

Companies have changed their global supply chains in profound ways due to Brexit, US-China trade war and COVID

June 29 2022, by Tom Walters



Credit: CC0 Public Domain

The continuing geopolitical risk and uncertainty experienced in recent years has prompted companies to change their global supply chains in profound ways, new research has found.

The research, led by Dr. Sam Roscoe of the University of Sussex Business School and published today in the *International Journal of Operations and Production Management* (IJOPM), studied 34 companies in nine industries and explored how these companies managed the compounding disruptions caused by Brexit, the US-China Trade War and COVID-19. The authors recommend that trade and [economic policy](#) should not intensify uncertainty but help business managers better understand and manage supply chain risks.

The research found that to counteract prolonged uncertainty, companies had to rethink their supply chain designs by nearshoring (moving production to nearby countries) or reshoring (transferring operations that had moved overseas back to the country from which it was originally relocated).

The study also found that supply chain redesign decisions are influenced by the intensity of government pressure to relocate production, the ease of moving suppliers and supply chain assets, and the severity of supply chain disruption risk.

For example, the study found companies in the Pharmaceuticals and Technology sector to be nearshoring and onshoring production due to a combination of intense political pressure and because [decision makers](#) were experiencing prolonged periods of uncertainty. But in other sectors, such as automotive, companies had to 'grin and bear it' because their brake rotor suppliers were all located in a particular geographic location (Northern China) and couldn't be moved despite high tariffs.

Professor Sam Roscoe, of the University of Sussex Business School, who led the study, says that their "study has found that although some companies wanted to move production due to uncertainty caused by Brexit, the US-China Trade War of COVID-19, they couldn't because of significant investments (high sunk costs) in production facilities, intense

regulatory oversight and suppliers clustered in one geographic location."

"We found that managers can overcome acute shocks to the supply chain by making incremental adjustments to stock levels and supplier numbers, however longer-term uncertainty requires strategic supply chain redesign."

The authors argue that the War in Ukraine and prolonged periods of inflation will only compound the pressures that companies have experienced since 2016. These persistent disruptions, the authors suggest, will lead to significant shifts from globalized supply chains to more regionalized and localized supply chain designs.

Roscoe says that "Brexit and the US-China trade war, and the political decisions that followed, created prolonged uncertainty for UK and US firms."

"Policy makers should be aware that high sunk costs in existing [production facilities](#), and [supplier](#) clustering in one geographic region may render new trade policy meaningless, as some companies cannot move supply chain assets even if they want to."

"Our recommendation is that trade and economic policy should not intensify uncertainty, but help business managers better understand and manage [supply chain](#) risks."

"Unpredictable and constantly changing tariff and non-tariff barriers have only heightened uncertainty and prompted managers to move production and suppliers to more stable business environments."

More information: Samuel Roscoe et al, Redesigning global supply chains during compounding geopolitical disruptions: the role of supply chain logics, *International Journal of Operations & Production*

Management (2022). [DOI: 10.1108/IJOPM-12-2021-0777](https://doi.org/10.1108/IJOPM-12-2021-0777)

Provided by University of Sussex

Citation: Companies have changed their global supply chains in profound ways due to Brexit, US-China trade war and COVID (2022, June 29) retrieved 2 May 2024 from <https://phys.org/news/2022-06-companies-global-chains-profound-ways.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--