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TAA when interest rates are rising

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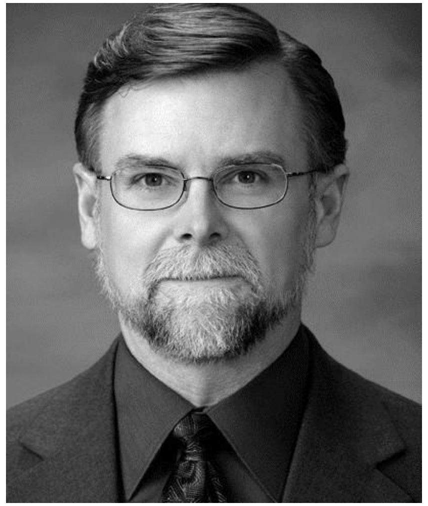

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Today . . . Right now

Interest rates today - straight Treasuries

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Treasury Yields

NAME	COUPON	PRICE	YIELD
GB3:GOV **3 Month**	0.00	2.70	2.76%
GB6:GOV **6 Month**	0.00	3.10	3.19%
GB12:GOV **12 Month**	0.00	3.16	3.28%
GT2:GOV **2 Year**	3.25	99.75	3.38%
GT5:GOV **5 Year**	2.75	97.83	3.23%
GT10:GOV **10 Year**	2.75	96.98	3.10%
GT30:GOV **30 Year**	3.00	94.30	3.30%

Interest rates today - TIPS (inflation protected)

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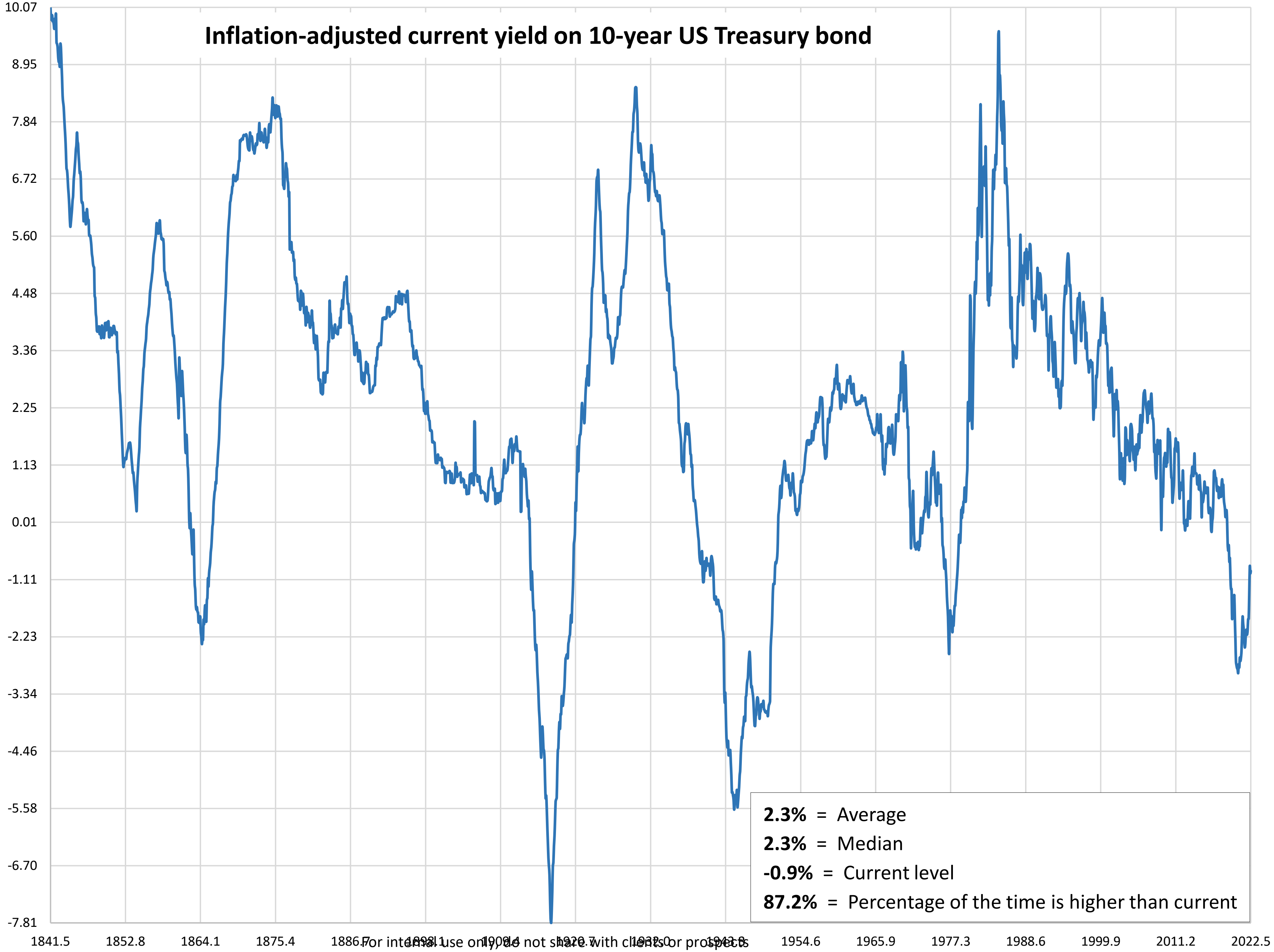
Treasury Inflation Protected Securities (TIPS)

NAME	COUPON	PRICE	YIELD
GTII5:GOV **5 Year**	0.13	98.63	0.42%
GTII10:GOV **10 Year**	0.63	101.21	0.50%
GTII20:GOV **20 Year**	0.75	94.77	1.05%
GTII30:GOV **30 Year**	0.13	79.12	0.94%

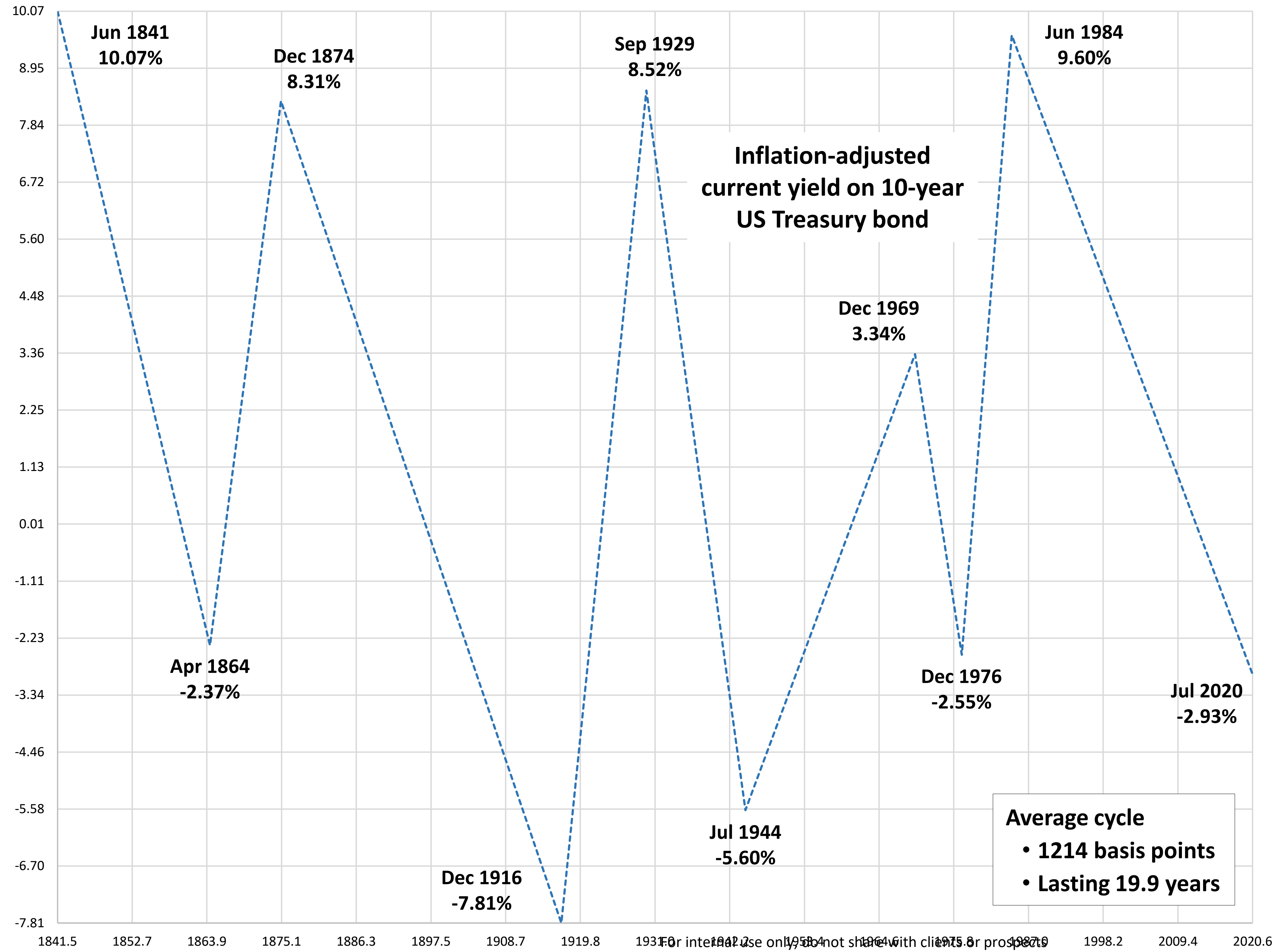
Context is necessary

Long-run history

Interest rates - details



Interest rates - the cycles



Interest rates - the cycles

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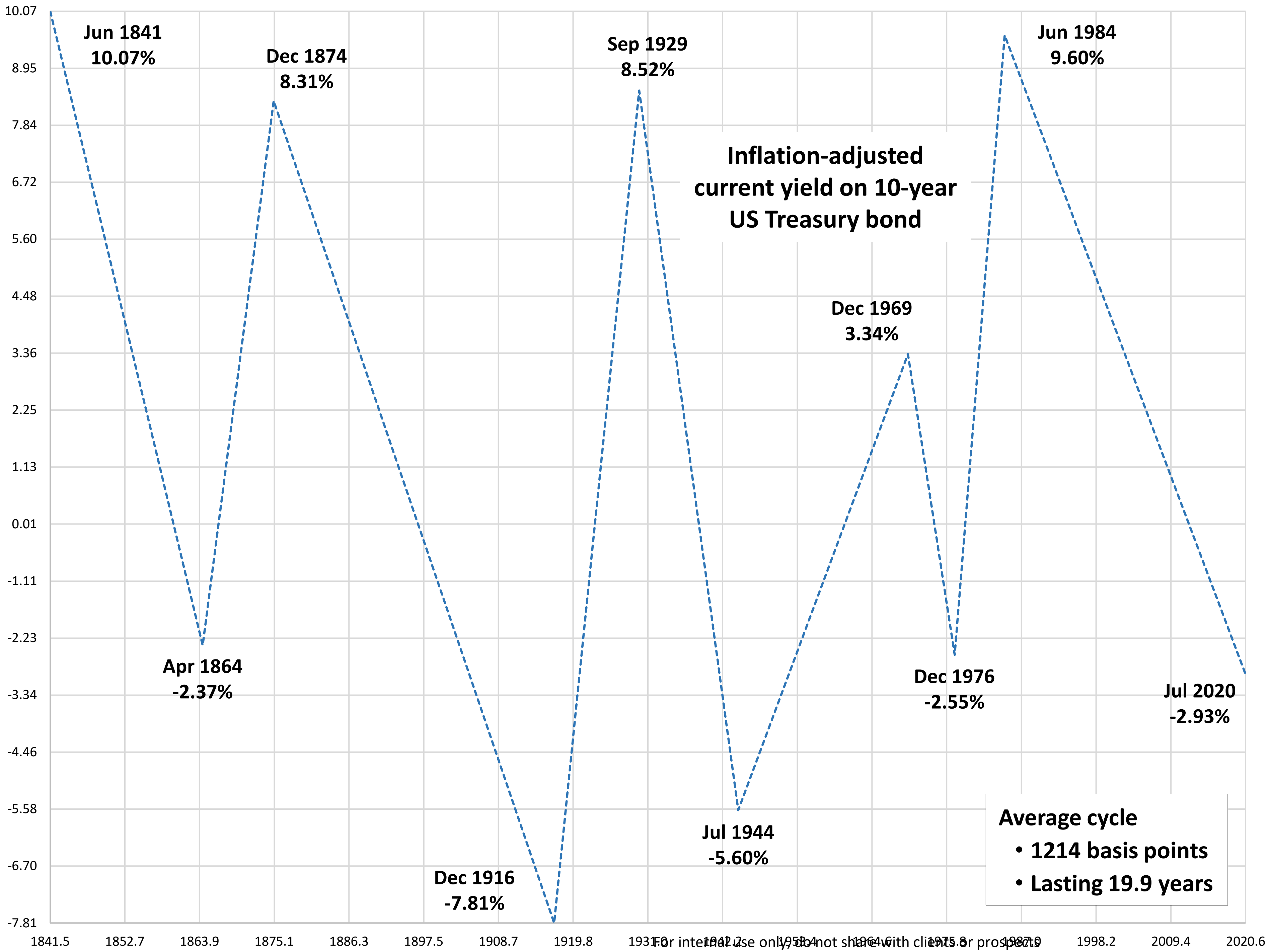

Interest rates . . . Now rise for *"19.9 years"*

Like they've always done

If we just “accept” history

Take history as the forward-looking forecast . . . . A good/best starting point

Future interest rates

- **Bottomed out**
  - July 2020
  - At -2.93% . . . Inflation-adjusted . . . Note, that is a negative interest rate
- **Typical cycle**
  - Runs for 19.9 years
  - Moves interest rates by 1214bps
- **If history repeats (the best possible starting point) . . . interest rates will peak**
  - On June **2040**
  - At 9.21% . . . Inflation-adjusted
  - Is this “heroic”? . . . . Nope . . . This would be normal, vanilla, boring . . . and typical

Is this a bond bear market? YEP !!!

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Bear markets for inflation-adjusted U.S. bonds since 1845

	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
	-22	2.67	Mar 1863	Nov 1865	6.1	31	-9.1
	-50	11.42	Dec 1908	May 1920	4.8	41	-5.9
	-31	16.58	Jan 1941	Aug 1957	3.3	45	-2.2
	-40	16.33	May 1965	Sep 1981	6.4	45	-3.0
	?	?	Jul 2020	?	?	?	?
Median BEAR market	-35	13.87			5.4	43	-4.5
Mean BEAR market	-36	11.75			5.1	40	-5.0

Author: Rob Brown, PhD, CFA at www.robbrownonline.com. Statistics based on data provided by Global Financial Data, Inc., at https://finaeon.globalfinancialdata.com and are current as of July 15, 2022

Bonds were defined as 50% intermediate-term U.S. Treasury bonds and 50% liquid high-quality U.S. corporate bonds. And were constructed using three total return bond indices provided by Global Financial Data. Intermediate-term U.S. Treasury bonds are defined by the GFD Indices USA 10-year Government Bond Total Return Index. Prior to 4/30/1915 liquid high-quality U.S. corporate bonds are defined by the GFD Indices USA Total Return AAA Corporate Bond Index. After 4/30/1915 liquid high-quality U.S. corporate bonds are defined by a 50/50 mix of the Dow Jones Corporate Bond Return Index and the GFD Indices USA Total Return AAA Corporate Bond Index

Results rely on month-end total returns adjusted for the All Urban Consumers Not Seasonally Adjusted Consumer Price Index as provided by the U.S. Department of Labor. Indices are unmanaged and cannot be invested into directly. Unmanaged index returns do not reflect fees, expenses, or sales charges. Index performance is not indicative of the performance of any investment. Past performance is no guarantee of future results

Bear and bull markets are defined as moves of at least 20.95730035% using month-end bond index total returns. This information in this presentation is for the purpose of information exchange. No representation or warranty is made to the reasonableness of the assumptions made. Investment advice offered through Integrated Wealth Concepts LLC (a Registered Investment Adviser), d/b/a Integrated Financial Partners, Inc.

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But why ?

It’s always necessary to ask and adequately answer the question of “why?”

The BIG issue at play . . . What is really determining everything

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- It's all about funding (paying for) . . . projects . . . that're at play

- Society and governments have several projects that they're attempting to finance
  - Cold war with Russia
  - Cold war with China
  - Conversion from fossil fuels to renewables
  - Income inequality gap
  - Wealth inequality gap
  - Expanding social welfare programs
  - Transitioning from one political structure . . . To a different structure

- Inflation is a method for both obscuring the cost . . . and dispersing its burden

- My 2 cents . . . The French revolution (reign of terror) of the late 18^{th} century . . . Is helpful

Ultra-simplified TAA model

Used to evaluate the question of how TAA performs when interest rates rise

28 asset categories (Jan 1919 - present)

- High quality, consistent, uniform data available since Jan 1919

- 7 types of US stocks
- 9 international countries
- 5 types of US Treasuries
  - 90-Day . . . to . . . 30-Years
- 1 type of TIPS
  - Yes, simulated back to 1919
- 1 type of high yield US corporate bonds
  - Yes, simulated back to 1919
- 2 types of precious metals
  - Gold and platinum
- 3 types of generalized commodities
  - Ultra-diversified commodities
  - Agricultural commodities
  - Diversified base metals

Specifics of the TAA modeling

- Investment time horizon is specified as
  - 7 ½ years . . . . . The midpoint of 5 years and 10 years
- Pick those asset categories that trended the most strongly
  - Over the last eleven months
- Always pick the top eight
- Because of the short investment time horizon (7 ½ years)
  - Differentiated weighting is applied to the asset categories
  - For example, if Treasuries are "selected," then they receive an extra weight

Transactions costs are assumed in the analysis

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- At the low end
  - 1 basis point to trade stocks . . . . in one direction (a buy or a sale)

- At the high end
  - 108.3 basis points to trade diversified base metals . . . a buy or a sale

- The assumed transactions costs are far higher than what one to encounter in real life

Data

- All data was provided by

- Global Financial Data, Inc.
- Kenneth R. French data library (Dartmouth University)

Results

Over the entire time period . . . . 1919 to the present

All results are shown after inflation

- **Adjustment for inflation is necessary because**
  - Inflation has varied to such an extent (high to low), that without this adjustment one ends up with noise
  - Investors care about what their portfolio will purchase in goods and services

- **We took the entire time period (1919 – present)**
- **Evaluated for those months when interest rates were rising the most rapidly**
  - 20% of the months
  - 25%
  - 33.33%
  - 50%

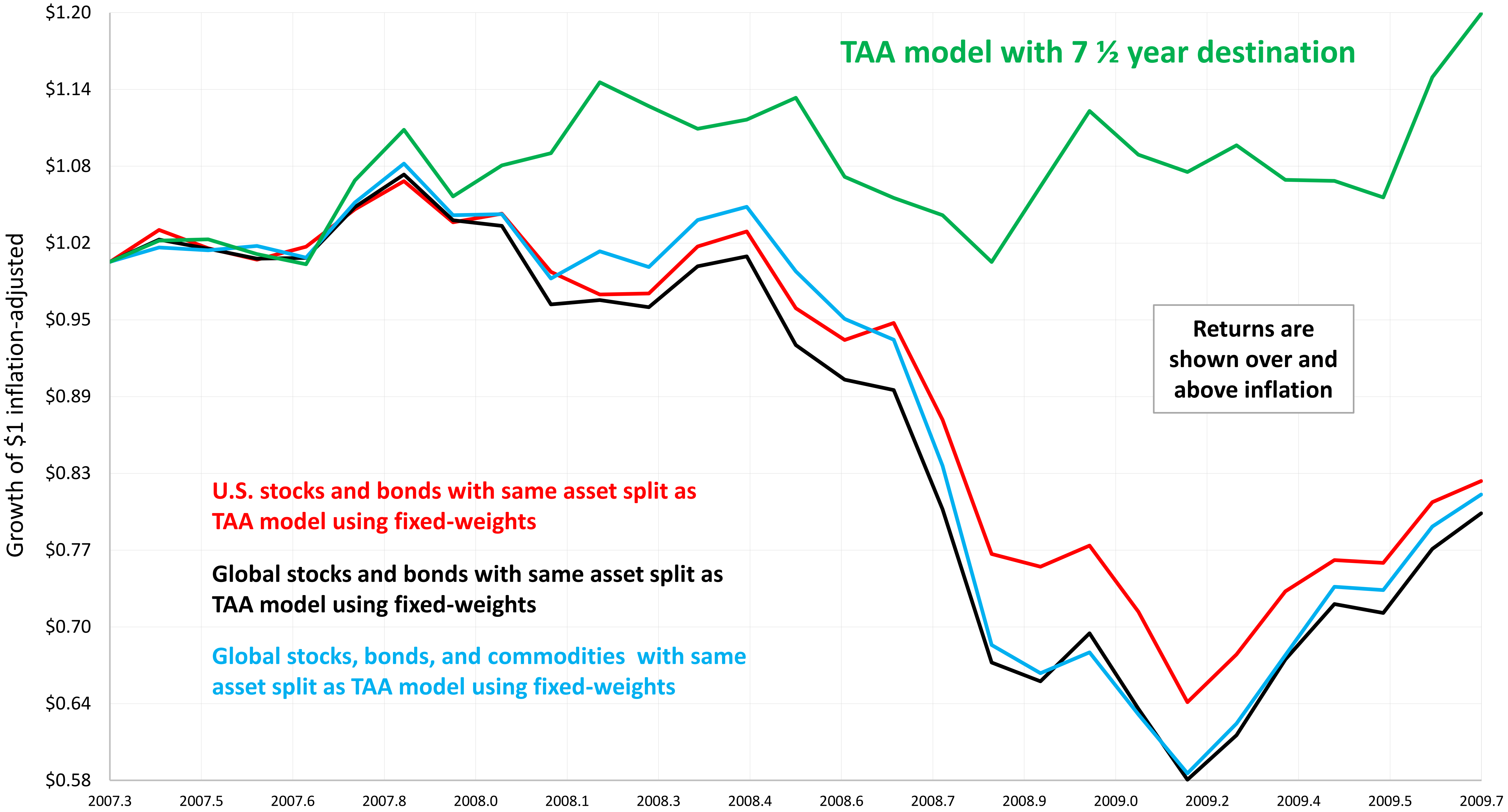
- **Strictly ignored how high or low interest rates were . . . Only looked at how fast interest rates were rising (measured proportionately)**

After inflation, annualized returns

Percentile (in %)	TAA before all transactions costs	TAA after super high transactions costs	S&P 500	Dow Jones Industrials	10-year Treasury	US Aggregate Bond Index	25/75 S&P 500 and 10-year Treasury
20	7.1	5.9	-5.1	-4.2	-12.4	-8.5	-10.4
25	8.6	7.4	-3.5	-3.5	-11.2	-7.5	-9.1
33.33	7.7	6.6	-2.5	-2.1	-8.9	-6.3	-7.1
50	8.5	7.5	0.4	0.5	-5.7	-3.7	-3.9

But why?

Why is the TAA model doing so much better than passive Buy & Hold?


TAA model with 7 ½ year destination
Returns are shown over and above inflation
U.S. stocks and bonds with same asset split as TAA model using fixed-weights
Global stocks and bonds with same asset split as TAA model using fixed-weights
Global stocks, bonds, and commodities with same asset split as TAA model using fixed-weights
Growth of $1 inflation-adjusted
$1.20
$1.14
$1.08
$1.02
$0.95
$0.89
$0.83
$0.77
$0.70
$0.64
$0.58
2007.3
2007.5
2007.6
2007.8
2008.0
2008.1
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2008.4
2008.6
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2009.0
2009.2
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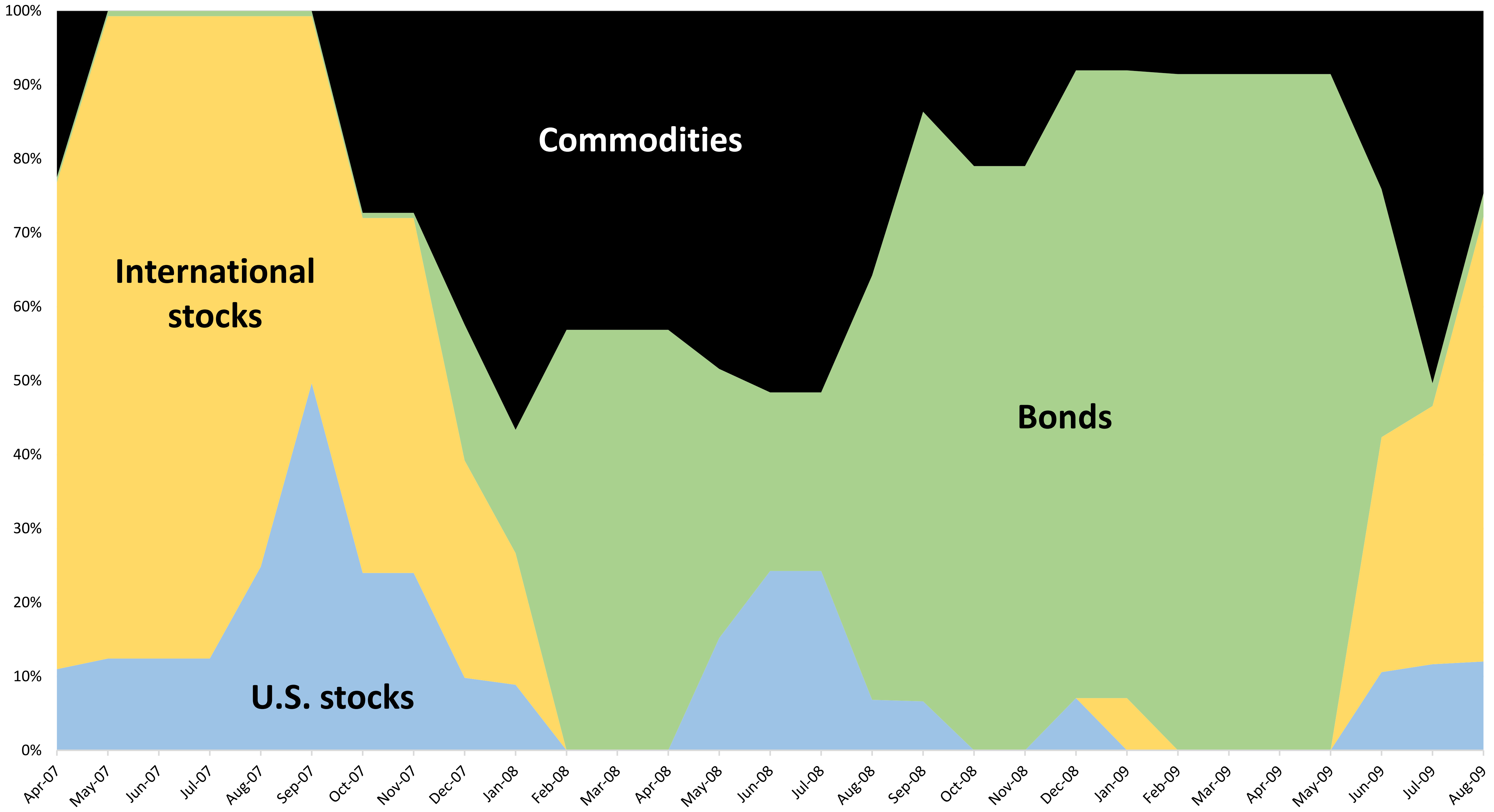

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Commodities
International stocks
Bonds
U.S. stocks
Apr-07
May-07
Jun-07
Jul-07
Aug-07
Sep-07
Oct-07
Nov-07
Dec-07
Jan-08
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Jan-09
Feb-09
Mar-09
Apr-09
May-09
Jun-09
Jul-09
Aug-09

Conclusion - as based on the data

- The best possible time to first start a TAA (tactical asset allocation) program is . . .

- Is at the beginning of a rising interest rate environment

- Do you or your client feel that interest rates might rise for the next 10 or perhaps 20 years?

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WINNERS REPEAT, LOSERS REPEAT

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Rob Brown

Rob is a senior level investment professional with over 35 years of experience in portfolio management for large, sophisticated foundations, endowments, pensions, and the ultra-high net worth. Today, he serves as Integrated's Chief Investment Officer. Prior to Integrated, he held executive positions with Goldman Sachs, Genworth Financial, SEI, Envestnet, and the CFA Institute. During his tenure with Goldman Sachs, he directed the investment management department, a team that included nine CFA Charterholders who oversaw $18.6 billion. While at Genworth, Rob served as the Chief Investment Officer directing a $7.5 billion institutional portfolio of domestic and international securities. At SEI, he worked as the Managing Director of SEI's Research Department that supported the wealth management needs of over $300 billion of pension, endowment, and foundation assets under advisement. At Envestnet, Rob served as the Chairman - Investment Policy Committee, Executive Vice President, and Senior Managing Director - Consulting Division for PMC International (later acquired by Envestnet), where he led the investment decision-making for a $3.3 billion portfolio. Rob also worked in the public sector, where he held the position of Chief Investment Officer for one of our nation's larger state public pension plans, the Arizona Public Safety Personnel Retirement System. His publications have appeared in the Journal of Derivatives and Hedge Funds, Journal of Investing, Journal of Investment Consulting, Journal of Beta Investment Strategies, Pensions & Investments, FA Magazine, RIA Central, On Wall Street Magazine, Royal Alliance Associates Sourcebook, Bank Investment Consultant, Investment News Magazine, London Financial Times, Financial Planning, Financial Advisor, Journal of Finance and Market, Journal of Financial Planning, and Journal of Wealth Management.

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Winners Repeat, Losers Repeat

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KEY FINDINGS

- The TAA portfolio earned an inflation-adjusted 10.8% over the aggregate period (102.1 years), whereas a comparable passive index earned a lesser 6.7% (one with a similar standard deviation, a 75/25 global stock/bond mix).
- TAA's performance advantage resulted even after subtracting unusually high transaction costs from the TAA portfolio, while assuming that the comparable passive index could rebalance each month cost-free.
- The TAA portfolio's greater relative success in achieving the stated investment objective did not diminish with the passage of time. If anything, it may have improved during the most recent period (14.3% of the cases examined drawn from the data spanning 1919–2021).

ABSTRACT

I present a tactical asset allocation proof-of-concept portfolio. It is intended to harvest the non-IID statistical attributes of stocks, bonds, commodities, and currencies, both domestic and international. It has as its objective to benefit from markets' propensity to trend from month to month and during both bull and bear market environments. The proof-of-concept portfolio relies on a simple quantitative rule that allows for rigorous evaluation over the past 102.1 years. The results presented herein suggest that Tactical Asset Allocation (TAA) is an approach worthy of consideration. Moreover, the article suggests that a necessary condition for TAA success lies in correctly specifying its rather differentiated investment objective—one that may be unrelated to comparisons with popular fixed-weight index benchmarks. Such fixed-weight benchmarks have correlations with TAA strategies that are so low as to make commonly used statistical comparisons irrelevant (i.e., not statistically significant). This article attempts to correct our industry's mischaracterization and overpromising of all things TAA by focusing on the time required for success.

Tactical Asset Allocation (TAA) earned a poor reputation over the past 13 years (since 3/6/2009, the recent bear market low). My objective is to mitigate a portion of the retail industry's TAA skepticism. This is an interesting topic, given the size of the retail industry, TAA's prominence within it, and forecasted future growth in TAA's market share. Direct and indirect, the retail industry is large and growing, currently estimated to be more than $16 trillion.[1] TAA first came into existence back in the 1980s and has grown consistently ever since, with occasional faster growth

[1] Sources: ICMA (International Capital Market Association) analysis using Bloomberg Data (August 2020), Ned Davis Research, and The Visual Capitalist (https://www.visualcapitalist.com).

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Tactical Asset Allocation during rising inflation

Friday

Sept 2nd

11:00 a.m. EASTERN

Important Disclosures

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

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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.

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