

From Data to Decisions:

Evidence-Based Insights into Navigating Economic Regimes

Firm Overview



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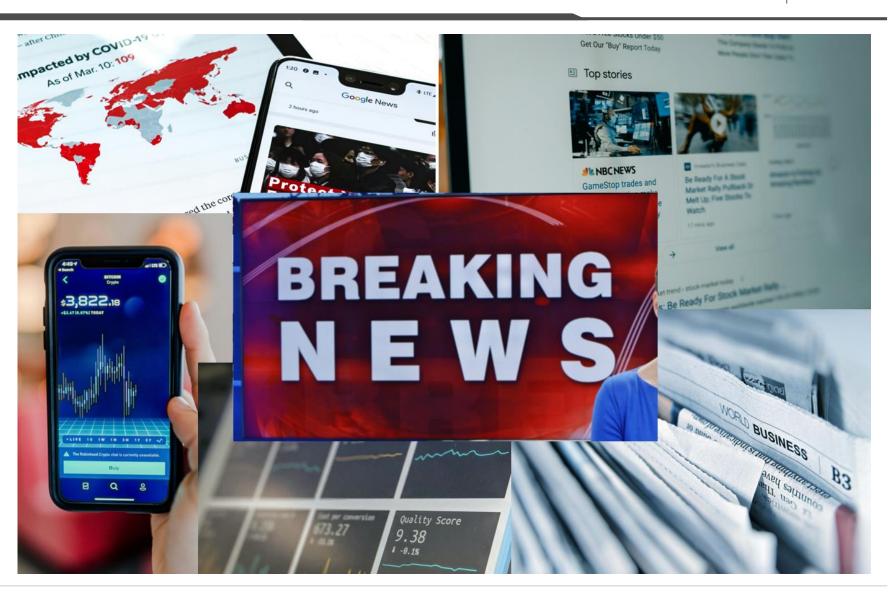
UMAs & SMAs

Research & Consulting

Alternative **Strategies**

Modern Problem: Too Much Information!





Finding the Signal in the Noise

- I) Understand the Four Economic Regime Quadrants
- 2) Identify evidence-based economic indicators that provide fundamental insights
- 3) Use these tools to navigate asset allocation decisions through time



Part I

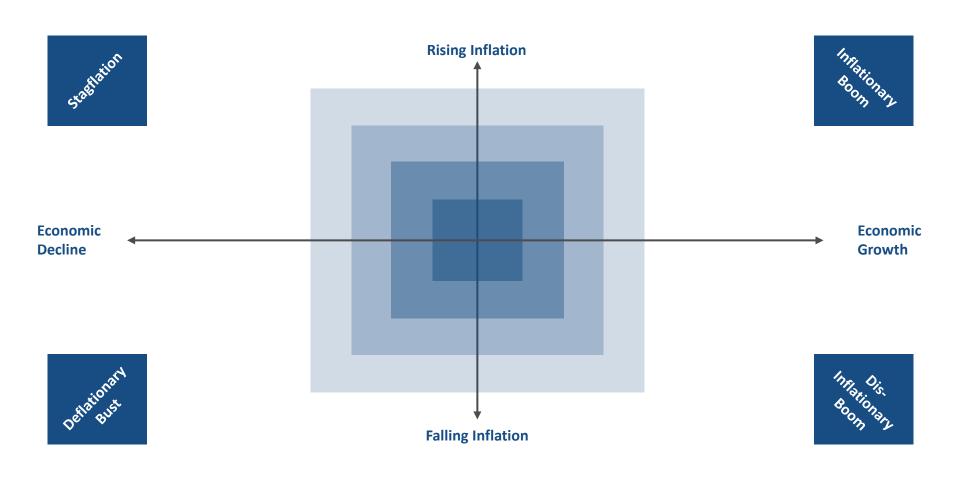
Economic Regimes: A Story About Growth & Inflation

What Really Matters?

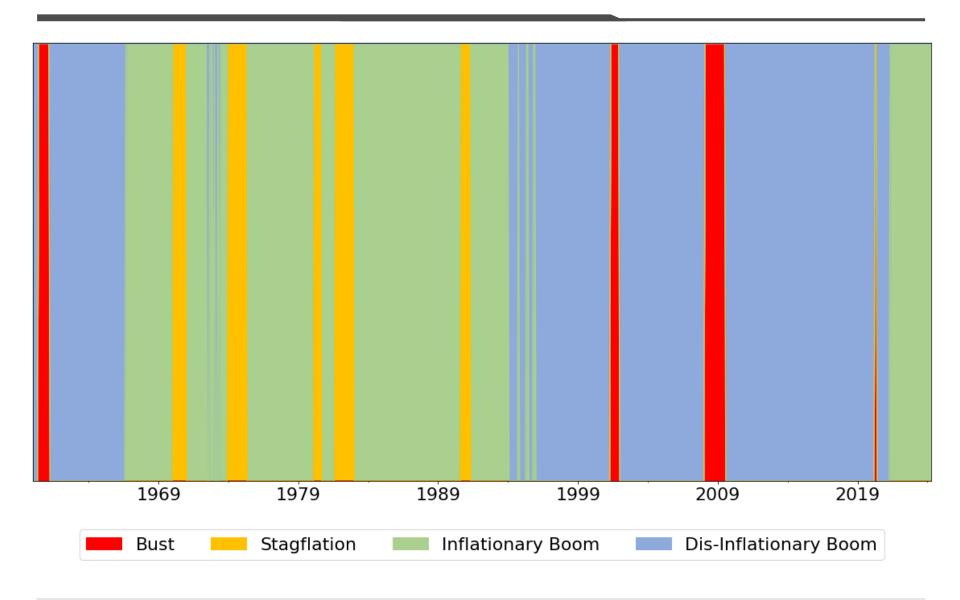
Fundamental drivers for each asset class:

- Stocks & Real Estate: future earnings and asset values over inflation
- Bonds: interest & principal payments over inflation
- Commodities: changes in supply/demand and currency valuations (i.e., inflation)

Key Themes & Establishing a Framework

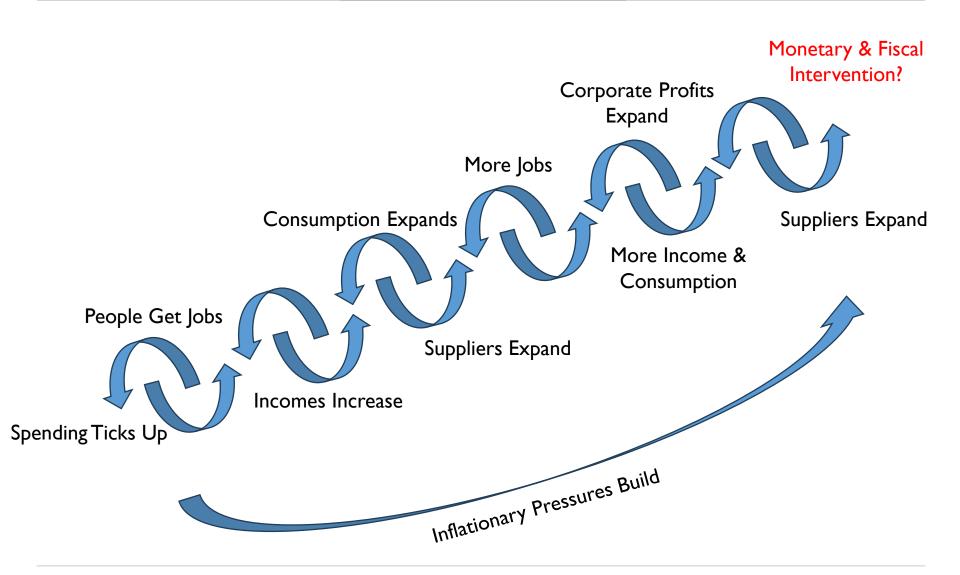


Regimes Through History



Virtuous Cycles



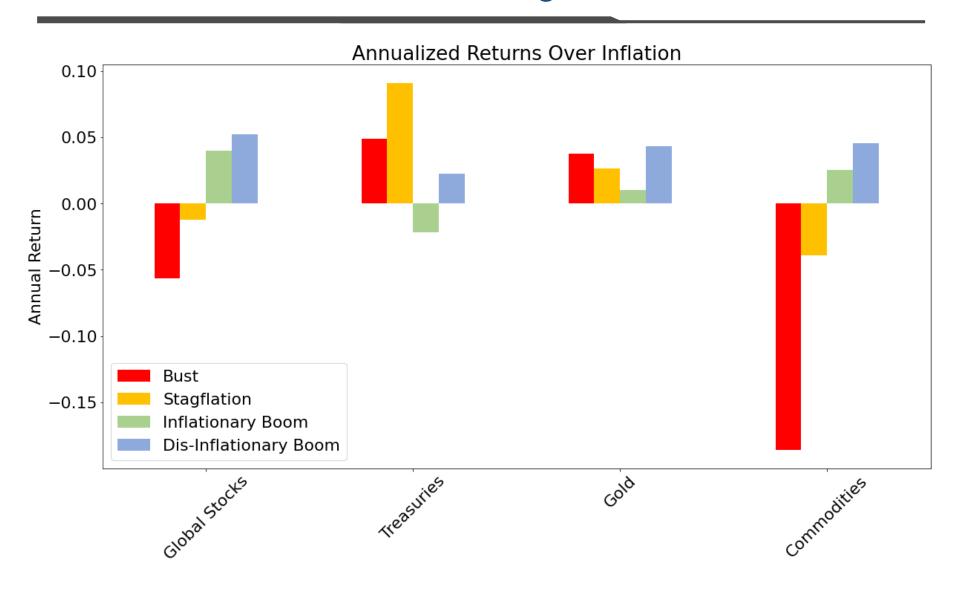


Vicious Cycles

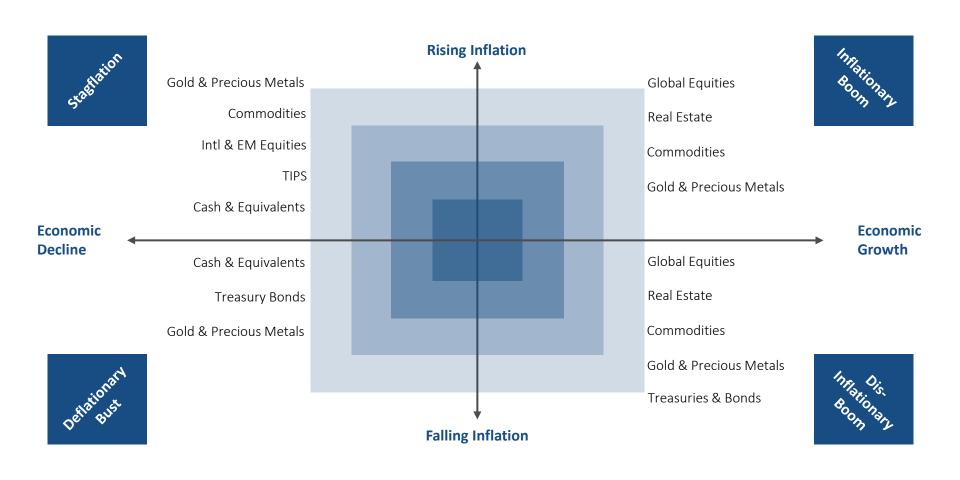


Monetary Intervention Suppliers Stall Expansions Incomes Decrease Corporate Profits Stall Corporate Profits & Market Prices Fall Job Cuts Spending Falls **Spending Decreases** More Job Cuts Deflationary Pressures Build Monetary & Fiscal Response

Real Annual Returns in Each Regime



Portfolio Construction Framework





Part II

Assessing Economic Growth: A Simple Data Driven Approach

Economic Key Categories

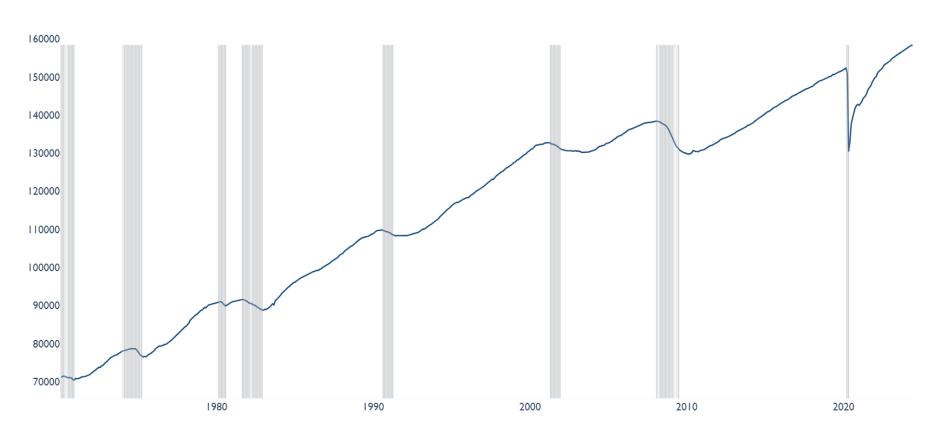


- Labor
- Consumer Incomes
- Consumer Spending
- Commercial Output: Goods & Services
- Sentiment & Financial Markets

Labor: Non-Farm Payrolls



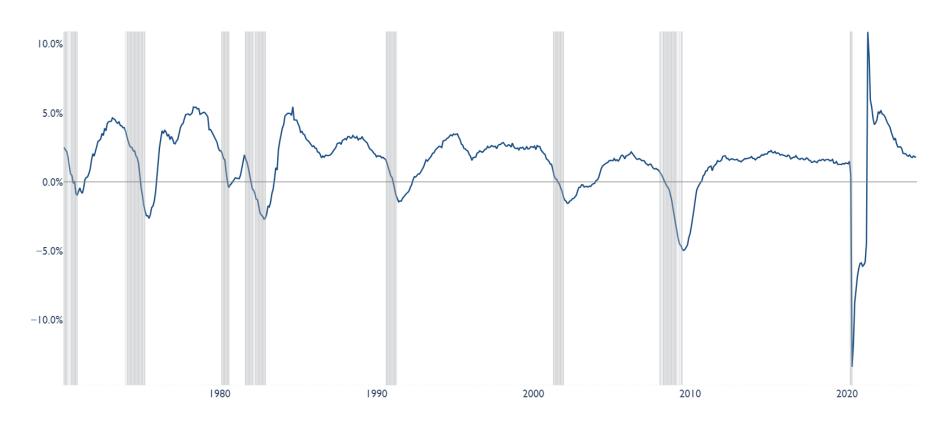
Non-Farm Payrolls



── Non-Farm Payrolls ■ U.S. NBER Recession

Labor: Non-Farm Payrolls YoY %

Non-Farm Payrolls - Annual % Change

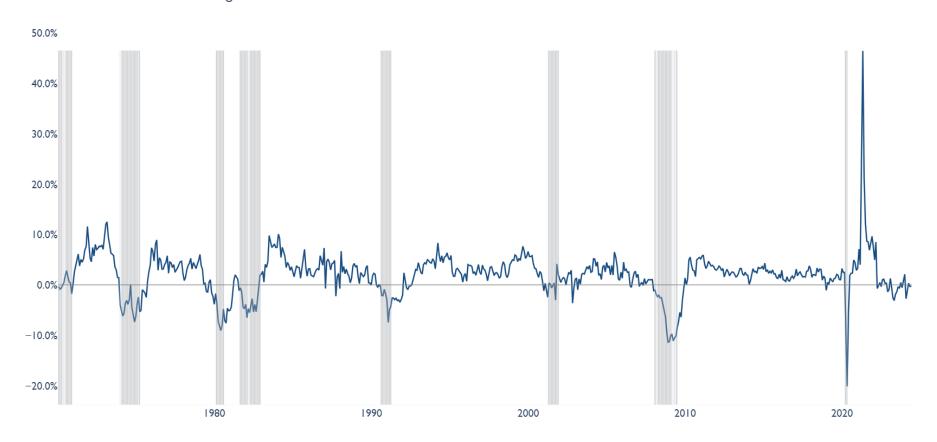


— Non-Farm Payrolls - Annual % Change 📗 U.S. NBER Recession

Consumption: Retail Sales



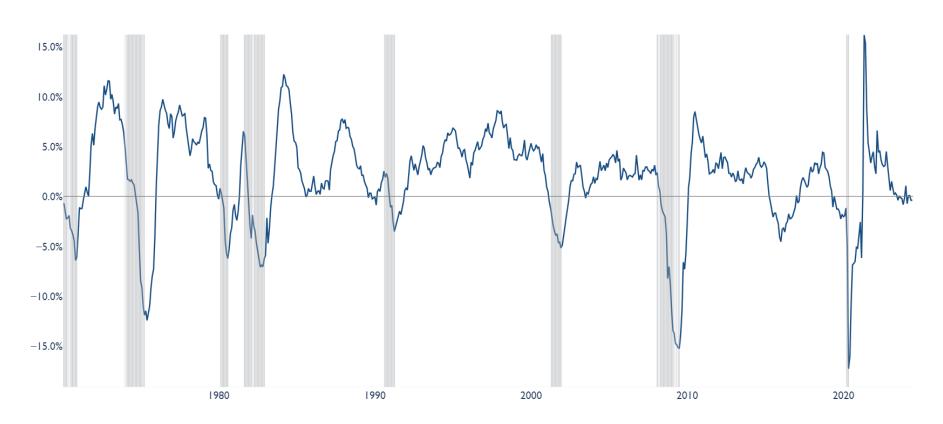
Retail Sales - Annual % Change



Commercial Output: Industrial Production



Industrial Production - Annual % Change

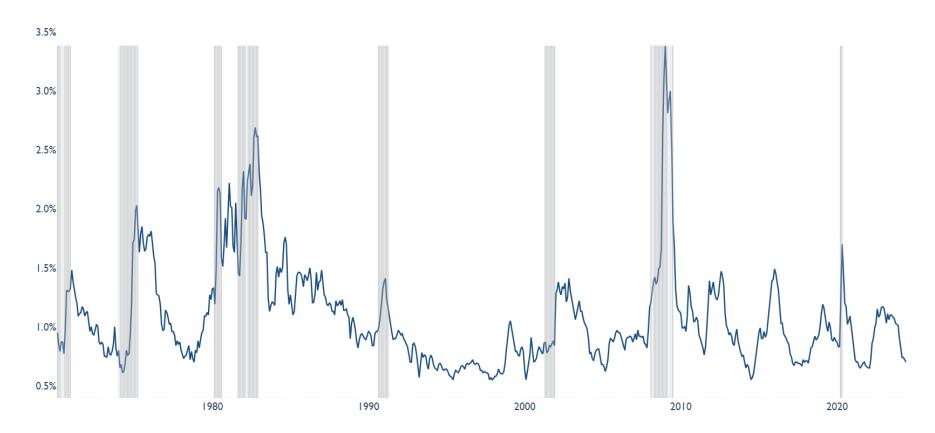


— Industrial Production - Annual % Change 📗 U.S. NBER Recession

Market Sentiment: Credit Spreads



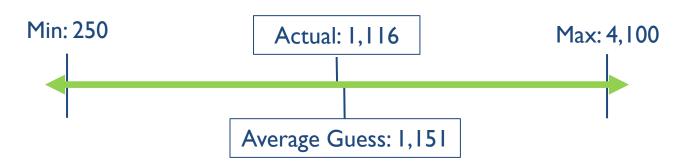
Corporate Bond Spread: Moody's BAA Minus AAA



Corporate Bond Spread: Moody's BAA Minus AAA U.S. NBER Recession

Wisdom of the Crowds

Michael Mauboussin's Jelly Bean Experiment (73 Students)





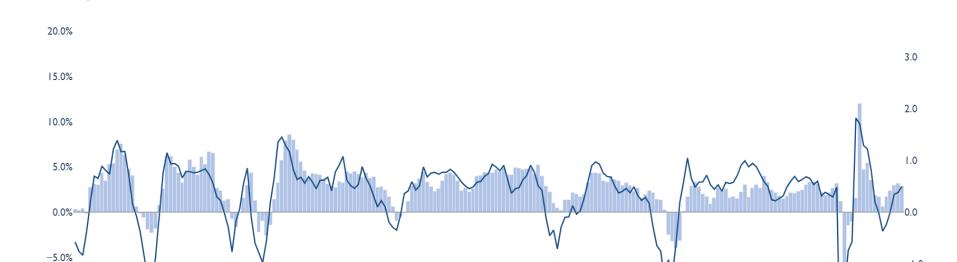
- > A major factor in the theory of market efficiency
- > We can ask a "crowd" of quantitative measures instead
- > Referred to as an "ensemble approach" in machine learning
- > Ensemble methods are leading the way in AI & machine learning

Composite Growth Model v. Real GDP



-2.0

-3.0





Real U.S. GDP - Annual % Change — RQA Economic Index

Source: St. Louis Fed, University of Michigan, RQA

-10.0%

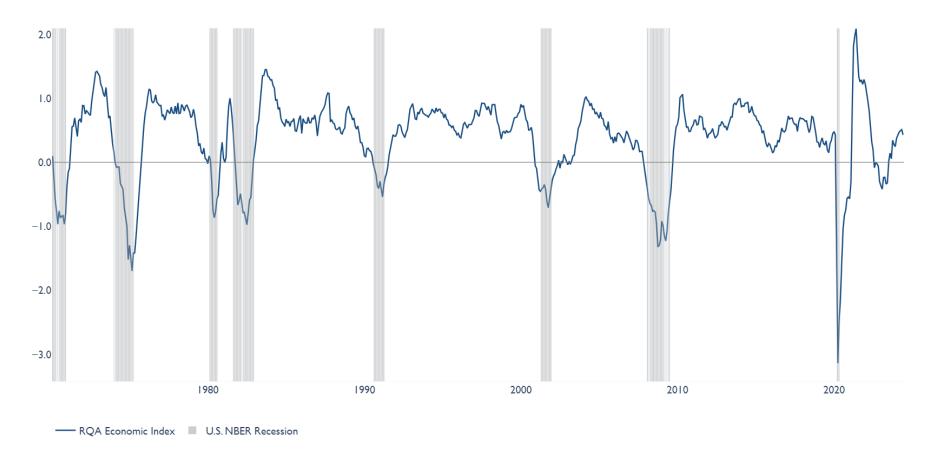
-15.0%

RQA Economic Index

Composite Growth Model v. Recessions



RQA Economic Index



Source: St. Louis Fed, University of Michigan, RQA



Part III

Assessing Inflation: A Simple Market-Based Approach

Key Inflation Drivers

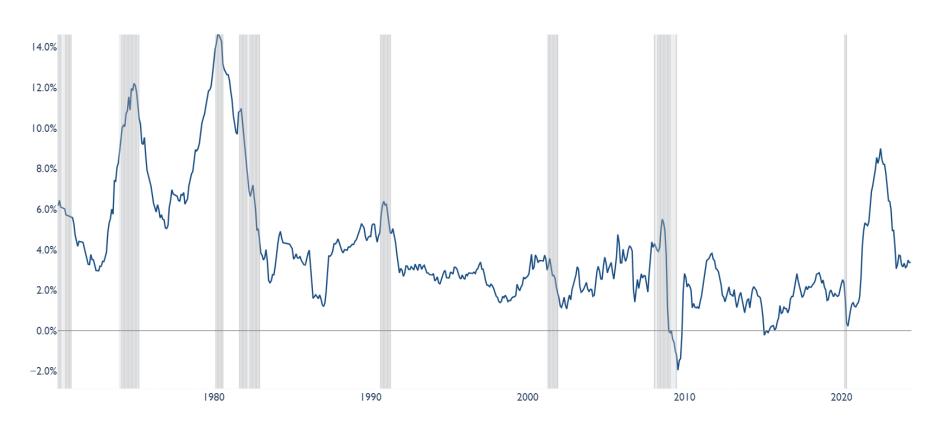


- Money Supply Growth
- Supply Shocks
- Expanding Production Costs
- Robust Consumer Demand
- Inflation Expectations

U.S. Inflation Through Time



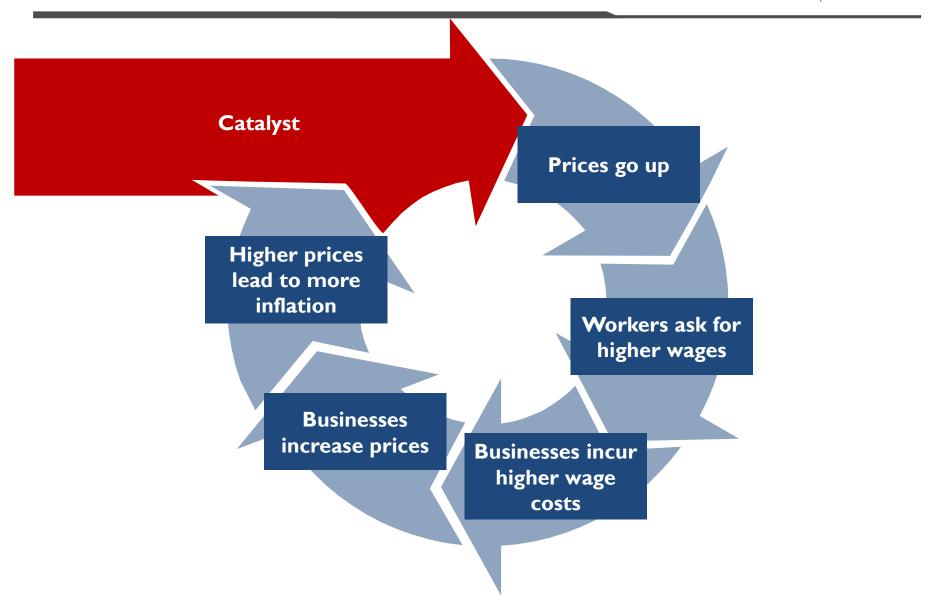
Consumer Price Index (CPI) - Annual % Change



Consumer Price Index (CPI) - Annual % Change U.S. NBER Recession

Inflation Feedback Loop

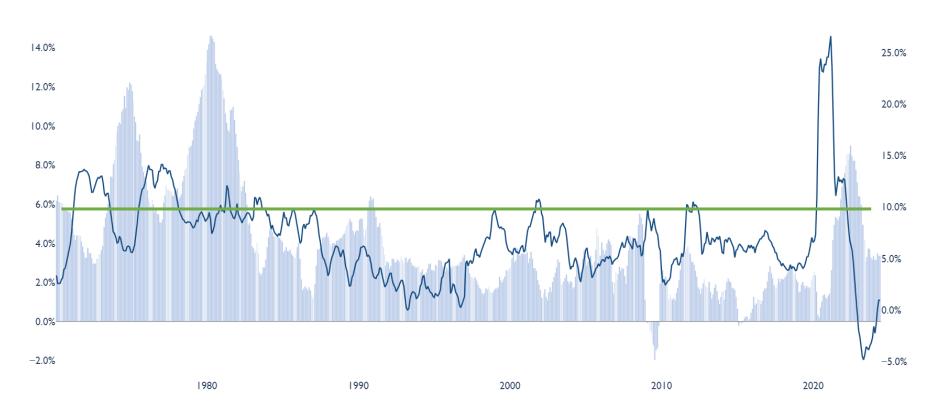




Catalyst: M2 Money Supply Growth



M2 Money Supply - Annual % Change

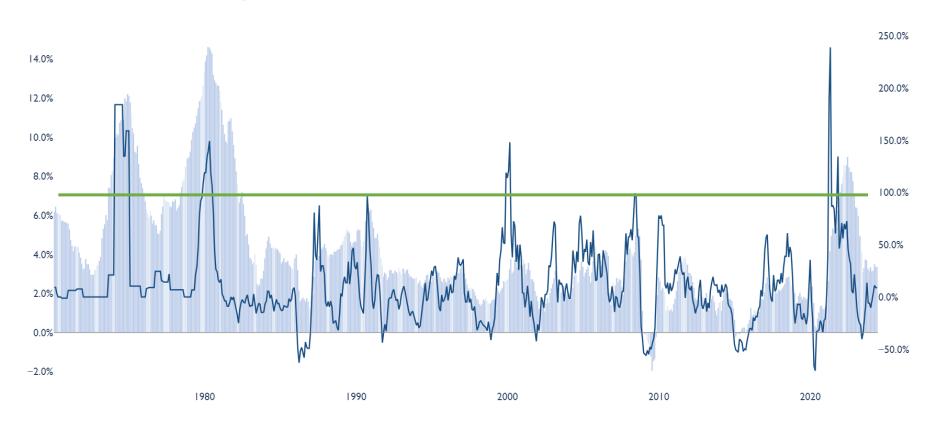


Consumer Price Index (CPI) - Annual % Change — M2 Money Supply - Annual % Change

Catalyst: Crude Oil Shocks



WTI Crude Oil - Annual % Change



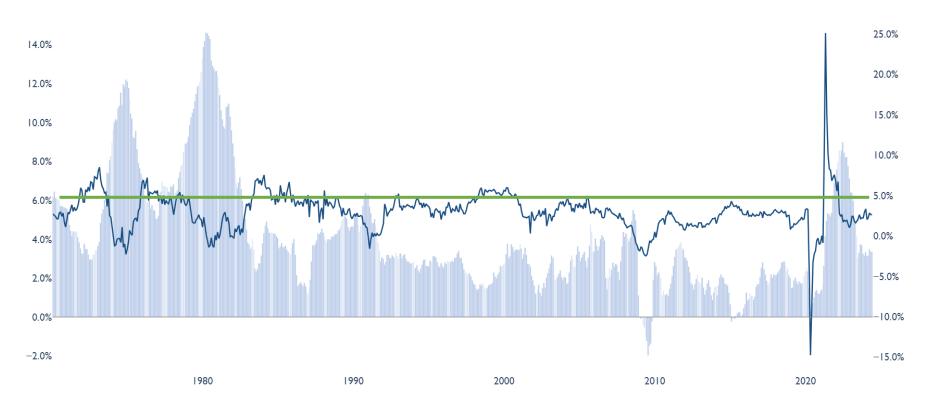
Consumer Price Index (CPI) - Annual % Change — WTI Crude Oil - Annual % Change

Source: St. Louis Fed, MacroTrends, Norgate Premium Data, RQA

Catalyst: Real Personal Consumption



Real Personal Consumption Expenditures - Annual % Change



Consumer Price Index (CPI) - Annual % Change —— Real Personal Consumption Expenditures - Annual % Change

Forecasting Inflation

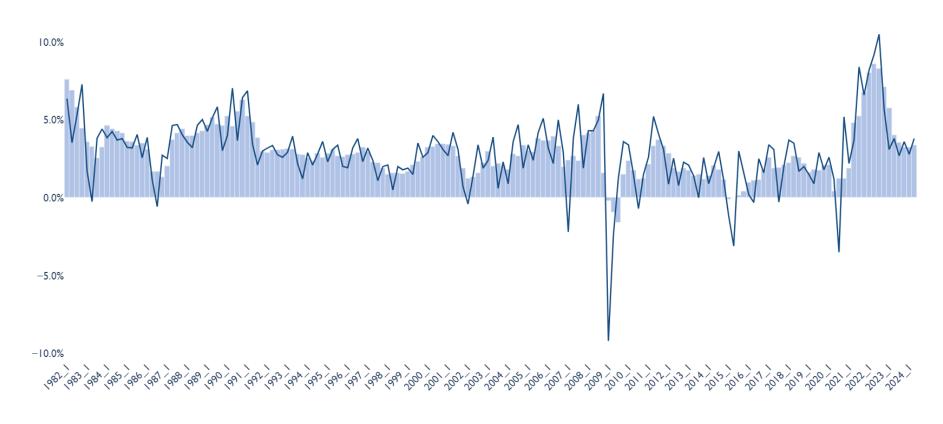


- Fundamental & Catalyst Data Tends to be Tricky/Inconsistent
- Market Implied Measures (Leaning on the wisdom of crowds)
 - Forecaster Surveys (Philadelphia Fed)
 - University of Michigan Surveys
 - Treasury Breakevens (Nominal –TIPS yields)

Inflation: Forecaster Surveys



Professional Forecasters



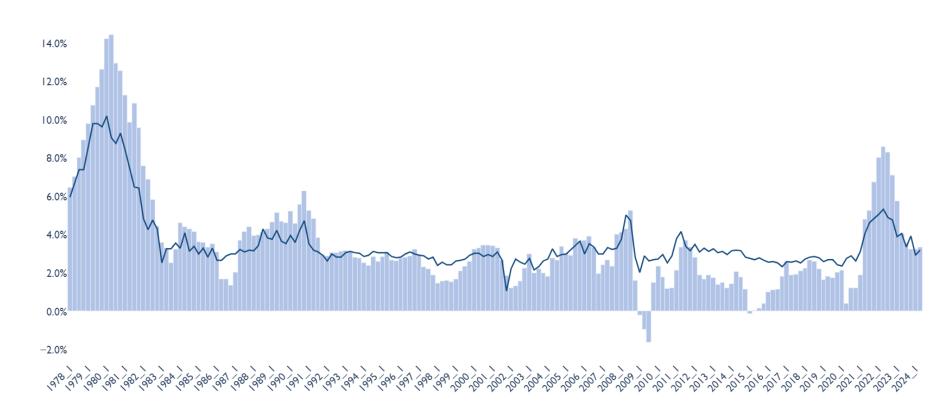
Consumer Price Index (CPI) - Annual % Change —— Professional Forecasters

Source: St. Louis Fed, Philadelphia Fed, RQA

Inflation: Michigan Survey







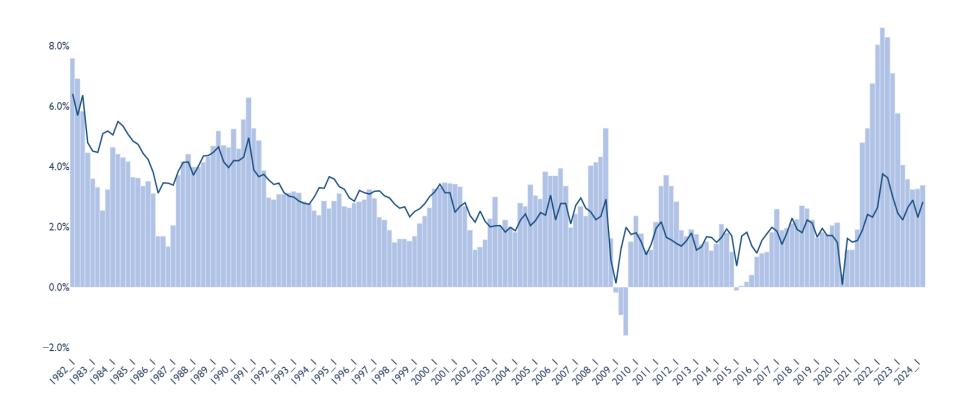
Consumer Price Index (CPI) - Annual % Change — Michigan Surveys

Source: St. Louis Fed, University of Michigan, RQA

Inflation: Market-Implied Breakeven Yields



I-Yr Breakevens



Consumer Price Index (CPI) - Annual % Change — I-Yr Breakevens

Inflation Composite Expectations

Inflation Forecast Composite



Consumer Price Index (CPI) - Annual % Change —— Inflation Forecast Composite

Source: St. Louis Fed, Philadelphia Fed, University of Michigan, RQA



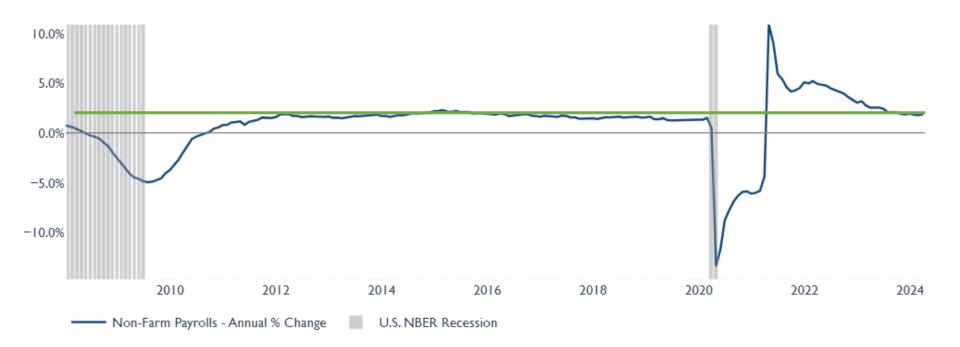
Part IV

Today's Assessment

Payrolls Continue Marching



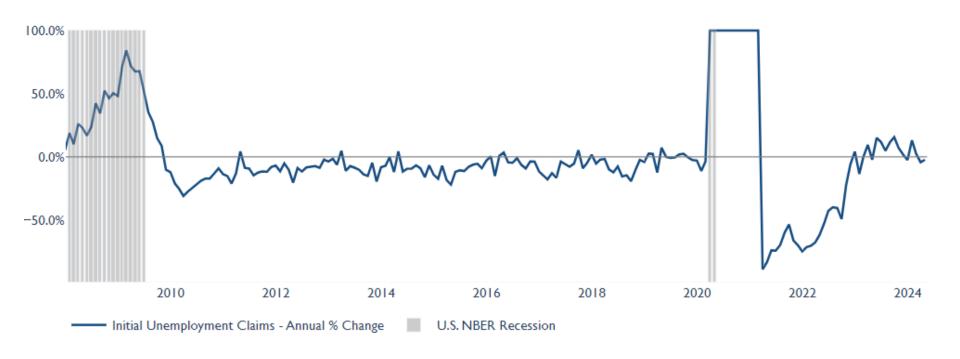
Non-Farm Payrolls - Annual % Change



Unemployment Claims Remain Stable



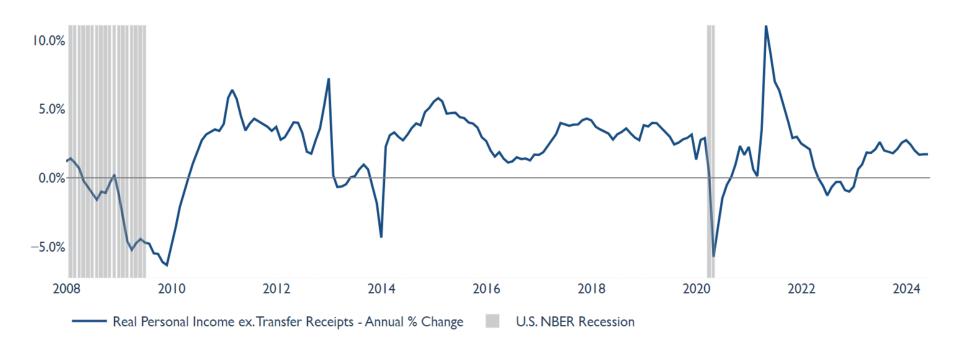
Initial Unemployment Claims - Annual % Change



Incomes Remain Elevated



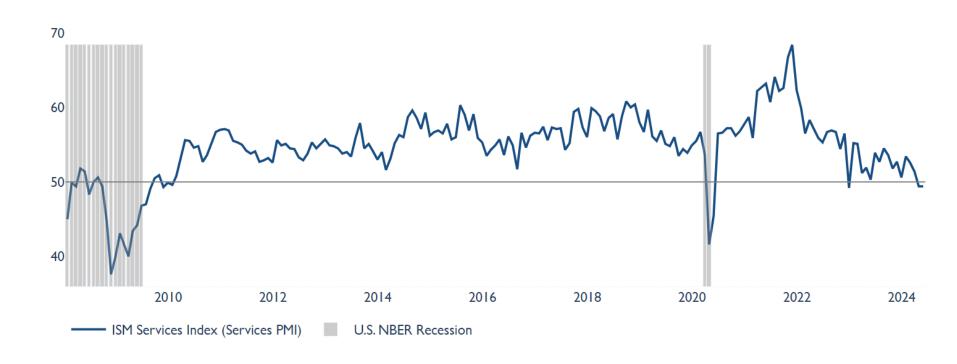
Real Personal Income ex. Transfer Receipts - Annual % Change



Services Demand Has Been Strong

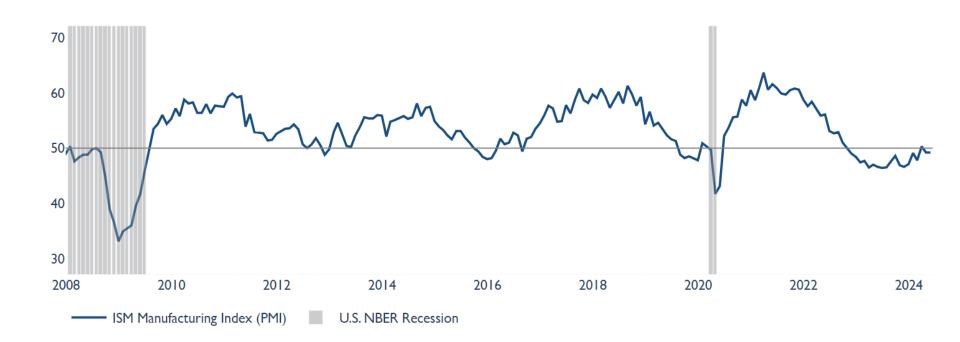


ISM Services Index (Services PMI)



Goods Demand Has Been Weak, But...

ISM Manufacturing Index (PMI)



Rolling Heatmap



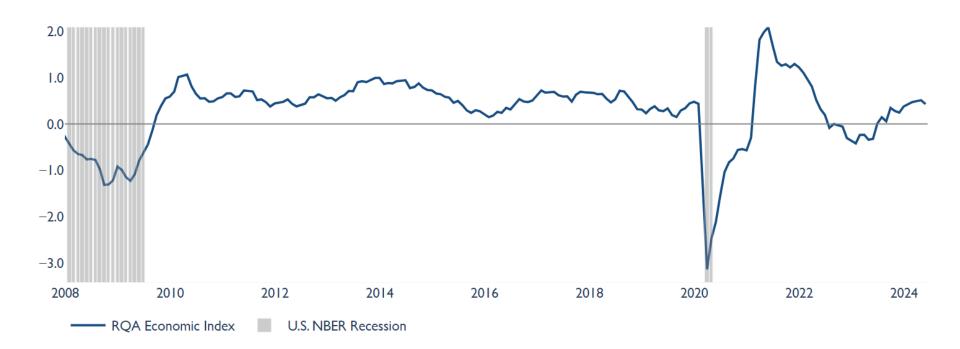
Standardized Economic Indicator Strength	May-24	Apr-24	Mar-24	Feb-24	Jan-24	Dec-23	Nov-23	Oct-23	Sep-23	Aug-23	Jul-23	Jun-23
<u>Labor</u>												
Non-Farm Payrolls (YoY%)	1.7%	1.6%	1.6%	1.7%	2.3%	2.3%	2.4%	2.5%	2.4%	2.5%	2.8%	2.9%
Initial Unemployment Claims (Inverse YoY%)	4.4%	10.0%	-6.1%	-12.0%	-15.1%	3.1%	9.2%	3.2%	-5.7%	6.2%	13.7%	-3.5%
Employment-to-Population Ratio (YoY%)	-0.3%	-0.2%	-0.2%	0.0%	0.0%	1.0%	0.3%	0.5%	0.5%	0.7%	0.7%	0.3%
Average Weekly Hours Worked (YoY%)	-0.3%	0.0%	-0.3%	-1.8%	-0.3%	-0.3%	-0.9%	-0.6%	-0.3%	-0.6%	-0.6%	-0.9%
RQA Labor Composite (YoY%)	1.4%	2.9%	-1.2%	-3.0%	-3.3%	1.5%	2.7%	1.4%	-0.8%	2.2%	4.1%	-0.3%
Commercial Output												
ISM Manufacturing PMI (% over Base)	-1.6%	0.6%	-4.4%	-1.8%	-5.8%	-6.8%	-6.2%	-2.8%	-4.8%	-7.0%	-7.2%	-6.8%
ISM Services PMI (% over Base)	-1.2%	2.8%	5.2%	6.8%	1.2%	5.4%	3.6%	7.2%	9.0%	5.4%	7.8%	0.6%
Industrial Production Index (YoY%)	-0.3%	-0.4%	-0.3%	-0.4%	-0.9%	-1.8%	-1.9%	-1.5%	-1.0%	-1.8%	-2.0%	-2.6%
Residential Real Estate Permits (YoY%)	1.7%	3.2%	-0.4%	9.8%	12.4%	8.8%	-2.6%	-5.8%	1.7%	-13.9%	-14.5%	-12.0%
Income & Consumption												
Real Personal Incomes (ex. Transfer Receipts) (YoY%)	8.2%	7.9%	7.8%	8.2%	8.7%	8.6%	8.3%	7.7%	7.9%	1.7%	2.0%	1.4%
Retail Sales (YoY%)	-0.6%	-0.8%	-2.6%	-2.5%	1.2%	-0.8%	-1.7%	-0.5%	-1.5%	-1.1%	-1.5%	-1.9%
Real Personal Consumption Expenditures (YoY%)	3.2%	3.9%	3.3%	2.8%	4.1%	3.2%	2.9%	3.2%	3.1%	3.1%	2.7%	2.4%
RQA Consumer Spending Composite (YoY%)	1.3%	1.5%	0.4%	0.2%	2.6%	1.2%	0.6%	1.4%	0.8%	1.0%	0.6%	0.2%
Financials & Sentiment												
Treasury Yield Curve Spread - 10-Yr Less 3-Month	-1.0%	-0.8%	-1.2%	-1.2%	-1.4%	-1.5%	-1.1%	-0.7%	-1.0%	-1.5%	-1.6%	-1.6%
Treasury Yield Curve Spread - 10-Yr Less 2-Yr	-0.4%	-0.4%	-0.4%	-0.4%	-0.3%	-0.4%	-0.4%	-0.2%	-0.4%	-0.8%	-0.9%	-1.1%
Corporate Bond Spreads (Inverse YoY%)	32.1%	33.3%	28.2%	26.4%	22.4%	13.7%	12.1%	6.4%	0.9%	6.1%	-6.8%	-11.1%
U.S. Monetary Base (YoY%)	3.3%	5.6%	10.8%	9.7%	7.8%	5.8%	4.9%	2.9%	-0.4%	-0.4%	1.8%	-0.4%
S&P 500 Return (YoY%)	26.3%	20.8%	27.9%	28.4%	18.9%	24.2%	12.0%	8.3%	19.6%	14.0%	11.1%	17.6%
Consumer Sentiment (YoY%)	17.1%	21.2%	28.1%	14.9%	21.7%	16.6%	8.1%	6.5%	15.7%	19.2%	38.8%	28.4%
Inflation & Money Supply												
CPI (YoY%)	3.4%	3.5%	3.1%	3.0%	3.6%	3.2%	3.2%	3.6%	3.6%	3.1%	2.9%	4.1%
Core PCE (YoY%)	2.6%	2.7%	2.7%	2.7%	3.0%	3.1%	3.4%	3.5%	3.7%	4.5%	4.4%	4.8%
M2 Money Supply (YoY%)	0.9%	0.1%	-1.3%	-2.3%	-1.6%	-2.7%	-3.2%	-3.5%	-3.9%	-3.7%	-3.6%	-4.4%

Source: St. Louis Fed, University of Michigan, RQA

Composite Economic Model



RQA Economic Index

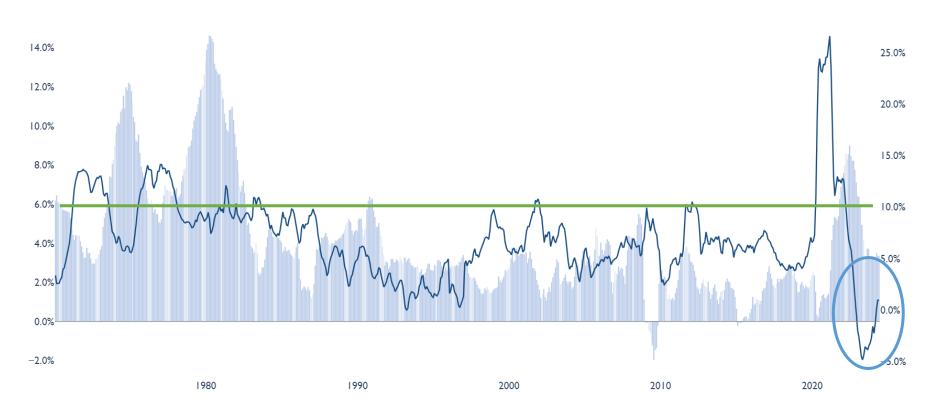


Source: St. Louis Fed, University of Michigan, RQA

M2 Money Supply Growth Today



M2 Money Supply - Annual % Change

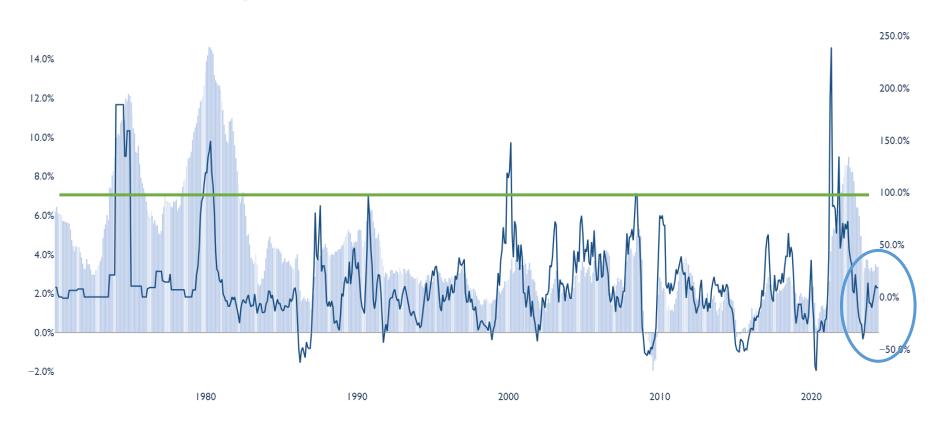


Consumer Price Index (CPI) - Annual % Change — M2 Money Supply - Annual % Change

Crude Oil Today



WTI Crude Oil - Annual % Change



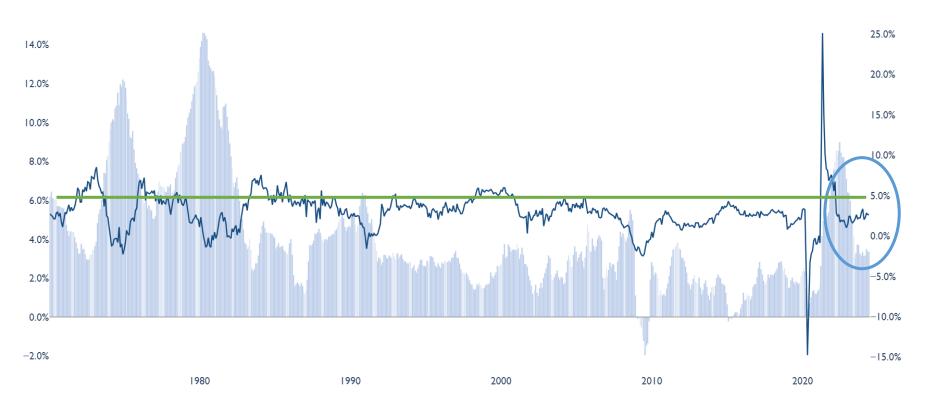
Consumer Price Index (CPI) - Annual % Change — WTI Crude Oil - Annual % Change

Source: St. Louis Fed, MacroTrends, Norgate Premium Data, RQA

Real Personal Consumption Today



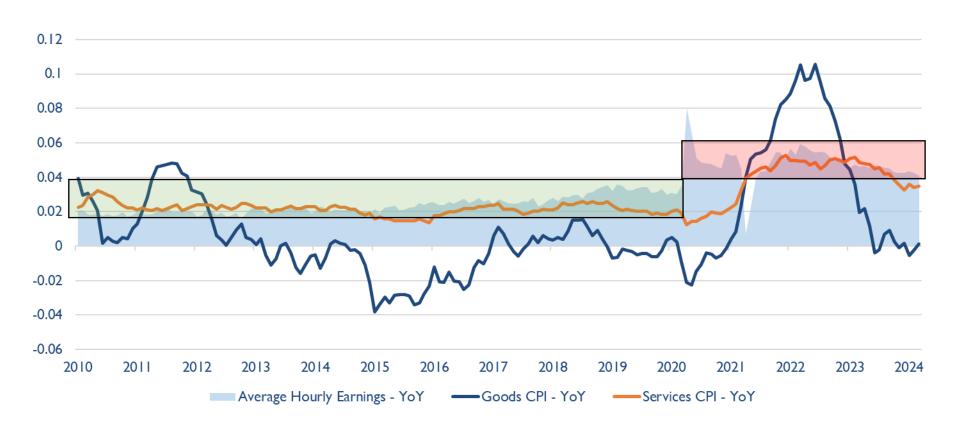
Real Personal Consumption Expenditures - Annual % Change



Consumer Price Index (CPI) - Annual % Change —— Real Personal Consumption Expenditures - Annual % Change

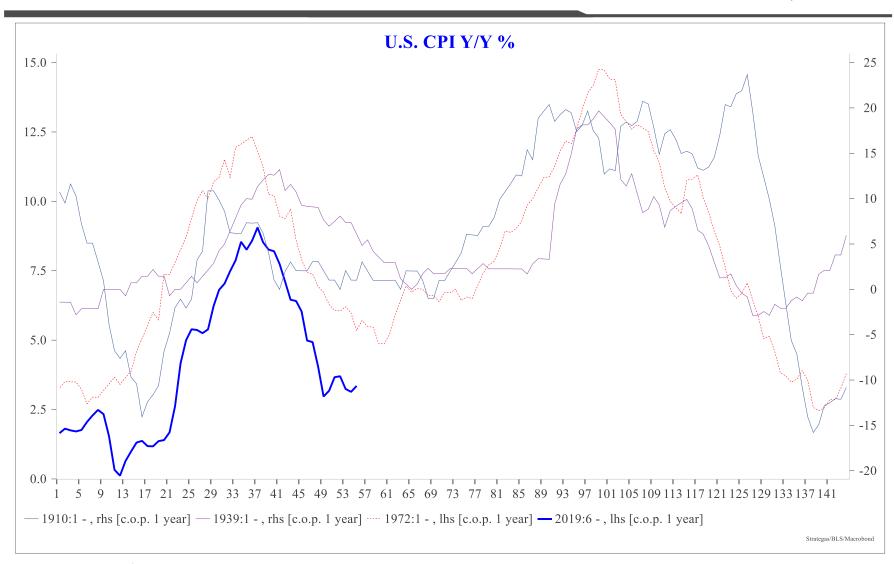
Inflation: Goods v. Services





Inflation Tends to Come in Waves





Source: Strategas Research Partners, RQA

Inflation Tends to Come in Waves

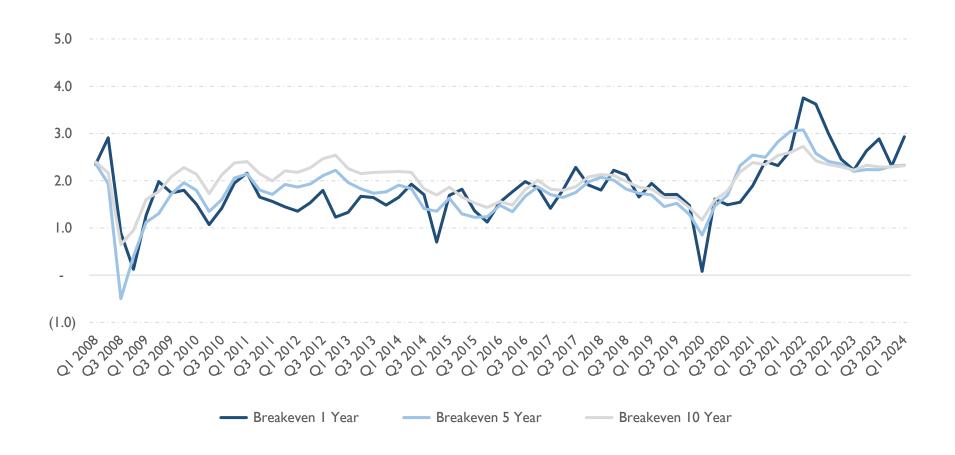


Developed Economy Inflation Episodes Breakdown									
Country	CPI Series Start	CPI Series End	Years of History	Single Waves	Inflation Episodes	% Multiple			
Austria	1968	2023	55	0	2	100%			
Belgium	1933	2023	90	0	4	100%			
Denmark	1901	2023	122	0	3	100%			
Finland	1953	2023	70	0	2	100%			
France	1900	2023	123	0	3	100%			
Germany	1950	2023	73	0	1	100%			
Greece	1960	2023	63	0	1	100%			
Ireland	1923	2023	100	0	2	100%			
Italy	1955	2023	68	1	2	50%			
Netherlands	1900	2023	123	0	3	100%			
Portugal	1949	2023	74	0	2	100%			
Spain	1958	2023	65	1	2	50%			
Sweden	1900	2023	123	2	4	50%			
United Kingdom	1900	2023	123	1	4	75%			
Iceland	1940	2023	83	0	4	100%			
Norway	1900	2023	123	1	5	80%			
Switzerland	1922	2023	101	1	2	50%			
Australia	1924	2023	99	0	2	100%			
Canada	1915	2023	108	0	3	100%			
Japan	1971	2023	52	0	1	100%			
New Zealand	1927	2023	96	1	3	67%			
South Korea	1953	2023	70	0	4	100%			
United States	1900	2023	123	0	3	100%			
Averages			2127	8	62	87%			

Source: Strategas Research Partners, RQA

Near-Term vs. Long-Term Expectations

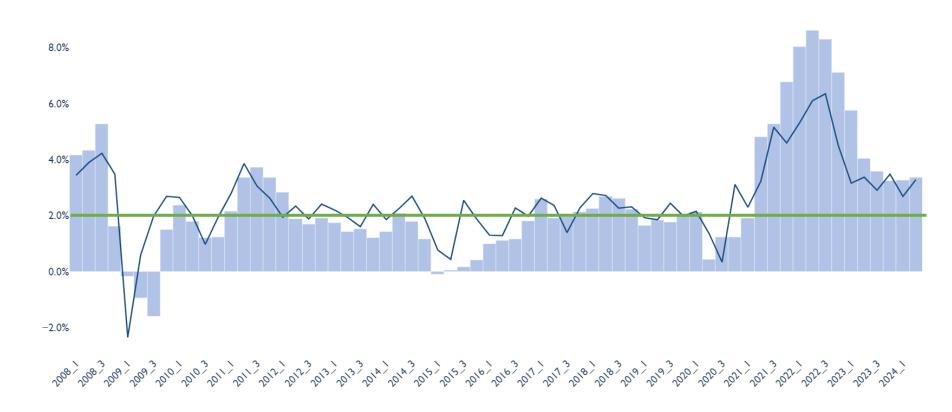




Inflation Composite Expectations



Inflation Forecast Composite

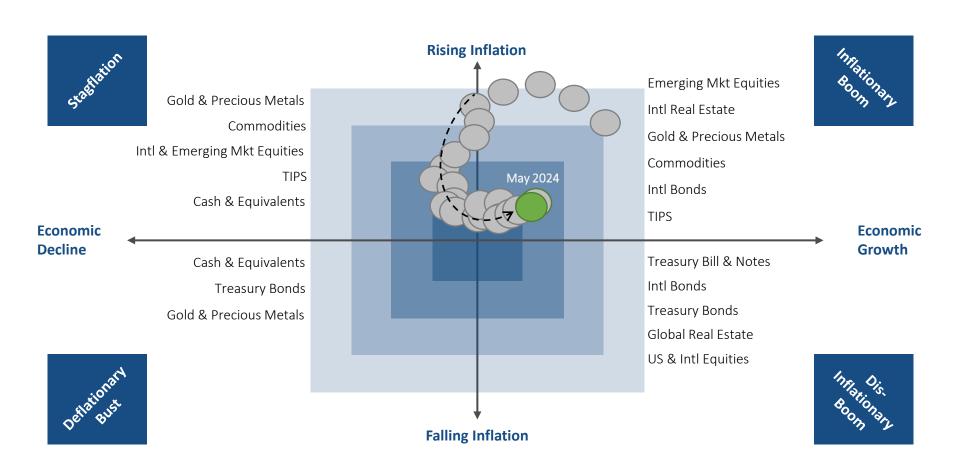


Consumer Price Index (CPI) - Annual % Change — Inflation Forecast Composite

Source: St. Louis Fed, Philadelphia Fed, University of Michigan, RQA

Regime Drift Over Time





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INDEX AND BENCHMARK RETURNS REFLECT THE REINVESTMENT OF DIVIDENDS OR INCOME. IT SHOULD NOT BE ASSUMED THAT THE FUNDS WILL INVEST IN ANY SPECIFIC SECURITIES THAT COMPRISE THE INDICES, NOR SHOULD IT BE UNDERSTOOD TO MEAN THAT THERE IS A CORRELATION BETWEEN THE FUNDS' RETURNS AND INDICES. THE COMPARISONS TO THESE WIDELY FOLLOWED BENCHMARKS ARE PROVIDED FOR INFORMATION PURPOSES ONLY.

INCEPTION DATES FOR EACH MANDATE ARE AS FOLLOWS: GLOBAL BALANCED, SEPTEMBER 30, 2019; GLOBAL ADAPTIVE, JUNE 30, 2019; AND NCQ, LP, DECEMBER 31, 2014.

ANNUAL MANAGEMENT FEES INCORPORATED INTO EACH MANDATE ARE AS FOLLOWS: GLOBAL BALANCED, 0.50%; GLOBAL ADAPTIVE, 0.75%; NCQ,LP, 1% (PLUS 10% OF NET PROFITS ABOVE HIGH WATER MARK). FEES ARE ASSESSED AT MONTH END OF EACH CALENDAR MONTH. UNLESS OTHERWISE STATED AND AGREED UPON.