

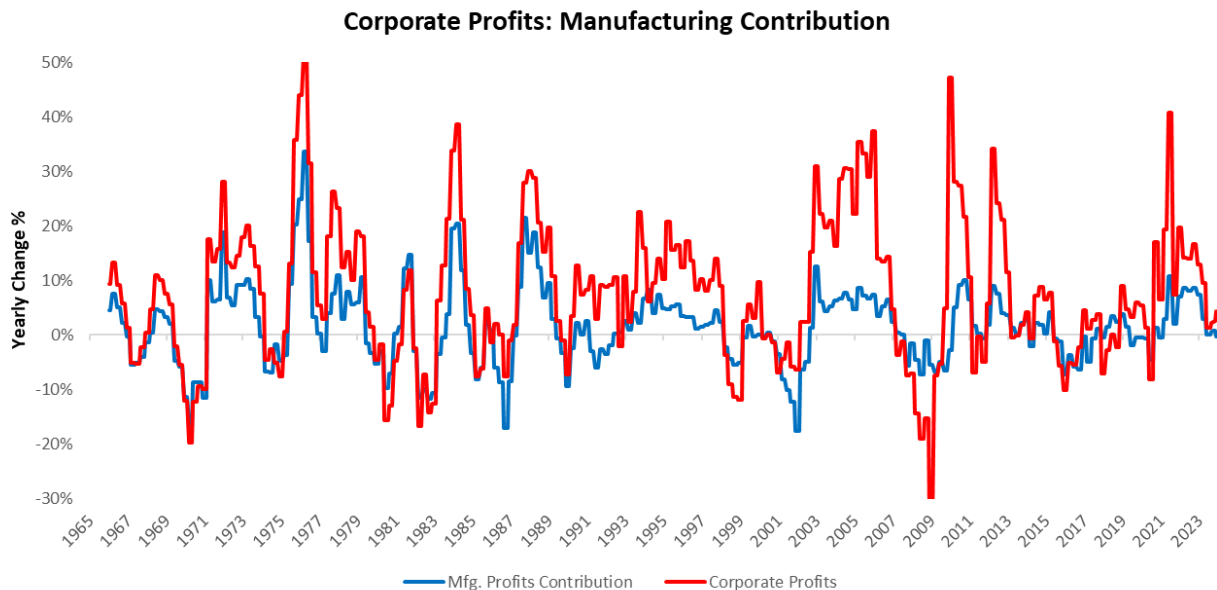
The Observatory

Welcome to *The Observatory*. *The Observatory* is how we at Prometheus monitor the evolution of the economy and financial markets in real-time. The insights provided here are slivers of our research process that are integrated algorithmically into our systems to create rules-based portfolios.

Our primary takeaways are as follows:

- **Cyclical conditions have improved in the economy, with manufacturing measures showing sequential gains in line with cyclical conditions.**
- **However, manufacturing remains exposed to weakness in sales, low levels of production, and high labor cost pressures.**
- **Relative to these pressures, manufacturing-sensitive equities continue to price in highly favorable conditions, creating the potential for a reversal. We continue to see industrials, energy, and materials as shorts versus the broad index.**

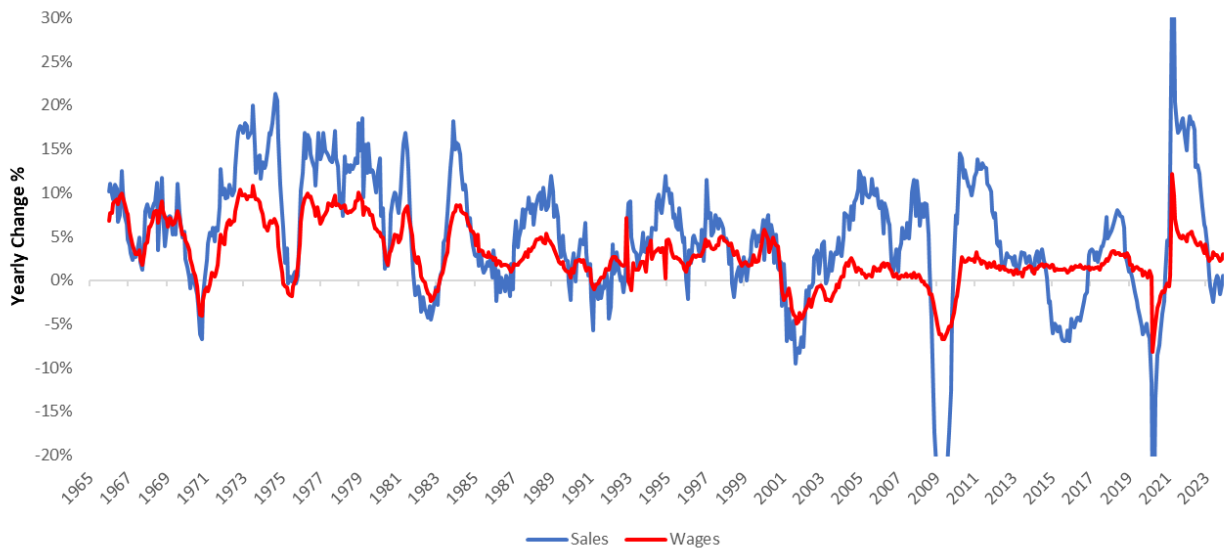
Overall, the manufacturing complex remains the weakest link in the macro economy, with pressures persistent but somewhat moderating. Manufacturing is an integral part of the cyclical economy. While manufacturing now commands a smaller portion of the GDP, it continues to be a primary driver of the variation in profitability. We visualize this importance below by showing the contribution of manufacturing sector profits to aggregate corporate profits. As shown, manufacturing plays a strong role in setting the trend for overall profitability:



As we can see above, manufacturing profits have already begun to weigh on the broader corporate profit picture. If manufacturing profits continue to decline, it will weigh on broader corporate and employment conditions. We assess the drivers of profitability to better understand the dynamics at play.

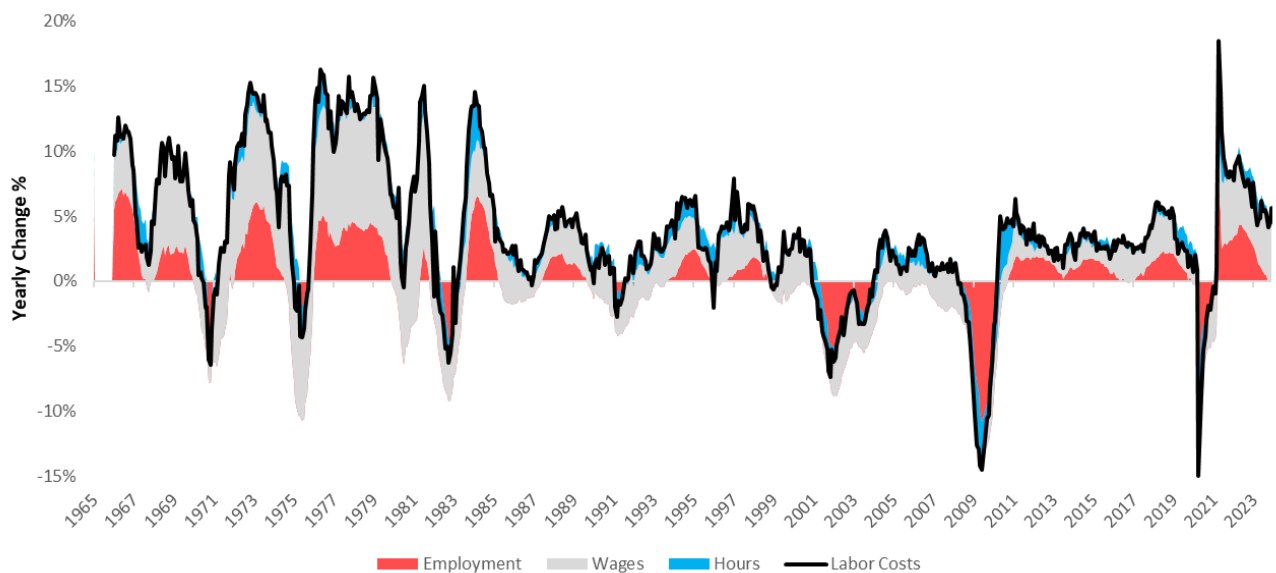
Given the importance of manufacturing profits to the cyclical direction of the economy, we perform an in-depth assessment of the drivers of manufacturing profitability. Like any business, profits are a function of the sales generated relative to the costs incurred. At the macro level, the primary driver of these costs tends to be labor costs in the form of wages. Below, we visualize these principal drivers of profitability for manufacturing.

Manufacturing Monitor: Nominal Sales vs. Wages



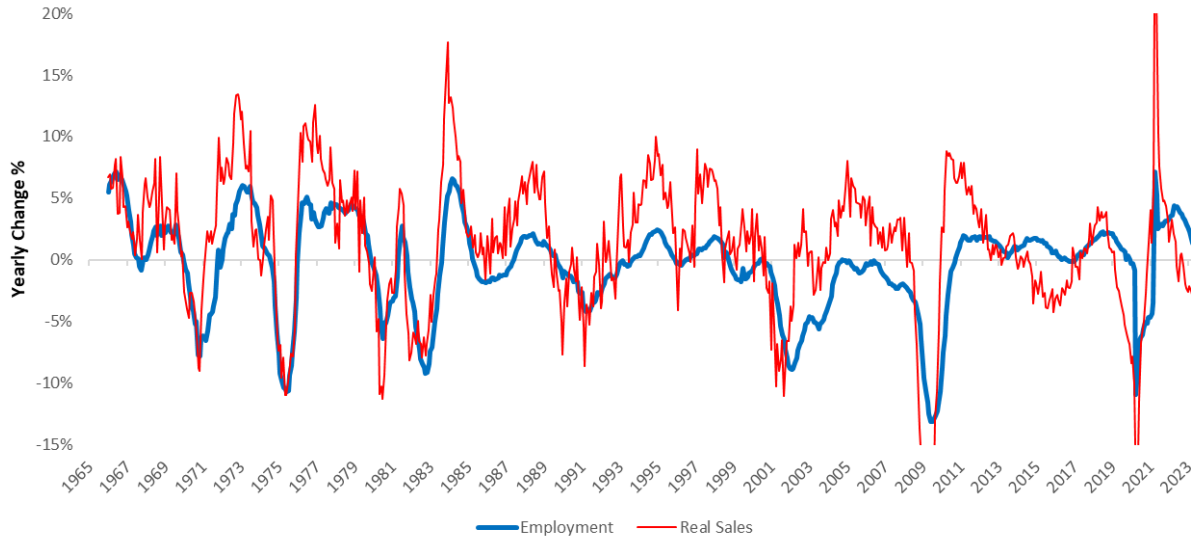
As we can see above, wages' resilience relative to sales declines is creating significant pressures on corporate profitability. To better understand the macro drivers of these wage trends, we decompose total labor costs into their constituent drivers- changes in employment, hours worked, and hourly wages. We visualize their contributions to total labor costs below:

Manufacturing Monitor: Labor Cost Drivers



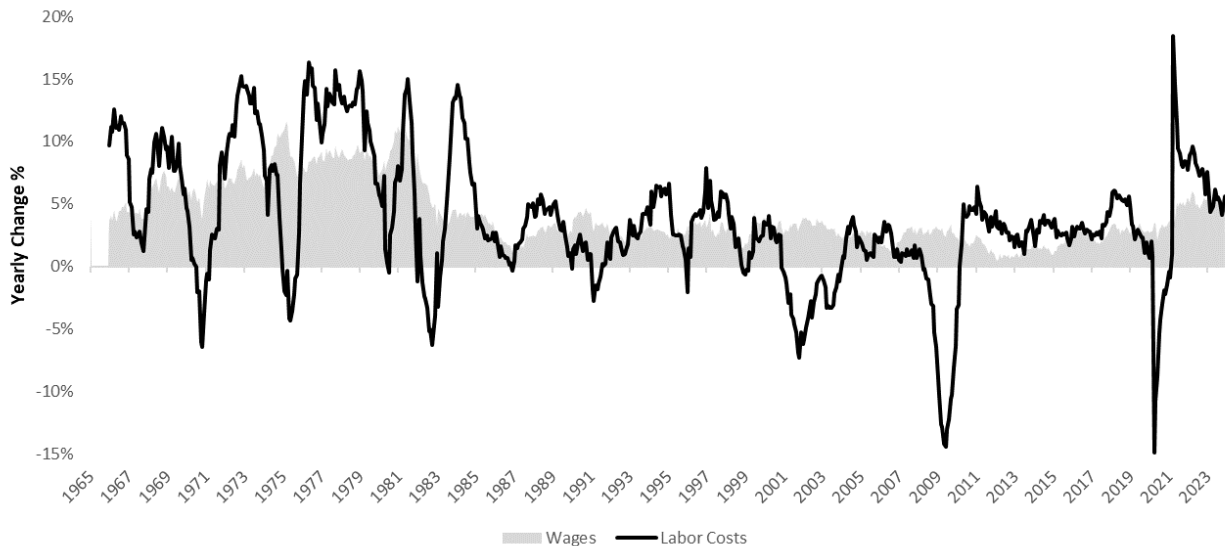
It is important to note that the primary driver of wage costs today is hourly wage rates rather than employment. This dynamic reflects a fundamental condition, i.e., the purpose of employment growth is output growth. With real sales growth muted, employment has followed suit lower:

Manufacturing Monitor: Labor Cost Drivers



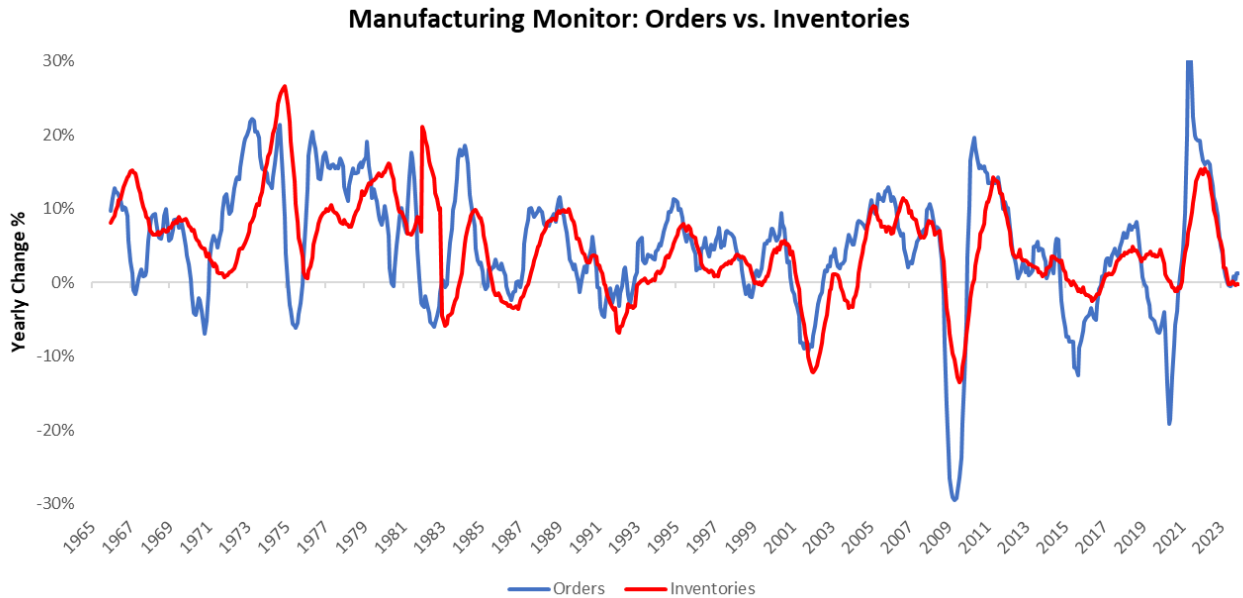
While labor costs driven by employment are variable based on output, labor costs from wage increases tend to be far more persistent and slow-moving. We isolate changes in wages below:

Manufacturing Monitor: Labor Cost Drivers

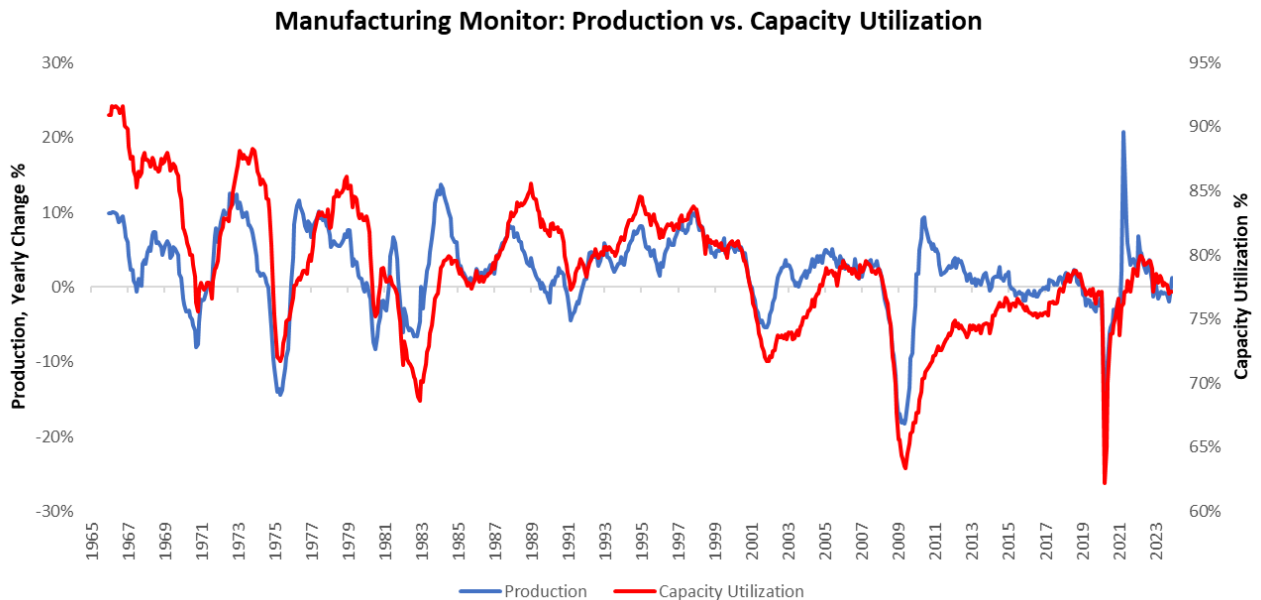


Given the stickiness of wages and the large share of labor costs they currently demand, we think it is reasonable to expect labor costs to be an ongoing pressure on manufacturing profits.

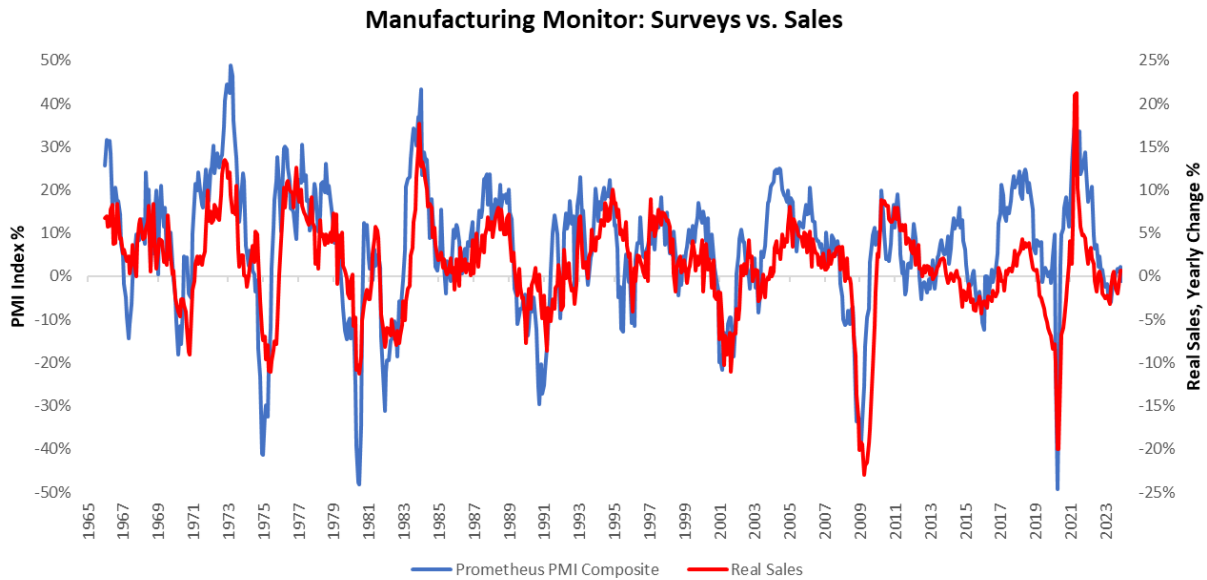
Now that we have examined the high-level determinants of profits, we turn to underlying measures of demand conditions. Particularly, we look at the growth of new orders and inventories. New orders drive sales, and sustained growth in new orders increases inventories. Excessively large gaps between these two variables are unsustainable and likely to be resolved in favor of new orders. We visualize these dynamics below:



To further understand demand conditions, we now turn to production and capacity utilization measures. Production is the primary engine for the growth of the manufacturing sector over time. While expanding production is a positive for topline, existing capacity constraints limit the degree of expansion we can see in the manufacturing sector.

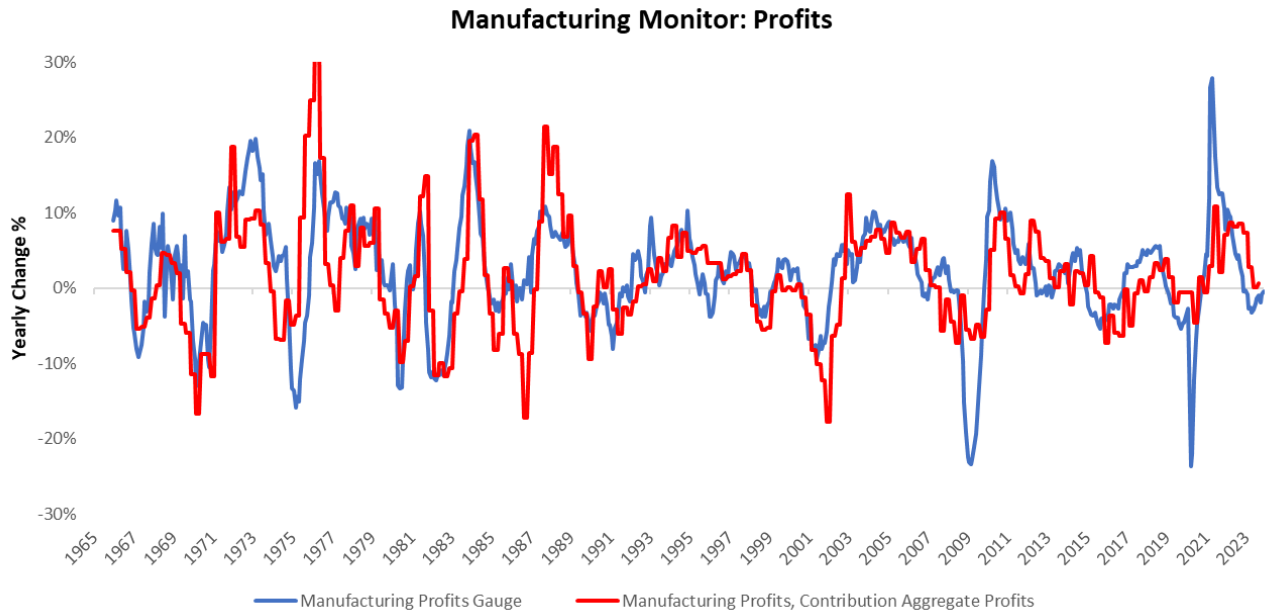


Strong moves in production without an increase in total productive capacity are typically unsustainable. Scanning through these demand and production measures, we see flat conditions in both. Orders and inventories are in sync, suggesting no major disequilibrium; meanwhile, production has declined, and capacity utilization has come off its highs. We see a similar flatling of conditions in our timely PMI measures:

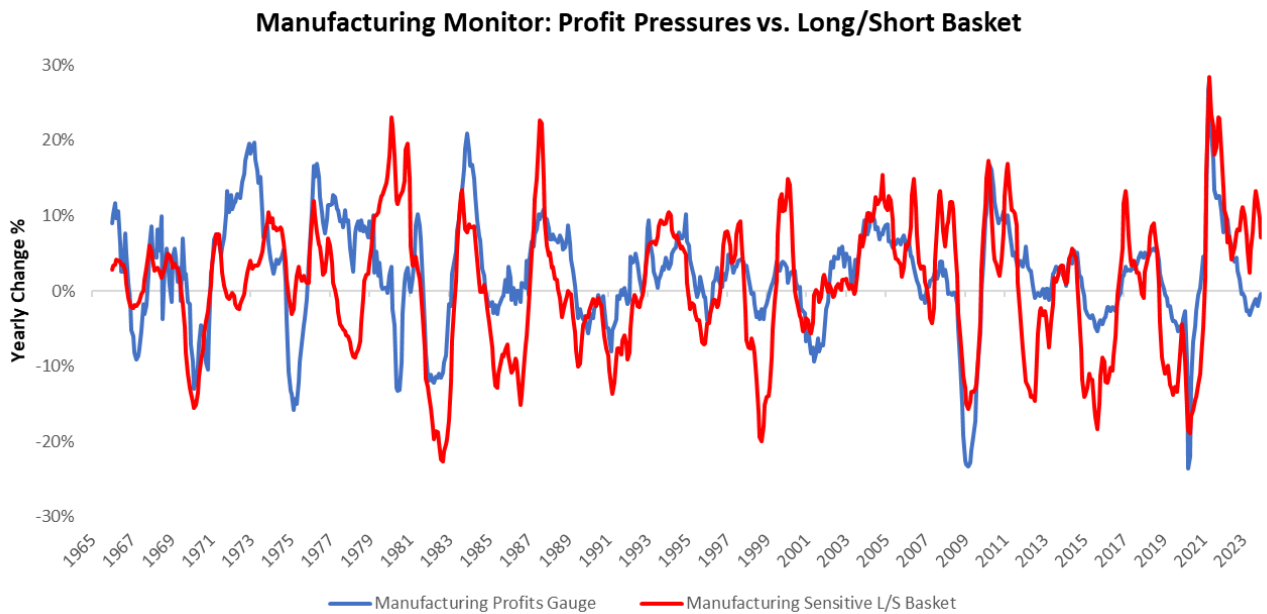


While hard data offers significant insights into the mechanical drivers of manufacturing, survey-based measures (PMIs) can provide insight into where we are in the manufacturing cycle. These PMIs have intrinsic value as purchasing managers sit at the intersection of demand and supply, and their perception of conditions reflects conditions in the manufacturing cycle. Above, we show our PMI composite, which aggregates data across PMI measures, and how our composite offers timely insights into the real manufacturing sales cycle.

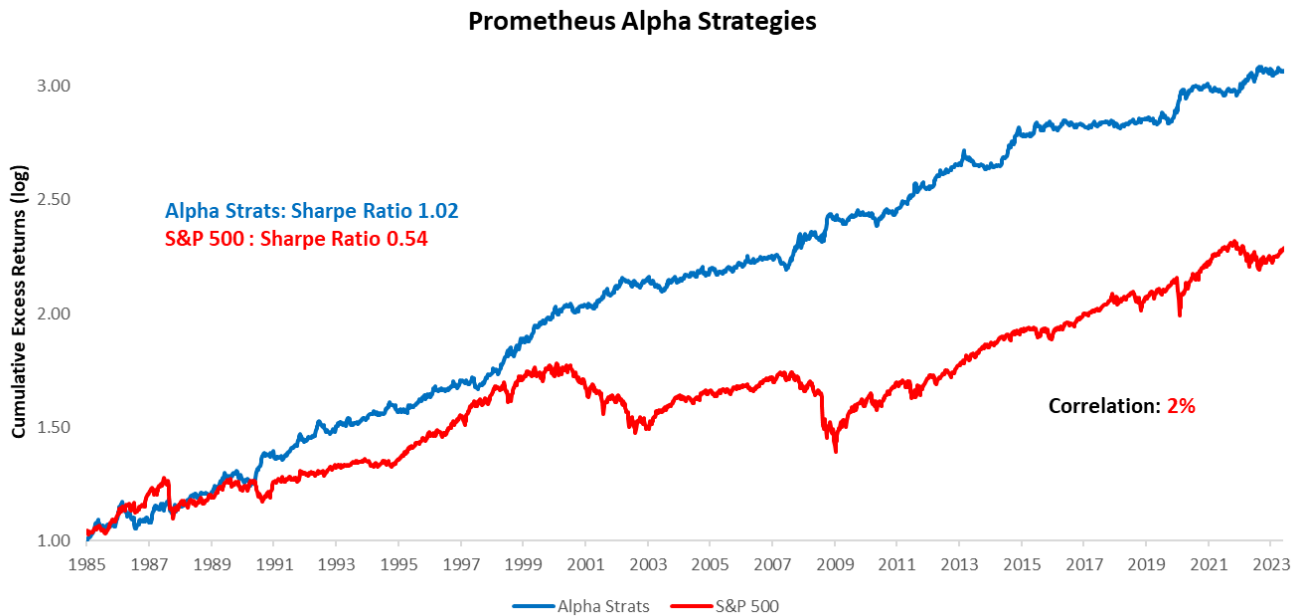
We now aggregate and net all of the cross-current from these various drivers of manufacturing into a single metric to gauge manufacturing profit pressures. Below, we show how this measure has been a good guide for manufacturing's contribution to aggregate profits.



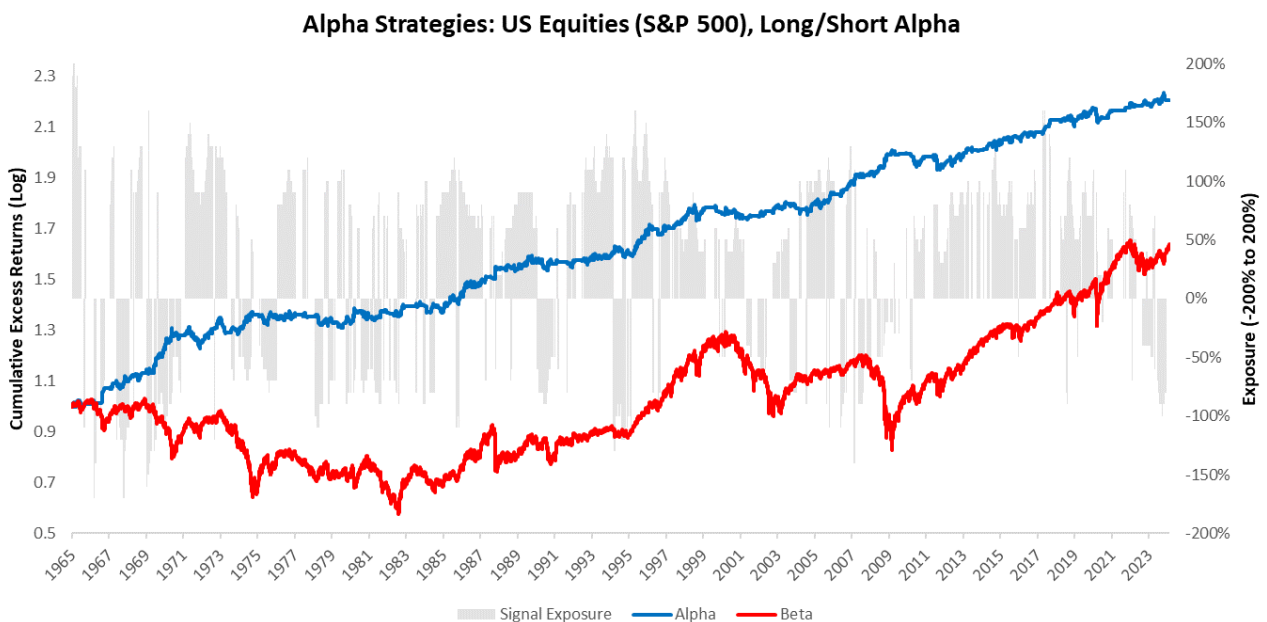
Finally, we visualize market pricing relative to these evolving fundamental trends. Below, we show our manufacturing profits gauge and our long/short basket of manufacturing sensitive vs. insensitive sectors. As we can see below, trends in this basket are capped by the degree to which profits move. Said differently, manufacturing outperformance usually requires an accelerating profit cycle.



Overall, manufacturing demand and output have flatlined and could potentially improve. However, without a significant decrease in wage cost, we think these improvements will unlikely offset the pressures on profitability. As such, we expect the industrial, energy, and materials stocks to underperform the broader index, reflected in our Alpha Strategies. Below, we show the full ensemble of our Alpha Strategies, which trade stocks, bonds, and fixed income versus the S&P 500.



Our S&P 500 Alpha Strategy remains flat on its bets on the S&P 500, i.e., broad recession risk remains muted.



For alpha generation, we continue to find the most reward/risk in relative value. Until next time.

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