Tactical Asset Allocation during recessions

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- We have a recession coming . . . inevitable . . . always have, always will

- So how will TAA (tactical asset allocation) perform during the next recession
- That's a bridge too far

- BUT . . . We can ask and answer how . . . TAA performed during past recessions

What is a recession?

It's well worth taking a moment to define this "economic behavior"

Two different definitions

- ## Most commonly used

  - NBER (National Bureau for Economic Research) officially defines when we are (and are not) in a recession

  - NBER does NOT care about "investments" or your needs or your client's needs

  - They are serving a much much larger audience . . . With vastly different needs/objectives

  - Their definition of a recession is subjective, flexible, and remains undefined

  - Other than it will be based on
    - Severity
    - Duration
    - Breadth (geographic and sector)

- Less traditional

- However . . . . it might possibly be more relevant for investment professionals and their clients

- Second definition
  - A recession only occurs when GDP shrinks by at least 3.6201%
  - Economy stays in recession until it starts growing . . . And that growth is at least 3.6201%

How do these two definitions compare?

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	Number of recessions since 11/30/1919	How often do they agree with each other (by month)	What portion of the time was spent in recession	Longest period of time without a recession (in years)
NBER definition	18	86 %	19.0 %	10.5
2nd definition (GDP decline or growth of at least 3.62%)	27	86 %	14.9 %	28.0

How are we going to define TAA?

- Select 8 assets that trended most strongly over the 11 months just completed
- All 8 must be equal-weighted
- However . . . if "cash" is selected . . . then it is over-weighted . . . "cash" is defined as 90-Day U.S. Treasury Bills . . . giving it an 11x overweight

- The playing field . . . 26 unique and quite different asset categories
  - 7 US stocks
  - 9 International stocks
  - 5 U.S. Treasuries
  - 1 Inflation-protected Treasury bond (TIPS)
  - 1 Precious metals
  - 3 Other commodities

- The data . . . Jan 1919 through today

- The TAA model . . . . which was <u>burdened</u> with transactions costs

- 3 different passive index Buy&Hold portfolios . . . this is a seriously high hurdle
  - Pure 100% U.S. .
    - 50% stocks and 50% bonds
  - Global . . . Half U.S. and half international
    - 50% stocks and 50% bonds
  - Global but with 10% allocated to commodities

- WHY?
  - Because we've got to ask/answer how other practical solutions would have performed

- Start with NBER definition of recessions

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During NBER definition of recessions

	TAA after transaction costs	Pure U.S. passive benchmark	Global passive benchmark	Global passive benchmark with 10% commodities
Annual return above inflation	4.6	0.8	-1.0	-1.5
Risk-adjusted return (return/risk)	0.5	0.0	-0.1	-0.1
Risk (standard deviation)	10.0	16.2	13.2	12.5
Annual margin of outperformance by TAA portfolio		3.8	5.6	6.1

During NBER definition of expansions

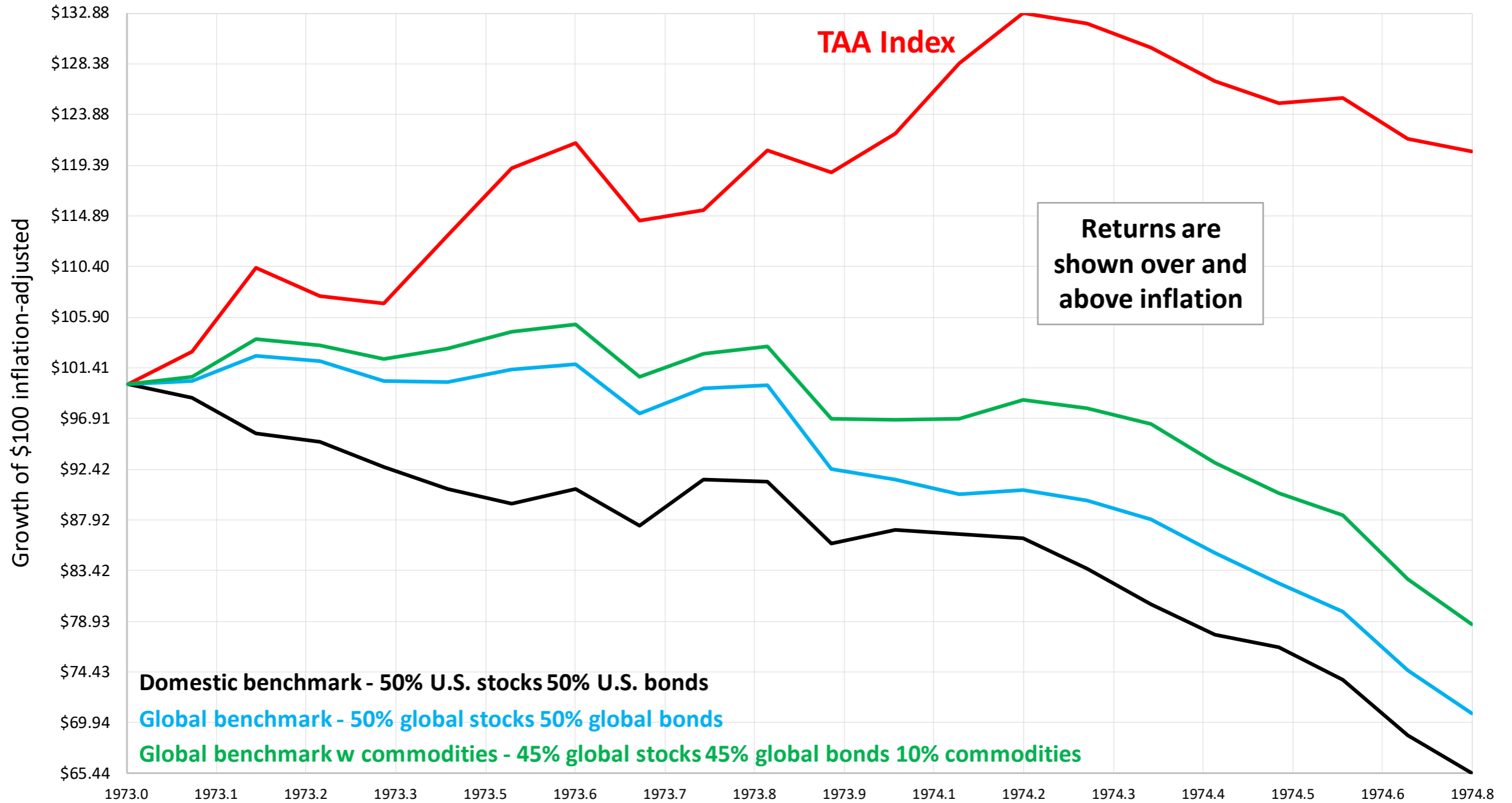|	TAA after transaction costs	Pure U.S. passive benchmark	Global passive benchmark	Global passive benchmark with 10% commodities
Annual return above inflation	12.5	7.0	7.1	6.8
Risk-adjusted return (return/risk)	1.1	0.8	0.9	0.9
Risk (standard deviation)	11.3	8.9	8.1	7.7
Annual margin of outperformance by TAA portfolio		5.5	5.4	5.6

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During GDP growth/shrinkage definition of expansions

	TAA after transaction costs	Pure U.S. passive benchmark	Global passive benchmark	Global passive benchmark with 10% commodities
Annual return above inflation	11.3	6.6	5.8	5.7
Risk-adjusted return (return/risk)	1.0	0.7	0.7	0.7
Risk (standard deviation)	11.1	9.5	8.4	8.0
Annual margin of outperformance by TAA portfolio		4.7	5.5	5.6

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During GDP growth/shrinkage definition of recessions

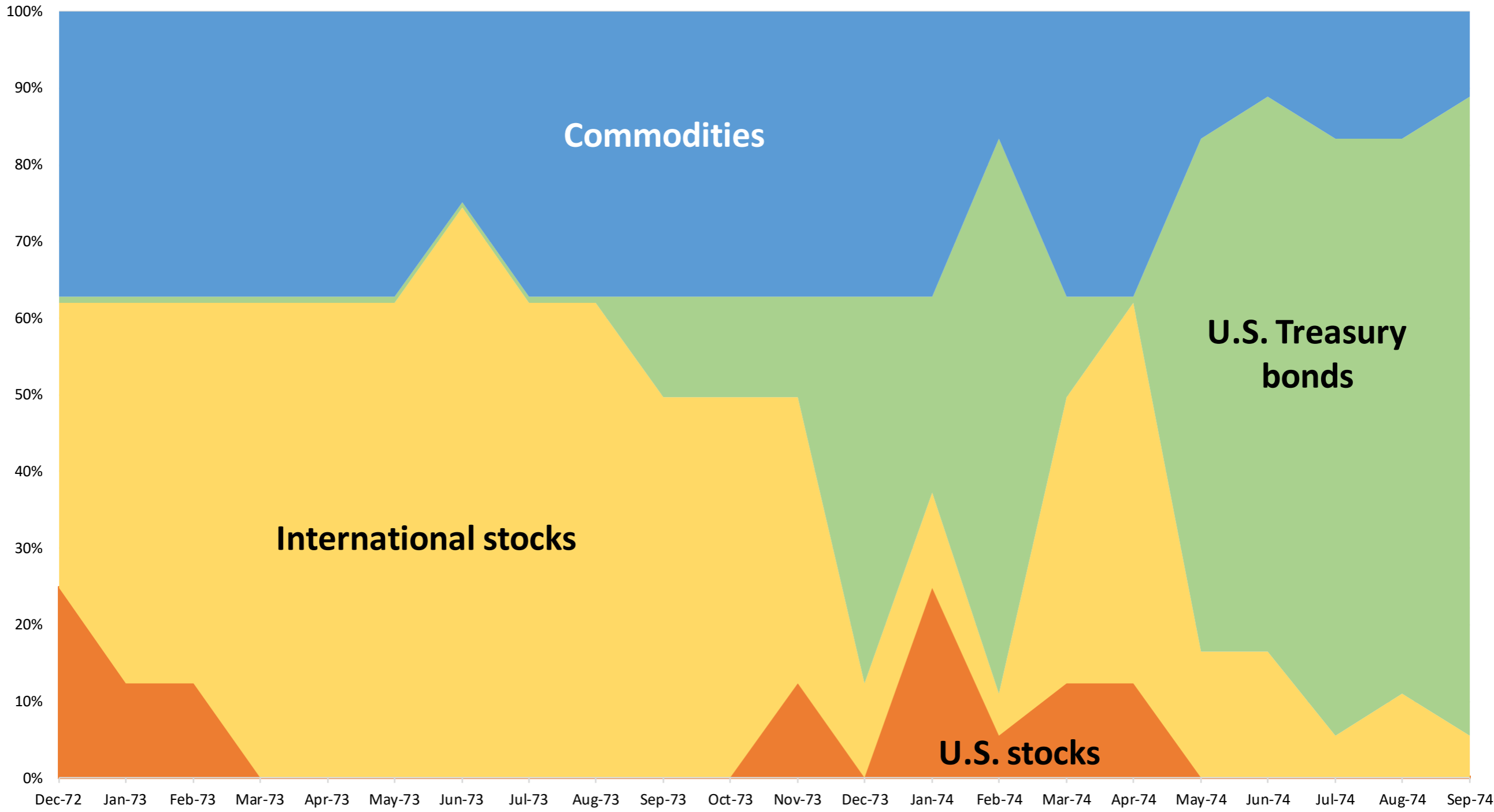|	TAA after transaction costs	Pure U.S. passive benchmark	Global passive benchmark	Global passive benchmark with 10% commodities
Annual return above inflation	8.9	1.2	3.4	2.3
Risk-adjusted return (return/risk)	0.8	0.1	0.3	0.2
Risk (standard deviation)	11.2	15.9	13.3	12.6
Annual margin of outperformance by TAA portfolio		7.7	5.5	6.6

Always ask . . . "Why?"

TAA Index

Returns are shown over and above inflation

Growth of $100 inflation-adjusted

$132.88
$128.38
$123.88
$119.39
$114.89
$110.40
$105.90
$101.41
$96.91
$92.42
$87.92
$83.42
$78.93
$74.43
$69.94
$65.44

Domestic benchmark - 50% U.S. stocks 50% U.S. bonds

Global benchmark - 50% global stocks 50% global bonds

Global benchmark w commodities - 45% global stocks 45% global bonds 10% commodities

1973.0 1973.1 1973.2 1973.3 1973.5 1973.6 1973.7 1973.8 1973.9 1974.1 1974.2 1974.3 1974.4 1974.5 1974.6 1974.8

Chart: Growth of $100 inflation-adjusted, 1968.9–1970.5

TAA Index (red line)

Returns are shown over and above inflation

Domestic benchmark - 50% U.S. stocks 50% U.S. bonds (black line)

Global benchmark - 50% global stocks 50% global bonds (blue line)

Global benchmark w commodities - 45% global stocks 45% global bonds 10% commodities (green line)

Y-axis values: $74.17, $76.26, $78.35, $80.44, $82.54, $84.63, $86.72, $88.81, $90.90, $92.99, $95.09, $97.18, $99.27, $101.36, $103.45, $105.54

X-axis values: 1968.9, 1969.0, 1969.1, 1969.2, 1969.3, 1969.4, 1969.6, 1969.7, 1969.8, 1969.9, 1970.0, 1970.1, 1970.2, 1970.3, 1970.4, 1970.5

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The Value opportunity - Is it too late

Friday

February 24th

11:00 a.m. EASTERN

Important Disclosures

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

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