

JULEX CAPITAL

TAA during the next recession

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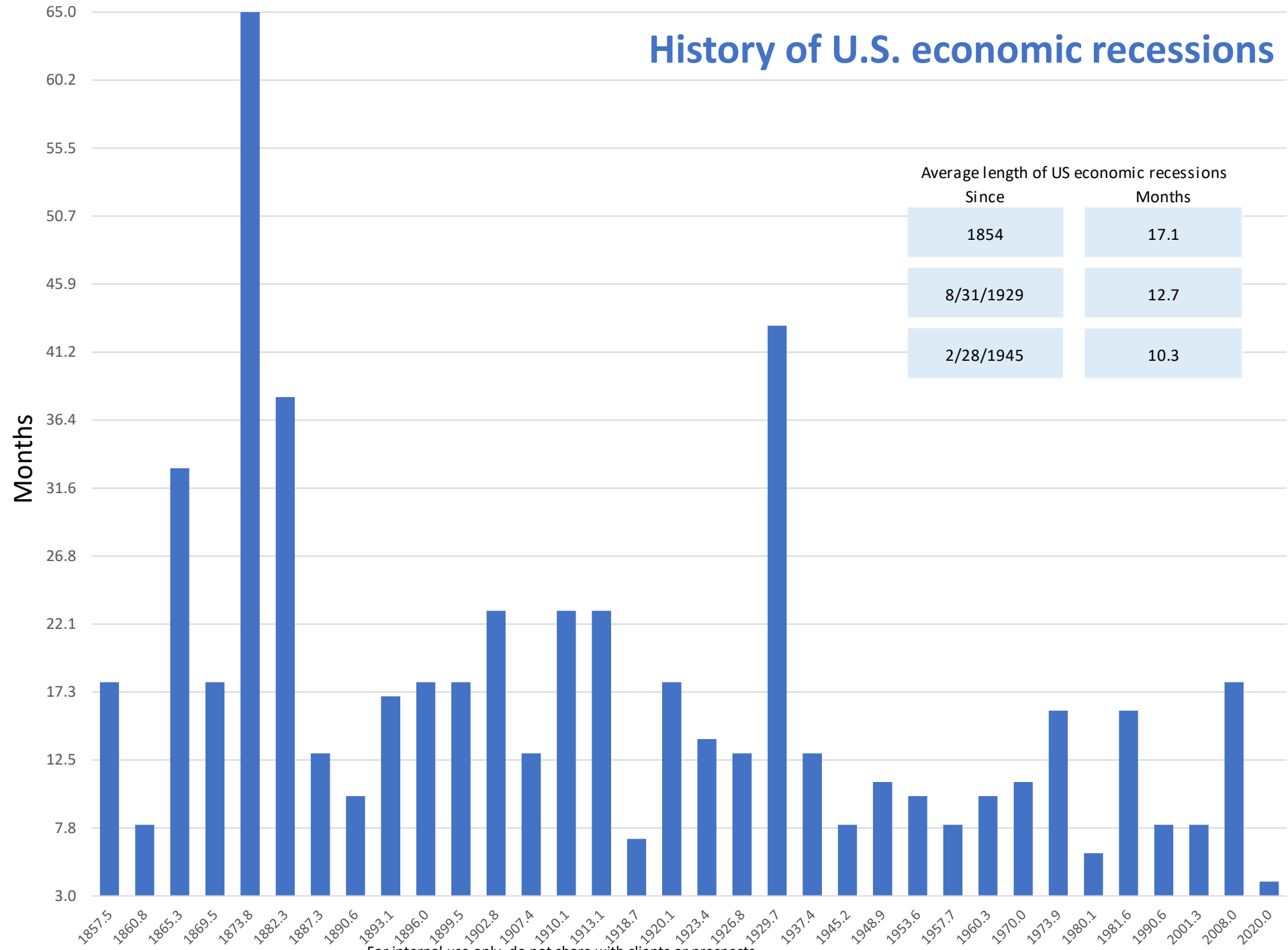
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- It is not . . . “two consecutive quarters of negative GDP growth”
- It is determined by a committee of the NBER (National Bureau of Economic Research)
 - The NBER's definition emphasizes that a recession involves a significant decline in economic activity that is spread across the economy and lasts more than a few months. In our interpretation of this definition, we treat the three criteria - depth, diffusion, and duration - as somewhat interchangeable. That is, while each criterion needs to be met individually to some degree, extreme conditions revealed by one criterion may partially offset weaker indications from another.

History of U.S. economic recessions



Average length of US economic recessions

Since	Months
1854	17.1
8/31/1929	12.7
2/28/1945	10.3

Average length of US economic expansions

Since	Years
1854	3.44
8/31/1929	5.35
2/28/1945	5.33

Ultra-simplified TAA model

Used to evaluate the question of how TAA performs during recessions

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

- 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 would encounter in real life

- 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 returns are
 - After inflation . . . Inflation-adjusted
 - For a time period of exactly 7 ½ years in length
- 10.8% average
- Percentile outcomes
 - 50th 10.6%
 - 15th 5.4%
 - 10th 4.5%
 - 5th 3.7%
 - 1st 2.7%
 - 0.5th 2.6% in other words, 99.5% of the time, the TAA portfolio earns more than 2.6% real

Recessionary results

When the 7 ½ year investment period . . .

STARTS during a recession

ENDS during a recession

If the investment period ENDS during a recession

- 11.8% average
- Percentile outcomes
 - 50th 11.6%
 - 15th 5.9%
 - 10th 4.7%
 - 5th 3.6%
 - 1st 2.7%
 - 0.5th 2.6% in other words, 99.5% of the time, the TAA portfolio earns more than 2.6% real

If the investment period STARTS during a recession

- 12.6% average
- Percentile outcomes
 - 50th 12.3%
 - 15th 6.5%
 - 10th 5.6%
 - 5th 4.4%
 - 1st 4.0%
 - 0.5th 3.8% in other words, 99.5% of the time, the TAA portfolio earns more than 3.8% real

Side by side comparison - real returns

Entire period (1919 through the present)

ONLY those 7 ½ year investment period that **ENDED** during a recession

- 10.8% average
- Percentile outcomes
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Why did TAA perform even better during recessions? Because markets are more directional during such periods. Directional markets give TAA an added edge.

Entire period (1919 through the present)

ONLY those 7 ½ year investment period that ENDED during a recession

ONLY those 7 ½ year investment period that STARTED during a recession

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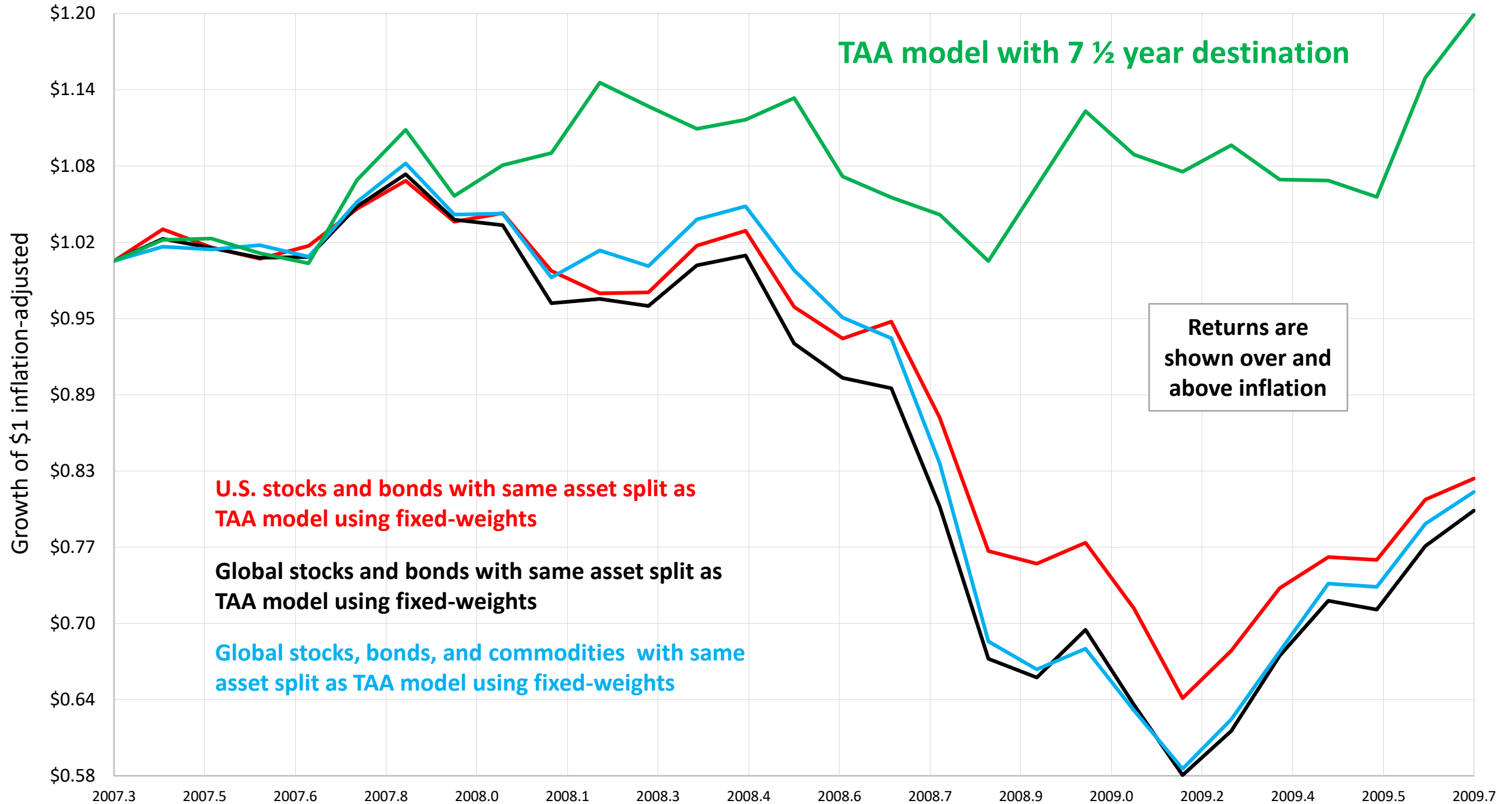
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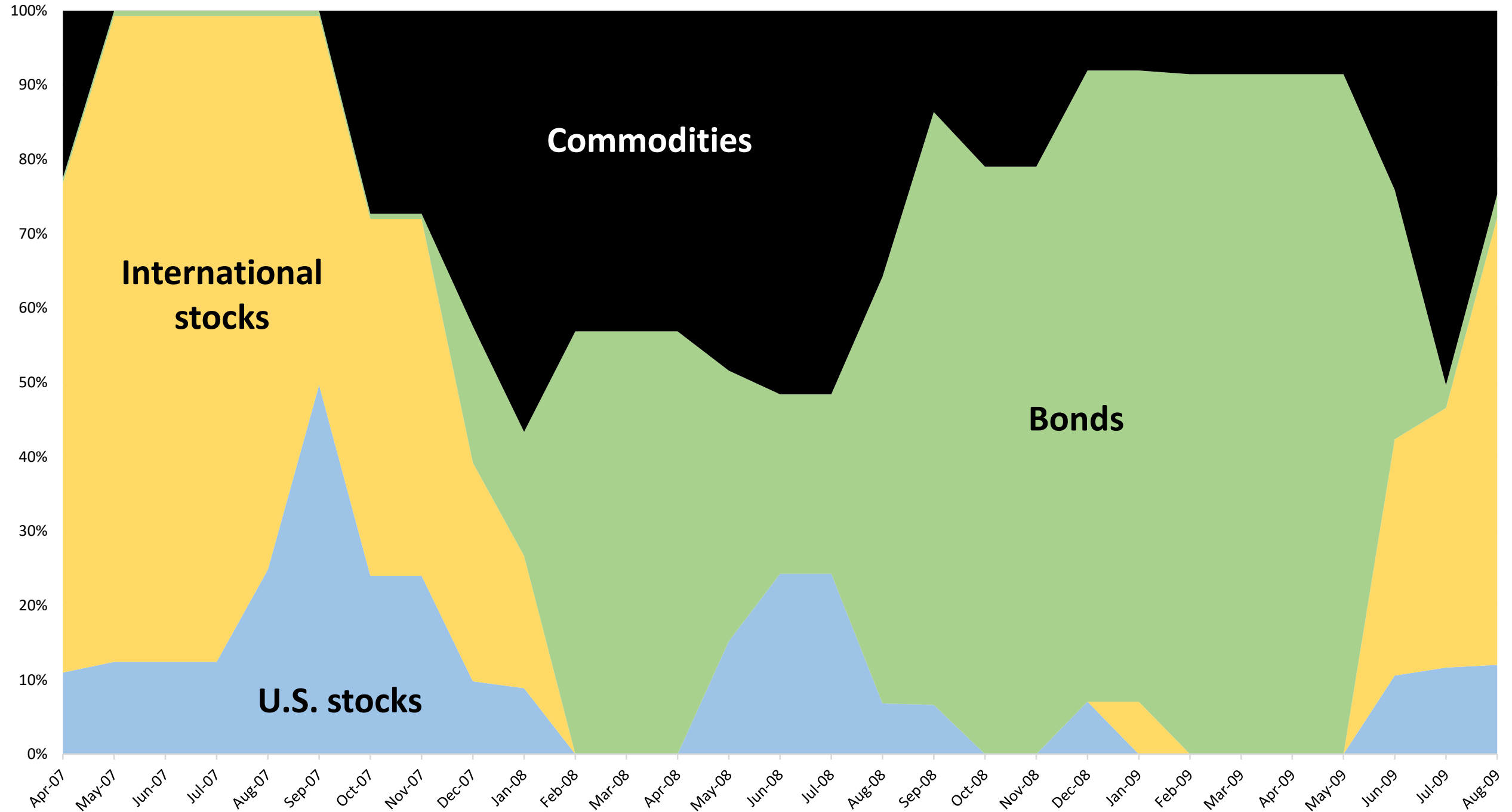
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- 0.5th 2.6%

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- 0.5th 3.8%





Conclusion - as based on the data

- The best possible time to first start a TAA (tactical asset allocation) program is . . .
- Is after . . . a recession has started
- Do you or your client feel that a recession might have started ???

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Will interest rates and inflation keep rising, why, and for how long?

Friday

Aug 12th

11:00 a.m. EASTERN

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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