

Supply Chain Vulnerabilities under COVID-19: Industry Perspective

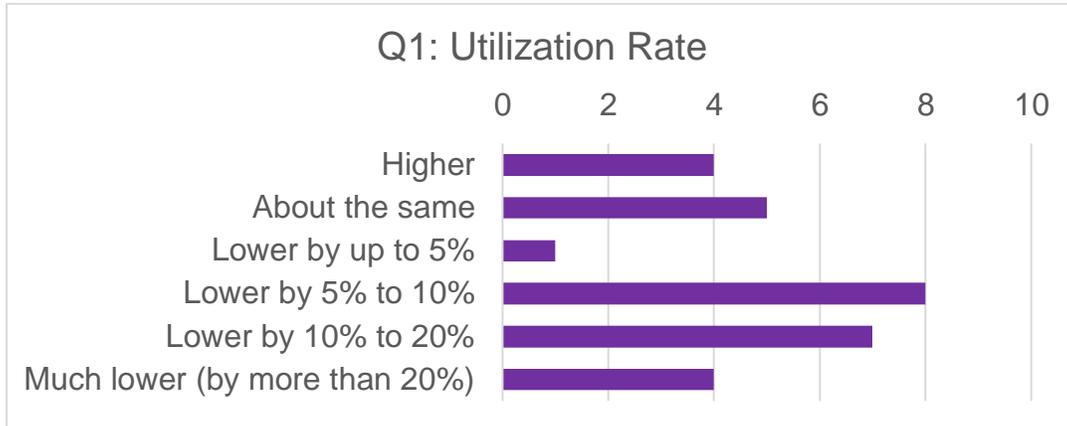
Christopher Cummings, Breton Johnson, Sunil Chopra, Hani Mahmassani

How is COVID-19 impacting US supply chains? To answer this critical question, the researchers at Northwestern University Transportation Center conducted a survey from 65 members of the Business Advisory Council between March 30th and April 3rd. The survey obtained 29 responses. The main findings of the survey are as follows:

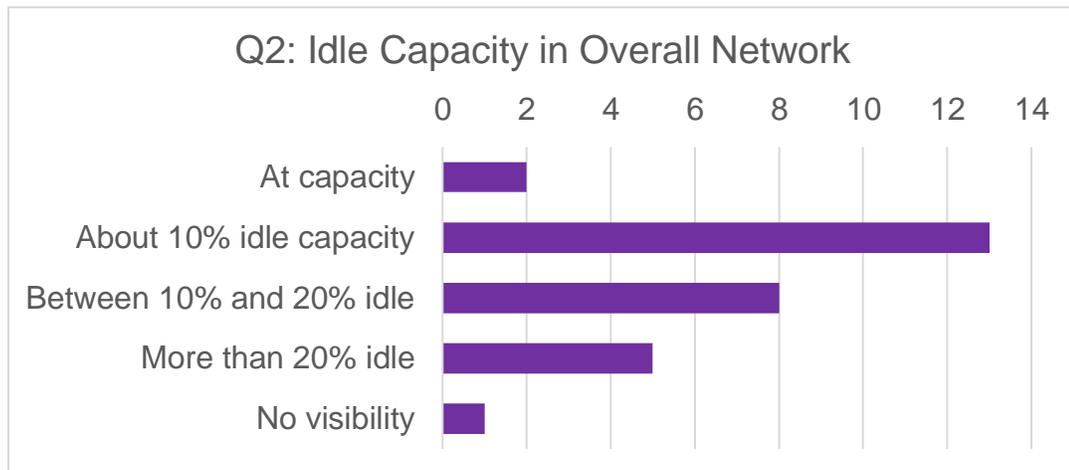
1. **While most sectors are seeing a significant drop in asset utilization, some are seeing increased demand for their assets.** About 70% of respondents (20/29) reported a drop in asset utilization with about 40% seeing a drop in utilization of over 10%. About 15% of the respondents reported an increase in demand for their assets. As a result, there is plenty of idle capacity in the system with about half the respondents reporting more than 10% idle capacity.
2. **The greatest vulnerability of supply chains is at nodes such as DCs, ports, and production facilities.** The major causes for the vulnerability related to shutdowns (about 64%) or labor shortage (32%) related to COVID19. The other major cause was the absence of inventory because of lack of supply (43%).
3. **Companies are improving supply chain resilience by reallocating capacity across markets (31%) and strengthening existing relationships (21%).** As a result, 3PLs are seeing an increase in business.
4. **Companies are improving financial resilience by delaying capital expenditures (31%) and reducing overall capacity (21%).**
5. **Major future vulnerabilities relate to shortage of supply from Asia (48%) and Europe (31%) and continued labor shortages (45%).**

The questions asked and responses are detailed below:

Compared to the same period last year, is the utilization rate of your capacity (assets):

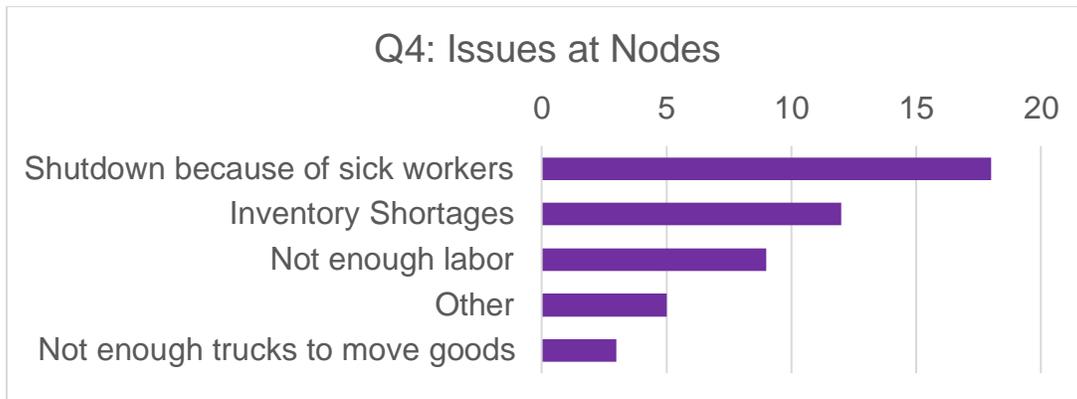


How much idle capacity do you have in your overall network at the moment?

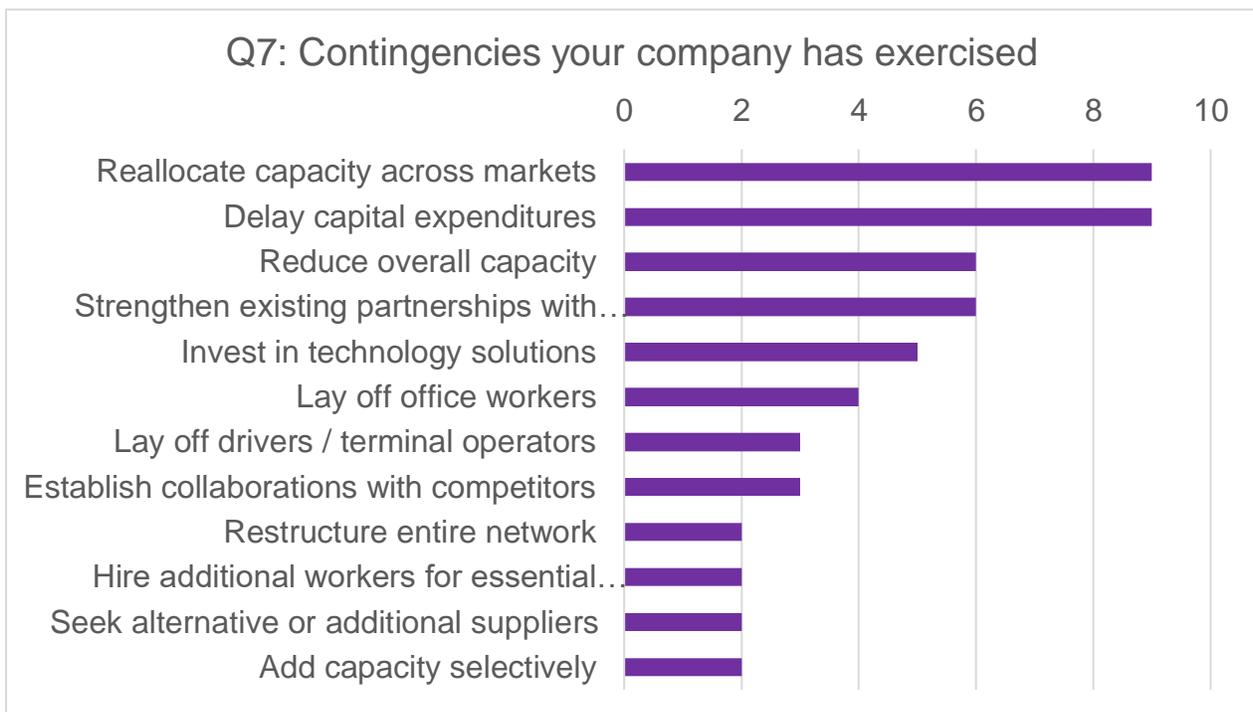


Where do you see the greatest vulnerability in our supply chain network?

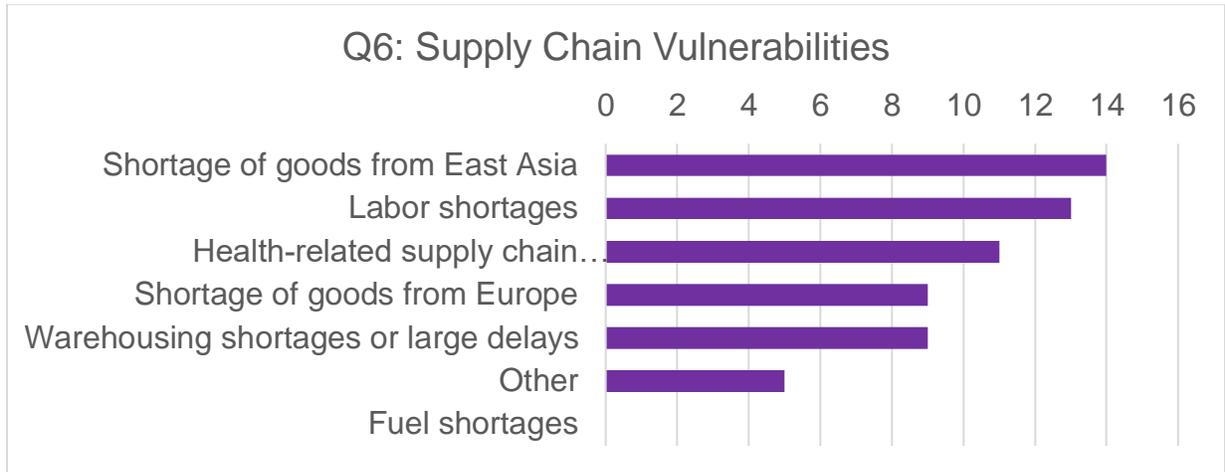
What issues do you currently see at nodes? (multiple answers allowed)



What contingencies has your company exercised? (multiple answers allowed)



What supply chain vulnerabilities do you foresee in the future (next few months)? (multiple answers allowed)



What time frame do you envision before the situation starts normalizing again for your business?

