

Month in Macro

This report is part of our ongoing effort to provide economic and market guidance to our subscribers during a period of historic levels of uncertainty. 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 our connecting the dots across all the economic and financial data our systems use to make portfolio decisions. This report will focus on the economy; future issues will include our market analysis. Our key takeaways are as follows:

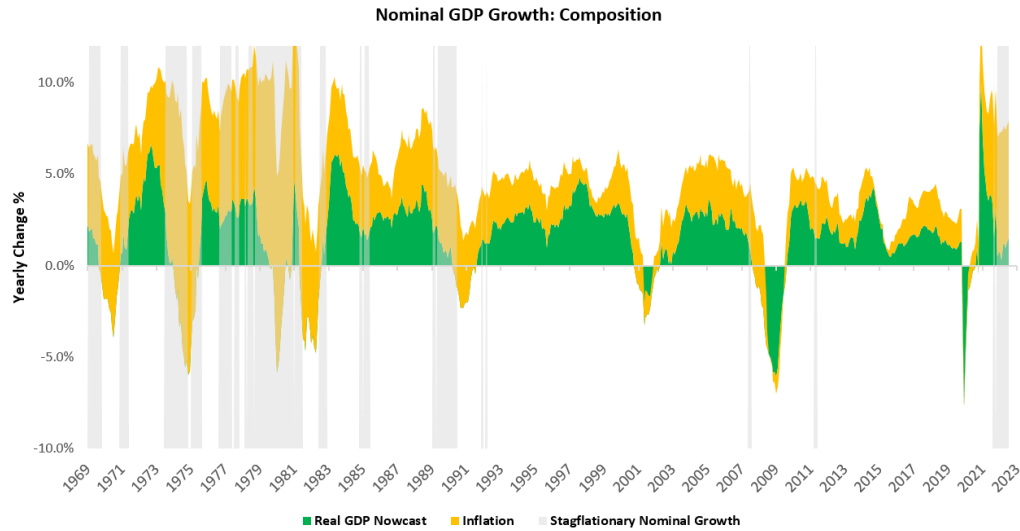
- **Growth has reaccelerated, while Inflation cooled this month. However, our outlook suggests that the respite in Real GDP is likely to be short-lived as we progress through the economic cycle.**
- **Inflation is now at a crossroads, with competing forces battling to determine the future inflation impulse. Emerging data suggests moderation is increasingly likely.**
- **Conditions are brewing for the Federal Reserve to take its foot off the gas on interest rate hikes, with current market pricing of terminal rates in the ballpark of peak rates.**
- **The combination of these conditions creates an environment where growth shocks are likely to trump inflation shocks over the next six months.**

Over the last month, our systematic tracking of economic conditions has shown an upward move in real GDP growth alongside a deterioration in inflationary pressures. Our granular monitoring of economic conditions suggests that we are now critical stage of the inflation cycle, with the potential for the next few months to mark a turning point. These periods are hard to judge ex-ante; however, our assessment tells us that recessionary pressures are building deflationary economic conditions. The economy and markets are at a crucial juncture, which we detail in the following pages.

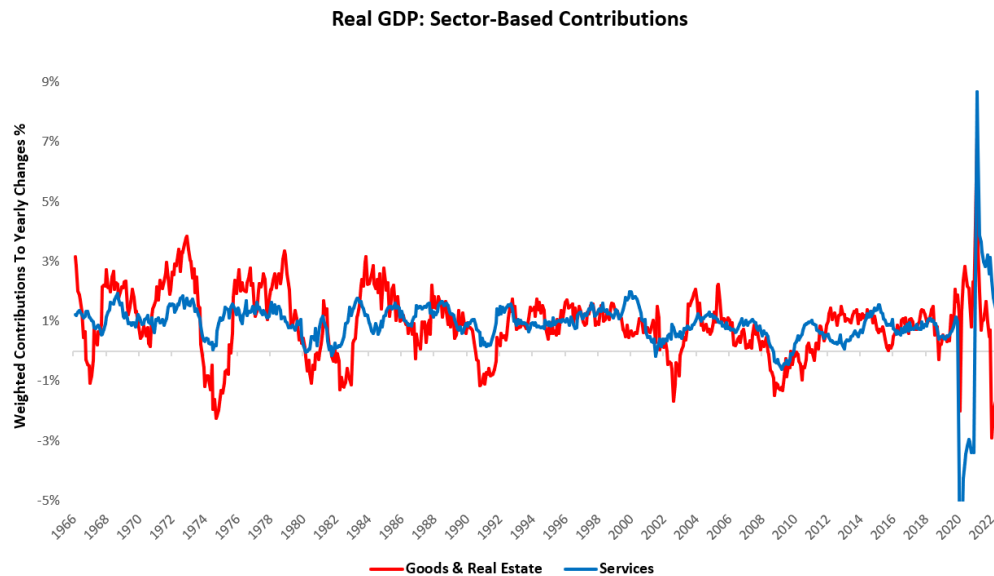
Our latest GDP Nowcast places real GDP growth at 1.8% versus one year ago, with economy-wide inflation over 6%. Over the last month, economic activity has accelerated, pushing our GDP Nowcast higher. These changes marginally confirmed our outlook from our last Month In Macro of a potential "pain period." To reiterate our thoughts:

We believe we are now in the "pain period." What we mean by this is that economic data is likely to remain more resilient than many expect. Those calling for an imminent contraction will likely experience pain in their positioning. Managing risk as the data evolves is paramount in timing a transition.

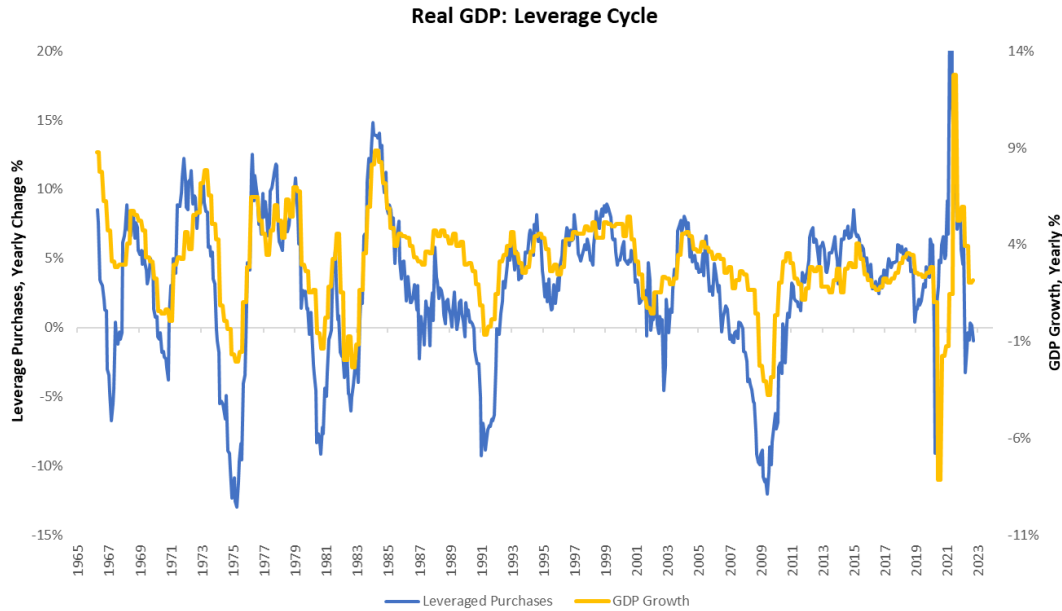
In line with this outlook, topline nominal economic activity has marginally accelerated within a broader downturn, as shown below:



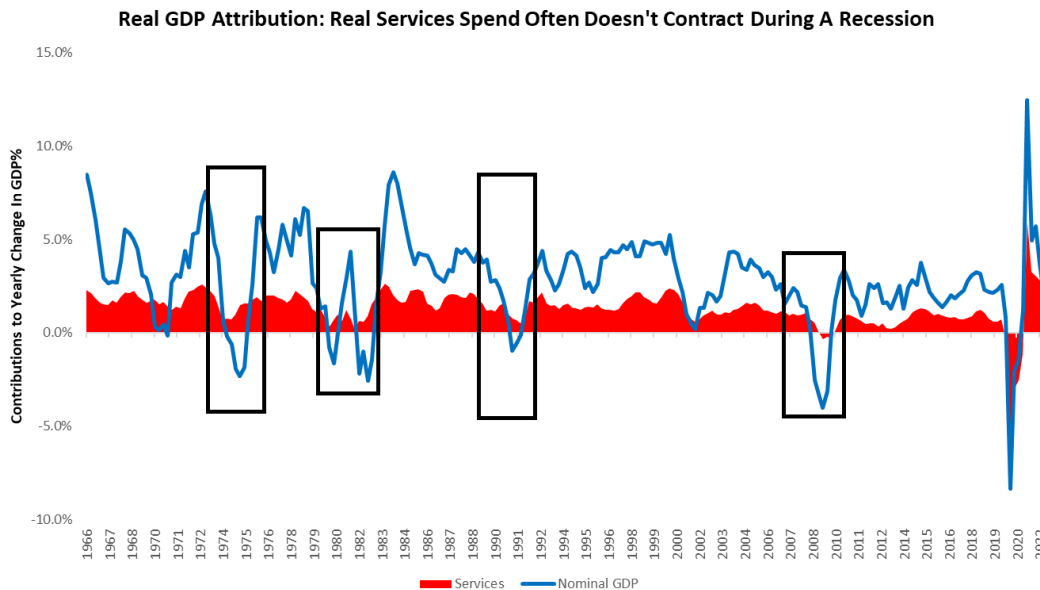
However, under the surface of this data, there is an emerging "tale of two economies"- one which continues to benefit from stagflationary nominal income dynamics, while the other suffers from contractionary credit dynamics. To begin our exploration of these conditions, we show GDP components aggregated to create two categories, i.e., Goods & Real Estate and Services. As we can see below, activity in these areas has diverged significantly:



The above divergence reflects COVID-19 snapback effects and a deteriorating leverage cycle dynamic. Goods & Real Estate spending tends to be cyclically sensitive, as many components of this aggregate require either leveraged purchases or investment. Conversely, Services spending is primarily a function of employment and wages. Therefore, the divergence between these two is mainly a function of the ability and willingness to leverage, which depends on current income, the economic outlook, and the cost of capital. With the Fed moving to tighten the cost of capital at a historic pace, leveraged activity is likely to weaken. We show this below by isolating components from the above aggregate into a Levered Purchases measure:



While goods spending exhibits cyclical characteristics, services spending is far more resilient as it depends on the strong feedback loop between nominal income and employment. Currently, employment is stretched to secular highs, allowing services spending to compensate for the contractions in Goods & Real Estate spending. However, given the tightness of labor markets, along with the Fed's objectives of taming inflation through higher unemployment, it is unlikely that services spending will remain elevated. Therefore, any marginal weakness in the services sector will likely significantly weaken the overall GDP picture.

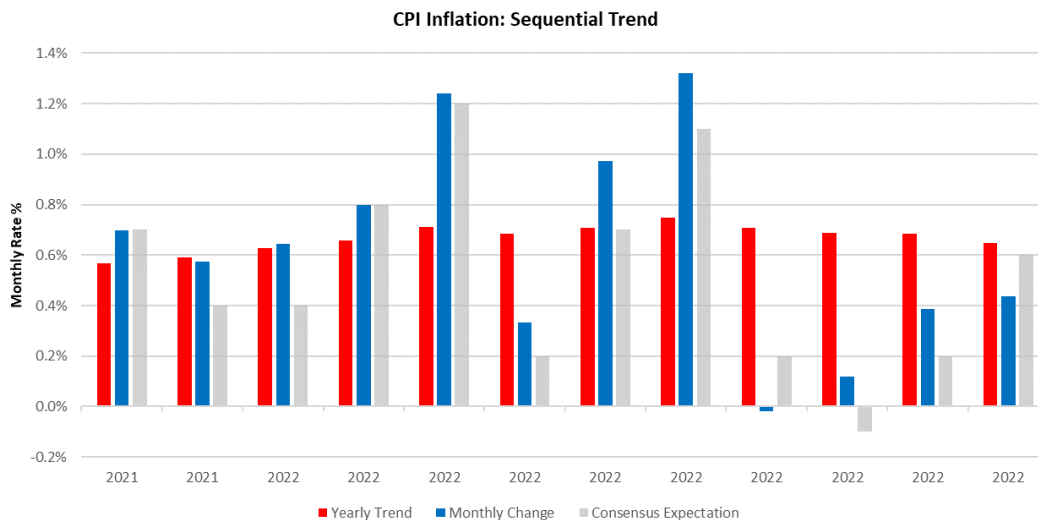


As we can see above, service spending doesn't often contract in a recession. As a result, our current high-level assessment is that we are beginning to see what looks like a tale of two economies – one that

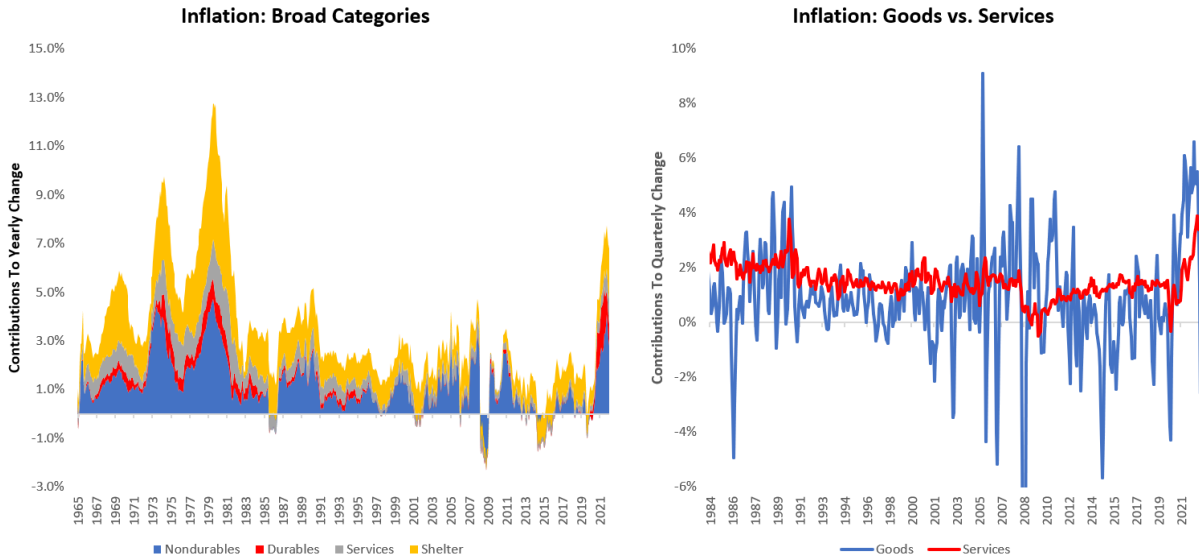
remains well anchored by stagflationary nominal growth dynamics and one that has begun to suffer the consequences of credit contraction. We see this reflected in inflation data, which we turn to next.

Inflation outcomes have begun to diverge. Inflation begins with shocks to the balance between money and real resources. Mechanically, once the initial shock has passed, the continuation of inflation depends on whether inflation makes its way up the supply chain to labor in a manner where nominal spending continues to push nominal demand, creating a self-reinforcing loop, i.e., entrenchment. Even if inflation becomes entrenched, it cannot sustain itself indefinitely, as it requires either increasing output or increasing amounts of money to keep the feedback loop alive. In the current environment, we are witnessing deteriorating levels of output alongside policymakers trying to engineer a pullback in inflation by reversing initial conditions, i.e., by tightening liquidity to bring back the balance between money and real resources. However, the Fed does not have the tools to fight the liquidity creation of the fiscal authorities- this power lies with the Treasury in the form of taxation. Resultantly, the Fed will need to cause an adequate contraction in credit-sensitive sectors to a large enough extent to see weakness in the broader economy. Therefore, we will likely see the durable goods economy contract and experience deflationary pressures ahead of other sectors. The most recent CPI data lent credence to this outlook, with goods & levered spending showing deteriorating prices, with services prices largely remaining resilient.

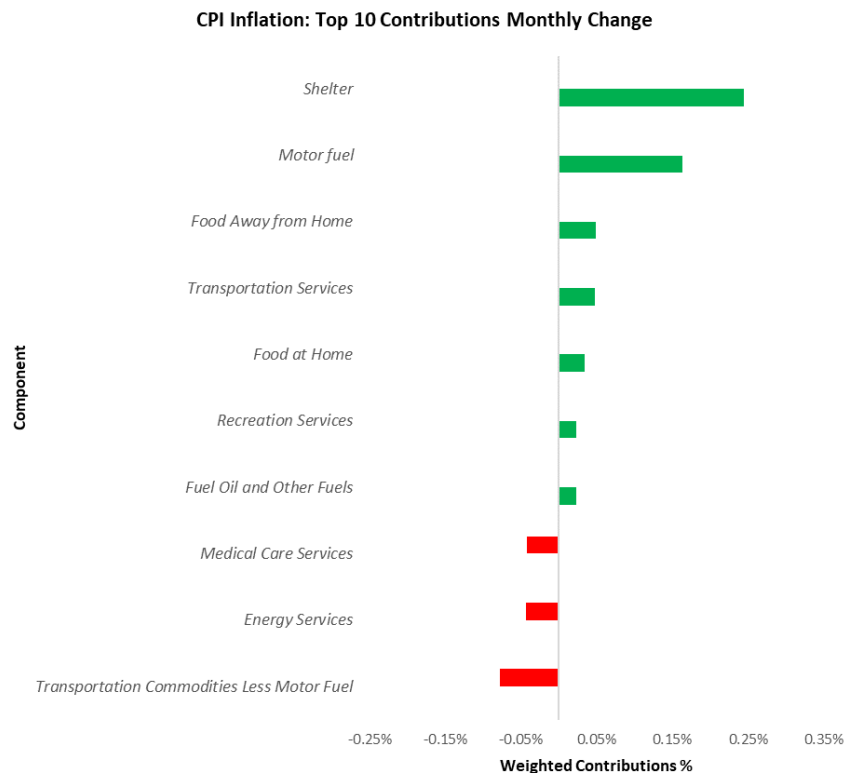
CPI Inflation increased by 0.44% in October, disappointing consensus expectations of 0.6%. This print contributed to a sequential deceleration in the quarterly trend relative to the yearly trend. Below, we show the monthly evolution of the data relative to its 12-monthly trend and consensus expectations.



Consistent with our expectations, there is increasing pressure emanating from goods prices. Below, we show the contributions of Durable & Non-Durable Goods versus Services (including Shelter).

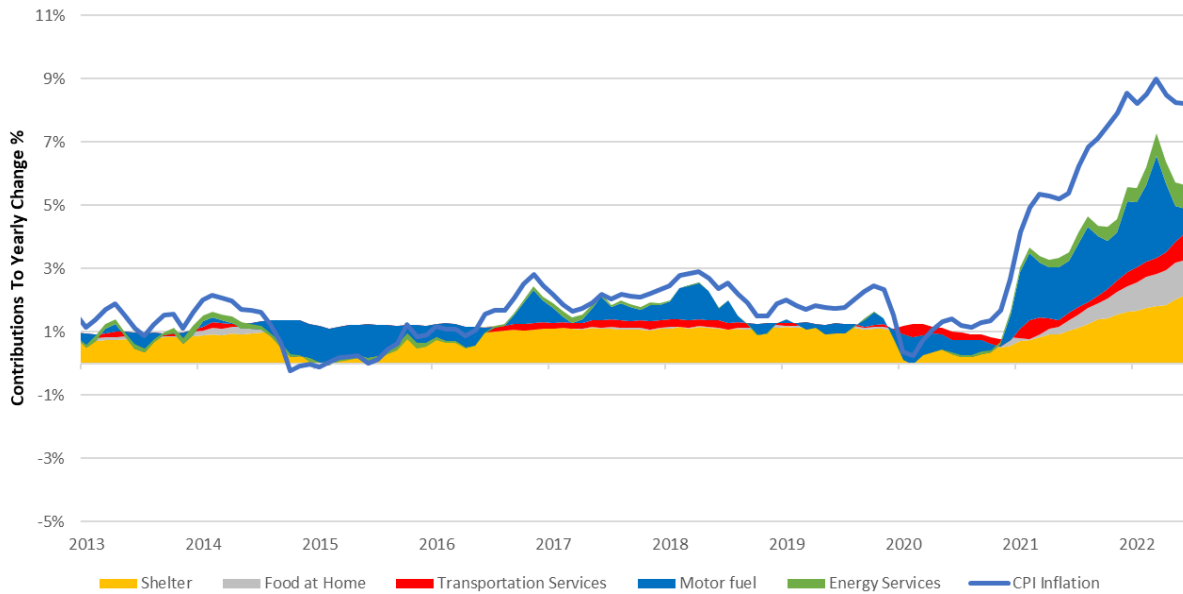


Digging deeper, the primary drivers of this print were Food Away from Home (0.05%), Motor fuel (0.16%), Transportation Commodities Less Motor Fuel (-0.08%), Shelter (0.25%), & Transportation Services (0.05%). Below, we show the top 10 drivers of the monthly change:



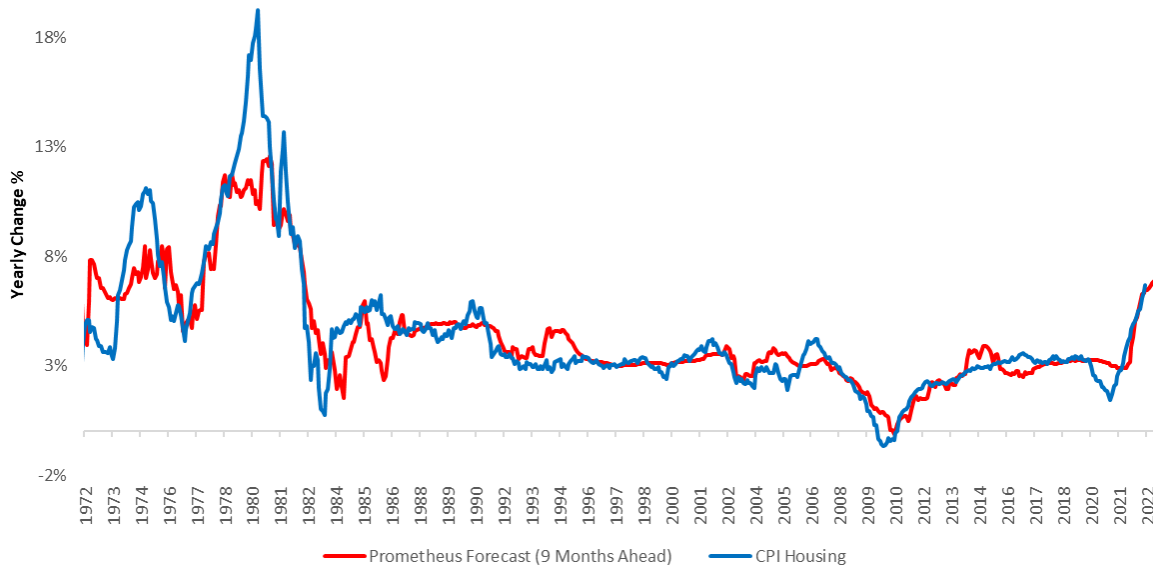
Over the last year, Food at Home (1.06%), Motor fuel (0.74%), Energy Services (0.58%), and Shelter (2.25%) have been the primary drivers of the 7.76% CPI inflation. Looking forwards, we believe that the pressures remain in place for these numbers to be strong relative to history:

CPI Inflation: Top 5 Drivers Of Yearly Growth

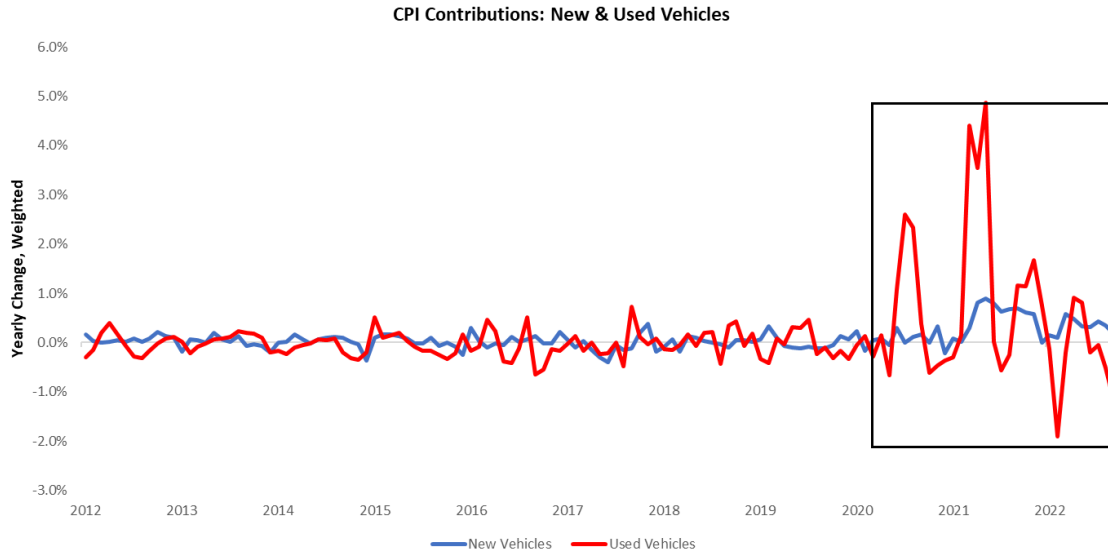


We think this strength will likely come from a strong and steady undercurrent in housing inflation. This expectation is driven by our expectations of the mechanical lag between home prices and the computation of the CPI's housing components. We show our estimates for this below:

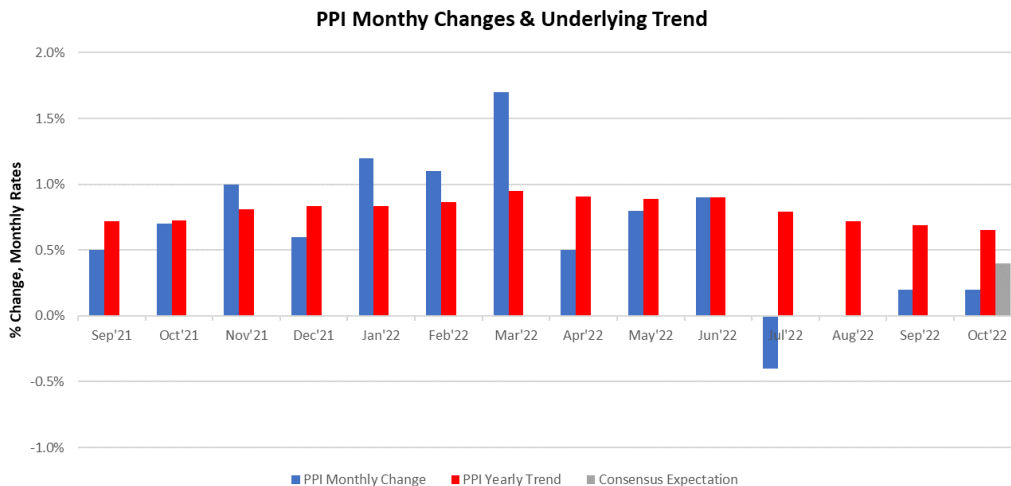
CPI: Housing Inflation & Forecast



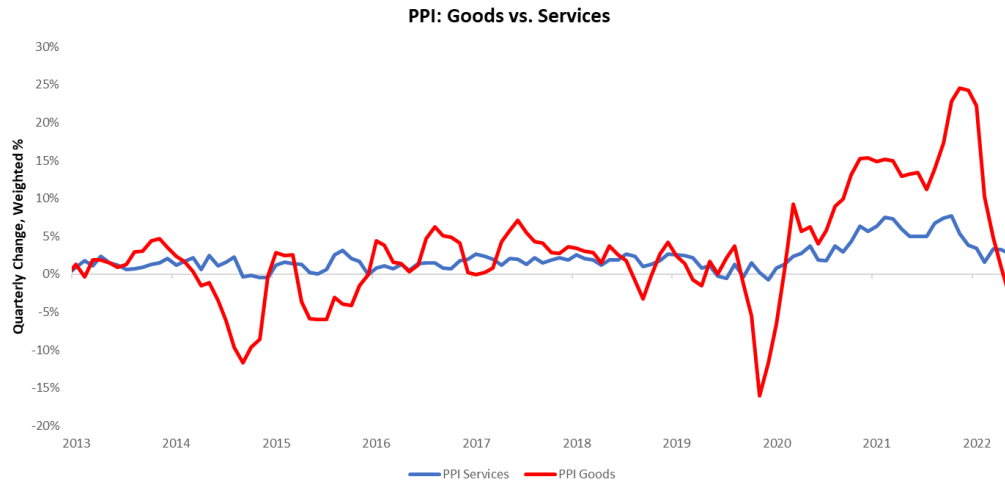
By our estimates, the worst housing inflation will likely be ahead of us. Furthermore, housing alone will keep CPI above the Fed's 2% objective. However, while components like housing show considerable strength, we also see weakness in durable goods. Principally, this decline is coming from motor vehicle prices. Furthermore, used car deflation drives motor vehicle price dynamics almost entirely. We show this below:



As we can see above, motor vehicle inflation is driven almost entirely by the used car prices, which have seen a step function higher in volatility following COVID-19 lockdowns and ensuing supply chain disruptions. We see this in conjunction with the strong demand for used cars relative to new vehicles. Essentially, we are witnessing an environment where used vehicle sales are rising alongside falling prices, with new vehicle sales falling but with modestly rising prices. The combination of these factors speaks to a consumer unable to finance incrementally more expensive automobiles- i.e., the outlook for final automobile demand & and prices remains bleak. We see further corroboration of these dynamics in PPI data. More specifically, PPI data showed a monthly increase of 0.2%, contributing to a 7.8% change versus a year ago, disappointing consensus expectations. This reading was a sequential deceleration within a decelerating trend 12-month trend. Personal Consumption Goods, Energy, Finished Consumer Services, Food, & Private Capital Equipment Trade Services were PPI's primary drivers over the last year.

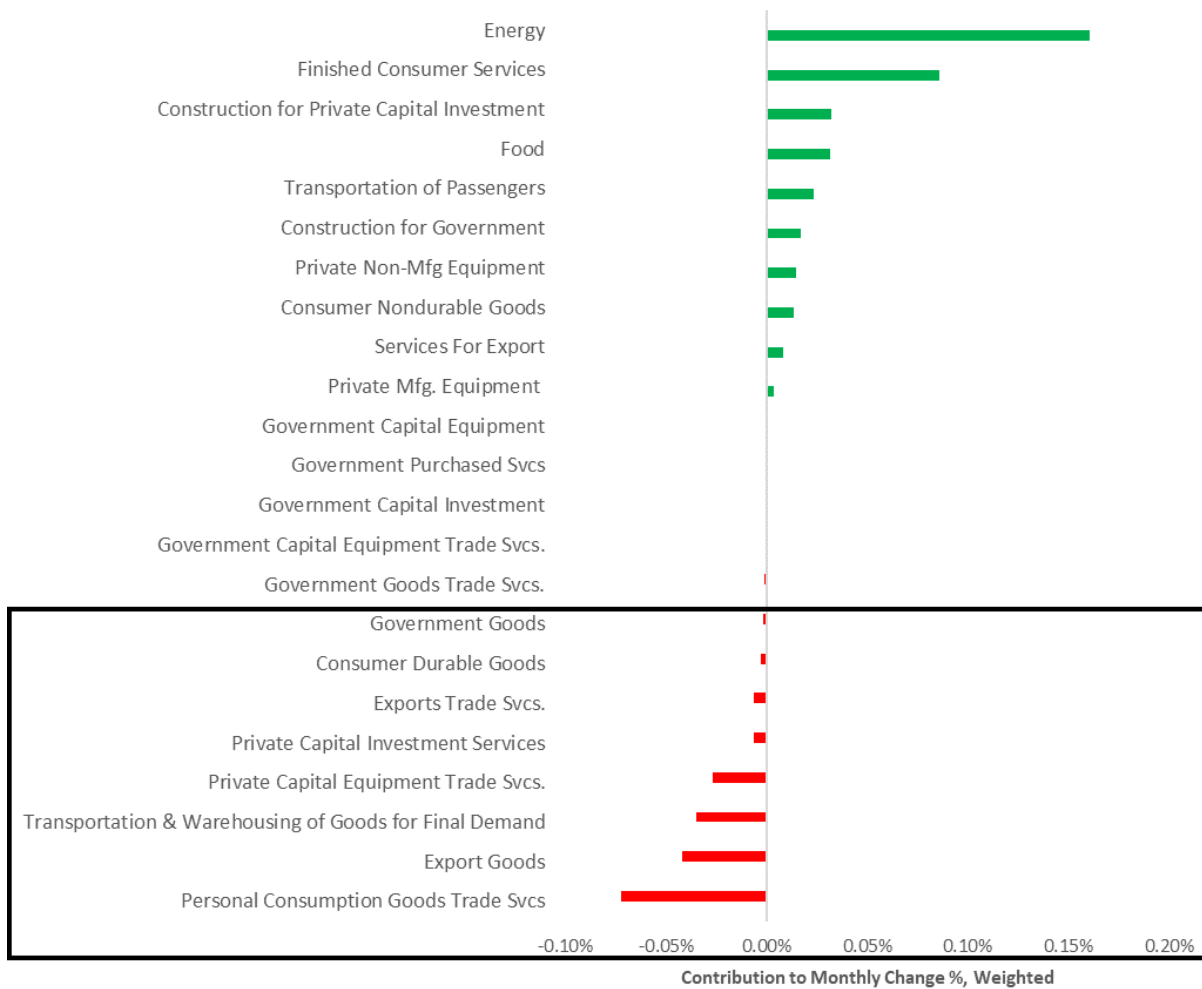


Zooming into PPI for Goods vs. Services, we see a similar picture to that painted by CPI, i.e. deteriorating Goods prices versus Services prices:



Drilling a little deeper, we show the contributions to the most recent monthly PPI print:

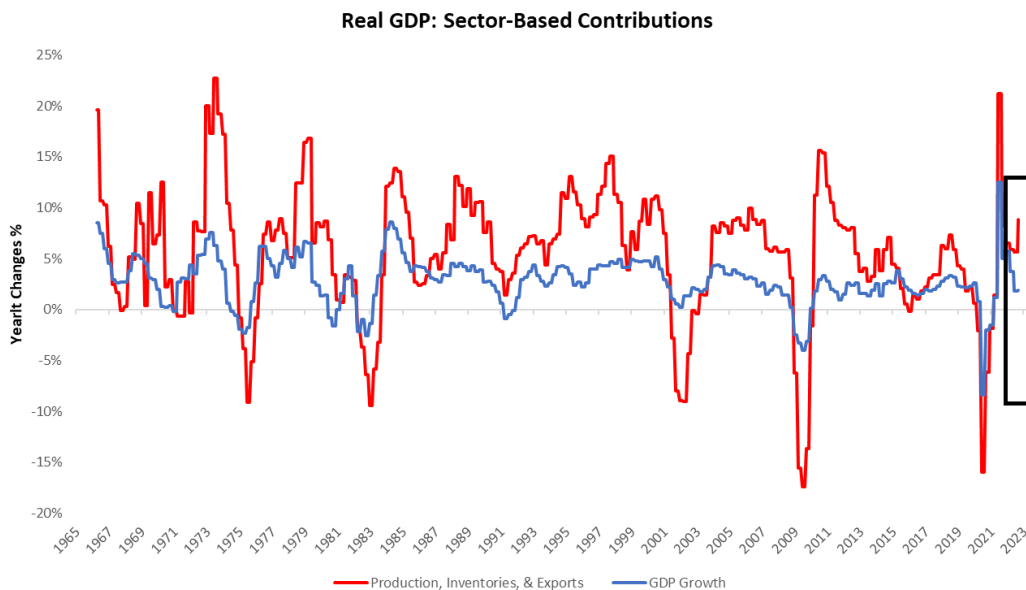
PPI Attribution: Top 10 Drivers To Monthly PPI



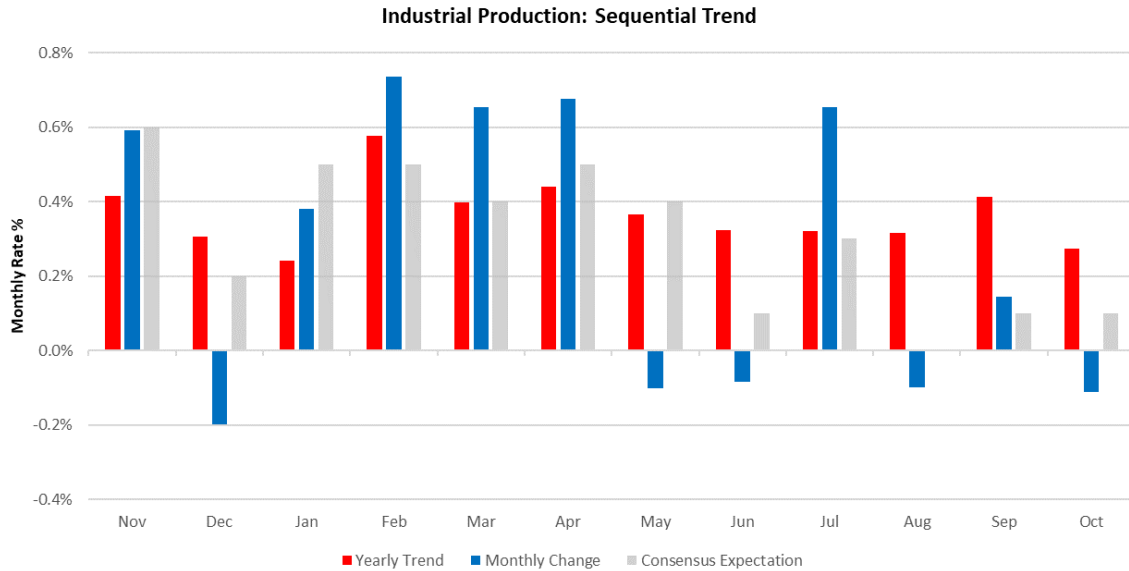
As we can see above, an increasing number of goods-related segments are seeing declines ranging from consumer durables to personal consumption goods, consistent with our observations from real growth and CPI data.

Overall, broad gauges of both growth and inflation paint a picture of divergent outcomes between the goods and services sector, which we think is driven primarily by the leverage cycle. Therefore, as we progress through this cycle, there is potential for increasing divergence, followed by eventual convergence. In our assessment, the next phase of the economic process will be driven by the contraction of output, which will have knock-on effects on the labor market- which brings us to our assessment of Industrial Production.

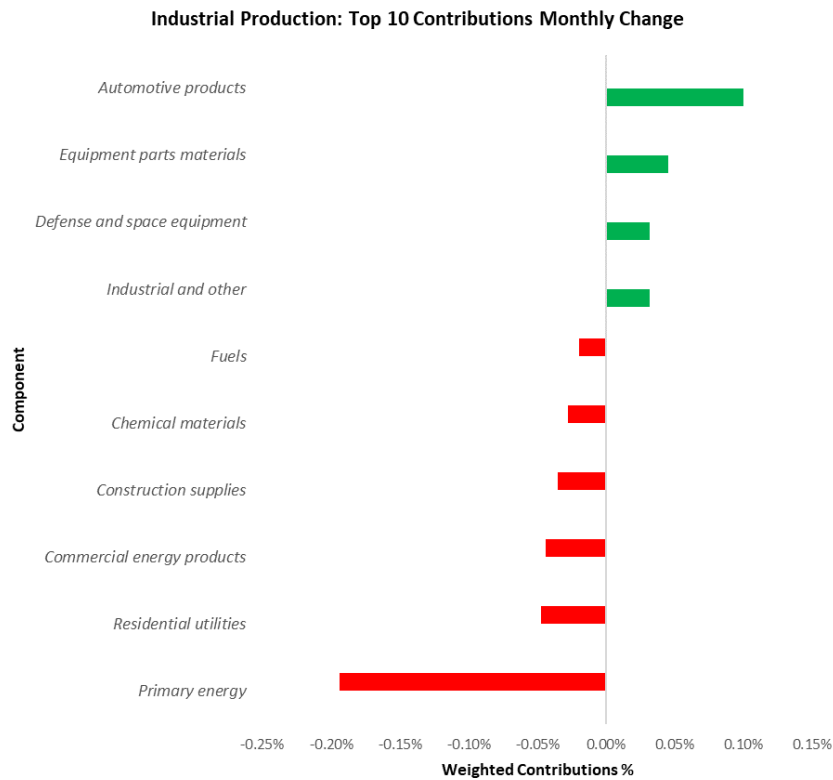
Today, production and business activity (as opposed to consumption & government activity) are the driving force behind real spending growth. Below, we show the contributions to production, inventories, and exports, along with GDP growth, to highlight the strength of production & business activity relative to the broader economy:



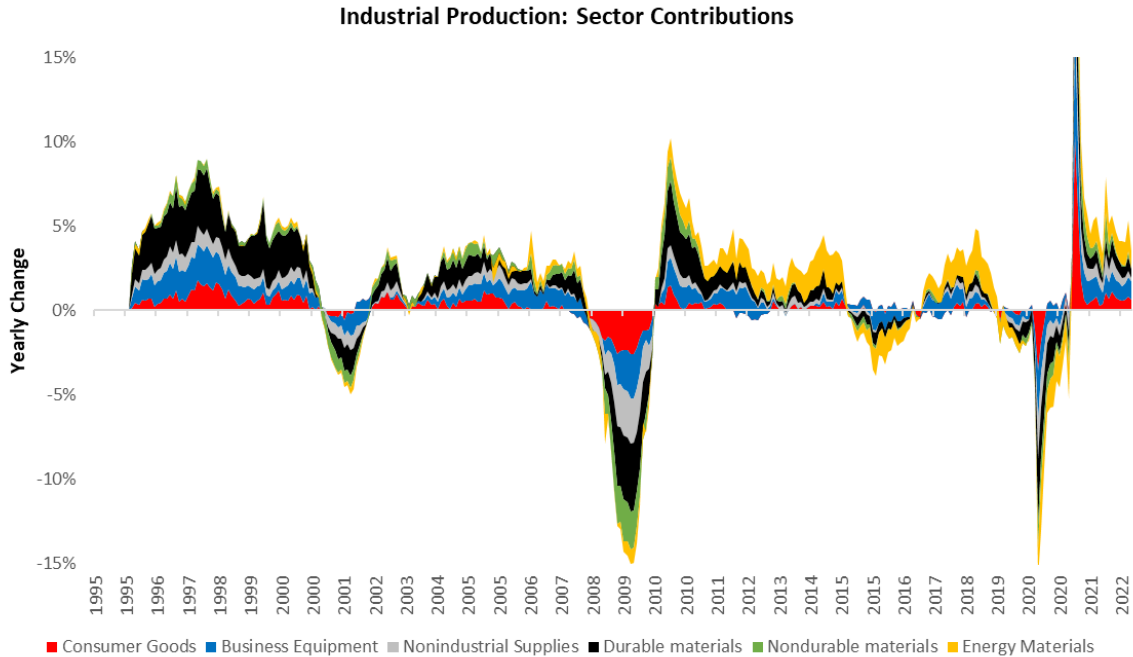
It is essential to understand that the source of these outputs is industrial production, i.e., without industrial production, this spending cannot continue to manifest. Therefore, to understand whether a business activity can continue to support nominal and real GDP, we carefully track conditions in production. Industrial Production decreased -0.11% in October, disappointing consensus expectations of 0.1%. This print contributed to a sequential deceleration in the quarterly trend relative to the yearly trend. Below, we show the monthly evolution of the data relative to its 12-month trend and consensus expectations.



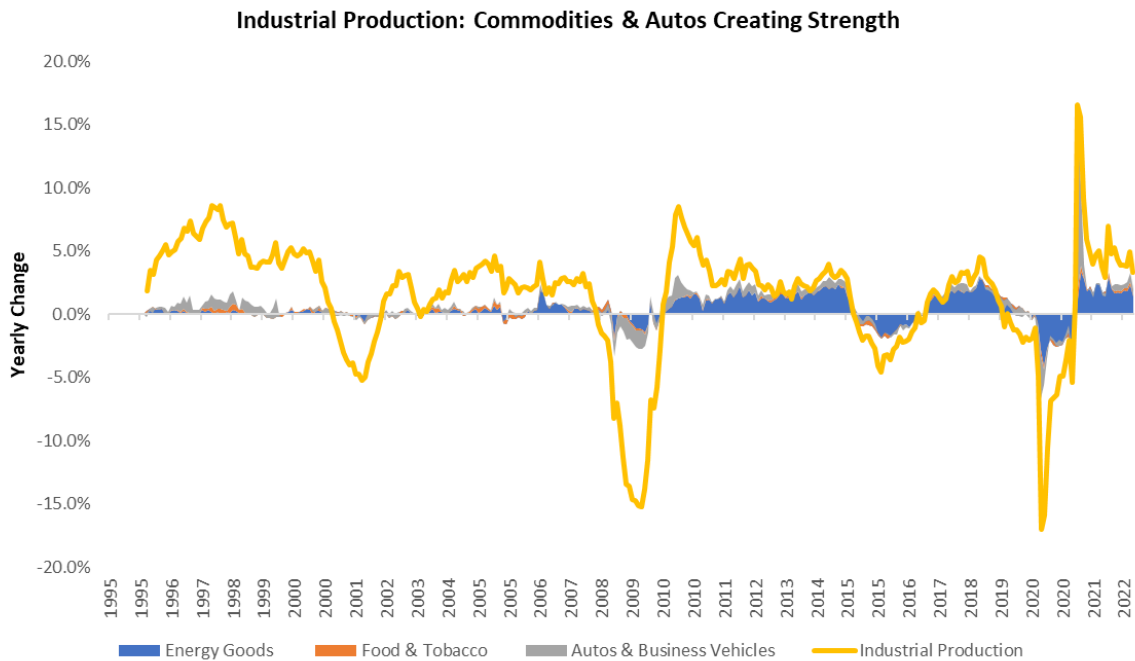
We think it is imperative to note that four of the last six prints of industrial production data have been contractionary, i.e., decreased final demand from consumers has found its way into lower output needs. Furthermore, the breath of negativity was significant in this print. The primary drivers of this print were Automotive products (0.02%), Residential utilities (-0.15%), Commercial energy products (-0.21%), Equipment parts materials (0.09%), & Primary energy (-0.16%). Below, we show the top 10 drivers of the monthly change.



Stepping back, much of the change over the last year has come from two sectors, i.e., Business Equipment and Energy Materials. Under the surface of these sector aggregates, we find that Energy, Food, and Autos have contributed 2.01% to the 3.3% yearly change in Industrial Production. We show the sector contributions below:

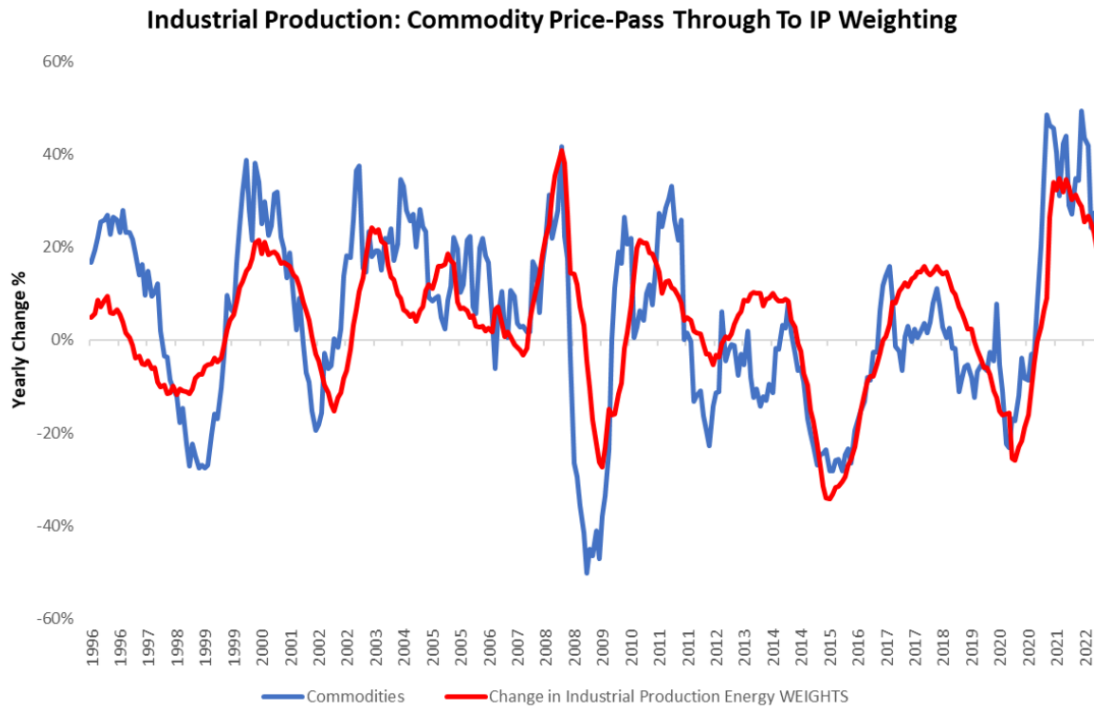


And then our Energy, Food, and Autos aggregate below:



There are three drivers of these elevated year-over-year numbers: nominal demand effects, strong automobile production, and elevated base effects. Let us begin by explaining the nominal effects in industrial production data. For those who read our last Month In Macro and are familiar with this concept, please feel free to skip ahead to automobile production.

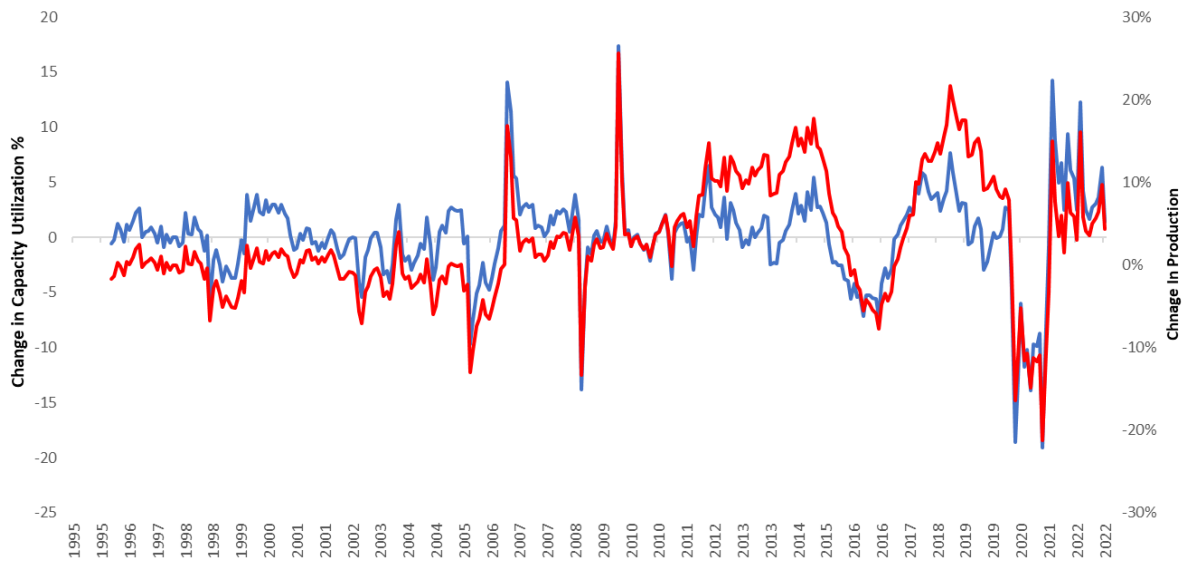
While it is indeed intended for Industrial Production data to be "real," i.e., un-influenced by inflation- we live in a nominal world, and nominal activity seeps into everything. Below, we show how this impacts the weighting of various indices in Industrial Production, highlighting the extremely strong energy sector:



The IP methodology considers "unit value added OR prices" to decide the weight of components of the index. In today's environment, energy prices are rapidly rising- and the relative importance of energy rises in IP massively, resulting in the index reflecting some degree of nominal activity. This pass-through can be seen in the strong correlation between the weight of energy production and broad commodities indices. Therefore, as energy prices expanded significantly, the importance of energy in industrial production and the quantity of output increased immensely, creating a large base effect in the year-over-year data. Hence, most recent data is not contributing to strong industrial production numbers, but rather aberrantly strong past numbers are keeping year-over-year statistics elevated.

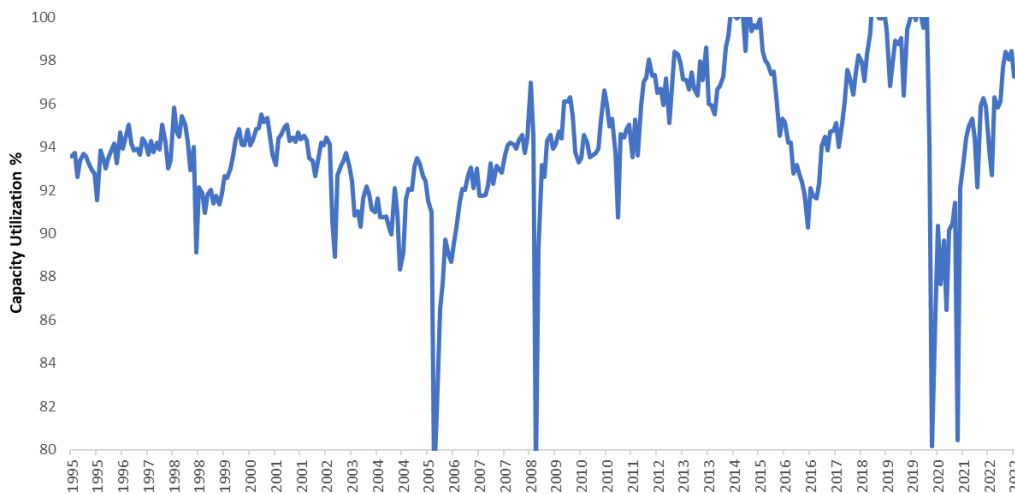
Energy production is unlikely to continue to grow at as quick a pace due to capacity limitations. Production is a function of capacity utilization and the change in existing capacity. Therefore, to increase Production, one needs to either increase the amount of current capacity usage or increase overall capacity through capital expenditures. Capital expenditures don't instantaneously result in new capacity, and often there can be a lead time of several years until capital expenditures result in increased capacity. Resultantly, most incremental Production is met through the increase of capacity utilization. We show this relationship below for Oil & Gas extraction, i.e., the start of the energy supply chain:

Production & Capacity Utilization: Oil & Gas Extraction



As we can see above, Production is largely met through increased capacity utilization. However, today there remains very little excess capacity left to increase output:

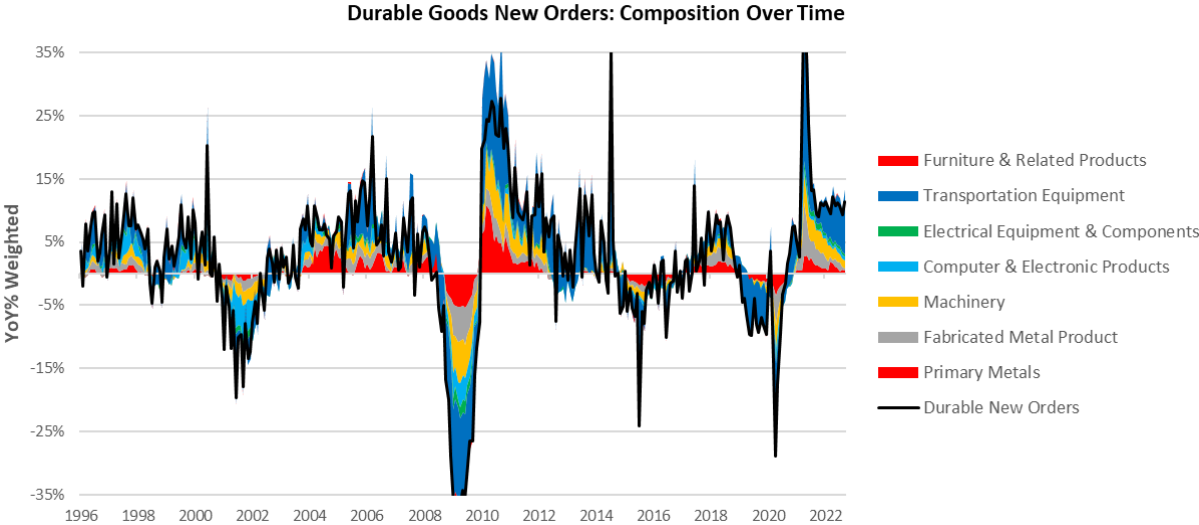
Capacity Utilization: Oil & Gas Extraction



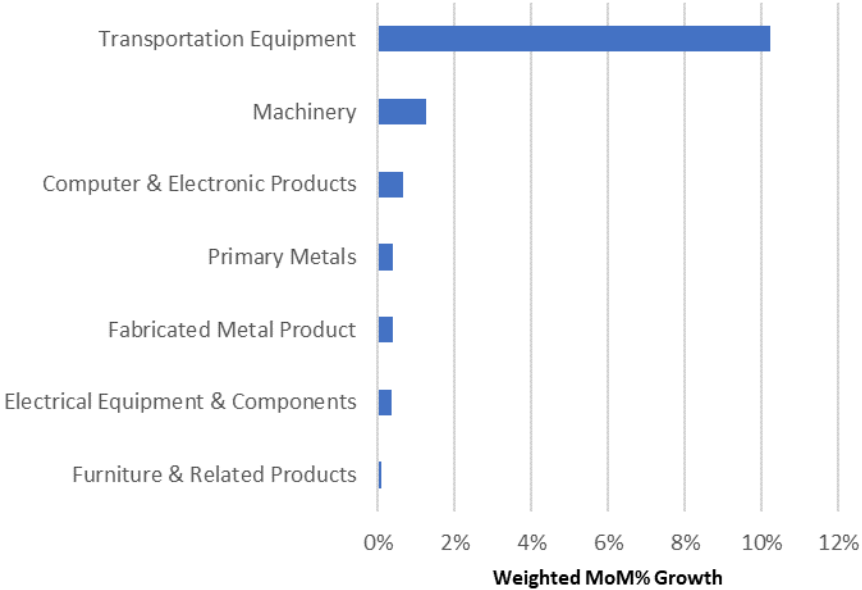
Therefore, while capacity utilization can rise a little further, this dynamic puts a very real cap on how contributive energy production can be to aggregate Production.

Next, regarding automobile production, the final demand for automobiles does not justify continued production expansion. Currently, we are seeing wholesalers and retailers purchasing automobiles but largely unable to offload them to consumers. We see this in the gap between new orders and final demand data. Transportation equipment contributed the most to new orders for industrial goods, with a weighted YoY growth of 10.3%. However, final demand for automobiles lacked significantly, as per the latest retail sales data. Resultantly, these produced vehicles are making their way into automobile inventories.

Below, we show how transportation continues to push new orders on a nominal basis.

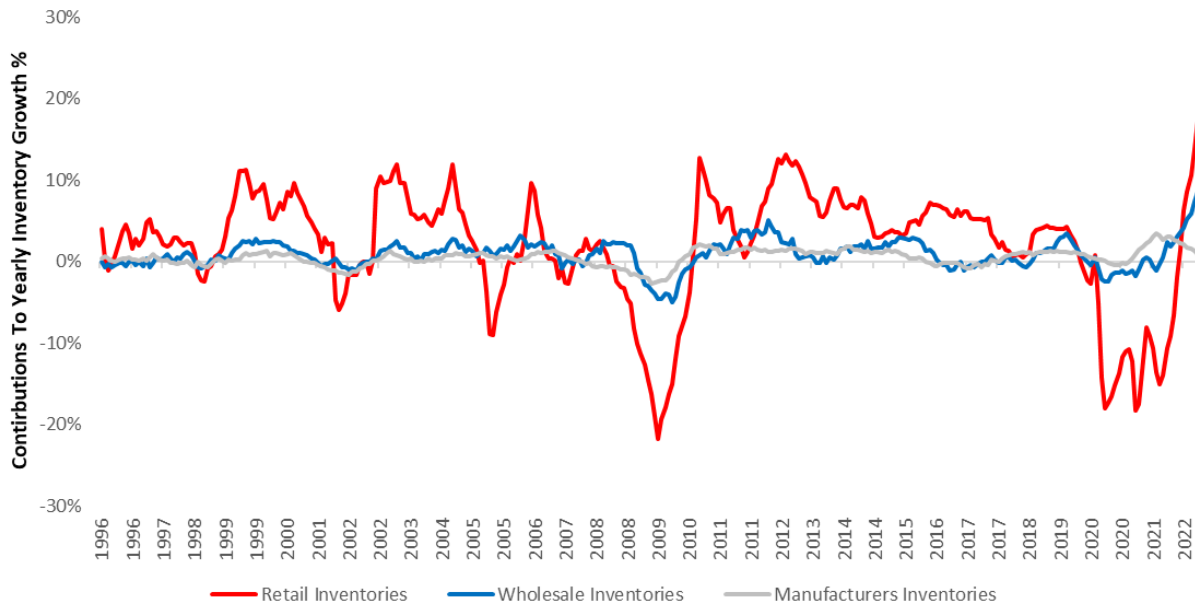


Durable New Orders: Contributions To Latest Print



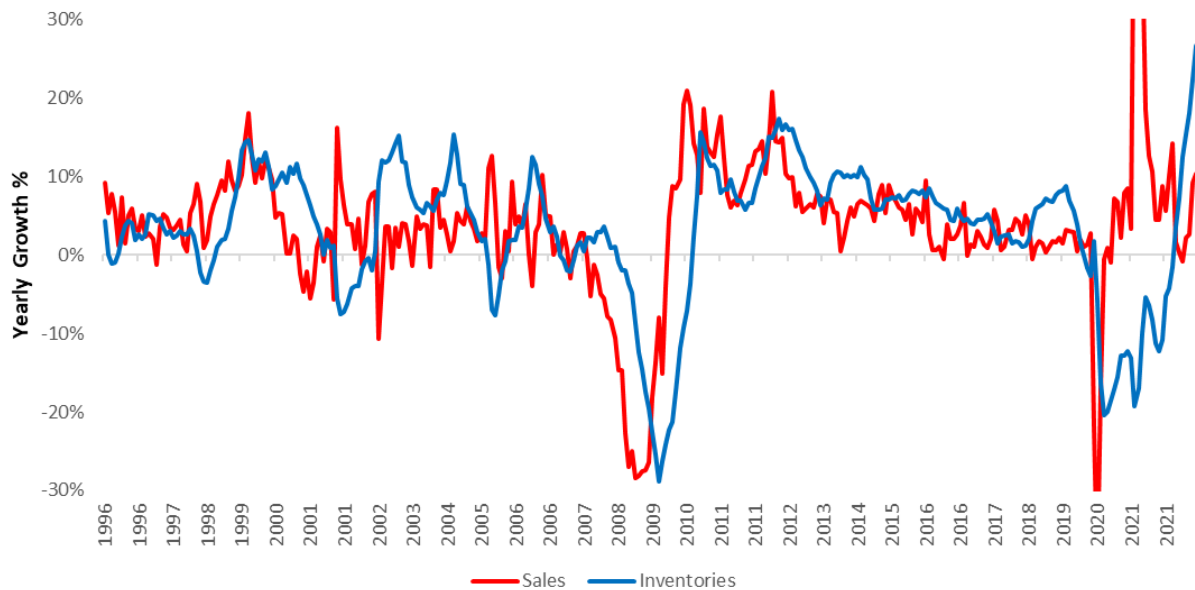
However, final consumer demand for new cars remains weak. Therefore, these produced automobiles continue to make their way into the inventories of both retailers and wholesalers. We show this below:

Automobile Inventories: Retailers Continue To Scale Inventories



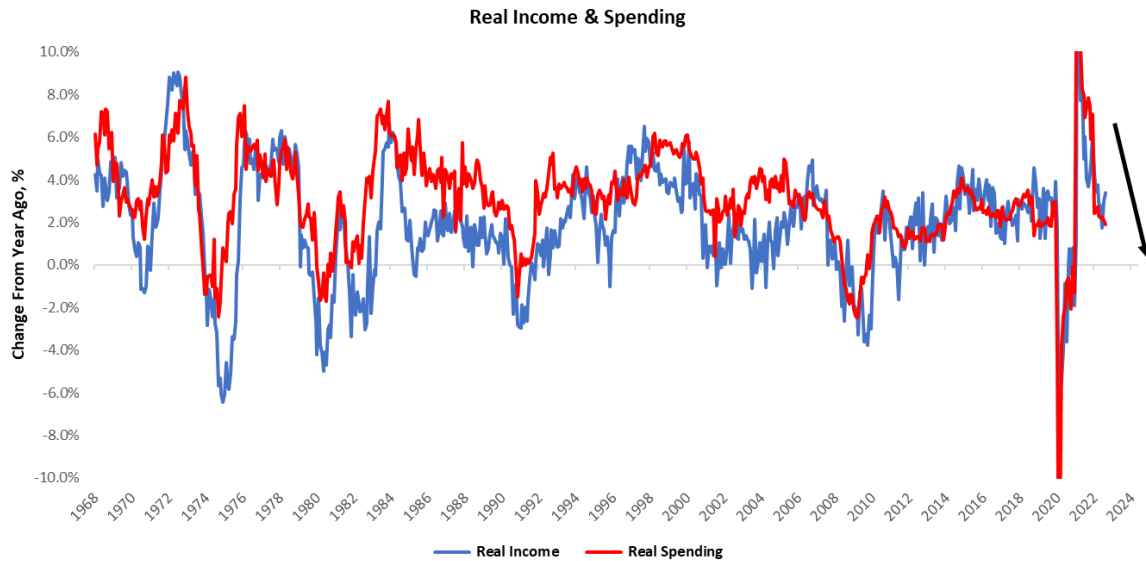
For the time being, these inventories are protected by price increases; however, volume demand remains weak. That is why we believe that while production constraints limit energy production, automobile production is likely to be limited by demand constraints.

Automobiles: Inventory Growth Far Outpacing Nominal Sales Growth

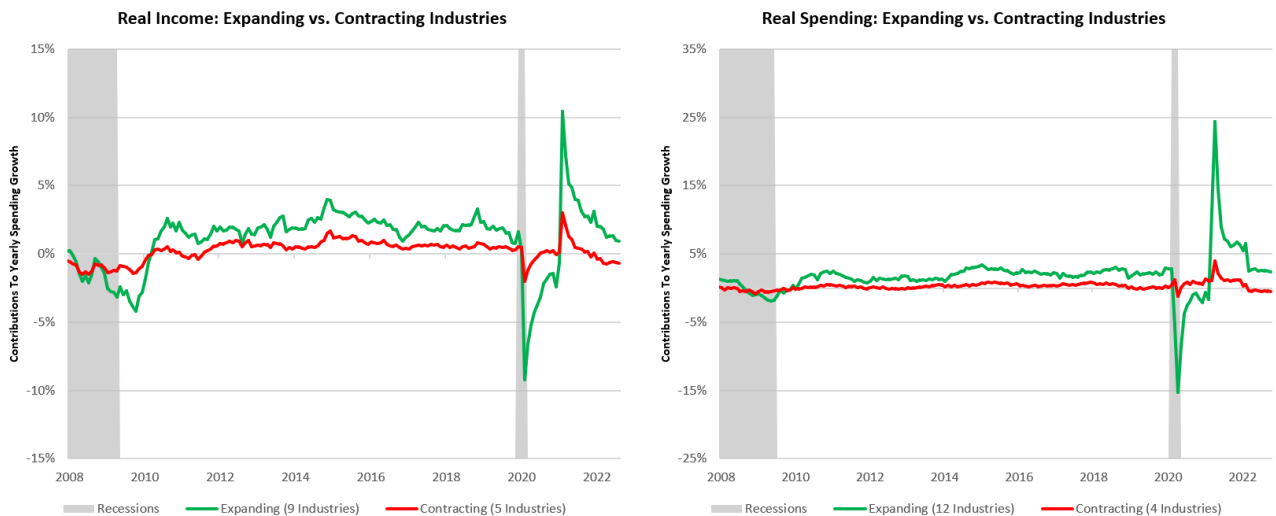


It is essential to understand that aggregate production can go to one of three destinations, consumption (household/final demand), inventories (business/intermediary demand), or exports (foreign demand). We have limited visibility on foreign demand & hence shall not delve into this area. Fortunately, consumption and inventories account for the lion's share of demand. In the next section, we begin our demand analysis by presenting our household income and spending assessment.

We begin by showing both sides of consumer activity, i.e., income and spending. Income and spending are two sides of the same coin, as one person's income is another person's spending. As we can see, both remain in a steady downtrend:



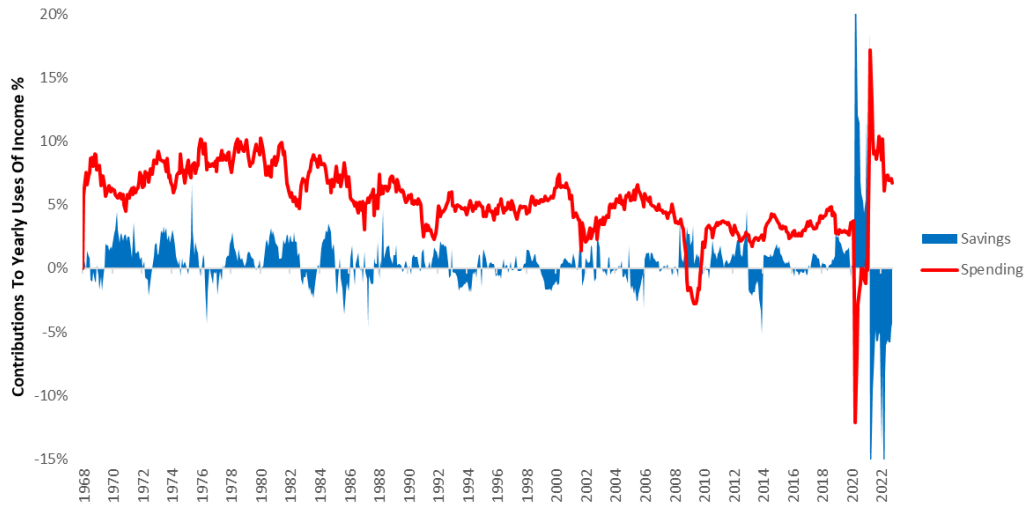
We can further break income and spending into groups based on industries that are contracting or expanding:



Currently, we are seeing contractions in durable goods, food, energy, and financial services spending. This contractionary spending accompanies contracting income from retail & wholesale trade, non-durable goods, and financial services. Additionally, decelerations remain abundant across the complex of income and expenditure.

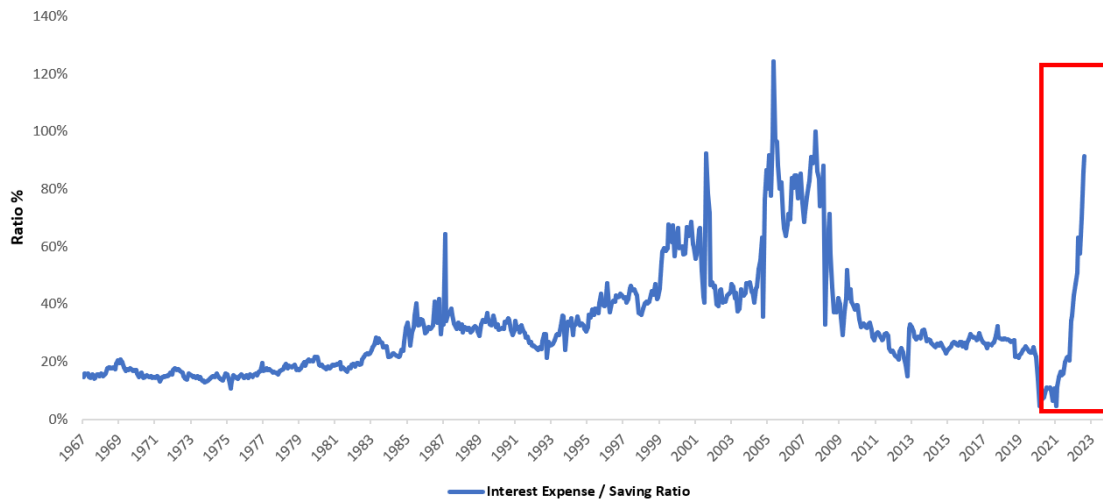
This month, we saw a rebound in personal spending; however, this increase came from a further drawdown in savings and an increase in government benefits rather than an increase in employee compensation.

Personal Income: Uses



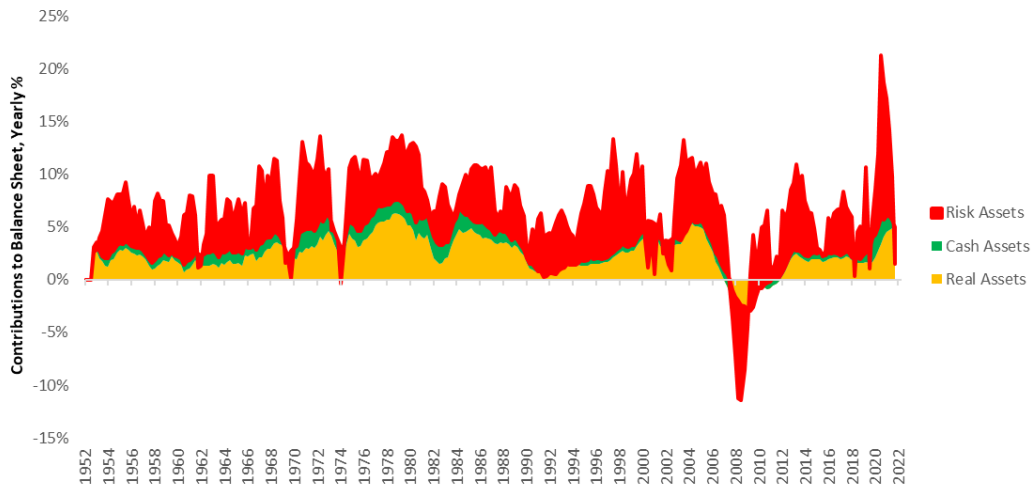
Above, we show the composition of personal income, highlighting both total nominal spending relative to savings. As we can see above, there has been a clear and consistent reduction in savings growth. This reduction has come alongside a dramatic spike in interest expense, i.e., income is redirected to either spending or interest expense in today's environment.

Uses Of Income: Interest Payments vs. Saving



Furthermore, when we examine household balance sheets, we see a contraction underway in their total assets. This declining net worth decreases the ability of households to leverage their existing assets to fund purchases of assets, goods, or services. We show this next:

Households & Nonprofits: Balance Sheet Growth

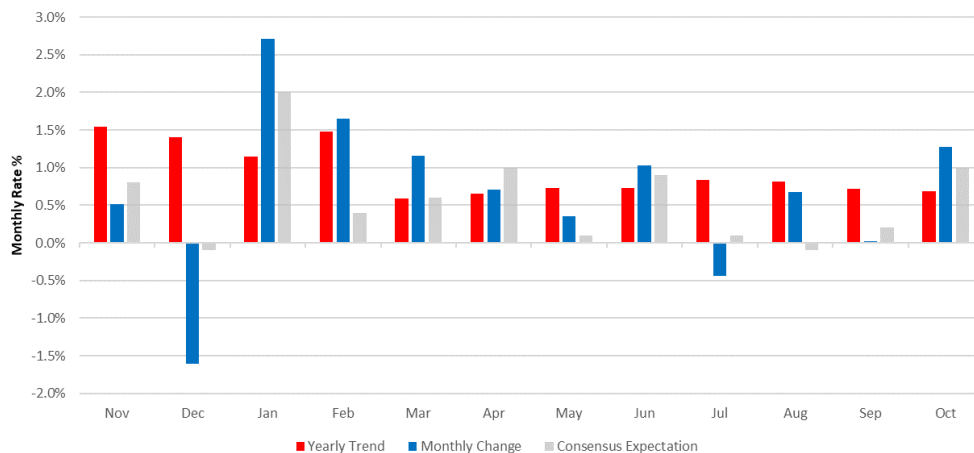


Therefore, the outlook for real consumer demand remains weak as their current income decelerates, interest expense rises, savings fall, and net worth deteriorates. Nonetheless, nominal activity remains elevated and can stay so for a while.

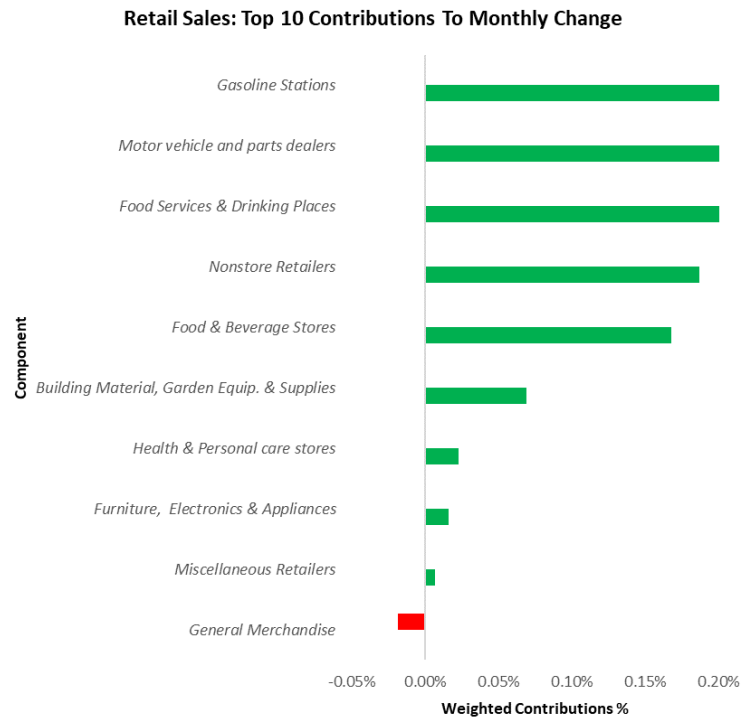
This month's Retail Sales report was the epitome of this elevated nominal activity. The nominal numbers were solid; however, two factors stand out when we look under the hood. First, the composition of nominal gains is skewed toward areas with inflation biases, i.e., energy, food, & autos. Second, our estimates of real retail sales show that 50% of this nominal gain came from inflationary forces rather than any real output. The combination of these factors reflects the "pain period," where stagflationary nominal growth dynamics will remain far more persistent than those expecting an imminent contraction in economic activity.

More specifically, Retail Sales increased by 1.27% in October, surprising consensus expectations of 1%. Below, we show the monthly evolution of the data relative to its 12-monthly trend and consensus expectations, as well as the trajectory of Real vs. Nominal Retail Sales.

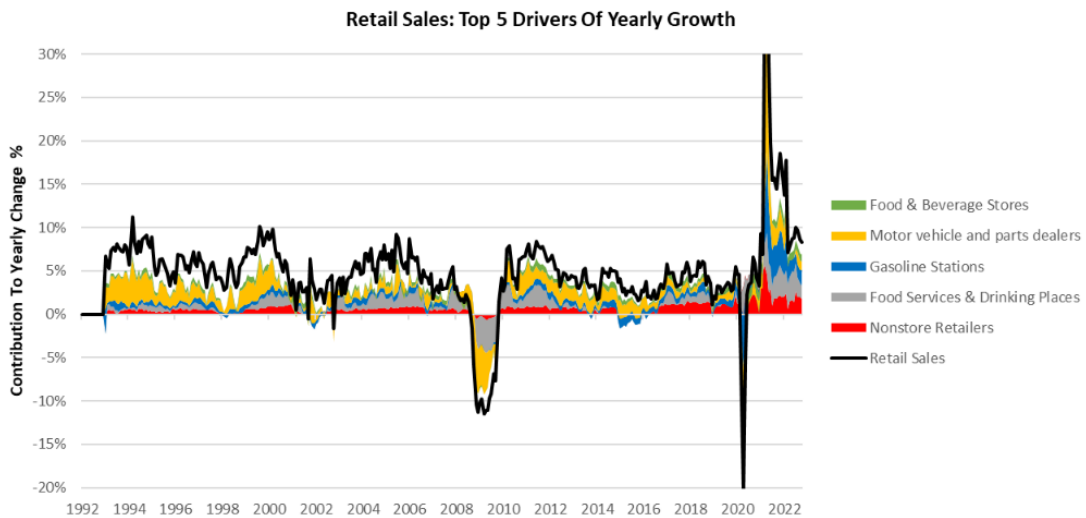
Retail Sales: Sequential Trend



The primary drivers of this print were Motor vehicle and parts dealers (0.72%), Gasoline Stations (-0.47%), & Food Services & Drinking Places (0.63%). Below, we show the top 10 drivers of the monthly change:

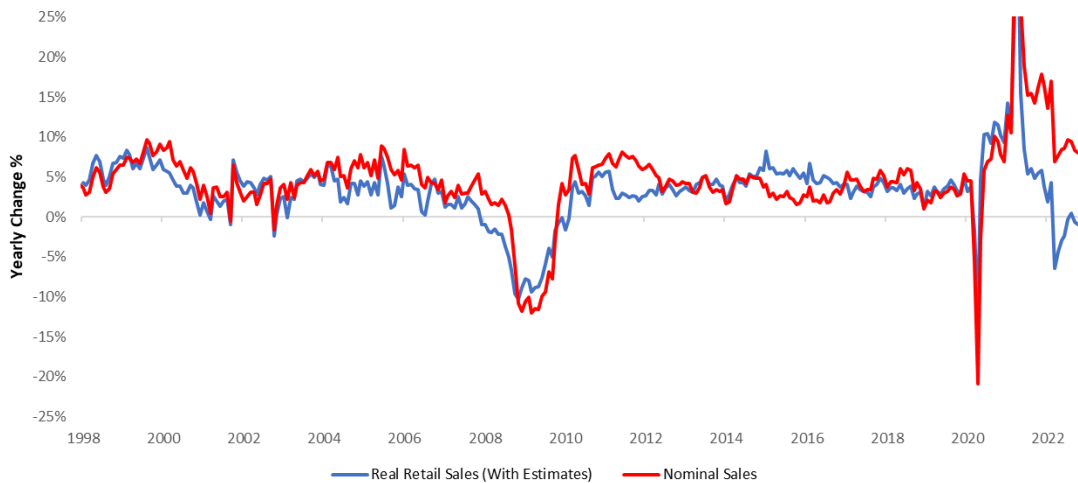


Over the last year, Motor vehicle and parts dealers (1.01%), Food & Beverage Stores (0.89%), Gasoline Stations (1.51%), Non-store Retailers (1.8%), & Food Services & Drinking Places (1.73%). have been the primary drivers of the 8.27% growth in retail sales.



Below, we show the divergence between real spending and nominal spending in retail sales:

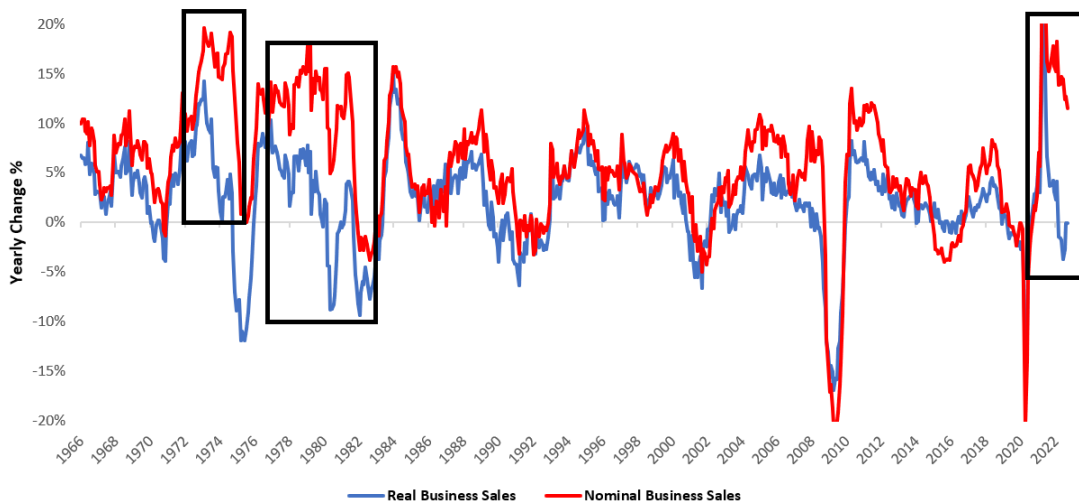
Retail Sales: Real & Nominal



Therefore, while nominal growth rates remain elevated as the virtuous cycle of income and expenditure facilitates inflationary spending, the drivers of future growth, i.e., real activity, borrowing costs, net worths, and marginal savings, all show signs of weakness. These factors are likely to continue to drive down consumption as a destination of industrial production and output. The alternative source for marginal demand for output is from businesses, which we discuss in the next section.

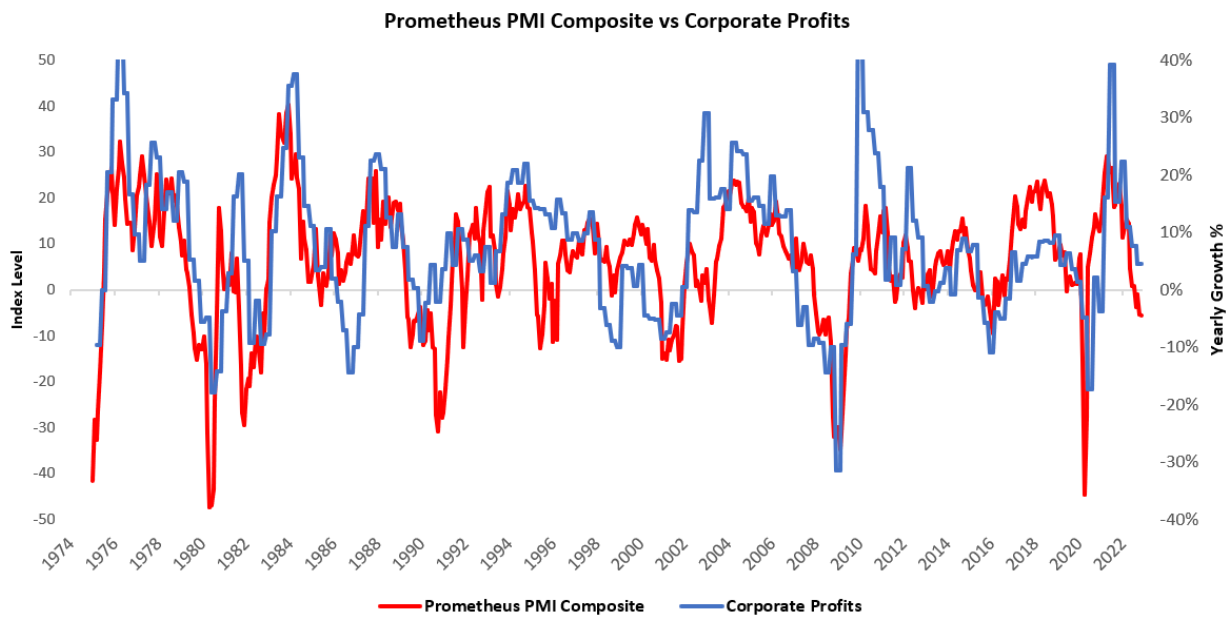
Nominal business activity remains strong, but real activity looks weak. As we have emphasized previously, the current environment of stagflationary nominal growth, coupled with a highly hawkish Fed, creates a challenging environment for businesses to continue to increase real growth. This challenge is because income gains are less valuable than in previous periods. When companies distribute income to employees, their real consumption power does not improve. When companies reinvest their profits, the real output for every nominal dollar invested keeps decreasing. This dynamic creates a self-reinforcing spiral lower, with real output the eventual victim. Below, we show the current divergence between real and nominal business sales:

Business Sales: Nominal vs. Real

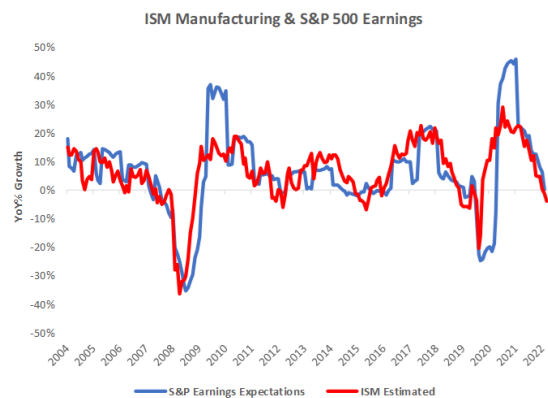
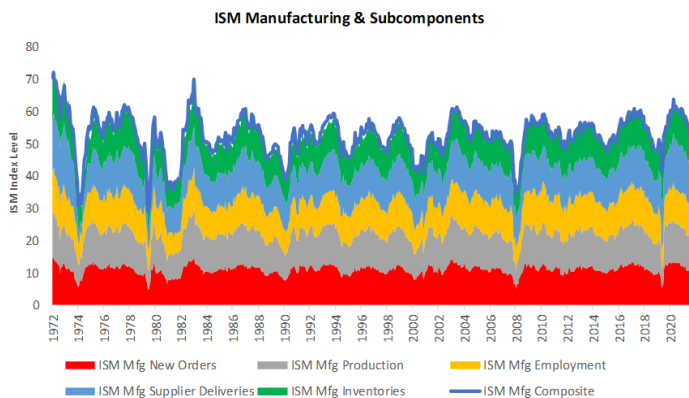


This dynamic is unlikely to be one that can sustain itself indefinitely, and we are seeing significant signs of potential weakness ahead for corporate profitability alongside already weak conditions. Future profitability largely depends on the ability of businesses to reinvest, either through existing cash balances or through newly raised capital. As we can see above, the real value of sales is currently deteriorating. Alongside this deterioration in real sales activity, we are seeing a weakening in PMI data, which are typically strong indicators of the profit cycle. PMI data reflect the outlook of purchasing managers that sit at the intersection of output and demand, based upon which they attempt to optimize orders and inventories. Therefore, changes in PMIs broadly correspond with changes in the demand and supply conditions that potentiate profits.

We show our PMI Composite alongside corporate profitability below:

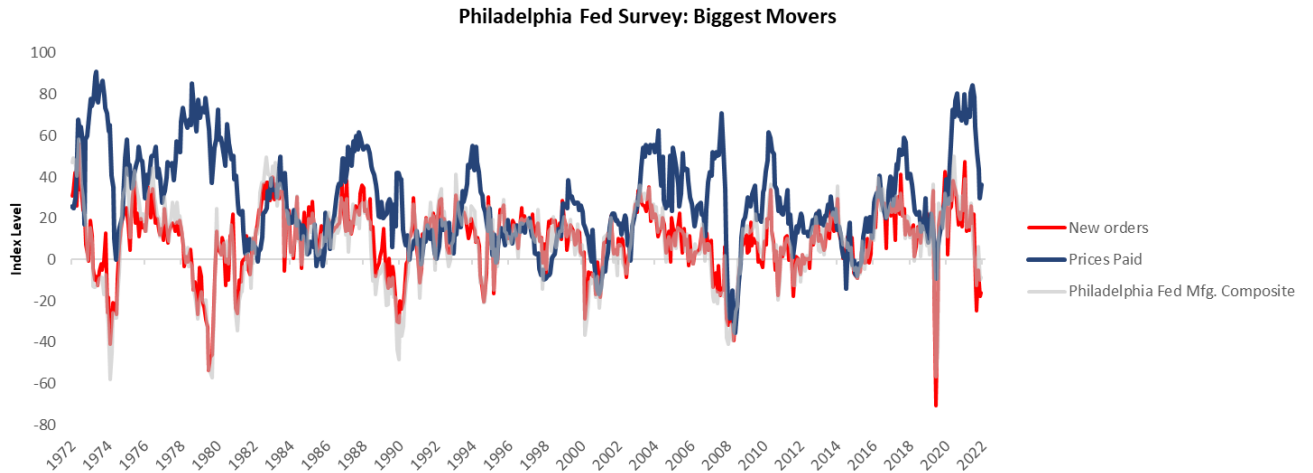


As we can see above, our PMI Composite implies that there is further downside to come for corporate profitability. We see this broader trend reflected in the most recent ISM PMI, which showed its first official contraction. This bodes ill for both the future of profitability, along with earnings estimates for the S&P 500, which will likely continue to be revised lower:

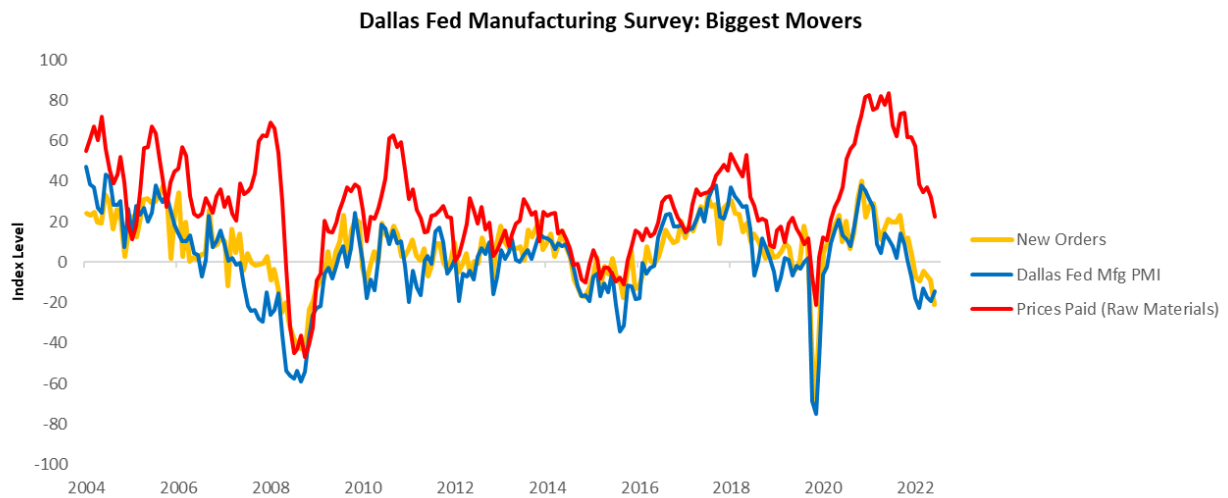


This trend was further exemplified by the moves observed in the incremental data received in the form of regional PMIs. We show some of these for context.

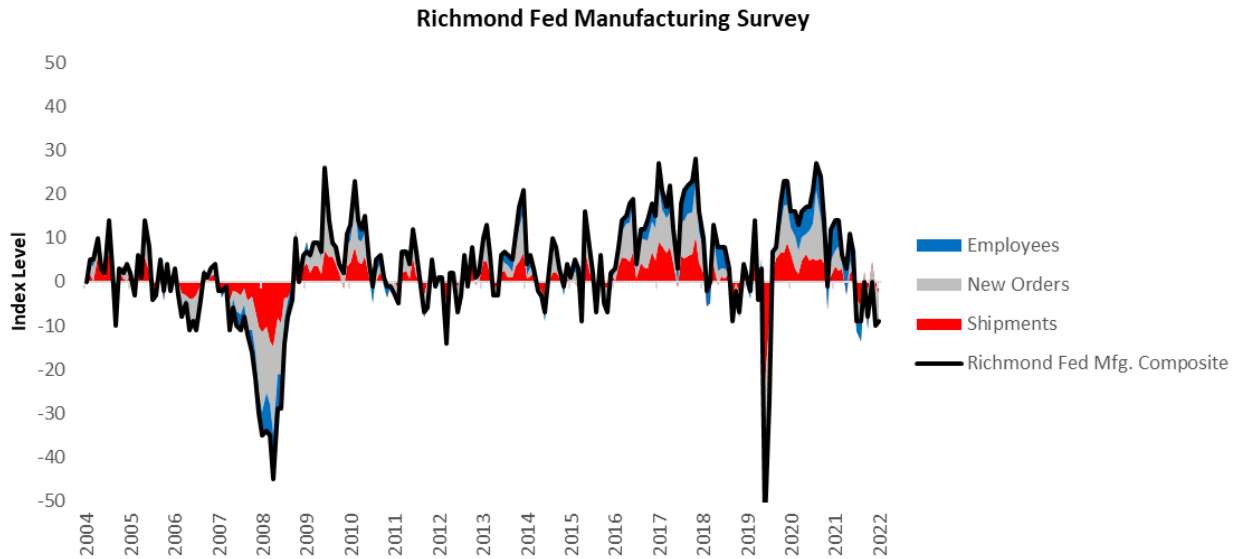
The latest Philadelphia Fed manufacturing survey data showed a contractionary reading of -19.4, disappointing consensus expectations of -9.7.



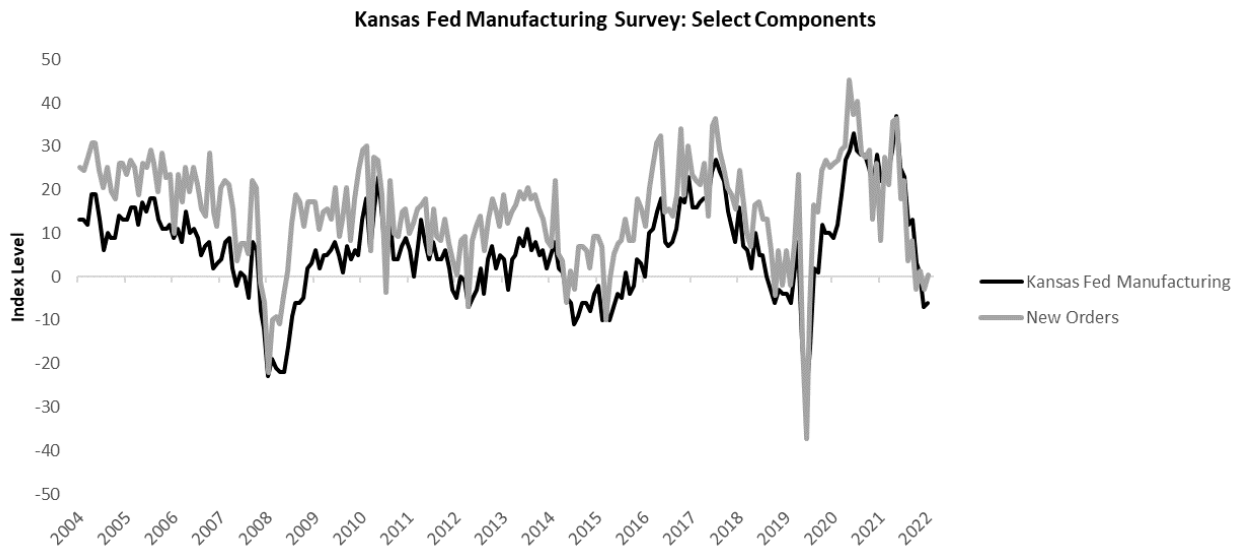
The latest Dallas Fed Manufacturing PMI data showed a contractionary reading of -14.4, surprising consensus expectations of -21.



The latest Richmond Fed manufacturing survey data showed a contractionary reading of -9, disappointing consensus expectations of -8.

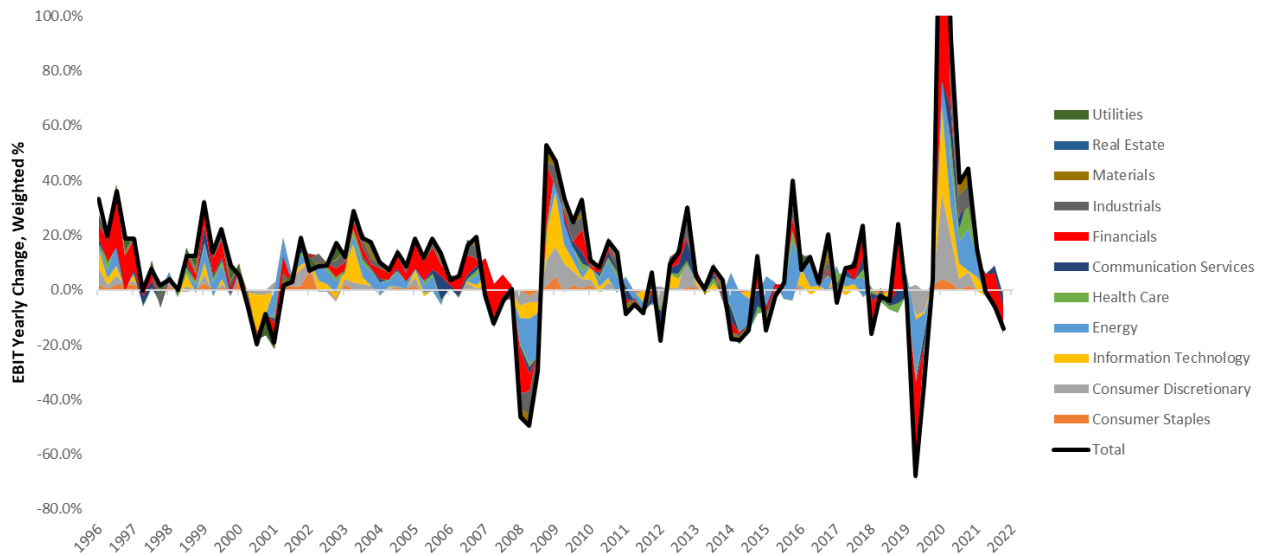


Finally, we show the Kansas Fed PMI, which showed a contractionary reading of -6, surprising consensus expectations of -7.5.



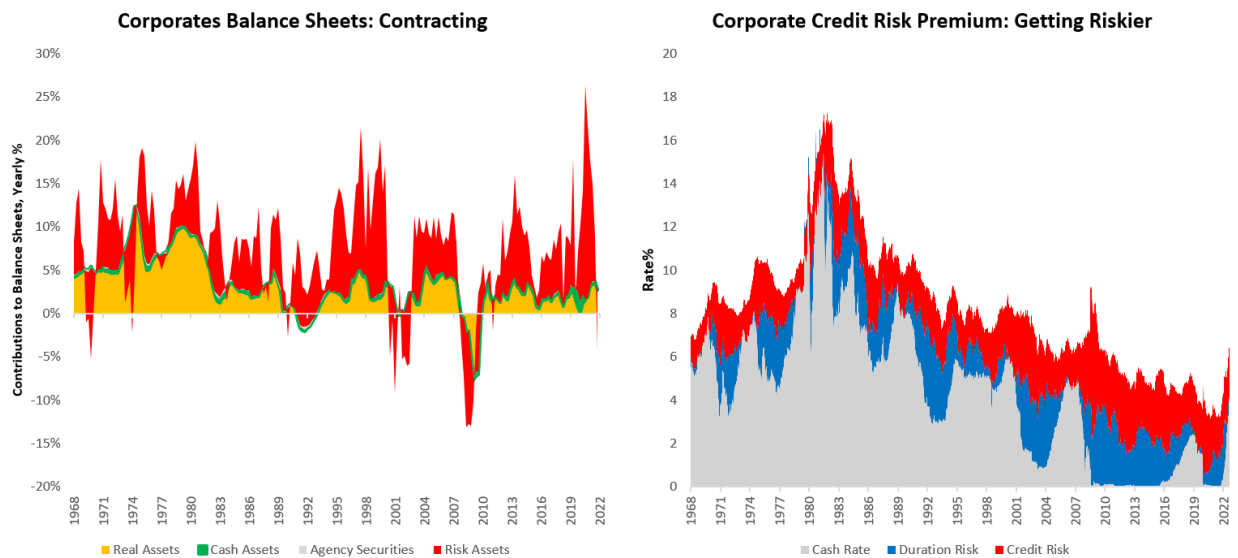
As we can see, a broad range of PMI data points to a deteriorating profit environment. Furthermore, our tracking shows that aggregate earnings for public equities are in contraction versus one year prior. We show this composite below, along with a sector-wise breakdown of earnings:

Equity Markets: Aggregate Earnings, All Public Companies



Our tracking diverges from more traditional measures of earnings, such as S&P 500 earnings (which are still positive). This divergence is due to the fact that measures like the S&P 500 choose aggregate companies that possess the largest economies of scale relative to companies outside those aggregates. Currently, we are seeing financials, technology, and communications dragging on earnings. Conversely, we see energy, industrial, and utilities supporting aggregate earnings.

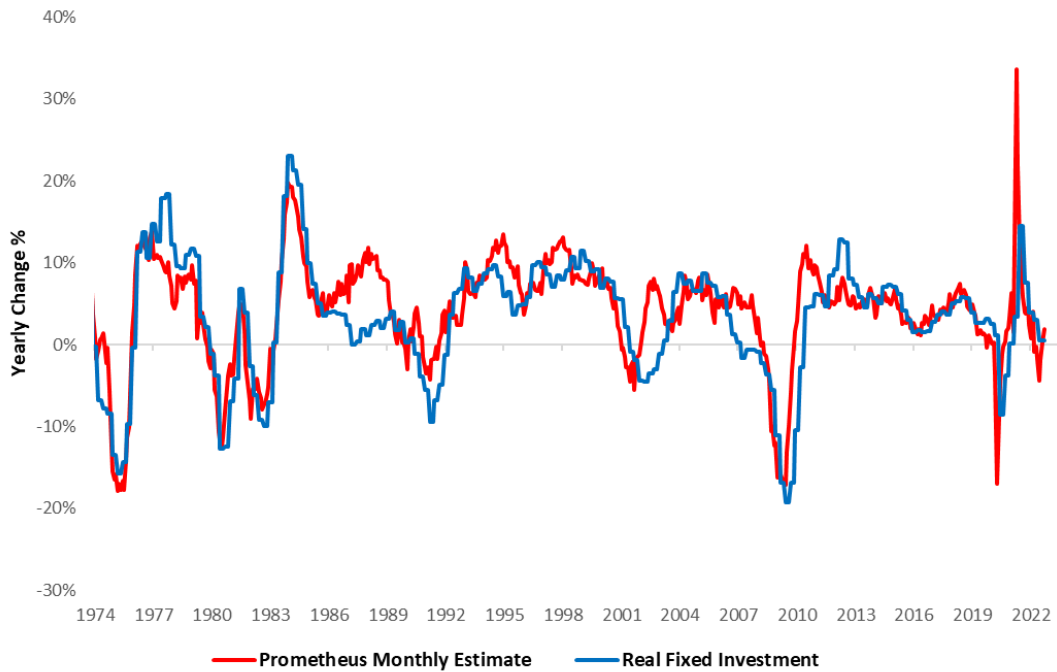
Overall, it is hard to make the case that earnings are in a positive environment, especially on an inflation-adjusted basis. Aside from earnings, businesses can use newly raised capital to fund future investment (which entails inventor build as well). However, as we show below, corporate asset values are balance sheets are contracting and the cost of capital is both rising and getting riskier:



As we can see above, asset values are declining, credit risk is rising, and the overall cost of capital has spiked. The combination of these factors will likely weigh on business reinvestment. We already see

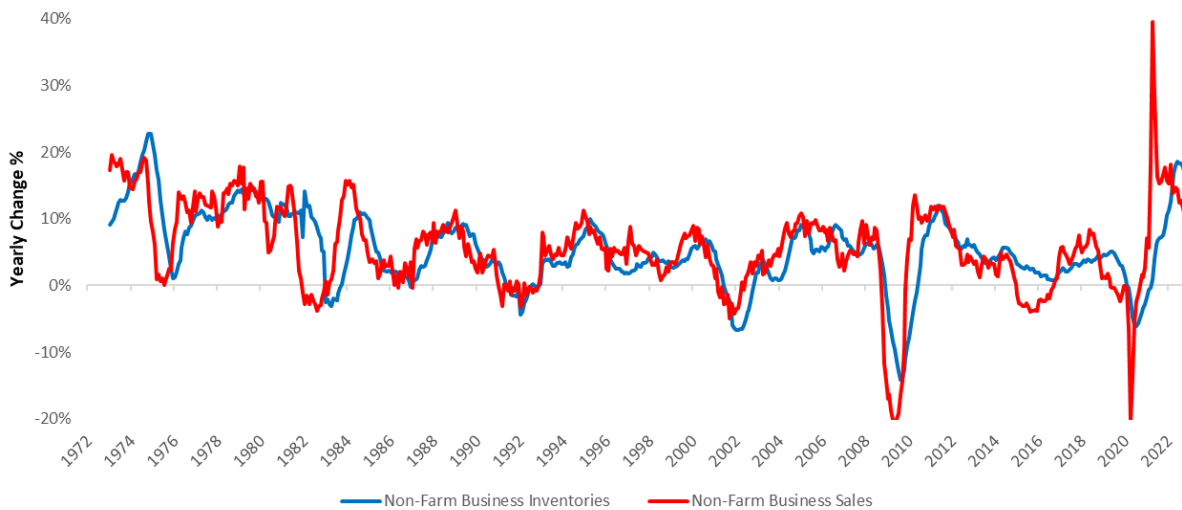
deteriorations on this front, with our tracking of fixed investment showing weakness (though some recent strength should also be noted):

Business Profits: Fixed Investment Weak



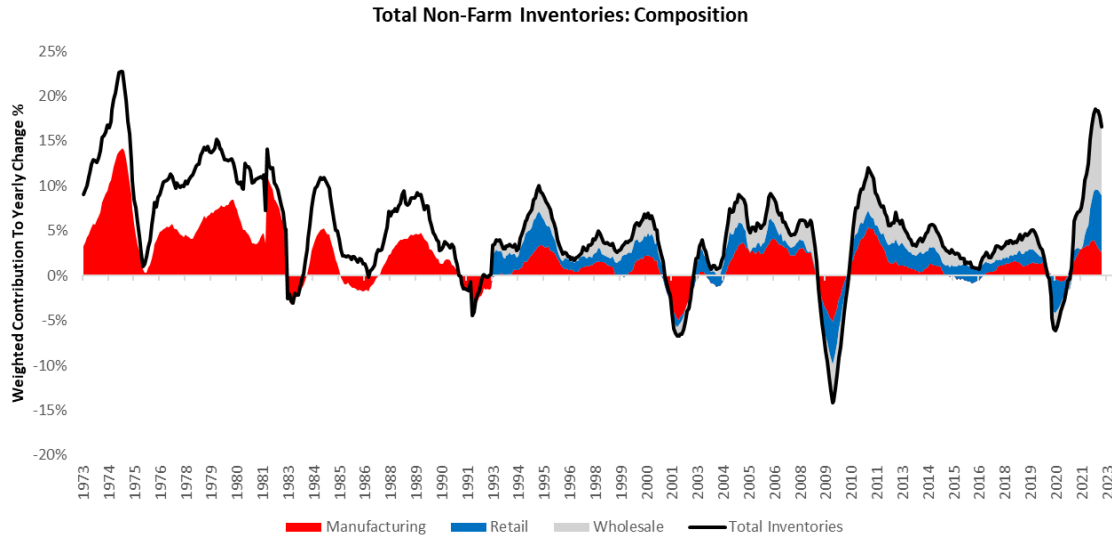
Aggregating these factors, it is highly unlikely that businesses will reaccelerate their primary demand for production (invest in fixed assets) or increase their intermediate demand (invest in inventory build). Therefore, as sales continue to decelerate, inventories are likely to weaken as well. We show how this has typically borne out over history:

Non-Farm Inventories: Pressure to Head Lower



To further illustrate current inventory dynamics, we showcase the composition of total nonfarm inventories below.

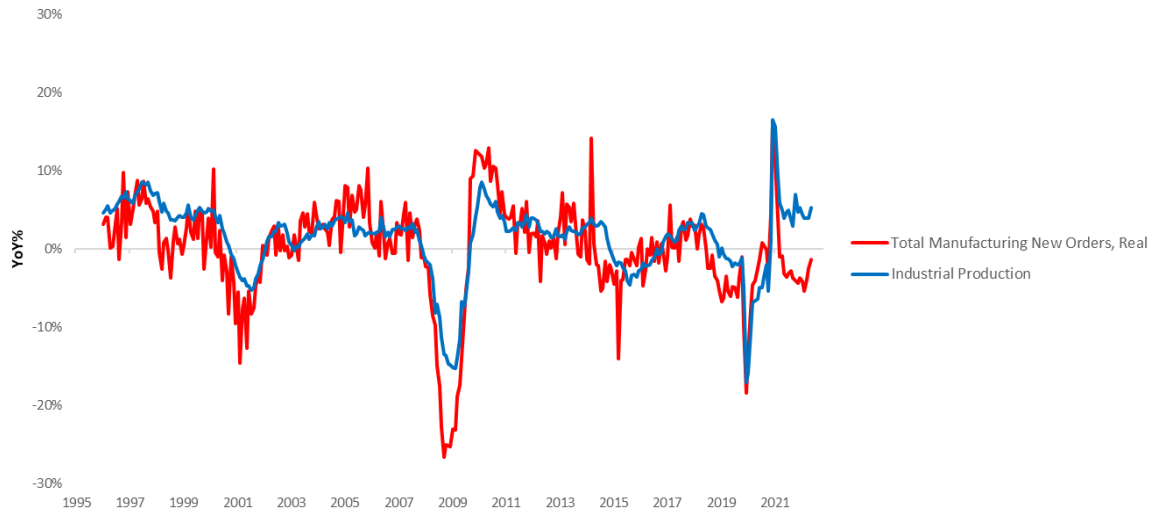
The latest Wholesale Inventories showed a monthly increase of 0.8%. This data resulted in a 0.24% increase in Total Nonfarm Inventories- with manufacturing, retail, and wholesale contributing 0.15%, - 0.05%, and 0.28%, respectively. Over the last year, manufacturing, retail, and wholesale have contributed 2.61%, 6.08%, and 7.93%, respectively to a 16.71% increase in Nonfarm Inventories.



An important trend to note is the divergence between manufacturer's inventories and wholesaler & retailer inventories. Manufacturers are steadily reducing their inventory growth, while wholesalers' and retailers' growth remains elevated, suggesting the struggle of wholesalers and retailers to find final demand. Recall inventory building can help pad profitability because one business's inventory growth is another business's sales growth. Additionally, inventory build is less penalized during inflationary periods, resulting in periods of elevated inventory rise. We judge today to be one of these periods. However, inventory build has limitations and can only go so far as it does not increase productive capacity, and there is a finite ability to add inventories due to physical limitations. Moreover, total business sales are currently below the rate of change of inventories, suggesting downward pressures on future inventory growth. The gap between sales & inventories is significant relative to history, suggesting strong downward pressure on inventories.

This pressure is further exemplified by the incremental data that was received on real manufacturing orders. Real Manufacturing New Orders increased by 0.28%, with durable goods and non-durable goods contributing 0.19% and 0.08%, respectively. On a real basis, we estimate that total manufacturing new orders have decreased -by 1.35% versus one year ago. Therefore, new orders for industrial goods remains at odds with production data, and reconciliation is underway. We show real new orders relative to industrial production below:

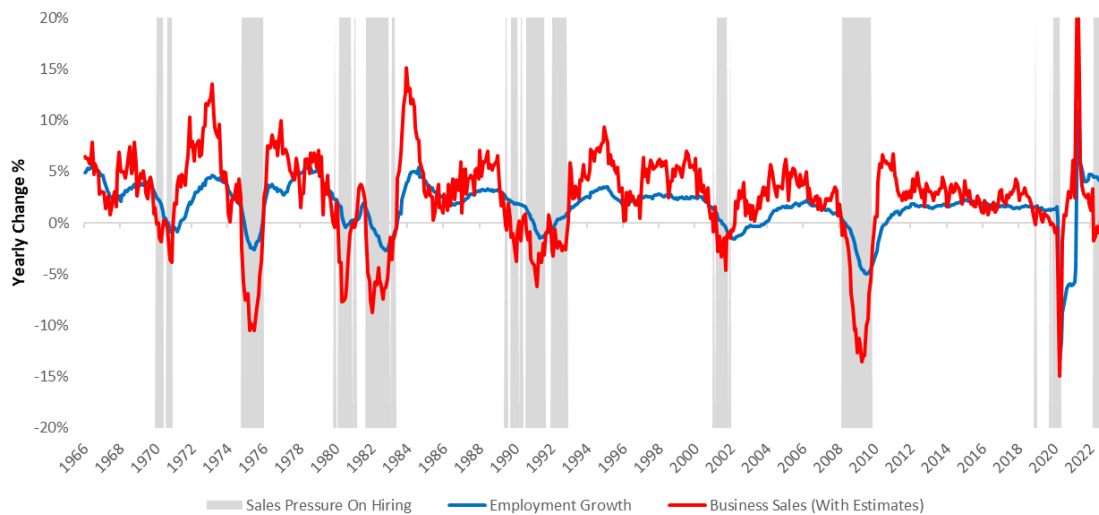
Manufacturing: New Orders And Industrial Production



Therefore, our assessment of economic conditions suggests that production is likely to remain weak and potentially worse. This process is likely to unfold over several months, coincident with a decline in various measures of business health.

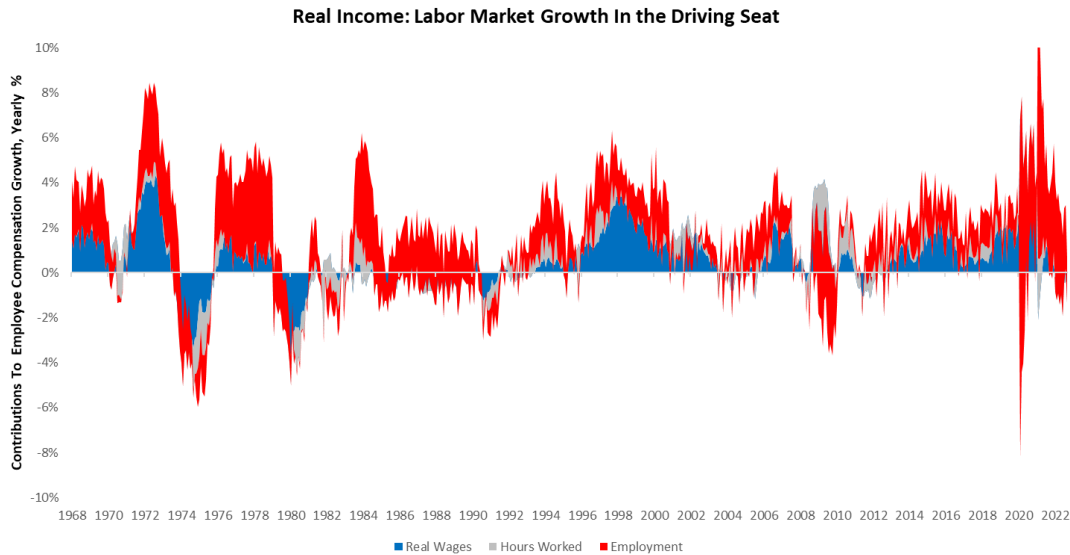
Finally, we turn to the link between consumers and businesses, i.e., employment. Businesses hire workers as a function of their expected output needs, which are in part based on their current revenue growth. When the outlook for businesses weakens and their expected profitability declines, businesses have no choice but to pull back on output in the face of weaker demand. With enough pressure on output, the next logical step for businesses is to begin to lay off workers to reduce their operating costs and maintain profitability. Below, we show how this dynamic has played out over history, with weakness in real business sales resolving itself in contraction in employment:

Real Business Sales & Employment: Firing Pressures Increasing



Sales growth is currently below employment growth, suggesting downward pressures on future hiring. The divergence between sales & hiring is significant relative to history, suggesting strong downward

pressure on future employment. This brings us to our analysis of labor markets. Based on our analysis of economic conditions, as production pressures accelerate, we will begin to see weakness in labor markets. This prospective weakness will have far-reaching consequences for aggregate economic activity. Below, we show why we expect this to be the case, using a decomposition of labor income:

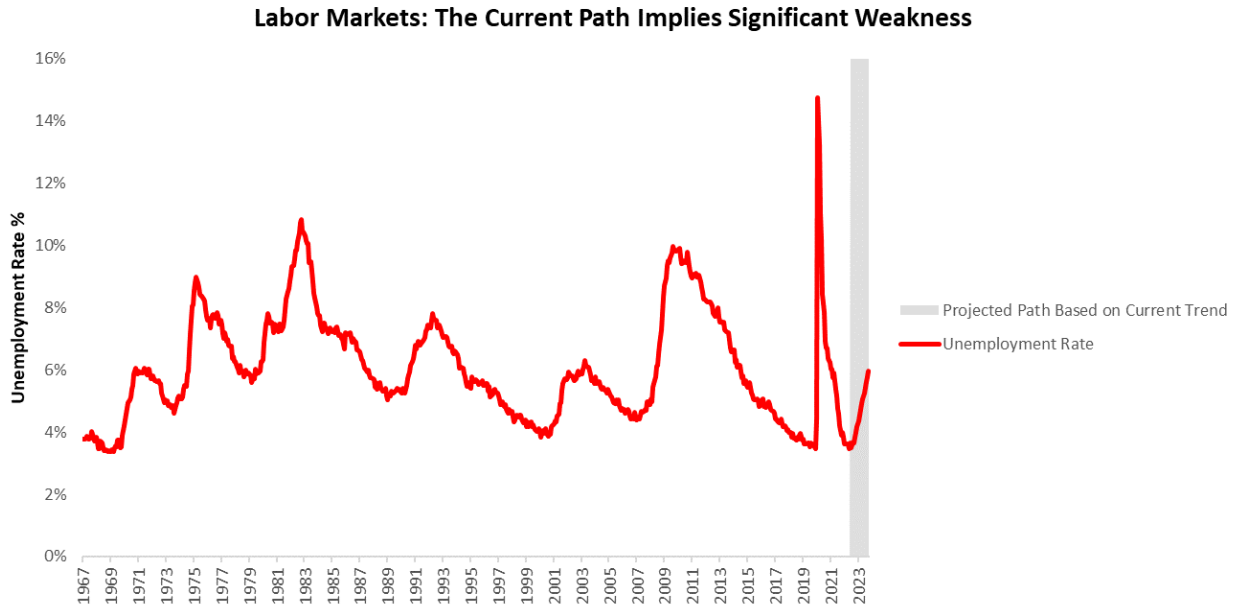


Real income can increase through an increase in one of three avenues: real wages, hours worked, or the number of employees. In today's setting, more than 100% of the yearly change in real income comes from employment growth. Said differently, real incomes are contracting, and businesses are decreasing the number of hours that employees work, likely to cap nominal outlays. Therefore, for real income growth to contract, we would just need to see marginally weaker hiring, i.e., real incomes could contract without a contraction in labor markets. If labor markets were to contract, the contraction in incomes is likely to be sizable. Weakness is well within the cards, as employment growth remains stretched, though significantly less so than in prior months.

Below, we show employment growth, normalized by population growth, to estimate how hot or cold the labor market is running. As we can see, the labor market has cooled modestly in recent months but remains tight.



The current trajectory of labor markets is largely consistent with our broader assessment of conditions, i.e., that weakening output will need to result in weaker employment. As we can see below, if unemployment data continues on its current trajectory, we are likely to see a significant spike in unemployment rates in 2023:

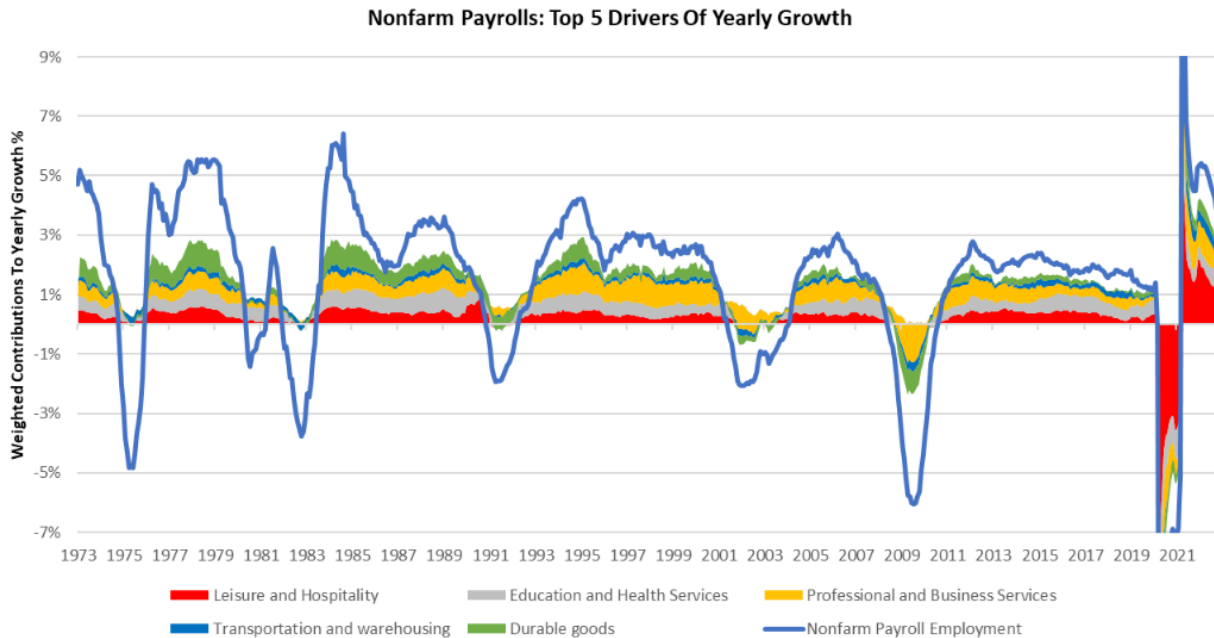


While this spike in labor markets may look unusual, we think it is important to understand that labor markets are uneventful until they begin to weaken. Once the initial stages of labor market weakness begin, they create a vicious feedback loop, resulting in further weakness. This dynamic is a function of the dual nature of income and spending. Therefore, when we remove workers from the labor force, income is destroyed, which in turn impairs spending on other goods, which impairs another worker's income. Currently, we are not near this point. We show our tracking of claims data that quantifies this below:

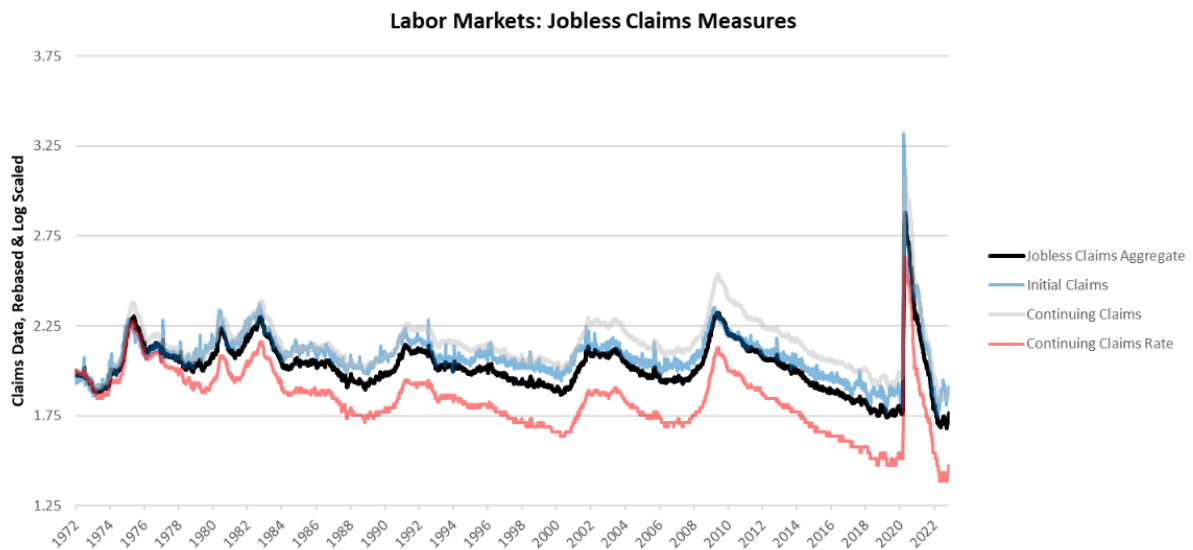
Jobless Claims: Recent History Relative To Recessionary Averages

| | Initial Claims | Continuing Claims | Continuing Claims % |
|------------------------------|----------------|-------------------|---------------------|
| 9/2/2022 | 218 | 1400 | 1.00% |
| 9/9/2022 | 208 | 1376 | 1.00% |
| 9/16/2022 | 209 | 1346 | 0.90% |
| 9/23/2022 | 190 | 1365 | 1.00% |
| 9/30/2022 | 219 | 1364 | 0.90% |
| 10/7/2022 | 226 | 1383 | 1.00% |
| 10/14/2022 | 214 | 1438 | 1.00% |
| 10/21/2022 | 218 | 1487 | 1.00% |
| 10/28/2022 | 218 | 1498 | 1.00% |
| 11/4/2022 | 226 | 1503 | 1.00% |
| 11/11/2022 | 223 | 1551 | 1.10% |
| 11/18/2022 | 240 | - | - |
| Recessionary Avg. (Ex-COVID) | 473 | 3395 | 3.51% |
| Recessionary Avg | 573 | 3658 | 3.64% |

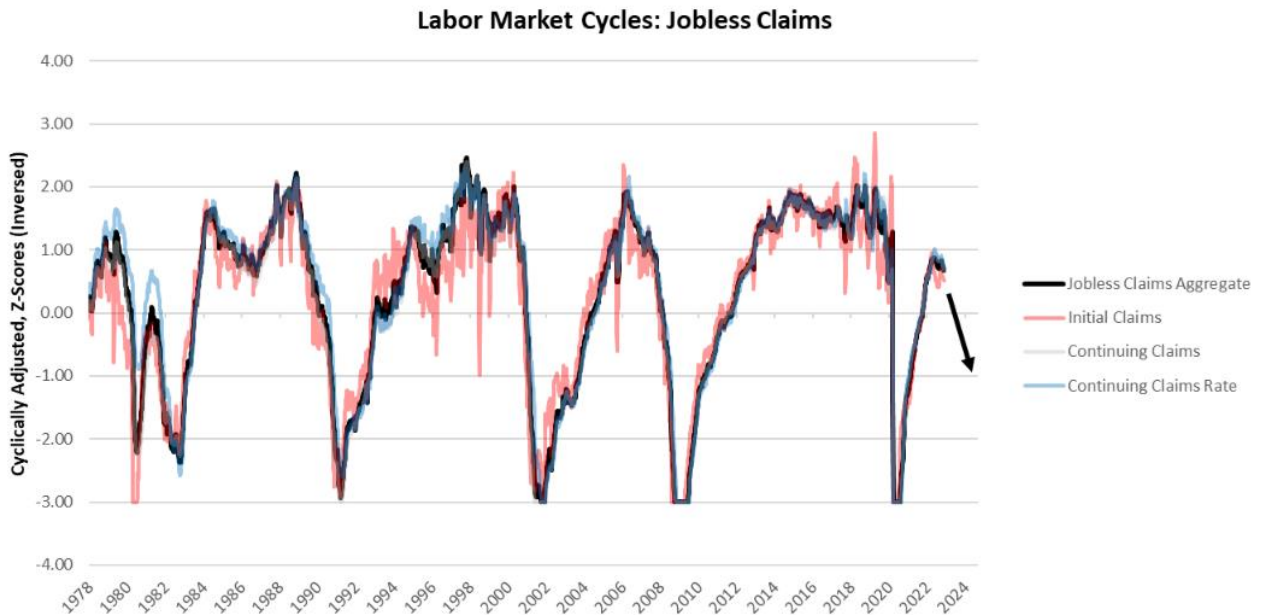
As we can see above, we remain a ways off from recessionary jobless claims activity. However, what we must remember is that it is rarely a linear process of getting there. Currently, the nonfarm labor market strength remains exposed to cyclical weakening of incomes and spending. Below, we show the top contributors to nonfarm payrolls over the last year:



Durable goods spending, transportation, and leisure and hospitality are all pro-cyclical sectors, significantly exposed to business cycle risk. This distribution of employment growth creates an environment where a downturn in cyclical spending (which is already ongoing) will likely catalyze future weakness in employment. Nonetheless, current conditions remain positive, and we show jobless claims data below. As per the latest data received on labor markets, Initial Claims surprised expectations coming in at 240 versus the expected 231, while Continuing Claims surprised expectations coming in at 1551 versus the expected 1520:



Additionally, we show these measures adjusted to reflect labor market cycles:

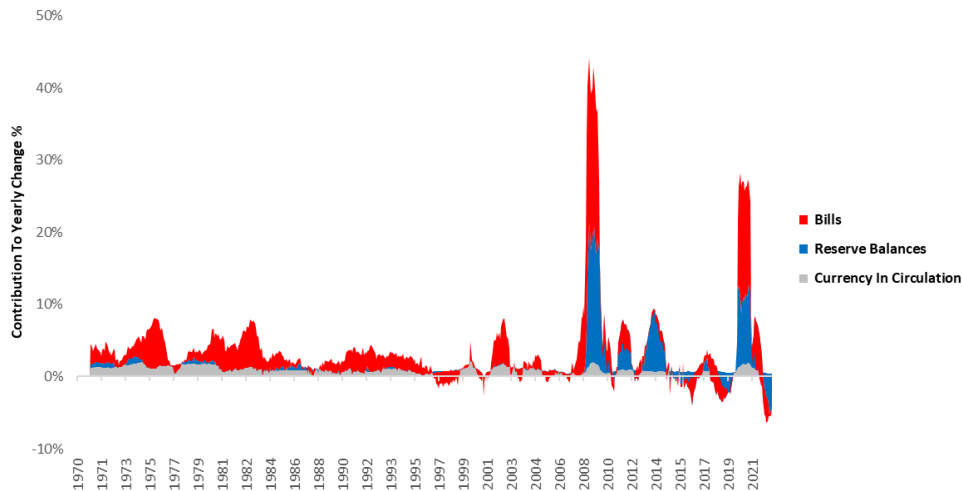


Therefore, our analysis of labor markets suggests that we are in the early stages of an inflection. Our systems will incorporate signals coming from our various labor market gauges to help us navigate this potential turning point. Finally, we turn to the primary driver (and potential savior) of this brewing economic downturn: policy liquidity.

Liquidity is the stock of cash and cash-like assets that facilitates both economic and market activity. In today's setting, the primary driver of liquidity is the US Sovereign, which is our nomenclature for the joint monetary and fiscal authorities, i.e., the US government. The US Sovereign controls both the price and quantity of money and money-like assets. What is crucial to understand is that the liabilities of the US Sovereign are the assets of the private sector, and an increase in US Sovereign liabilities is an increase in assets for the private sector, coming from one of the most secure lenders in the world. Thus, when the private sector sees an increase in cash, government-guaranteed deposits, reserve balances, or Treasury bills, the potential for economic activity increases drastically.

Conversely, as these assets become more scarce amidst a slowing economy, these highly liquid assets see significant demand as economic participants value liquidity over capital appreciation. Today, the US Sovereign is undergoing one of the strongest financial tightenings on record by raising interest rates, reducing the availability of reserve balances to the public sector, and limiting the supply of treasury bills. We visualize this tightening of conditions by showing the most liquid components of the US Sovereign's liabilities:

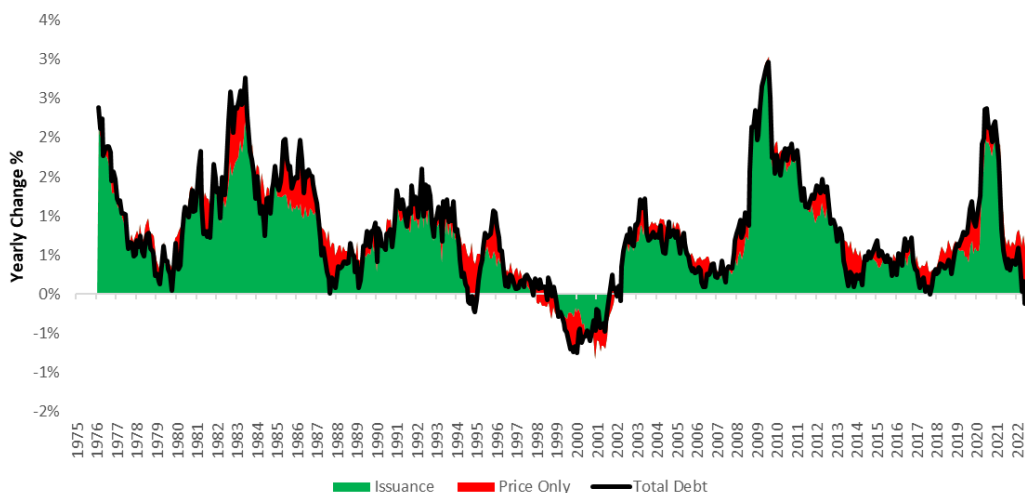
Liquidity: Sovereign Liabilities



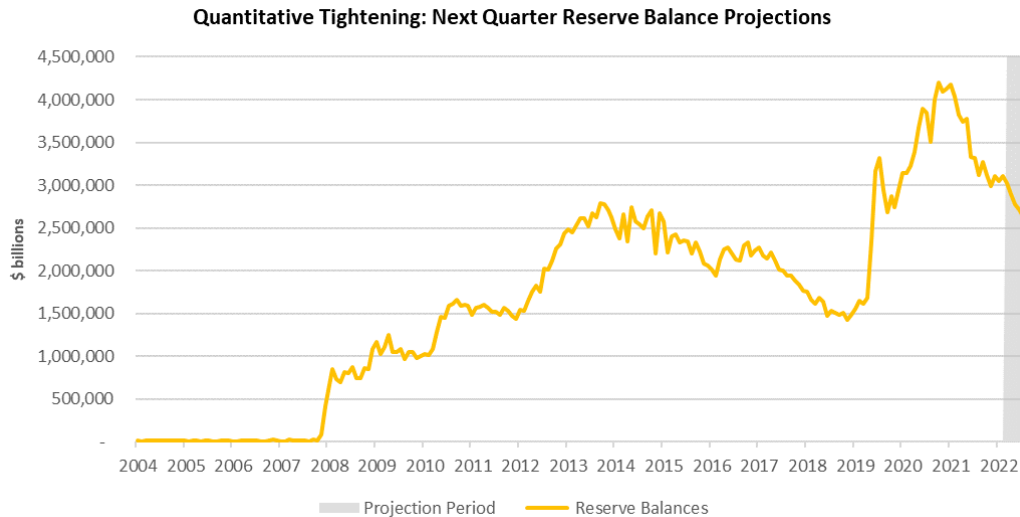
Above, we net out intragovernmental holdings between the Fed and Treasury to isolate liquid assets that are solely the assets of the private sector. As we can see above, the contraction is unprecedented. What is important to note here is this effect can be reversed in one of two ways. First, the Fed can halt or reverse its Quantitative Tightening, which we deem to be unlikely. Second, the Treasury can issue more Treasury bills as a share of their total debt issuance. This second avenue could provide significant amelioration in tightening liquidity conditions. This strategy would have fared extremely well this year, as the government Treasury liabilities saw a significant contraction, which could have been offset through the issuance of bills. Looking at the aggregate change in the Treasury market, the majority of the change in total Treasuries outstanding has come from changes in the market price of debt rather than from increased issuance. This dynamic is aberrant, and increased bill issuance (which has begun modestly) will likely lead to some stabilization in conditions.

Below, we show the aggregate market capitalization of Treasury securities and show its composition by changes in price and changes in issuance. As we can see below, changes in price have been the dominant driver in 2022:

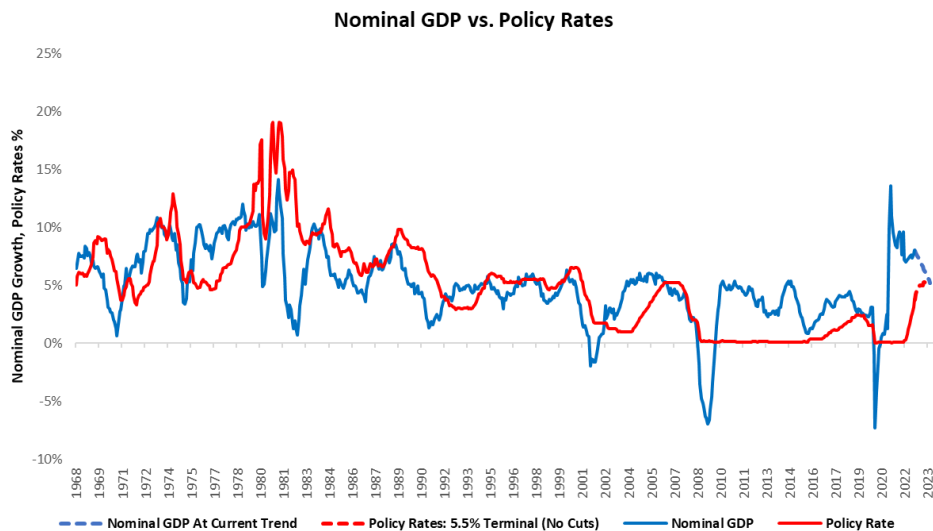
Treasury Securities: Market Capitalization Of Total Debt



Therefore, fiscal authorities have the ability to counteract some of the negative effects of quantitative tightening. However, the choice to do so will likely have significant political inputs, which we do not have any ability to estimate. Turning to monetary policy and QT, we show our forecasts for Reserve Balances, i.e., financial sector liquidity, below:



These estimates include the path of Fed run-off, expected Treasury bill issuance, Treasury General Account uptake, and the expansion of currency in circulation. Overall, evaluation of liquidity conditions shows that liquidity conditions for the private sector remain extremely weak, though increasing bill issuance will likely combat some of the challenges faced by markets. Nonetheless, the environment remains one where liquidity will continue to tighten unless fiscal authorities choose otherwise, especially with policy rates continuing on their path higher. This comes alongside a deteriorating nominal growth outlook, as detailed in the note. Below, we show an extremely conservative (positive) trajectory for nominal growth relative to our assessment of the potential trajectory for terminal policy rates. As we can see, conditions are likely to become restrictive in 2023:



What this means for the economy is that both real and financial assets will continue to see price pressures, alongside higher interest burdens, to the extent that they diminish corporations' willingness to reinvest meaningfully. These forces will continue to put pressure on businesses so long as they continue, forcing sales and profits lower, reducing output, and potentiating labor market weakness ahead. The effects of this tightening liquidity are already taking place in areas of the economy that are leverage-dependent, and if they continue over an extended period, they are likely to permeate through the broader economy.

Conclusions

To reiterate our observations:

- Growth has reaccelerated, while Inflation cooled this month. However, our outlook suggests that the respite in Real GDP is likely to be short-lived as we progress through the economic cycle.
- Inflation is now at a crossroads, with competing forces battling to determine the future inflation impulse. Emerging data suggests moderation is increasingly likely.
- Conditions are brewing for the Federal Reserve to take its foot off the gas on interest rate hikes, with current market pricing of terminal rates in the ballpark of peak rates.
- The combination of these conditions creates an environment where growth shocks are likely to trump inflation shocks over the next six months.

In this note, we have detailed a tale of two economies, which show a divergent set of conditions. This divergence is primarily driven by the joint effects of policy tightening and cyclical slowing. The combination of these factors creates the conditions necessary for a potential turning point in the economy, with growth likely to deteriorate, with inflation potentially moderating. We remain in the early days of this transition, and the data ahead of us will be essential in revising our outlook. The Prometheus ETF Portfolio remains well-prepared for the range of outcomes we have discussed in this note, and we expect it to navigate any transitions successfully. Until next month.

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