

Industry Update
Truck Transportation



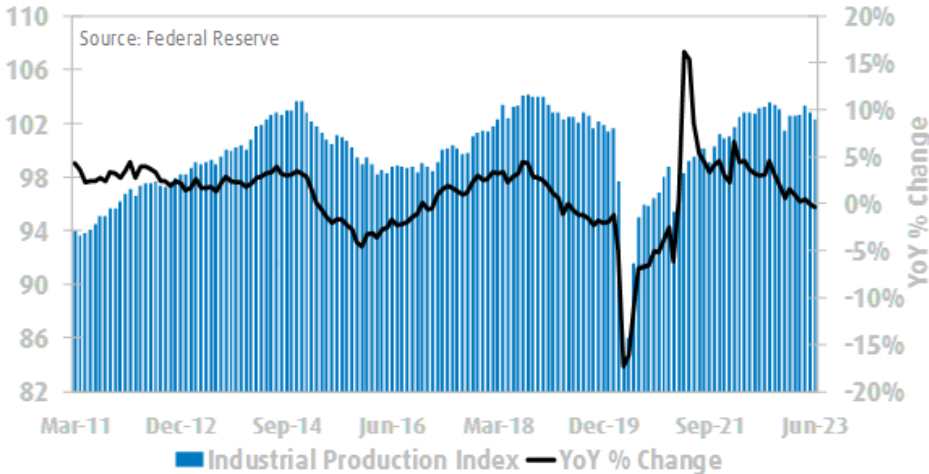
Key Developments

- **Yellow Corp.**, North America’s 3rd largest less-than-truckload carrier, ceased operations and intends to file for bankruptcy, according to the Teamsters Union representing 22,000 of Yellow’s employees.
- **JB Hunt** announced the purchase of 10 battery-electric and 3 Hydrogen fuel cell Class 8 trucks from **Nikola**. Separately, Nikola announced a new \$16.3 million government grant and has received a total of \$58.2 million in awards to support the development of seven hydrogen refueling stations in California.
- The **California Air Resources Board (CARB)** and a group of commercial vehicle manufacturers announced an agreement whereby CARB will align its nitrogen oxide (NOx) emissions regulations with the EPA’s model year 2027 regulations. CARB will also provide at least four years of lead time and three years of regulatory stability before imposing new requirements. In exchange, the truck OEMs committed to meeting CARB’s emissions regulations regardless of whether other entities challenged CARB’s authority to set those regulations.
- Be sure to check out the latest perspectives from BMO economists on the influence of Fed rate increases on the U.S. macro outlook (page 8).

Industry Fundamentals

Consensus forecasts for 2023 real GDP have moved dramatically from no growth (0%) entering the year to roughly 2.0%. However, beneath the surface of the better-than-expected macro topline, which primarily reflects strength in consumer spending for services, lackluster activity in the goods sector continues to weigh on truck freight. Recently however, there have been encouraging green shoots for the freight markets, some seasonal and some structural, including progress on inventory destocking, strength in auto sales, an upswing in ocean container pricing, and better-than-feared residential construction activity, among others. From a capacity standpoint, natural rebalancing continues with net authority revocations remaining at high levels. Further, with Diesel prices on the upswing, the rebalancing may soon accelerate as marginally viable carriers, sustained only by low fuel costs, succumb to the increased cost pressure. Still, any equation of a seasonal upturn in freight and additional carrier exits will inevitably result in tighter capacity and higher rates.

Industrial Production Index (Seasonally Adjusted)



U.S. industrial production dropped 0.5% in June, which was much weaker than expected (the consensus call was flat), while May was also revised lower to show a 0.5% drop. Factory output fell 0.3% after a downwardly revised 0.2% drop in May. With June’s result, industrial production dipped below year-ago levels for the first time since early 2021, when it was still reeling from pandemic-related restrictions. Now it’s the combination of rate hikes and tighter financial conditions weighing on the industrial sector.

The overall drop in manufacturing output dragged **capacity utilization** lower by 0.3 percentage points to 78.0%, which is 0.2 percentage points below the long-run average.

Macroeconomic Indicators

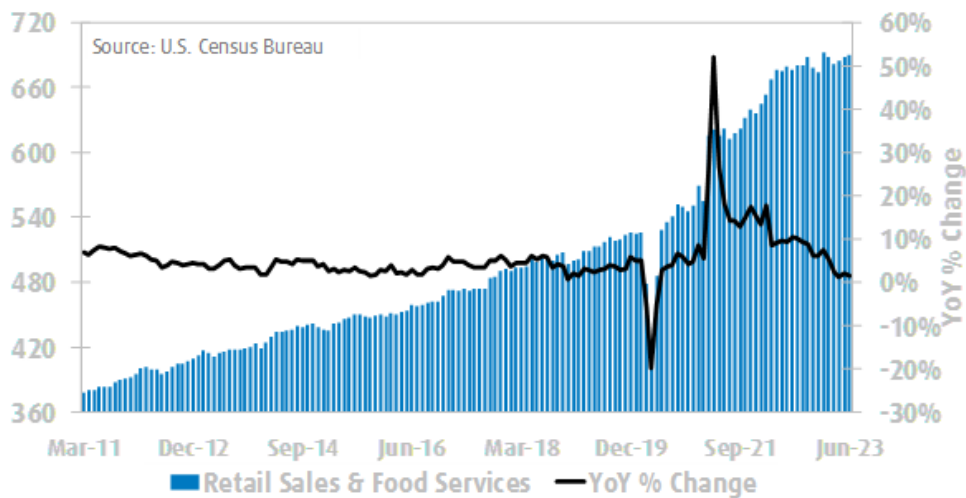
ISM Purchasing Managers Index



The **Purchasing Managers' Index (PMI)** is a sentiment measure of near-term business conditions in the manufacturing sector. During July, the index edged up 0.4 pts to 46.4 after dropping to a three-year low in June. Overall, the index has held below the 50-mark, indicating shrinking activity, for nine straight months - the longest stretch since the financial crisis. The silver lining is that although production (+1.6 pts to 48.3) and new orders (+1.7 pts to 47.3) continued to shrink, the pace of contraction is slowing.

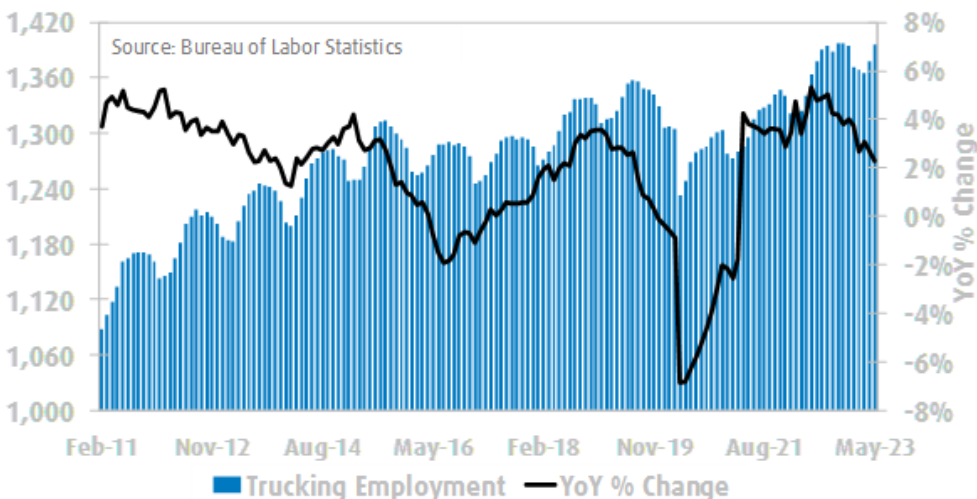
The past relationship between the PMI and GDP suggests that the July PMI corresponds to an annualized GDP growth rate of -0.8%, well below BMO Economists' current estimate of +2.0% for the third quarter.

Retail Sales & Food Services (Seasonally Adjusted \$Bn)



U.S. retail sales rose 0.2% in the month following an upwardly revised gain of 0.5% in May. The headline increase was less than expected, weighed down by a decline in gas station receipts and a surprisingly modest advance in autos (new unit sales flagged a sizable increase). Excluding cars and gasoline, sales rose 0.3%. However, reflecting solid gains in furnishings, electronics, and appliances, the control measure that feeds into personal spending jumped 0.6%, double the prior month's upwardly revised pace.

Truck Transportation Production and Non-Supervisory Employment



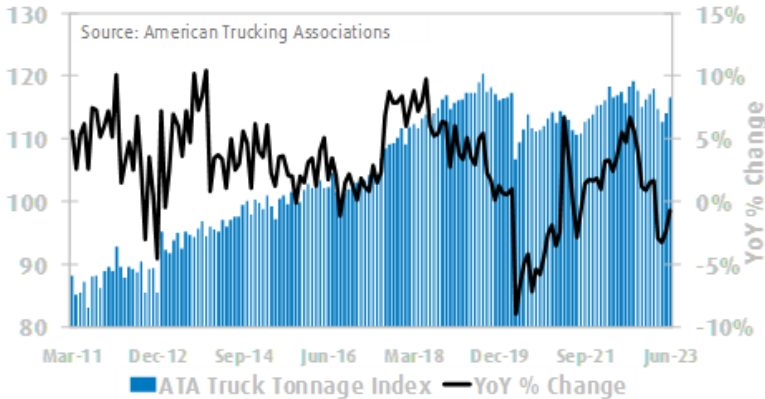
Employment in the truck transportation industry has rebounded from a seasonal pullback early in the year and, in May, was just shy of an all-time high reached last November. **Production and non-supervisory employment** during May increased for the second consecutive month and was up 2.2% (~30,200) from the recent low point in March and up +2.3% (~31,100) year-over-year.

Although absolute employment has grown, the growth rate has notably decelerated over the past year as lower equipment utilization from a sluggish freight environment has decreased the urgency for carriers to add driver capacity.

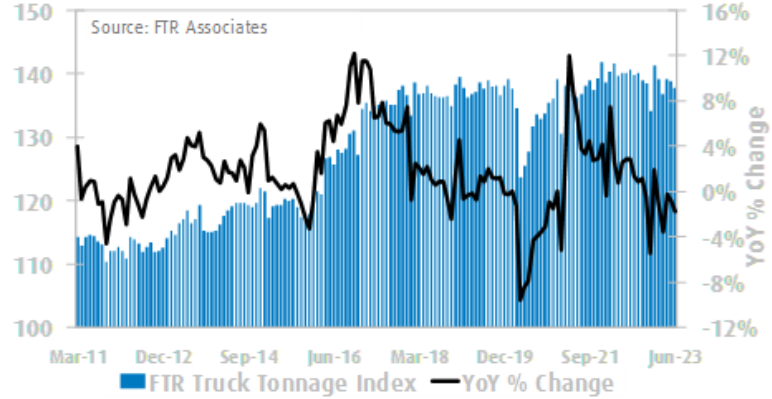
Freight Indicators

Through mid-year, the freight market is trending modestly below last year. The environment reflects a sluggish macro backdrop, mainly manifested in the residential construction sector, usual weak seasonality, and inventory de-stocking as retailers have been challenged by supply chain uncertainty and consumer spending shifting away from goods toward services over the past year. Slack equipment utilization and multi-year low freight rates are predictable byproducts of the lackluster freight environment. Still, the near-term outlook for freight could begin to brighten. Tailwinds include: improving seasonality, normalizing inventories, resilient consumer spending, firm durable goods orders, robust energy production, incomplete replenishment of auto inventories, and improving home builder sentiment. Conversely, remaining headwinds include tightening credit conditions, cooling but still elevated inflation, and weak manufacturing output.

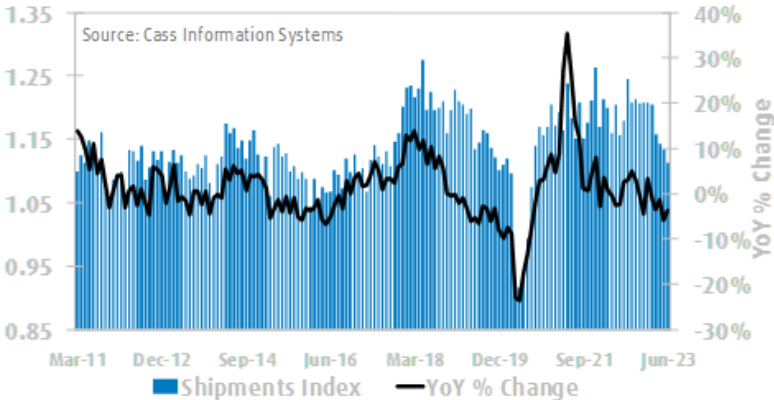
ATA Truck Tonnage Index (Seasonally Adjusted)



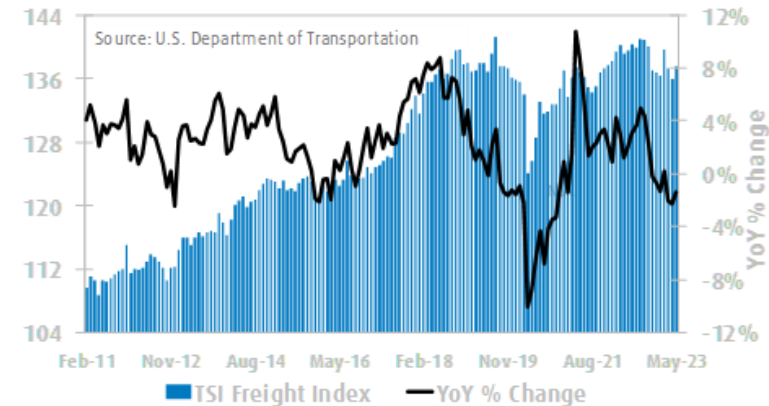
FTR Truck Tonnage Index (Seasonally Adjusted)



Cass Freight Index – Shipments (Seasonally Adjusted)



Transportation Services Index (Freight)



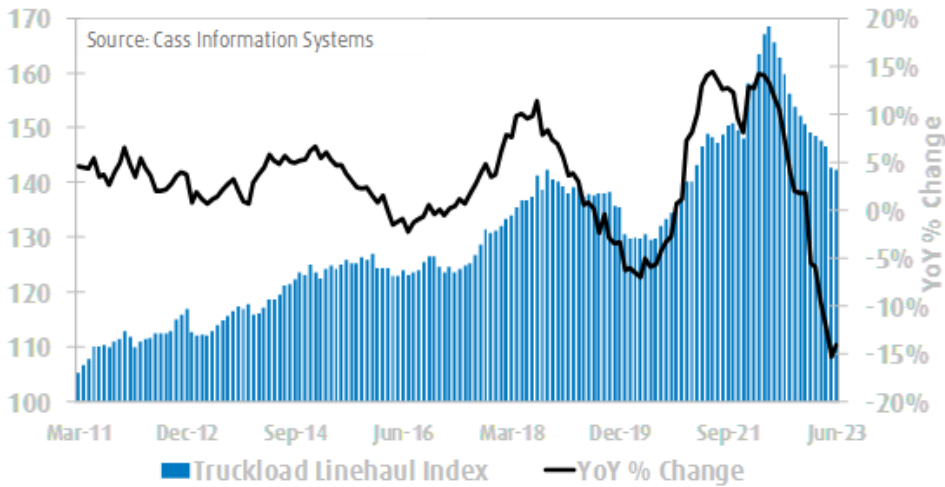
Class 8 Fleet Capacity Utilization



- The **ATA For-Hire Truck Tonnage Index** (primarily contract freight) rose 2.1% (month-over-month) during June but was nearly 1% lower than a year earlier.
- The **FTR Truck Tonnage Index** has been choppy at a high level while contracting year-over-year in seven of eight months through June.
- The **Cass Freight Shipment Index** (all modes) has declined (year-over-year) for five consecutive months through June.
- The **TSI Freight Index** has contracted (year-over-year) during six of the prior seven months through May.
- The **FTR Class 8 Capacity Utilization Index** has retreated to a near 3-year low but is essentially in line with its long-term average.

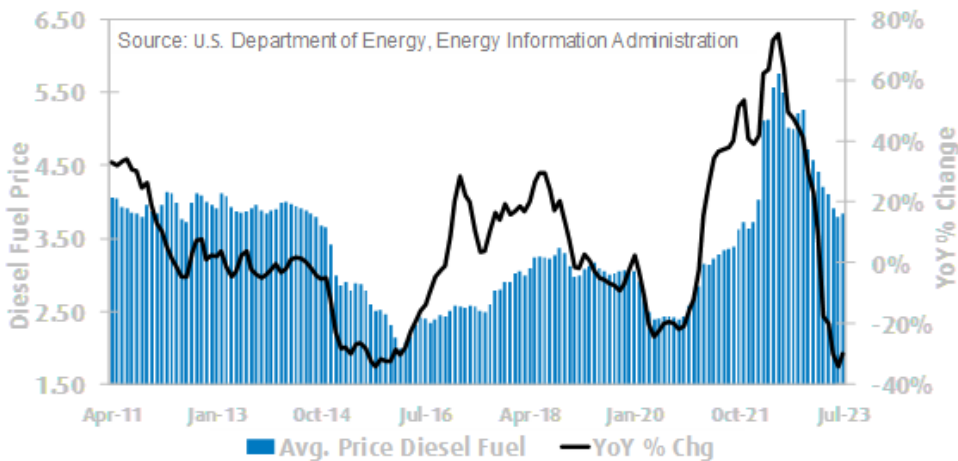
Revenue And Expense Indicators

Cass Truckload Linehaul Index



The **Cass Truckload Linehaul Index**, which reached an all-time high a year ago, reflects a mix of base rate pricing (excluding fuel and other surcharges) in the dry van contract and spot freight markets. Due to the periodic nature of the contract pricing cycle, there is typically a five or six-month lag from when the contract market reflects earlier trends in spot freight pricing. With dry van spot rates flat since April, the worst of the nearly relentless downward pressure on contract rates may be in the rearview.

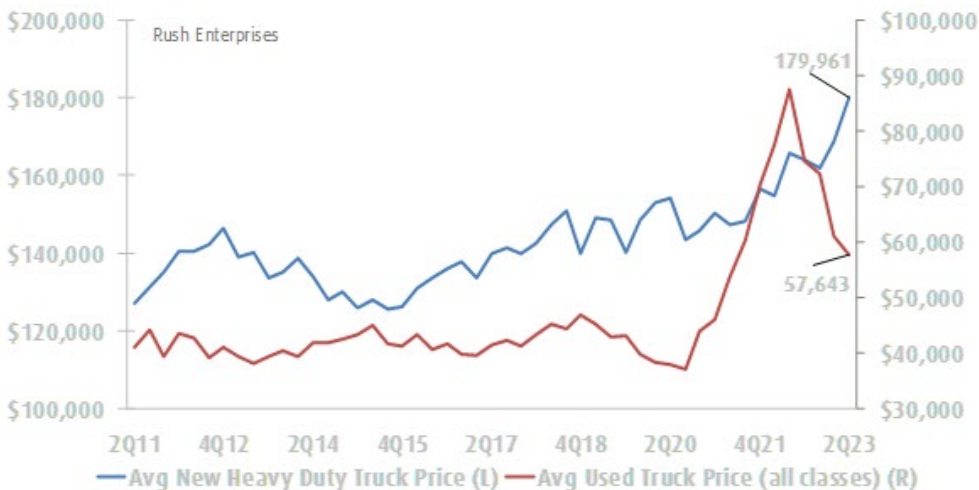
On-Highway Diesel Fuel Price (Monthly Average \$/Gallon)



Since the invasion of Ukraine, **Diesel** fuel prices have been on a high-altitude roller-coaster. Over the past year, however, mirroring a sharp decline in WTI crude prices, the national average weekly Diesel price of \$3.90/gallon in late July had declined \$1.91 (-33%) from an all-time high of \$5.81 last June.

According to the most recent forecast from the U.S. Energy Information Administration (EIA), WTI crude and Diesel prices will experience modest volatility in both directions through the remainder of the summer and fall before finishing the year near current levels.

Average New Heavy Duty and Used Truck (All Types) Prices (\$)

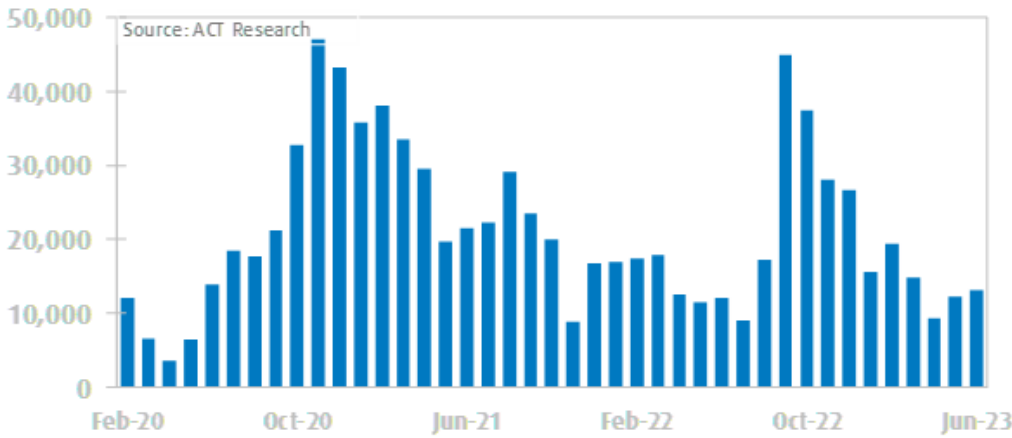


With an improved but still somewhat constrained supply chain coupled with ongoing strong demand from large fleets, the **average price of new heavy-duty trucks** sold by Rush Enterprises during the 2nd quarter reached a new high. Heavy-duty ASPs increased by \$11,185 (+6.6%) from the 1st quarter and \$14,116 (+8.5%) from the year-earlier quarter.

Used truck prices continue to depreciate as inventories increase from trade-ins and financially stressed operators rationalize capacity. The **average price of all used trucks** sold by Rush Enterprises during the 2nd quarter declined 5.4% from the 1st quarter and 34.1% from the year-earlier quarter. Rush has taken a strategically defensive position by holding below-average used truck inventories and expects the depreciation rate to continue to moderate during the 3rd quarter.

Truck and Trailer Orders

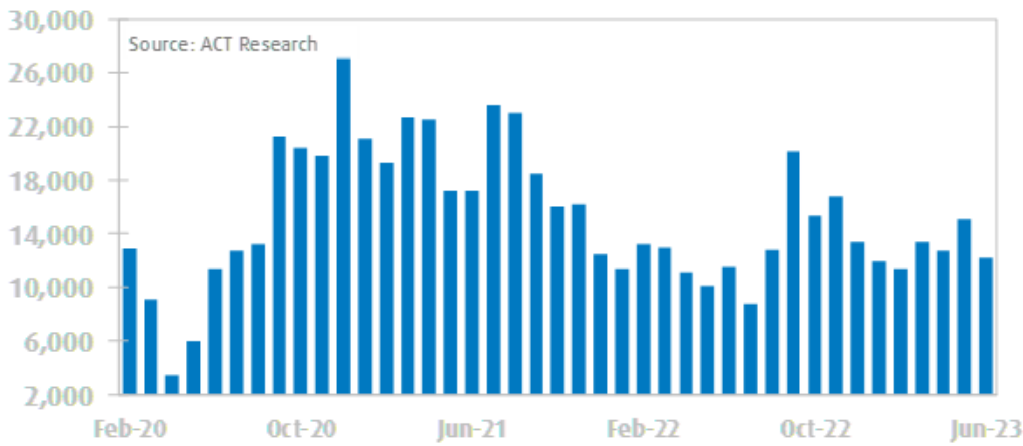
U.S. Class 8 Net Truck Orders



As expected, **U.S. Class 8 net truck** orders experienced typical seasonal weakness during the first half of the year, with much of the demand for 2023 build slots already booked and 2024 slots yet to be opened.

Net truck orders bottomed in April and have since drifted higher through June. Altogether orders during the 2nd quarter were down 30% from the 1st quarter and 4% lower than the year-earlier quarter. Based on prior seasonal trends and next year's build slots opening over the next few months, the near-term order pace will likely gradually drift higher. That said, given expectations of an equipment cycle reset next year and difficult comparisons, declines in year-over-year orders during the 2nd half of the year would not be surprising.

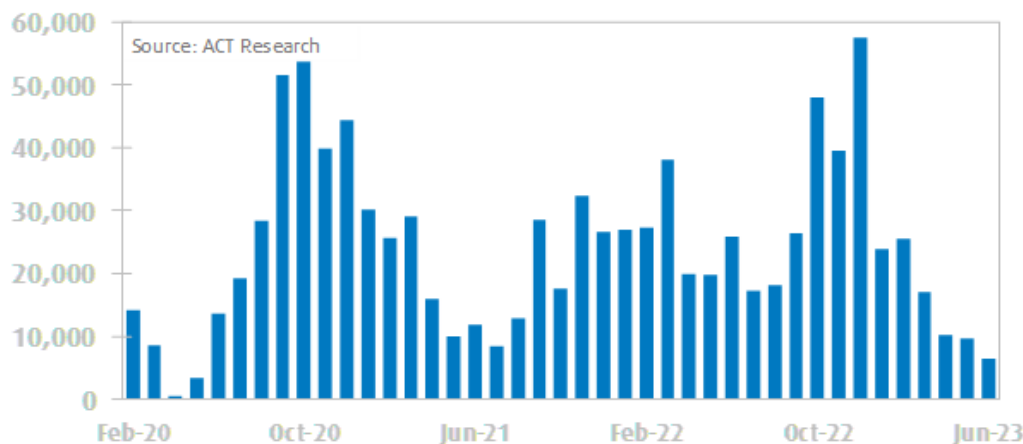
U.S. Class 5-7 Net Truck Orders



Medium-duty orders surged during the fall of last year as OEMs opened more build slots. More recently, orders have settled into a lower range as pent-up demand for build slots begins to wane, and the headwind of slowing macro trends such as residential construction activity takes a toll.

Overall orders during the 1st half of the year were up 9.2% from a year ago but were down 12.0% compared to the 2nd half of last year. Importantly, trailing 6-month cancellations remain relatively benign, averaging 1.6% of backlog and well below the 2.6% pre-pandemic average. The longer-term view remains stable, featuring the usual support of diverse end markets, the secular trend toward shorter hauls, and the durable tailwinds of e-commerce and last-mile delivery.

U.S. Net Trailer Orders

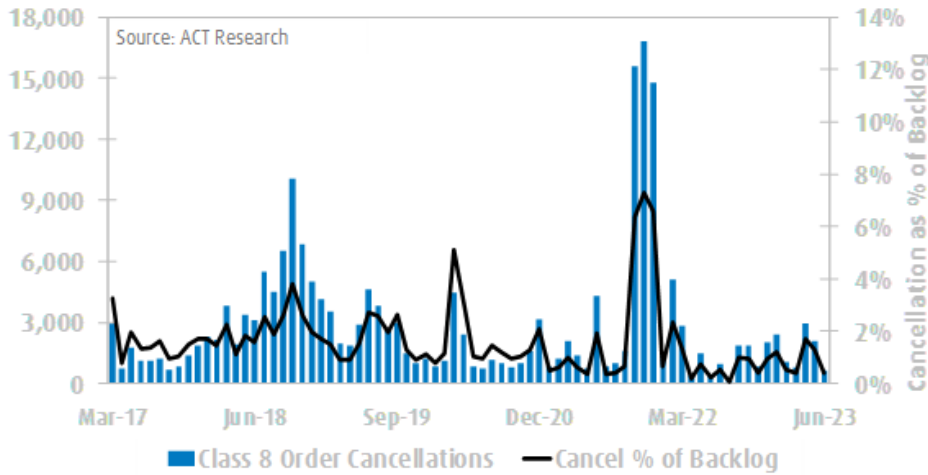


Similar to the pattern for heavy-duty power equipment, albeit with signature pronounced volatility, **orders for trailers** have seen a significant drop-off from a ferocious finish to last year. And given typical spring/summer seasonality, orders will likely remain subdued into the fall.

During the 2nd quarter, orders fell 60.7% from the 1st quarter and 60.0% from the year-ago quarter. Moreover, the elevated monthly cancellation rate of 3.2% during the 2nd quarter deserves some attention, given the contrast to the long-run pre-Covid average of 1.9% and the near historically low cancellation rate for heavy-duty power equipment.

Other Equipment Indicators

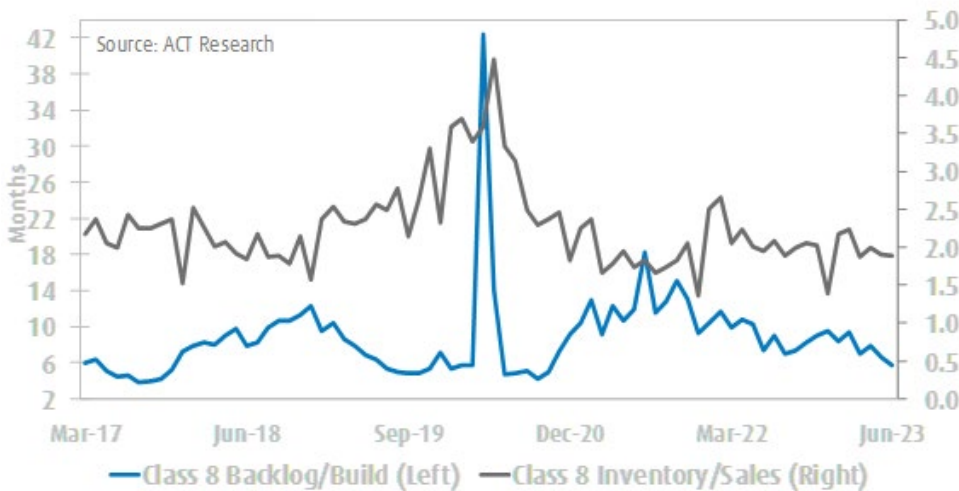
U.S. Class 8 Order Cancellations



Despite the seasonal decline in orders during the 1st half of the year, carrier appetite for capacity appears intact given a trailing 6-month average monthly cancellation rate (as % of backlog) of 0.9% compared to the pre-pandemic 2.3% long-run average.

That said, given stress on cash flows in the spot market, sustained pressure on contract rates, and a sluggish freight market, the rate of cancellations is not likely to remain so far below the long-run average. Still, following several years of limited availability and despite a dwindling backlog, most fleets remain reluctant to relinquish their place in line.

U.S. Class 8 Backlog/Build vs. Inventory/Sales



A typical seasonal deceleration in orders during the 1st half of the year combined with a dramatic increase in production has put significant downward pressure on wait times for new class 8 trucks. Specifically, the **heavy-duty backlog-to-build** ratio has been driven to the lowest level since October 2020 and, at the end of June, was slightly below the long-run pre-pandemic average of six months.

With the improvement in builds met with steady demand, the **heavy-duty inventory-to-sales** ratio during June retreated to slightly below the long-term average range of 2-2 ½ months.

U.S. Class 8 Retail Sales vs Builds

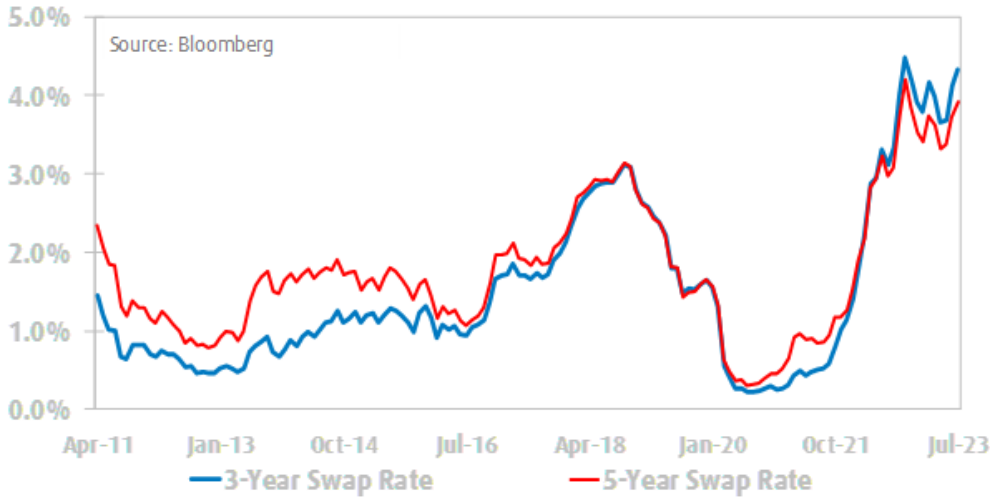


Including a sharp early calendar downturn during January, the well above replacement pace of **U.S. Class 8 unit retail sales** (276.6k annualized during the 1st half and 282.5k over the past twelve months through June) is a clear sign that OEMs have made significant progress with their supply chains while also demonstrating that plenty of carriers have not lost their appetite for capacity.

Class 8 production has improved significantly from a monthly average of 18,000 units in 2021 to 22,000 during 2022 and, more recently, an average of 24,100 during the 1st half of 2023.

Other Business Indicators

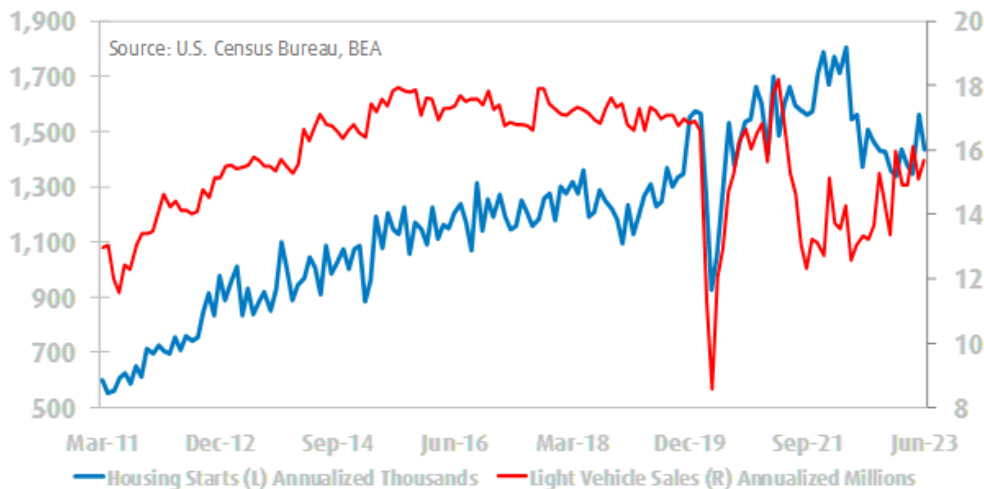
Interest Rates: 3 & 5 Year Interest Rate Swap Pricing



Interest rate swaps are derivative instruments commonly used by financial institutions to mitigate interest rate risk on a loan portfolio. The pricing of interest rate swaps (swap rates) mirrors expectations of interest rates' future direction.

After a brief shift lower early in the year, rates have again reversed course and shifted higher primarily due to expectations of further Fed tightening. At the same time, bank sector turmoil has faded into the rearview. Likewise, the futures markets reflect expectations of a peak in the terminal Fed Funds rate. As of late July, BMO's economists were on board with the consensus that the Fed Funds rate has likely peaked and that a rate cut will probably not materialize until the 2nd quarter of 2024.

U.S. Housing Starts & Light Vehicle Sales (Seasonally Adjusted)



U.S. **housing starts** and permits weakened in June, albeit compared to a surprisingly strong surge during May. Nonetheless, despite stubbornly high prices and elevated mortgage rates, continued improvement in homebuilder sentiment suggests that further downside in residential construction may be limited.

Given improvements in component availability and likewise production, inventories of new autos have improved significantly. Despite higher financing costs that have likely dampened at least some of the pandemic-induced pent-up demand, annualized **U.S. sales of light vehicles** of 15.7 million during June were up 20.2% from a year ago, albeit down 8.9% from June 2019, the Summer before the pandemic.

U.S. Business Inventories/Sales (Seasonally Adjusted)



The **total business inventories-to-sales ratio** bottomed at an all-time low at the end of 2021 but has now recovered to the pre-pandemic long-term average. A closer look reveals that manufacturing (higher) and general merchandise inventories (lower) have progressed toward normalization. Inventories of motor vehicles and parts have also made progress toward replenishment but remain somewhat below historical norms.

“Voice of the BMO Economics Team”

With macro conditions outperforming most economists' expectations but with the lag of financial tightening not yet fully reckoned with, we thought checking in on the BMO Economics Team's latest perspective on the Fed and the future outlook for the U.S. economy would be helpful. For more: <https://economics.bmo.com/en/>

U.S. Economy: How Much Progress Has The Fed Made?

Sal Guatieri, Senior Economist and Director July 28th, 2023

“We’re at least close to where we think our destination is... and it only makes common sense to move... at a careful pace” — Federal Reserve Chair Powell in testimony to Senate Banking Committee, June 22, 2023

The Fed raised policy rates this week but confirmed it will likely maintain a slower pace of tightening. The latter reflects a view that previous rate increases—the largest and fastest since policy-rate targets were adopted in the 1980s—may be sufficient to restore price stability, and acknowledges that some headway has already been made toward reaching the inflation goal. **This note assesses the scope of the Fed’s progress by comparing changes in economic conditions between current and past tightening cycles.**

The fed funds rate rose five percentage points in the first 15 months of the current tightening cycle starting in March 2022. (Note that this period excludes the July rate hike, as a full set of economic data exists only to June.) As far back as the mid-1950s, the only cycle to see a faster rate of increase was in the early 1970s when the Fed was wrestling with an oil price shock. Adjusted for inflation, real policy rates have risen faster in the current cycle than in all others, though it helped that lift-off started from the most deeply negative levels on record.

The current tightening cycle appears less aggressive when considering rate levels rather than changes. The real rate of around 1% is more than two percentage points below the average level of past cycles. However, the neutral real rate—the rate consistent with long-run stability in growth and inflation—has fallen over time. Most Fed officials peg it at around 0.5% currently, compared with a long-run average of around 3% since 1961. As a result, the difference between real and neutral rates is somewhat higher today than the norm at this point in past cycles. **Based on interest rates, the Fed would appear to be ahead of the game.**

Turning to inflation, **the core rate has fallen over one percentage point since March 2022, more than in most earlier cycles.** In fact, it’s rare for core inflation to fall in the first fifteen months of a tightening cycle, so the current decline is meaningful. However, this progress partly reflects the reversal of some temporary factors, such as rising resource prices and supply chain disruptions, that helped spike inflation to four-decade highs last year. Long-run **inflation expectations** have also performed better than usual, though they are not yet aligned with price stability. Meantime, **average hourly earnings** have slowed the most in the current cycle. In all, the Fed appears to have made **decent progress in reducing inflation and calming a couple of key drivers.** This could reflect the aggressive pace of rate hikes, or perhaps their effects impacting the economy faster than usual.

Making further progress on inflation will likely require a weaker economy and looser labor market. There is some evidence that the Fed has made headway here. Monthly **real GDP** data suggest the economy, though still expanding at a moderate rate, has slowed more than the average of past cycles. **Employment** growth has also decelerated more than in all earlier cycles, though it started at a high rate due to stimulative policies and a reopening economy. Although the **unemployment rate** hasn’t risen in the past 15 months, at least it hasn’t fallen as in most other cycles. The labor market is often the last sector to feel the brunt of rate hikes, as companies are initially reluctant to lay off workers. Even two years after the start of tightening, the jobless rate was higher on just two occasions. In fact, after the Fed began raising rates in 2004, the jobless rate fell for three years, and it took another year (and the Great Recession) for it to return to former levels. While there’s more wood to chop, the Fed has at least **prevented worker shortages from worsening in the current cycle.**

“Voice of the BMO Economics Team” Continued

U.S. Economy: How Much Progress Has The Fed Made (cont.)

One area where the **Fed has made little headway, however, is financial conditions.** Tighter conditions usually work in tandem with higher interest rates to cool the economy. But, the Chicago Fed’s national index shows little change since March 2022, bucking the historical tendency to tighten. This is largely due to this year’s strong rally in equity markets, with the S&P 500 index unchanged from 15 months ago compared with big declines in many earlier cycles. At least the Fed has received some help from a cooler housing market, with home prices decelerating the most of all cycles, though they started from frothy levels and have recently turned higher. Also helping is that lending conditions appear to have tightened more than in other cycles dating back to the 1990s, partly due to earlier stress among some regional banks. **Still, relatively loose financial conditions will put the onus on policy rates to do the heavy lifting.**

Does the relative progress the Fed has made to date in easing inflation pressures mean that price stability can be restored without the need for a painful downturn? **Possibly, though it would be premature to declare mission accomplished.** First, part of the progress simply reflects the low bar the Fed set for itself by falling so far behind the curve. In fact, the starting point for economic conditions in the current cycle is so unique that comparisons to prior cycles might not be fully apt. Second, while moving in the right direction, current growth in the economy, employment and wages is likely still inconsistent with price stability. And third, unlike past cycles, monetary policy is bucking against several buffers today, such as excess savings, pent-up demand, and expansionary fiscal policy. This means rates may need to rise further or stay high for longer to finish the job.

But progress is progress, and the Fed’s aggressive tightening cycle appears to be paying dividends in calming inflation pressures. **The relative headway compared with past cycles suggests the latest rate hike could be the last, and that a soft landing might be more than a Powell pipe dream.**



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