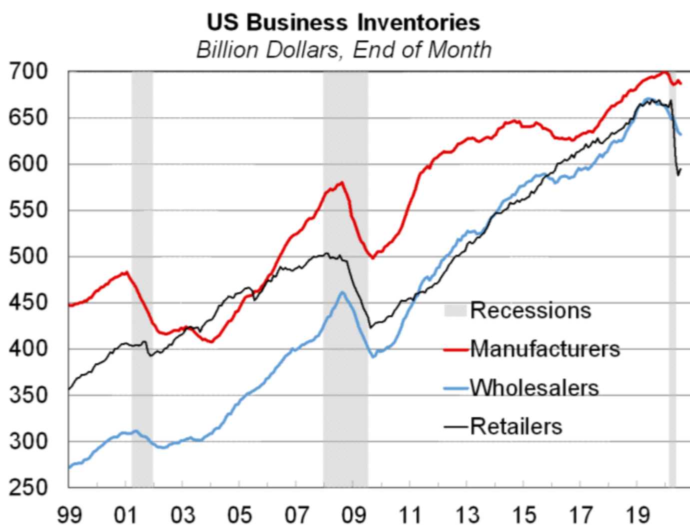
Current Economic Conditions

Robert C. Fry, Jr., Ph.D. September 18, 2020

RESTOCKING WILL SUPPORT GROWTH IN MANUFACTURING & CONSTRUCTION

Even before the COVID-19 pandemic reached America, it had already affected the U.S. economy by restricting the flow of goods, particularly from China. Once the pandemic arrived, much of the economy, even manufacturing facilities that could have been operated safely, was shut down by government mandates. Then demand for goods (but not so much for services) rebounded more quickly than businesses expected, partly due to earlier-than-expected reopenings in some states but mostly because consumers shifted spending from services to goods, especially goods that can be delivered. The net result of interrupted supply chains, the shutdown of production, and a quicker-than-expected rebound in demand has been a major drawdown of inventories. Replenishing depleted inventories will continue to boost manufacturing production and home construction as the economy recovers from recession.

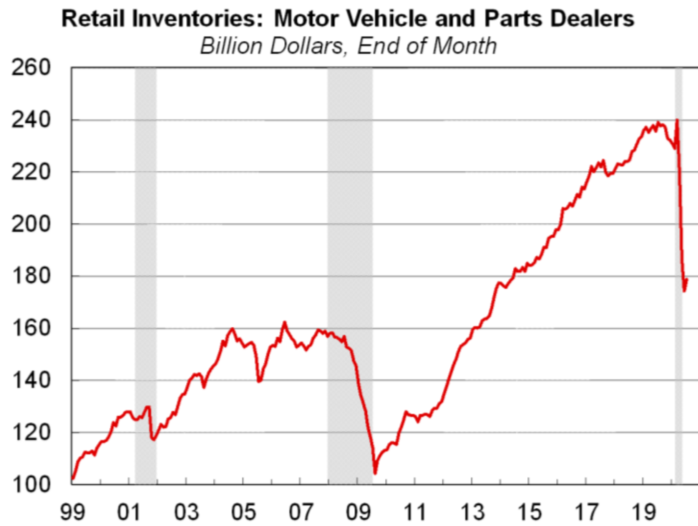
The change in private inventories is a component of Gross Domestic Product, part of business investment. The real (inflation-adjusted) value of private inventories, measured in dollars of 2012 purchasing power, shrank by $286.4 billion (at an annual rate) in the second quarter after shrinking $80.9 billion in the first quarter. The second-quarter drawdown was the largest ever. The shrinkage of private inventories subtracted 3.5 percentage points from real GDP growth in the second quarter. This was the biggest hit to GDP growth from inventories since 1988 and came after a 1.3 percentage point hit to GDP growth in the first quarter. Mathematically, because the change in inventories is a component of GDP, it is the **change in the change** in inventories that contributes to GDP **growth**. Consequently, inventories are likely to contribute to GDP growth in the third quarter even though most forecasters, including myself, expect a further drawdown in inventories, albeit a smaller drawdown than in the second quarter.



Other broad measures of inventories also show a big drawdown this year, especially at the wholesale and retail levels. Given the shift from retail stores to online sales, which probably won't be fully reversed when the pandemic ends, a reduction in retail inventories is appropriate, and a quick and complete rebuilding should not be expected. But the shift to online sales and delivery have likely left the level of wholesale inventories far below what is appropriate; those inventories need to be rebuilt. Purchasing managers report that manufacturers' inventories are contracting and that customers' inventories are too low. Unless consumer spending on goods turns back down, rebuilding inventories will require increased production of goods by factories and farms. Industrial production in U.S. manufacturing rose for a fourth straight month in August, by 1.0%, but remains well below pre-recession levels, except for computers and electronics, motor vehicles, and pharmaceuticals.

Depleted inventories of cars and houses for sale are especially noteworthy. Even though motor vehicle sales plummeted in March and April, a near total shutdown in vehicle production for two months

left dealers with few new cars to sell. Some resorted to parking cars diagonally on their lots to make it look like they had more cars than they really did. Auto production, while off slightly from July to August on a seasonally adjusted basis, will have to remain strong to restock the lots.



The desire of many to escape cities for single-family homes in the suburbs and exurbs, at the same time that many homeowners are still reluctant to let potential buyers tour their homes, left the inventory of existing single-family homes for sale down 22.2% year-over-year in July. The lack of existing homes for sale is boosting demand for new houses. That has already lifted single-family housing starts, which are almost back to the cyclical peak reached last December. Single-family building permits, the most important number in the monthly residential construction report, rose to a 13-year high in August, suggesting continued strength in starts. But new home construction and home improvements are being limited by labor shortages, not only in construction *per se* but also up and down the building materials supply chain, and higher costs for materials. A contractor, from whom I've been awaiting an estimate for three months because he has been awaiting an estimate from a supplier, says that "it is an unprecedented time in terms of work load." Increased spending on home improvement has also increased demand for furniture and appliances, leaving those inventories depleted.

Note that I have not referred to the inventory/sales ratio, usually measured in months. Because sales fluctuate more than inventories, the inventory/sales ratio tells you more about the level of sales than about the level of inventories. While the ratio of inventories to **future** sales is relevant, albeit difficult to calculate, the ratio of inventories to **current** sales is a misleading metric, especially when sales are at a peak or trough. Companies that set a target inventory/sales ratio will find themselves with insufficient inventories when a recovery begins and will lose sales and market share as a result. (They will also overbuild inventories when sales are unsustainably strong at a cyclical peak.)

During my corporate career, while helping a business team find leading indicators for sales of their products, I was asked, "If you could have one piece of data you don't have now, what would it be?" I quickly responded, "My customers' inventories." Then, after a moment's reflection, I said, "No. My customers' customers' inventories." Knowing what is happening with inventories down your supply chain can alert you to impending increases or declines in orders and thereby allow you to avoid lost sales due to insufficient inventories or the costs of holding excessive inventories. And knowing what's happening with inventories up your supply chain can warn you to find alternative sources of supply if inventories are too lean (or allow you to negotiate a good deal if they're excessive).

Inventories are one of the most cyclical (and pro-cyclical) segments of GDP. They swing widely during business cycles and magnify the amplitude of those cycles. They are also hard to forecast because fluctuations in inventories are a mix of intentional and unintended builds and drawdowns. An intended build or drawdown can be thwarted by demand that is stronger or weaker than expected. My third-quarter forecast is for real GDP growth at a 28% annual rate, but growth could be stronger if inventory rebuilding begins sooner than I expect. I expect inventory rebuilding to take a while, and it will continue to support recovery in manufacturing and construction even as the recovery in consumer spending decelerates. That deceleration, which is already showing up in monthly data on retail sales – up a "disappointing" 0.6% in August – will show up in a big downshift in GDP growth in the fourth quarter. But unless consumer spending turns back down or all the inventory restocking involves imported goods, rebuilding inventories will keep manufacturing and home construction growing in coming quarters.

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