Month In Macro

This note aims to share our research team's internal checkpoint process in evaluating the current state of the economy as it pertains to markets. The pages that follow will have familiar content for those who follow our work, but with the added benefit of connecting the dots across all the economic and financial data our systems use to make portfolio decisions. Our primary takeaways are as follows:

- ***Nominal GDP expanded by 0.64% in December, with real GDP rising by 0.33% and inflation rising by 0.31%.***
- ***Conditions across nominal income, output, and employment continue to look significantly at odds with an imminent risk of a recession.***
- ***Relative to these conditions, earnings expectations look modestly weak relative to the probable forward path of revenue. This gap remains small and does not represent a sizable macro mispricing.***
- ***With the S&P 500 making new all-time highs, risk-controlled bets on equity beta seem reasonable, while alpha opportunities remain muted. Our Alpha Strategies are flat equities at this time.***

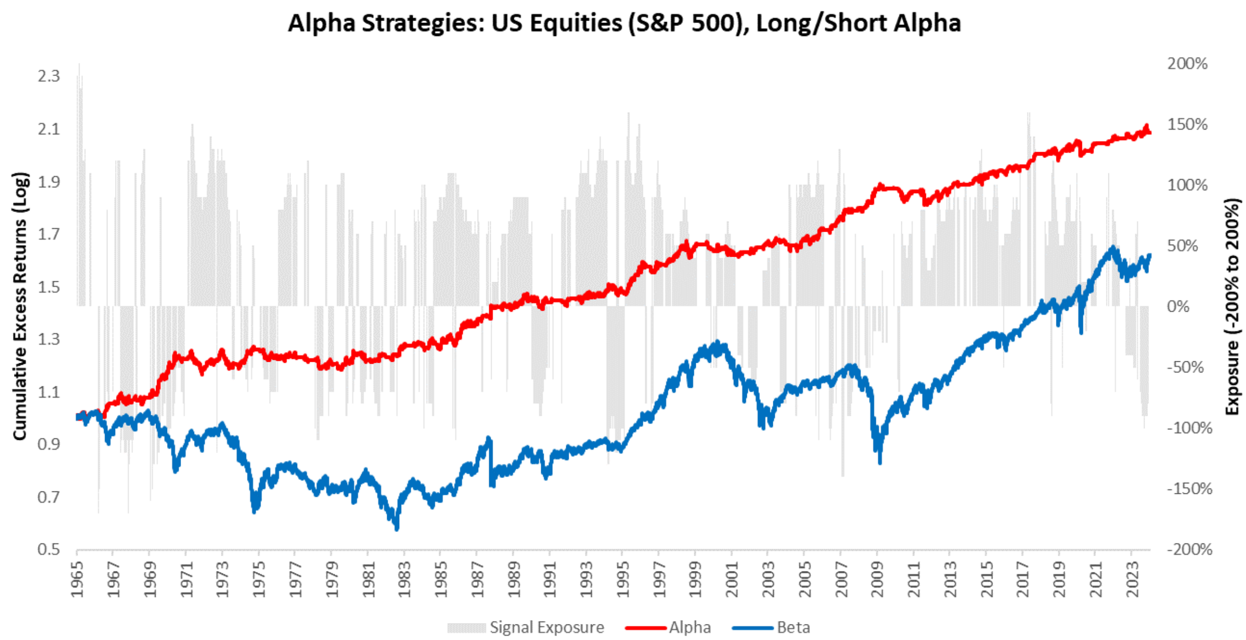
In this note, we focus predominantly on the prospects for a recession and what that means for equities. Recent changes in economic activity lead us to believe that we remain well removed from a recession, leading our growth forecasts to turn higher and our view on equities to be constructive. We show our real GDP forecasts below:

As we can see above, our views on the forward path of GDP have improved as the pass-through of monetary tightening has been limited to primarily the industrial sector. While this industrial weakness is of note, it has not been enough to impact the broader economy. Given this resilience, our upgraded systematic Alpha Strategies show signals to remain flat equities. We expand on these new strategies in the next section.

Prometheus Alpha Strategies: US Equities (S&P 500)

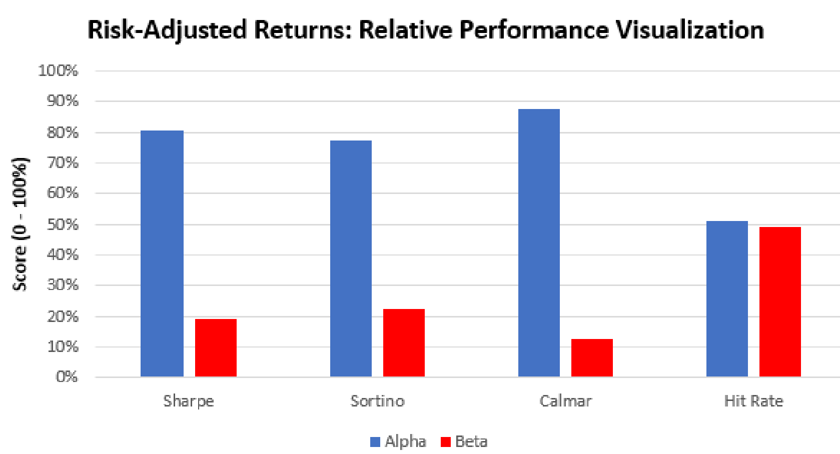
At Prometheus, innovation has been the cornerstone of our evolution, and we're constantly pushing forward our understanding of macroeconomic dynamics to further our edge in markets. A key driver of this evolution is our iterative research process, where we try to systematize our ongoing understanding of macro conditions into investment strategies. Keeping with this process over the last year has allowed us to improve our process substantially and create our next generation of programs: Alpha Strategies.

Alpha Strategies reflects the best parts of our understanding of macro, markets, and portfolio construction. The purpose of Alpha Strategies is simple: to provide durable and consistent return streams independent of beta. Today, we kick things off with our Alpha Strategy for the S&P 500. We begin with the high-level performance statistics:



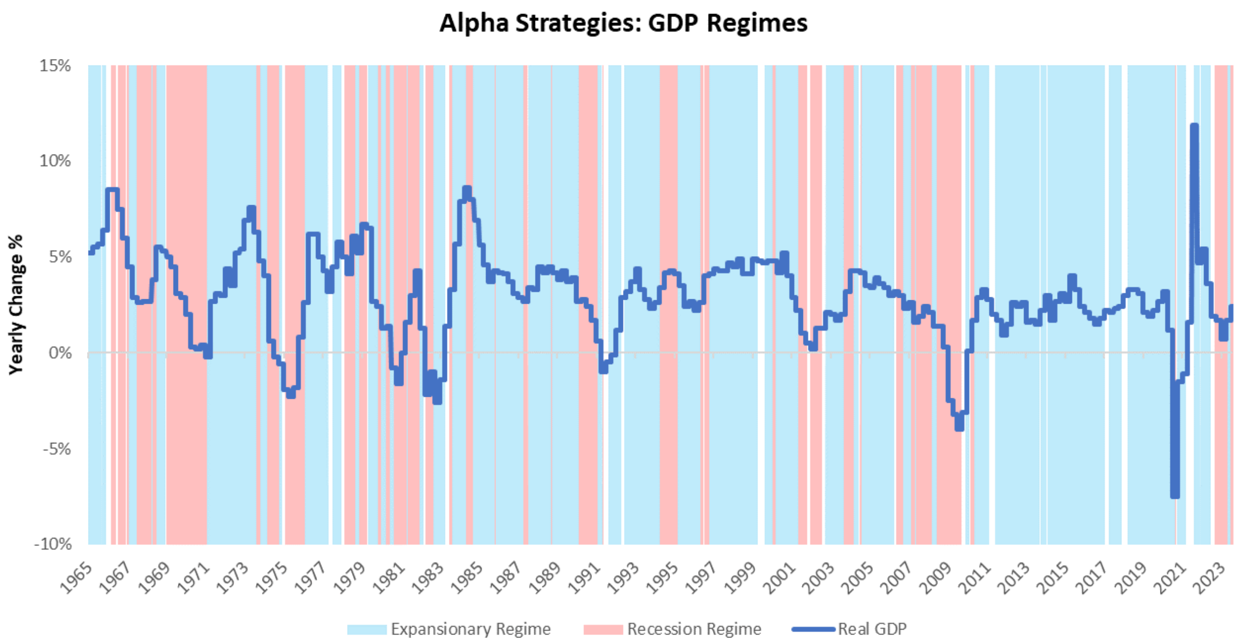
Summary Statistics

	Alpha	Beta
Total Return	9.0%	7.0%
Excess Return	4.8%	2.4%
Volatility	7.9%	16.7%
Semi-Variance	7.5%	13.0%
Max DD	-16%	-57%
Sharpe	0.61	0.15
Sortino	0.64	0.19
Calmar	0.29	0.04
Hit Rate	52%	50%
DD Duration (Years)	3.85	7.07



As we can see, our Alpha Strategy has largely outperformed beta exposure in terms of providing a smooth return path over time, as evidenced by the cumulative excess return path. Furthermore, the Alpha Strategy outperforms beta exposure across measures of risk-adjusted returns, with higher returns and lower risk across measures. While the outperformance of this strategy is evident from these statistics, we think it is important to recognize that the objective of alpha is not to outperform beta but rather to add value to beta in an uncorrelated fashion. Thus, while we display our Alpha Strategy relative to its underlying beta, outperforming this beta is not an explicit objective but a welcome outcome. Alpha is always scarce in markets, and adding alpha to any return stream is additive to the portfolio. Our approach seeks to generate macro alpha, i.e., alpha that stems from correctly identifying future economic conditions relative to what markets have currently priced.

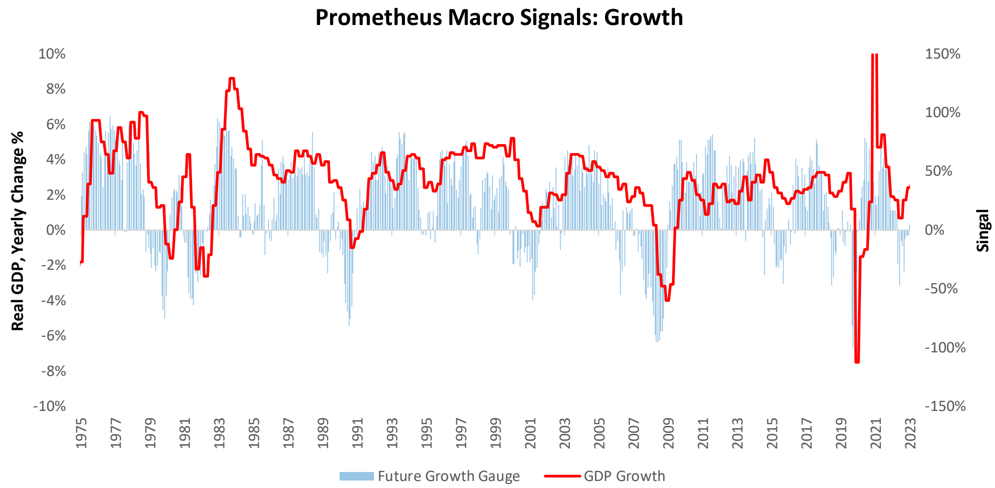
In the case of US Equities, this requires having a view of the business cycle. The single most significant driver of equity market returns over long periods is the level and change of real GDP growth. Using a vast array of economic data, we can estimate expected regimes for the economy. We visualize this high-level regime recognition below:

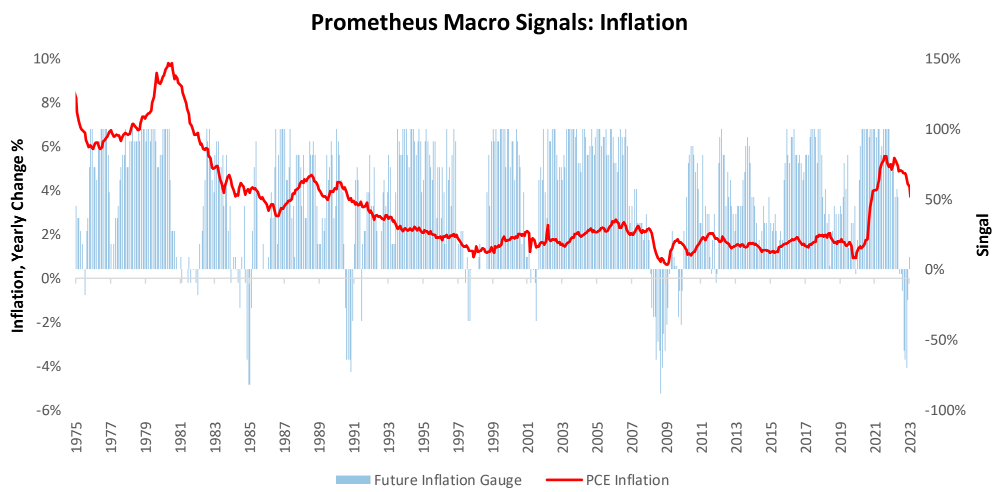


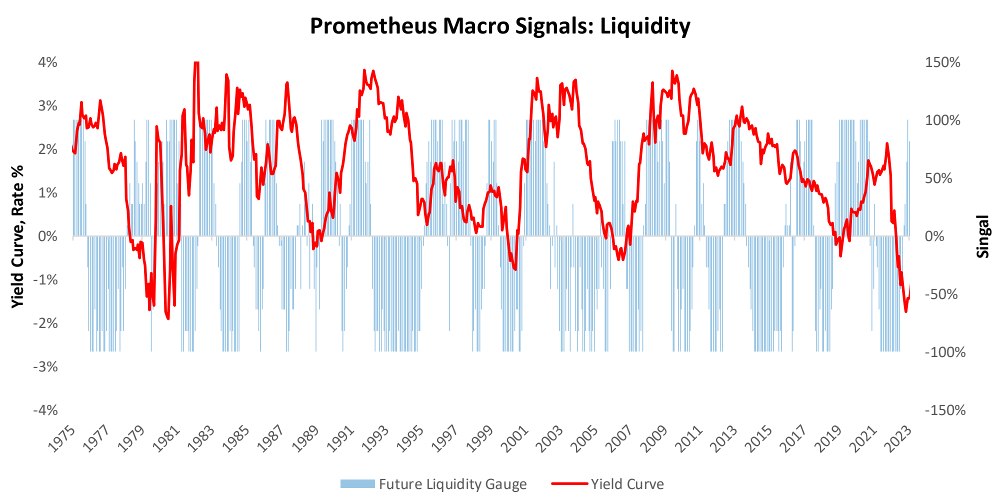
As shown above, our systematic regime recognition process has generally proven adept in spotting turning points and cascades in GDP regimes. This regime recognition stems from our comprehensive tracking of macroeconomic conditions, detailed in the thousands of pages of research we have shared in our *Month In Macro* and *The Observatory*. While we do not share the specifics of our signal construction to protect our edge in markets, we will continue to share the intuitions and frameworks driving our systematic assessment of future economic conditions.

Below, we show some of the high-level factors that drive our systems' assessment of where we are in the economic cycle:

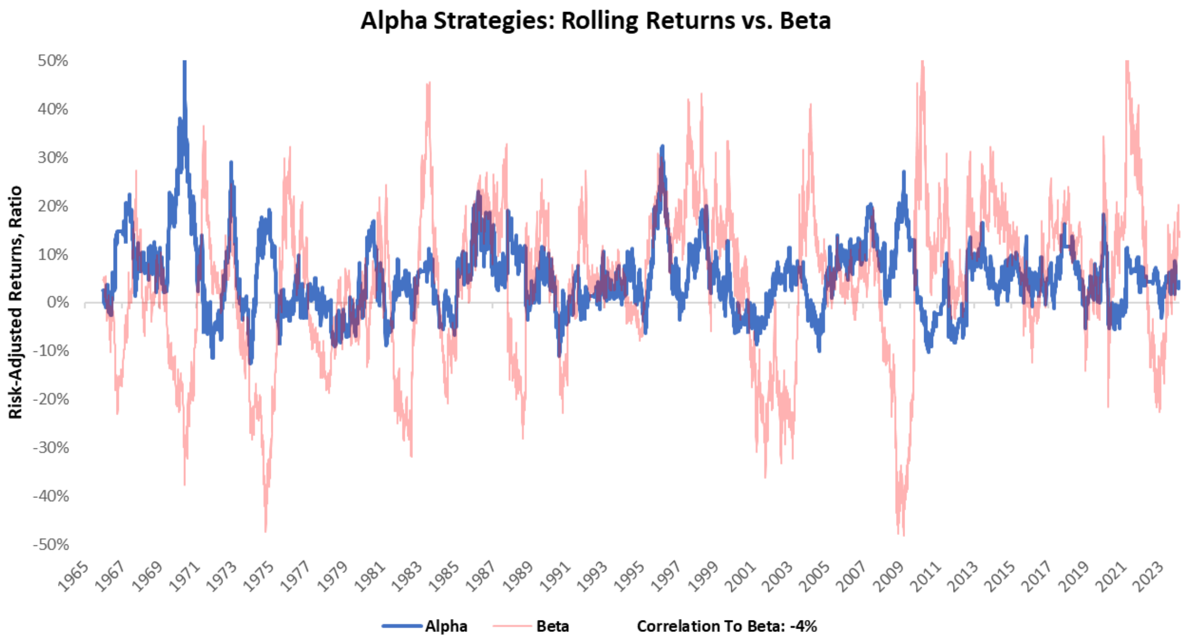
Prometheus Macro Signals: Systematic Fundamental Outlook



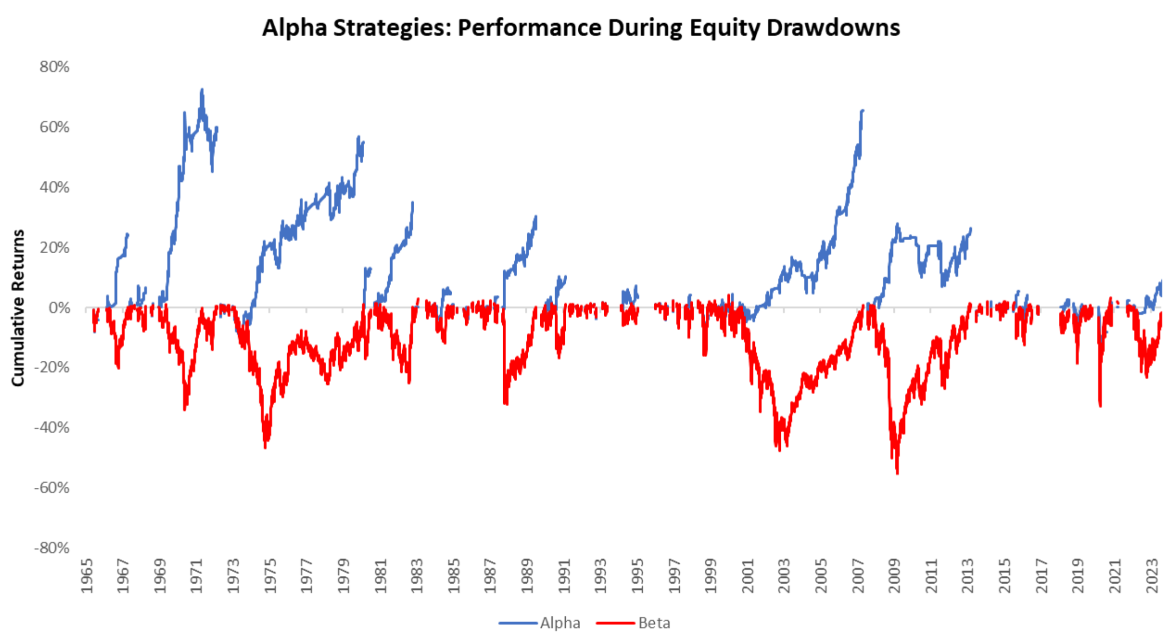




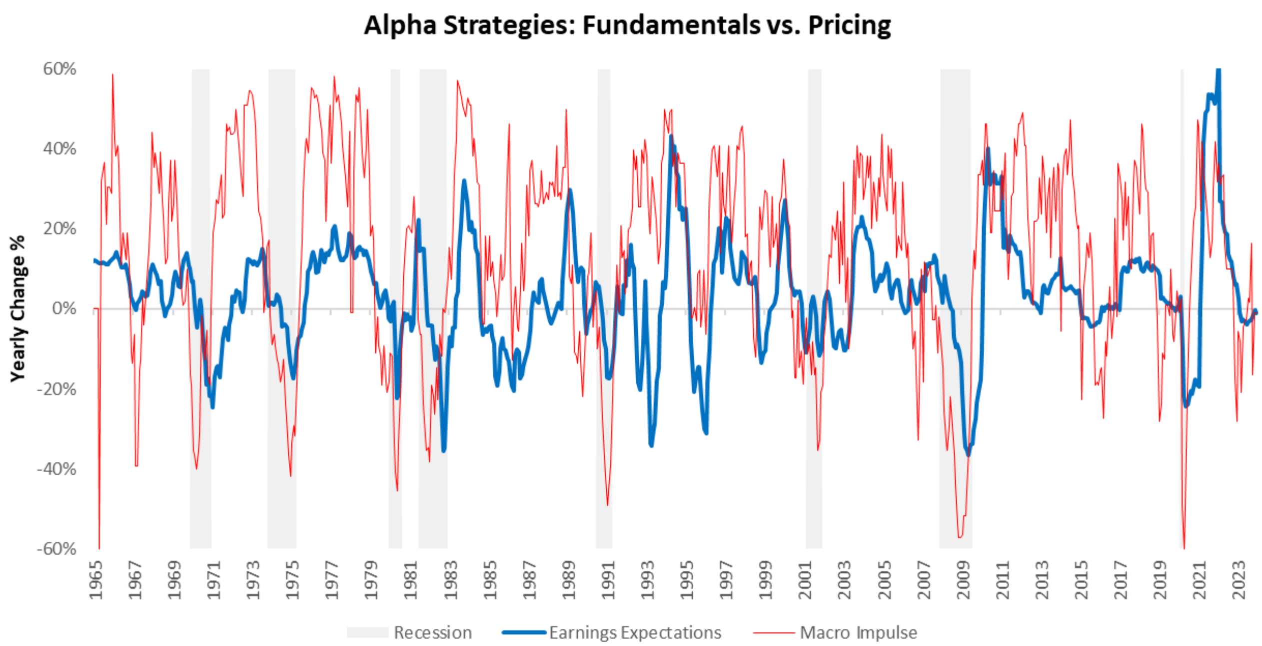
This broad-based assessment of macro conditions allows our strategies to be wary of macroeconomic risks to equities, creating the potential for us to profit from declines in equity prices that markets may not have priced in. Conversely, when asset prices are weak, but fundamentals point to a strong environment ahead, our strategies can find significant value in being long equities. The strategy will likely run limited exposure during periods where mispricings are limited.



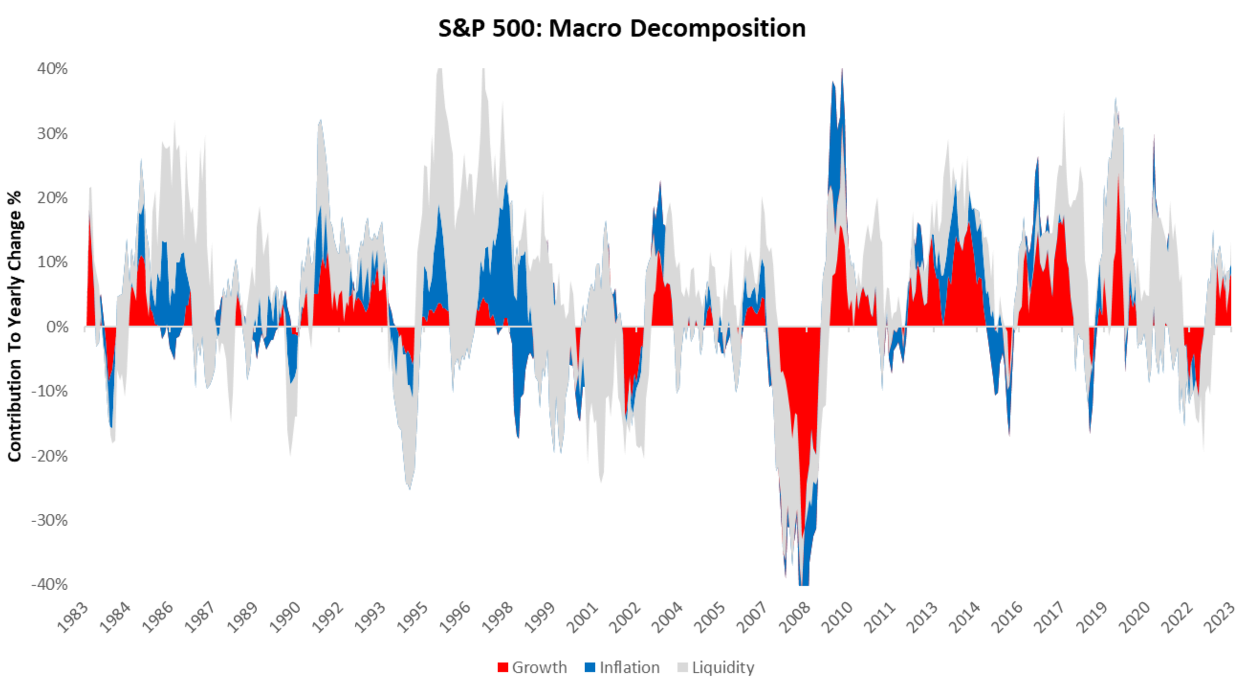
As shown above, our systems avoid large drawdowns in equities while participating in rebounds. We visualize the outperformance during beta drawdowns below, where we visualize cumulative strategy performance during beta drawdowns of greater than 5%:



As we can see above, our Alpha Strategy recognizes potential downside risk in equity markets and seeks to preserve and potentially even compound capital during these downturns. An essential part of this process is understanding not just the potential path of the economy but how probable that is relative to what is priced in by asset markets. We do this by assessing both fundamental dynamics:

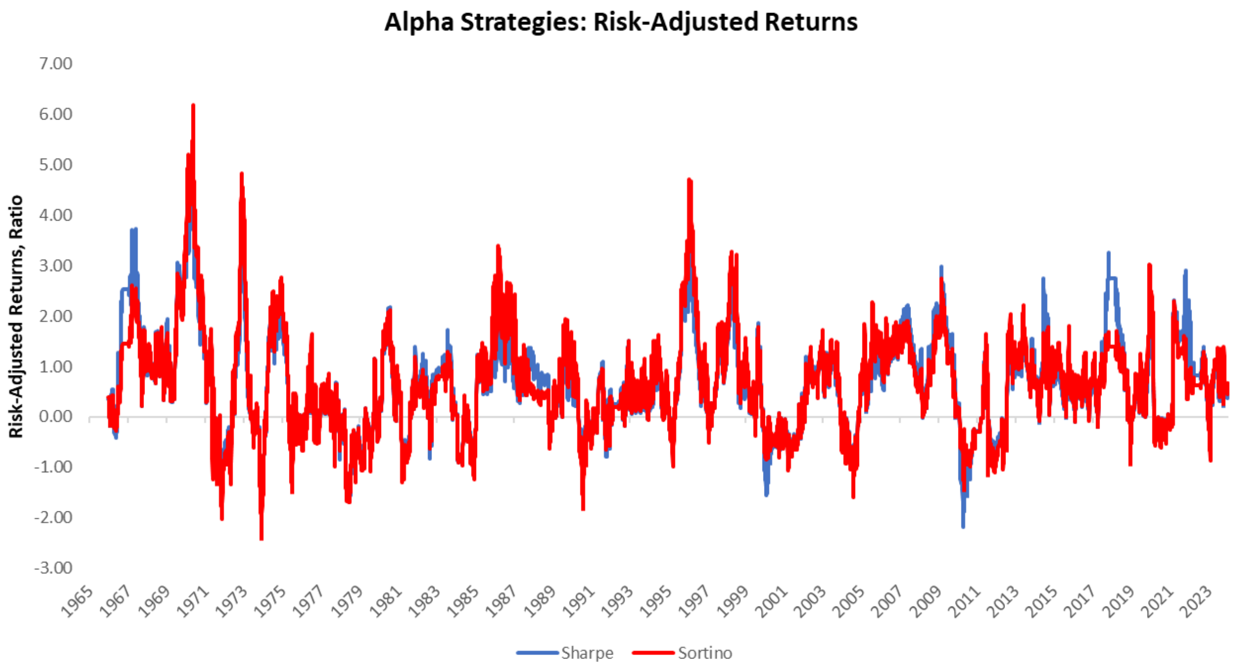


And market-implied pricing of conditions:

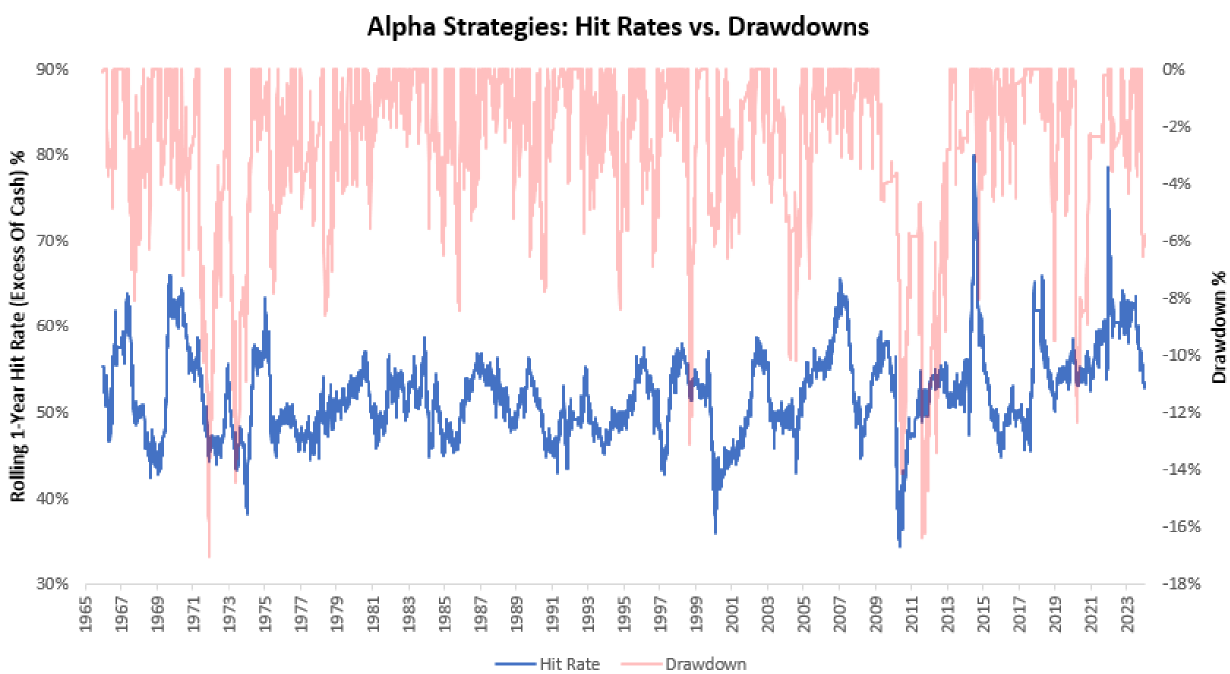


Combining a very modest edge in assessing forward-looking macro conditions and an assessment of market pricing of those allows us to take on bets that offer a better risk-reward profile.

We see this in our assessment of rolling risk-adjusted returns, with rolling Sharpe (0.61) and Sortino (0.64) ratios in positive territory on average, with positive skew:

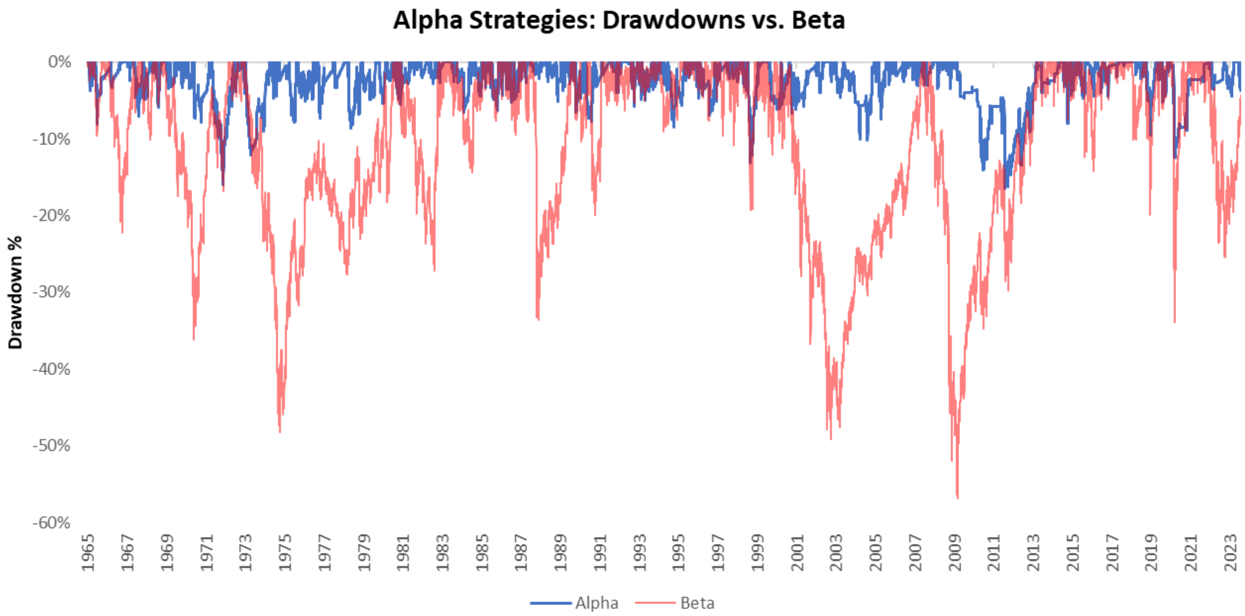


These positive risk-adjusted returns come as a function of a modest edge in hit rates, with an average daily hit rate of 52%:

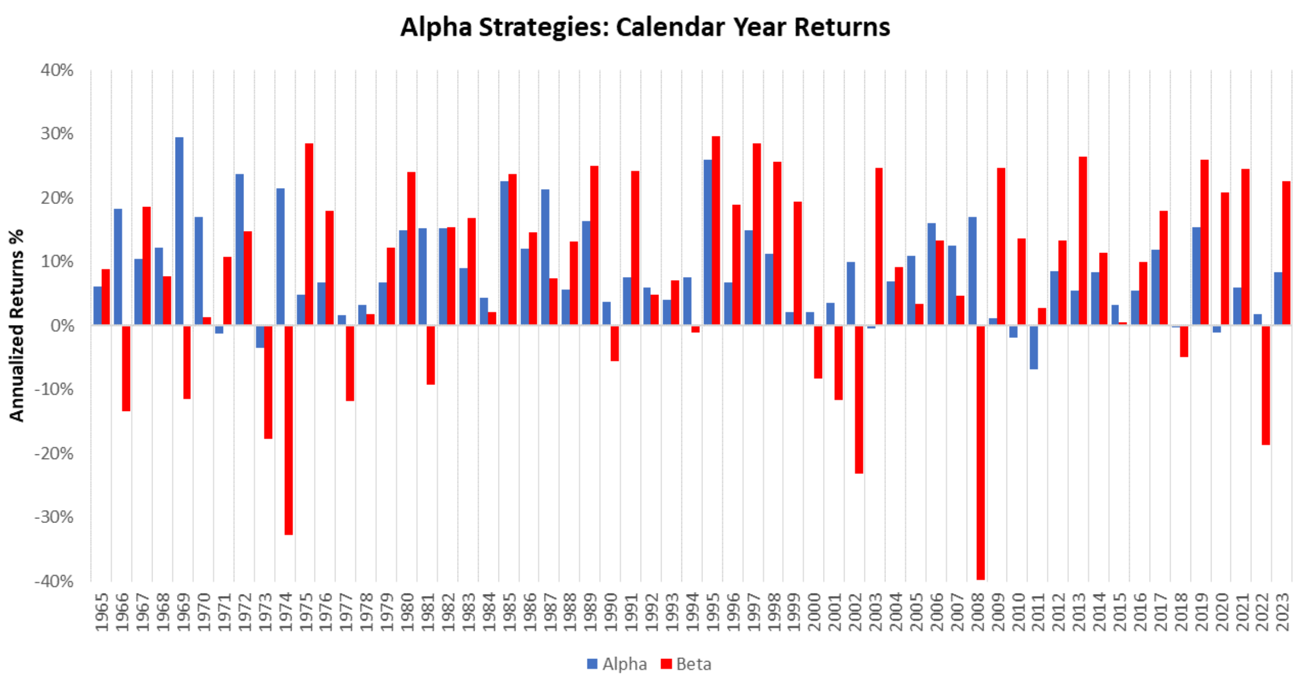


Now, while a daily hit rate of 52% represents a modest edge, the cumulative effect of this edge over long periods with a modest skew can contribute to significant cumulative return impacts. Creating the conditions for this compounding to occur requires a considerable focus on drawdown control.

Below, we show the drawdowns for our Alpha Strategy versus Beta:



As shown above, our Alpha Strategies has shown limited drawdowns over our simulation history, with a maximum drawdown of 16%. Importantly, our strategy has maintained this limited drawdown profile despite facing hit rates as low as 30% (i.e., 70% offside trades in a year). This drawdown profile has allowed our simulated strategy to show strong calendar year performance, with only six down years since 1965:



Below, we offer the calendar mean returns by month for those wishing for some more texture:

Alpha Strategies: Calendar Returns, By Month (1965-2023)

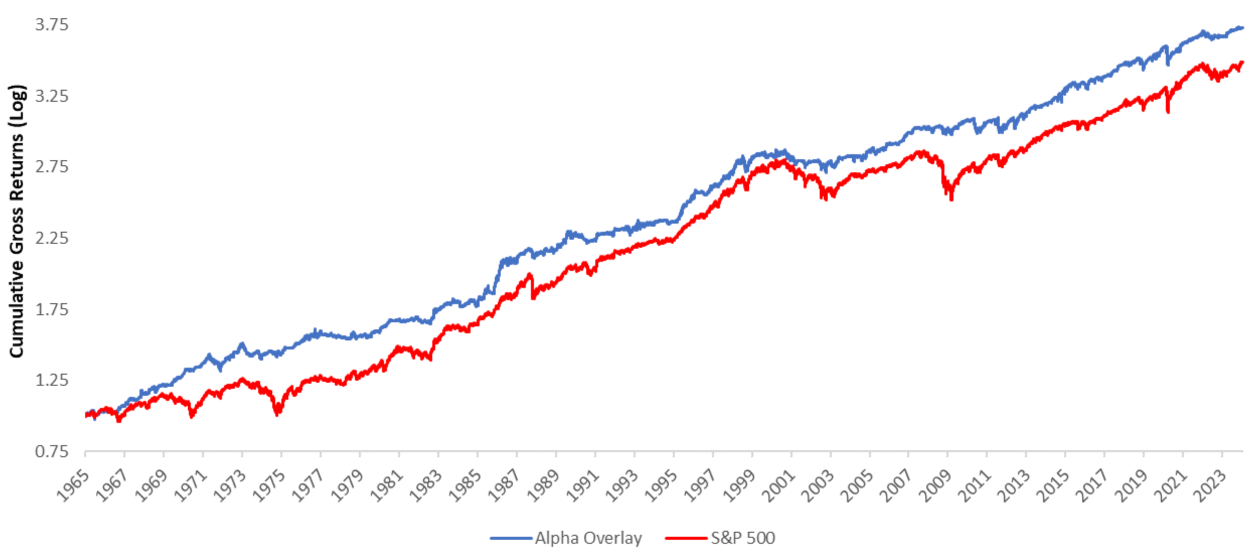
	January	February	March	April	May	June	July	August	September	October	November	December
1965	3.0%	0.8%	-2.5%	5.1%	0.7%	-4.6%	0.6%	0.2%	1.8%	0.3%	0.3%	0.3%
1966	0.3%	0.3%	0.9%	0.6%	0.3%	0.3%	0.4%	8.8%	3.3%	0.4%	0.4%	0.3%
1967	0.4%	-0.1%	4.5%	0.3%	1.9%	-1.2%	-3.7%	2.5%	-0.2%	5.0%	0.9%	-1.4%
1968	2.8%	0.3%	3.4%	-0.9%	1.2%	-0.3%	-2.1%	1.3%	4.5%	0.5%	0.4%	0.4%
1969	1.4%	3.6%	-3.0%	0.3%	0.2%	8.6%	4.8%	1.0%	4.1%	-2.2%	3.7%	4.9%
1970	8.5%	-3.4%	0.4%	1.5%	6.3%	1.2%	0.4%	-0.8%	-0.9%	1.6%	0.1%	0.3%
1971	0.3%	2.0%	1.1%	4.6%	-5.7%	0.1%	-2.6%	-0.6%	-0.4%	-3.6%	-0.2%	3.3%
1972	1.2%	2.3%	2.1%	2.2%	1.2%	1.3%	0.3%	2.2%	1.3%	1.3%	5.3%	1.1%
1973	-1.9%	-3.9%	-3.0%	-0.6%	0.4%	0.5%	1.4%	3.2%	-0.2%	-0.8%	0.6%	0.9%
1974	3.0%	1.1%	1.6%	3.7%	3.9%	0.6%	0.4%	4.2%	-0.4%	0.4%	0.5%	0.5%
1975	0.0%	-1.1%	0.6%	-1.9%	-1.8%	-1.9%	4.3%	3.6%	1.9%	-0.8%	-1.1%	2.2%
1976	-1.4%	-0.8%	2.2%	-0.7%	-1.0%	3.4%	-0.7%	1.4%	2.0%	-2.6%	0.0%	4.0%
1977	-1.6%	0.3%	0.3%	0.3%	0.2%	0.7%	-1.3%	0.2%	1.1%	0.4%	0.4%	0.4%
1978	0.4%	1.6%	0.0%	-6.8%	-0.1%	0.5%	1.2%	1.9%	-0.5%	0.7%	2.4%	1.1%
1979	-2.0%	1.8%	0.2%	0.1%	-1.9%	0.7%	-0.9%	4.7%	0.7%	4.8%	-1.8%	0.0%
1980	2.1%	0.8%	9.5%	0.8%	-0.7%	1.7%	0.5%	0.8%	-0.8%	0.3%	-4.5%	3.2%
1981	1.0%	-0.1%	0.3%	0.8%	1.9%	2.1%	1.9%	4.6%	1.0%	0.5%	2.0%	-1.6%
1982	0.8%	0.6%	0.8%	0.8%	-0.8%	2.4%	-0.4%	0.8%	0.6%	5.9%	2.3%	0.4%
1983	0.5%	0.5%	0.6%	0.5%	0.5%	0.6%	1.9%	0.9%	0.5%	0.5%	0.1%	1.1%
1984	-0.4%	-4.3%	0.7%	0.8%	4.9%	1.2%	1.0%	0.1%	-0.3%	-0.6%	-1.4%	2.2%
1985	5.3%	0.8%	-0.2%	1.9%	4.6%	1.3%	-0.7%	-1.3%	1.1%	-2.1%	6.1%	4.0%
1986	0.1%	6.0%	4.0%	-0.9%	1.8%	1.6%	-3.5%	4.7%	-4.0%	2.6%	0.9%	-1.1%
1987	5.6%	-0.1%	0.4%	2.7%	0.4%	0.4%	0.8%	-0.8%	-0.4%	11.0%	-1.2%	0.6%
1988	1.2%	0.1%	0.3%	0.5%	0.6%	2.5%	-0.8%	0.2%	0.7%	1.1%	-1.4%	0.3%
1989	4.9%	-2.6%	1.7%	2.6%	0.8%	-0.5%	7.3%	1.3%	-0.4%	-2.5%	1.1%	1.5%
1990	0.2%	0.4%	-0.7%	3.0%	-5.8%	-0.1%	0.1%	3.2%	3.9%	1.0%	-1.6%	0.5%
1991	0.4%	3.1%	-0.6%	0.4%	0.4%	0.4%	0.4%	0.1%	-0.2%	-0.2%	-2.6%	5.5%
1992	0.0%	0.9%	0.3%	0.3%	0.3%	0.6%	1.4%	-2.4%	0.8%	0.1%	2.3%	0.9%
1993	0.7%	0.7%	1.6%	-2.3%	2.0%	-0.2%	-0.5%	2.8%	-2.6%	2.4%	-1.6%	0.9%
1994	3.6%	0.4%	3.5%	-0.5%	-0.3%	3.1%	-2.1%	-1.7%	-2.9%	1.6%	2.7%	-0.5%
1995	-0.8%	-0.6%	1.7%	4.0%	4.1%	1.9%	3.0%	-0.1%	3.4%	1.0%	3.2%	3.3%
1996	1.9%	0.9%	-0.4%	-0.2%	0.3%	0.4%	-1.2%	-1.8%	-0.2%	2.3%	6.5%	-2.2%
1997	0.2%	1.2%	0.1%	0.4%	0.2%	2.3%	3.1%	-0.8%	0.5%	2.5%	2.0%	2.0%
1998	0.5%	3.4%	3.2%	-0.3%	-0.3%	2.7%	-0.1%	-9.0%	3.2%	3.2%	1.6%	2.1%
1999	3.0%	-0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	-0.1%	-2.1%	0.3%	-0.6%	0.4%
2000	-1.0%	1.0%	4.0%	-1.9%	-0.7%	1.1%	0.0%	2.5%	-1.3%	-0.4%	-2.3%	0.5%
2001	1.7%	-2.4%	0.3%	0.3%	0.1%	1.3%	-0.1%	1.4%	0.2%	0.2%	0.1%	0.0%
2002	0.8%	2.0%	-1.4%	1.9%	1.6%	0.1%	0.1%	0.1%	-0.3%	2.4%	1.8%	0.1%
2003	-1.2%	-0.3%	-0.7%	2.2%	2.3%	0.7%	0.1%	-0.2%	0.3%	-0.3%	0.2%	-3.2%
2004	0.1%	0.2%	-2.2%	1.8%	0.1%	0.1%	-1.3%	-0.1%	0.7%	2.4%	2.9%	1.9%
2005	-0.5%	1.9%	-1.7%	-2.0%	2.4%	0.0%	3.1%	-0.4%	0.5%	4.2%	2.0%	0.7%
2006	0.0%	0.3%	0.3%	0.3%	0.0%	1.9%	2.7%	1.2%	0.8%	2.7%	2.2%	2.3%
2007	-1.1%	4.0%	4.2%	0.3%	-1.1%	2.1%	0.2%	-0.3%	0.3%	0.6%	0.2%	2.6%
2008	0.2%	-1.1%	0.0%	1.8%	0.0%	4.4%	0.7%	-1.0%	1.7%	4.3%	3.9%	0.9%
2009	1.0%	2.3%	-0.5%	-0.8%	-1.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.2%
2010	0.0%	0.1%	-2.0%	0.0%	-5.7%	-2.4%	3.0%	-1.7%	3.2%	1.8%	-0.2%	2.0%
2011	0.0%	0.0%	0.0%	0.0%	1.1%	-1.4%	-1.7%	-4.6%	-2.6%	3.0%	0.0%	0.3%
2012	1.6%	1.4%	0.9%	2.5%	-4.9%	2.7%	0.9%	1.5%	1.9%	-0.8%	0.2%	0.6%
2013	2.2%	1.1%	2.9%	-0.3%	0.0%	-1.6%	0.3%	0.0%	0.0%	-0.1%	0.5%	0.0%
2014	0.0%	0.9%	0.0%	2.5%	1.7%	0.1%	-2.1%	4.4%	-1.8%	1.1%	1.9%	-0.4%
2015	-2.2%	4.0%	-0.2%	0.5%	0.8%	-2.0%	0.1%	3.0%	0.9%	-0.1%	-0.1%	-1.1%
2016	0.6%	-0.2%	3.2%	0.5%	-0.8%	-1.2%	2.7%	-0.1%	-0.2%	-1.5%	1.9%	0.0%
2017	0.0%	0.0%	0.1%	2.0%	1.9%	1.1%	0.1%	3.6%	1.8%	0.1%	0.1%	0.1%
2018	0.1%	0.1%	-0.1%	0.1%	1.0%	-0.1%	1.7%	1.2%	0.3%	-2.3%	0.1%	-2.4%
2019	2.1%	1.5%	2.0%	1.4%	-1.8%	4.4%	0.8%	-1.7%	1.2%	0.8%	2.3%	1.9%
2020	0.1%	-4.8%	-5.9%	1.7%	0.9%	0.4%	0.2%	0.0%	0.4%	-0.8%	5.7%	1.0%
2021	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	2.2%	0.0%	0.0%	3.4%
2022	0.0%	-2.5%	0.7%	0.0%	0.1%	0.1%	0.1%	1.1%	3.3%	-0.2%	-2.4%	1.0%
2023	-0.6%	1.0%	2.2%	2.1%	0.4%	-0.6%	-1.9%	2.1%	4.9%	2.5%	-4.6%	0.4%

As we can see, the strategy has experienced various conditions and shown durable performance.

As we mentioned at the onset of this note, these strategies aim not to outperform passive beta but to provide uncorrelated alpha. Consistent with this objective, we have thus far shown S&P 500 beta excluding dividends. The purpose of excluding dividends is that our Alpha Strategy aims to predict asset price returns over cash, with dividends simply reflecting a near-constant drift factor within the total returns of an asset. Therefore, we exclude dividends from our alpha and beta simulations for the purest evaluation of alpha. This exclusion does not mean we ignore dividends but recognize that they are not part of the evaluation of an alpha seeking to predict prices. This nuance does not take away from the value-addition from our signal, and we show how we can create outperformance relative to a passive benchmark with dividend reinvestment using our approach.

Below, we show passive beta exposure (with dividends reinvested) compared to an Alpha Overlay portfolio, which contains 60% exposure to passive beta, with our Alpha Strategy added as a leveraged overlay.

Alpha Strategies: Alpha Overlay vs. Passive Beta Exposure



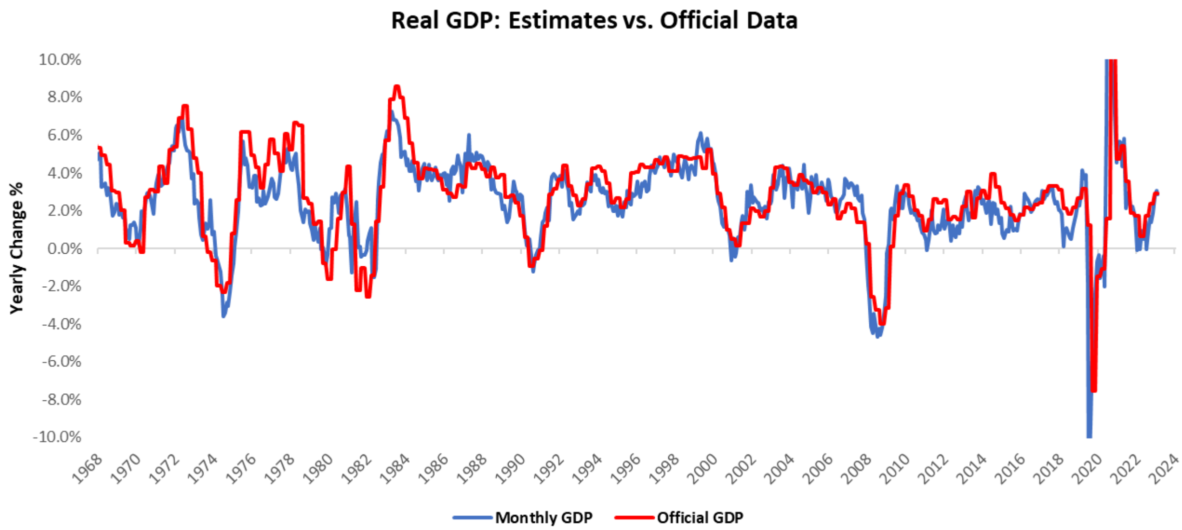
The Alpha Overlay portfolio outperforms passive S&P 500 exposure with higher cumulative returns (11.6% vs. 11.1%), lower volatility (13.8% vs. 16.7%), and reduced maximum drawdowns (29% vs 55%). Therefore, whether we're looking to generate absolute returns or enhance benchmark returns, we think our Alpha Strategies will offer an able guide to navigating macroeconomic dynamics.

These strategies are neutral on equity markets after being both long and short equities in 2023, resulting in positive returns and a -63% correlation between the S&P 500:

Currently, these strategies remain neutral on equities as the expected path of the economy does not diverge meaningfully from what markets have priced in. As these conditions change, so will our positions. In the following pages, we will elaborate on the macroeconomic dynamics driving this systematic assessment of conditions.

GDP: Output & Spending Continue To Remain Strong

Before we dive deep, we think setting the stage for where we are is essential. For the latest data through December, our systems place Real GDP growth at 3.3% versus one year prior. Below, we show our monthly estimates of Real GDP relative to the official data:



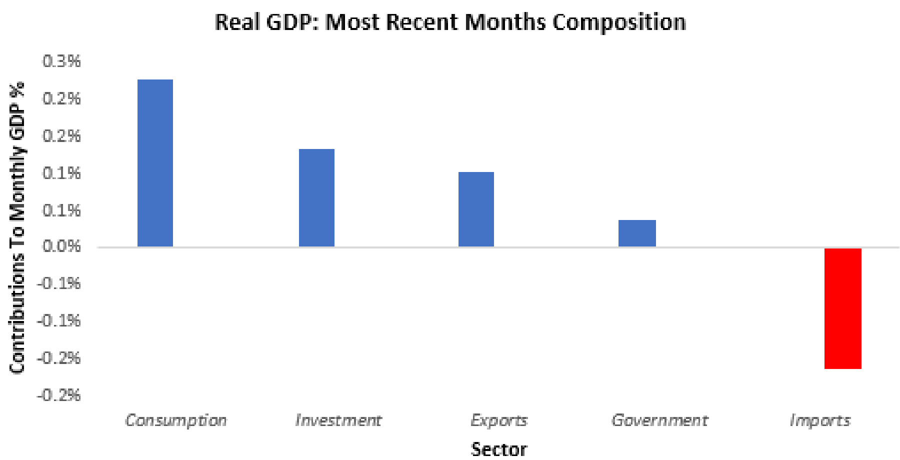
In November, GDP came in at 0.33% versus the prior month. We decompose the most recent months' data into its major divers to better understand this increase. Below, we offer the contribution by sector to monthly GDP in the table:

Contributions To Monthly GDP Changes

	GDP	*C*	*I*	*G*	*X*	*M*
Jan 23	0.8%	0.7%	0.1%	0.0%	0.5%	-0.5%
Feb 23	-0.1%	0.0%	0.0%	0.0%	-0.5%	0.3%
Mar 23	0.2%	-0.1%	-0.2%	0.0%	0.3%	0.2%
Apr 23	-0.5%	0.1%	0.2%	0.0%	-0.6%	-0.3%
May 23	0.8%	0.1%	0.1%	0.0%	0.2%	0.4%
Jun 23	0.5%	0.2%	0.1%	0.0%	0.1%	0.2%
Jul 23	0.3%	0.3%	0.1%	0.1%	0.2%	-0.3%
Aug 23	0.7%	0.0%	0.3%	0.0%	0.1%	0.3%
Sep 23	0.2%	0.3%	0.0%	0.0%	0.3%	-0.4%
Oct 23	-0.1%	0.1%	0.0%	0.1%	-0.2%	0.0%
Nov 23	0.2%	0.2%	-0.1%	0.0%	-0.2%	0.2%
Dec 23	0.3%	0.2%	0.1%	0.0%	0.1%	-0.2%
Cumulative	3.3%	2.0%	0.8%	0.4%	0.1%	-0.1%

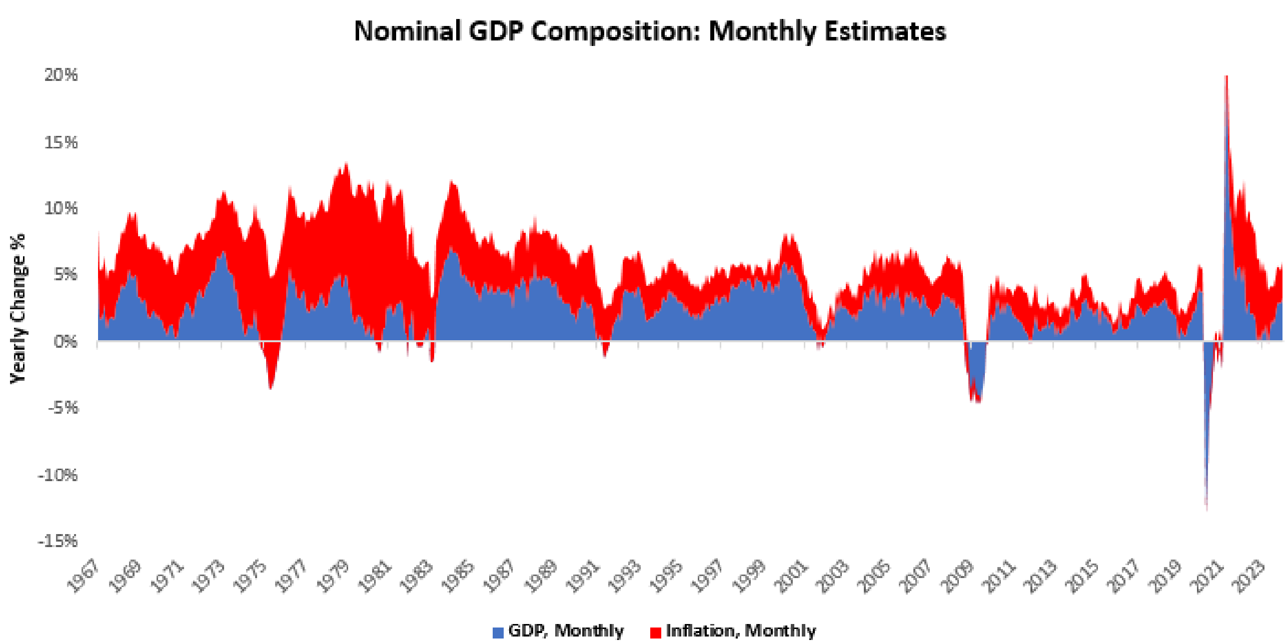
December saw consumption, investment, and government spending all rise, sustaining expansionary activity in the economy and generating revenue for businesses. These big-picture drivers continue to show healthy levels of growth, which look largely inconsistent with weakness in the economy.

Below, we show the weighted contributions to the most recent one-month change in real GDP and the recent history of month-on-month GDP. Additionally, we offer the contribution by sector to monthly GDP in the table below:



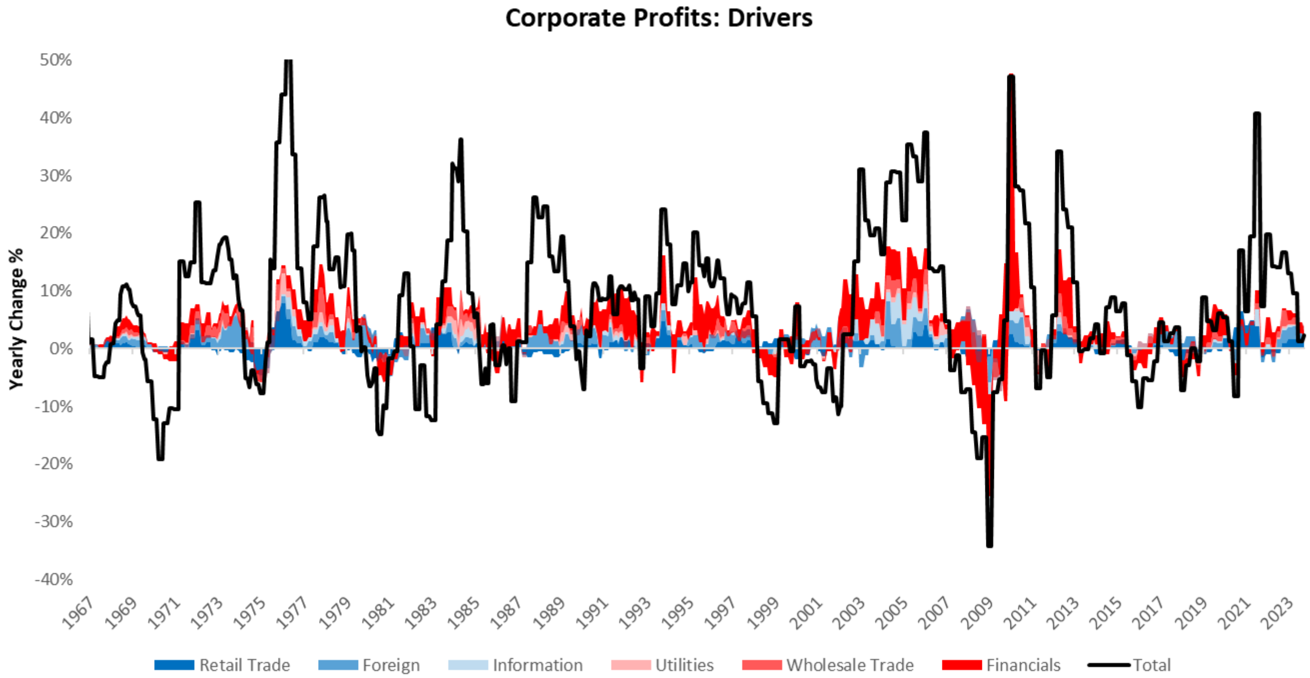
Real GDP MoM	
Jan 23	0.8%
Feb 23	-0.1%
Mar 23	0.2%
Apr 23	-0.5%
May 23	0.8%
Jun 23	0.5%
Jul 23	0.3%
Aug 23	0.7%
Sep 23	0.2%
Oct 23	-0.1%
Nov 23	0.2%
Dec 23	0.3%
Cumulative	3.3%

Our latest estimates place nominal GDP at 6.1 % versus one year prior. Nominal activity continues to remain elevated relative to recent history:

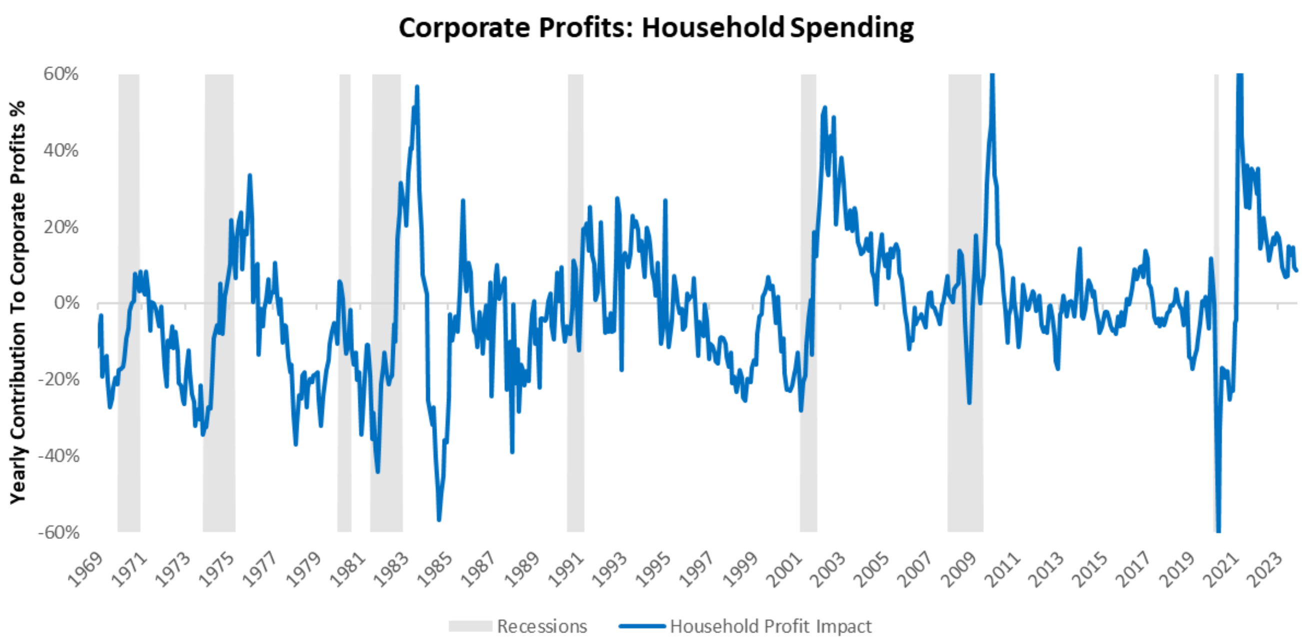


While the current trend in nominal GDP growth remains inconsistent with the Federal Reserve's inflation target, sequential developments align with these objectives. It remains to be seen whether these trends can extend themselves to 2024. Next, we turn back to real GDP to understand the composition of growth.

These gains in real activity continue to support profits, which continue to decline but remain resilient:

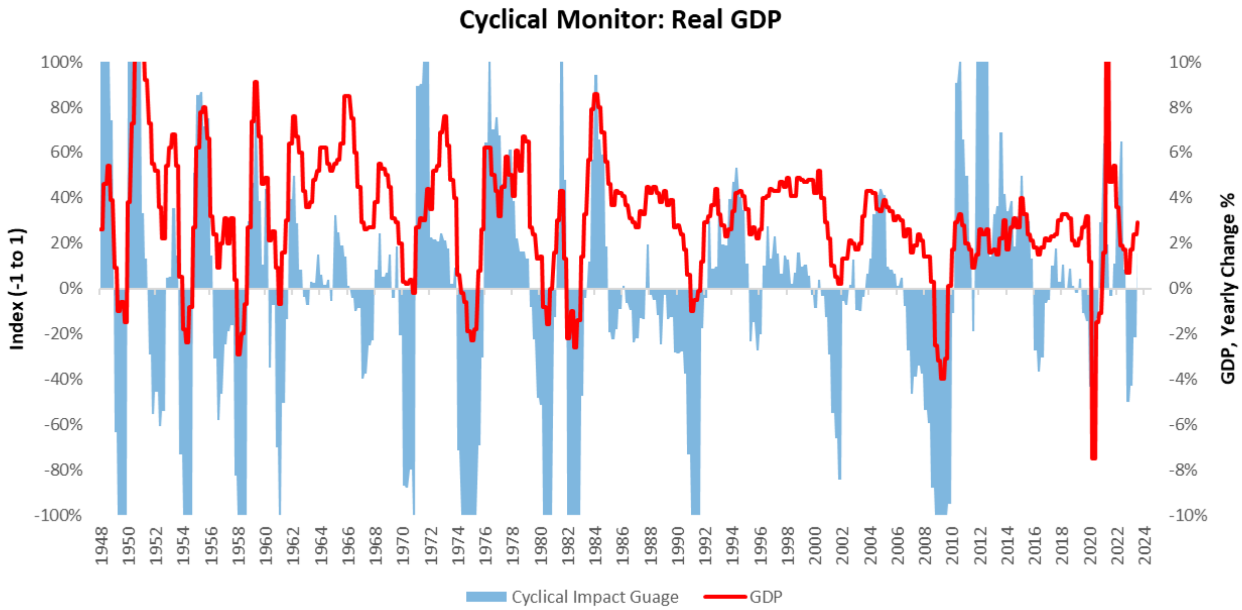


The primary source of this spending continues to come from households, which continue to draw down on savings to support businesses' bottom lines. We visualize this below:

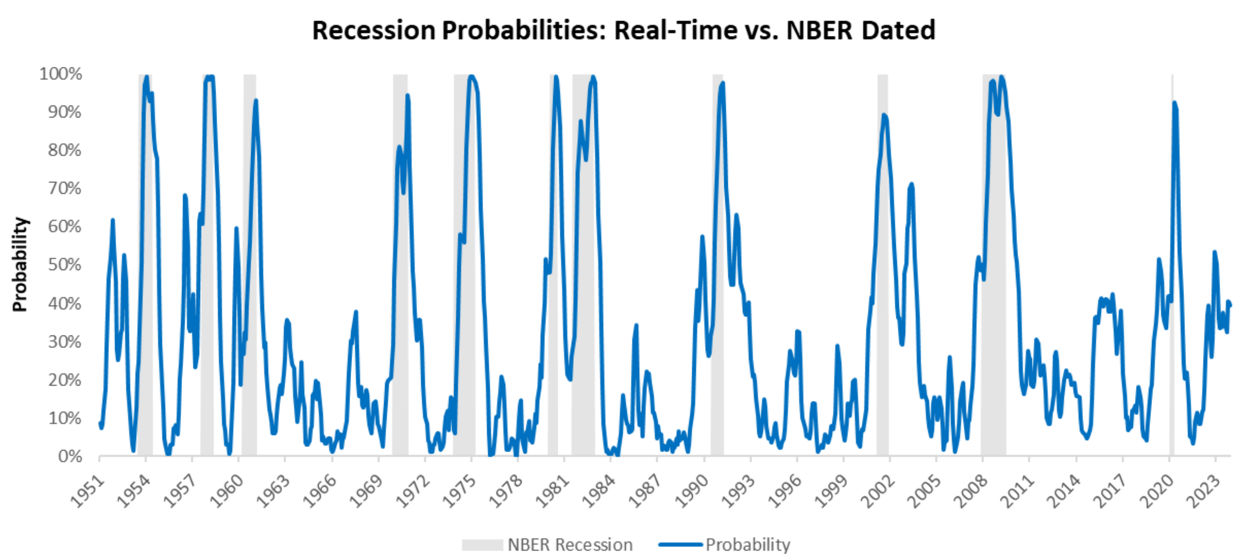


As such, a strong consumer supports both GDP and corporate profitability. Thus, even if investment or government spending declines, they would need to decline substantially to impact the overall economy.

Furthermore, our gauge of cyclical activity has continued to show improvement. These gauges have flagged recessionary pressures well since 1948:



The combination of these dynamics has kept recessionary probabilities muted relative to expectations following an intense hiking cycle in short rates. Our estimates of recession probabilities show recession odds at 40%:

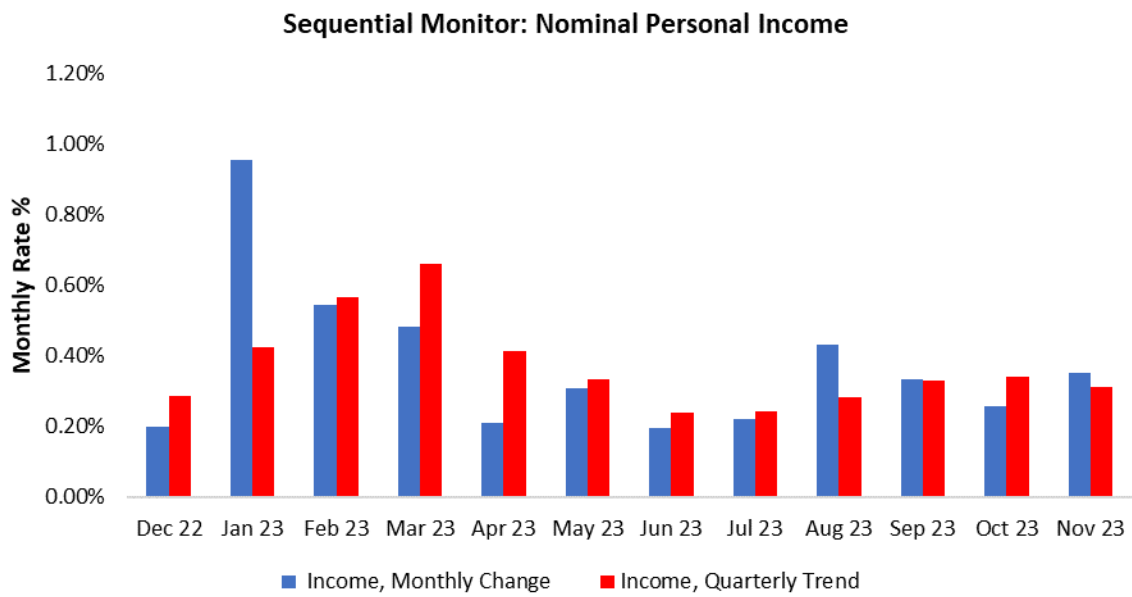


While the odds are elevated, they are impacted by base effects, i.e., data has begun to show some weakness in delta space but remains healthy in level terms. The biggest driver of the strength of the economy remains the consumer. To better understand the path for this principal component of economic activity, we dedicate the remaining sections to an in-depth evaluation of the consumer's income, spending, and balance sheets.

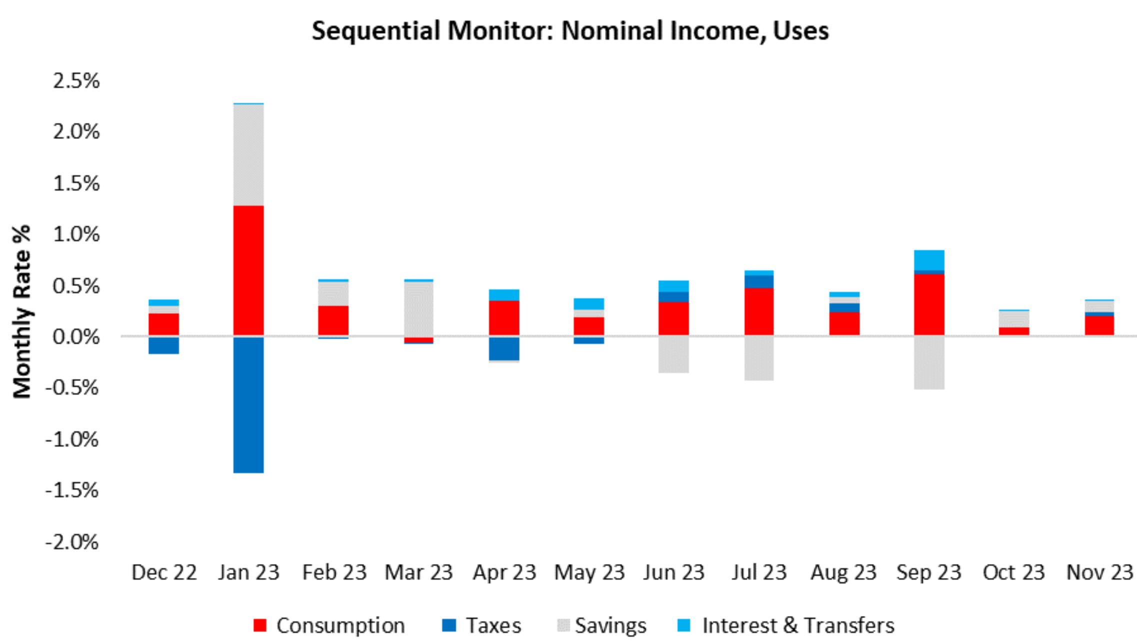
Spending, Income, Employment & Balance Sheets Broadly Positive

In the post-COVID fiscal era, households have become critical players in driving resilience in growth and profitability. Therefore, a forward view on GDP requires a forward view on household income and spending to understand that offset to traditional recessionary forces. At a high level, we see income, spending, and balance sheet conditions as favorable to continued output. In the pages that follow, we offer our detailed tracking of these conditions.

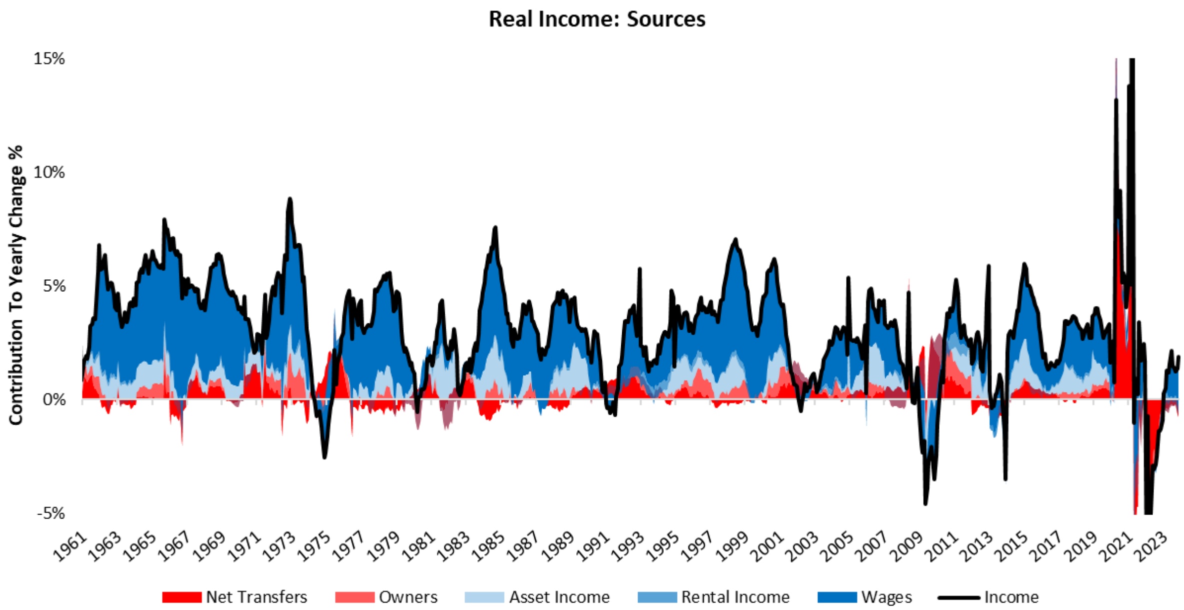
We begin with incomes. In November, nominal personal income increased by 0.35%, contributing to a sequential deceleration in the quarterly trend:



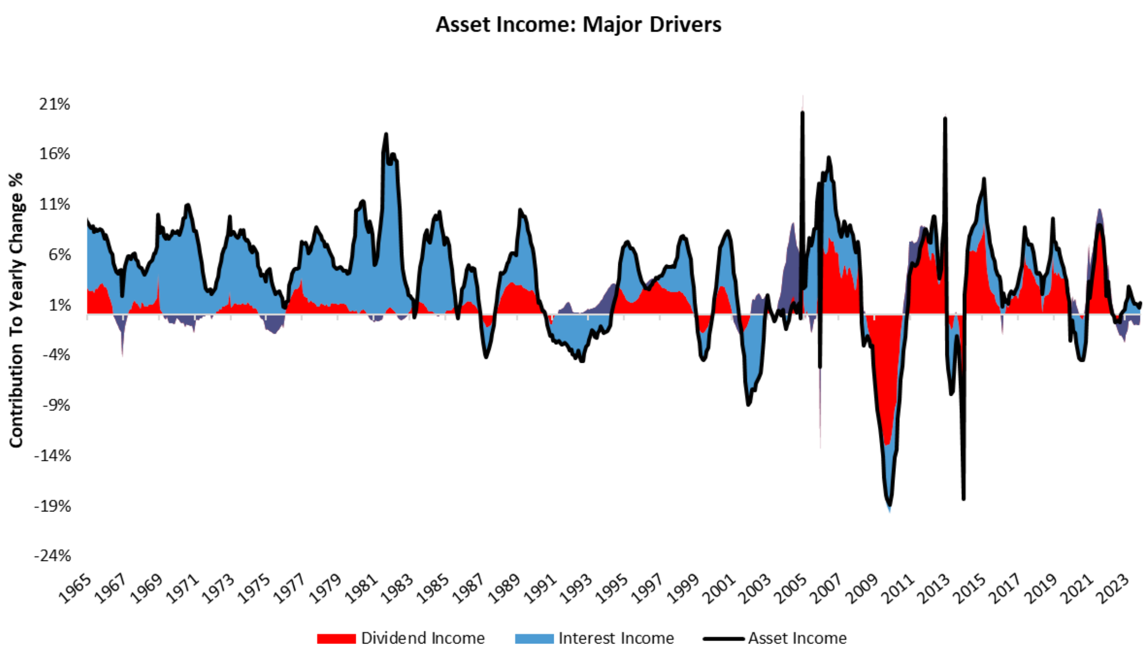
Income flows through consumption, taxes, savings, interest payments, and transfers. To better understand the impacts of income growth, we show the composition of the uses of income.



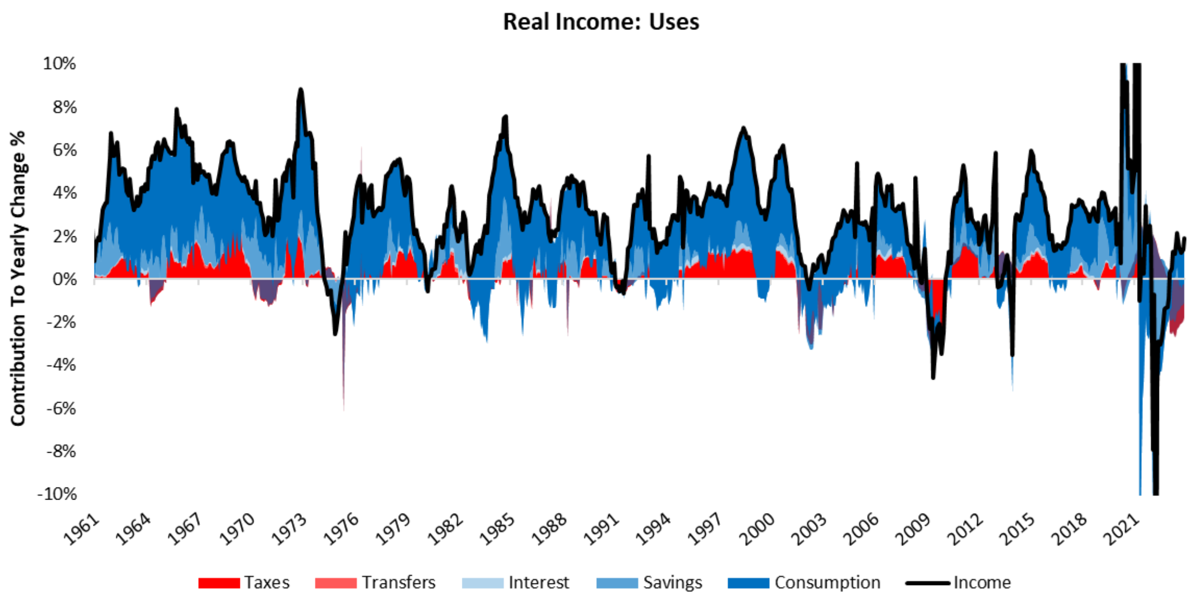
As we can see above, the primary use of income was increased consumption. We now zoom out to understand what has driven these income changes over the last year relative to its major drivers. Below, we show the composition of changes in real incomes, broken down into its major sources. Over the last year, real incomes were primarily driven by Wages, which contributed to a 2.16% rise in total real income growth of 1.9%:



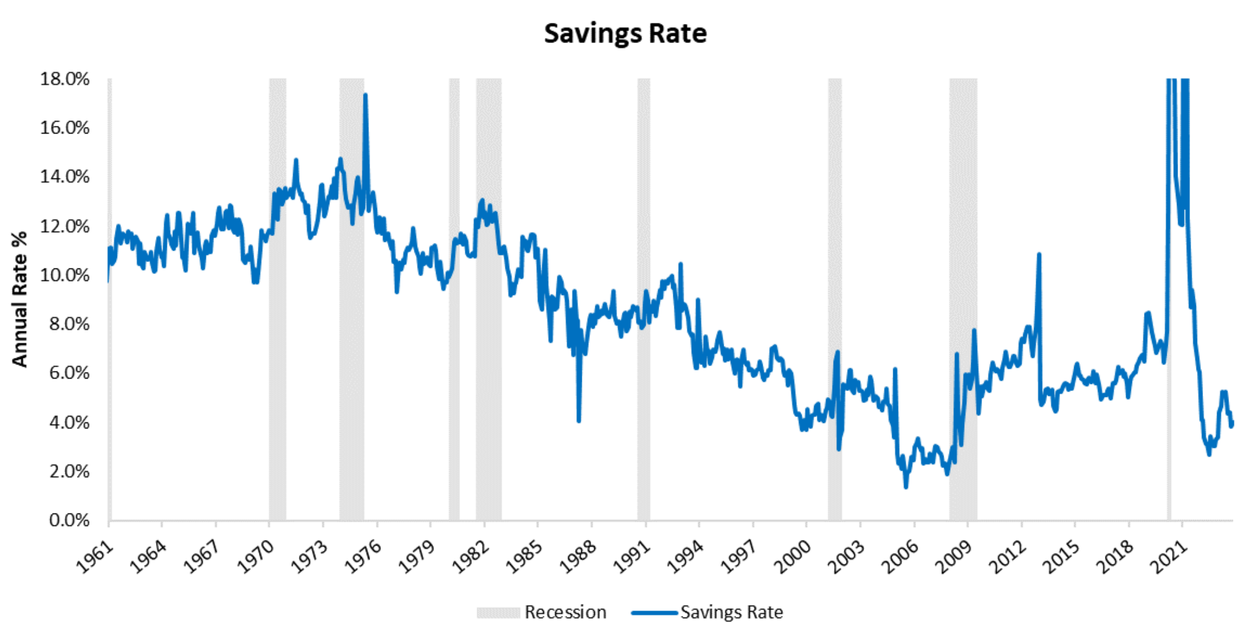
While wages dominantly drive income, asset income also plays a strong role in offsetting interest expense. Over the last year, asset incomes were dominantly driven by Interest Income, contributing to a 1.56% rise in total asset income growth of 1.15%.



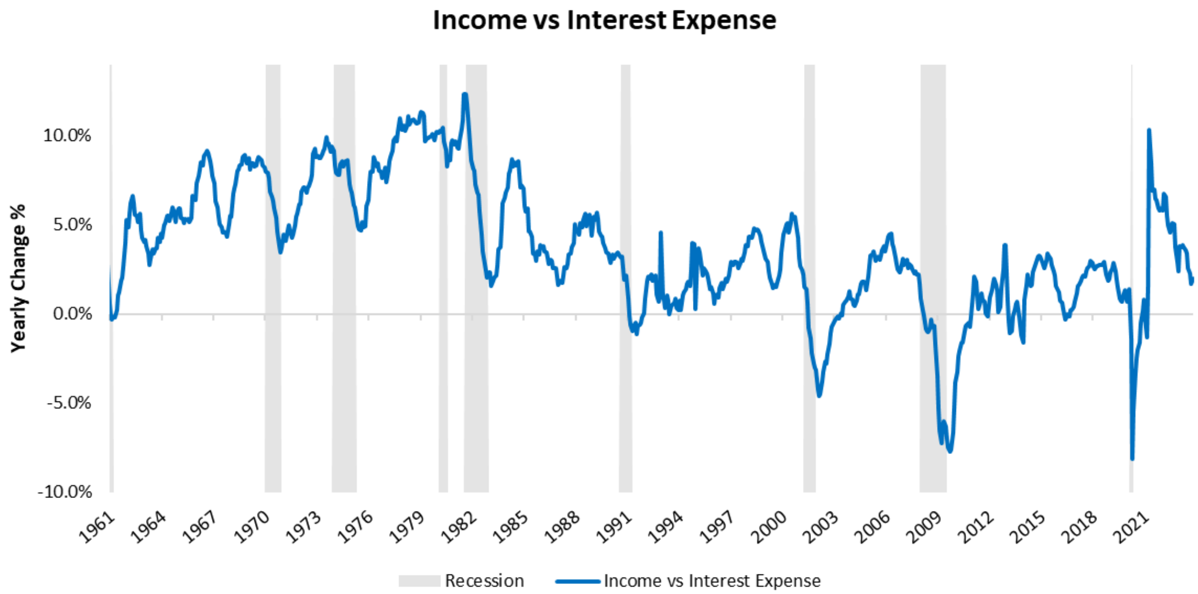
We now turn to how this income has been used for spending and to meet liabilities. Below, we show the composition of changes in real incomes, broken down into its major uses. Over the last year, real incomes were driven mainly by consumption, which contributed to a 2.16% rise in total real income growth of 1.9%:



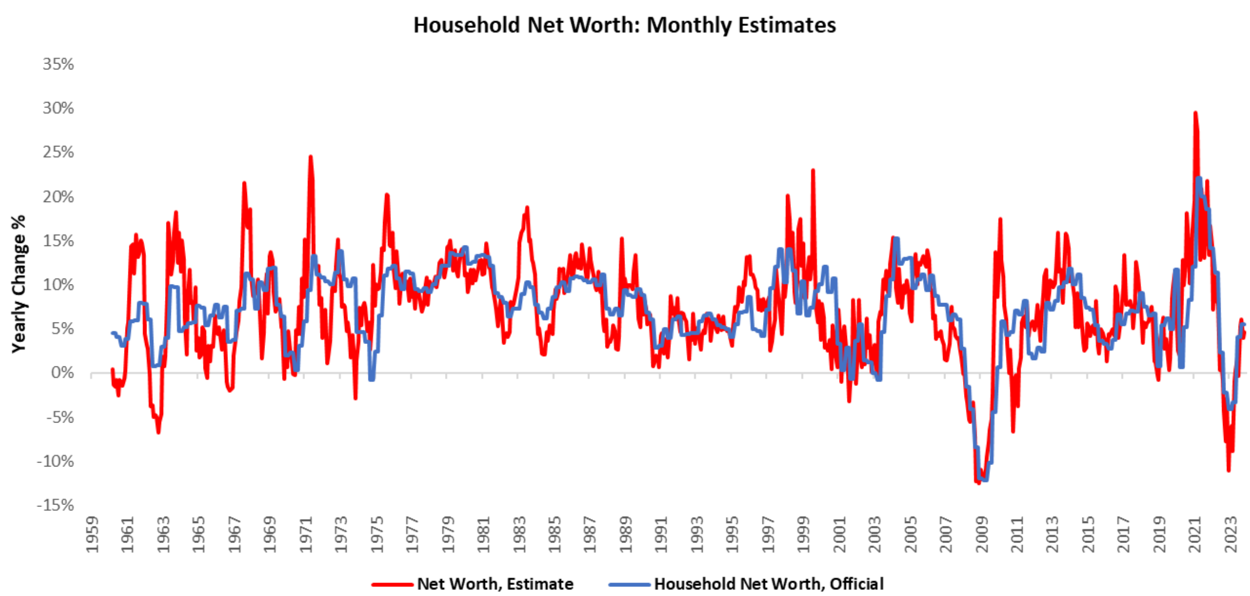
Next, we turn our attention to the savings rate. While not the biggest driver of corporate profits, savings rates play an important role in transferring income from households to businesses. The less households save, the more businesses profit. On the contrary, a lower savings rate also impedes the ability of households to outpace their consumption growth relative to their income growth in the future. The savings rate is at 4.09% and has sequentially increased from last month.



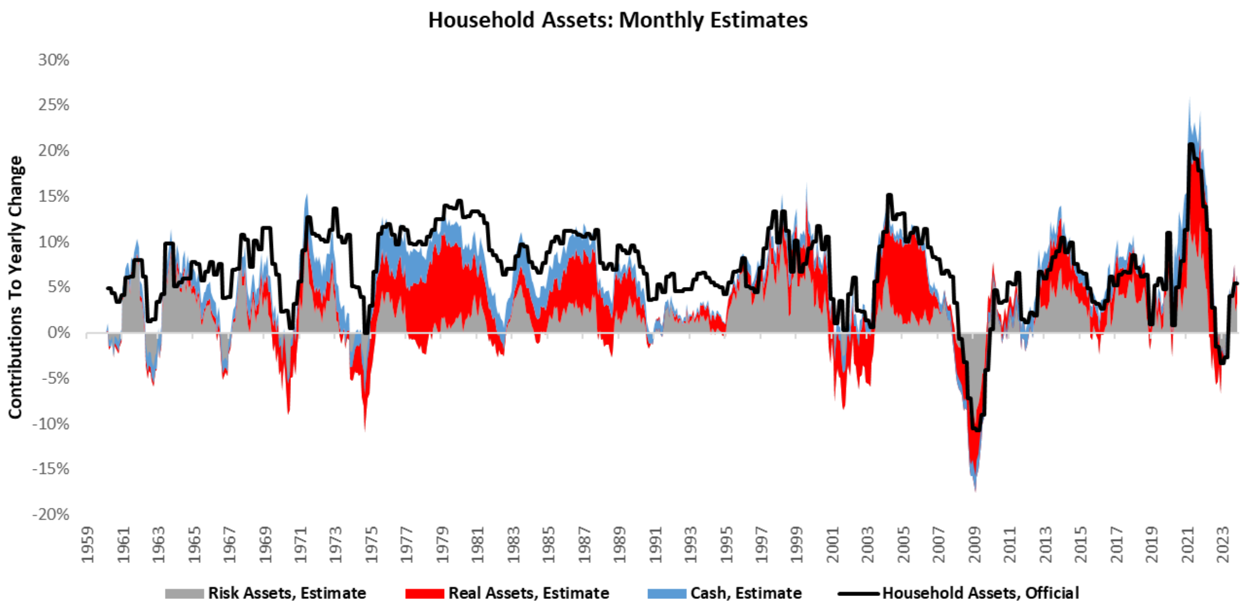
Finally, we evaluate the relative change of income growth to the debt service costs for households. This measure allows us to monitor the impact of policy tightening on the health and sustainability of household spending.



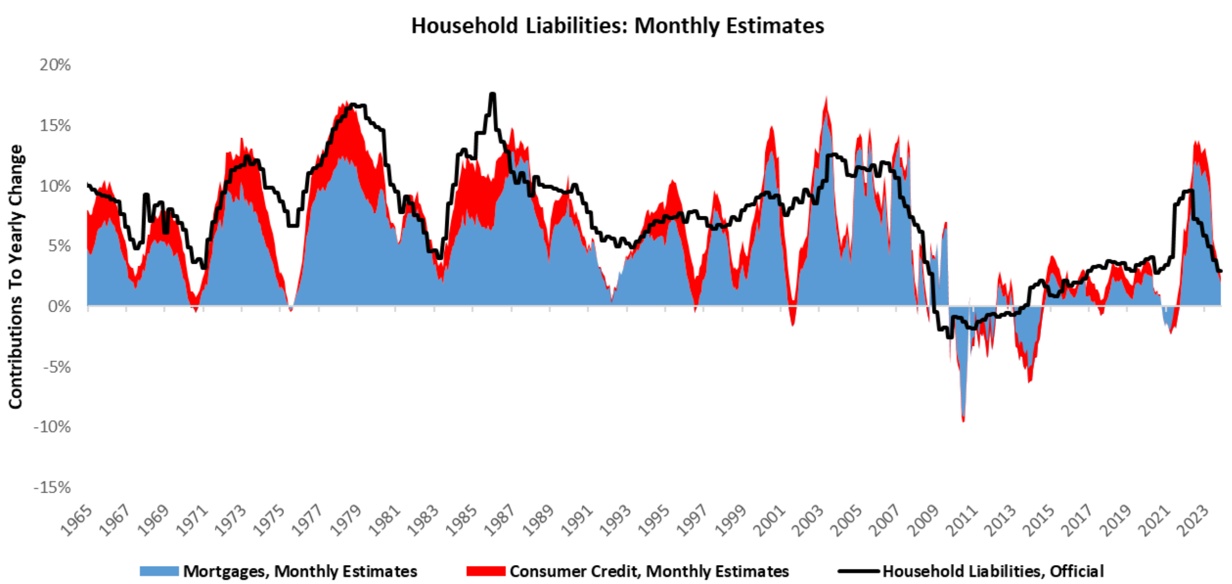
As we can see above, incomes remain well above interest burdens, suggesting little pressure on debt payments. However, it is important to note that we are now closer to historical norms of this measure, i.e., these conditions are a lot less stimulative. Along with limited debt service burdens, net worths continue to expand. We show the evolution of our household net worth estimates below, which show that net worth has increased 5.7% over the last year:



Over the last year, household assets have grown by 5.7%. Below, we decompose these changes in assets into risk assets (equities, corporate credit, etc.), real assets (real estate, consumer durables, etc.), and cash assets (checking, savings, money markets funds, etc.). Risk assets, real assets, and cash assets have contributed 3.29%, 3.07%, and -0.66%, respectively, to the total change in household assets over the last year.

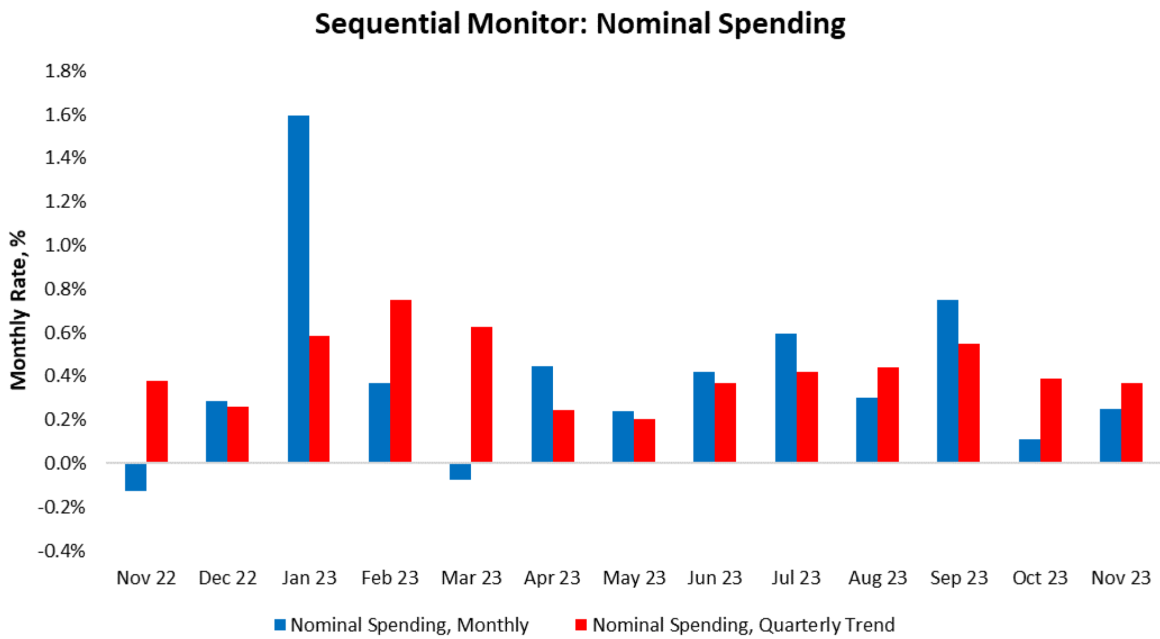


Contemporaneously, household liabilities have grown by 2.34%, driven by a 1.83% rise in mortgages and a 0.51% increase in consumer credit. We show our estimates for both below, along with the official data:

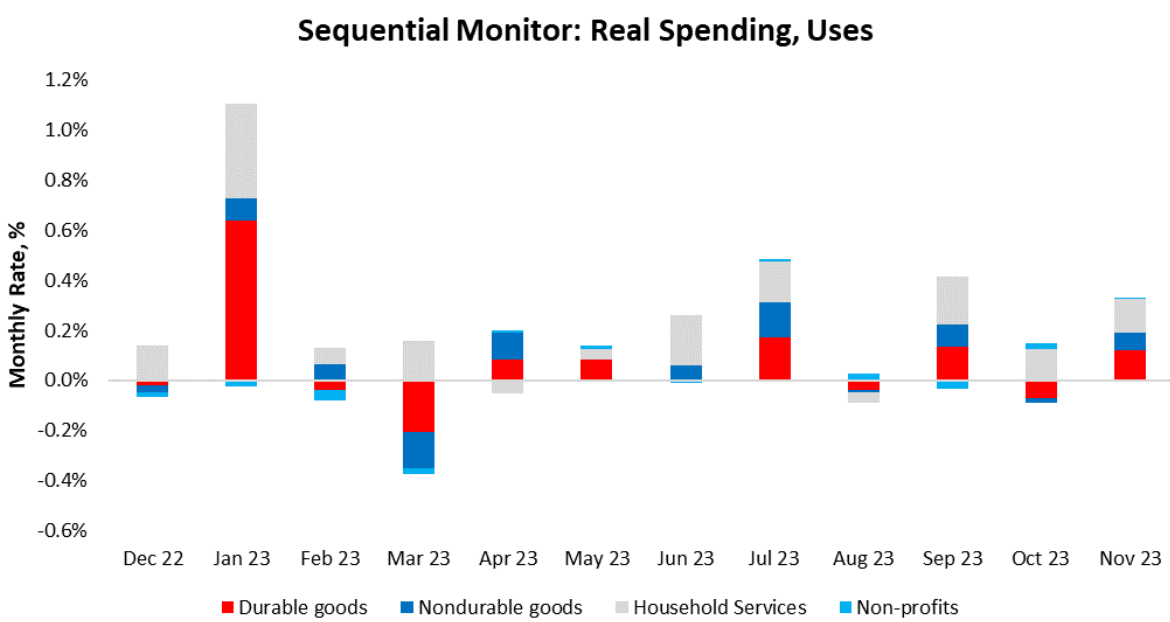


Overall, the conditions in income and balance sheets continue to support consumer spending. We have seen this in spending over 2023.

In November, nominal spending increased by 0.25%, contributing to a sequential deceleration in the quarterly trend. Below, we show the sequential evolution of nominal spending:

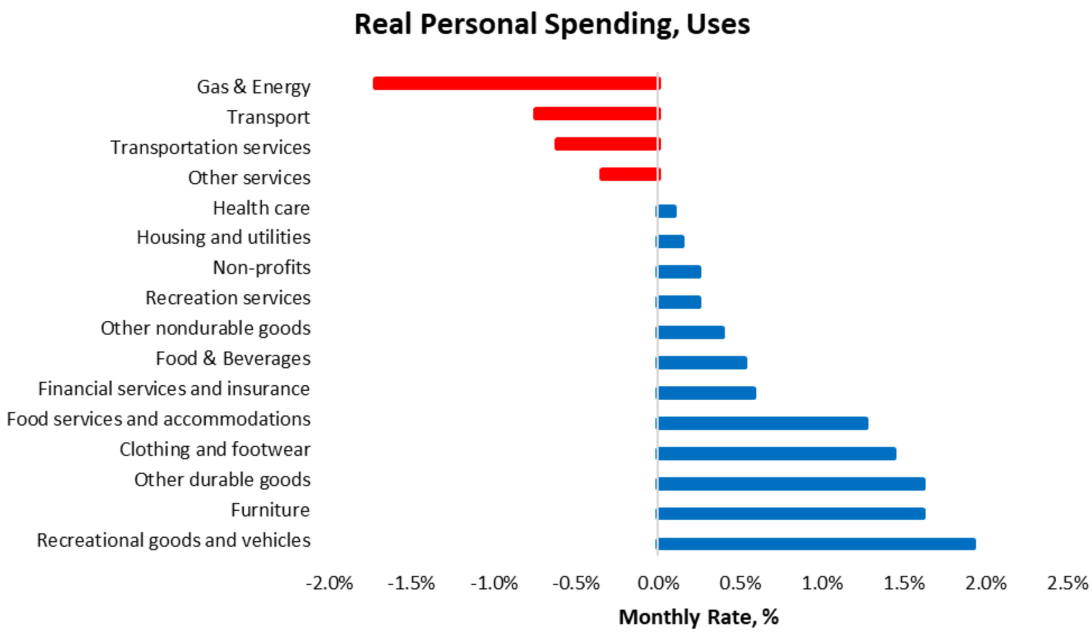


Spending flows through durable goods, nondurable goods, household services, and non-profits. To better understand the impacts of spending growth, we show the composition of the uses of spending. As we can see, consumers primarily spent on Household Services:

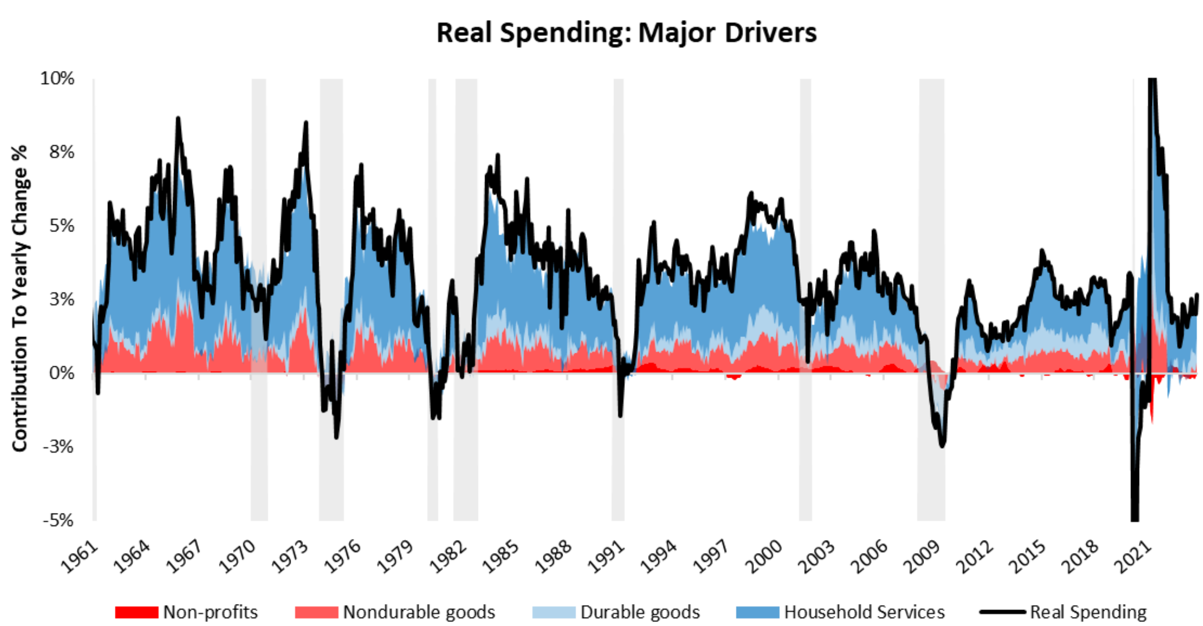


As we can see above, all major categories have contributed to the expansion in real spending.

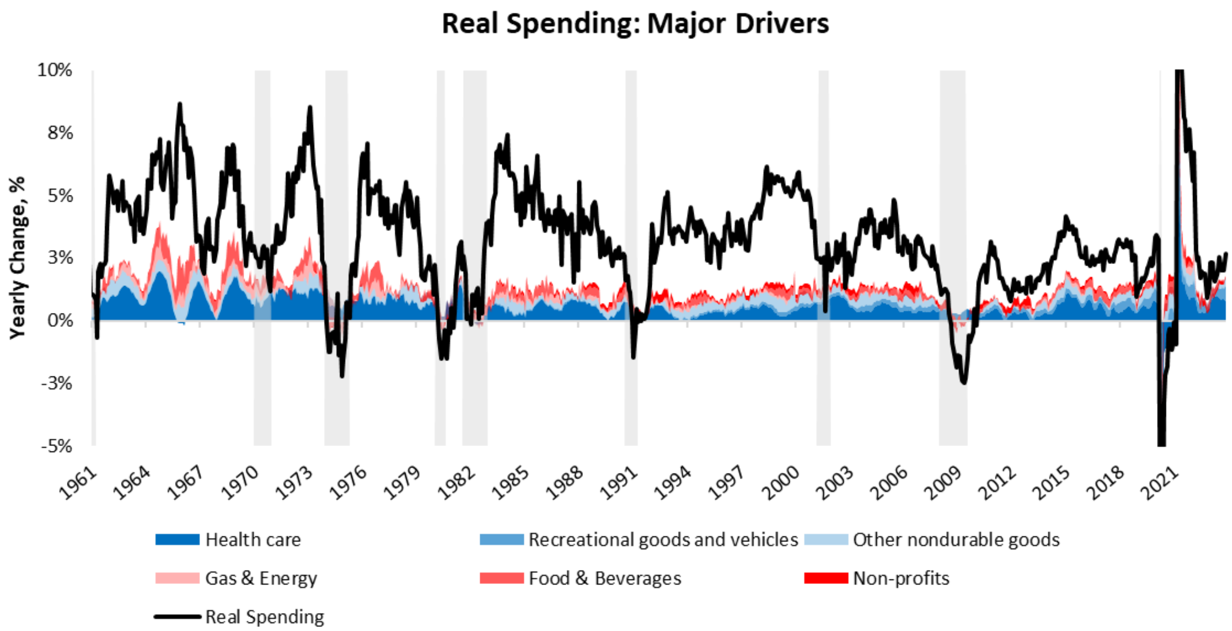
For a more granular view, we further analyze the monthly contributions of the sixteen sub-components of goods and services. Recreational goods and vehicles were the biggest contributors (1.93 %), and Gas & Energy (-1.72 %) was the largest detractor to the monthly print. Below, we show the composition of this spending over the most recent month:



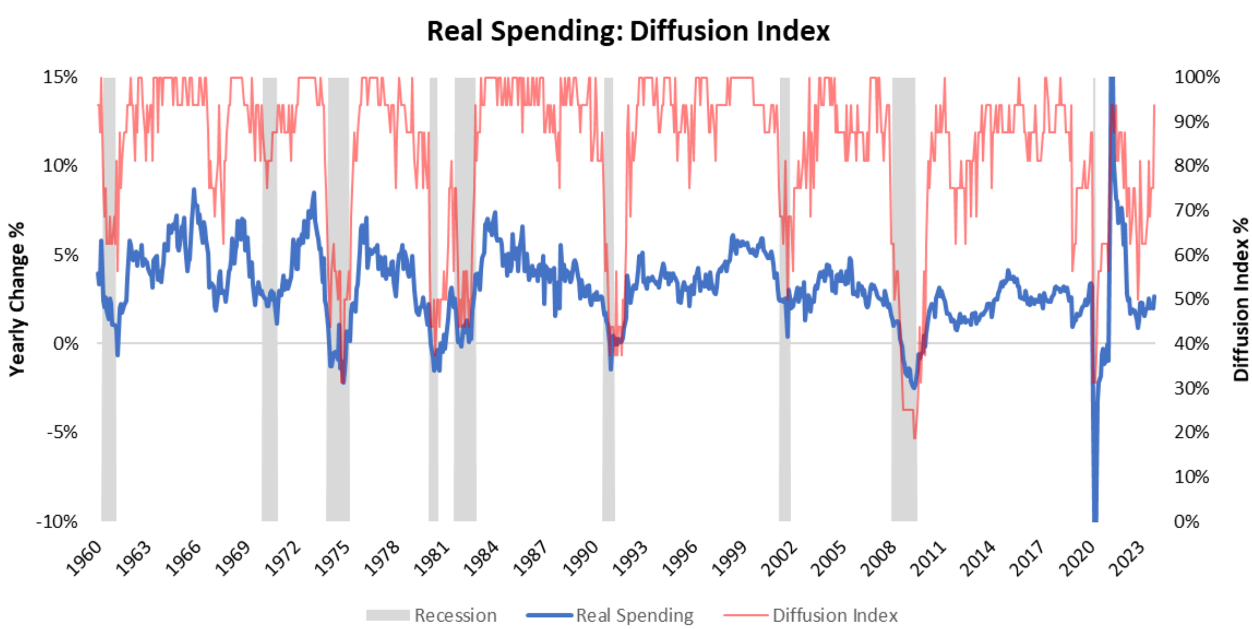
We now zoom out to understand what has driven these spending changes over the last year and decomposed its major drivers over time. Below, we show the composition of changes in real spending, broken down into its major uses. Over the last year, real spending was primarily driven by household services, which contributed to a 1.51% rise in total real spending growth of 2.69%:



We dive deeper into these trends. Below, we present the top six drivers of real spending, with the three strongest industries highlighted in blue (Health care, Recreational goods & vehicles, Other nondurable goods) and the three weakest industries highlighted in red (Gas & Energy, Food & Beverages, Non-profits):

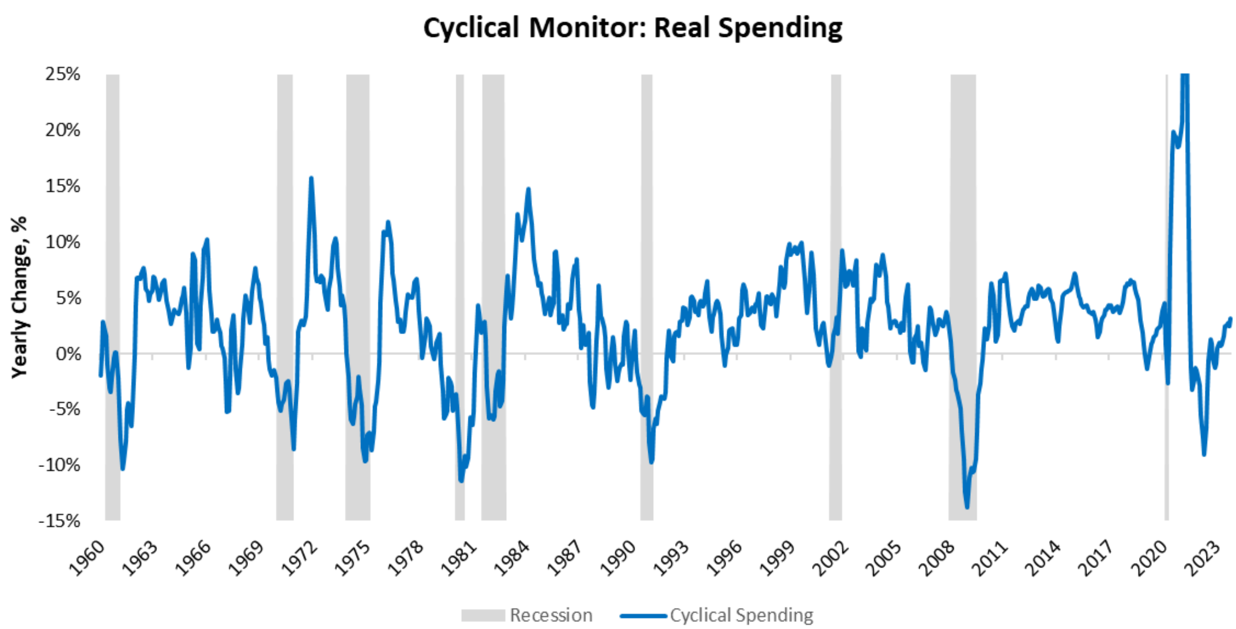


To further assess the health of the current expansion of spending, we examine the diffusion of the 16 subsectors we track. We examine the diffusion of spending, i.e., the number of industries that are expanding versus the number of industries that are contracting:

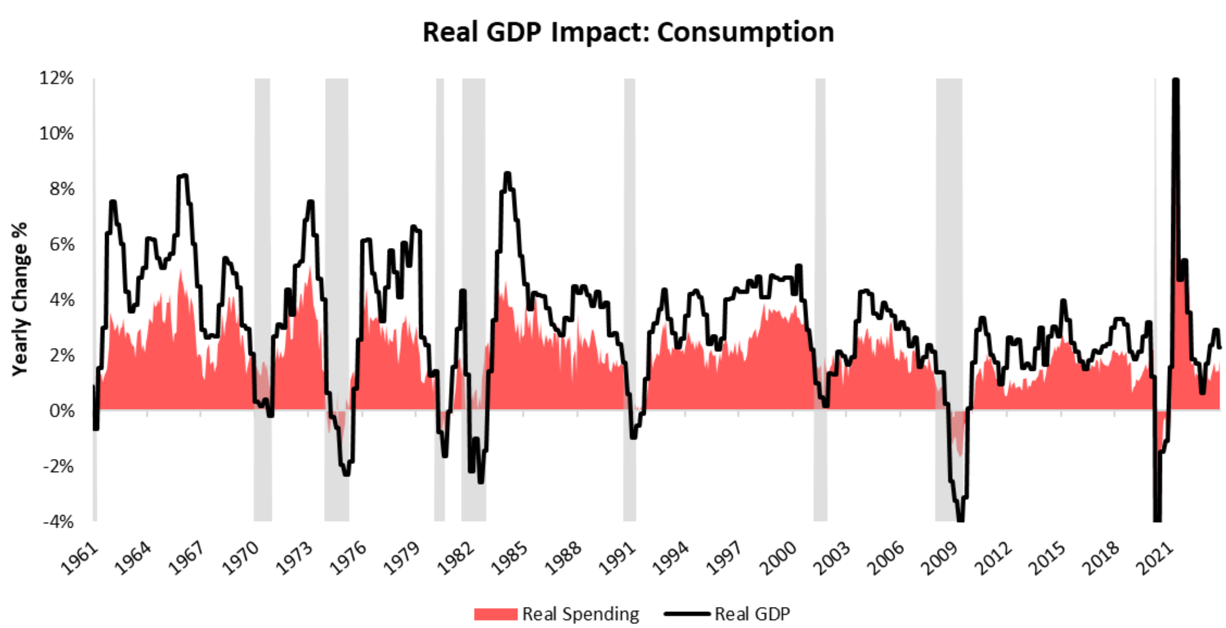


We find that 94% of the industries are expanding, suggesting broad-based growth.

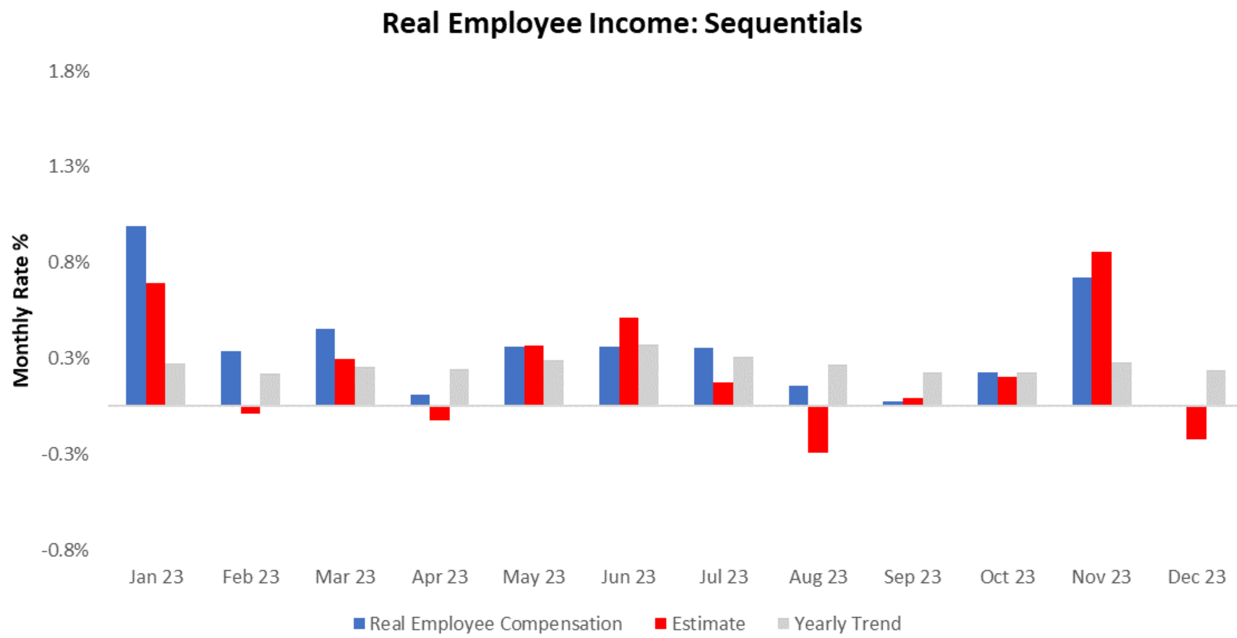
While understanding the current drivers helps us understand ongoing conditions, an assessment of the consistently cyclical drivers of spending helps us understand our position in the economic cycle. To conduct this assessment, we look at the performance of industries acutely exposed to changes in the credit cycle. Therefore, we expect these measures to contract significantly during recessionary periods and increase during robust growth periods. This measure is positive and higher than its six-month trend and expanding, signaling significant strength in spending and growth dynamics:



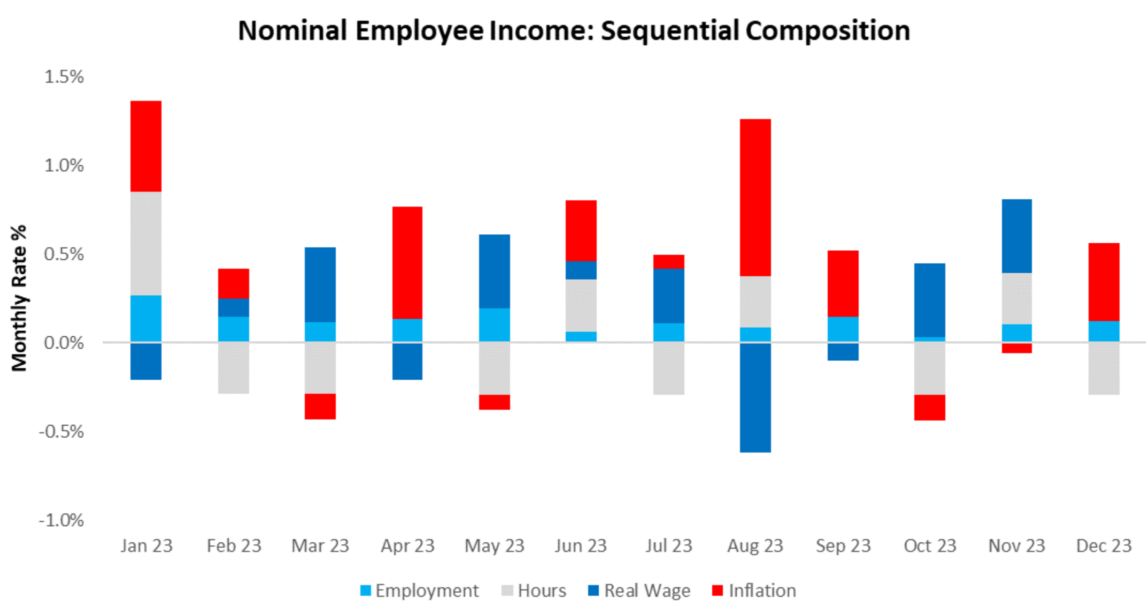
Therefore, both broad and targetted measures of cyclical spending show strength in consumer spending. This spending continues to support economic activity:



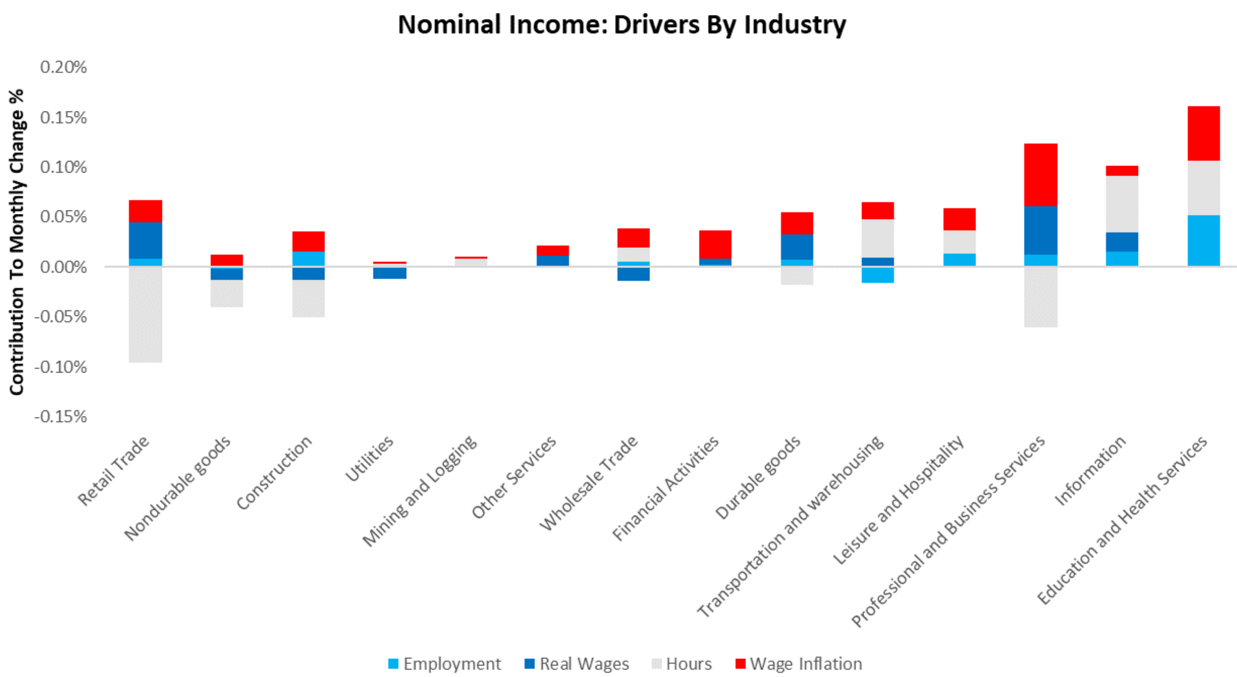
This spending makes its way into business revenues, which are then passed through to households as wages. These wages can come from employment, hours worked, real wage growth, or wage inflation. We assess each. Our latest estimates for December showed real employee income decreased by -0.17%. This data showed an acceleration in the quarterly trend relative to the one-year trend. We show the evolution of the sequential data below:



This estimated real income data came alongside a nominal income change of 0.27%. We can decompose this nominal wage growth into growth from employment, hours worked, real wages, and wage inflation, which contributed 0.12%, -0.29%,0%, and 0.44%, respectively, to nominal income. We show the sequential evolution of this compositional data below:



We further decompose these macroeconomic drivers by industry. Below, we visualize the contributions to total nominal income coming from each industry, broken into its drivers, ranked from left (weakest) to right (strongest). As we can see below, nominal income was generally positive, with Education and Health Services contributing the most to strength and Retail Trade dragging on nominal income growth:



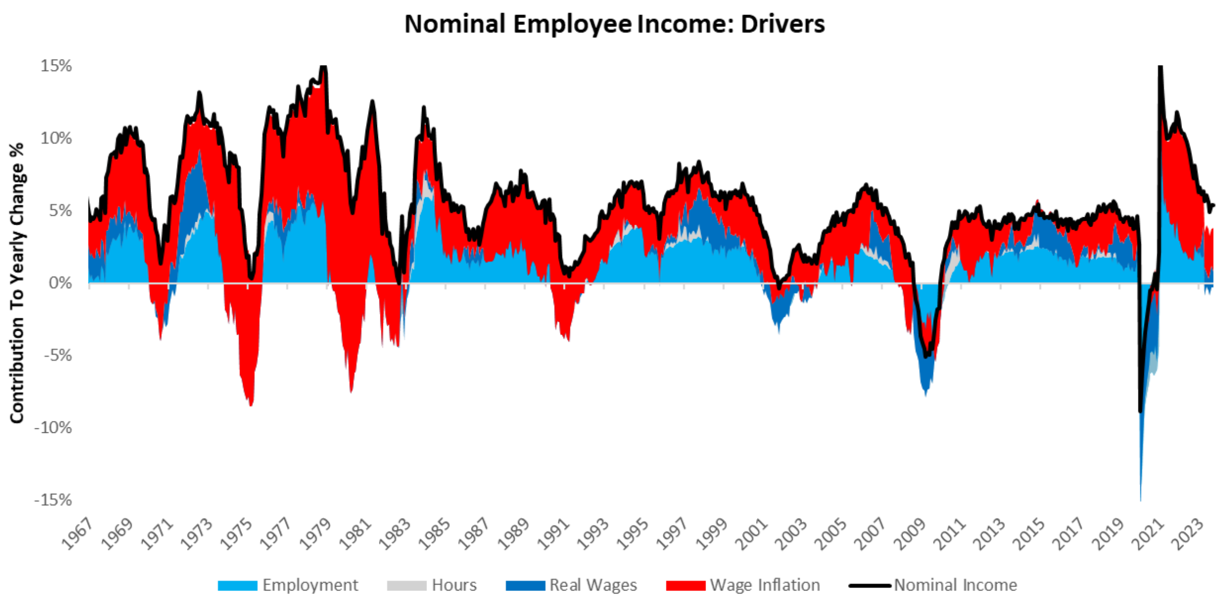
Additionally, we showcase the deocomposition of the most recent months' data below in tabular form:

Nominal Employee Income: Composition, Most Recent Month

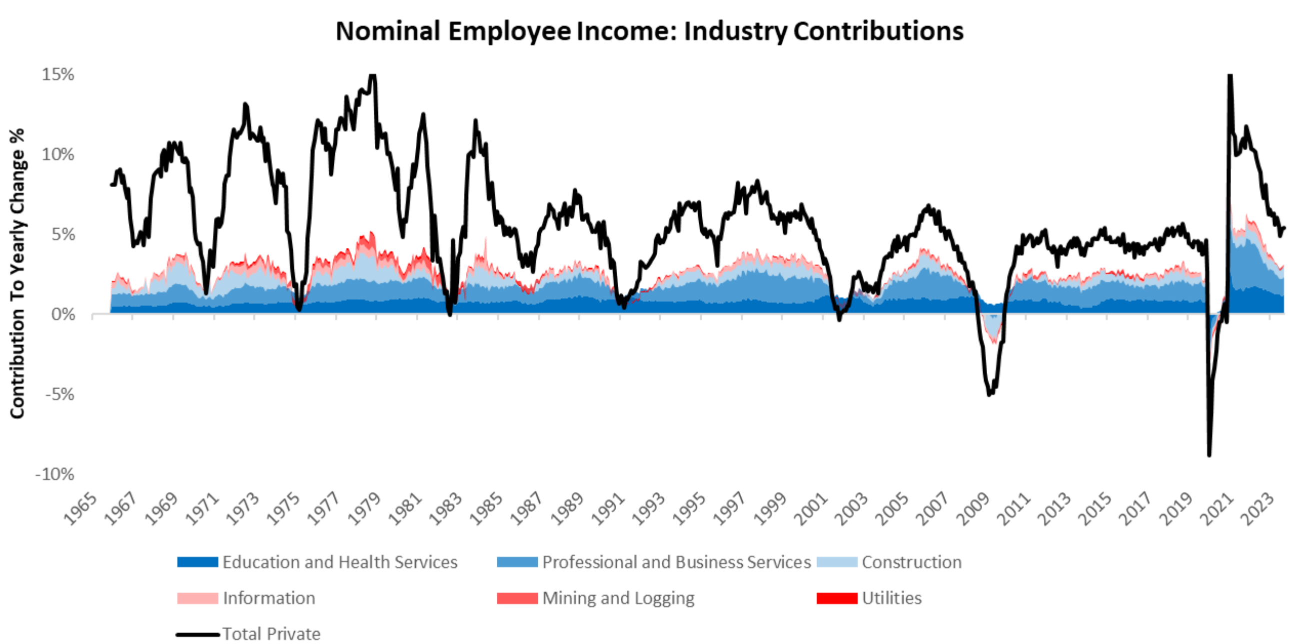
	Nominal Income	Employment	Real Wages	Hours	Wage Inflation
Retail Trade	-0.03%	0.01%	0.04%	-0.10%	0.02%
Nondurable goods	-0.03%	0.00%	-0.01%	-0.03%	0.01%
Construction	-0.01%	0.02%	-0.01%	-0.04%	0.02%
Utilities	-0.01%	0.00%	-0.01%	0.00%	0.00%
Mining and Logging	0.01%	0.00%	0.00%	0.01%	0.00%
Other Services	0.02%	0.00%	0.01%	0.00%	0.01%
Wholesale Trade	0.03%	0.01%	-0.01%	0.01%	0.02%
Financial Activities	0.04%	0.00%	0.01%	0.00%	0.03%
Durable goods	0.04%	0.01%	0.03%	-0.02%	0.02%
Transportation and warehousing	0.05%	-0.02%	0.01%	0.04%	0.02%
Leisure and Hospitality	0.06%	0.01%	0.00%	0.02%	0.02%
Professional and Business Services	0.06%	0.01%	0.05%	-0.06%	0.06%
Information	0.10%	0.02%	0.02%	0.06%	0.01%
Education and Health Services	0.16%	0.05%	0.00%	0.05%	0.05%
Total	0.27%	0.12%	0.00%	-0.29%	0.44%

As we can see, any weakness in nominal income was largely driven by a pullback in wages, though in aggregate, it remains positive.

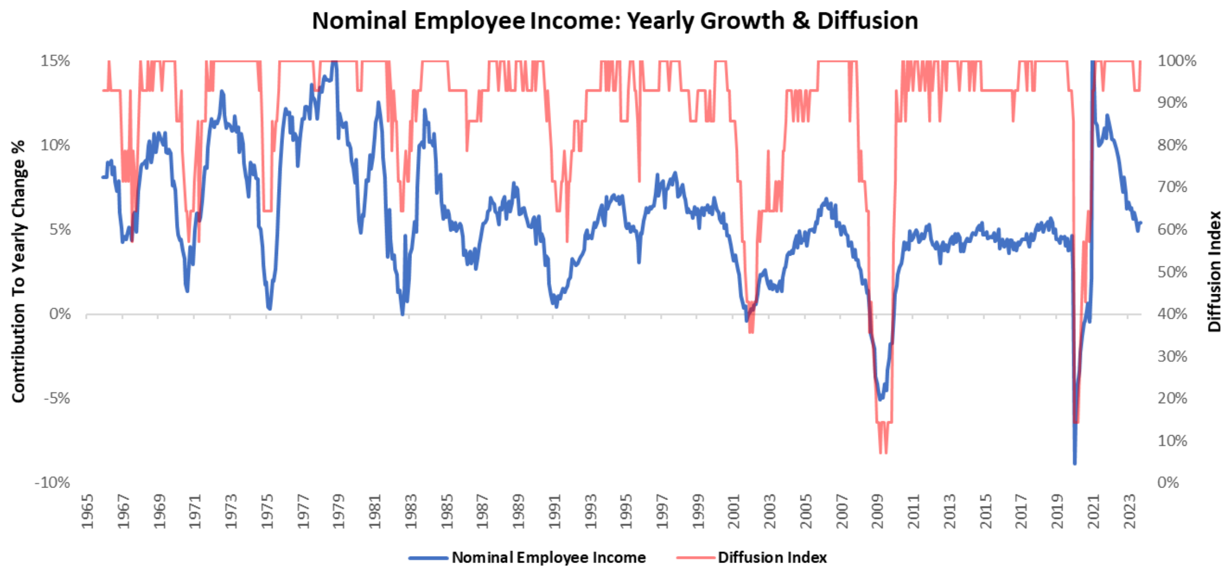
For further perspective, we show how nominal employee income has evolved over the last year, with nominal income growth of 5.39%, 0.76% of which came from real growth. Over the last year, nominal income has primarily been driven by Wage Inflation, which has expanded by 3.06%. We display this below:



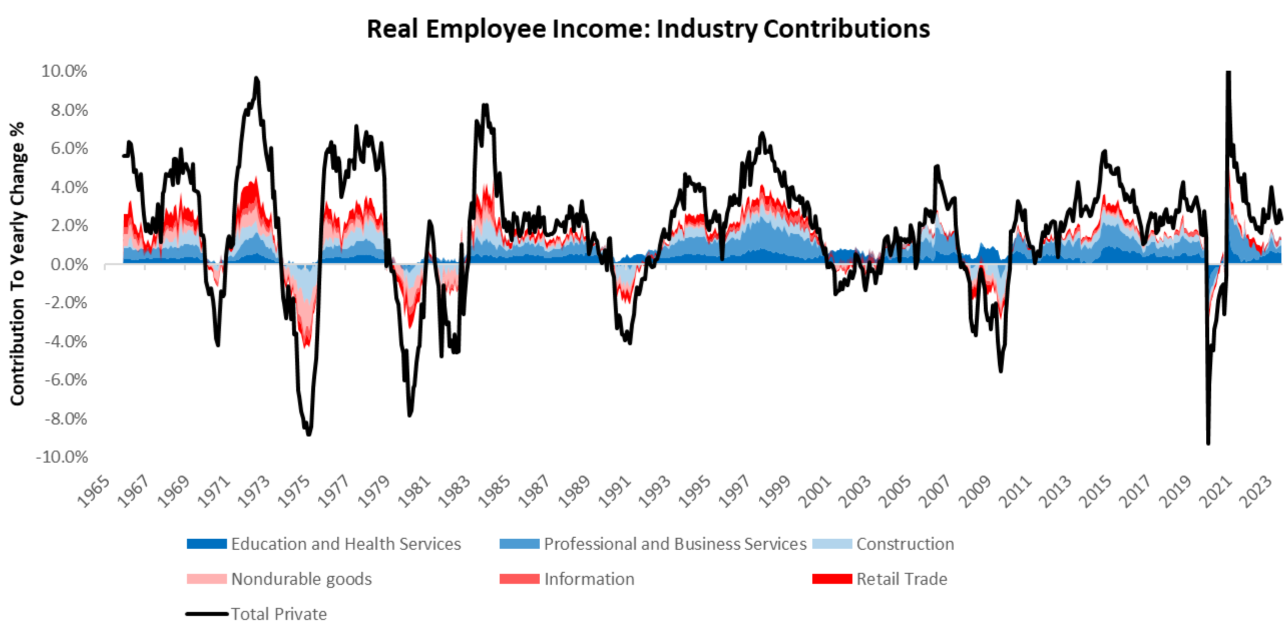
Digging into the industry-level data, we find that nominal employee income over the last year has been positive across the board, with Education and Health Services, Professional and Business Services, and Construction contributing strength (shown in shades of blue). On the other hand, Utilities, Mining and Logging, and Information are the weakest areas of income (shown in shades of red).



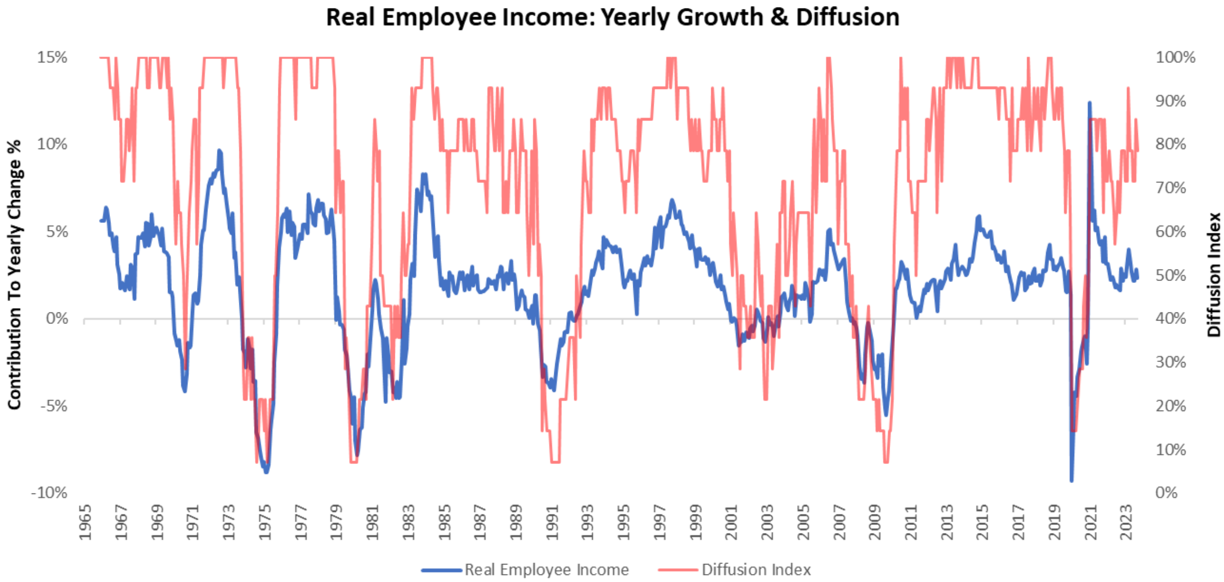
Additionally, we show the yearly change in the data, along with the underlying diffusion of industry growth:



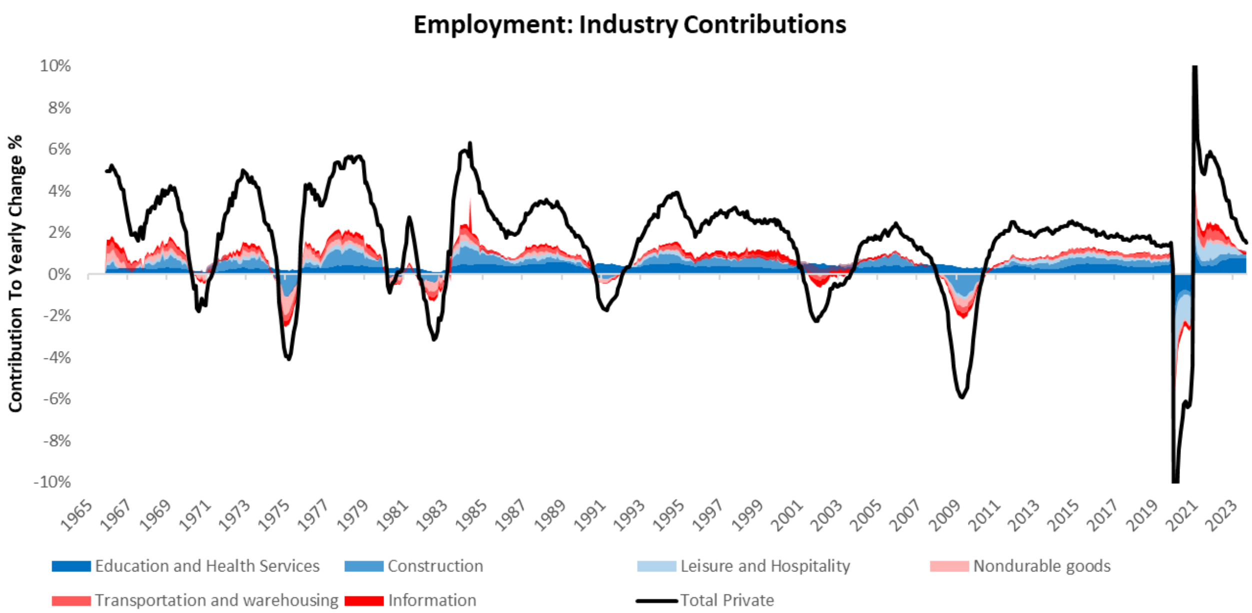
Nominal incomes are rare to contract, given the persistence of wage inflation. As such, they can often be a poor indicator of cyclical conditions. To better understand these dynamics, we turn to real employee income, which over the last year has largely been positive, with Education and Health Services, Professional and Business Services, and Construction contributing strength (shown in shades of blue). On the other hand, Retail Trade, Information, and Nondurable goods are the weakest areas of income (shown in shades of red):



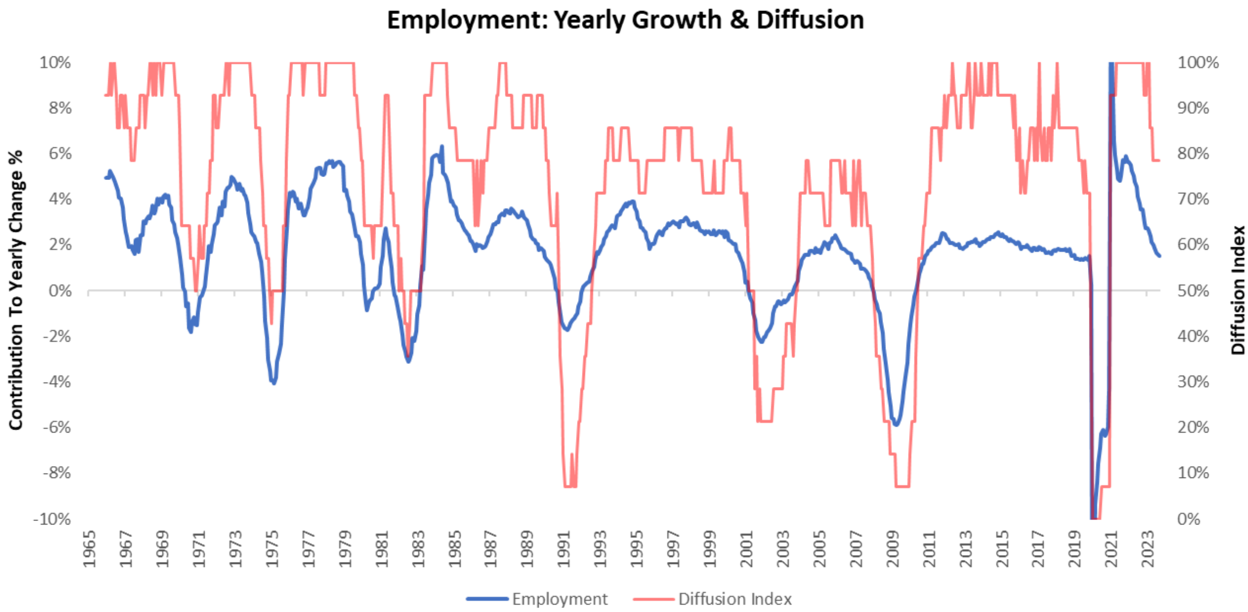
We show the diffusion of the dat below:



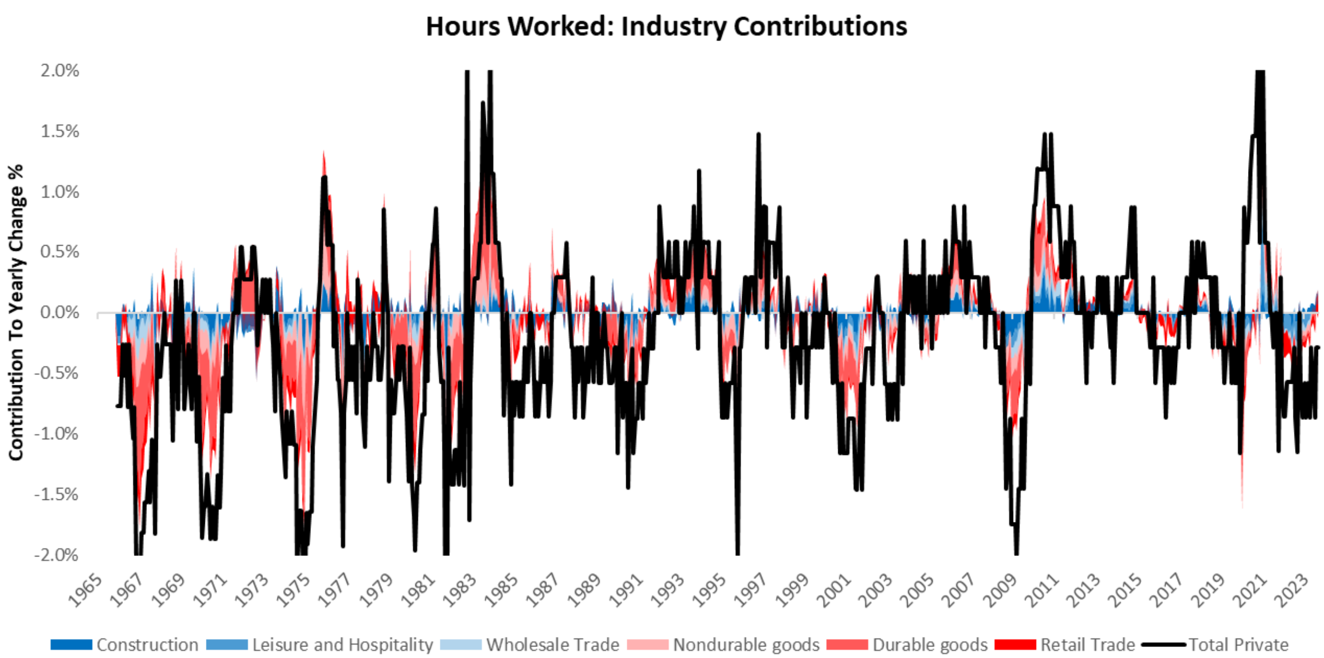
Further dissecting this real income, we examine employment, which is typically the primary driver of real growth. Over the last year, employment growth has largely been positive, with Education and Health Services, Construction, and Leisure and Hospitality contributing strength (shown in shades of blue). On the other hand, Information, Transportation and warehousing, and Nondurable goods are the weakest areas of employment (shown in shades of red):



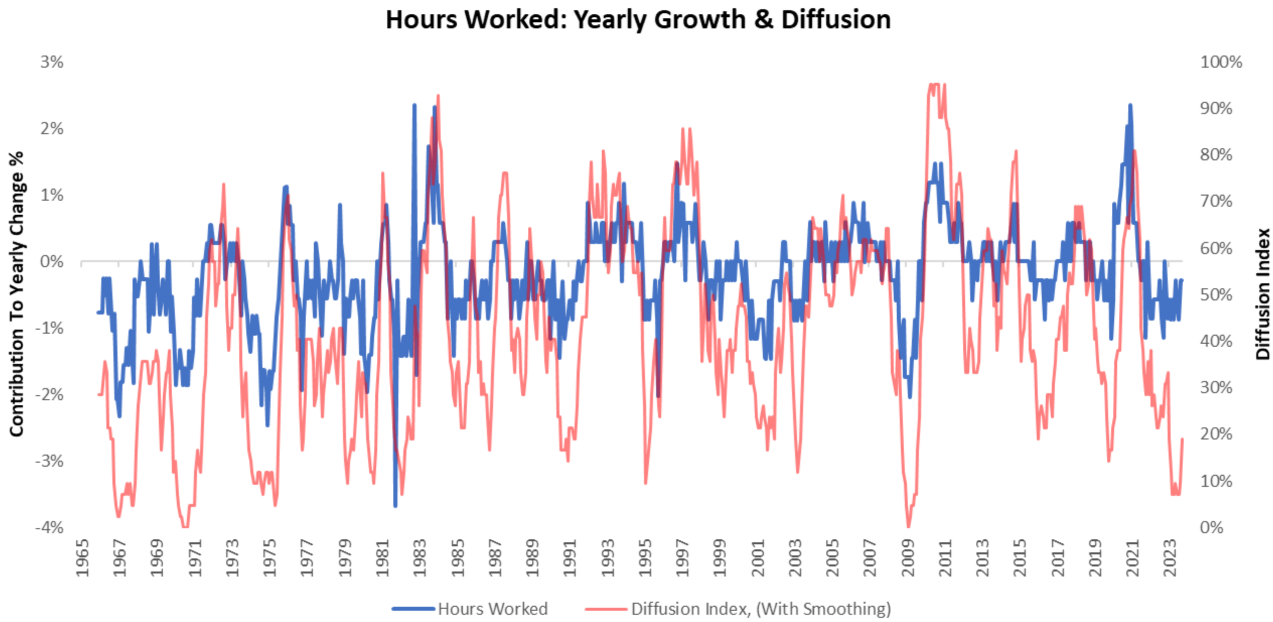
Additionally, we show the yearly change in the data, along with the underlying diffusion of industry growth:



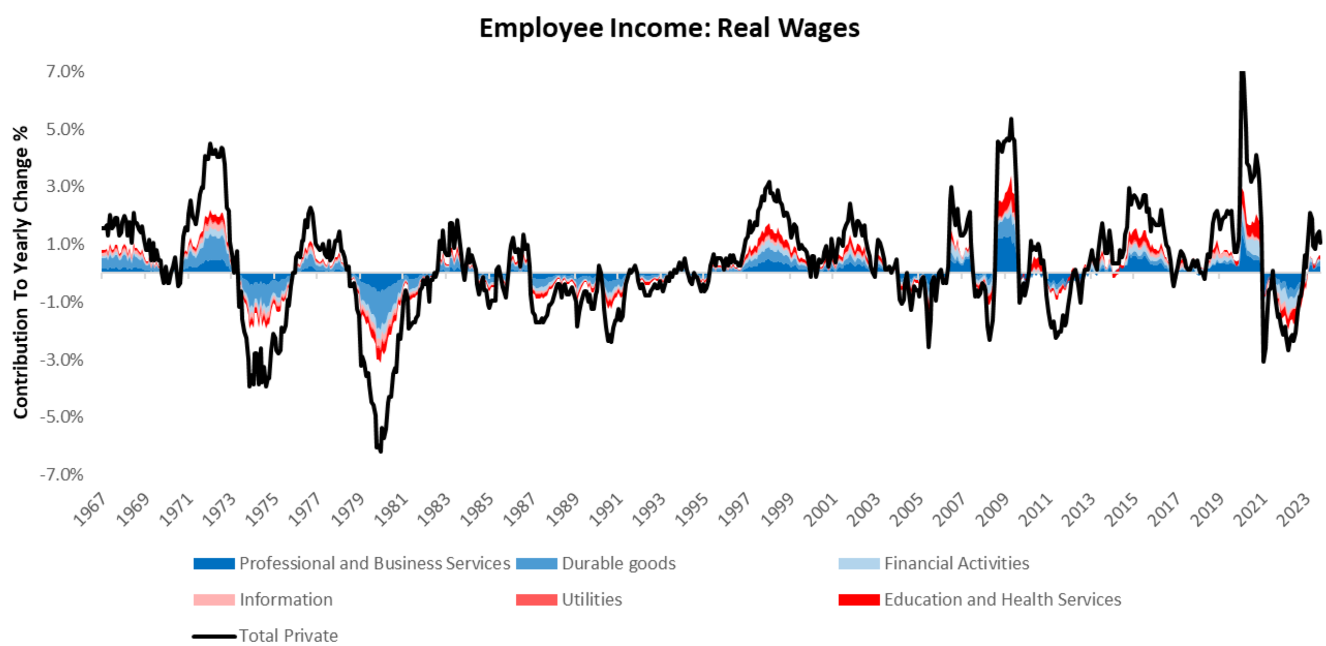
Next, in our analysis of real income, we turn to the number of hours worked by employees. Over the last year, growth in hours worked has largely been weak, with Construction, Construction, and Wholesale Trade contributing strength (shown in shades of blue). On the other hand, Retail Trade, Durable goods, and Nondurable goods are the weakest areas in terms of the number of hours worked (shown in shades of red).



Additionally, we show the yearly change in the data, along with the underlying diffusion of industry growth:

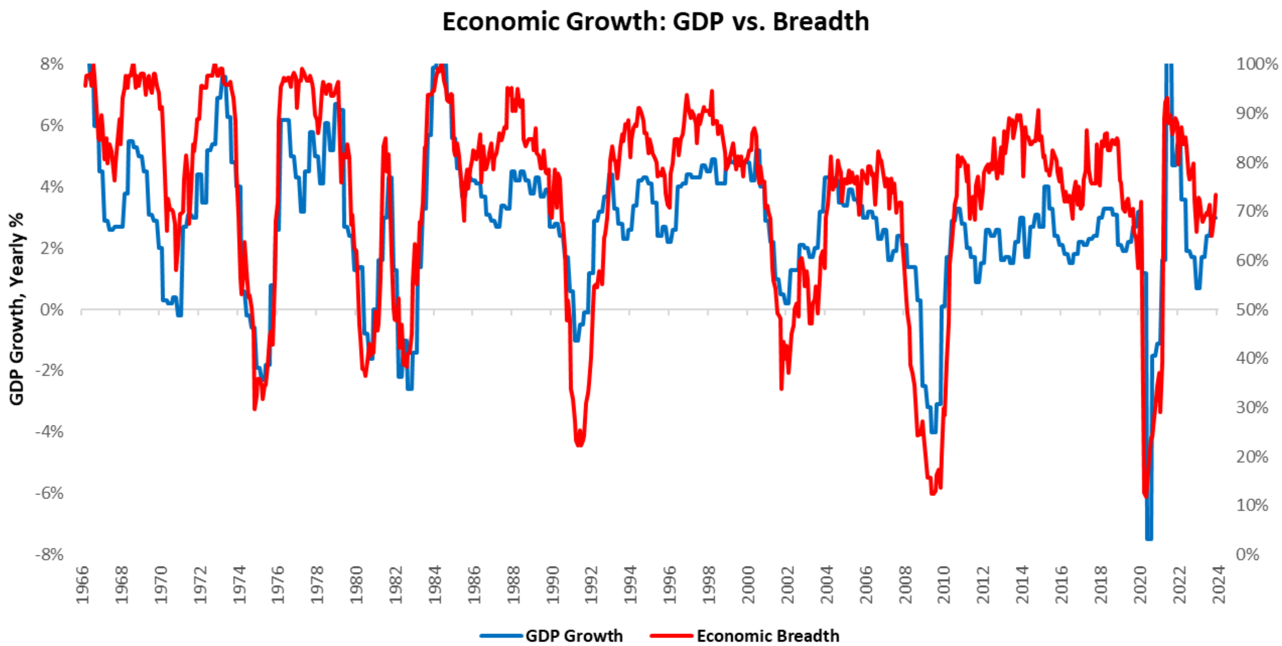


The final component of our analysis of real incomes is real wage growth. Over the last year, real wages have largely been positive, with Professional and Business Services, Durable goods, and Financial Activities contributing strength (shown in shades of blue). On the other hand, Education and Health Services, Utilities, and Information are the weakest areas of real wage growth (shown in shades of red).



As evidenced by these dynamics, income, spending, employment, and balance sheet conditions remain broad-based across the economy.

In today's environment, growth remains primarily driven by a strong consumer, supporting profitability and extending the economic cycle. These conditions have reaccelerated recently, with a broad array of economic data supporting this re-acceleration. Below, we help contextualize this economic breadth by showing our gauge, which aggregates over 70 different indicators to understand the breadth of current GDP growth:

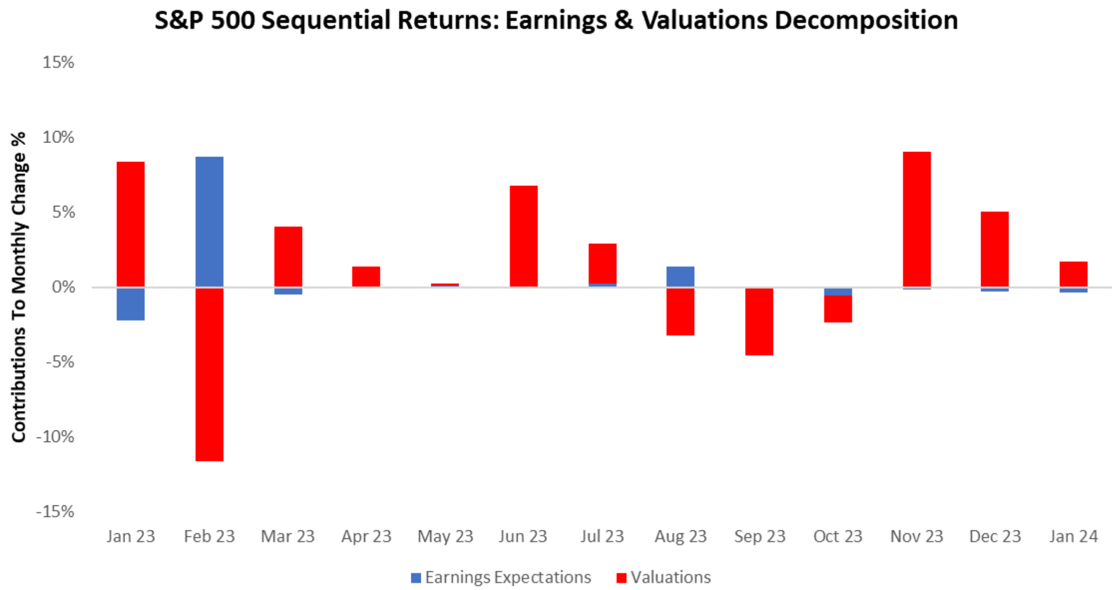


As we can see above, a comprehensive assessment of economic conditions suggests economic growth remains broadly positive. As such, while the impacts of monetary tightening are likely to impact the economy eventually, we see little effect at the current junction, which suggests that growth can continue at the current pace. This dynamic looks roughly consistent with what equity markets have priced in. We turn to this pricing in our next section.

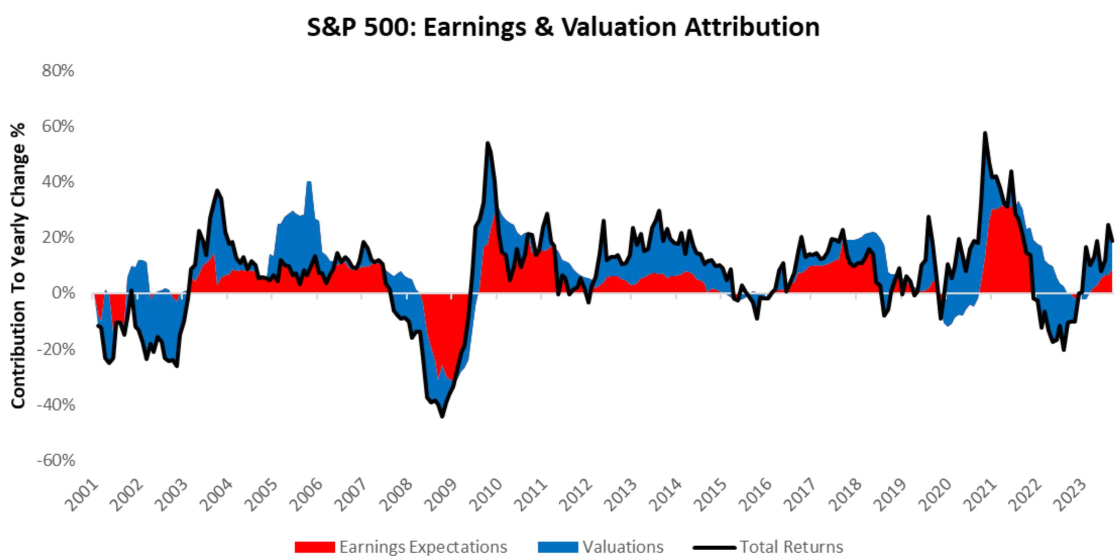
Equity Markets: Limited Alpha

Alpha is a function of the path of macroeconomic conditions relative to what markets have priced in. Our assessment of conditions suggests that the economy can continue on the current trend but is unlikely to accelerate cyclically. We explore what equity markets have priced in relative to this outlook.

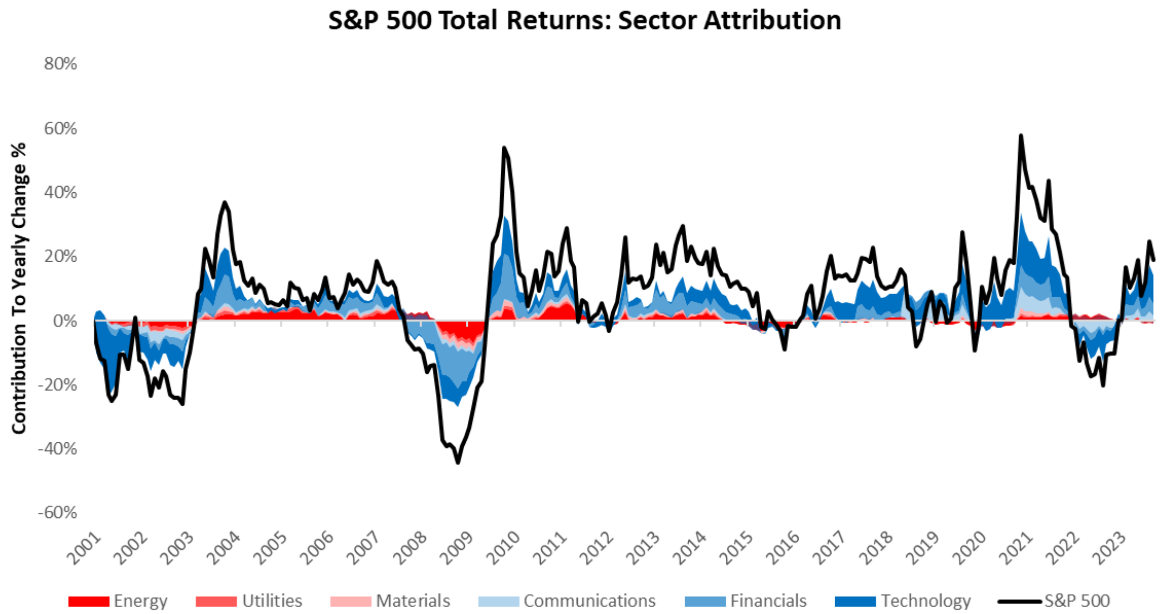
Over January, the S&P 500 fell 1.37%, primarily driven by valuations. Earnings expectations and valuations contributed -0.37% & 1.73% to the 1.37% market rise. Below, we show the sequential evolution of market prices, along with our decomposition of returns:



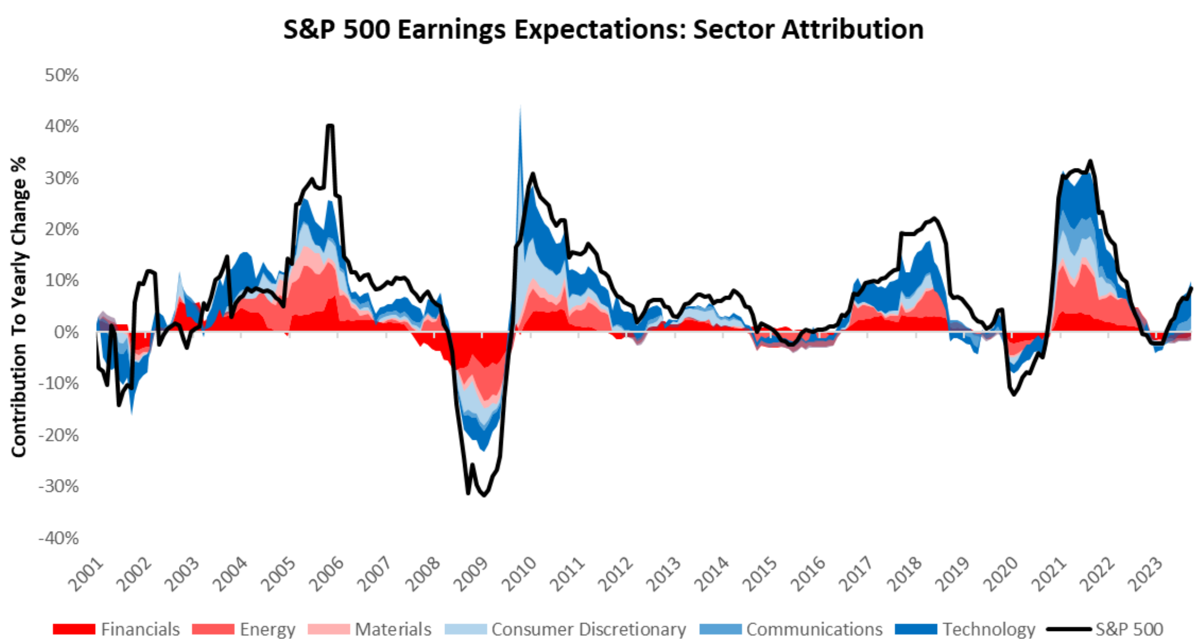
Over the last year, the S&P 500 has been dominantly driven by valuations, with total returns rising by 26.3%. We show cumulative returns on the S&P 500 over the last year, decomposed into earnings expectations (6.16%) and valuations (17.43%):



We further decompose these yearly returns into their sector contributions. We begin by showing the primary drivers of the S&P 500. We show the top three drivers in blue (Technology, Financials, Communications) and the bottom three in red (Energy, Utilities, Materials):

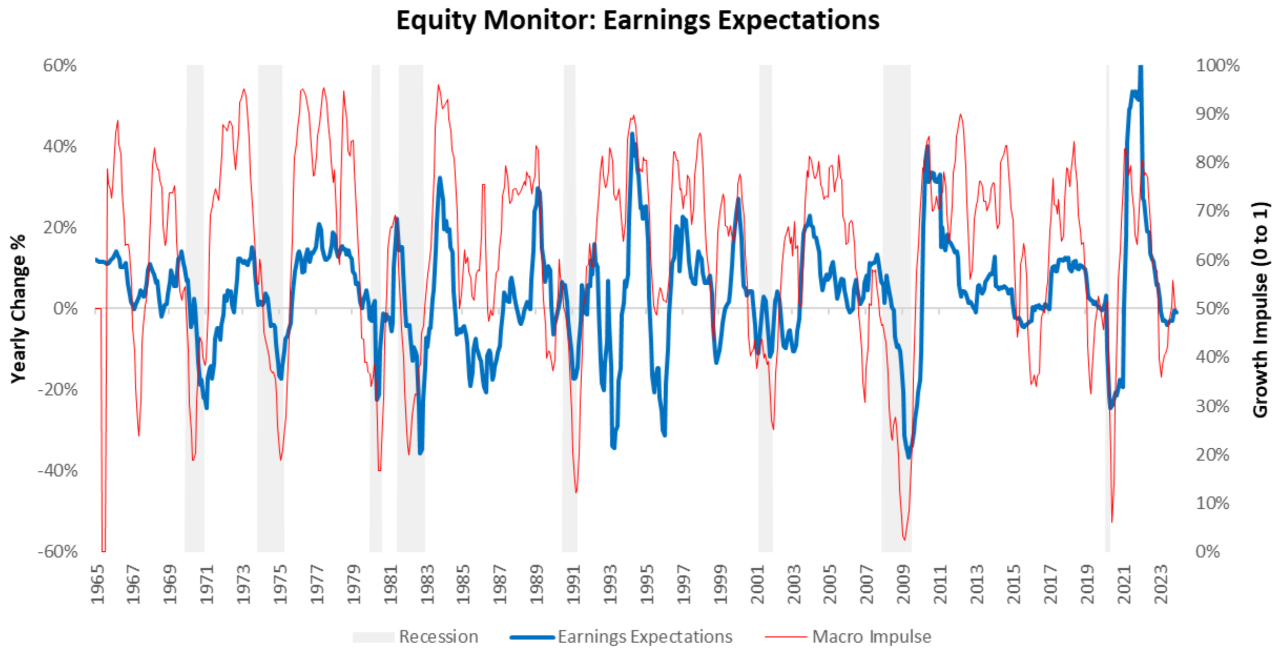


We drill down into these total returns by isolating the changes in one year forward earnings per share expectations. We show the top three drivers in blue (Technology, Communications, Consumer Discretionary) and the bottom three in red (Financials, Energy, Materials):

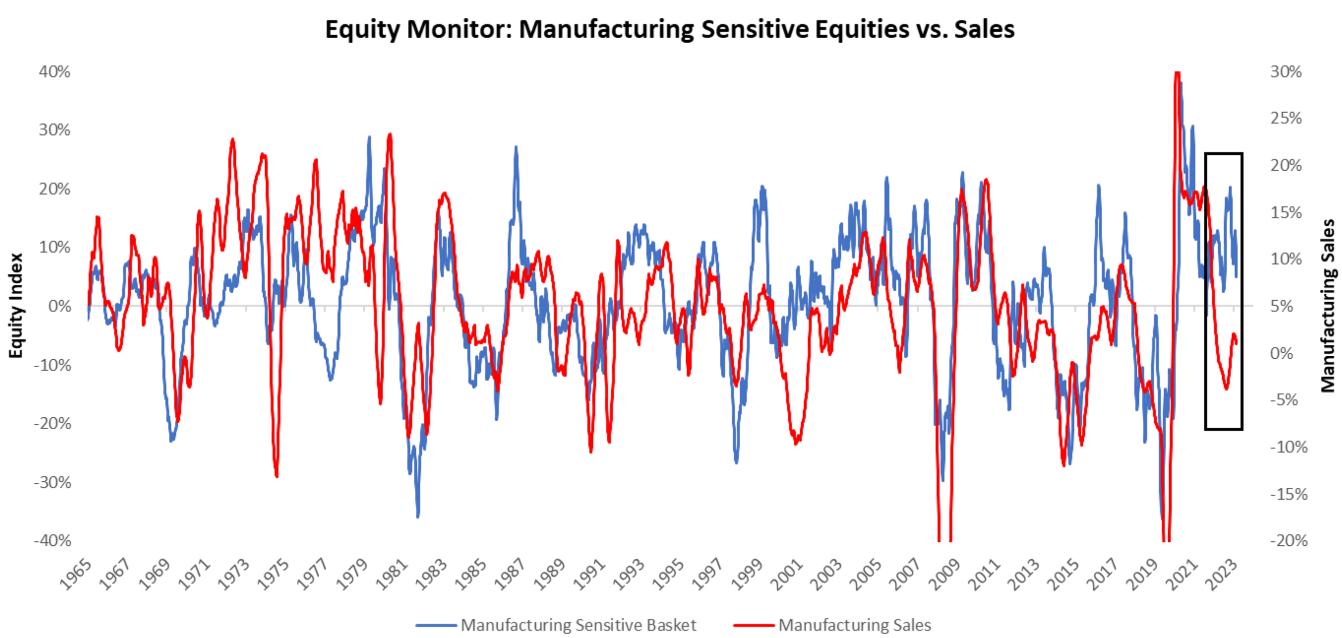


As shown above, we have seen a significant rise in earnings per share expectations.

This improvement is consistent with the improvement in our macro impulse gauges. We visualize these dynamics below:

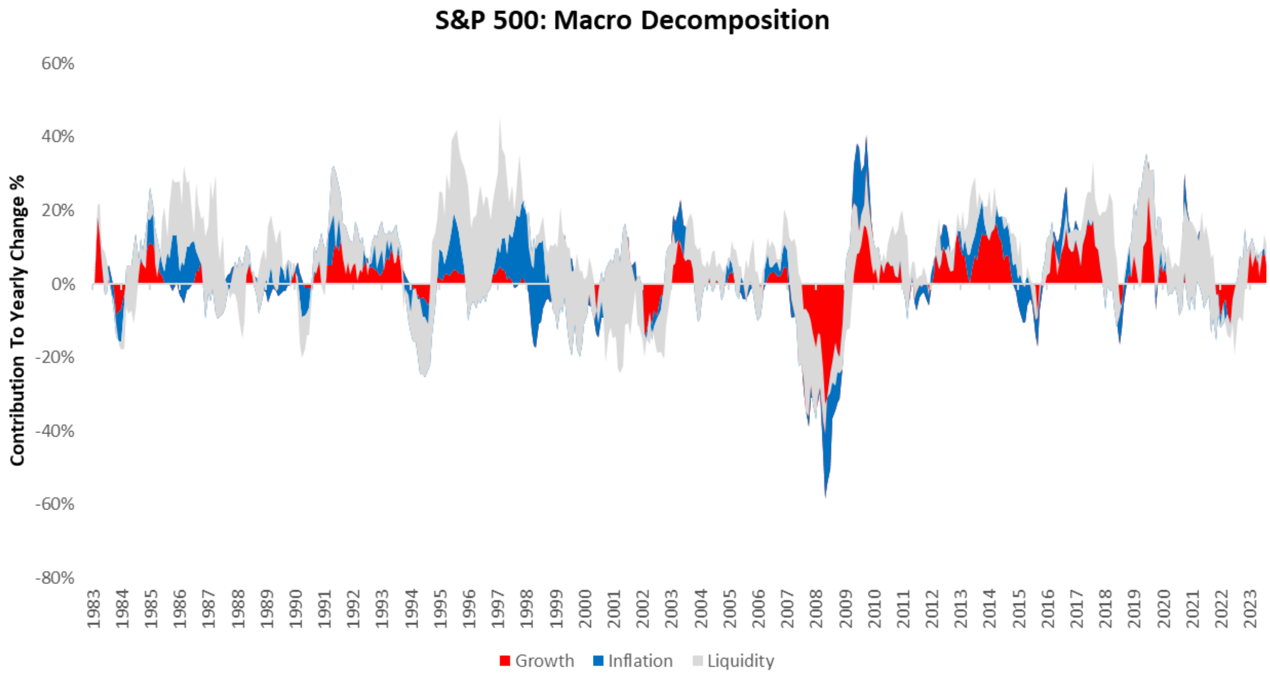


As we can see above, earnings expectations look roughly consistent with the current macro impulse, though there is potential for them to expand further. Furthermore, measures of equity market internals suggest strength:

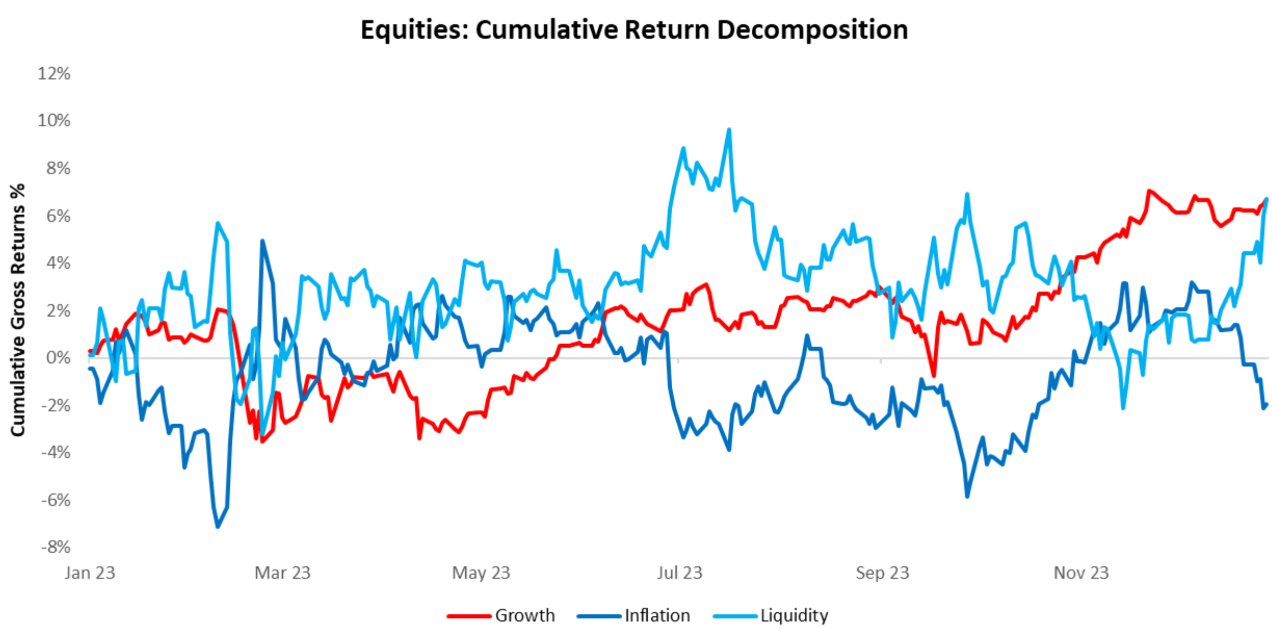


Nonetheless, it is important to note that these dynamics have deviated significantly from fundamentals, suggesting some caution in manufacturing industries. Relative value opportunities will likely persist.

At a macroeconomic level, we can decompose equity returns into their constituent growth drivers, inflation, liquidity, and discount rates using our proprietary measures. Over the last year, equities have been primarily driven by growth, with inflation dragging on returns:



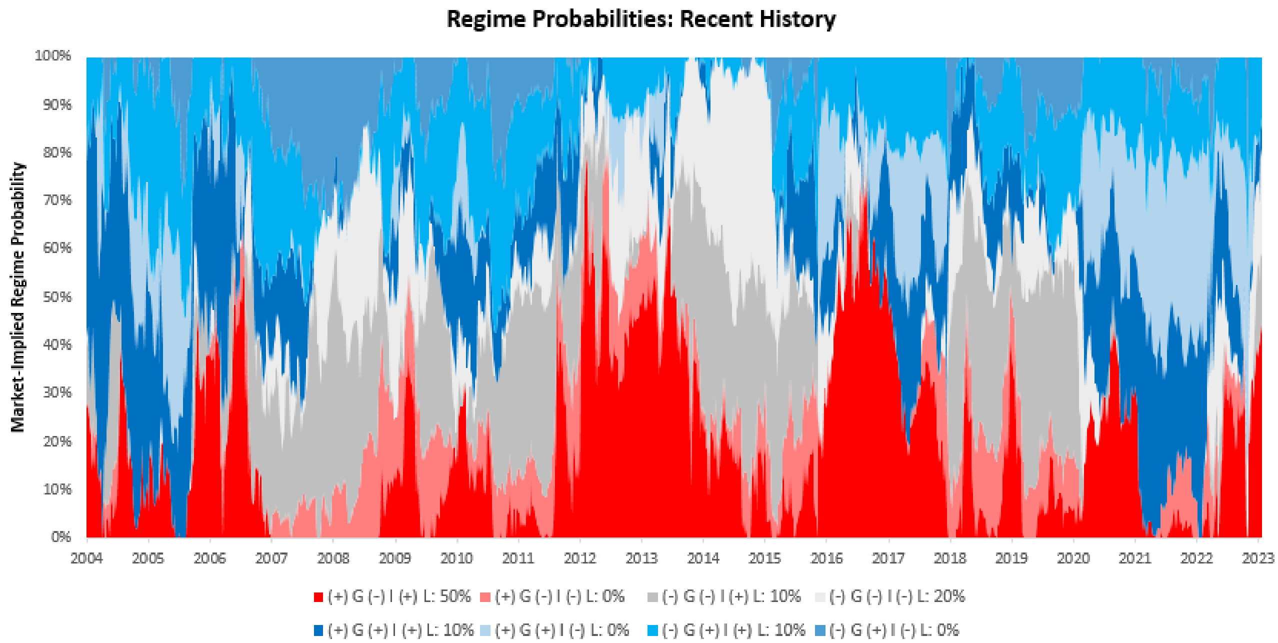
To further contextualize these returns, we show the cumulative returns attributable to our growth, inflation, liquidity, and discount rate factors. In the most recent month, growth, inflation, and liquidity have contributed 0.08%, -3.5%, & 4.92%, respectively. We show the cumulative contributions to total returns over the last year below:



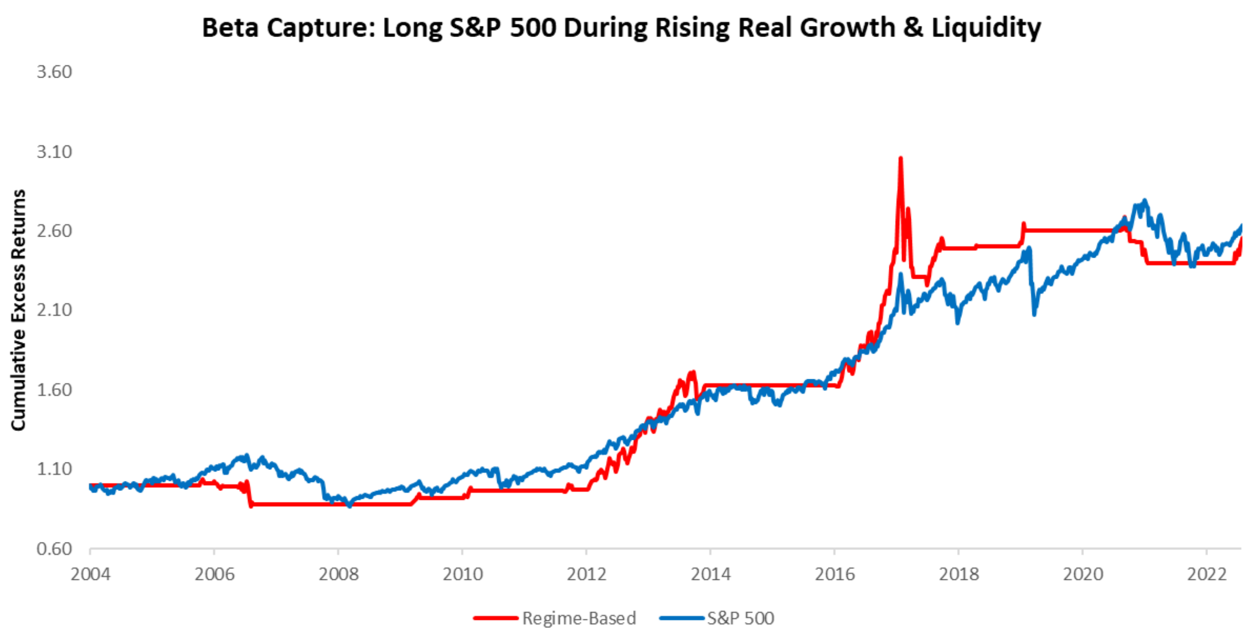
We zoom out to our cross-asset macro regime lenses to show how the cross-section of macro markets has priced-in outcomes favorable to equities:

Prometheus Market Regime Probabilties

	(+) G (-) I (+) L	(+) G (-) I (-) L	(-) G (-) I (+) L	(-) G (-) I (-) L	(+) G (+) I (+) L	(+) G (+) I (-) L	(-) G (+) I (+) L	(-) G (+) I (-) L
Probability %	45.3%	0.0%	13.1%	20.8%	7.5%	0.5%	12.8%	0.0%



Markets have moved to price in rising growth, falling inflation, and rising liquidity, an extremely beneficial environment for equities. We show this below:



For informational purposes only.

This pricing has come with an economic data impulse that remains positive, also supporting equities:

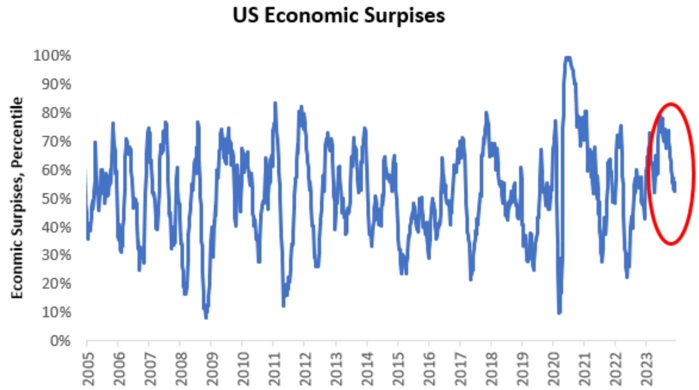
Economic Momentum: Economic Surpises vs Asset Class Performance

Asset Class Performance By Economic Surpise Percentile

	0-25%	25%-50%	50%-75%	75%-100%
Stocks	*-8%*	*2%*	*13%*	*30%*
Commodities	*-29%*	*3%*	*6%*	*17%*
Bonds	*28%*	*9%*	*-8%*	*-3%*
Gold	*15%*	*12%*	*9%*	*-3%*

Economic Surpise Percentile: Weekly Trend

Dec 22	Dec 29	Jan 05	Jan 12	Jan 19
57.2%	53.3%	52.4%	53.0%	55.4%



Overall, markets have largely priced in conditions consistent with the ongoing macro impulse. As such, we see limited opportunities to generate long-side alpha and no impetus to be short equities at this junction. We expect the next major alpha opportunity in equities to be on the short side, though we do not see conditions align for this in the near future.

Conclusions

We reiterate our expectations and our views on macro and risk.

- ***Nominal GDP expanded by 0.64% in December, with real GDP rising by 0.33% and inflation rising by 0.31%.***
- ***Conditions across nominal income, output, and employment continue to look significantly at odds with an imminent risk of a recession.***
- ***Relative to these conditions, earnings expectations look modestly weak relative to the probable forward path of revenue. This gap remains small and does not represent a sizable macro mispricing.***
- ***With the S&P 500 making new all-time highs, risk-controlled bets on equity beta seem reasonable, while alpha opportunities remain muted. Our Alpha Strategies are flat equities at this time.***

Overall, markets have priced in outcomes that are consistent with the ongoing improvement in macroeocnomic dynamics. Given this pricing, we think it that alpha opportunities remain limited. However, we think it would be a mistake to fight market regime pricing. As such, careful, risk-controlled beta exposure could make sense for those managing beta portfolios. We continue to monitor the evolution of these conditions carefully. Until next time.

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