SUPPLY CHAIN

The Risk Impact of COVID-19 on Supply Chains

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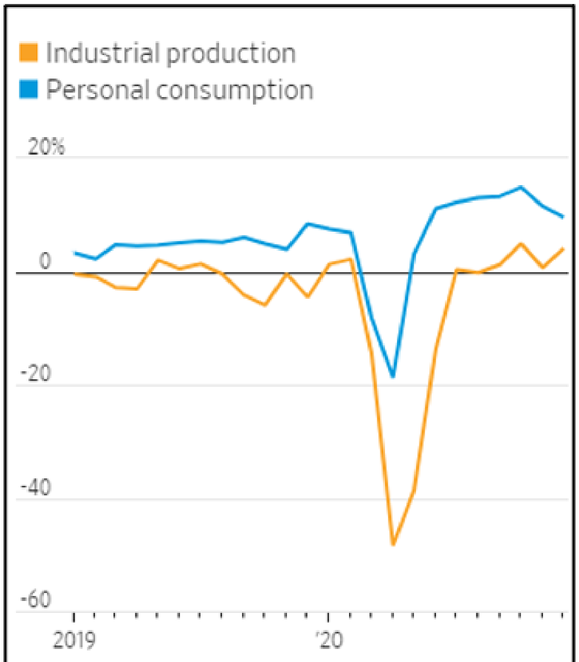
Our previous article outlined how different companies are implementing more rigorous internal processes to manage Supply Chain Risk but with varying degrees of success. These changes are primarily driven by the global sourcing and supply challenges, including COVID-19, Anti Free Trade Efforts, Climate Change, and a push for Sustainable Supply. The one thing that has become abundantly clear in working with our clients is that some of their current Supply Chain Risk Management processes are not robust enough to meet many of today's challenges and likely future potential challenges.

The just-in-time inventory system (JIT) was a popular trend in the last decades with obvious cash, service and obsolescence benefits. In integrated global economies, this strategy has left many companies open to supply and demand shocks. Companies employed this inventory strategy to increase efficiency, decrease waste by receiving goods only as they needed them for the production process, and reduce inventory costs. JIT has always required producers to forecast demand accurately, requiring sophisticated logistics to manage global supply chains.The COVID-19 pandemic has exposed the shortcomings of the (JIT) management strategy that aligns raw-material orders from suppliers directly with production schedules.

In response to the pandemic, U.S. manufacturers enacted their standard 'recession' playbook, shutting down factories and warehouses, cutting costs and preserving cash. The unemployment rate shot up in the early months of the COVID-19 crisis in the U.S., and payroll numbers showed that more than 20 million jobs were lost in April 2020 alone.

Because of the atypical nature of this recession, companies were unprepared for the sharp rebound in consumer demand that followed almost immediately and continues today, clearly shown when tracking Industrial production against personal consumption.



Note: Durable goods; seasonally adjusted; inflation adjusted
Sources: Federal Reserve (industrial production); Bureau of Economic Analysis (consumption)

As consumer demand improved, suppliers tried to respond by increasing production to restock inventory and assembly plants.

Today, we are still feeling the repercussions of this whiplash effect across many industries as the system is struggling with the acceleration of demand and a static supply chain.

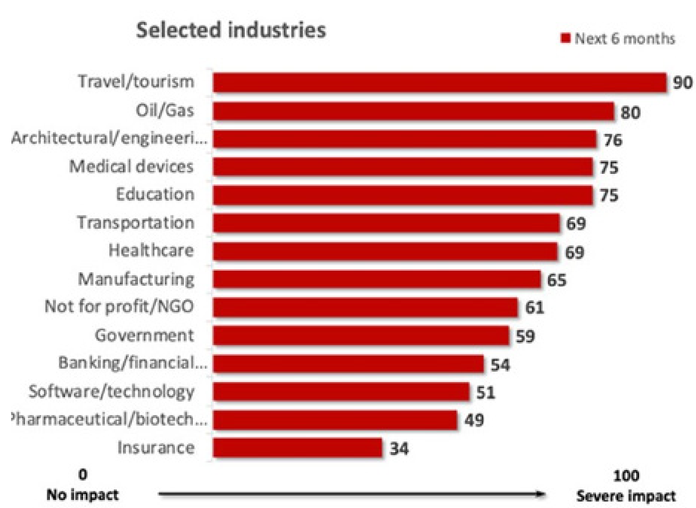
IMPACT OF COVID-19

The impact of the pandemic on businesses around the globe has been well documented. According to the Institute of Supply Management, 75% of businesses have had to reduce revenue targets due to supply chain disruptions. Early in the pandemic, we quickly experienced the critical impact of supply and demand shocks created by COVID-19, especially with products and raw materials from overseas.

Everything from global travel, clothes, medicines, and processed foods was severely impacted. In addition, we saw the immediate effect of getting adequate personal protective equipment (PPE) to healthcare workers and replenishing supermarket products.

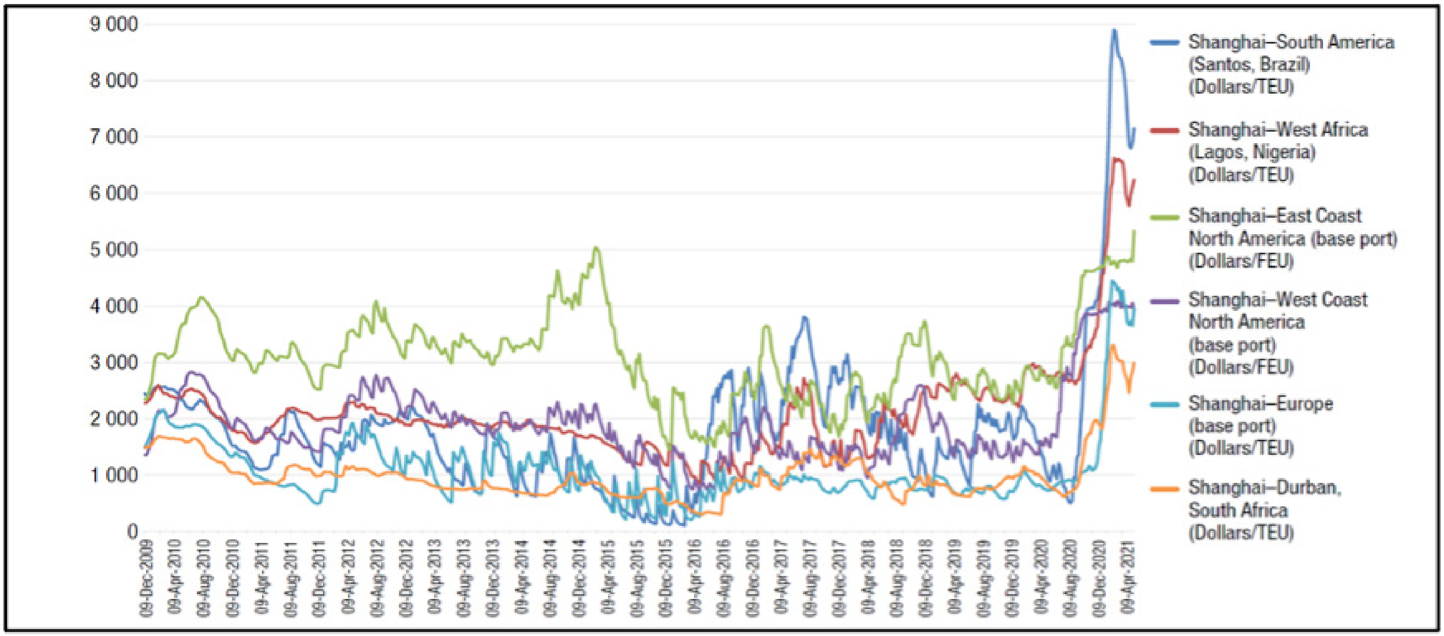
One of the more visible shortages attributed to the pandemic was that of toilet paper. Toilet paper became a coveted item early on as many people had to shelter-in-place. Since grocery stores only keep several weeks' worth of demand, the sudden increase in demand fueled by panic buying – quickly depleted stocks. In response, factories rapidly retooled to meet short-term demand with the likely outcome of a significant over-supply for a short period, meaning that companies are carrying excessive inventory and incurring additional change-over/retooling costs. A scenario that companies do not necessarily want to repeat.

As shown in the graph below, some of the other industries impacted most by the pandemic based on a survey by IMD conducted in early 2020 were: airlines, casinos & gaming, leisure facilities, auto parts & equipment, and oil & gas drilling. Most of these companies saw demand due to grounding of air traffic, border closures, and shelter-in-place policies.



Share of respondents answering Very high or Extremely severe, %

Source: Survey by IMD



Abbreviations: FEU, 40-foot equivalent unit; TEU, 20-foot equivalent unit. Source: UNCTAD calculations, based on data from Clarksons Research, Shipping Intelligence Network Time Series.

The automotive industry has faced new challenges with delivering fewer new cars resulting in many factory closures. What was shaping up to be a banner year with U.S. sales of 16 to 17 million units during 2020, but instead seeing daily activity almost grind to a halt resulting in massive layoffs throughout the industry. We saw this most recently with Ford announcing that they were going to halt production of F-150, Bronco Sport and other vehicles, with significant potential impact on 2021 Earnings.

Again, like Ford, it is likely that other producers did not have sufficient flexibility in their supply chains to manage such events to minimize the negative impact on both the business and the economy, with supply chains scattered across the globe.

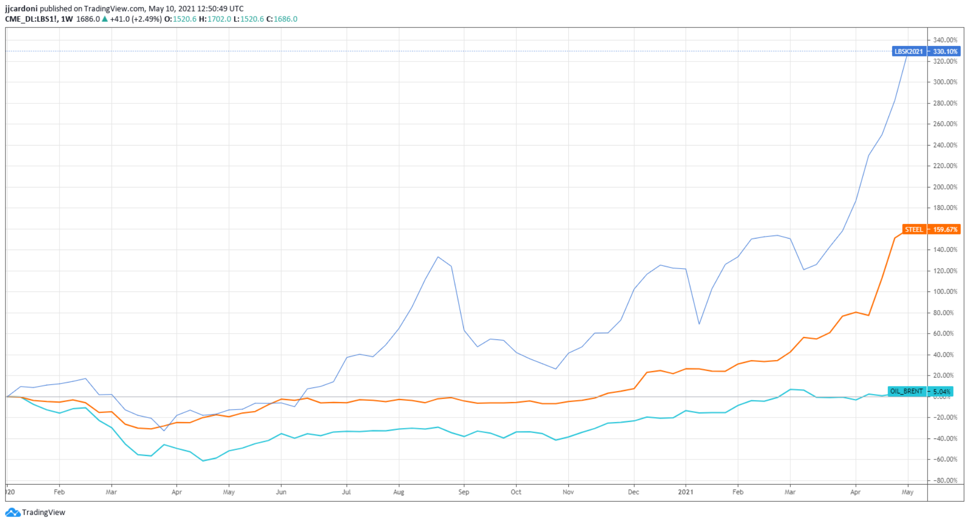
A rebound in demand is expected for 2021. However, with the continuing fallout of COVID-19 still evident, supply chain constraints are driving Automotive companies to temporarily idle or extend downtimes due to the semiconductor chip shortage.
However, there is light at the end of the tunnel, largely thanks to the vast spectrum of government interventions (including fiscal and monetary responses).

Smaller companies with less cash are finding it more difficult to speed up production and acquire materials to accommodate demand.

Industries heavily reliant on overseas suppliers are further constrained by the bottleneck in the shipping industry due to port closures and reduced shipping capacity and air freight.
Meanwhile, similar constraints have been felt on land as trucking companies experienced driver shortages and cross-border restrictions shrank road capacity.

The reopening of supply lines comes at a cost; shipping rates move sharply upwards in lockstep with the resurgent world economy with huge spikes in shipping container costs. Those yet to be convinced of the ongoing vulnerabilities in global supply chains or the need for rigorous and innovative management of supply chain risks need to look no further than the recent Suez Canal blockage. According to the U.N. Conference on Trade & Development, ships carry about 80% of consumer goods. The resulting changes in consumption and consumer behavior add fuel to ongoing potential demand shocks in supply chains.

Another significant consequence of the rebound in demand has been the impact on PPI (Producer Price Index) as the y/y gain rose to a 10-year high of 4.2% from 2.8%, the most considerable rise since September of 2011. During the recent Berkshire Hathaway annual shareholder meeting, Warren Buffet said that they see “very substantial inflation” and likely to continue into the remainder of this year at the very least.



The chart above represents the commodity price changes for lumber, oil, and steel, all of which are key components in the manufacture of a wide range of consumer products. Combined, these price increases for key commodities and shipping costs increase the overall cost of goods produced, which could have additional economic consequences to smaller overseas suppliers manufacturing these products – another potential risk to the supply chain.

With the rollout of multiple vaccines worldwide, governments will eventually reign in the pandemic. However, no one seems to have the confidence to put a timeline to that, given the continuing spikes in countries like India. All of that aside, the World Economic Outlook (WEO) suggested 'stronger-than-projected momentum on average across regions with global trade volumes forecast to grow about 8 percent in 2021'. There has been a positive note in much of the Purchasing Managers Index data around the globe. Japan's manufacturing activity continues to expand, as is the case with both the euro area and the U.K. economies gaining ground. The economic activity in the U.S. private sector continued to expand in April, with the manufacturing PMI and services PMI hitting new all-time highs of 60.6 and 63.1, respectively.

MITIGATING STRATEGIES

Companies must move toward a more agile supply chain network beginning with an assessment to identify critical risk scenarios and define potential responses. Installing a monitoring and reporting system to identify and provide structured responses to risk and exposure is both an essential and critical requirement to maintain operations.

Many companies forced-accelerated investment in e-commerce and expanded their capabilities to address customer demand and delivery. Additional tools to provide improved visibility and monitoring using advanced data analytics and alternative supplier sourcing strategies will help minimize risk. Organizations must have strong internal collaboration and collaboration with customers and suppliers as part of their culture to leverage data to be able to rapidly respond.

Reducing and accurately forecasting lead times is a critical element of the manufacturing process while ensuring you do not run out of inventory. Conducting an in-depth review of what should be made overseas while insourcing necessary items, paying a little more in shipping along with some freight hedging, as well as increase on-shore inventories since financing is cheap and are all strategies that will help address some of the current challenges. Moving stock closer to key markets or repatriating manufacturing from overseas suppliers to domestic suppliers is another option.

Still, companies who are capable of capitalizing on their just-in-time strategies will be able to leverage on their competitive edge. Organizations could create a hybrid method for high velocity / low-risk items while enabling some of the recommendations and tools described above, choosing to balance between strategies depending on consumer demand and predictability of forecasts.