# COVID-19: Supply Chain Impacts and Insights from Germany

Germany is Europe's largest economy with world-leading automotive, chemical, and pharmaceutical industries. The country has enjoyed 10 years of strong economic growth. But because the German economy depends heavily on exports and has a large trade surplus, the country has been hit severely by the COVID-19 pandemic. The following analysis highlights three industries in Germany and provides insight into the actions companies are taking to manage supply chains during this pandemic and the future steps necessary to build more resilient operations.

One of the themes that emerge from our discussions with industry executives is the need for internationally accepted standards for supply chain management. While some companies were able to find alternate routes, carriers or methods of delivery, many operations such as the loading and unloading of goods required physical documentation and original signatures. Other companies, however, were able to apply no-touch policies. The pandemic has exposed the need to work toward international standards for supply chains.

We highlight three industries: Pharmaceutical, Automotive, and Chemicals, to help business leaders learn more about the situation in Germany and how supply chain resilience can be addressed:

## *Pharmaceutical*

The German pharmaceutical industry ranks fourth in worldwide production and is dominated by small and medium-sized enterprises (SMEs)--92% employ less than 500. The industry's supply chain has been less affected by the pandemic than other industries because of its large safety stocks of ingredients and finished drugs. However, the industry is diverse, and while companies that manufacture in Germany and/or Europe were less affected, those that rely on supplies from India had more issues. Supplies from China were disrupted only when coming from the Wuhan area. Pharmaceutical companies will focus on supply chain risk management efforts to ensure their ability to react fast and efficiently to future disruptions, and to create closer relationships with suppliers, logistic companies, and regulators. As in other countries, the pandemic will spur business and political discussions about the relocation of production, national drug stockpile reserves, and medicine price and discount structure, especially for generic drugs.

*"The past few weeks have confirmed to us that it is a real advantage to produce locally because it would allow us to react very quickly if necessary, "Made in Germany" will gain its importance, even if it comes with higher prices."- Stefan Koch, CEO of Aristo Pharma*

## *Automotive*

The German automotive industry is by far the largest in Europe and after China and the U.S., the third largest worldwide. It is also one of the German industries most affected by the pandemic because of a sharp falloff in demand and supplies. Automakers employ just-in-time production methods and in March, month-over-month car production dropped 37% due to supply constraints. Sales, meanwhile, are expected to fall by 20% in 2020. Many SME car component companies who serve as key suppliers to large car manufacturers have been hobbled by the COVID-19 crisis. The successful relaunch of car production with its highly complex supply chains and processes poses a special challenge and will require that all elements of the supply chain restart at the same time. Meanwhile, the German car industry used factory closing as an opportunity to retool several plants to produce e-cars that are easier to manufacture and have a growing market unlike traditional automobiles.

*"The functioning of the supply chain is the most important element in restarting production. Therefore, the industry needs to communicate closely and honestly on how quickly it can return to its previous capacities"-Stefan Wolf, CEO of ElringKlinger*

## *Chemicals*

The German Chemical industry is the third largest worldwide. Although Germany's BASF is the world's largest chemical company, 90% of the 2,200 chemical companies in Germany are SMEs. The industry depends highly on exports and has 1,500 subsidiaries outside Germany. Because the chemical industry relies heavily on railroads and ships, which were mostly running during the pandemic, the industry was less affected by supply chain disruptions. Chemical factories did not shut down and the safety stocks they possessed kept them going. However, because large customers such as the car manufacturers closed down, analysts expect that COVID-19 will lead to a revenue decline for the chemical industry in Germany.

*"I was surprised to see how quickly the Green Lane Initiative of the EU Commission was set up and how it turned out be an effective response to mitigate supply chain disruptions. It helped a lot to get the logistical barriers out of the way"-Niels Ulrich, BASF SC Excellence*

*"During the Corona crisis we had an improved turnover, but we shall see, whether these were early sales or whether the sales will continue to increase. We expect to export more to China, because they seem to catch up with consumption, whereas the Germans will be more reluctant to spend money. There is also a danger that bankruptcies of other companies might influence us"-Axel Valteniner-Branth, CEO and owner of Branth-Chemie*

In Germany, business leaders, supply chain executives, and industry associations have started to analyze the issues related to COVID-19, and to address the problems, internal and external, that affected customers and suppliers. They have started changing the supply chain processes and requesting legal or administrative changes from government bodies. Several of the issues are shared by all global supply chains, such as customs and border management. However, other issues are clearly industry-specific, for example, the requirements for the transport of dangerous chemical goods. The following recommendations are for C-suite executives to actualize their continuity planning. They are organized by short and long term and industry-specific actions:

**Short term actions:**

- Connect all departments working on supply chain management including government relations.
- For German companies and especially the German automakers just-in-time manufacturing will require that companies have the latest information, for example, which borders are open or closed for the transport of goods.
- Establish a process to ensure that the goods can be delivered to the customers, for example, something as simple as calling in advance to make sure the customer will be available to accept delivery. One chemical industry executive told us: "In the beginning, we experienced a higher need of communication with our customers to ensure they could receive the deliveries."
- Review your existing supply chain data model and pandemic plans and revise if necessary
- Model the impact of the virus on financial performance and take the necessary measures such as re-prioritizing business units, suppliers, and processes.

**Long Term actions:**

- Analyze which issues in the supply chain management were due to different national government regulations and work with your legal team and industry associations to resolve them.
- Help build and populate industry-specific databases for companies to share information and insights to better manage a future crisis.
- Work internally and externally to create an integrated, seamless global view of your supply chains.
- Monitor the government's national or transnational relocation policies and initiatives for local production of critical supplies such as PPE and the effect those moves might have on business and costs.
- Analyze the existing supplier network and create a back-up supplier database.
- Maximize the value of data using DSCI's data-trading approach.

COVID-19 came as a shock to the global supply chain operations and Germany is no exception. While businesses and the economy are getting back to a new normal, it is clear that agility and resilience will be the driving factors for a company's long-term success. However, the outstanding question is how will businesses strike a balance between resilience and efficiency?

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The Digital Supply Chain Institute is a membership-based not-for-profit institute whose members are focused on executing the supply chain of the future. We perform applied research, conduct pilots, communicate the Digital Supply Chain story and link members with companies that are going through similar journeys. DSCI is a program of The Center for Global Enterprise (CGE). Visit our website dscinstitute.org to learn more or reach out to Vivek Ghelani, Project Manager, DSCI at vghelani@thecge.net

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