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Supply Chains, Inventory, Inflation, and Pandemic Issues

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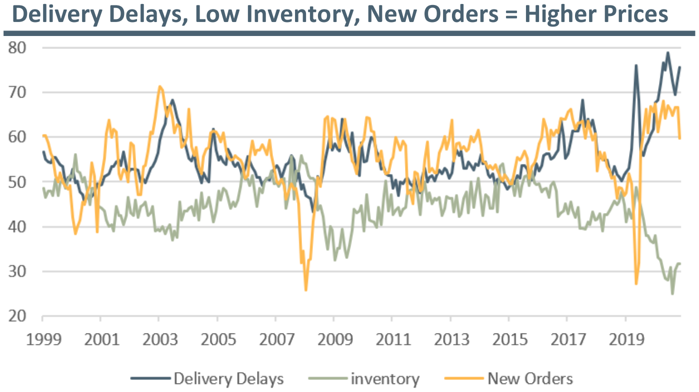
If you have visited Walmart, Target, a grocery store, or even a clothing store recently, you may have seen shelves a bit more bare and higher prices for the products that are available. Listening to the talking heads in the media, there is an abundance of blame put on the Presidential administration, people not wanting to work, and offshoring of domestic production. However, the supply chain and its interaction with the economy, along with COVID restrictions globally, have had a much bigger impact than the aforementioned culprits.

Inventory is one factor that receives little attention. Leveraging Institute for Supply Management's customer inventory data, as of April 2020, inventories were about average for the past decade but since then have declined to a 20-year low. Why are inventories this low? Well, peak inventory occurred during the midst of COVID shutdowns in the U.S. along with other developed and emerging countries. Companies, blind to how demand would respond as it has been roughly 100 years since we've had a global pandemic, were unsure how to react. Given the evolution of production, supply chains, and the global economy since the last pandemic, this has had a disproportionate impact on production. A company at the height of the pandemic would not want to continue it's normal orders as it would have to absorb the cost while waiting for demand to come back. Low inventories in addition to pandemic restrictions delaying production and high demand is an economic recipe for higher prices.

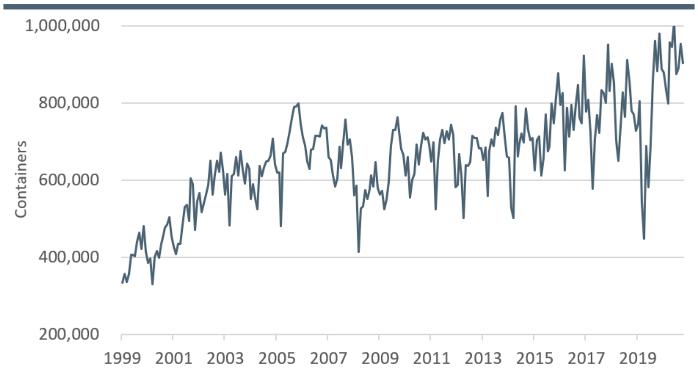
Delivery Delays, Low Inventory, New Orders = Higher Prices



Source: Bloomberg

Delivery delays are a big problem with getting raw materials or even final production goods. News reports talk about almost 100 ships waiting off the port of Los Angeles with cargo to deliver. Yes, California has had more COVID restrictions impacting employment, but dock workers are there and have recently moved to working 24 hours a day, 7 days a week. So why are these ships not being unloaded quickly? Well, the number of inbound containers and total cargoes are at its highest level in 20 years (see chart below). Adding to the issue is the fact that ports are not very efficient and have yet to implement automation that would improve the docking and unloading process. However, even if dock efficiency improved, we're still short truck drivers to get the cargoes to their respective destinations. Inefficiency, record volume, and transportation shortages all contribute to both delaying delivery and driving prices higher.

Port of Los Angeles: Volume of Containers per Year



Source: Bloomberg

One may ask and have probably heard questions like, "Why not go to other ports, like Florida?" The issue is that a large amount of our imports come from Asia and the cheapest and quickest route to the U.S. is to the west coast. Freight rates have increased during the last year to reach an all-time high. U.S. importers are aiming for the quickest and cheapest transportation routes as not all companies can charter planes and absorb the higher costs. The China to Los Angeles route is about 14 to 18 days. Routing to the east coast adds a minimum of 10-12 days with total transit times of 28 to 40 days. On top of that, Florida ports are already operating at 70-80% capacity, thus, there would not be capacity to absorb a significant influx of traffic.

Another issue is that some of the manufacturing and exporting hubs in Asia have a zero COVID policy. China, for instance, is a manufacturing hub and parts of the supply chain start there. Products are then moved to other Asian nations before coming to the U.S. China's zero COVID policy had led to the government shutting down its largest manufacturing hubs (cities) amid COVID outbreaks. Recent news out of China has indicated that its zero COVID policy may not be maintained in perpetuity, which would be good news for the supply chain. But, in the meantime, complete shutdowns not only delay production but also delay shipping of parts to next locations for additional components or final stops. Despite only 34% of total U.S. imports coming from Asia, most of these are inputs or retail goods that impact retailers—and therefore why the Dollar Tree will soon begin charging *more* than a dollar for goods.

Negative events that impact the supply chain like this can lead to adaption and innovation. Semiconductor chips have been the most sought after, especially for autos. Global foundries were not prepared for the demand increase but they have been forced into new ways of thinking. Industrial truck company, PACCAR, mentioned on its earnings call that it is re-engineering chips for its trucks to adapt to the limited supply and maintain its production levels rather than delay deliveries further. Certain elements of the global supply chain and the economy are too entrenched to change quickly, but that doesn't mean this painful period of delivery delays and higher prices won't produce an improved supply chain and better decision-making by companies that will work to prevent this from happening in the future.

The last and most important question is, when do supply chain issues ease? That's a question everyone is asking and there is no good answer without a crystal ball. Supply chain issues will likely continue into 2022 but recent manufacturing data has shown some easing. GXO Logistics CEO, Malcolm Wilson, said in a recent Bloomberg interview, "We're through the worst of it. I think we've reached the peak." Does this mean prices will fall soon? Not likely. At a late September virtual European Central Bank event, Federal Reserve Chairman, Jerome Powell, maintained that inflation is transitory and is the result of supply constraints that are a part of the economic reopening. He said it is a process with a beginning, middle and an end. Powell expects supply-chain bottlenecks to continue into 2022 before fading.

As a consumer, especially into the holiday season, essentially being told to "be patient" isn't welcome advice when these supply constraints will ease. It seems the constraints will be with us for a while. However, a lot of these issues are dependent on COVID policies globally, labor inputs being maintained, and adaptation by companies. The global economy and supply chain can be improved with short-term fixes, but we won't see a price impact until we can get closer to an uninterrupted manufacturing and delivery process from start to finish.

About the Author ...

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Ross joined Market Street in 2014 and assists the Chief Investment Officer and Director of Investments with implementation of the investment program.

Prior to joining Market Street, Ross worked in institutional asset management with United Kingdom-affiliated Aviva Investors North America, which was recently acquired by Athene Asset Management. At Aviva, he was a Reporting Analyst for two years and then moved into Investment Performance where he served as a Performance Analyst. Ross's main responsibilities included analyzing and calculating performance on fixed income portfolios as well as alternative investment funds.

Ross received his B.S. in Finance and Management from Drake University. He holds the right to use the Chartered Financial Analyst® designation and is also a member of the New York Society of Securities Analysts.