

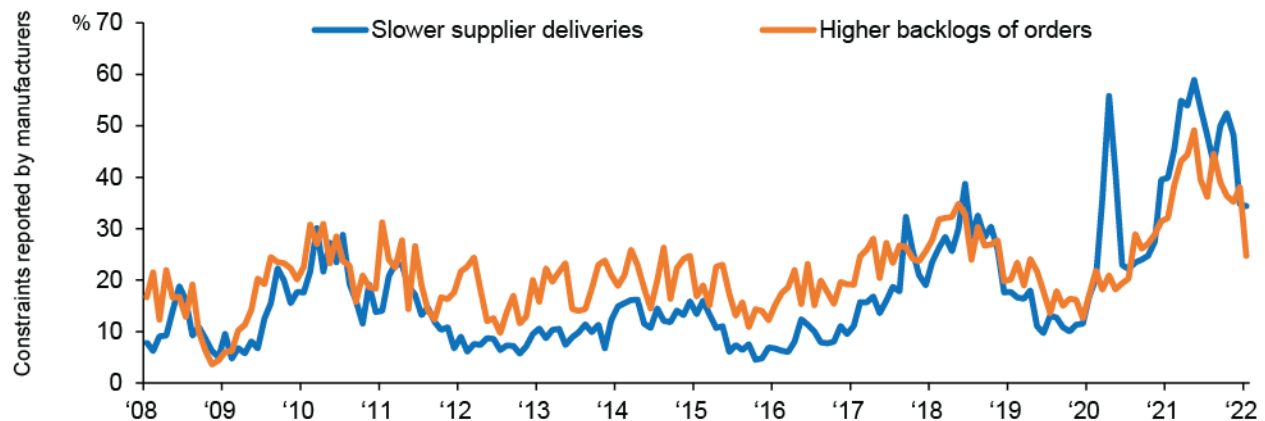
ON POINT

ECONOMIC AND POLICY INSIGHT FROM THE OCC

Supply Chain Stress Pressures Small Firm Profitability

U.S. manufacturers, wholesalers, and retailers coped with stressed supply chains during the past year. Manufacturers encountered difficulty obtaining materials needed for production. In May 2021, at the peak of the slower supplier delivery times, more manufacturer purchasing managers reported slower delivery times than at any point since the oil shocks of the 1970s (figure 1). Adding to operational challenges, the cost of raw materials and other inputs has risen significantly. Production constraints contributed to shortages, notably for automakers, but the dramatic increase in U.S. demand for goods drove most of the supply chain stress. Downstream, wholesalers and retailers faced challenges maintaining inventories, with retailers' inventories relative to sales falling to historic lows.

Figure 1: Manufacturing Purchasing Managers Report More Supplier Delays, Order Backlogs



Sources: ISM Manufacturing Purchasing Managers Index, Haver Analytics

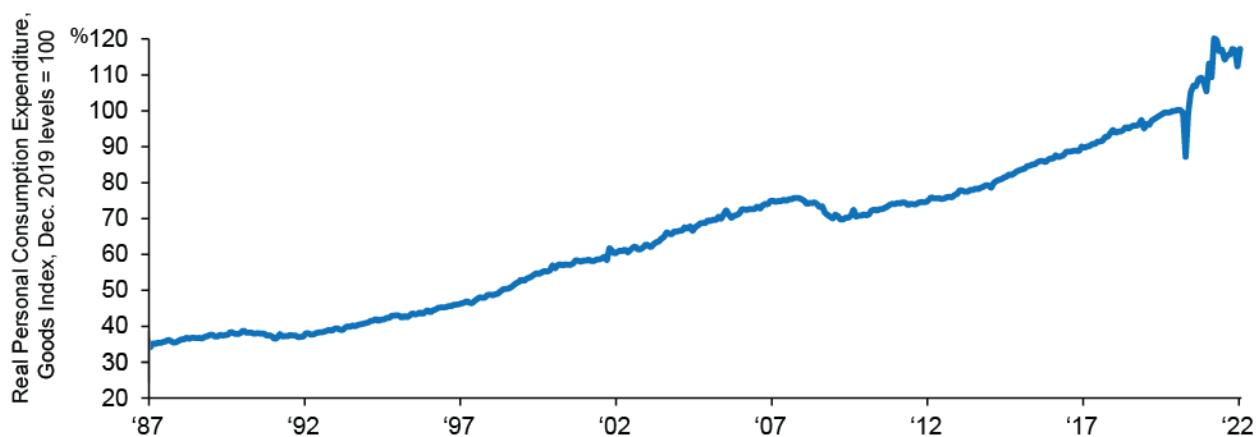
¹ Oxford Economics. (2021). "When Will Supply Chain Pain Recede, and What Lessons Can Businesses Learn?"

Supply Chains Unable to Meet Spike in Demand for Goods

The pandemic and relief efforts led to a surge in demand for goods as spending on services became less attractive during the pandemic. Consumers responded by saving more but also by purchasing more goods, especially durable goods, than normal (figure 2). Purchases of goods increased by 17.8 percent in 2021. Much of this demand represents discretionary purchases for home improvements or entertainment. Sales volumes at furniture, electronics, and appliance stores in 2021 were 15 percent greater than in 2019. Likewise, sales volumes at sporting goods, hobby, book and music stores—a small category capturing many discretionary goods—rose more than 40 percent beyond its pre-pandemic level by the second quarter of 2021.

The sharp rotation toward purchasing goods placed significant pressure on production. Most U.S. manufacturers managed to return to pre-pandemic levels of capacity by mid-2021. Some supply chain issues, however, restricted flexibility, impeding further increases in production capacity. For example, supply chain pressures were already building when the delta variant of COVID-19 forced authorities to institute lockdowns in some East Asian trading partners limiting outbound shipments. These disruptions were compounded by imbalances in the normal direction of global goods trade volumes creating unexpected bottlenecks in global and domestic logistics networks.

Figure 2: Recovery of Goods Production Not Enough to Meet Historic Surge in Demand



Smaller Firms Face Greater Pressures on Profitability

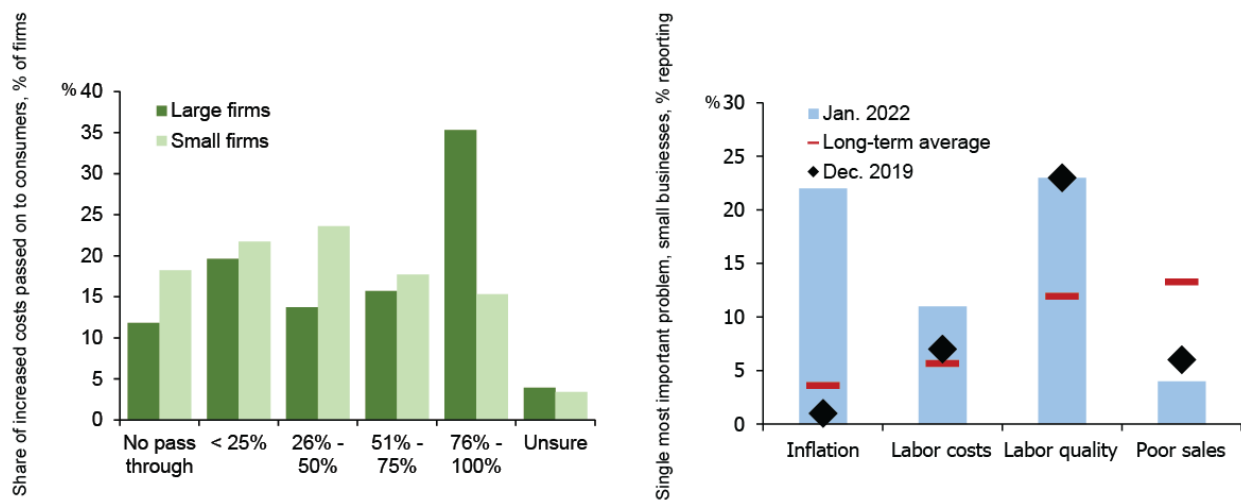
Healthy consumer demand offers firms ample opportunities to increase sales. At the same time, the costs to meet those sales have increased. Since January 2021, producer prices for manufacturers rose by 15 percent in the United States. Many of the measures implemented to allay supply chain problems are more expensive than existing practices. One such measure is transporting goods by air rather than using sea transport. Firms also compete for a limited supply of workers and raw materials, driving expenses up.

To maintain profit margins, firms attempt to pass along these higher costs to consumers. Healthy gross profit margins economy-wide are evidence that most firms are able to pass rising production costs on to consumers. At the peak of supply chain pressures in the second and third quarters of 2021, U.S. gross profit margins rose to levels not seen since the early 1950s. Profit margins increased significantly at manufacturers, wholesalers, and retailers. These data, however, also indicate profit margins may be under pressure in the motor vehicle sector, as auto parts suppliers struggle due to production cuts by large automakers.

While profits are up overall, there have been some industries that fared better than others. According to an S&P global survey of industry analysts,² the current operating conditions of strong demand, supply chain issues, and cost pressures, are viewed as very unfavorable in only 1 percent of global sectors. Analysts reported a very favorable environment in 9 percent of sectors. Those businesses operating at key bottlenecks, including lumbermills, shipping firms, and semiconductor manufacturers have taken advantage of pricing power and posted record profits.

The firms most negatively affected by the current environment are small firms, which lack both the pricing power and flexibility of larger firms. As shown in figure 3, left chart, the share of U.S. firms passing at least three-quarters of the input cost increase along to customers is much higher at large firms (35.3 percent) than small firms (15.3 percent).³ Small firms also are reporting historically high levels of concern around inflation trends, influencing input costs, as well as getting adequate labor inputs and keeping labor costs under control in a tight labor market (see figure 3, right chart). Unlike their larger peers, small firms are more likely to absorb supplier and labor cost increases by reducing margins and profitability. Small firms are also less able to take mitigating measures, such as diversifying supply chains, switching suppliers, or discontinuing affected products. Even with these limitations, small firms also see benefits from strong demand, with the share of businesses citing poor sales as their top business problem falling to the lowest level in 40 years.⁴

Figure 3: Cost Increases Create Greater Challenges for Small Firms



Spending on goods is expected to wane over the next year, which should ease burdens on supply chains but also reduce pricing power and profit margins. Should supply chain issues persist while demand for goods eases, these smaller firms are more likely than larger firms to have their profit margins compress further.

² S&P. (2021). [“Supply Chain Strains and Rising Costs Will Pressure Profitability in 2022.”](#)

³ [The CFO Survey](#), Duke University, Atlanta Fed, Richmond Fed, fourth quarter 2021

⁴ National Federation of Independent Business, [Small Business Optimism Index](#), January 2022.

The Point?

The global supply chain disruption has lessened as firms adjusted, but smaller businesses are likely to face more pressures on profitability than larger firms.