

The new normal

Will Covid-19 herald fundamental changes in how global supply chains function?

Summary:

- **The scale of change brought about by Covid-19 is so great that things may never return to how they were before**
- **Supply chains have an opportunity to become much more resilient, but this cannot be at the cost of efficiency**
- **The organisations that thrive after the crisis will be those that go further than others in agility and resilience while maintaining customer-centricity and efficiency. This is likely to be the case whatever the future brings**

The 2020 Coronavirus outbreak has led to an almost unimaginable change in how a large percentage of the planet lives its life in the short term. At the time of writing, schools and businesses are shut, many people required to stay at home, all but essential travel banned in many countries. People have found ways to adapt, with home working now the rule rather than the exception, video conferencing widespread and e-commerce boosted.

So fundamental are some of the changes, that it is reasonable to ask whether things will ever fully go back to the way they were before. A quick survey of the press in the middle of April 2020 provides a full range of opinion, from everything going back to normal, to nothing ever being the same again.

An early spoiler for this paper: we don't know what the future will hold.

So why write a paper on the future of global supply chains? Well, we are going to indulge in what other commentators are doing and write about what we think should happen, rather than necessarily what will happen.

Confirmation bias is a powerful thing. If you have a strong nationalistic bent and believe that everything you consume should be made in your own country, Covid-19 seems to be proving everything that you ever believed. That the initial outbreak occurred in China seems clear. That Chinese supply chains were amongst the earliest affected is certainly the case. Which only goes to prove, some argue, that we should not rely on China for anything.

But wait a minute. The underlying problem is surely concentration risk, not an origin risk. Bringing all production "home" is just displacing a concentration risk, not eliminating it. It may have a stronger emotional appeal to some people, but it is a political argument, not a logistical one. Besides which, only time will tell if Chinese supply chains actually bounce back quicker than others.

Goods are produced in different places for a variety of reasons: proximity to customers and sources of raw materials, conversion costs like labour and energy, tax efficiency and other government

incentives, access to talent and technical know-how, plus, ideally, risk mitigation. These considerations, plus an era of reasonably borderless commerce, have led to the evolution of supply chains that see parts cross and sometimes re-cross borders in the journey from raw material extraction to final product assembly.

Note that these criteria are in a state of flux. Labour arbitrage is a prime example, with wages in the developing world catching up on those in the developed world. It is only a matter of time before there is no labour arbitrage to be had between, say, China and the US. This will happen anyway, and will drive changes in production strategy much more surely than any lessons learnt from the Covid-19 crisis. For a country like China, proximity to its numerous and increasingly wealthy population will supplant labour arbitrage as a prime reason for locating production there.

Will some organisations bring some operations closer to home, prioritising local sourcing? No doubt, and in many cases it will be the right thing to do for them. They just need to make sure they are targeting the systemic risk in their supply chain in the right way and not just swapping one risk for a different, equal one. If you have all your eggs in one basket, switching them all to a different basket won't help. The next completely unexpected but massively disruptive event is unlikely to be exactly like this one.

Another example of confirmation bias evident in recent weeks concerns mistrust of lean manufacturing. Coronavirus-related shortages prove, if that is what you want to believe, that inventories have been kept too small.

But wait a minute. Large parts of the economy are currently crashing for lack of demand. How would additional inventory help? Having too much of your current assets tied up in inventory that you can't sell is the last thing you want in such a situation. And how do you know what inventory to buffer? Holding inventory is a valid strategy for dealing with normal variability and some particular scenarios (for instance, if you know that a given supplier is liable to be unreliable and you have no reasonable alternative sources), but is hardly a feasible protection against any possible disruption that might last for any length of time. How much inventory do you need? 6 months? 12 months? Of everything?

On the contrary, we think that the new normal for leading companies will be inventories that are closer to optimized. Large inventories built to forecast are the opposite of agile. To make supply chains resilient, carefully thought out redundancy and a relentless focus on shortening lead times is necessary. Meanwhile, there is enormous potential to better apply optimization techniques.

It is perhaps easy to pick holes in other people's predictions, more difficult to improve on them. We are not in the business of divining the future. And yet in this humanitarian crisis, and the extraordinary disruption it has brought to everyone's lives, there is an opportunity to genuinely change supply chains for the better. Perhaps the most likely outcome is that some things will go back to how they were before, but some organisations will take this opportunity to improve a number of things in how their supply chains function. We expect leading organisations to do the following:

- **Put a greater focus on cash.** Partly driven by historically low interest rates, the holding cost of inventory seems to have been ignored or underestimated by a great many organisations. As we have argued elsewhere, using the opportunity cost of cash is a more strategic way to determine optimal cycle stock levels and can also be expected to influence sourcing decisions, as the total cost of ownership is given greater attention. Trying to shore up liquidity by squeezing suppliers and/or customers puts your supply chain under greater stress and even before the crisis governments were stepping in to put limits on this. Better to start by getting your own house in order and optimizing your inventories.

- **Allow risk management to play a more fundamental role in the business.** Risk struggles to make a meaningful impact when it is a separate function and can too often be restricted to box-ticking compliance exercises. Risk management is a difficult thing to do well, since it involves imagination, judgement and constant reappraisal, but it should be at the heart of all strategic supply chain decisions.
- **Continue to take advantage of all the opportunities presented by globalisation.** In the current crisis it is easy to criticize low-cost country sourcing, but in normal times there is limited satisfaction in being resilient when your competitors are pricing you out of the market. The best organisations will find ways to be both resilient and global.
- **Put renewed efforts into lean.** Precisely because building resilience through diversified supply bases, redundancy and more local supply options has a cost, savings must be found elsewhere to pay for them. Being both lean and resilient is hard work, but promises sustainable competitive advantage.
- **Accelerate environmental protection initiatives.** Leanness, by eliminating waste and improving efficiency will help protect our precious natural environment even as the economy rebounds. One of the few positive side-effects of Covid-19 has been a temporary drop in global emissions. Expect the emissions to shoot up again as production resumes, but perhaps the increased sense of the precariousness of life will encourage sustainability efforts to be redoubled. Firms have come under heightened ethical scrutiny in recent weeks and let us hope this has an enduring impact on consumer behaviours.

Whether or not what we describe in this paper become the new normal in supply chain management only time will tell. But our belief is that these behaviours will improve supply chains regardless of what the future holds. They would have been good things to do before the Covid-19 crisis and we believe that they will make your supply chains successful whatever the future holds.

nVentic is a specialist supply chain consulting company with advanced analytical capabilities and a particular focus on inventory optimization.