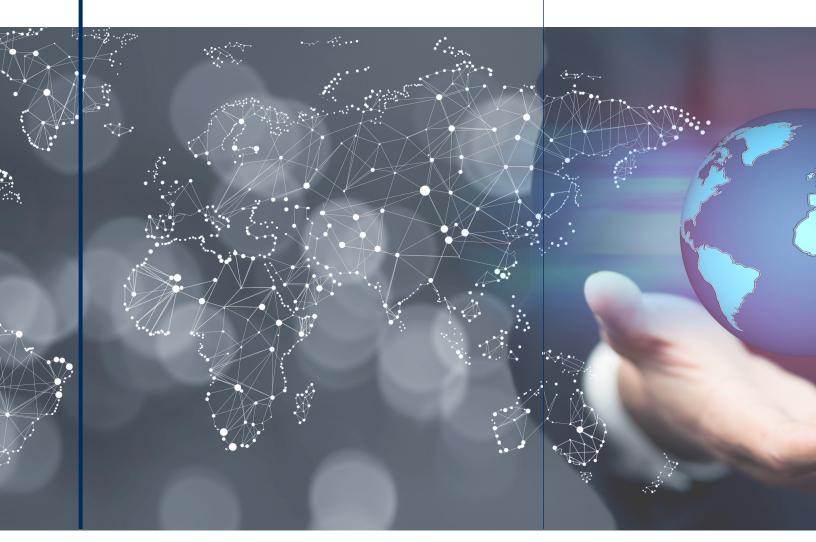


Equity Research Economics

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Richard de Chazal, CFA

Economics Weekly Taking Stock of Inventories



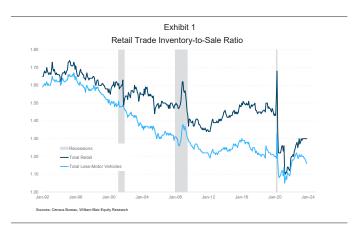
Please refer to important disclosures on pages 14 and 15. Analyst certification is on page 14.

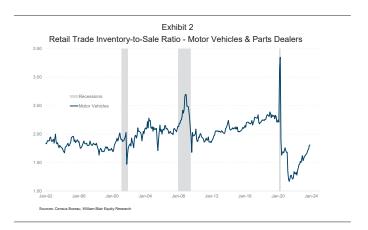
Inventory cycles play an important role in accelerating the momentum of economic growth, inflation, and corporate profitability. Companies generally build stock during the expansion phase, when consumption is expected to continue. Conversely, they liquidate stock when they are either caught out by a faster-than-expected slowing in that demand (having resulted in involuntary inventory accumulation) or when they anticipate growth weakness ahead (voluntary liquidation). In this *Economics Weekly*, we assess where we are in the current inventory cycle, what companies are telling us about expected future nearterm growth, and some of the deciding factors around what could be a structural change in inventory levels.

How Did We Get Here?

Companies spent much of 2023 destocking their inventory, following a period of heightened inventory rampup through 2021 and 2022. Real final sales of domestic product (i.e., GDP less-inventories) increased by 5.7% from 2020 to 2022, while aggregate GDP increased by 6.1%. Some of this strength was associated with a bullwhip effect following previous supply chain disruptions. This in turn played a role in the subsequent inventory drag of 2023, when real final sales rose by 3.4%, against a 3.1% increase in real GDP. The inventory drawdown was also the result of widely held expectations for an economic recession last year, which does not yet seem to have materialized.

Importantly, one area that did not experience destocking was autos (which account for almost 25% of the total value of retail inventories). Exhibit 1 shows the aggregate retail inventory-to-sales (I/S) ratio, as well as the aggregate less autos. Exhibit 2 shows the continued steady increase in the auto dealers' I/S ratio. Both are notably still lower than pre-pandemic levels.





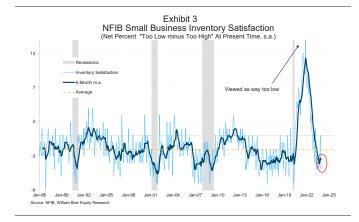
Furthermore, the most recent Beige Book reported that auto dealers have been facing rising supply due to weaker demand and supply chains now clearing—particularly for the supply of those previously missing microprocessors:

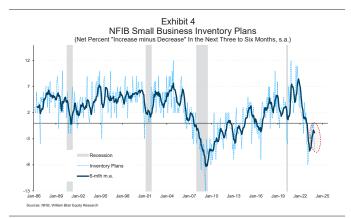
Contacts noted that dealers maintained sound profitability but that margins have begun to erode because supply constraints have eased and inventories have risen. One contact reported that dealers were lowering margins to move product off their lots. Another observed that the higher overall price of new cars—especially given the rising mix of electric vehicles—is further bifurcating the new and used car market, with lower-income house-holds unable to afford new cars.

For all other retail industries, I/S ratios were flat to down over the last year (see exhibits 9-13 on page 5), which is also the case for merchant wholesalers and manufacturers.

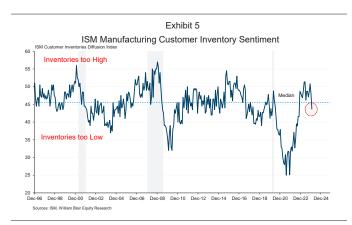
Where Are We Now?

One of the best gauges of inventory sentiment comes from NFIB's small business surveys, given that small businesses are more often than not the hod carriers for the larger manufacturers and retailers. The latest survey suggests that companies are still not satisfied with current levels and expect to pare them back further in the coming months (exhibits 3, 4).

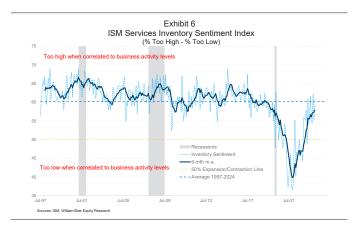




This sentiment is slightly at odds with the latest ISM readings on inventory sentiment. When asked whether customers' inventories were too high, too low, or about right, there was a sharp dip in the manufacturers' sentiment back into the too low territory (exhibit 5).



Sentiment around service sector inventories is reported as being too high when above 50%, but current readings compared to the historical average would suggest they are likely still a little low (exhibit 6).



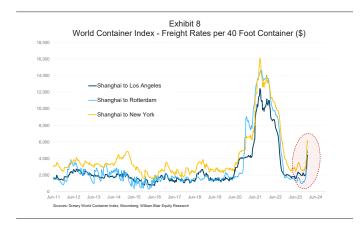
Meanwhile, the ISM Manufacturing New Orders Minus Inventory Index—historically a good leading indicator for capex investment (exhibit 7)—shows new orders expanding at a faster pace than inventories. This is also consistent with the "too low" manufacturing sentiment being driven more by optimism around future demand growth.



It is also possible that rising new orders and the too low inventory sentiment are due to companies' returning concerns about disrupted supply chains and more volatile pricing. The narrative from the recent share price performance of UPS and FedEx, as well as their recent mass layoff announcements, however, would not be consistent with expectations for stronger demand.

Further comments from the Beige Book as well as the ISM respondents would suggest that issues around the Suez and Panama canals are certainly one factor. These disruptions have significantly impacted both air and sea freight

rates, and in turn, the time it now takes for supplies to actually be received (exhibit 8).



In discussing the rising transportation costs, one construction company in the ISM survey, for example, responded:

Transportation impacts of the Suez Canal, due to unrest in the Red Sea and the issues at the Panama Canal, are impacting both costs and schedules for the transport of global goods.

Another chemical company remarked:

The start of 2024 looks good. Sales are above expectations, and costs are mostly stable. A few commodities are up in cost due to supply shortages. Many previously short commodities market positions have corrected themselves. There is a real short-term increase in the cost of international freight.

While another transportation company noted:

The commercial vehicle market appears to be retracting a bit in 2024 compared to last year. Forecast sales have decreased slightly in most product segments, with only limited growth related to customers' competitive sourcing and moves to new technology. Most supply chains, including for semiconductors, have stabilized, with the only major escalation now being transit through the Red Sea.

The upshot seems to be that other than autos, companies are indicating that after a year of destocking, inventories are now much closer to desired levels—and possibly even a little low, based on increased concerns about supply disruptions and some cautious optimism around a soft landing.

Structurally Higher Levels of Inventories?

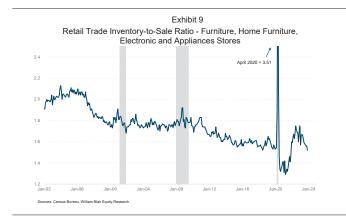
Following the pandemic, many in the corporate sector believed that they were likely to maintain higher levels of inventory going forward. Supply chains proved themselves as having been overly stretched and excessively fragile. As was widely noted, just-in-time became just-in-case. So far, however, there is only very tentative evidence that they are attempting to follow through on this.

The other factors helping to reinforce this just-in-case sentiment include rising geopolitical tensions, the increased volatility of inflation (wholesale commodity prices have notably bottomed and started to push a little higher following the Suez and Panama Canal issues), and the continuation of more extreme weather events (droughts, flooding, fires, etc.), which are again disrupting supply lines.

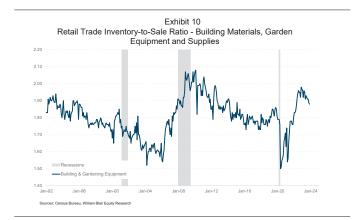
Nevertheless, it is important to note that other factors are also helping keep inventories lower. These include faster computing power, the emergence of AI, big data, and digitization, which are allowing companies to better predict demand trends and thus to keep inventory levels lean. Meanwhile, it is also quite possible that the proliferation of 3D printing will similarly necessitate holding lower levels of inventory.

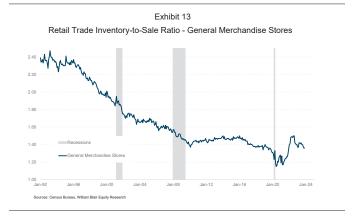
Conclusion

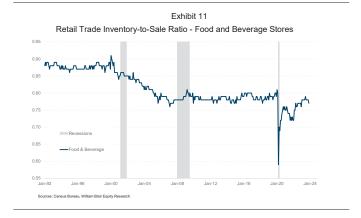
After much of 2021 and 2022 was spent ramping up inventories, 2023 was the year of destocking. It seems that current levels are now roughly around desired levels, with some companies increasingly concerned about shortages. The sharp drop in the ISM inventory index into "too low" territory would seem to be consistent with greater concerns about renewed supply chain disruptions related to the problems in the Red Sea and the Panama Canal, as opposed to optimism about accelerating demand. It is difficult to know to what extent companies are willing and able to follow through on their previously expressed desire to increase supply chain redundancies and carry high levels of inventories. Slightly faster inflation and the elevated threat of further disruptions would be consistent with such sentiment, though advances in technology also suggest such a buildup may not be necessary.









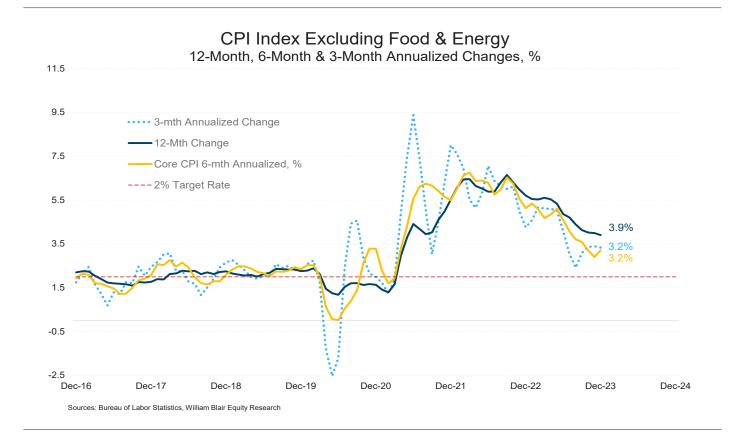


Highlights in the Week Ahead

| Date | Time (ET) | Indicator | Last | Consensus | WB Estimate | Actual |
|--------|--------------|-----------------------------|-------|-----------|----------------|--------|
| 13 Feb | 8:30 a.m. | Consumer Price Index (Jan) | 0.3% | 0.2% | 0.2% | |
| | | CPI Less-food & energy | 0.3% | 0.3% | 0.3% | |
| 15 Feb | 8:30 a.m. | Advance Retail Sales (Jan) | 0.6% | 0.1% | -0.1% | |
| | | Sales Less-autos | 0.4% | 0.3% | 0.2% | |
| 15 Feb | 9:15 a.m. | Industrial Production (Jan) | 0.1% | 0.4% | -0.2% | |
| | | Capacity Utililzation | 78.6% | 79.0% | 78.6% | |
| 16 Feb | 8:30 a.m. | Producer Price Index (Jan) | -0.1% | 0.1% | 0.1% | |
| | | PPI Less-food & energy | 0.0% | 0.1% | 0.2% | |
| 16 Feb | 8:30 a.m. | Housing Starts (Jan) | -4.3% | 0.5% | -0.5% | |
| | | Building Permits | 1.8% | 1.5% | 1.0% | |

Sources: Bloomberg, William Blair Equity Research

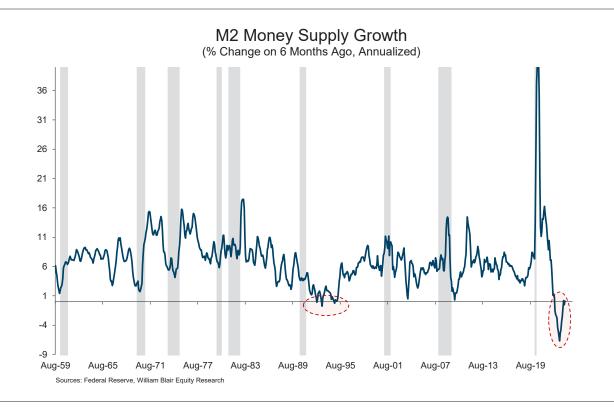
Indicator of the Week: Consumer Price Index

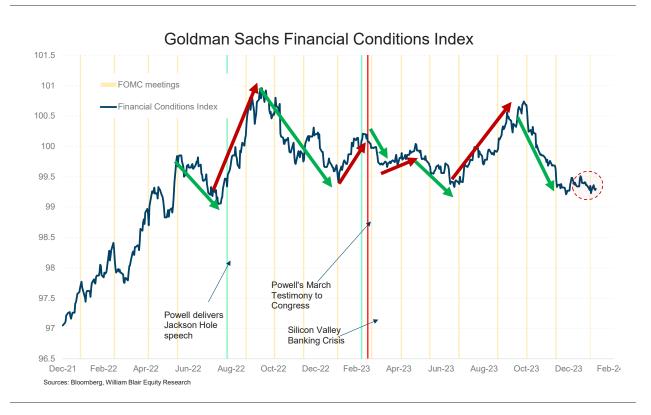


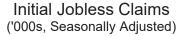
Economic Scorecard

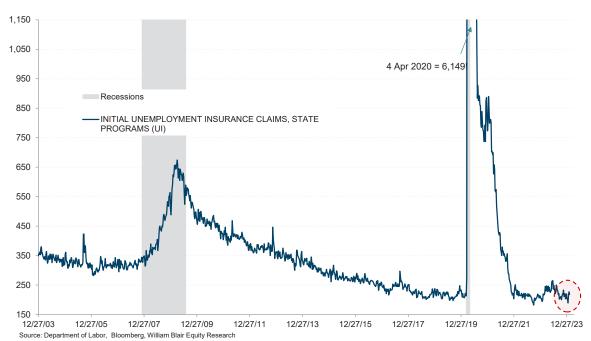
| Growth | Aug-22 | Sep-22 | Oct-22 | Nov-22 | Dec-22 | Jan-23 | Feb-23 | Mar-23 | Apr-23 | May-23 | Jun-23 | Jul-23 | Aug-23 | Sep-23 | Oct-23 | Nov-23 | Dec-23 | Jan-24 |
|---|-------------|-------------|------------|-------------|------------|-------------|------------|------------|--------|------------|------------|--------|------------|------------|--------|--------|------------|--------|
| US Leading Indicators | -1.5 | -2.1 | -3.6 | -5.1 | -6.4 | -6.1 | -7.0 | -8.0 | -8.3 | -8.2 | -8.1 | -7.8 | -7.9 | -8.1 | -8.1 | -7.7 | -7.1 | |
| US Coincident Indicators | 1.9 | 2.0 | 1.4 | 0.8 | 0.8 | 1.5 | 1.4 | 1.4 | 1.4 | 1.7 | 1.8 | 1.7 | 1.4 | 1.3 | 1.4 | 1.7 | 1.9 | |
| US Lagging Indicators | 7.4 | 7.6 | 7.3 | 7.4 | 7.4 | 6.3 | 6.1 | 5.5 | 4.9 | 3.7 | 2.9 | 2.3 | 1.8 | 1.0 | 1.1 | 1.3 | 0.6 | |
| Consumer | | | | | | | | | | | | | | | | | | |
| Total Retail Sales | 10.1 | 9 | 8.9 | 6.2 | 5.8 | 7.4 | 5.3 | 2.2 | 1.3 | 2.1 | 1.5 | 2.8 | 2.8 | 4 | 2.2 | 4.0 | 5.6 | |
| Personal Income | 3.9 | 5.1 | 4.9 | 4.6 | 4.5 | 5.8 | 5.7 | 5.8 | 5.7 | 5.6 | 5.4 | 4.8 | 4.8 | 4.6 | 4.3 | 4.6 | 4.7 | |
| Real Disposable Personal Income | -3.8 | -2.3 | -2 | -1.6 | -0.9 | 3.2 | 3.5 | 4.4 | 4.5 | 5 | 5.3 | 4.3 | 4 | 3.8 | 3.9 | 4.4 | 4.2 | |
| Real Personal Consumption | 1.8 | 1.9 | 1.4 | 0.9 | 1.3 | 2.3 | 2.3 | 1.7 | 1.6 | 1.8 | 2.1 | 2.5 | 2 | 2.1 | 1.9 | 2.7 | 3.2 | |
| Personal Saving Rate (%) | 3.2 | 3 | 3 | 3.3 | 3.4 | 4.4 | 4.7 | 5.2 | 5.2 | 5.3 | 4.8 | 4.4 | 4.4 | 3.8 | 4.1 | 4.1 | 3.7 | |
| Consumer Confidence (Conference Board)** | 103.6 | 107.8 | 102.2 | 101.4 | 109 | 106 | 103.4 | 104 | 103.7 | 102.5 | 110.1 | 114 | 108.7 | 104.3 | 99.1 | 101 | 108 | 114.8 |
| Employment | | | | | | | | | | | | | | | | | | |
| Employment Growth | 4.1 | 4.0 | 3.6 | 3.3 | 3.0 | 3.2 | 2.8 | 2.5 | 2.5 | 2.5 | 2.4 | 2.1 | 2.1 | 2.0 | 1.9 | 1.9 | 2.0 | 1.9 |
| ASA Temporary Staffing Index | 9.3 | 5.4 | 1.1 | 0.2 | 1.0 | -2.1 | -6.1 | -6.5 | -6.8 | -5.9 | -6.6 | -4.7 | -4.8 | -5.5 | -7.5 | -7.6 | -5.5 | -12.2 |
| ISM Employment Index Manufacturing* | 54.4 | 49 | 50.2 | 49.3 | 50.2 | 50 | 48.8 | 47.8 | 49.4 | 50.3 | 49.1 | 45 | 48.6 | 50.9 | 47.1 | 46.1 | 47.5 | 47.1 |
| ISM Employment Index Services* | 49.7 | 51.4 | 49.5 | 50.4 | 49.8 | 50.4 | 53.6 | 51.1 | 51.2 | 49.7 | 52.9 | 50.9 | 54.1 | 52.5 | 50.4 | 50.6 | 43.8 | 50.5 |
| Unemployment Rate, % | 3.6 | 3.5 | 3.6 | 3.6 | 3.5 | 3.4 | 3.6 | 3.5 | 3.4 | 3.7 | 3.6 | 3.5 | 3.8 | 3.8 | 3.8 | 3.7 | 3.7 | 3.7 |
| Average Hourly Earnings | 5.4 | 5.1 | 5 | 5.1 | 4.9 | 4.6 | 4.7 | 4.6 | 4.7 | 4.6 | 4.7 | 4.7 | 4.5 | 4.5 | 4.3 | 4.3 | 4.3 | 4.5 |
| Initial Jobless Claims (avg. wkly. chg. '000s) | 210 | 191 | 202 | 213 | 209 | 200 | 219 | 238 | 239 | 230 | 254 | 228 | 238 | 209 | 211 | 220 | 208 | 209 |
| Jop Openings | -7.0 | -0.3 | -7.9 | -4.3 | -5.0 | -8.0 | -14.0 | -19.0 | -12.2 | -16.0 | -16.4 | -21.6 | -6.9 | -13.9 | -15.5 | -16.9 | -19.7 | -14.6 |
| Layoff Announcements | 30.3 | 67.6 | 48.3 | 416.5 | 129.1 | 440 | 410.1 | 319.4 | 175.9 | 286.7 | 25.2 | -8.2 | 266.9 | 58.2 | 8.8 | -40.8 | -20.2 | -20 |
| lousing Market | | | | | | | | | _ | | | _ | | | | | | |
| Housing Starts | -4.5 | -6.2 | -8.9 | -16.6 | -24.1 | -19.7 | -18.9 | -19.4 | -25.2 | 2.6 | -9.2 | 5.8 | -13.3 | -7.3 | -3.9 | 6.9 | 7.6 | |
| New Home Sales | -7.5 | -23.6 | -15.1 | -24.6 | -23.4 | -19.9 | -19.1 | -9.5 | 11.1 | 11.6 | 21.3 | 34.1 | 2.5 | 23.1 | 17.2 | 5.7 | 4.4 | |
| Existing Home Sales | -20.2 | -24.0 | -28.2 | -35.2 | -34.0 | -36.9 | -23.1 | -22.1 | -23.0 | -20.4 | -18.9 | -16.6 | -15.3 | -15.6 | -14.6 | -7.3 | -6.2 | |
| Median House Price (Existing Homes) | 8.9 | 15.6 | 16.3 | 7.4 | 17 | 0.4 | 1.4 | 0.7 | -8.9 | -6.5 | -3.5 | -8.9 | 0.1 | -10.8 | -16.5 | -7.9 | -13.8 | |
| Existing Homes Inventory (Mths' supply) | 3 | 3 | 3.2 | 3.4 | 3.5 | 3.4 | 2.9 | 2.8 | 2.8 | 2.8 | 2.8 | 2.9 | 3 | 3.3 | 3.5 | 3.7 | 3.7 | |
| New Homes Inventory (Mths' supply) | 8.7 | 9.7 | 9.7 | 9.4 | 8.5 | 8.1 | 8.4 | 8.1 | 7.6 | 7.2 | 7.5 | 7.1 | 7.9 | 7.5 | 7.8 | 8.8 | 8.2 | 44 |
| NAHB Homebuilder Sentiment* | 49 | 46 | 38 | 33 | 31 | 35 | 42 | 44 | 45 | 50 | 55 | 56 | 50 | 44 | 40 | 34 | 37 | 44 |
| nflation | | | | | | | | | | | | | | | | | | |
| Consumer Price Index | 8.3 | 8.2 | 7.7 | 7.1 | 6.5 | 6.4 | 6 | 5 | 4.9 | 4 | 3 | 3.2 | 3.7 | 3.7 | 3.2 | 3.1 | 3.4 | |
| CPI Less-food & energy | 6.3 | 6.6 | 6.3 | 6 | 5.7 | 5.6 | 5.5 | 5.6 | 5.5 | 5.3 | 4.8 | 4.7 | 4.3 | 4.1 | 4 | 4 | 3.9 | |
| Producer Price Index | 8.7 | 8.5 | 8.2 | 7.4 | 6.4 | 5.7 | 4.7 | 2.7 | 2.3 | 1.1 | 0.3 2.5 | 1.1 | 1.9 2.5 | 2 | 1.2 | 0.8 | 1 0 | |
| PPI Less-food & energy PCE Price Index | 7.2 6.5 | 7.2 6.6 | 6.9 | 6.3 | 5.7 | 5 | 4.6 | 3.3 4.4 | 3.1 | 2.8 | 3.2 | 3.3 | 3.3 | 2.6 3.4 | 2.3 | 2.6 | 1.8 2.6 | |
| PCE Prices Less-food & energy | 5.2 | 5.5 | 6.3 5.3 | 5.9 5.1 | 5.4 4.9 | 5.5 4.9 | 5.2 4.8 | 4.4 | 4.4 | 4.7 | 4.3 | 4.2 | 3.7 | 3.6 | 3.4 | 3.2 | 2.0 | |
| =- | J.2 | 3.3 | 3.3 | 5.1 | 4.5 | 4.5 | 4.0 | 4.0 | 4.0 | 4.7 | 4.5 | 4.2 | 3.7 | 3.0 | 3.4 | 5.2 | 2.5 | |
| Business Activity - US | 2.4 | 4.5 | 2.4 | 4.0 | 0.0 | 4.5 | 0.0 | 0.0 | 0.4 | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | |
| Industrial Production | 3.1 | 4.5 | 3.1 | 1.9 | 0.6 | 1.5 | 0.9 | 0.2 | 0.4 | 0.1 | -0.4 | 0.1 | 0.0 | -0.2 | -0.9 | -0.6 | 1.0 | |
| New Cap Gds Orders less-aircraft & parts Business Inventories | 8.2 19.8 | 5.6 19.5 | 5 18.3 | 3.2 16.9 | 15.2 | 5.6 12.6 | 2.7 | 1.9 8.8 | 6.2 | 3.2 5.2 | 1.4 3.3 | 1.8 | 0.6 1.4 | 0.5 1 | 0.8 | 0.7 | 0.9 | |
| ISM Manufacturing PMI* | 52.8 | 50.8 | 50 | 48.9 | 48.1 | 47.4 | 47.7 | 46.5 | 47 | 46.6 | 46.4 | 46.5 | 47.6 | 48.6 | 46.9 | 46.6 | 47.1 | 49.1 |
| Markit US Manufacturing PMI* | 51.5 | 50.8 | 50.4 | 47.7 | 46.2 | 46.9 | 47.7 | 49.2 | 50.2 | 48.4 | 46.3 | 40.5 | 47.0 | 49.8 | 50 | 49.4 | 47.1 | 50.7 |
| ISM Services Index* | 55.9 | 55.7 | 54.7 | 55.2 | 49 | 54.7 | 55 | 51.2 | 52.3 | 51 | 53.6 | 52.8 | 54.1 | 53.4 | 51.9 | 52.5 | 50.5 | 53.4 |
| Markit US Services PMI* | 43.7 | 49.3 | 47.8 | 46.2 | 44.7 | 46.8 | 50.6 | 52.6 | 53.6 | 54.9 | 54.4 | 52.3 | 50.5 | 50.1 | 50.6 | 50.8 | 51.4 | 52.5 |
| | 10.7 | 10.0 | 17.0 | 10.2 | | 10.0 | 00.0 | 02.0 | 00.0 | 01.0 | 0 | 02.0 | 00.0 | 00.1 | 00.0 | 00.0 | 01.1 | 02.0 |
| Business Activity - International Germany Manufacturing PMI Markit/BME* | 49.1 | 47.8 | 45.1 | 46.2 | 47.1 | 47.3 | 46.3 | 44.7 | 44.5 | 43.2 | 40.6 | 38.8 | 39.1 | 39.6 | 40.8 | 42.6 | 43.3 | 45.5 |
| Japan Manufacturing PMI Jibun Bank* | 51.5 | 50.8 | 50.7 | 49 | 48.9 | 48.9 | 47.7 | 49.2 | 49.5 | 50.6 | 49.8 | 49.6 | 49.6 | 48.5 | 48.7 | 48.3 | 47.9 | 48 |
| Caixin China Manufacturing PMI* | 49.5 | 48.1 | 49.2 | 49.4 | 49 | 49.2 | 51.6 | 50 | 49.5 | 50.0 | 50.5 | 49.2 | 51 | 50.6 | 49.5 | 50.7 | 50.8 | 50.8 |
| China Manufacturing PMI* | 49.4 | 50.1 | 49.2 | 48 | 47 | 50.1 | 52.6 | 51.9 | 49.2 | 48.8 | 49 | 49.3 | 49.7 | 50.2 | 49.5 | 49.4 | 49 | 49.2 |
| UK Manufacturing PMI Markit/CIPS* | 47.3 | 48.4 | 46.2 | 46.5 | 45.3 | 47 | 49.3 | 47.9 | 47.8 | 47.1 | 46.5 | 45.3 | 43 | 44.3 | 44.8 | 47.2 | 46.2 | 47 |
| France Manufacturing PMI Markit* | 50.6 | 47.7 | 47.2 | 48.3 | 49.2 | 50.5 | 47.4 | 47.3 | 45.6 | 45.7 | 46 | 45.1 | 46 | 44.2 | 42.8 | 42.9 | 42.1 | 43.1 |
| Currencies*** | | | | | | | | | | | | | | | | | | |
| Euro (EUR/USD) | -14.9 | -15.4 | -14.5 | -8.2 | -5.8 | -3.3 | -5.7 | -2.1 | 4.5 | -0.4 | 4.1 | 7.6 | 7.8 | 7.9 | 7.0 | 4.6 | 3.1 | -0.4 |
| Renmimbi (USD/CNY) | 6.7 | 10.4 | 14.0 | 11.4 | 8.5 | 6.2 | 9.9 | 8.4 | 4.5 | 6.5 | 8.3 | 5.9 | 5.3 | 2.6 | 0.2 | 0.6 | 2.9 | 6.1 |
| Yen (USD/Yen) | 26.3 | 30.1 | 30.5 | 22.0 | 13.9 | 13.0 | 18.4 | 9.2 | 5.1 | 8.3 | 6.3 | 6.8 | 4.7 | 3.2 | 2.0 | 7.3 | 7.6 | 12.9 |
| Sterling (GBP/USD) | -15.5 | -17.1 | -16.2 | -9.3 | -10.7 | -8.4 | -10.4 | -6.1 | -0.1 | -1.3 | 4.3 | 5.5 | 9.0 | 9.2 | 6.0 | 4.7 | 5.4 | 3.0 |
| Canadian \$ (USD/CAD) | 4.1 | 9.1 | 10.0 | 5.0 | 7.3 | 4.7 | 7.7 | 8.1 | 5.5 | 7.3 | 2.9 | 3.1 | 2.9 | -1.8 | 1.8 | 1.1 | -2.3 | 1.0 |
| Mexican Peso (USD/MXN) | 0.3 | -2.4 | -3.7 | -10.2 | -5.0 | -8.7 | -10.6 | -9.2 | -11.9 | -10.0 | -14.9 | -17.8 | -15.4 | -13.5 | -8.9 | -9.8 | -13.0 | -8.6 |
| IS Equities | | | | | | | | | | | | | | | | | | |
| S&P 500 | -12.6 | -16.8 | -15.9 | -10.7 | -19.4 | -9.7 | -9.2 | -9.3 | 0.9 | 1.2 | 17.6 | 11.1 | 14.0 | 19.6 | 8.3 | 12.0 | 24.2 | 18.9 |
| S&P 400 Midcap | -11.7 | -16.6 | -12.9 | -4.8 | -14.5 | 0.7 | -2.3 | -6.7 | -0.4 | -4.3 | 15.6 | 8.6 | 8.8 | 13.6 | -2.7 | -0.5 | 14.4 | 3.0 |
| S&P 600 Smallcap | -11.7 | -20.0 | -13.1 | -7.4 | -17.4 | -2.5 | -5.1 | -10.4 | -5.5 | -8.9 | 7.8 | 3.4 | 3.6 | 8.1 | -9.3 | -5.9 | 13.9 | -0.1 |
| | | | | | | | | | | | | 0.4 | 0.0 | 0.1 | -0.0 | -0.0 | 10.5 | -U. I |

Other Economic Indicators

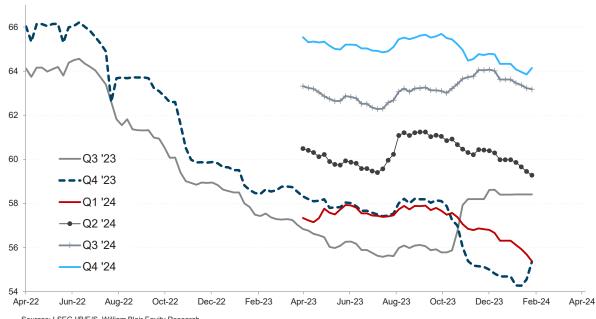






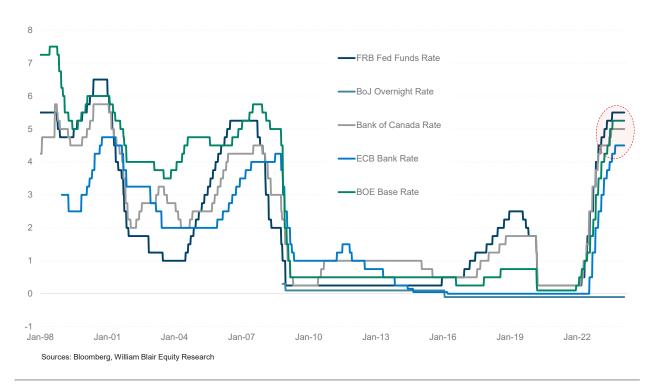


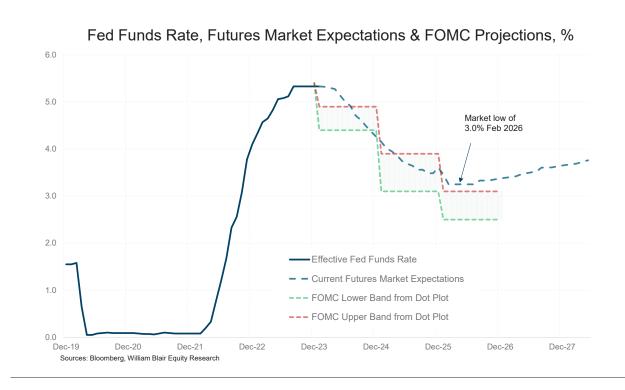
Progression of S&P 500 Bottom-Up EPS Estimates (2023-2024, \$/Shr)



Sources: LSEG I/B/E/S, William Blair Equity Research







S&P 500 Sector Performance

| Global Industry Classification System | Current Weight* 08-Feb-24 | Week Ago 01-Feb-24 | Month Ago 08-Jan-24 | Qtr-to-Date 29-Dec-23 | Year-to-Date 29-Dec-23 |
|--|------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| S&P 500 Index S&P400 MidCap Index S&P600 SmallCap Index Dow Jones Industrials Nasdaq Composite | 100.00 | 1.87 0.72 -0.45 0.54 2.81 | 4.92 1.45 -1.35 2.77 6.40 | 4.78 0.21 -3.36 2.75 5.21 | 4.78 0.21 -3.36 2.75 5.21 |
| Communication Services | 9.30 | 4.99 | 10.42 | 11.04 | 11.04 |
| Advertising | 0.07 | -3.82 | -2.86 | -1.00 | -1.00 |
| Broadcasting | 0.05 | -11.35 | -8.12 | -6.70 | -6.70 |
| Cable & Satellite | 0.47 | -14.17 | -9.19 | -9.81 | -9.81 |
| Integrated Telecommunication Services | 0.66 | -6.37 | -1.50 | 3.44 | 3.44 |
| Interactive Home Entertainment | 0.15 | 1.24 | 3.99 | 3.17 | 3.17 |
| Interactive Media & Services | 6.30 | 8.91 | 13.81 | 14.00 | 14.00 |
| Movies & Entertainment | 1.12 | 4.14 | 15.10 | 15.39 | 15.39 |
| Publishing & Printing Wireless Telecommunication Svcs | 0.03 | 4.50 | 4.84 | 5.20 | 5.20 |
| wireless felecommunication svcs | 0.44 | -0.96 | -1.52 | 0.38 | 0.38 |
| Consumer Discretionary | 10.90 | 2.97 | 3.07 | 1.27 | 1.27 |
| Apparel Retail | 0.37 | 1.56 | 6.45 | 5.06 | 5.06 |
| Apparel & Accessories & Luxury Goods | 0.18 | 3.35 | -0.79 | -3.83 | -3.83 |
| Auto Parts & Equipment | 0.07 | -4.19 | -5.51 | -10.09 | -10.09 |
| Automobile Manufacturers | 1.61 | 0.73 | -17.66 | -19.98 | -19.98 |
| Automobile Retail | 0.27 | -1.91 | 7.78 | 5.45 | 5.45 |
| Broadline Retail | 4.13 | 6.52 | 13.53 | 11.40 | 11.40 |
| Casinos & Gaming | 0.18 | 4.80 | 2.47 | 6.04 | 6.04 |
| Computer & Electronics Retail | 0.04 | 0.33 | -0.07 | -3.57 | -3.57 |
| Consumer Electronics | 0.05 | 1.08 | -0.57 | -4.84 | -4.84 |
| Distributors | 0.11 | 0.62 | 1.58 | 0.06 | 0.06 |
| Footwear | 0.29 | 1.98 | 0.14 | -4.42 | -4.42 |
| Home Furnishings | 0.02 | -0.37 | 3.65 | 5.91 | 5.91 |
| Home Improvement Retail | 1.12 | 0.77 | 3.73 | 3.35 | 3.35 |
| Homebuilding | 0.30 | -0.67 | -0.07 | 0.30 | 0.30 |
| Hotels, Resorts & Cruise Lines | 0.92 | 3.13 | 6.94 | 5.69 | 5.69 |
| Household Appliances | 0.01 | -1.09 | -9.64 | -9.51 | -9.51 |
| Leisure Products | 0.02 | 1.47 | 1.64 | -0.74 | -0.74 |
| Restaurants | 1.07 | 0.86 | 3.36 | 1.61 | 1.61 |
| Other Specialty Retail | 0.14 | 1.05 | 4.09 | 6.17 | 6.17 |
| Consumer Staples | 6.56 | -0.73 | 1.86 | 2.62 | 2.62 |
| Agricultural Products | 0.10 | -6.29 | -22.24 | -23.52 | -23.52 |
| Brewers | 0.03 | -4.52 | -3.27 | -1.55 | -1.55 |
| Hypermarkets | 2.08 | 1.87 | 7.34 | 7.33 | 7.33 |
| Distillers & Vintners | 0.14 | -3.07 | -1.77 | 0.36 | 0.36 |
| Drug Retail | 0.04 | -3.05 | -12.06 | -13.67 | -13.67 |
| Food Distributors | 0.09 | -3.69 | 4.91 | 8.46 | 8.46 |
| Food Retail | 0.08 | -2.72 | -1.15 | -0.59 | -0.59 |
| Household Products | 1.21 | -0.67 | 5.71 | 7.02 | 7.02 |
| Packaged Foods & Meats | 0.77 | -2.40 | -0.55 | 0.68 | 0.68 |
| Personal Products | 0.16 | -1.90 | -5.12 | -7.13 | -7.13 |
| Soft Drinks | 1.38 | -0.29 | 0.74 | 1.18 | 1.18 |
| Tobacco | 0.48 | -4.36 | -6.49 | -3.82 | -3.82 |
| Enorgy | 3.70 | 1 51 | 0.97 | 0.91 | 0.91 |
| Energy Integrated Oil & Gas | 1.74 | 1.51 2.49 | 2.85 | 3.35 | 3.35 |
| Oil & Gas Equipment & Services | 0.36 | -1.07 | -5.08 | -8.48 | -8.48 |
| Oil & Gas Equipment & Services Oil & Gas Exploration & Production | 0.94 | 1.39 | -1.88 | -2.88 | -2.88 |
| Oil & Gas Refining & Marketing & Transportation | 0.41 | 1.47 | 9.29 | 11.39 | 11.39 |
| Oil & Gas Storage & Transportation | 0.32 | -0.80 | -3.87 | -2.50 | -2.50 |
| 2 2. 3ao otorago de Tranoportution | | 0.00 | 0.07 | | |

| Financials | 12.37 | 0.31 | 2.36 | 3.31 | 3.31 |
|--|-------|-------|--------|--------|--------|
| Asset Management & Custody Banks | 0.86 | 0.97 | 0.53 | -1.40 | -1.40 |
| Consumer Finance | 0.57 | 2.65 | 5.96 | 7.32 | 7.32 |
| Diversified Banks | 2.78 | -0.42 | -1.40 | 0.25 | 0.25 |
| | | | | | |
| Financial Exchanges & Data | 1.12 | -1.59 | 2.69 | -0.08 | -0.08 |
| Insurance Brokers | 0.60 | 2.75 | 4.64 | 6.01 | 6.01 |
| Investment Banking & Brokerage | 0.92 | -0.14 | -5.22 | -5.22 | -5.22 |
| Life & Health Insurance | 0.38 | 3.06 | -1.99 | -0.07 | -0.07 |
| Multi-line Insurance | 0.13 | -0.01 | 1.04 | 1.39 | 1.39 |
| Multi-Sector Holdings | 1.20 | 2.86 | 7.96 | 11.44 | 11.44 |
| <u>o</u> | 0.94 | 1.15 | 8.62 | 11.45 | 11.45 |
| Property & Casualty Insurance | | | | | |
| Regional Banks | 0.29 | -1.32 | -6.57 | -4.73 | -4.73 |
| Reinsurance | 0.04 | -6.30 | -4.82 | 0.27 | 0.27 |
| Transaction & Payment Processing | 2.56 | -1.19 | 4.78 | 5.37 | 5.37 |
| | | | | | |
| Health Care | 12.70 | 1.37 | 2.56 | 5.57 | 5.57 |
| Biotechnology | 1.96 | -1.84 | -0.40 | 4.39 | 4.39 |
| Health Care Distributors | 0.33 | -1.98 | 3.73 | 6.65 | 6.65 |
| Health Care Equipment | 2.45 | 0.50 | 5.25 | 6.32 | 6.32 |
| Health Care Facilities | 0.21 | -2.62 | 7.99 | 11.87 | 11.87 |
| | | | | | |
| Health Care Services | 0.54 | 3.80 | -1.52 | 1.44 | 1.44 |
| Health Care Supplies | 0.11 | 1.80 | 2.03 | 1.62 | 1.62 |
| Life Sciences Tools & Services | 1.41 | 0.39 | 2.78 | 2.64 | 2.64 |
| Managed Health Care | 1.63 | 2.13 | -2.93 | -1.03 | -1.03 |
| Pharmaceuticals | 4.06 | 3.82 | 5.24 | 10.39 | 10.39 |
| | | | | | |
| Industrials | 8.59 | 1.71 | 4.13 | 2.48 | 2.48 |
| Aerospace & Defense | 1.54 | 0.28 | 0.42 | -2.22 | -2.22 |
| Agricultural & Farm Machinery | 0.25 | -1.99 | -3.05 | -3.51 | -3.51 |
| Air Freight & Logistics | 0.45 | 2.47 | -5.77 | -5.33 | -5.33 |
| Building Products | 0.48 | 1.08 | 4.24 | 2.99 | 2.99 |
| | | | | | |
| Construction & Engineering | 0.07 | 3.75 | 1.07 | -3.72 | -3.72 |
| Construction Machinery & Heavy Trucks | 0.64 | 4.00 | 9.15 | 8.05 | 8.05 |
| Data Processing & Outsourced Services | 0.05 | -1.30 | -0.50 | -3.28 | -3.28 |
| Diversified Support Svcs | 0.26 | 1.56 | 6.55 | 3.12 | 3.12 |
| Electrical Components & Equipment | 0.61 | 4.65 | 7.12 | 5.55 | 5.55 |
| Environmental & Facilities Services | 0.40 | 1.25 | 5.92 | 4.54 | 4.54 |
| | | | | | |
| Human Resource & Employment Services | 0.41 | 1.41 | 4.21 | 4.72 | 4.72 |
| Industrial Conglomerates | 0.76 | -0.02 | -0.90 | -2.13 | -2.13 |
| Industrial Machinery | 0.84 | 1.33 | 5.74 | 3.73 | 3.73 |
| Passenger Airlines | 0.16 | 3.16 | 1.34 | 4.64 | 4.64 |
| Railroads | 0.65 | 0.36 | 5.69 | 3.93 | 3.93 |
| Research & Consulting Svcs | 0.23 | 1.73 | 5.61 | 4.64 | 4.64 |
| Trading Companies & Distributors | 0.30 | 0.79 | 14.67 | 11.48 | 11.48 |
| Trading Companies & Distributors | 0.30 | 0.79 | 14.07 | 11.40 | 11.40 |
| Information Technology | 29.70 | 3.02 | 10.09 | 8.53 | 8.53 |
| Application Software | 2.60 | 2.00 | 9.49 | 6.62 | 6.62 |
| | | | | | |
| Communications Equipment | 0.84 | 0.82 | 3.21 | 3.91 | 3.91 |
| Electronic Components | 0.21 | 1.38 | 6.44 | 5.33 | 5.33 |
| Electronic Equipment & Instruments | 0.17 | 2.03 | 0.46 | -2.60 | -2.60 |
| Electronic Manufacturing Services | 0.14 | 1.40 | 6.59 | 3.17 | 3.17 |
| Internet Software & Services | 0.09 | 1.32 | 5.14 | 2.30 | 2.30 |
| IT Consulting & Services | 1.16 | -0.88 | 9.40 | 6.80 | 6.80 |
| | | | | | |
| Semiconductor Equipment | 0.86 | 4.10 | 11.77 | 6.25 | 6.25 |
| Semiconductors | 8.02 | 6.59 | 18.73 | 19.26 | 19.26 |
| Systems Software | 8.61 | 2.63 | 11.14 | 10.68 | 10.68 |
| Technology Distributors | 0.08 | 6.04 | 11.80 | 7.32 | 7.32 |
| Technology Hardware, Storage & Peripherals | 6.93 | 0.75 | 1.40 | -2.16 | -2.16 |
| | | | | | |
| Materials | 2.20 | -0.81 | -2.13 | -3.13 | -3.13 |
| Commodity Chemicals | 0.16 | 0.54 | -2.01 | -1.11 | -1.11 |
| Construction Materials | 0.15 | 2.70 | 6.11 | 5.17 | 5.17 |
| Copper | 0.13 | -5.13 | -9.67 | -10.45 | -10.45 |
| | | -3.15 | | | |
| Fertilizers & Agricultural Chemicals | 0.16 | | 1.42 | -0.06 | -0.06 |
| Gold | 0.09 | -6.37 | -17.12 | -19.45 | -19.45 |
| Industrial Gases | 0.57 | -2.43 | -3.48 | -3.99 | -3.99 |

| Metal & Glass Containers | 0.04 | -0.45 | 3.45 | 2.82 | 2.82 |
|--|------|-------|--------|--------|--------|
| Paper Packaging | 0.16 | 1.94 | -2.02 | -0.55 | -0.55 |
| Specialty Chemicals | 0.60 | 0.88 | -1.88 | -4.18 | -4.18 |
| Steel | 0.15 | 1.46 | 7.49 | 6.65 | 6.65 |
| Real Estate | 2.27 | -1.29 | -3.89 | -4.37 | -4.37 |
| Data Center REITs | 0.29 | 1.47 | | | 7.28 |
| | | | 7.71 | 7.28 | |
| Health Care REITs | 0.18 | -2.35 | -4.91 | -5.56 | -5.56 |
| Hotel & Resort REITs | 0.03 | 0.67 | -4.12 | 0.41 | 0.41 |
| Industrial REITs | 0.28 | 0.93 | -1.14 | -1.23 | -1.23 |
| Multi-Family Residential REITs | 0.00 | -2.59 | -5.98 | -6.16 | -6.16 |
| Office REITs | 0.07 | -2.61 | -8.91 | -7.09 | -7.09 |
| Real Estate Service | 0.14 | -2.02 | -1.88 | -6.98 | -6.98 |
| Retail REITs | 0.29 | -0.71 | -4.31 | -3.75 | -3.75 |
| Self-Storage REITs | 0.18 | -1.05 | -7.21 | -8.21 | -8.21 |
| Single-Family Residential REITs | 0.18 | -1.05 | -7.21 | -8.21 | -8.21 |
| Telecom Tower REITs | 0.37 | -3.24 | -9.64 | -9.98 | -9.98 |
| Timber REITs | 0.06 | -1.32 | -3.05 | -5.07 | -5.07 |
| Utilities | 2.04 | -4.25 | -7.80 | -5.43 | -5.43 |
| Electric Utilities | 1.35 | -4.47 | -7.68 | -5.22 | -5.22 |
| Gas Utilities | 0.04 | -2.47 | -4.98 | -2.57 | -2.57 |
| | | | | | |
| Independent Power Producers & Energy Traders | 0.02 | -5.59 | -15.05 | -15.84 | -15.84 |
| Water Utilities | 0.05 | -2.72 | -8.43 | -7.70 | -7.70 |
| Multi-Utilities | 0.57 | -3.93 | -7.89 | -5.38 | -5.38 |

 $[\]hbox{*Current Weight is market cap based, based on calculations by William Blair Intl. Ltd.}\\$

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DOW JONES: 38726.30 S&P 500: 4997.91 NASDAQ: 15793.70

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|-----------------------|---------|------------------------------|---------|--|
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| Market Perform (Hold) | 30 | Market Perform (Hold) | 3 | |
| Underperform (Sell) | 1 | Underperform (Sell) | 0 | |

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