TAA performance - has it diminished over time?

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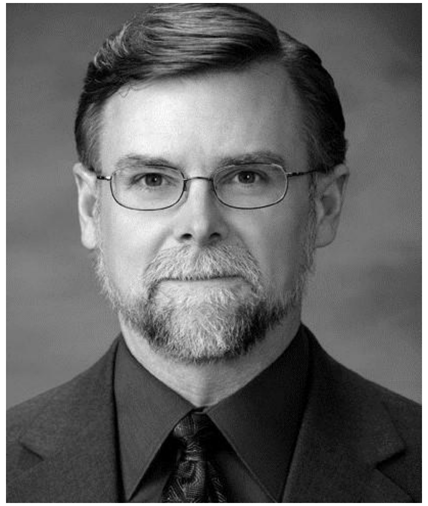

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Tag line

- Stop managing to the last 14 ½ years

- Stop managing to what happened since March 2009

- That period was so incredibly
  - Rare
  - Exceptional
  - Non-representative
  - Never again . . . to be repeated
  - Never before seen
  - Driven by monetary/fiscal policy that would kill the patient is ever again repeated
  - Nitroglycerin works once or twice . . . at best

2nd Tag Line

- Don't manage to the last 14 ½ years . . . Since March 2009

- Similarly
- Don't manage to the falling interest rate environment
- Essentially . . . since Oct 1977
- The last 46 years

But has TAA performance declined over time?

Has it slowly lost its edge and advantage?

TAA portfolio design

Draws from a large diverse universe of asset categories

- 7 slices of U.S. stocks
- 10 international countries
- 5 different maturities of U.S. Treasuries
- 1 TIPS bond
- 1 corporate bond . . . investment grade
- 8 different commodities

- 32 different asset categories

Portfolio construction

- Once each month . . .
- 8 asset categories selected
- Those that trended most strongly over the 11 months just finished

- Weightings
  - Equal weighted
  - <u>However</u> . . . if selected, the following receive modified weights
    - Overweighted (+)
      - Cash . . . 90-day Treasuries
      - TIPS bonds
      - Oil
      - Ultra-diversified commodities
    - Underweighted (-)
      - Precious metals
      - Treasuries (other than 90-day cash)
      - Corporate bonds

Portfolio construction

- Once each month
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    - Underweighted (-)
      - Precious metals
      - Treasuries (other than cash)
      - Corporate bonds

Why the overweighting/underweighting?

This portfolio is ONLY focused on a 7.5-year investment time period

Transactions costs

- Seriously important
- It was assumed significant one-way transaction costs
  - Lowest cost . . . 1 basis point for U.S. Treasury ETFs
  - Highest cost . . . 101 basis points for PALL (palladium ETF)
- These transaction costs . . . were subtracted from all of the performance results shown herein
- However . . . just to set the bar even higher . . . the three comparative passive benchmarks each rebalanced monthly . . . cost free

Consistency

- The portfolio construction rules never change
- Consistent and unvarying across all time

Data and timeframe

Why this is important

Time examined and data sources

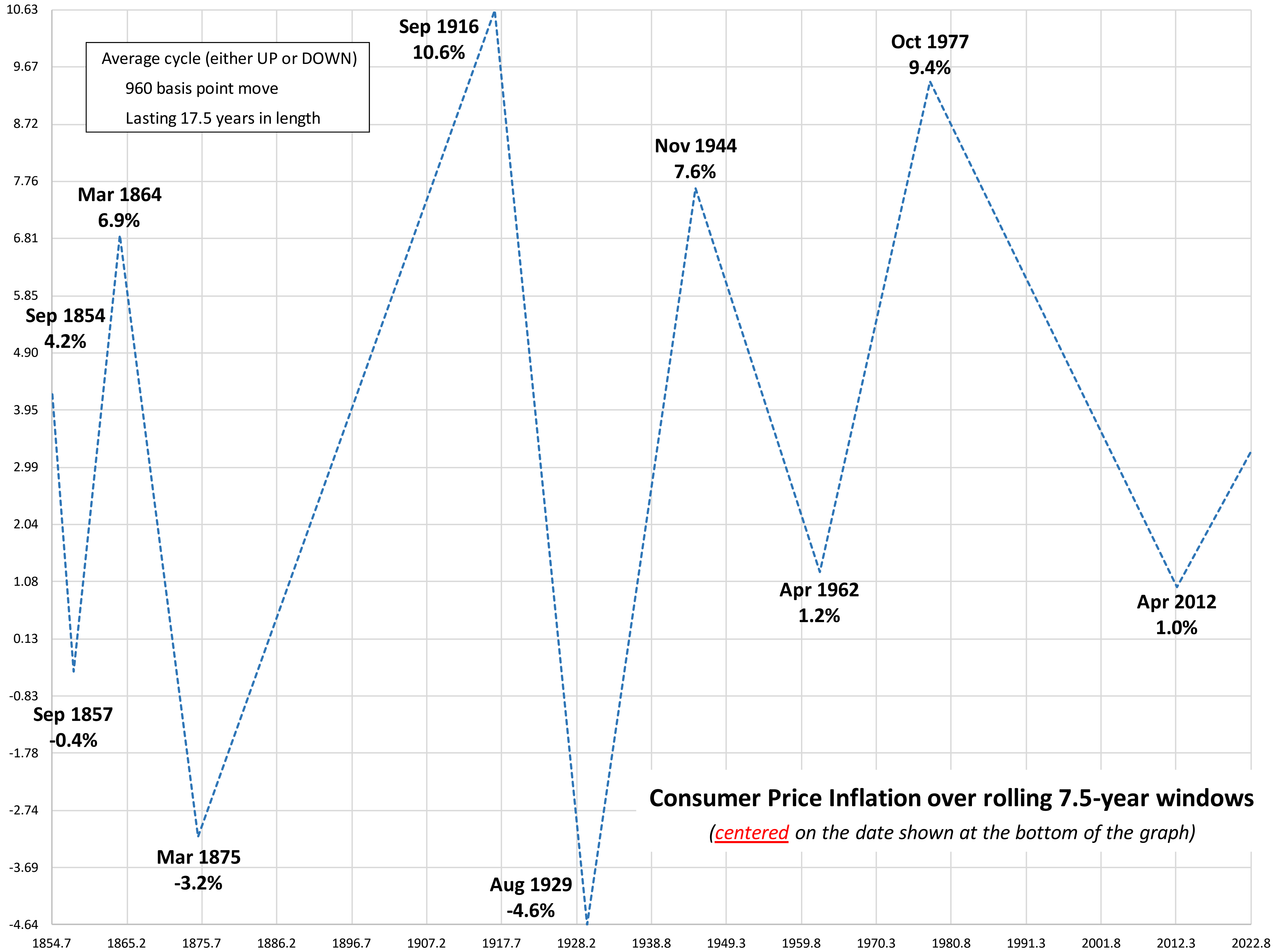
- Time period examined
  - Jan 1919 to the present

- Data sources
  - Global Financial Data, Inc.
  - Kenneth R. French Data Library at Dartmouth College

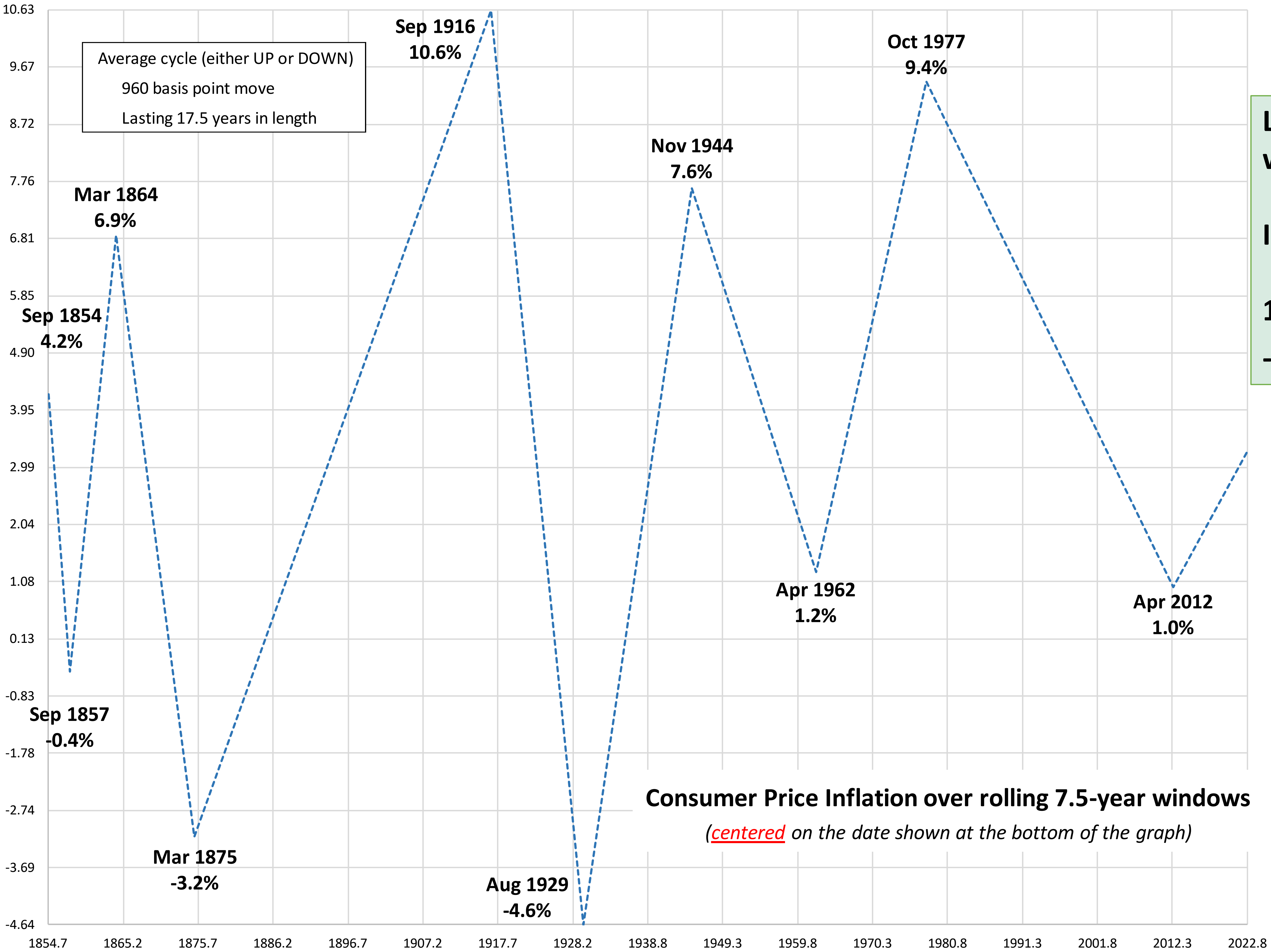
- Importance
  - Analysis is useless and highly misleading unless it includes different environments
    - War, peace, inflation, deflation, recession, growth
    - Rising/falling interest rates, inflation, energy prices
    - Restrictive and stimulative monetary and fiscal policy
    - Higher and lower corporate and individual tax rates
    - Low corporate profit margins, and high margins

We must adjust for inflation

Why this is important



Average cycle (either UP or DOWN)
960 basis point move
Lasting 17.5 years in length
Sep 1854 4.2%
Sep 1857 -0.4%
Mar 1864 6.9%
Mar 1875 -3.2%
Sep 1916 10.6%
Aug 1929 -4.6%
Nov 1944 7.6%
Apr 1962 1.2%
Oct 1977 9.4%
Apr 2012 1.0%
10.63
9.67
8.72
7.76
6.81
5.85
4.90
3.95
2.99
2.04
1.08
0.13
-0.83
-1.78
-2.74
-3.69
-4.64
1854.7
1865.2
1875.7
1886.2
1896.7
1907.2
1917.7
1928.2
1938.8
1949.3
1959.8
1970.3
1980.8
1991.3
2001.8
2012.3
2022.8
Consumer Price Inflation over rolling 7.5-year windows
(centered on the date shown at the bottom of the graph)

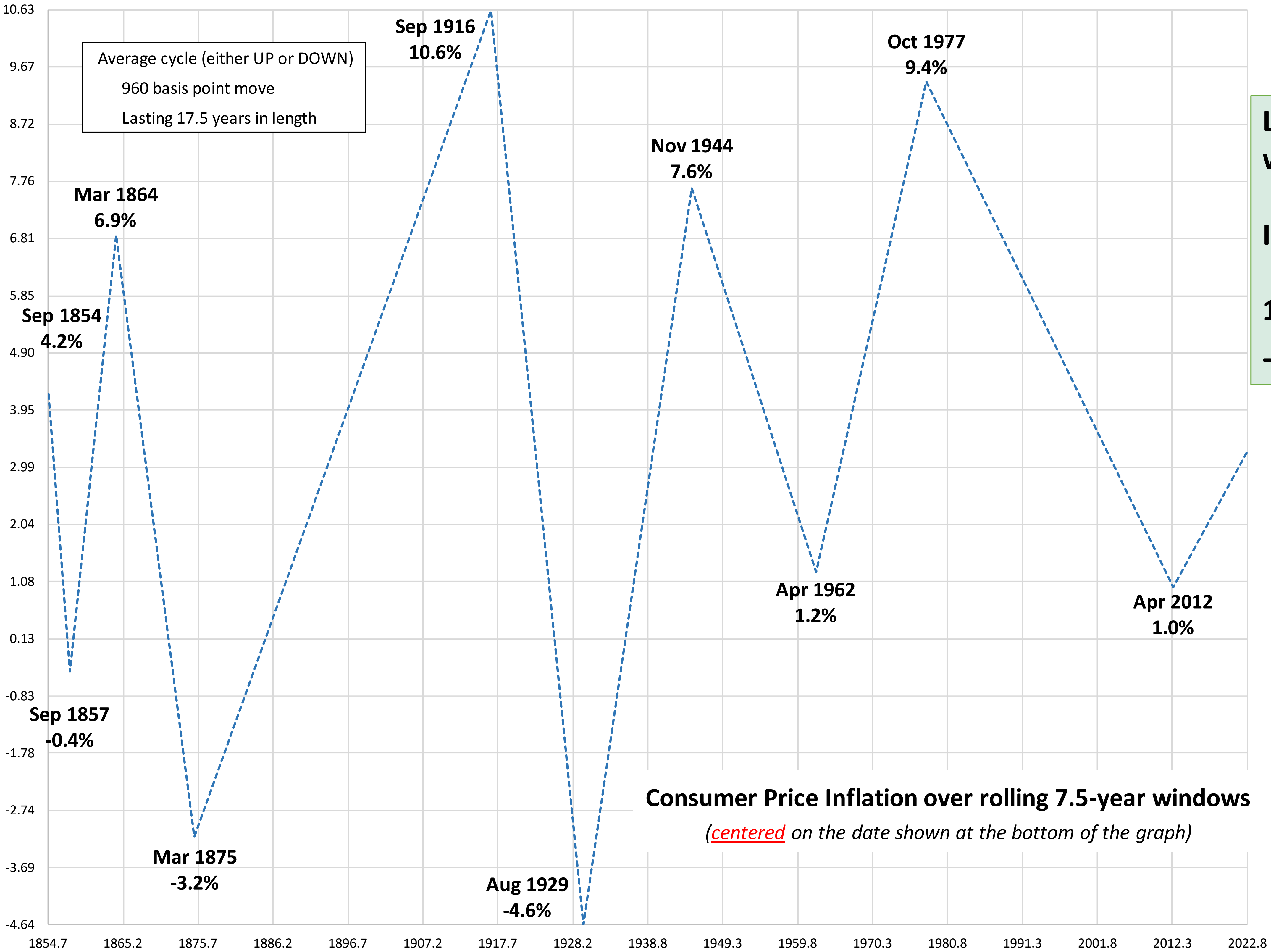


Looking at inflation over 7.5-year windows

It ran at . . .

10.6% per year in Sep 1916

-4.6% per year back in Aug 1929



Looking at inflation over 7.5-year windows

It ran at . . .

10.6% per year in Sep 1916

-4.6% per year back in Aug 1929

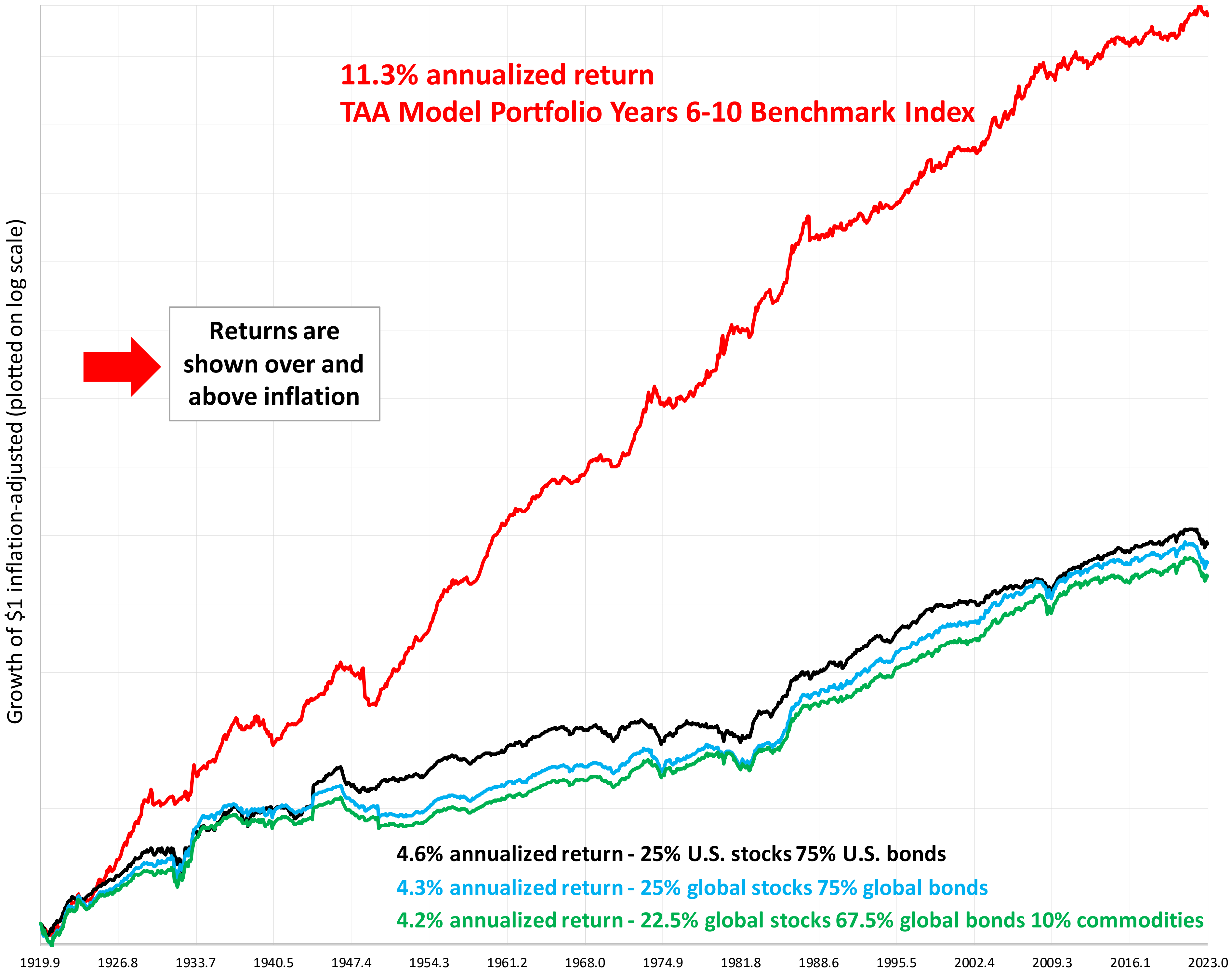
That's a staggering swing

From LOW to HIGH

Cumulative time period

The results

Large and consistent outperformance over the long-run



7 ½ year investment time periods

And nothing shorter

All about the client's needs . . . and when they arrive

- Assumption
- This investment is for the future . . . not the present
- Client is going to use this money 5 to 10 years in the future
- So we just take the mid-point of that interval

Analysis . . . and evaluation

- We examine all of the 7 ½ year periods
- And never consider the aggregate period (1919-present)

Results

Inflation-adjusted and after transactions costs have been subtracted out

Break up 1919 to the present

- Into eight equal length intervals
- Each interval will have either 144 or 145 unique 7 ½-year investment time windows

144.5 unique 7 ½-year periods . . . Ending May 1939

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Percentile outcome	Means . . .	**TAA**	US benchmark	Global benchmark	Global benchmark with commodities
50th	50% chance of earning more than	15.4	7.4	9.6	8.8
45th	55% chance of earning more than	14.7	7.2	8.9	8.4
40th	60% chance of earning more than	14.2	7.0	8.5	8.2
35th	65% chance of earning more than	13.9	6.7	8.3	8.0
30th	70% chance of earning more than	13.7	6.6	8.0	7.1
25th	75% chance of earning more than	13.4	6.3	7.8	6.5
20th	80% chance of earning more than	13.1	6.1	7.2	6.0
15th	85% chance of earning more than	13.0	5.5	6.9	5.5
10th	90% chance of earning more than	12.8	5.1	6.0	4.8
5th	95% chance of earning more than	12.2	4.7	5.3	4.1
4th	96% chance of earning more than	12.2	4.6	4.9	3.8
3rd	97% chance of earning more than	12.1	4.3	4.7	3.6

144.5 unique 7 ½-year periods . . . Ending May 1951

JULEX CAPITAL

Percentile outcome	Means . . .	**TAA**	US benchmark	Global benchmark	Global benchmark with commodities
50th	50% chance of earning more than	6.9	4.4	1.5	1.4
45th	55% chance of earning more than	6.6	4.2	1.2	1.1
40th	60% chance of earning more than	6.2	4.0	0.8	0.7
35th	65% chance of earning more than	5.8	3.7	0.5	0.5
30th	70% chance of earning more than	5.7	3.2	0.3	0.3
25th	75% chance of earning more than	5.5	3.0	0.2	0.2
20th	80% chance of earning more than	4.9	2.8	-0.1	-0.1
15th	85% chance of earning more than	4.7	2.4	-0.5	-0.4
10th	90% chance of earning more than	4.4	1.9	-0.7	-0.5
5th	95% chance of earning more than	4.0	1.7	-1.0	-0.8
4th	96% chance of earning more than	3.7	1.5	-1.0	-0.8
3rd	97% chance of earning more than	3.6	1.4	-1.1	-0.8

144.5 unique 7 ½-year periods . . . Ending Jun 1963

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Percentile outcome	Means . . .	**TAA**	US benchmark	Global benchmark	Global benchmark with commodities
50th	50% chance of earning more than	16.8	3.6	2.5	2.2
45th	55% chance of earning more than	16.1	3.5	2.2	1.9
40th	60% chance of earning more than	15.3	3.2	1.6	1.5
35th	65% chance of earning more than	14.2	3.1	1.4	1.2
30th	70% chance of earning more than	12.3	2.7	0.4	0.4
25th	75% chance of earning more than	8.0	2.5	-0.9	-1.0
20th	80% chance of earning more than	7.2	0.8	-3.2	-2.8
15th	85% chance of earning more than	6.6	0.5	-3.7	-3.3
10th	90% chance of earning more than	5.9	0.0	-3.9	-3.5
5th	95% chance of earning more than	5.2	-0.9	-4.0	-3.6
4th	96% chance of earning more than	5.1	-1.1	-4.0	-3.7
3rd	97% chance of earning more than	5.0	-1.2	-4.0	-3.7

144.5 unique 7 ½-year periods . . . Ending Jun 1975

JULEX CAPITAL

Percentile outcome	Means . . .	**TAA**	US benchmark	Global benchmark	Global benchmark with commodities
50th	50% chance of earning more than	11.5	1.9	2.9	3.1
45th	55% chance of earning more than	10.4	1.6	2.6	3.0
40th	60% chance of earning more than	9.8	1.4	2.3	2.7
35th	65% chance of earning more than	9.5	1.3	2.3	2.3
30th	70% chance of earning more than	9.2	1.1	2.1	2.2
25th	75% chance of earning more than	8.7	0.9	1.9	2.1
20th	80% chance of earning more than	8.3	0.6	1.5	1.7
15th	85% chance of earning more than	7.2	0.3	1.3	1.4
10th	90% chance of earning more than	6.5	-0.1	0.9	1.2
5th	95% chance of earning more than	6.0	-1.2	0.6	0.9
4th	96% chance of earning more than	5.8	-1.4	0.3	0.9
3rd	97% chance of earning more than	5.6	-1.8	-0.3	0.8

144.5 unique 7 ½-year periods . . . Ending Jul 1987

JULEX CAPITAL

Percentile outcome	Means . . .	**TAA**	US benchmark	Global benchmark	Global benchmark with commodities
50th	50% chance of earning more than	14.1	1.3	2.0	2.7
45th	55% chance of earning more than	13.8	0.9	1.8	2.5
40th	60% chance of earning more than	13.5	0.5	1.5	2.3
35th	65% chance of earning more than	13.0	0.1	1.0	1.9
30th	70% chance of earning more than	12.5	-0.1	0.7	1.5
25th	75% chance of earning more than	11.7	-0.3	0.5	1.3
20th	80% chance of earning more than	11.3	-0.8	0.3	1.3
15th	85% chance of earning more than	10.9	-1.3	0.0	1.0
10th	90% chance of earning more than	10.4	-1.6	-0.4	0.7
5th	95% chance of earning more than	9.8	-1.8	-0.8	0.4
4th	96% chance of earning more than	9.6	-1.9	-0.9	0.2
3rd	97% chance of earning more than	9.5	-2.0	-1.0	0.1

144.5 unique 7 ½-year periods . . . Ending Jul 1999

Percentile outcome	Means . . .	**TAA**	US benchmark	**Global benchmark**	Global benchmark with commodities
50th	50% chance of earning more than	10.9	8.7	9.2	8.1
45th	55% chance of earning more than	9.6	8.5	8.6	7.8
40th	60% chance of earning more than	9.1	8.2	8.2	7.5
35th	65% chance of earning more than	8.9	7.8	8.1	7.3
30th	70% chance of earning more than	8.6	7.6	7.9	7.1
25th	75% chance of earning more than	7.9	7.4	7.6	6.7
20th	80% chance of earning more than	7.3	7.2	7.4	6.5
15th	85% chance of earning more than	6.2	7.1	7.2	6.4
10th	90% chance of earning more than	5.8	6.7	7.0	6.2
5th	95% chance of earning more than	4.7	5.7	6.1	5.5
4th	96% chance of earning more than	3.4	5.5	5.9	5.2
3rd	97% chance of earning more than	2.6	5.4	5.8	5.0

144.5 unique 7 ½-year periods . . . Ending Aug 2011

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Percentile outcome	Means . . .	**TAA**	US benchmark	**Global benchmark**	Global benchmark with commodities
50th	50% chance of earning more than	11.4	4.7	6.7	6.9
45th	55% chance of earning more than	11.0	4.6	6.6	6.7
40th	60% chance of earning more than	10.6	4.4	6.5	6.6
35th	65% chance of earning more than	10.2	4.2	6.3	6.4
30th	70% chance of earning more than	10.0	4.2	6.3	6.3
25th	75% chance of earning more than	9.8	4.0	6.1	6.2
20th	80% chance of earning more than	9.6	3.8	6.1	5.9
15th	85% chance of earning more than	9.5	3.5	5.8	5.8
10th	90% chance of earning more than	9.3	3.1	5.6	5.6
5th	95% chance of earning more than	9.0	2.6	5.3	5.3
4th	96% chance of earning more than	8.9	2.5	5.2	5.2
3rd	97% chance of earning more than	8.7	2.4	5.1	5.1

144.5 unique 7 ½-year periods . . . Ending Aug 2023

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Percentile outcome	Means . . .	**TAA**	US benchmark	**Global benchmark**	Global benchmark with commodities
50th	50% chance of earning more than	5.4	4.6	3.6	3.3
45th	55% chance of earning more than	5.2	4.4	3.5	3.1
40th	60% chance of earning more than	5.0	4.3	3.3	2.8
35th	65% chance of earning more than	4.8	4.3	3.1	2.7
30th	70% chance of earning more than	4.6	4.2	3.0	2.4
25th	75% chance of earning more than	4.4	4.1	2.8	2.3
20th	80% chance of earning more than	4.2	3.9	2.6	2.1
15th	85% chance of earning more than	4.1	3.7	2.2	1.8
10th	90% chance of earning more than	3.9	1.7	0.3	0.9
5th	95% chance of earning more than	3.7	1.3	-0.3	0.3
4th	96% chance of earning more than	3.6	1.2	-0.4	0.2
3rd	97% chance of earning more than	3.5	1.1	-0.8	-0.2

So why is the question even coming up?

Why are advisors asking if TAA has lost its edge?

Why do clients fail?

- What's the most common and frequent reason that clients fire their advisors?

- Failure to set . . . and maintain . . . appropriate expectations for the future

- Allowing inappropriate comparisons to be made
- Allowing unrealistic expectations to develop and grow
- Failure to limit and strictly bound behavioral bias

- Whose fault is this?
- It's your fault

Why do advisors fail?

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- What's the most common and frequent reason that advisors fire their investment managers?

- Failure to set . . . and maintain . . . appropriate expectations for the future

- Allowing inappropriate comparisons to be made
- Allowing unrealistic expectations to develop and grow
- Failure to limit and strictly bound behavioral bias

- Whose fault is this? . . . . it's not the advisor's
- Wholesalers, investment managers, the sales and marketing staffs, executive leadership

EXAMPLES

- TAA will . . . <u>all are falsehoods</u>
  - Protect you from bear markets (recall that the typical bear market lasts just 1.46 years)
  - Give you a handsome bite of the apple during bull markets . . . But if TAA doesn't track, then how is this even possible . . . Dah !!
  - The S&P 500 will be up, and so will my TAA portfolio
- TAA needs
  - Time to mature and be ready for harvest
  - Never never less than "7 ½ years" . . . not ever
- TAA won't
  - Track markets
  - In marches to a radically different drummer
- TAA suffers from whipsaw . . . always has . . . always will

Bottom line

TAA is as strong and robust as it’s ever been !!!

But why?

- Because markets are trending today . . . just as strongly as they always have

- But why?

- Investment markets trend because it takes time for new information to
  - First develop
  - Be disseminated
  - Analyzed
  - Acted upon . . . portfolios traded
  - Reflected in market prices
- The length of time for this entire process varies considerably from one investor to the next and is therefore spread out over many months or more

Third party research

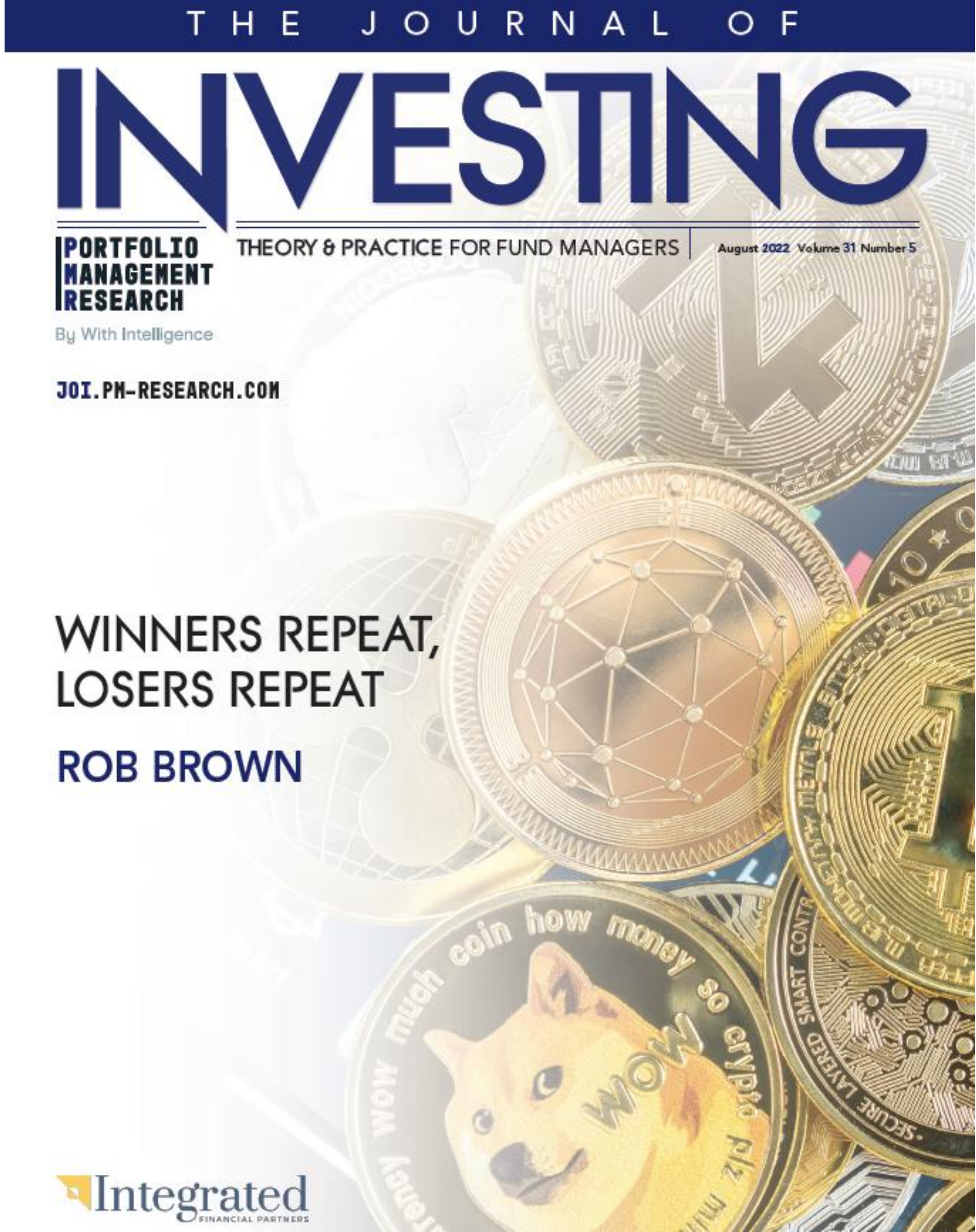
Codifying these results


The Journal of Portfolio Management

VOLUME 44, NUMBER 1 www.iijpm.com FALL 2017

A Century of Evidence on Trend-Following Investing

BRIAN HURST, YAO HUA OOI, AND LASSE HEJE PEDERSEN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WINNERS REPEAT, LOSERS REPEAT

ROB BROWN

Integrated FINANCIAL PARTNERS

Tactical Asset Allocation Views – September 2023

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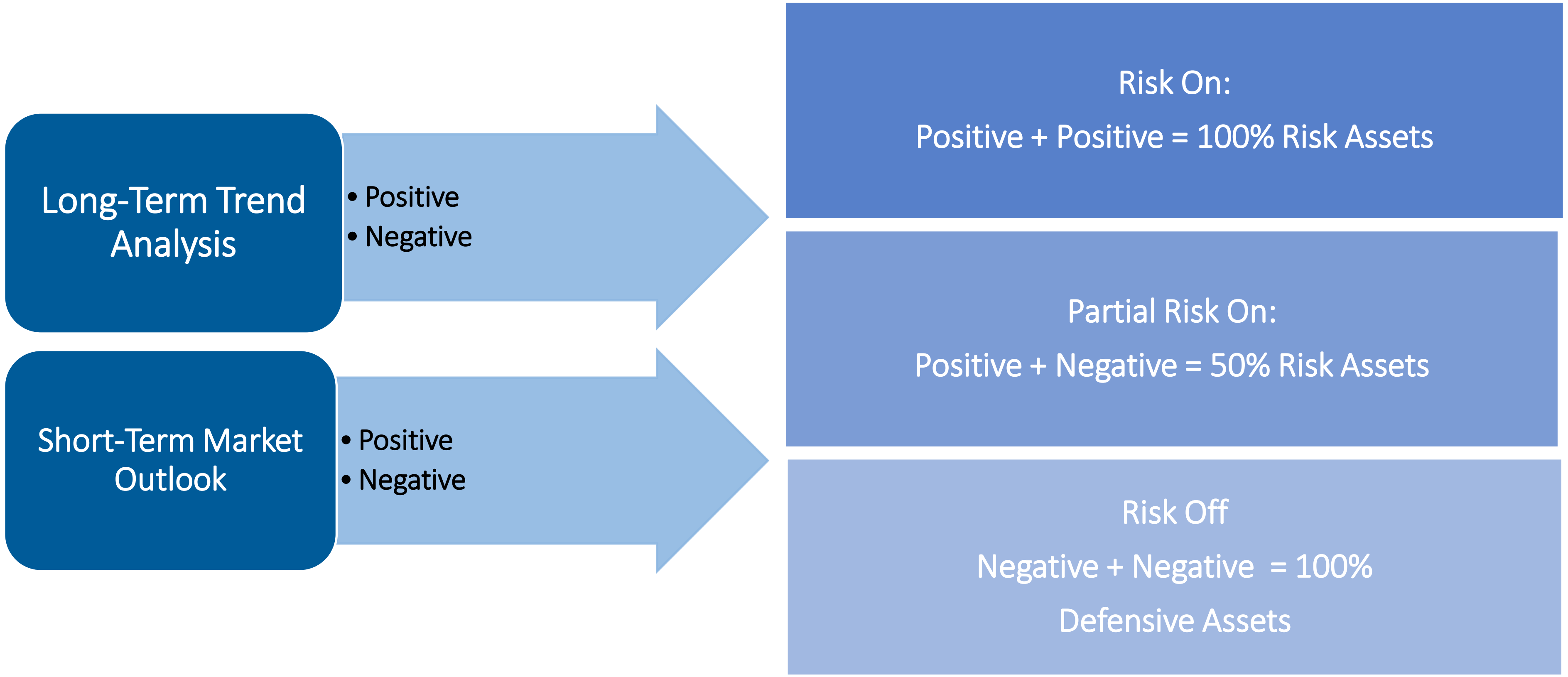
Julex Tactical Approach



- Combining long-term trend with short-term outlook
- Economic, valuation and technical factors are considered in the model

Long-Term Model vs. Short-Term Model (Back Test Results)

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Long-Term Model

- Identify current market Environment
- Slower to adapt
- Composite index regime model
- Favorable market environment: trending market (bull + expansion or bear + recession)
- Unfavorable market environment: trendless or quick reversal

Short-Term Model

- One-month-ahead market forecast
- Quicker to adapt
- Regression model
- Favorable market environment: normal market condition and potential opportunities for quick reversal
- Unfavorable market environment: over-extended market

1/1/1981 - 8/31/2023	Long-term Model	Short-term Model	Combined Model	9-month Moving Average	S&P 500 Index
Annual Return	12.96%	15.44%	14.31%	11.78%	11.33%
Standard deviation	13.24%	12.56%	12.15%	11.81%	15.16%
Sharpe Ratio	0.98	1.23	1.18	1.00	0.75
Max Drawdown	-29.6%	-25.0%	-23.5%	-26.4%	-50.9%

Important Events	Long-term Model	Short-term Model	Combined Model	9-month Moving Average	SP 500 Index
Stagflation (1/1981-1/1983)	52.7%	61.3%	57.1%	52.7%	19.9%
Black Monday (10/1987)	-21.5%	3.6%	-9.0%	-21.5%	-21.5%
Tech Bubble (9/2000 – 9/2002)	-19.0%	-7.4%	-12.7%	7.1%	-44.7%
Great Recession (10/2007-2/2009)	-4.5%	-20.7%	-12.7%	-1.1%	-50.9%
Pandemic (1/2020-12/2020)	3.3%	46.5%	23.6%	17.3%	19.1%
Inflation/Rate Hike (1/2022-12/2022)	-13.2%	-13.9%	-13.5%	-26.4%	-17.4%

Note: In the back test, the model switched between S&P 500 Index and Bloomberg Bond Aggregate Index based on positive or negative signals generated.
Please see the Disclosure for more information on back test in general.

Asset Allocation Views – Julex Risk Switch Model

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		Negative	Neutral	Positive	
Overall Signal			■		Weakening manufacture sector and other leading indicators, tight monetary policies and expensive valuation are negative for risk assets; but strong market momentum, resilient labor market and personal consumptions and overall economy, and AI booms offer supports to the markets.
Economic Data					
	Manufacturing activities	■			The ISM Manufacturing Index has contracted for nine months in a row to 47.6.
	Services Sector			■	The PMI Service Sector Index continues to be resilient at 54.5 in August.
	Consumptions			■	Personal Consumption Expenditure rose 0.8% in July.
	Labor Market			■	US economy added 187K jobs in August and unemployment rate edged up to 3.8%.
	Housing Market		■		Case/Shiller Housing Index has edged up again after declining for 7 months.
	Leading Economic Index		■		Leading economic index continues to point to slowdown/recession, but it improved last month.
	Inflation	■			Inflation is trending down, but still higher than the 2% Fed target. The Fed may keep rates high longer than expected.
Liquidity					
	Monetary Policies	■			Money supplies have been declining and yield curve are strongly inverted.
	Bank Lending	■			Fed Chicago financial condition index improved a bit recently, but the leverage subindex continues to indicate tightening lending condition after SVB crisis
Market Activities					
	Long-term Trend			■	Equity markets are trading above their long-term averages.
	Volatility			■	Market volatility falls below its long-term average.
	Short-term Reversal	■			Short-term reversal signal indicates the probability of short-term correction increases after the YTD market rally.
Equity Fundamentals					
	Valuation	■			The current S&P 500 12-month forward PE is 18.8. It is above both the five-year average (18.7) and the 10-year average (17.5).
	Relative Valuation vs. Bonds/cash	■			Higher interest rates make equities less attractive.
	Earnings	■			Corporate earnings have declined three quarters in a row, though more companies beat their estimates.

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Asset class returns are episodic, what does this mean, why is this so seriously important

Friday

September 15th

11:00 a.m. EASTERN

Disclosures

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.

Julex strategies follow strict quantitative processes. The portfolio recommendations here may not be the same as what are implemented in the Julex models. The opinions expressed here are mainly the CIO's.

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.

The investment performance shown, if indicated, 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.

Disclosures Part II

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

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