history
- Growth still relatively overvalued
- The growth “crazies” and “froth” still hasn’t been purged from the system
- After the 1<sup>st</sup> tech wave, value beat growth for 7 years . . . we just ended the 2<sup>nd</sup> tech wave
  
- The best way to harvest the value opportunity is
  - Risk managed
  - Deep value

# Punchline

*“Value stocks stand out as the only asset class likely to generate a 5%–10% real return over the coming decade”* . . . . Research Affiliates

# Credit market surprise, when and how severe



# Summary statistics for risk managed deep value versus standard indices

Summary statistic	Total market	Traditional commonly-used value	Moderate deep value	Risk managed moderate deep value	Moderately aggressive deep value	Risk managed moderately aggressive deep value
Return (geometric annualized mean)	10.81	11.85	12.74	15.12	12.98	15.57
Risk adjusted return (return divided by standard deviation)	0.54	0.53	0.51	0.70	0.47	0.64
Risk (annualized standard deviation of monthly returns)	19.97	22.53	24.97	21.66	27.77	24.47
Autocorrelation (from one month to the next)	0.133	0.151	0.150	0.110	0.157	0.106
Probability of earning at least 5% (annualized) over a 12.5-year investment time period	87.1	88.0	88.1	95.0	89.4	94.0

## Annualized return (for 12.5-year investment time windows) at different percentile levels

Portfolio	Different percentile levels (in %)										
	0.5	1	2	3	5	7.5	10	15	20	25	50
Total market	-3.8 %	-2.6 %	-2.0 %	-0.8 %	1.2 %	2.4 %	3.5 %	5.6 %	6.6 %	7.4 %	12.1 %
Traditional commonly-used value	-4.0	-3.0	-2.4	-1.5	0.4	2.0	3.7	6.0	7.0	7.9	13.4
Moderate deep value	-3.9	-3.2	-2.6	-1.8	0.3	2.2	4.3	5.8	7.0	8.4	14.4
Risk managed moderate deep value	1.1	2.0	2.7	3.3	4.9	6.3	7.5	10.1	11.2	11.8	15.5
Moderately aggressive deep value	-4.7	-4.1	-3.6	-2.5	-0.3	1.7	4.6	6.6	7.9	9.0	14.0
Risk managed moderately aggressive deep value	0.3	0.8	1.9	2.3	4.1	5.9	7.5	10.6	11.7	12.3	15.9

For more information contact



Jeff Megar, CFA  
Email [jeff.megar@julexcapital.com](mailto:jeff.megar@julexcapital.com)  
Office 781-772-1378



Liam Flaherty  
Email [liam.flaherty@julexcapital.com](mailto:liam.flaherty@julexcapital.com)  
Office 781-489-5398



# The opportunity in deep value and the importance of risk management

Friday

April 14<sup>th</sup>

11:00 a.m. EASTERN

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.