

Logistics & Supply Chain Market Update

Industry Consulting Team | Q3 2022

U.S. Economic Backdrop

- US GDP contracted 0.6% in Q2 (Fig. 1), a second straight quarterly decline – meeting a common definition of recession. However, much of the U.S. economy remains strong with unemployment at just 3.7%, wages rising, and consumer and business spending resilient in the face of heightened uncertainty.
- Inflation is starting to show signs of rolling over as a broad base of commodities have now moved well off their recent peaks. CPI and PCE data (Fig. 2) show sequential declines in headline and core inflation as higher interest rates filter through the economy. Prices could remain volatile though, especially at the headline level, as energy supply is tight and the war in Ukraine will continue to pressure global supplies of oil and natural gas.
- Inventory-to-sales ratio (Fig. 3), a key measure of economic and freight demand activity, remains well below normal. Despite the inventory build in big-box retail, many other categories need rebuilding from prior shortages. The auto sector for example still suffers from too little supply while the average age of vehicles on U.S. roads is now over 12 years. U.S. dealer lots combined for over 3MM total vehicles pre-pandemic, compared to just 1.09MM currently. Even in the troubled retail market, Walmart and Target have quickly reduced obsolete pandemic goods that bloated inventories last quarter as they accelerate a shift to more consumer essentials.

Freight Demand

- Freight volumes rose modestly in July as the transition from pandemic goods spending to more services continues to rebalance. Cass freight volumes (Fig.5) rose 0.4% y/y in July following the 2.3% decline in June. The Cass Expenditures Index, which measures the cost of transport across all modes, fell 3.6% sequentially from June to July but was still up over 28% y/y – almost a third of which is attributed to fuel increases.
- Pricing across the freight complex reflects the excess inflation during the pandemic is starting to ease. Spot dry-van trucking rates are down 30% since their peak in February. However, much of the decline is likely from a shift of spot market freight moving into the contract market, where rates are only down mid-single digits from their peak earlier in the year, as shippers look to secure more capacity going into peak season. It's expected that contract rates could moderate more if the economy continues to soften, but the floor in the next cycle will be higher than previous ones as drivers' wages are up ~ 20% from 2019 and fleets have become more disciplined in pricing in a cost-plus approach given the evolution of a higher fixed expense base over the last several years.
- Truck Tonnage (Fig. 6) rose a revised 7.9% in June y/y and increased 5.1% y/y in July. ATA's Truck Tonnage index is heavily skewed towards contract freight, so the increases likely capture the aforementioned trend of freight moving into the contract market. We've also underscored that as global industrial supply chains heal and infrastructure spending continues to rise, we are likely to see an accelerated push in volumes and tonnage in those sectors that could help to offset the continued normalization back to services in the consumer economy.
- New federal incentives for manufacturing, combined with rising risks abroad, are starting to feed industrial expansion in the U.S. As mentioned in our prior release, geopolitical unrest in Europe and the Taiwan Strait have added to global supply chain constraints already fractured by the pandemic. Higher tariffs, and now three federal bills aimed at varying aspects of infrastructure are all contributing to higher ROIs associated with reshoring. The WSJ recently noted that the U.S. is slated to reshore nearly 350,000 jobs this year – the highest on record and more than 50 times the 6,000 jobs reshored in 2010.

Figure 1



Figure 2

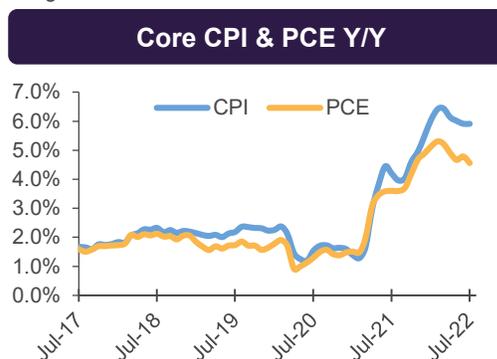
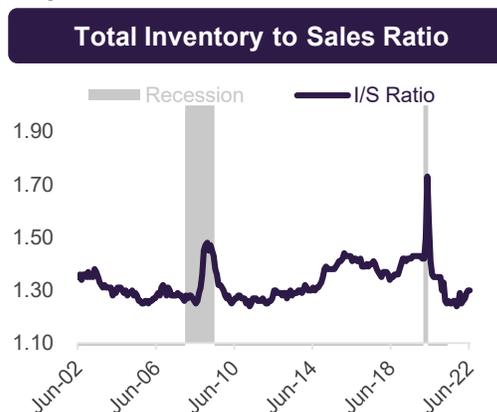


Figure 3



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Ocean Rates and Port Congestion Ease

- Ocean rates (Fig. 4) from Asia to the U.S. continued to fall from their peak but are still significantly above pre-pandemic levels.
- Asia to the U.S. West Coast container rate benchmarks fell to \$6,521 per 40-foot container in August, about a 1/3 off the peak hit last fall as port congestion on the West Coast moderates. However, rates remain about 4X higher than the same period in 2019.
- Asia to the U.S. East Coast container benchmarks were down to \$9,710 in August, less than half of where they stood during last September's record high and still 3.5X pre-pandemic levels in the same period.
- The backup of ships in San Pedro Bay, waiting to get into the ports of L.A. and Long Beach, has reduced to 16 container ships in August from the record of 109 in January of this year as shippers started to divert more cargo to the U.S. East coast.

Supply Chains Stretched by Severe Weather

- Severe drought and record heat across the Northern Hemisphere are leading to another round of supply chain disruptions. A persistently long La Niña event in the Pacific, aligned with rising global temperatures broadly, are contributing factors. Supply chain impacts include factory shutdowns in China, shipping delays in Europe and reduced agricultural output in the U.S. The Yangtze River, a major source of power in China, reached its lowest level on record in August - reducing hydropower and leading to widespread power shortages. As a result, China announced cuts to industrial power in the heavy manufacturing province of Sichuan, impacting production at Apple, Tesla, Volkswagen, Foxconn and Toyota just to name a few.
- In Europe, drought conditions affected supply lines on the Rhine River where ships normally carry 300MM tons of cargo a year. Laden cargo loads per ship were less than a fifth of normal capacity on the river in August as depths reached 5-7 feet, compared to 20 feet during normal conditions. As loads get lighter to navigate shallower drafts, ship and barge congestion increased on Western Europe's most important inland waterway, causing severe delays for shippers as it takes more ships to carry the same level of cargo.
- In the U.S., the Bureau of Reclamation declared a "Tier 2 Shortage" for the Colorado River impacting downstream allocations starting in 2023. This step directly curtails water in Arizona, Nevada and Mexico by 21% and has significant downstream effects across a wide array of agriculture products that could pressure prices even further for consumers. Already, farmers are expected to lose more than 40% of the total cotton crop this year due to drought and severe heat. The Colorado River is the primary water source for 40MM people across 7 states in the West although nearly 80% is used to irrigate 15% of U.S. farmland, including 90% of U.S. winter vegetables.
- Climate change is expected to be a persistent source of supply chain disruption going forward. Managing episodic risks have always been a critical component of the value-add brought by third party logistics providers (3PLs). Increasingly many 3PLs service offerings have broadened to include managing once occasional extreme climate events that are now routinely disrupting supply chains. As a result, 3PLs should benefit as outsourcing trends accelerate, and shippers look to tech-enabled service providers that are nimbler at navigating disruption and leveraging multiple modes of transportation at a lower cost.

Figure 4

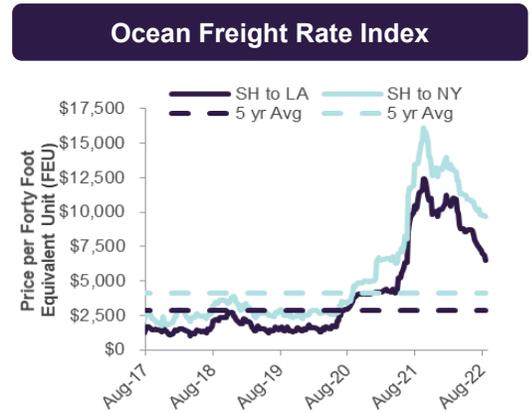


Figure 5

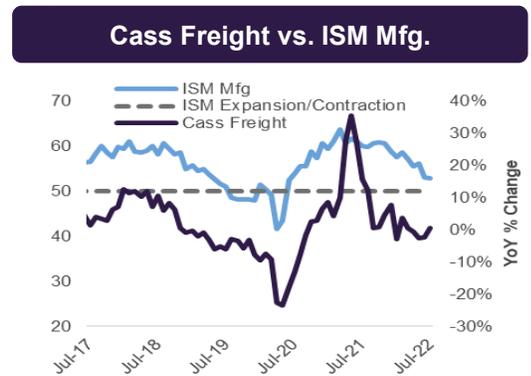


Figure 6

