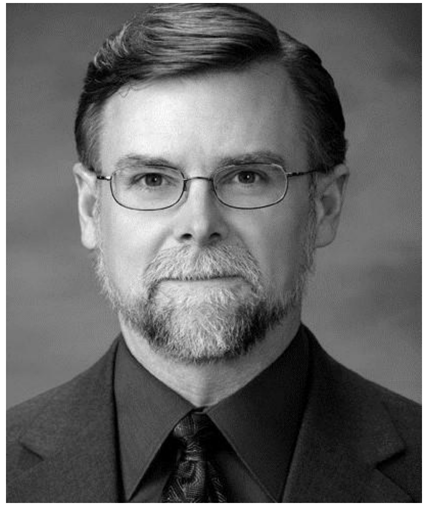
Do the odds favor VALUE . . . now?

Rob Brown, PhD, CFA

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



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"In the end, all business operations can be reduced to three words: people, product, and profits. Unless you've got a good team, you can't do much with the other two"

Lee Iacocca

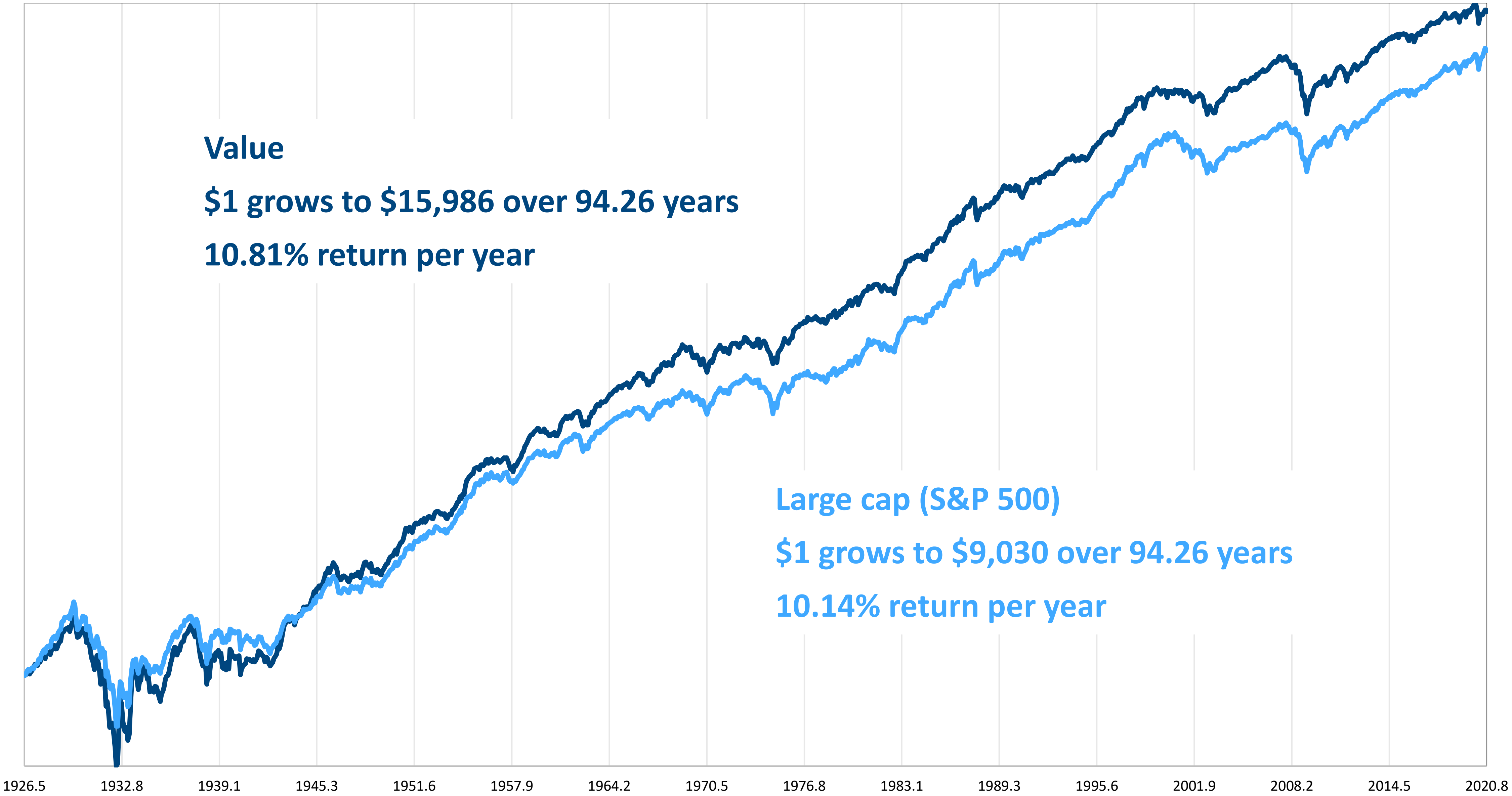
Conventional wisdom

- Conventional wisdom prescribes a permanent fixed tilt towards value
- This conclusion is based on the following assumptions about the value risk premium
    - Sufficient size
    - Sufficient consistency
    - Some diversification benefit
- Convention wisdom is wrong
- It lacks even the slightest degree of consistency . . . and instead is painfully episodic

Sufficient size

YES

Value premium of 0.67% per year over the last 94.26 years



The origins of conventional wisdom's mistaken beliefs, continued

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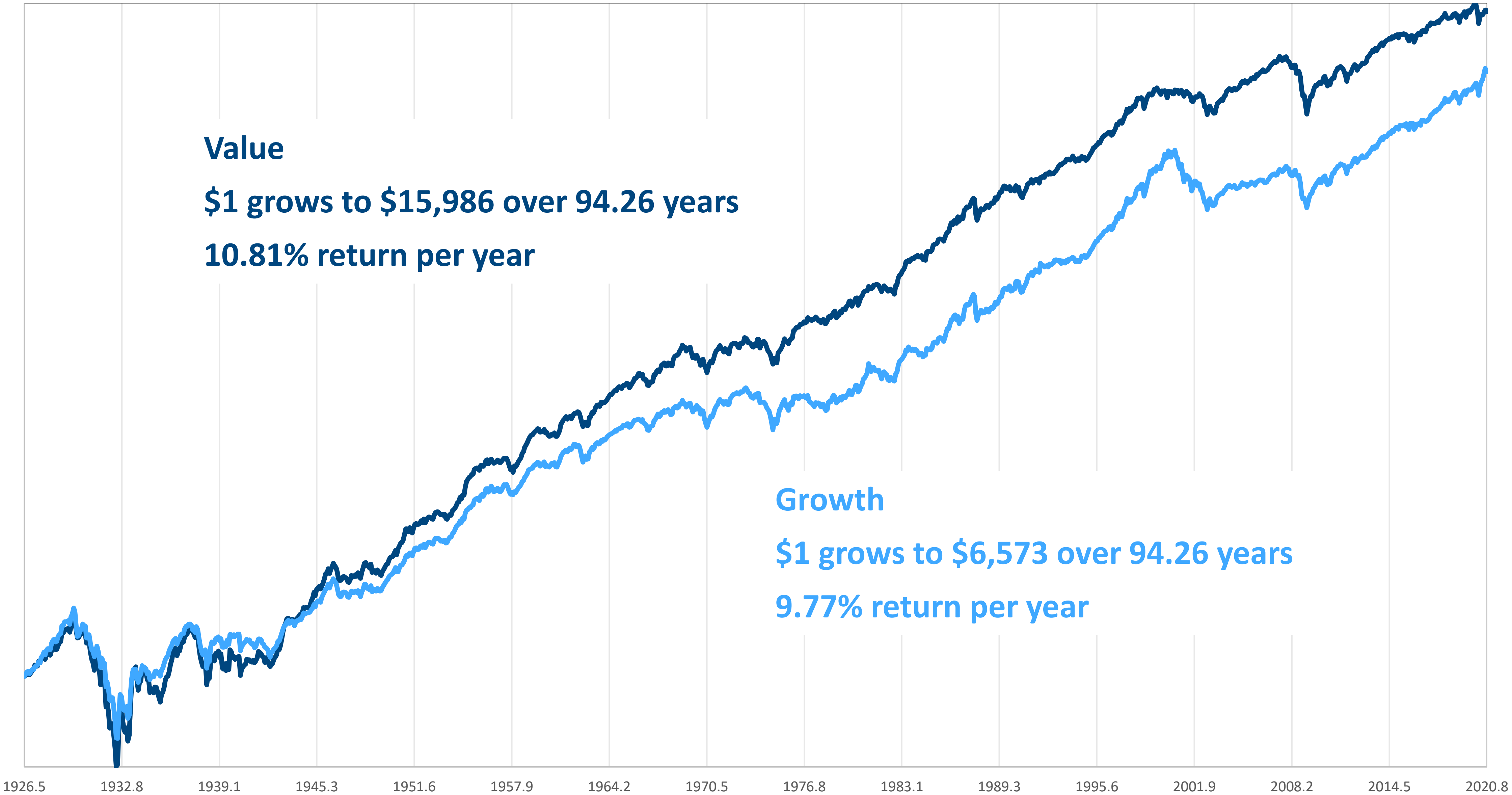
Value premium of 1.04% per year over the last 94.26 years

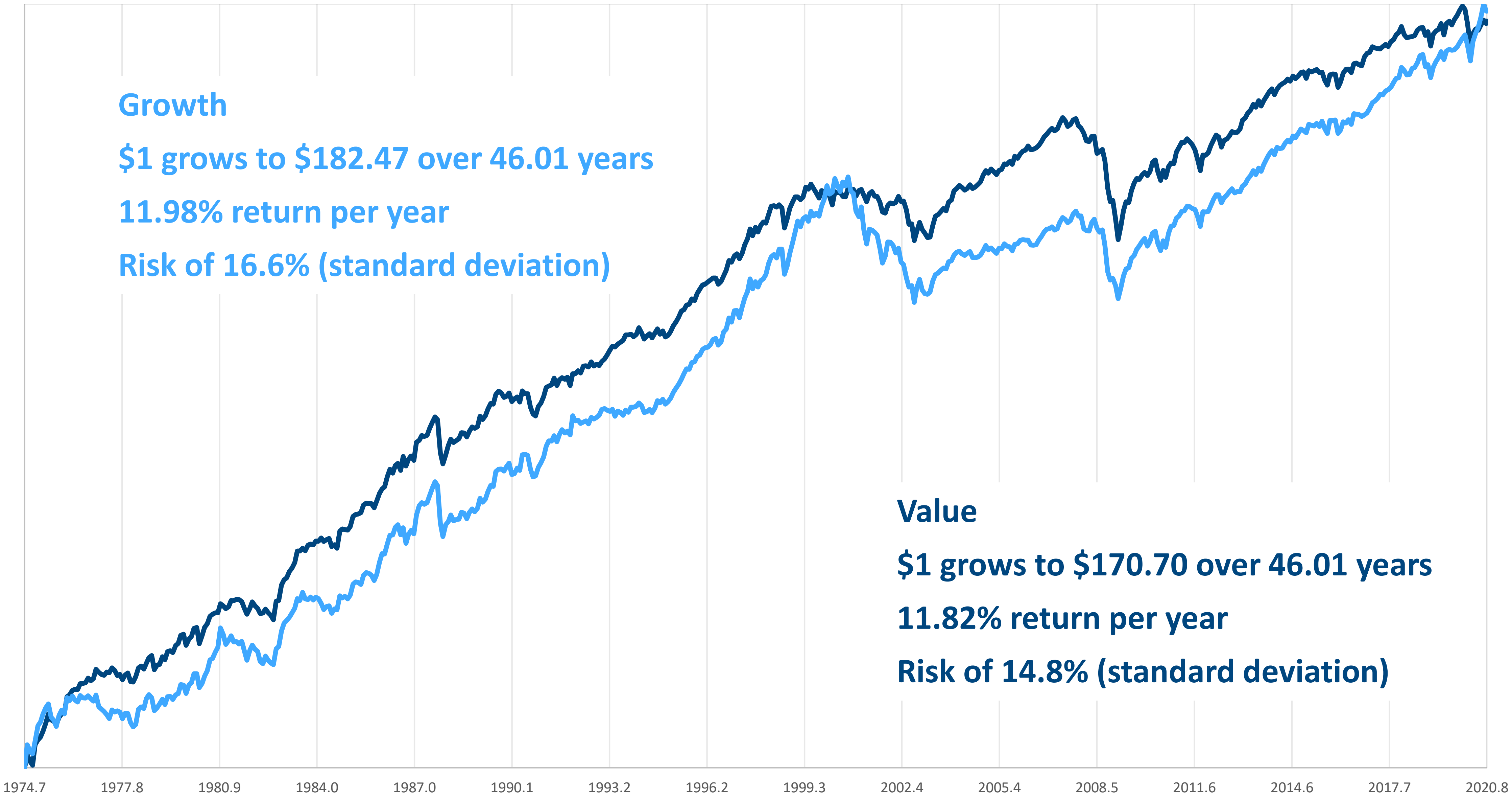


Sufficient consistency

NO

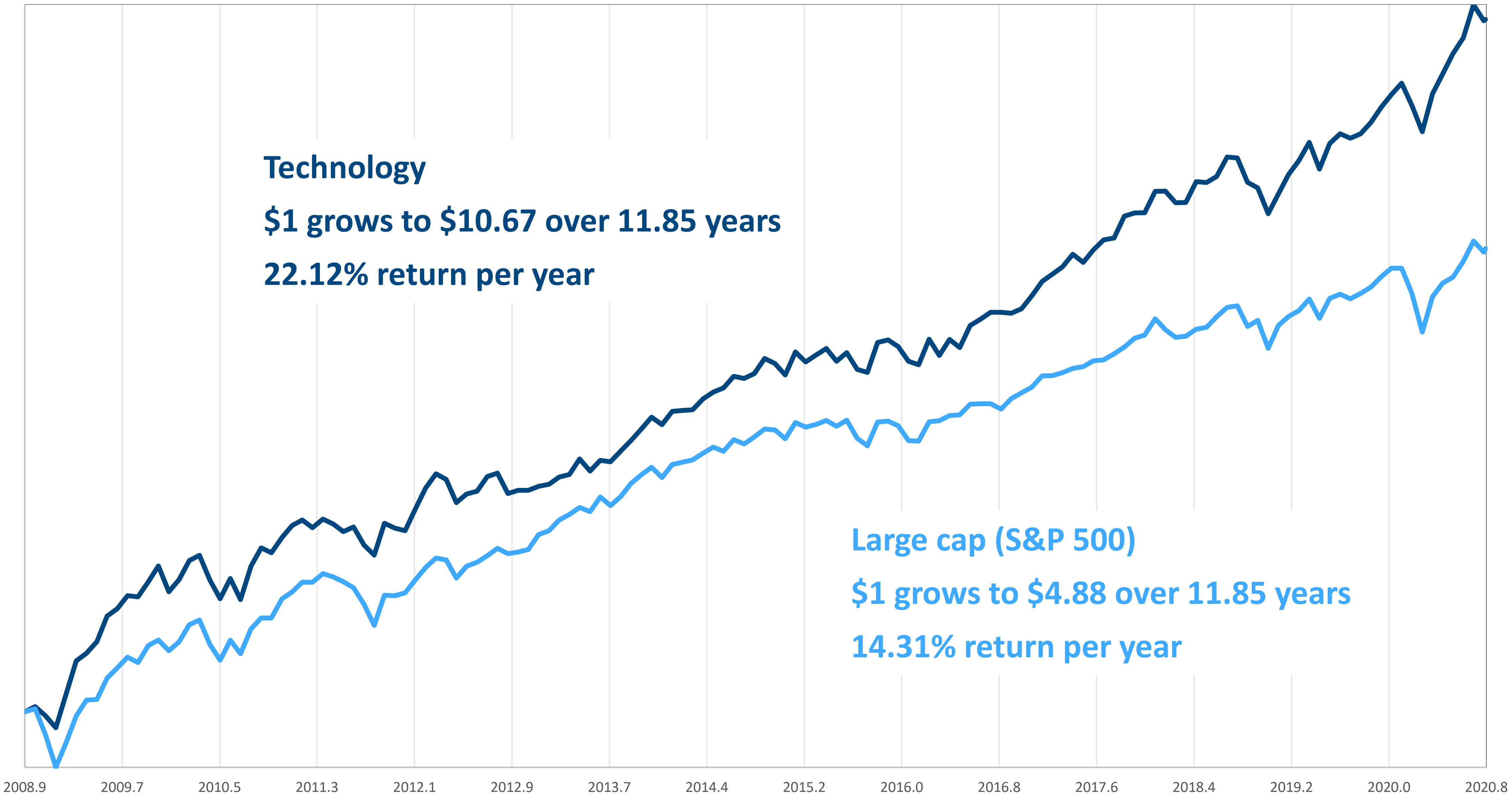
Conventional wisdom closed its eyes to the last 46+ years

Value premium of -0.16% per year over the last 46.01 years



Is recent value disappoint just due to the recent 12-year tech rally

History making technology rally began Nov 30, 2008



MAYBE - but to assume so, probably misleads

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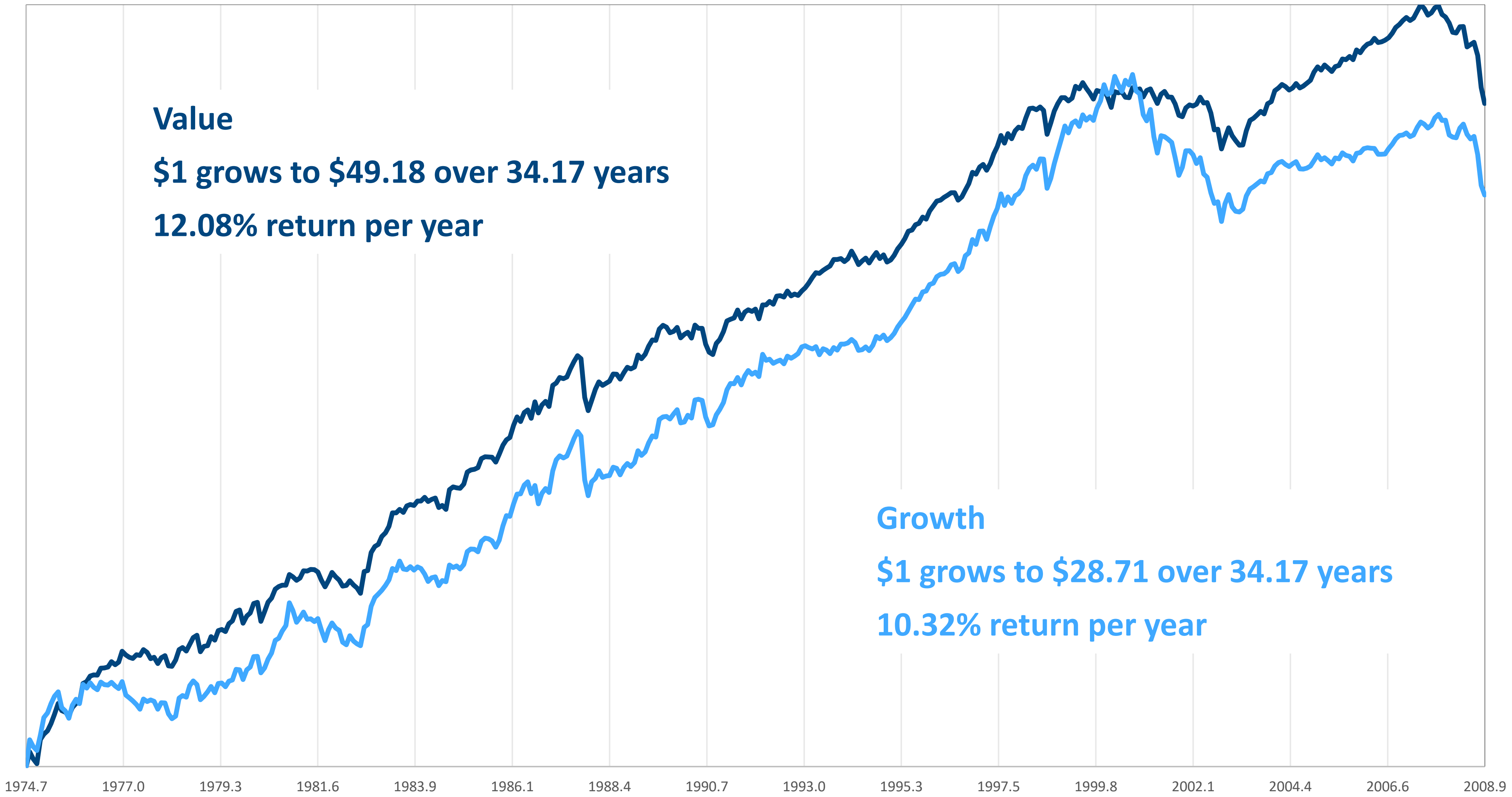
After removing the 11.85-year tech rally, value's premium returned to 1.75%

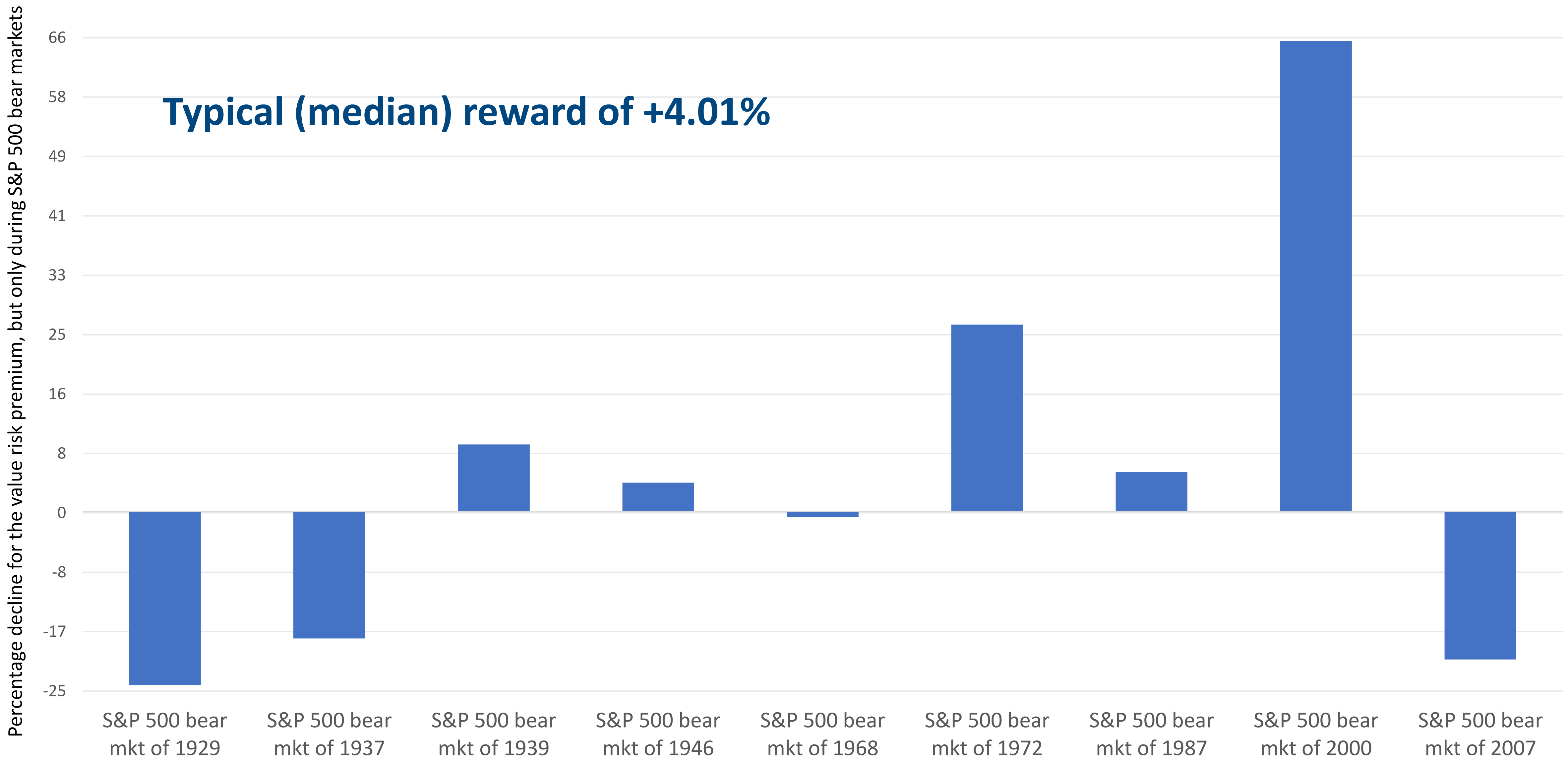


Some diversification benefit

NO, remarkably inconsistent

Diversification benefits are remarkably inconsistent

Value risk premium is random (noisy) during S&P 500 bear markets

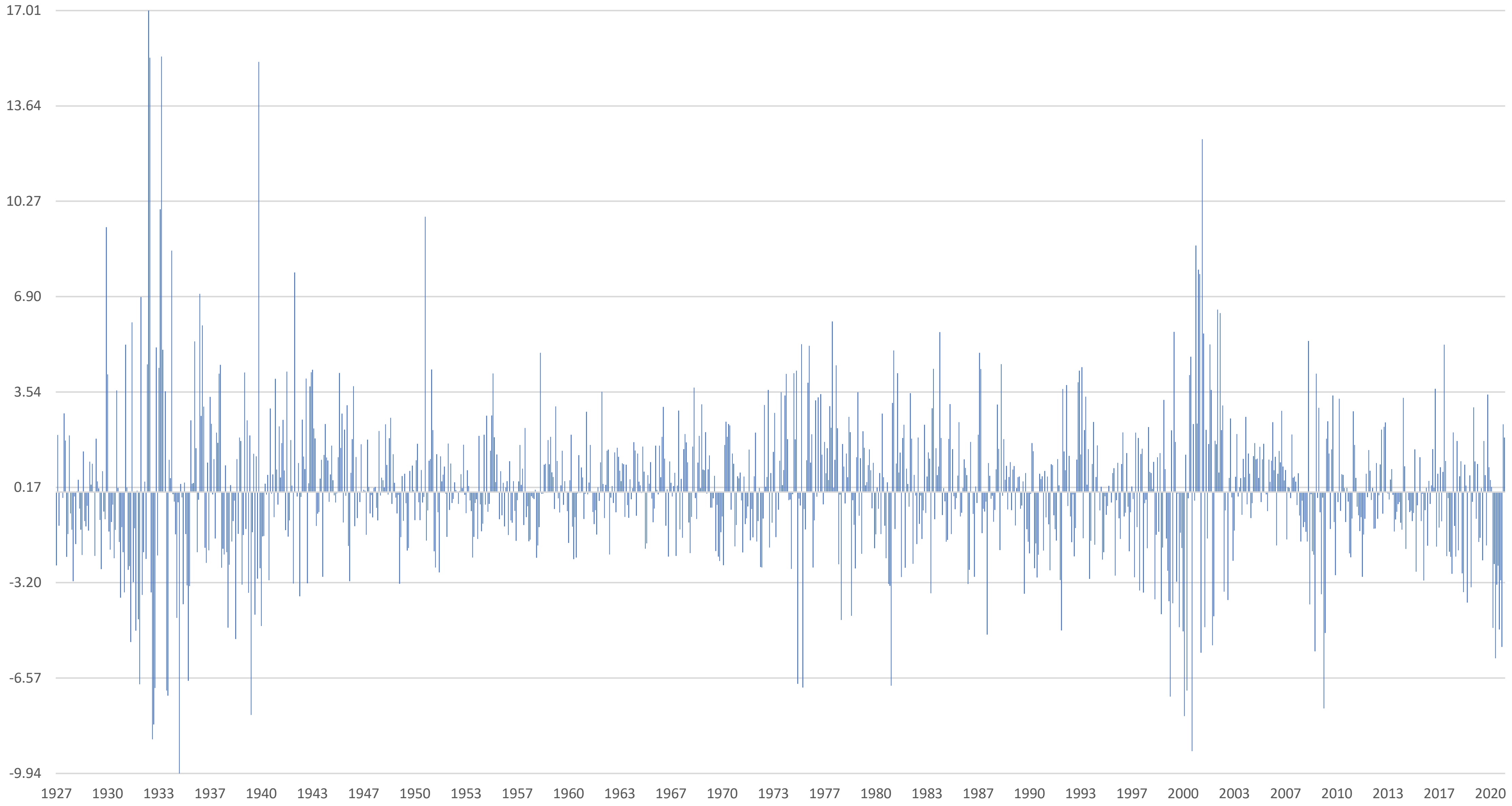


How consistent is the value risk premium?

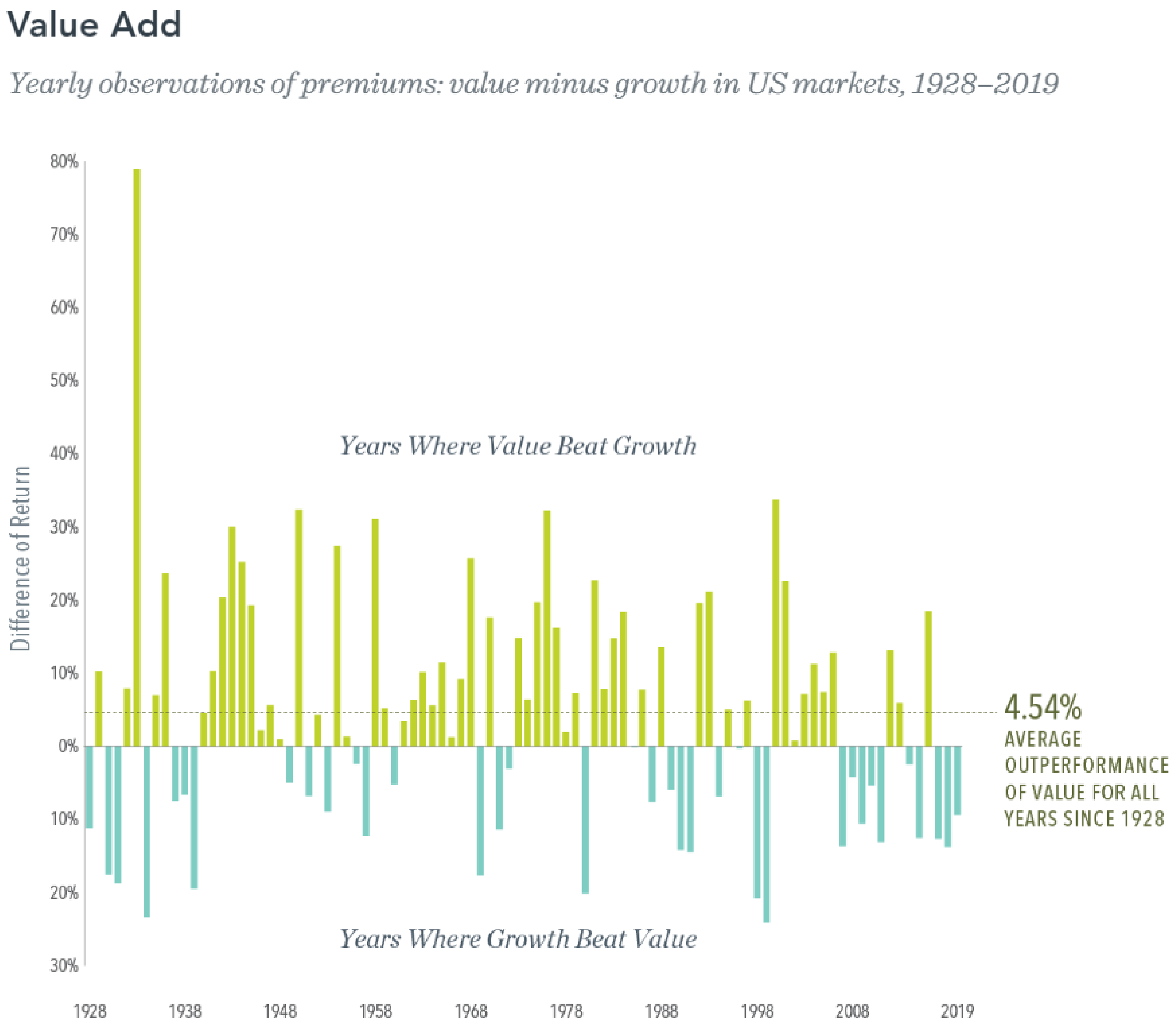
Is it episodic?

Month-by-month value risk premium

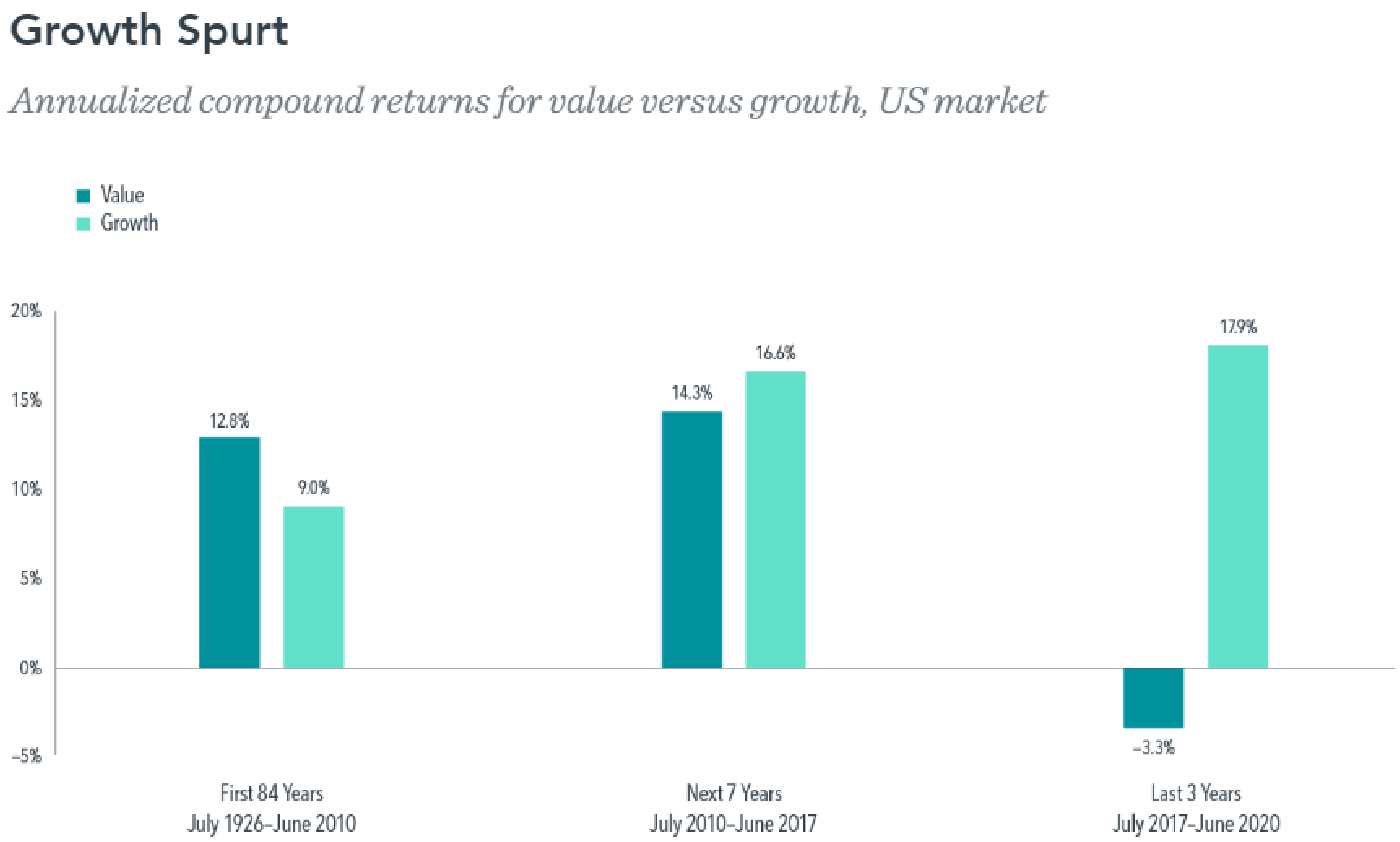
Monthly value risk premium has varied significantly over time



Games played with the data - be careful what you believe



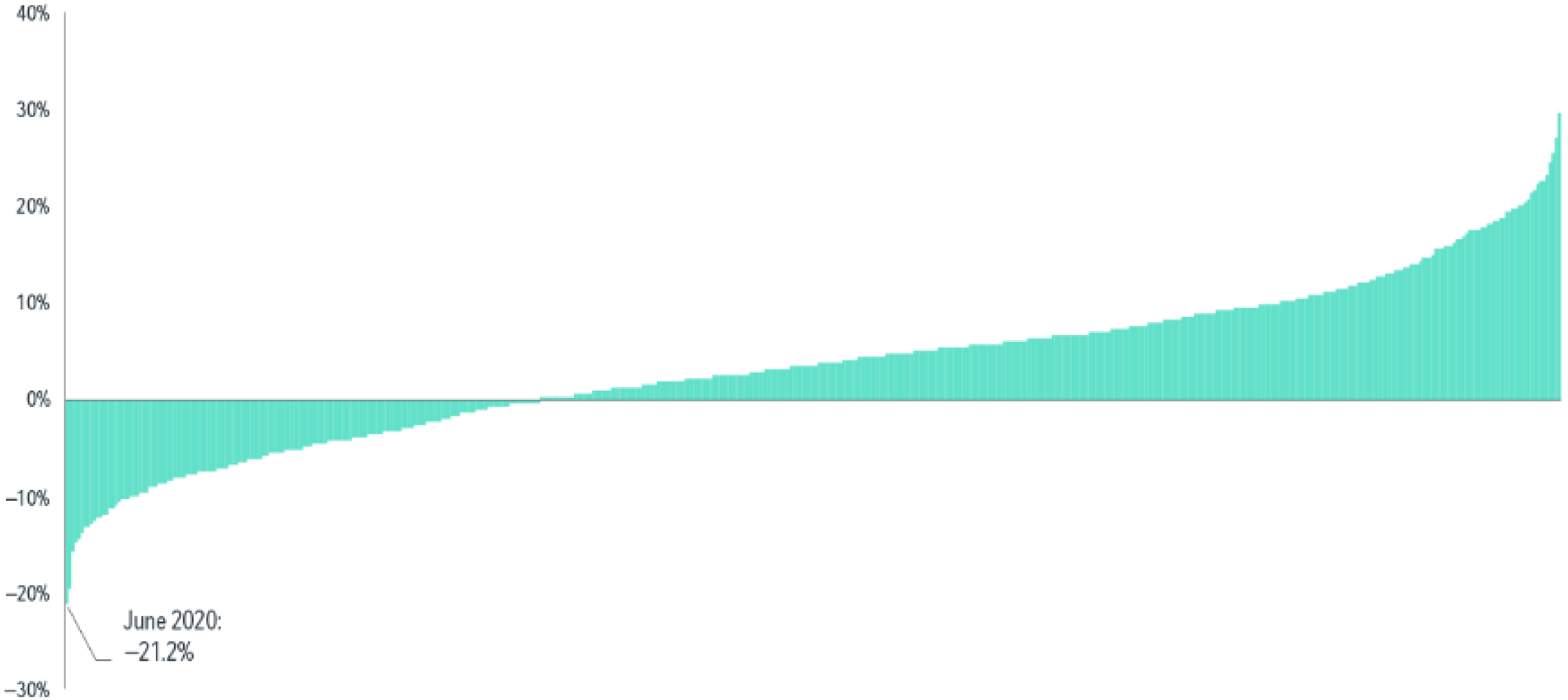
Games played with the data, continued



Games played with the data - more games

Back of the Pack

Rolling 3-year annualized return differences for value versus growth, US market, June 1929–June 2020



Games played with the data - a last game

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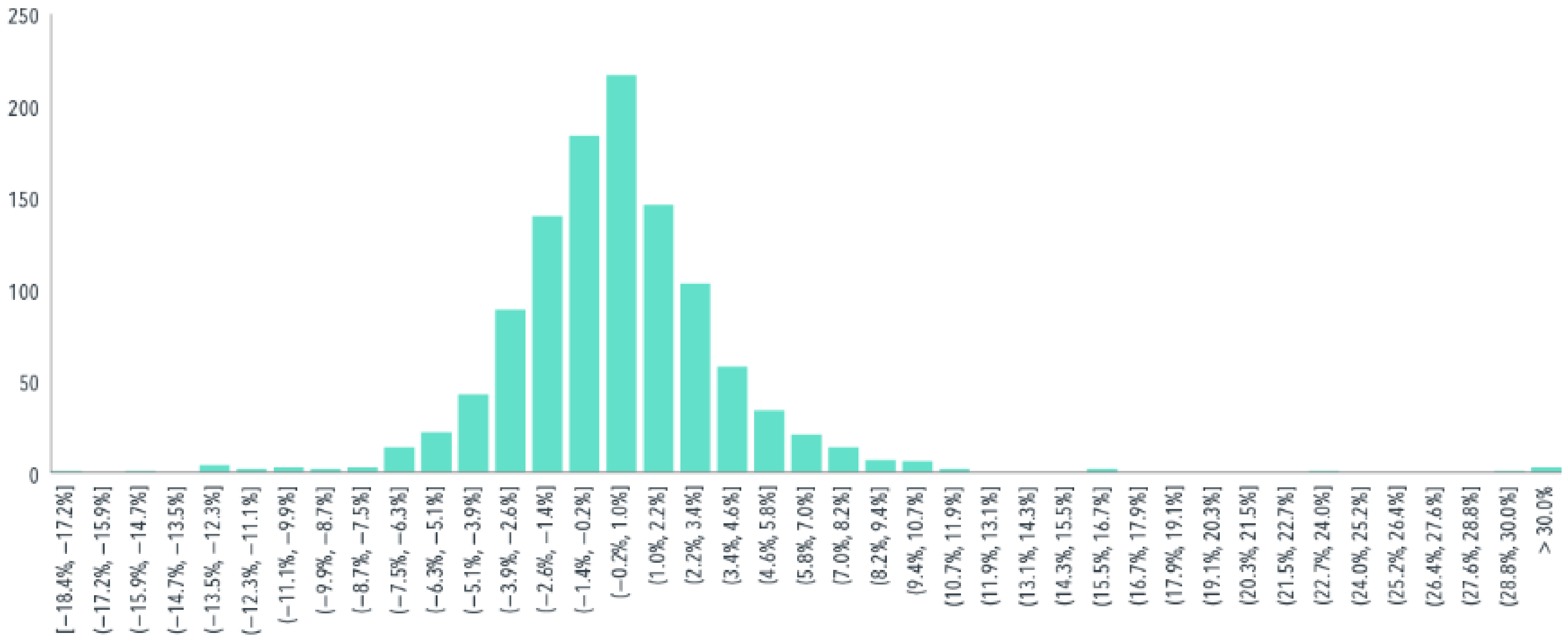
Monthly Statement

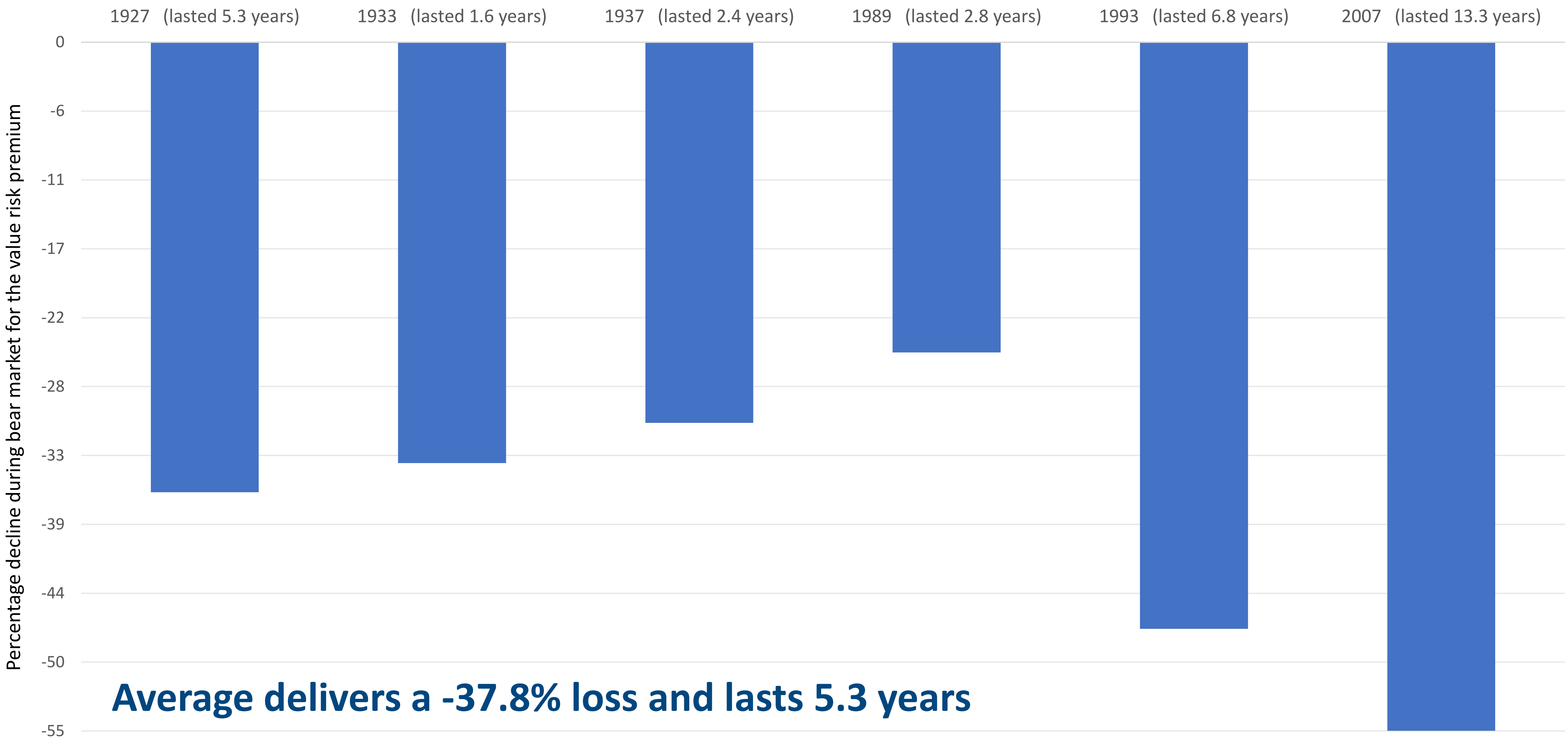
Distribution of monthly return differences for value versus growth, US market, July 31, 1926–June 30, 2020



The real story

The value risk premium is remarkably episodic

Bear markets for the value risk premium have been both severe and long-lasting



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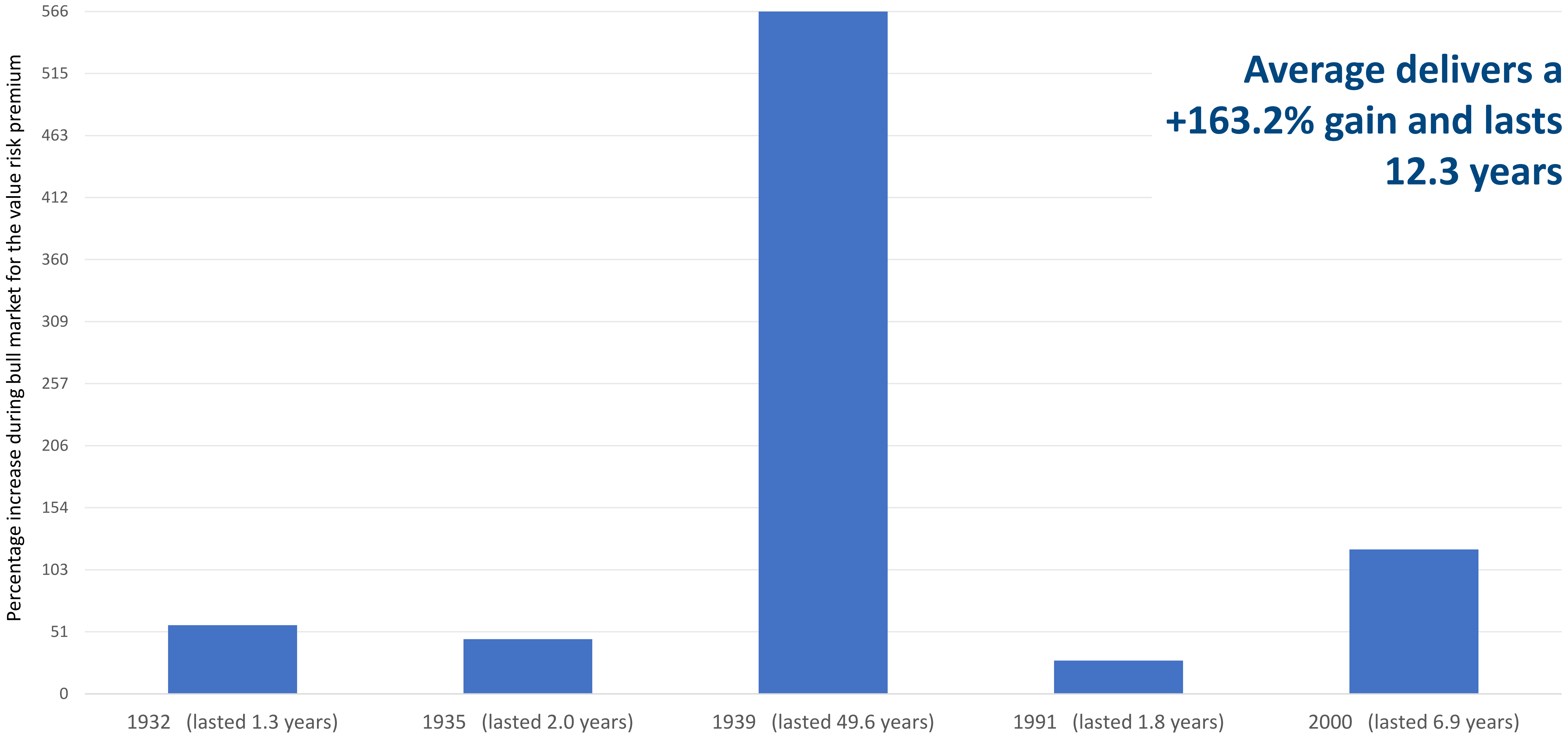
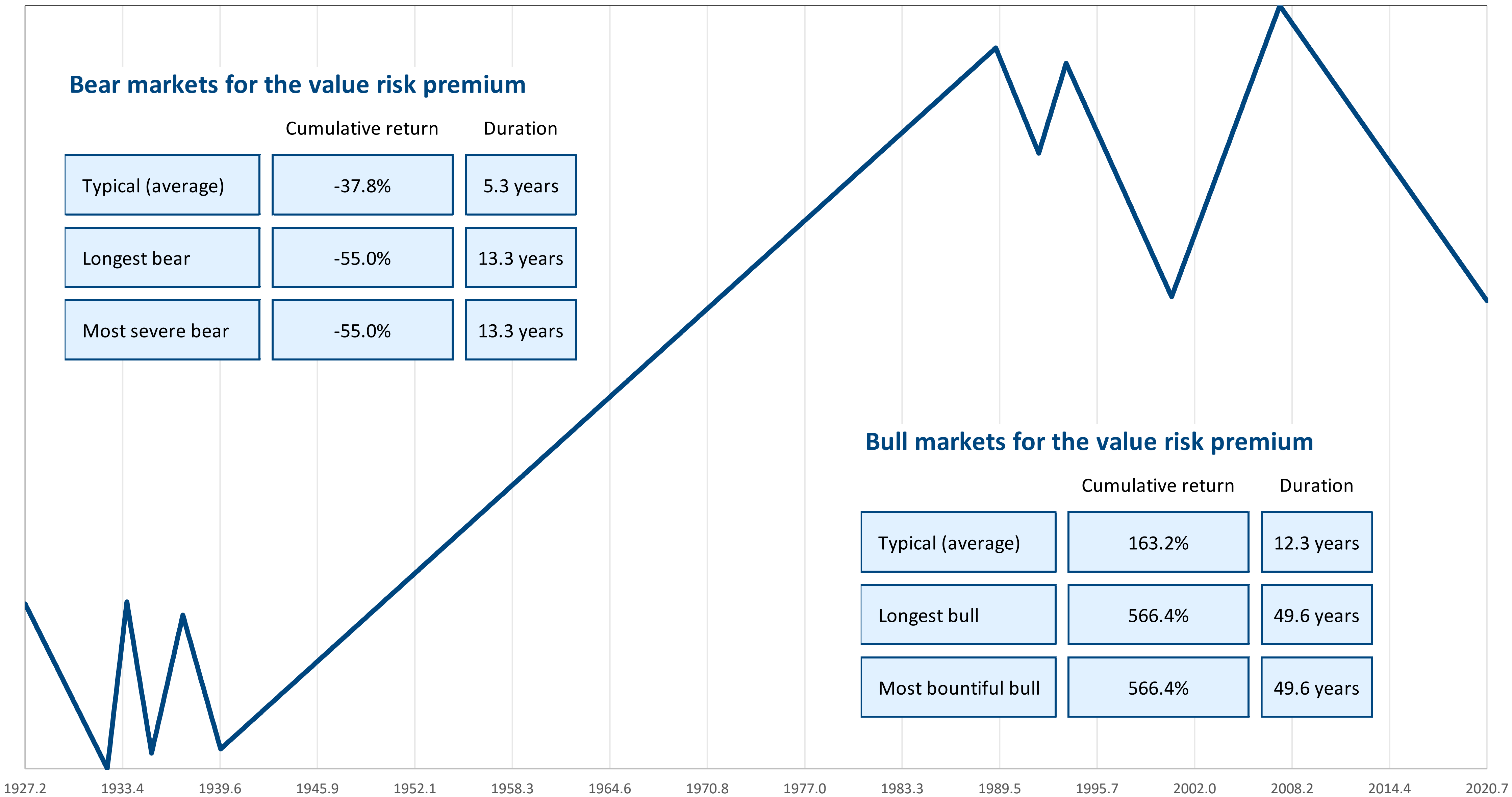
Bull markets for the value risk premium have been both bountiful and long-lasting



Episodic nature of the value risk premium

History of bear & bull markets for the value risk premium since 1926



Bear markets for the value risk premium

	Cumulative return	Duration
Typical (average)	-37.8%	5.3 years
Longest bear	-55.0%	13.3 years
Most severe bear	-55.0%	13.3 years

Bull markets for the value risk premium

	Cumulative return	Duration
Typical (average)	163.2%	12.3 years
Longest bull	566.4%	49.6 years
Most bountiful bull	566.4%	49.6 years

Episodic nature of the value risk premium, continued

Bear markets for the value risk premium

	Cumulative return	Duration
Typical (average)	-37.8%	5.3 years
Longest bear	-55.0%	13.3 years
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Bull markets for the value risk premium

	Cumulative return	Duration
Typical (average)	163.2%	12.3 years
Longest bull	566.4%	49.6 years
Most bountiful bull	566.4%	49.6 years

But, why now

Reason 1 - Ten largest companies

81% of the ten largest S&P 500 names are technology (by weight)

Apple	**Tesla**
Microsoft	**Berkshire Hathaway**
Amazon	**JP Morgan**
Alphabet	**Johnson & Johnson**
Facebook	**Visa**

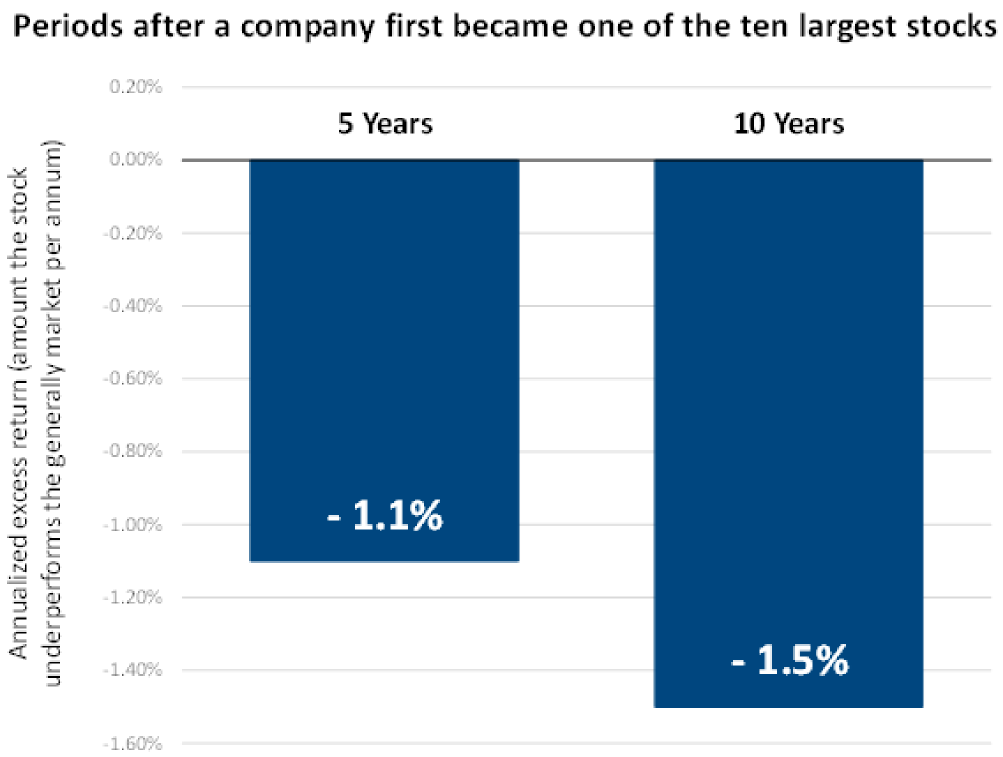
What happens to those ten largest names going forward

Excluding the largest companies on a global basis

Just leaving out the single largest company has historically added **+0.22%** per year[7] over and above the relevant index fund. If instead, one excluded the ten largest companies, the resulting portfolio outperformed by **+0.46%** per year[7]. In contrast, if one excluded the single largest company in each country, the resulting portfolio outperformed the comparable index fund by **+0.35%** per year[7].

Just here in the U.S.

In the U.S., once a company becomes one of the ten largest, its future performance underperforms by a wide margin[8].



But, why now

Reason 2 - Tech is in a bubble

Munger - It's just like the Great Tech Wreck of 2000

"It Must End Badly" - Munger Says Market Resembles Dot Com Bubble, Calls SPACs "Shit"

BY TYLER DURDEN

WEDNESDAY, FEB 24, 2021 - 03:29 PM

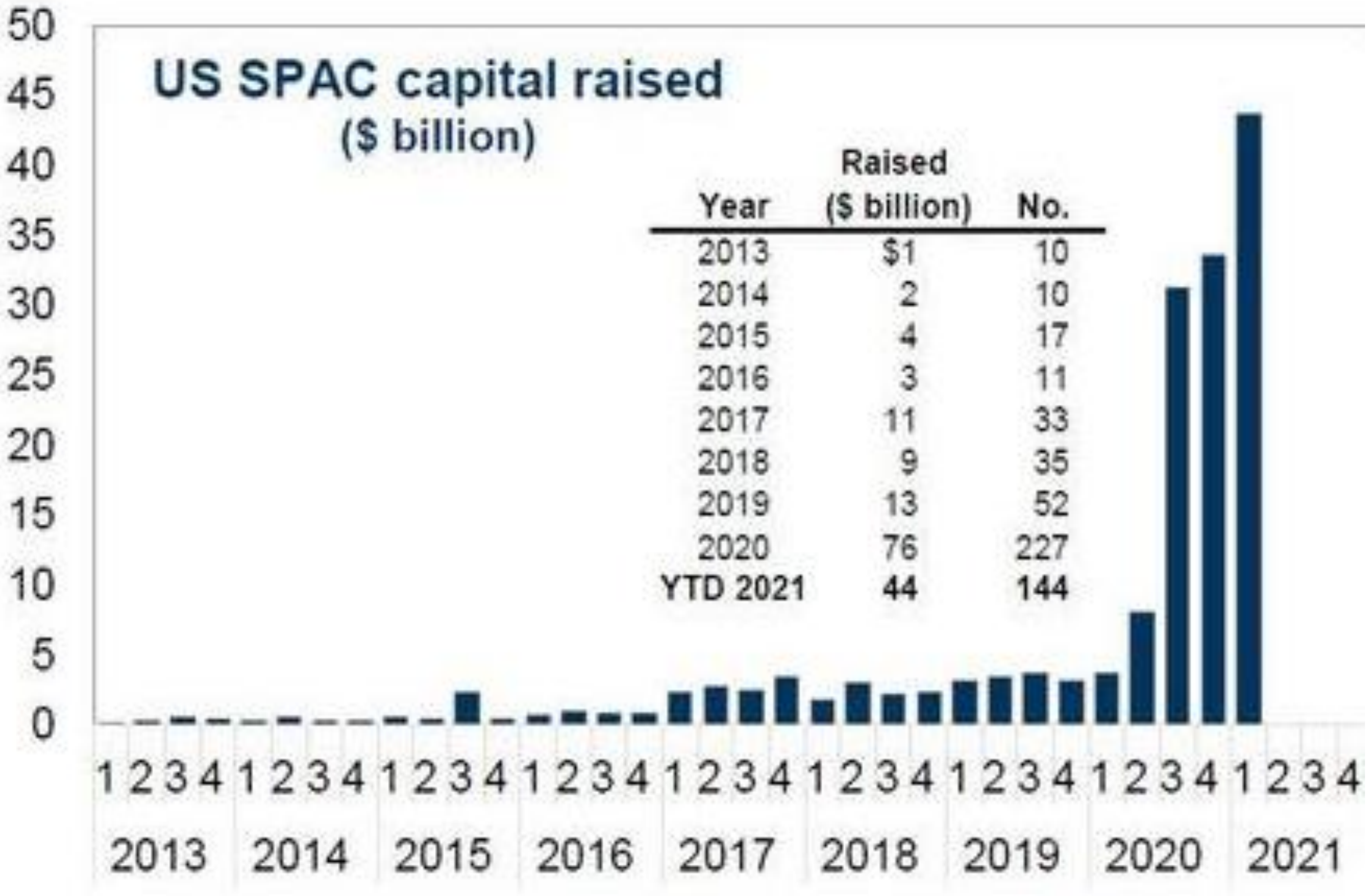
Warren Buffett's "No. 2" spoke during the annual meeting of the Daily Journal Corporation, the Los Angeles newspaper-publishing company chaired by Munger. The 97-year-old Charlie Munger is best known for his work as Vice Chairman of Berkshire Hathaway, where he has served as Buffett's right hand man for decades. And like Buffett, Munger has a soft spot for newspapers and legacy media companies, and thus took time out of his (busy?) week to answer questions from Daily Journal shareholders in a meeting broadcast live online (watch recording below).

Munger, Vice Chairman of Berkshire

SPACS started out red hot

SPACS have only gotten worse

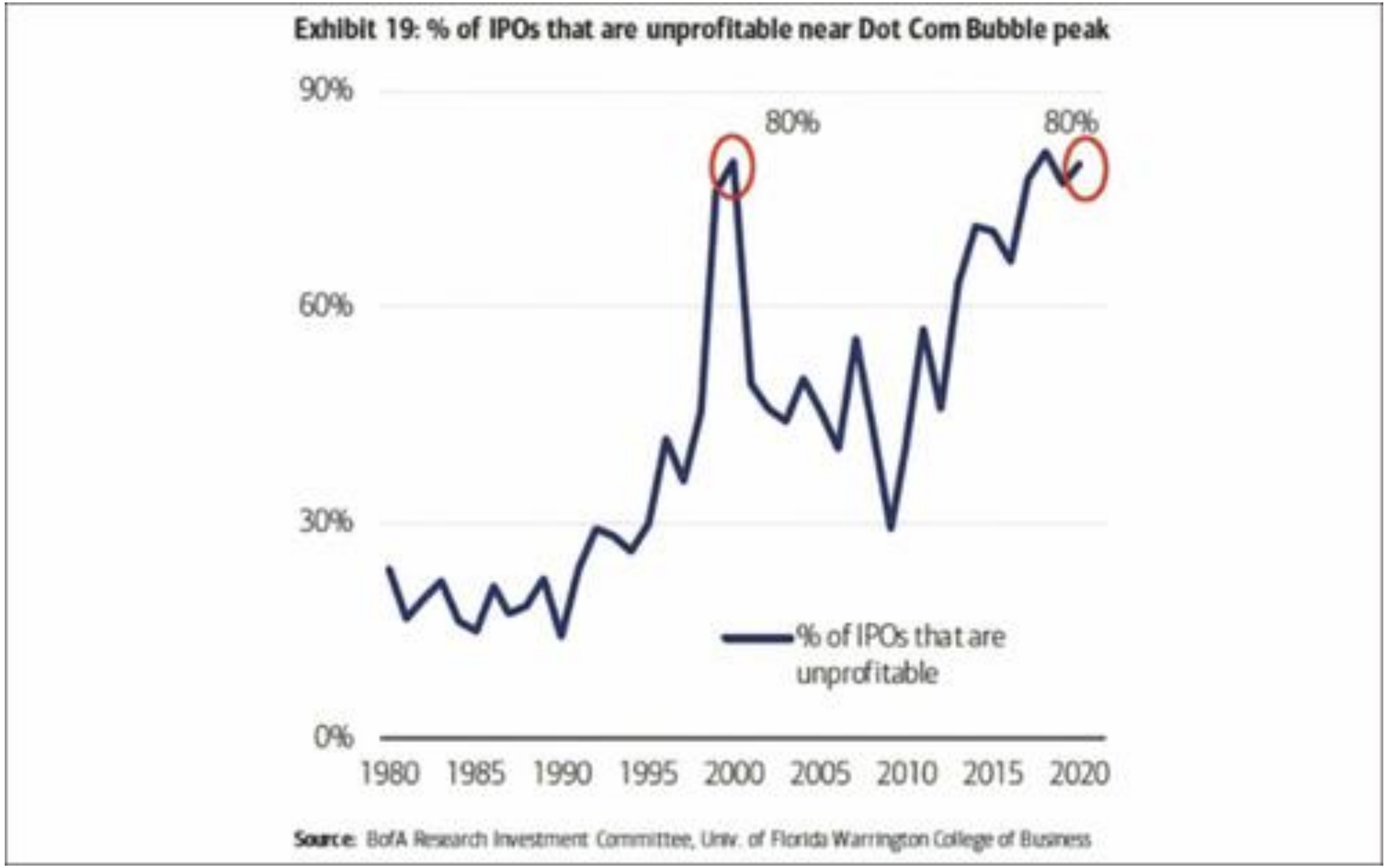
Exhibit 5: The SPAC boom has continued in early 2021
as of February 18, 2021



Year	Raised ($ billion)	No.
2013	$1	10
2014	2	10
2015	4	17
2016	3	11
2017	11	33
2018	9	35
2019	13	52
2020	76	227
YTD 2021	**44**	**144**

Source: Dealogic, Goldman Sachs Global Investment Research

IPOs of unprofitable innovation and technology companies



The problem with technology-we've seen it before

This undiversifying happens over a very extended period of time and, because of that, this phenomenon hasn't been studied – but in our case, that time is now. **The S&P 500 is now a concentrated portfolio, and has undone the logic of its original purpose and is not diversified at all.** The top five companies, out of 500 constituents, now account for 21% of the index.

Industry sector overweighting and excessive dominance

- Periodically a problem

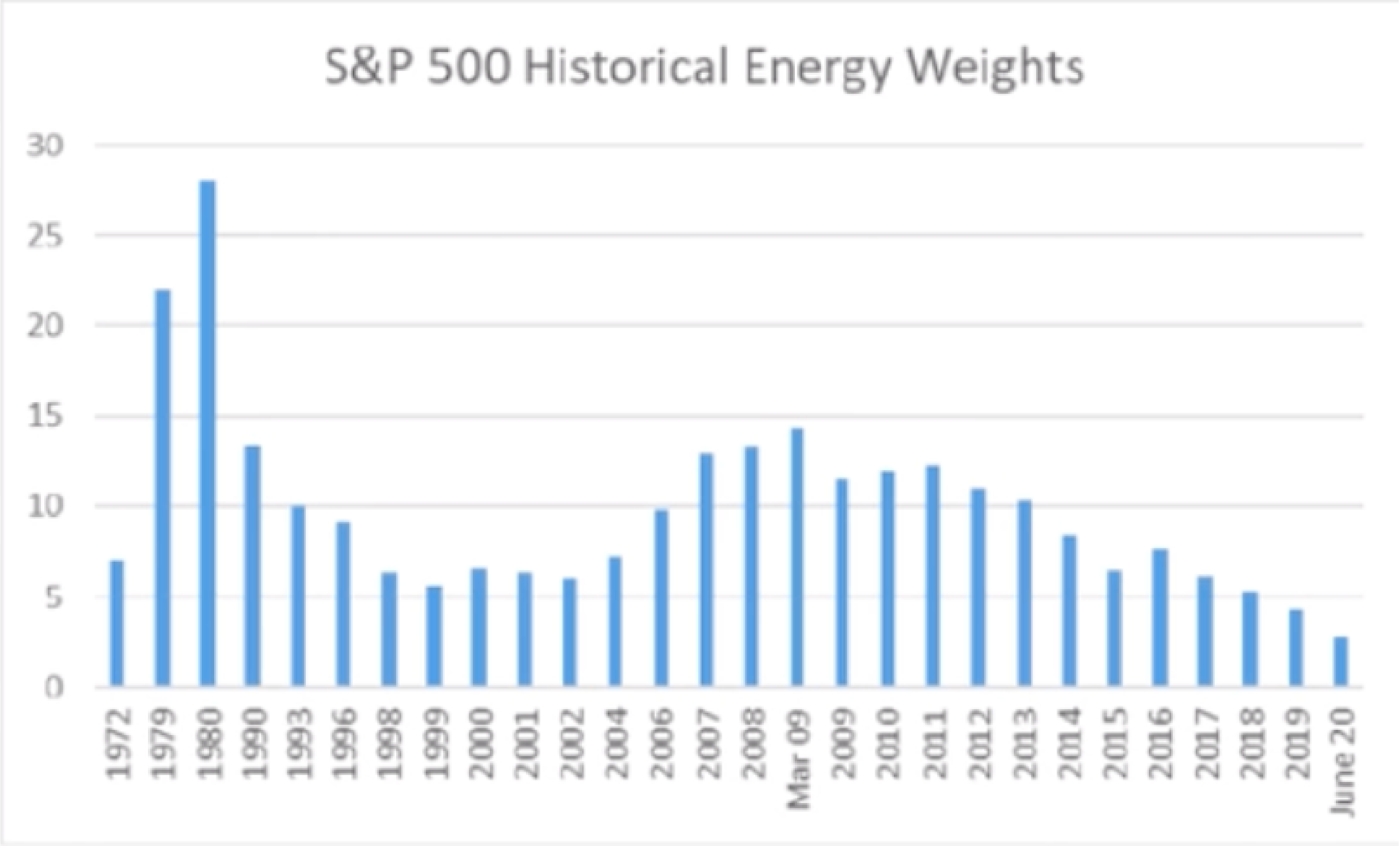
- Today . . . It is a serious problem with Technology
- Previously . . . It was a serious problem with Financials . . . back in Oct 2007

- Before that . . . It was a genuine problem with Energy . . . back in Nov 1980
  - 28.5% back in 1980
  - 2.5% today

Again, believe it or not, energy companies comprised seven of the top 10 market capitalization equities at the end of 1980.

The energy over- and underweights

Thus, an S&P 500 Index investor would have been very top-heavy in energy in 1980, with this weighting slowly coming down over time.



(Source: S&P Global, Bloomberg, Horizon Kinetic)

S&P imbalance and imprudence

INVEST AHEAD

The S&P 500 is really the S&P 5. Big tech dominates the index

By Paul R. La Monica, CNN Business

Updated 6:58 AM ET, Tue February 11, 2020

Technology is extremely overweight

- Today, “technology” comprises 38.1% 0f the S&P 500 Index

- This is after adjustment for three companies, that got reallocated to other industries by S&P
  - Amazon (AMZN), which has a 4.9% index weight, is classified as a *"consumer discretionary"*
  - Alphabet (GOOGL) (GOOG), which has a 3.4% combined index weight, is classified as a *"communication services"*
  - Facebook (FB), which has a 2.3% weighting, is classified as a *"communication services"*

In summary, if you add the market capitalization weightings of Amazon, Alphabet, and Facebook to the information technology sector, **the technology sector weighting balloons to roughly 38%, dwarfing even its late 1999/early 2000 weighting**. In this environment, where these leading technology stocks are historically overpriced, as I recently showed with my

And Apple is one of the “cheap” technology stocks

previous set of published articles that shows how lofty the valuation multiples are on Apple shares.

Valuation

Calendar	2013	2014	2015	2016	2017	2018	2019	Current	5-Yr	Index
Price/Sales	3.06	3.70	2.61	2.95	3.88	2.97	5.25	8.10	3.67	2.33
Price/Earnings	4.11	17.11	11.42	13.94	18.37	13.24	24.70	37.91	16.94	24.75
Price/Cash Flow	9.74	11.32	7.50	9.68	13.97	10.19	19.67	27.71	12.75	14.32
Price/Book	4.05	5.77	4.89	4.75	6.42	6.96	14.23	29.58	7.91	3.36
Price/Forward Earnings	2.50	14.08	10.56	12.90	14.90	12.08	22.17	31.85	15.71	—
PEG Ratio	1.48	1.23	1.06	2.06	1.40	1.25	2.03	2.54	1.65	—
Earnings Yield %	7.09	5.84	8.76	7.17	5.44	7.55	4.05	2.64	6.29	—
Enterprise Value (Bil)	7.15	653.34	606.47	628.84	902.38	794.26	1,295.13	2,157.69	887.81	—
Enterprise Value/EBIT	9.49	12.13	8.28	10.01	13.59	10.43	18.69	30.23	12.86	—
Enterprise Value/EBITDA	8.36	10.57	7.18	8.58	11.79	9.12	15.82	26.03	11.08	—

Salesforce is more representative of today's technology stocks

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Salesforce.com is in the same position, with its absolute and relative valuation ratios off the proverbial charts.

Valuation

Calendar	2013	2014	2015	2016	2017	2018	2019	Current	5-Yr	Index
Price/Sales	8.67	7.21	8.13	5.97	7.48	8.41	8.39	13.00	8.05	2.33
■ Price/Earnings	—	—	—	236.07	—	147.28	178.73	110.53	315.14	24.75
■ Price/Cash Flow	6.81	32.87	34.50	25.29	31.00	33.64	33.00	59.74	31.75	14.32
— Price/Book	1.30	9.87	10.96	7.01	8.35	7.13	4.33	6.48	8.11	3.36
Price/Forward Earnings	—	769.23	138.89	54.35	58.82	49.51	52.36	91.74	71.82	—
PEG Ratio	4.11	41.30	4.63	1.98	1.96	2.48	2.77	4.61	2.79	—
Earnings Yield %	0.40	-0.88	-0.17	0.42	0.00	0.68	0.56	0.90	0.28	—
Enterprise Value (Bil)	5.03	38.85	52.76	49.01	72.80	105.72	143.83	245.53	90.84	—
Enterprise Value/EBIT	—	—	622.02	380.40	404.16	119.86	116.18	1,687.58	535.99	—
Enterprise Value/EBITDA	7.32	160.84	88.44	68.81	78.63	60.12	48.02	105.20	72.31	—

As a reminder, and I have used this quote in my writing lately, remember what Scott McNealy, the former CEO of Sun Microsystems said about his company trading at a 10x revenue multiple at the peak of the dot-com bubble era.

> At 10 times revenues, to give you a 10-year payback, I have to pay you 100% of revenues for 10 straight years in dividends. That assumes I can get that by my shareholders. That assumes I have zero cost of goods sold, which is very hard for a computer company. That assumes zero expenses, which is really hard with 39,000 employees. That assumes I pay no taxes, which is very hard. And that assumes you pay no taxes on your dividends, which is kind of illegal. And that assumes with zero R&D for the next 10 years, I can maintain the current revenue run rate. Now, having done that, would any of you like to buy my stock at $64? Do you realize how ridiculous those basic assumptions are? You don't need any transparency. You don't need any footnotes. What were you thinking?

A great client-facing article on the problem with indexing

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- Exxon Mobil Exit From Dow Reveals S&P 500 Index Structural Flaws

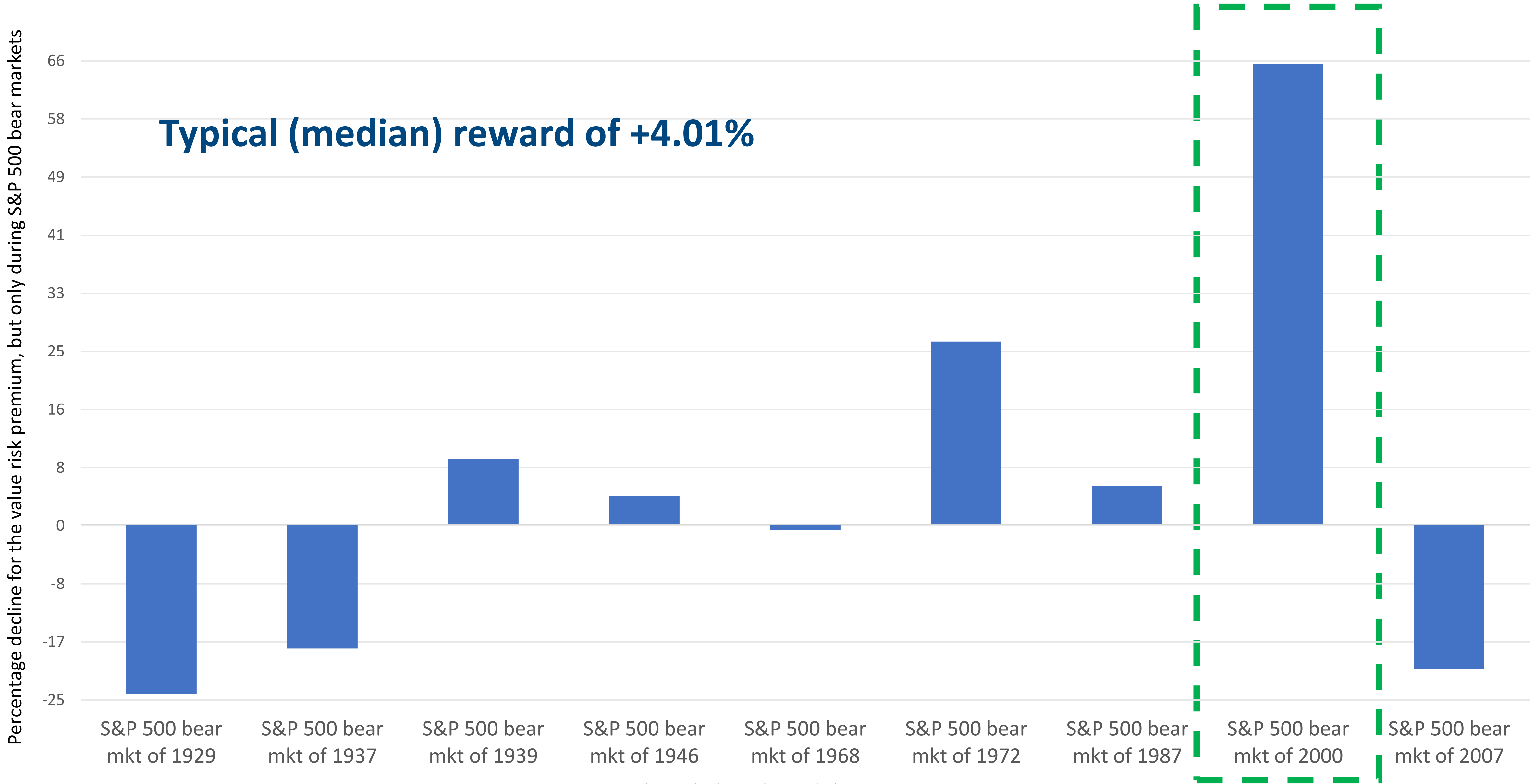
- https://seekingalpha.com/article/4371418-exxon-mobil-exit-from-dow-reveals-s-and-p-500-index-structural-flaws

But, why now

Reason 3 - Value did fantastic during the Great Tech Wreck of 2000

Tech wreck of 2000 and the value risk premium

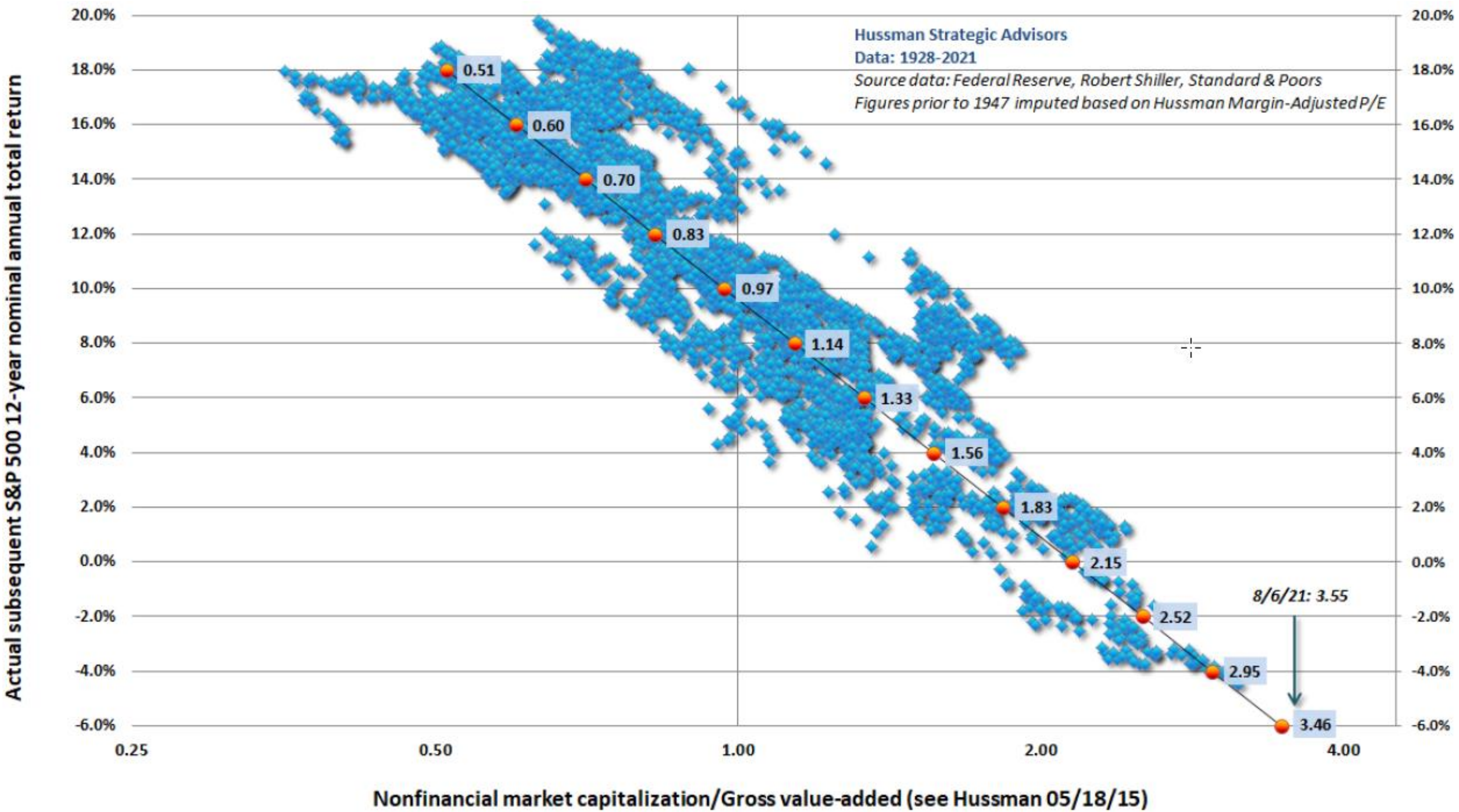
Value risk premium is random (noisy) during S&P 500 bear markets



But, why now

Reason 4 - Perhaps we have a bear market for all stocks coming

Are companies really worth 34% more today, than a year ago?



But, why now

Reason 5 - Tech is about to get hit by domestic and global anti-trust action

Big Tech's 'crossfire hurricane'

Julien Garran
21 January 2021

Introduction

This report argues that Big Tech is now caught in the crossfire between five politically driven threats;

Julien Garran
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Anti-trust action is coming . . . Big and bold

Big Tech Anti-trust

This report maintains that the mainstream media, the sell-side, and investors in general have underestimated the dedication and effectiveness of the 'New Brandeis School' of Anti-Trust, led by Lina Kahn, and the degree to which it has taken over the Democratic agenda on Anti-Trust in Washington. This report argues that the New Brandeis School's agenda is powerful, radical, and likely to make significant progress during Biden's first term. This has the potential to create a major shock to Big Tech investors.

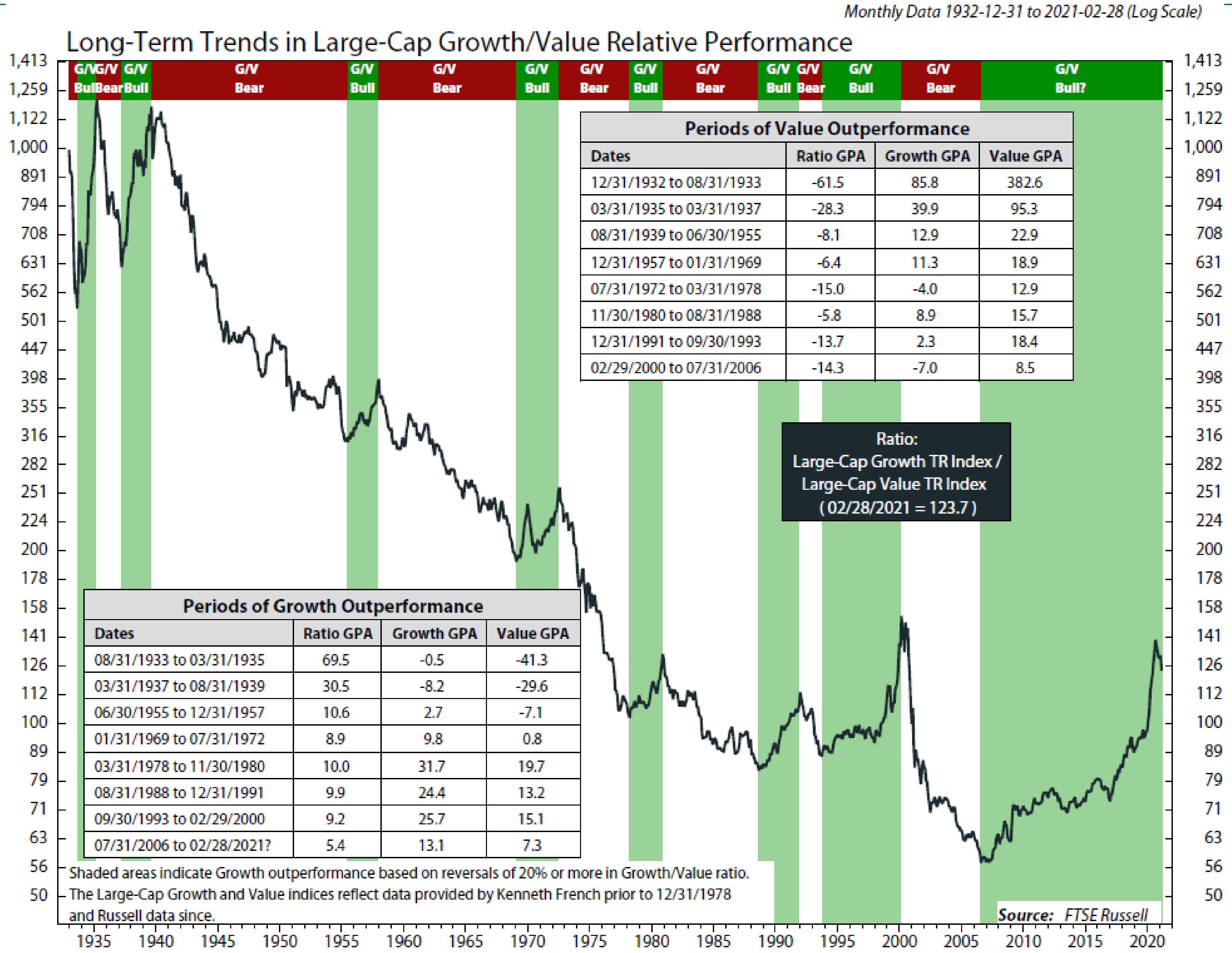
Justice Louis Brandeis & Lina Khan

Source; Google Opensource

But, why now

Reason 6 - The growth cycle is long in the tooth

Trees don't grow to the sky



Periods of Value Outperformance

Dates	Ratio GPA	Growth GPA	Value GPA
12/31/1932 to 08/31/1933	-61.5	85.8	382.6
03/31/1935 to 03/31/1937	-28.3	39.9	95.3
08/31/1939 to 06/30/1955	-8.1	12.9	22.9
12/31/1957 to 01/31/1969	-6.4	11.3	18.9
07/31/1972 to 03/31/1978	-15.0	-4.0	12.9
11/30/1980 to 08/31/1988	-5.8	8.9	15.7
12/31/1991 to 09/30/1993	-13.7	2.3	18.4
02/29/2000 to 07/31/2006	-14.3	-7.0	8.5

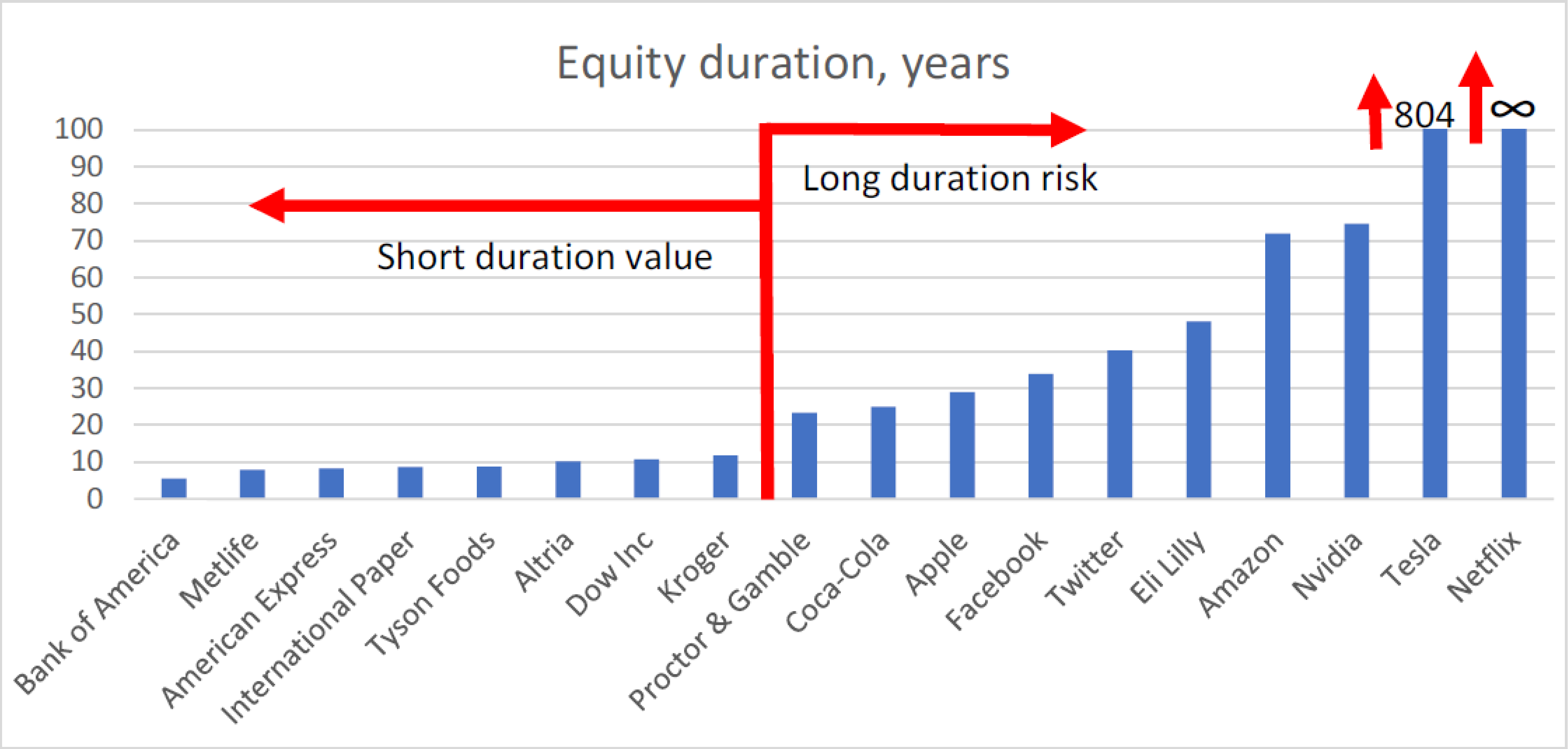
Periods of Growth Outperformance

Dates	Ratio GPA	Growth GPA	Value GPA
08/31/1933 to 03/31/1935	69.5	-0.5	-41.3
03/31/1937 to 08/31/1939	30.5	-8.2	-29.6
06/30/1955 to 12/31/1957	10.6	2.7	-7.1
01/31/1969 to 07/31/1972	8.9	9.8	0.8
03/31/1978 to 11/30/1980	10.0	31.7	19.7
08/31/1988 to 12/31/1991	9.9	24.4	13.2
09/30/1993 to 02/29/2000	9.2	25.7	15.1
07/31/2006 to 02/28/2021?	5.4	13.1	7.3

But, why now

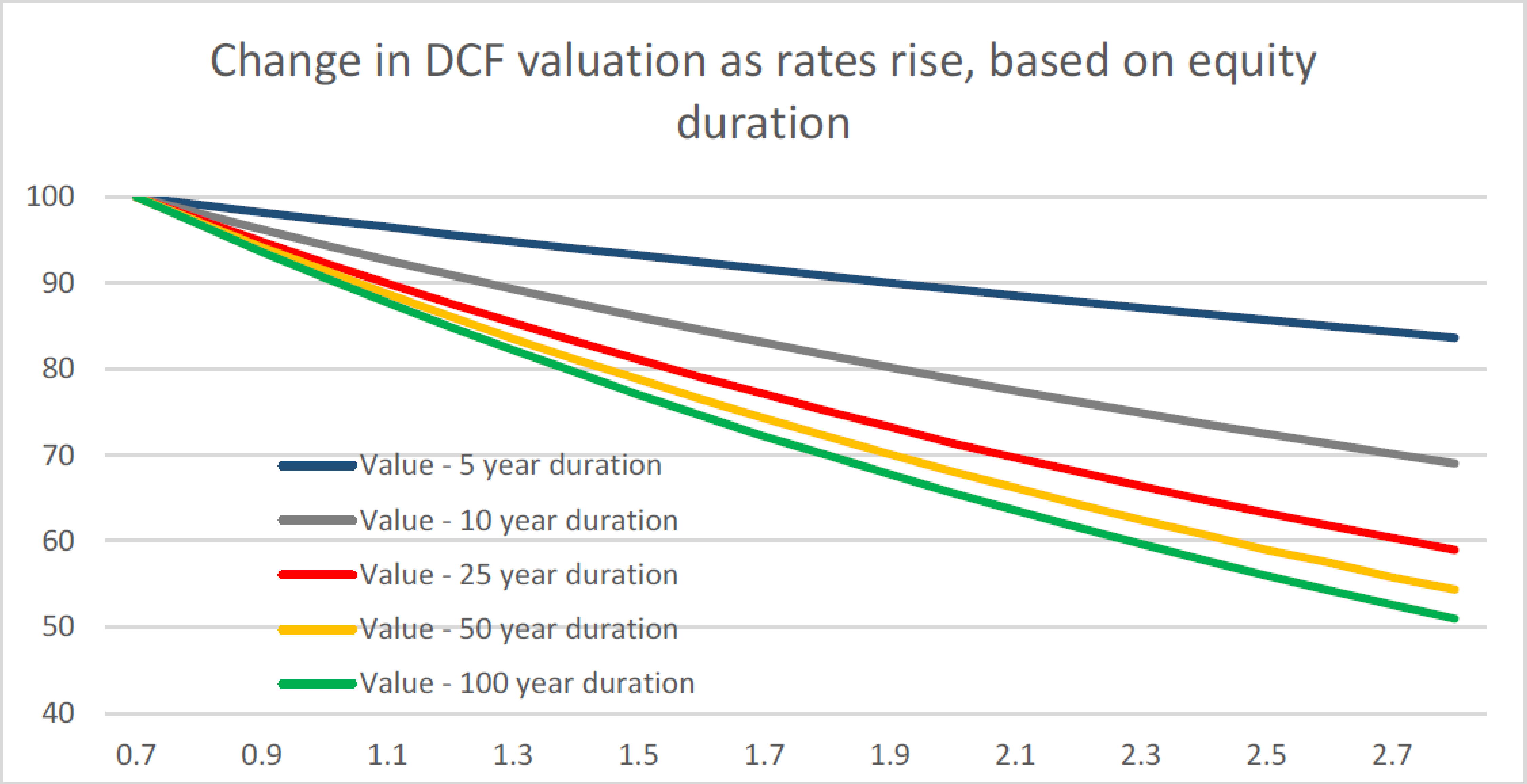
Reason 7 - The problem of rising interest rates

Interest rate duration for stocks



Source; The MacroStrategy Partnership, Factset. Note; these examples do not constitute recommendations.

Impact of stocks prices for different interest rate increases

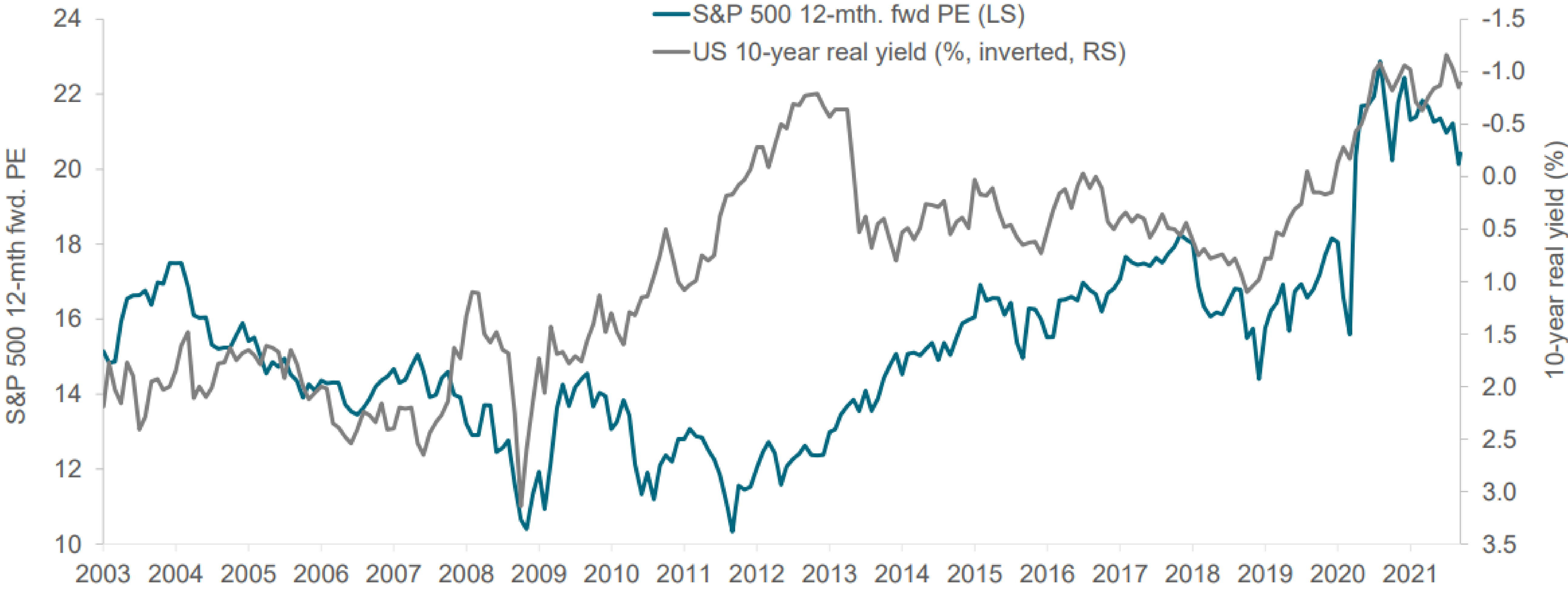


Source; The MacroStrategy Partnership

Consider . . . just how much interest rates will inevitably rise

Higher real yields could send valuations lower

S&P 500 forward PE vs. 10-year real yield (%)



PE: price to earnings ratio. Data as of October 8, 2021. Source: FactSet and Bloomberg

But, why now

Reason 8 - The story of "INNOVATION" is so boring . . . So old hat

Innovation has always been a part of our economy

- **Innovation has been part and parcel of the US and International for over 150 years**

- **Here in the US**
  - Railroads
  - Banks
  - Utilities
  - Energy - oil and coal
  - Autos
  - Chemicals
  - Consumer durables
  - Energy - technology driven recovery techniques (fracking)
  - Biotechnology
  - First wave of the “tech bubble” . . . . ended 2000
  - Second wave of the “tech bubble” . . . . ended 2021

Additional considerations

Observation 1 - Value works across all geographies

Value risk premium across different geographies

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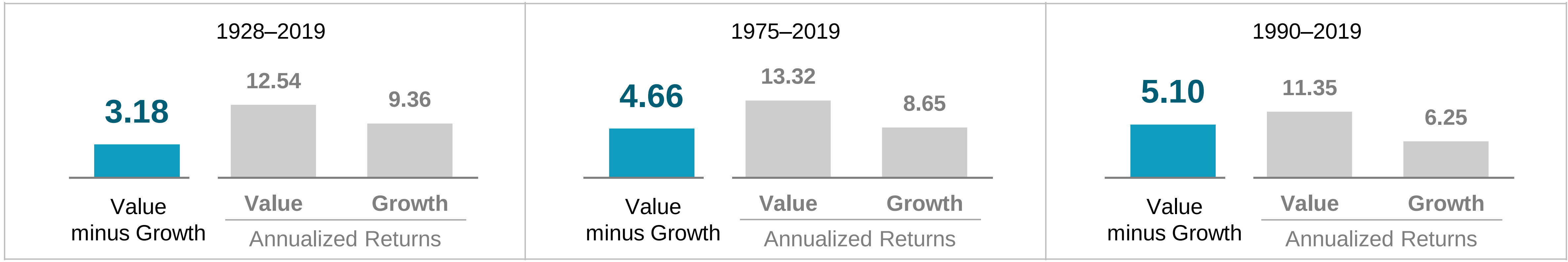
US Stocks

Developed ex US Markets Stocks

Emerging Markets Stocks

Relative Price

Relative performance of value stocks vs. growth stocks (%)

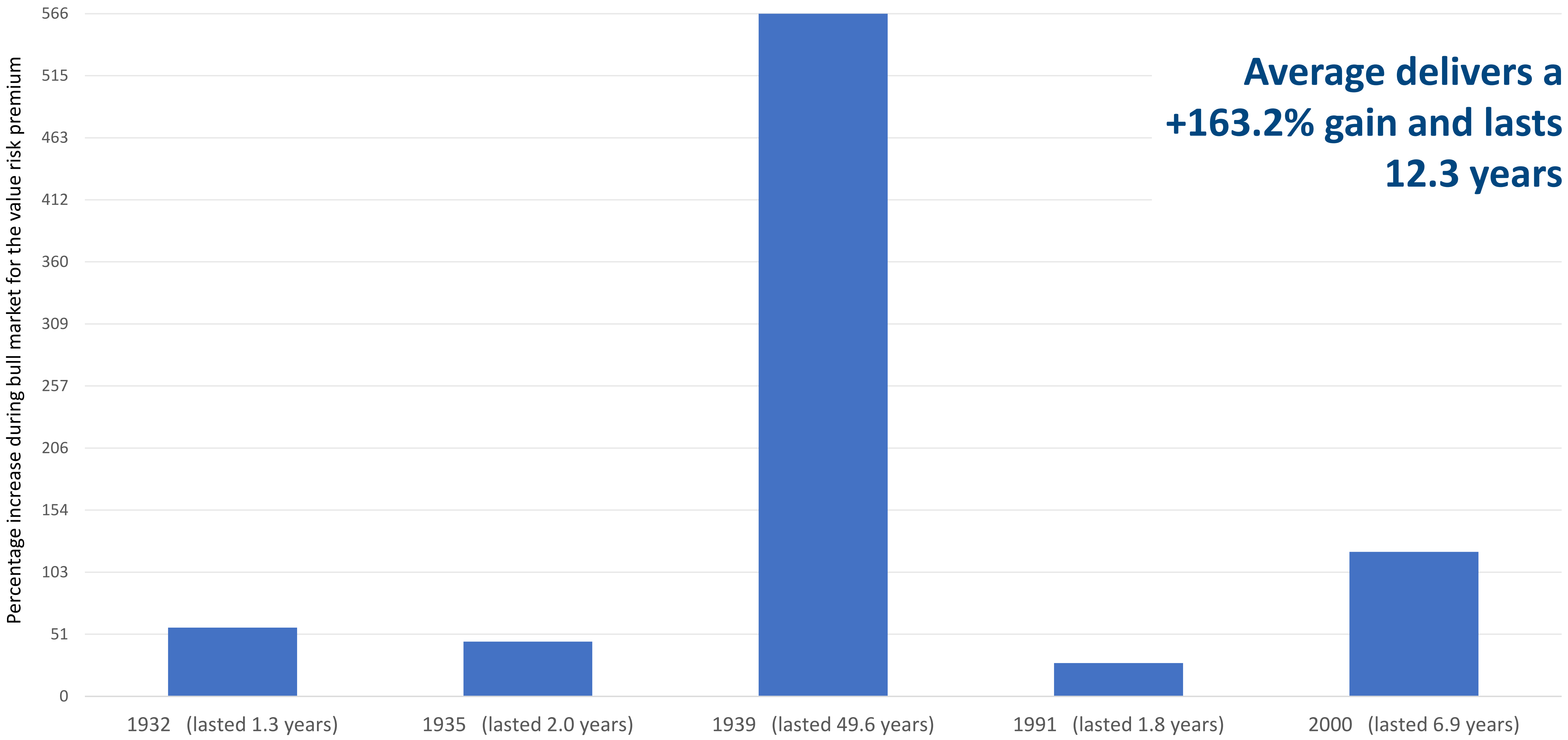


Additional considerations

Observation 2 - The juice is worth the squeeze

The reward is large during value risk premium bull markets

Average bull market delivers an extra +163% return over and above the return on growth



Additional considerations

Observation 3 - Value versus growth during the COVID-cycle

Interesting - a bubble within a bubble

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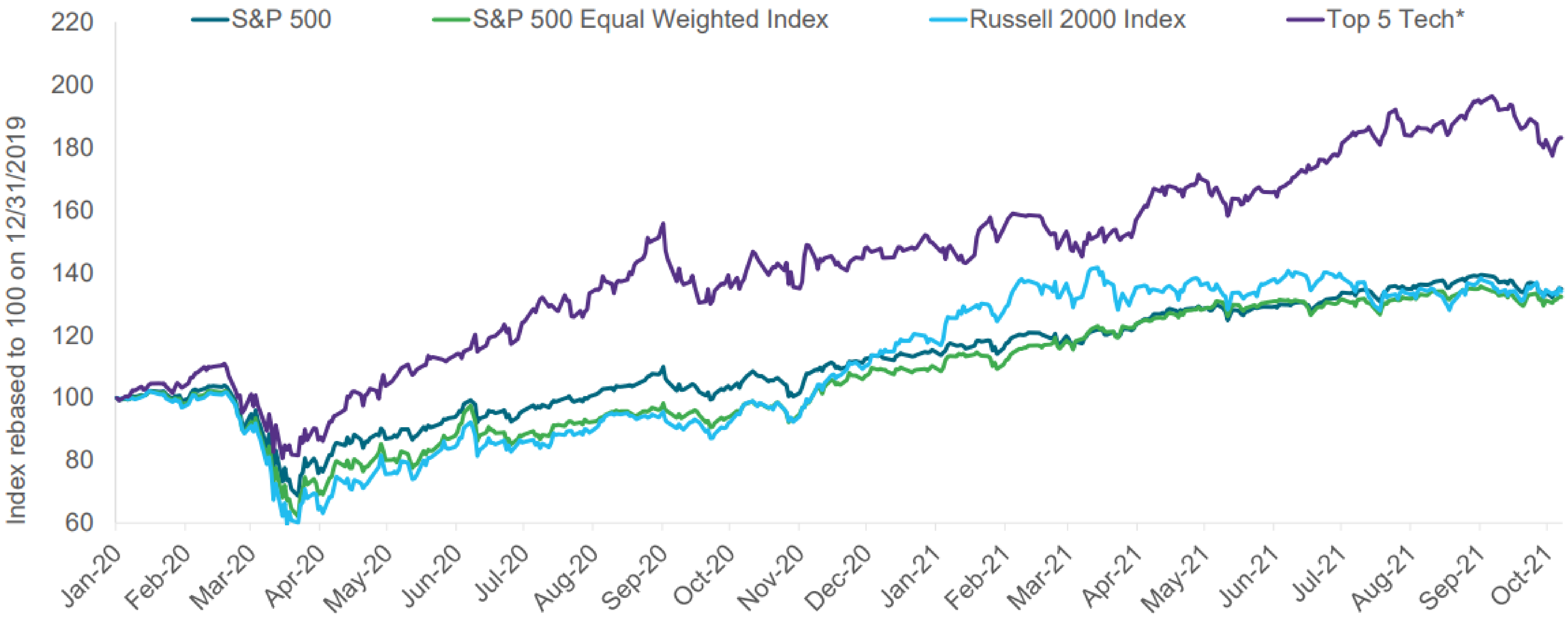
Big Tech's leadership has grown

Top 5 big tech vs. the rest of US equities



*Top 5 Tech: largest 5 stocks by market cap in S&P 500 - Facebook, Google, Amazon, Apple, Microsoft. Equal weighted performance for top 5 tech index. Data as of October 8, 2021. Source: Bloomberg.

Growth dominance during COVID - but this too will pass into history

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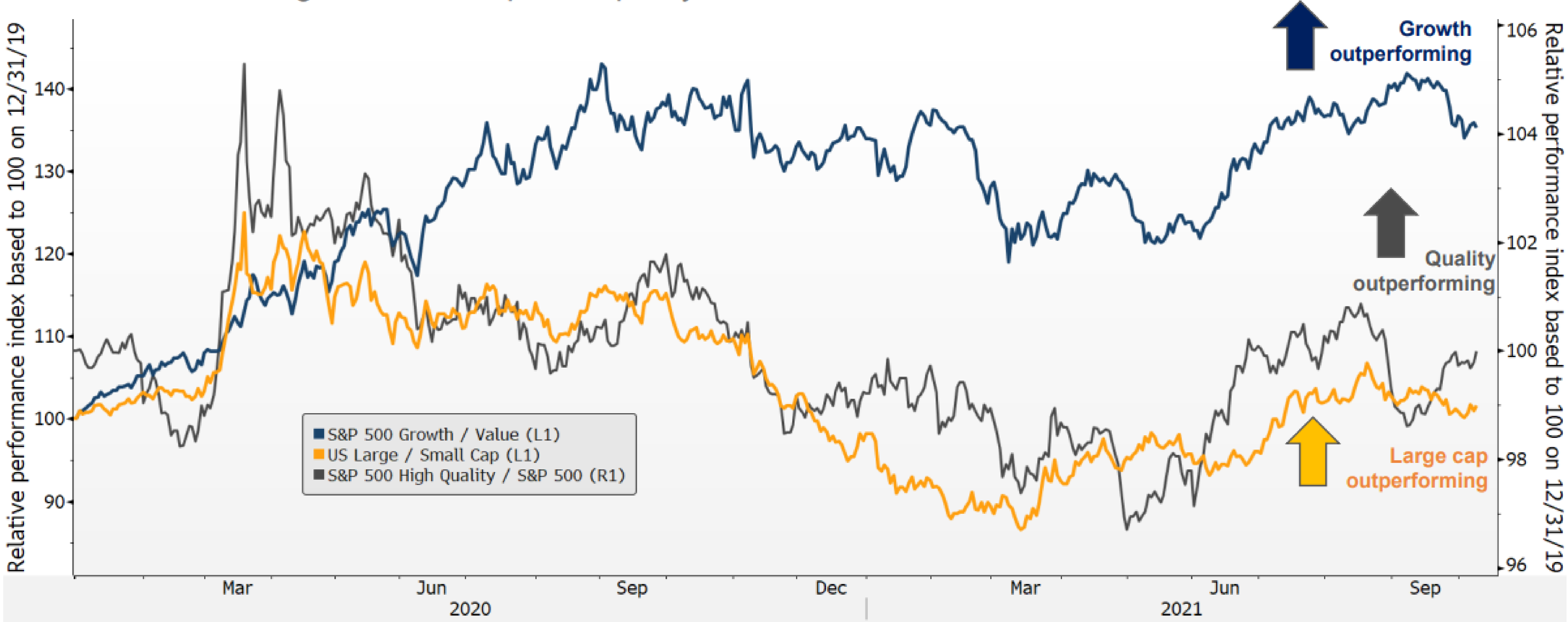
Relative factor performance has been mixed

Growth vs. value, large vs. small cap, and quality vs. S&P 500 since 2020



Data as of October 8, 2021. Source: Bloomberg

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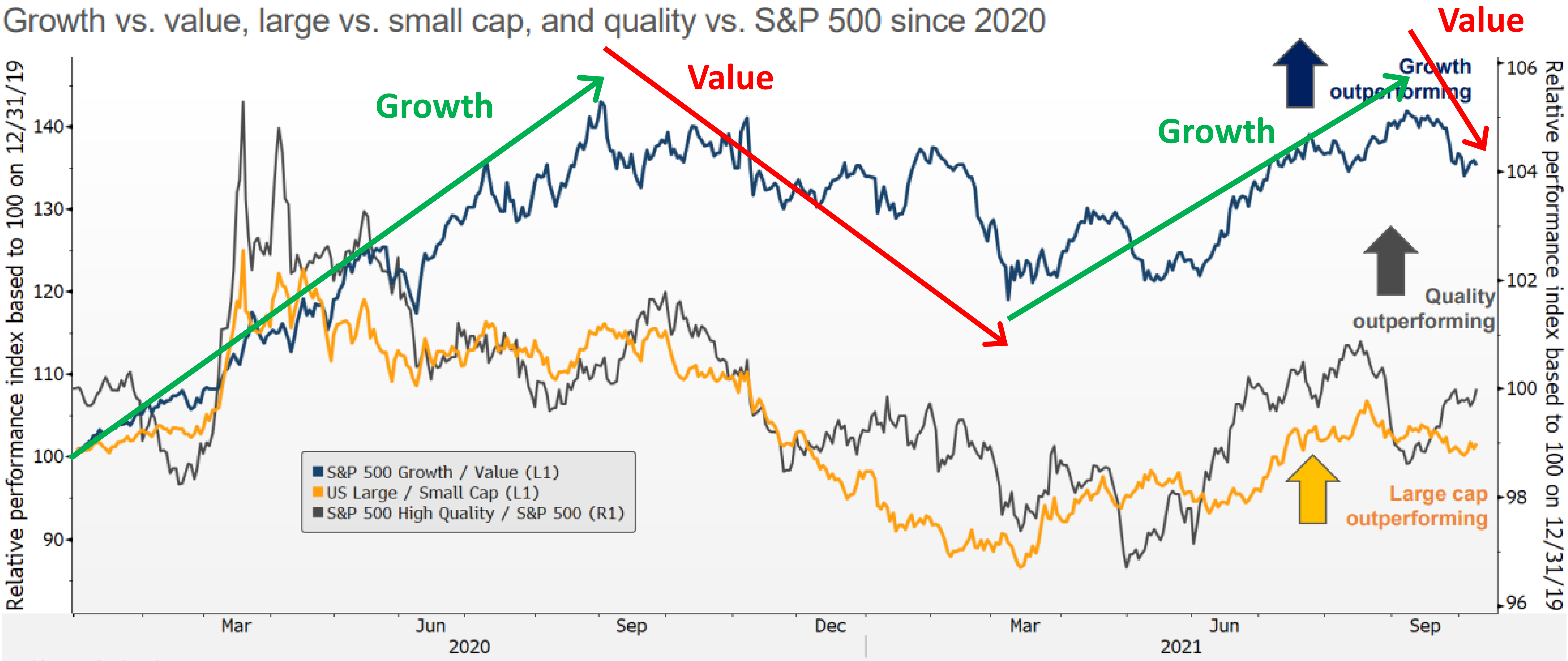

Data as of October 8, 2021. Source: Bloomberg

Additional considerations

Observation 3 - The right way and the wrong way to do value

A better expression of value

- Current income
- Zombie filter
- Sustainability
- Profitability
- Growing income
- Tangibles vs intangibles

A better expression of value

- Current income
- Zombie filter
- Sustainability
- Profitability
- Growing income
- Tangibles vs intangibles

The worst way to do value

- Ticker IWN
- Russell 2000 Value ETF

- It possibly maximizes your exposure to zombies
- And depends too heavily on the myopic P/B to identify value

Value choices at Julex

- High Dividend strategy . . . Individual stocks

- ESG strategy . . . Individual stocks

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