

Committee: Economic and Financial Committee (GA2)

Issue: Navigating Supply Chain Challenges in Conflict Zones

Student Officer: Marilena Semertzidou

Position: Co-Chair

PERSONAL INTRODUCTION

Dear Delegates,

My name is Marilena Semertzidou, and I am an 11th grader at the German School of Thessaloniki. I am honored to be serving as one of the Co-Chairs of the Economic and Financial Committee in the upcoming 7th DST MUN conference.

First and foremost, I would like to welcome you to this year's conference and congratulate you on your selection to this committee. During the conference, you will get a chance to experience a simulation of a UN conference, in which you will debate ongoing global problems, seek effective and feasible solutions, and simultaneously work with other delegates. Not only will you gain knowledge on major problems but also form new friendships along the way.

The first topic of this committee, namely "Navigating Supply Chain Challenges in Conflict Zones", is a complex and crucial issue that concerns even our daily lives. This study guide will provide you with the necessary information to get a grasp on the topic. Delegates are, however, strongly encouraged to conduct their own research, seeing as you will gain a deeper understanding of the situation, and therefore contribute to a fruitful debate. I am looking forward to creating and experiencing a memorable conference, while also developing new skills, like critical thinking and decision-making, which will be useful tools for the future.

If any questions arise during your research and you are unsure of the preparation process do not hesitate to contact me at marilena.semertzidou@gmail.com. I'm anticipating our meeting with much excitement!

Sincerely,

Marilena Semertzidou

TOPIC INTRODUCTION

Over the last two decades, there has been a noticeable escalation in the number of armed conflicts, with the figure rising from approximately 30 in the late 1990s to around 100 today.¹ The conflicts in Eastern Europe, the Ukraine-Russia war, and in the Middle East, the Israel-Palestine war, are on top of geopolitical tensions that create a supply chain crisis but also tensions in the Red Sea, the Houthi attacks, and the Taiwan political instability create urgent humanitarian needs that cannot be addressed.² Access limitations due to border closings, delayed port operations, increases in shipping costs, and long delivery times added layers of complexity to ongoing humanitarian operations, straining the already limited funding and resources. The importance of humanitarian logistics in conflict zones and complex emergencies lies in its ability to navigate challenges such as safety concerns, coordination issues, quality assurance, innovation needs and efficient delivery of aid to vulnerable populations.

Navigating supply chain challenges in conflict zones poses threats to businesses and human organizations who are involved alike. Businesses relying on suppliers or manufacturing facilities situated in conflict zones face heightened risks of production halts, delays, or quality issues due to the instability and unpredictability of war-torn regions. Businesses operating in or sourcing from war zones often face higher operational costs due to increased security measures, insurance premiums, and reliance on more expensive transportation routes. To mitigate supply chain disruptions in conflict zones, human organizations may need to maintain higher levels of safety stock, increasing inventory holding costs. The instability of conflict areas can lead to supply chain disruptions, requiring additional efforts and resources to identify and qualify alternative suppliers. Persistent supply chain disruptions in conflict zones can result in reduced product availability and increased lead times, potentially causing the loss of business market share. Political instability, violence, and war are some of the main causes that disrupt the flow of goods and services. The security of personnel and cargo, the integrity of infrastructure, and the reliability of local regulatory environments are all compromised in such situations. Entities within these zones must implement highly effective strategies to proactively manage and minimize these risks.

¹ Nikolic, J., Ferraro, T. and de Saint Maurice, T. (2020), "Aggregated intensity: classifying coalitions of non-state armed groups", <https://blogs.icrc.org/law-and-policy/2020/10/07/aggregated-intensity-classifying-coalitions-non-state-armed-groups/>

² Daniel Allen, "Geopolitical Crises Continue to Challenge Today's Supply Chains", 21 Feb 2024, <https://emag.directindustry.com/2024/02/21/geopolitical-crises-continue-to-challenge-todays-supply-chains/>

As disruption continued, businesses started to assess if they could pass on costs to their customers or absorb them and reduce their margins. When it comes to those working in procurement, who are often tasked with cutting costs, many professionals are reporting higher levels of stress and burnout. Under these circumstances, we need to work hard to support consumers against increased costs and employees to avoid the loss of their jobs in the supply industry. The coordination of activities with the supply industry is also important in terms of using smart warehouse automation and optimizing logistics to boost resilience against crises.

Humans depend on supply chains to deliver necessities such as food and water. Any breakdown of these delivery pipelines quickly threatens human life. Markets face a period of instability from high energy and food prices, as well as an emerging debt crisis. A sustainable supply chain should be the aim worldwide in alliance with the goals of peacebuilding, such as reducing violence, promoting human rights, strengthening governance, fostering social cohesion, and supporting livelihoods. This means that the supply chain should consider the potential effects of its operations on the conflict dynamics, the local communities, and the stakeholders involved, and seek to avoid or mitigate any harm and enhance any opportunities for peace.

DEFINITION OF KEY TERMS

Blockchain

"A blockchain is a distributed database or ledger shared among a computer network's nodes."³

Bureaucratic

Bureaucratic means "relating to a system of controlling or managing a country, company, or organization that is operated by a large number of officials."⁴

Conflict Zone

"Conflict zone refers to war or political instability that disrupts essential services such as housing, transportation, communication, sanitation, water, and health care which requires the response of people outside of the community affected."⁵

Demand

³Adam Hayes, "Blockchain Facts: What Is It, How It Works, and How It Can Be Used ", 29 June 2024, <https://www.investopedia.com/terms/b/blockchain.asp>

⁴ "Bureaucratic", Cambridge Dictionary, <https://dictionary.cambridge.org/dictionary/english/bureaucratic>

⁵ AN Pasad and PL Pasad, "Children in Conflict Zones", 21 Jul 2011, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4921424/>

"Demand is a principle of economics that captures the consumer's desire to buy the product or service. The demand is calculated as the price the consumers are willing to pay for the product or service."⁶

Inflation

"Inflation is a gradual loss of purchasing power that is reflected in a broad rise in prices for goods and services over time."⁷

Missile

Missile refers to "a flying weapon that has its own engine so that it can travel a long distance before exploding at the place that it has been aimed at."⁸

Mitigate

Mitigate means "to make something less harmful, unpleasant or sad."⁹

Profit Margin

Profit margin refers to "the difference between the cost of buying or making something and the price at which it is sold."¹⁰

Spillover

Spillover means "the effects of an activity that have spread further than was originally intended."¹¹

Stockpiling

Stockpiling is "the practice of storing a large supply of something for future use."¹²

Supply

Supply means "to provide something that is wanted or needed, often in large quantities and over a long period of time."¹³

Supply Chain

⁶ "What is 'Demand'", <https://economictimes.indiatimes.com/definition/demand>

⁷ Jason Fernando, "Inflation: What It Is and How to Control Inflation Rates", 23 Aug 2024, <https://www.investopedia.com/terms/i/inflation.asp>

⁸ "Missile", Cambridge Dictionary, <https://dictionary.cambridge.org/dictionary/english/missile>

⁹ "Mitigate", Cambridge Dictionary, <https://dictionary.cambridge.org/dictionary/english/mitigate>

¹⁰ Profit margin Definition & Meaning | Britannica Dictionary. (n.d.). <https://www.britannica.com/dictionary/profit-margin>

¹¹ "Supply", Cambridge Dictionary, https://dictionary.cambridge.org/dictionary/english/supply#google_vignette

¹² "Stockpiling", Cambridge Dictionary, <https://dictionary.cambridge.org/dictionary/english/stockpiling>

¹³ "Spillover", Cambridge Dictionary, <https://dictionary.cambridge.org/dictionary/english/spillover>

"The supply chain is the interconnected journey that raw materials, components, and goods take before their assembly and sale to customers."¹⁴

Vendor

Vendor refers to "a person or company that sells goods or services"¹⁵

BACKGROUND INFORMATION

Overview of the current situation

Supply chain crisis refers to strains in global production networks that started to emerge in late 2020 as a reflection of imbalances between the supply and demand of certain goods that create burdens for the ongoing global economic recovery. The crisis in the global supply chain is not caused by a single cause but by the total number of parts that hinder the smooth delivery of goods to customers. Supply chain problems were prominent during the COVID-19 lockdown amid a "perfect storm" of causes, including shifts in demand, labor shortages, and structural factors. The Russia-Ukraine conflict and COVID-19 lockdowns in China have recently exacerbated issues, affecting supply in certain sectors, including consumer goods, metals, food, chemicals, and commodities. Some sectors are likely to be further implicated in future supply chain issues than others. Russia's dominant role in global energy, industrial metals, and soft commodities supply has already pushed commodity price inflation to the highest levels since around 1960. The European Union (EU) and the United Kingdom (UK) have also banned Russian ships from docking at ports, which poses a significant risk to European supply chains and commodity prices.¹⁶

The spillover from Israel's war in Gaza¹⁷ is causing more burdens around the world, not just for shipping companies but for the entirety of global trade, resulting in port congestion, delays in goods reaching their final destinations, and soaring shipping costs.

Moreover, recent attacks by Yemen's Houthi rebels in the Red Sea and the Gulf of Aden are forcing marine cargo carriers to avoid these shipping lanes and

¹⁴ "What is supply chain?", 17 Aug

2022, <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-supply-chain>

¹⁵ "Vendor", Cambridge Dictionary, <https://dictionary.cambridge.org/dictionary/english/vendor>

¹⁶ "What's behind the global supply chain crisis?", 25 May 2022,

<https://www.ipmorgan.com/insights/global-research/supply-chain/global-supply-chain-issues>

¹⁷ Statista Research Department, "Impact of the Israel-Hamas war on shipping in the Red Sea - statistics & facts", 15 Aug 2024,

<https://www.statista.com/topics/12046/impact-of-the-israel-hamas-war-on-shipping-in-the-red-sea/>

instead sail around the Cape of Good Hope.¹⁸ Therefore, from the pandemic restrictions imposed since 2021 all over the world affecting product production and supply to the geopolitical tensions of the last years, including the war between Russia and Ukraine and between Israel and Palestine, the crisis seems to be growing bigger each year¹⁹.

Consumers all over the world have experienced the consequences of supply chain disruptions through inflation and higher prices, smaller quantities of available goods, and longer wait times for purchases. Businesses have also suffered, experiencing delayed deliveries, overworked staff, and an intensified level of uncertainty. It is pointed out that the Red Sea-Suez Canal crisis has affected the supply of 30%²⁰ of the world's container traffic and involves critical products such as grain, oil, and natural gas, marking routes in the Red Sea-Suez Canal as vital for vessels. The Houthi attacks have targeted merchant tankers from multiple countries and utilized advanced equipment like drones and missiles. As a result, many of the world's largest shipping companies have paused or diverted their operations in the Red Sea. But this has a cost of about \$1 million²¹ in extra fuel for every round trip between Asia and Europe. Besides, insurance costs are rising, adding to the overall cost of shipments.

On the other hand, the war between Ukraine and Russia, which are the world's largest grain-producing countries, has lowered exports of agricultural commodities. Moreover, the tension between China and the USA over Taiwan threatens the global trade of technology commodities such as computers, servers, chips, and mobile phones, which have already been affected by the COVID-19 pandemic.

The main challenges

The last few years have proven to be challenging for global supply chains, as businesses are up against a multitude of disruptions. From geopolitical tensions and instability to natural disasters, cybersecurity risks or even the pandemic have each

¹⁸ "Geopolitical Crises Continue to Challenge Today's Supply Chains", <https://emag.directindustry.com/2024/02/21/geopolitical-crises-continue-to-challenge-todays-supply-chains/>

¹⁹ "What's behind the global supply chain crisis?", 25 May 2022, <https://www.ipmorgan.com/insights/global-research/supply-chain/global-supply-chain-issues>

²⁰ Jane Courtneil, "How is the Red Sea Crisis Impacting the Suez Canal and Global Supply Chains? (How to Ensure Maritime Security)", 24 Apr 2024, <https://www.polestarglobal.com/resources/how-is-the-red-sea-crisis-impacting-the-suez-canal-and-global-supply-chains-how-to-ensure-maritime-security>

²¹ "What is the Red Sea crisis, and what does it mean for global trade?", <https://www.theguardian.com/world/2024/jan/03/what-is-the-red-sea-crisis-and-what-does-it-mean-for-global-trade>

played a significant role by influencing the flow of the supply chains. Studies have showcased that financial losses of 62%²² are to be expected for many businesses that grapple with supply chain disruptions.

Geopolitical Instability

Starting by addressing the issue of geopolitical instability, supply chains have always been vulnerable to disruptions caused by geopolitical tensions. 6 out of 10 major organizations²³ have accepted the fact that geopolitical instability will most likely have a detrimental impact on their supply chains in the next 3 years. Geopolitical tensions have seen nations turn inward and become skeptical about cooperation and interdependence. In terms of the supply chain, this caution is fair, as if tensions escalate, essential materials may be inaccessible or major trade routes could be closed. Therefore, governments and industry leaders are looking further into domestic self-sufficiency in material supply and manufacturing. In short, they are trying to build ‘friend shoring’ relationships – trade ties with like-minded and possibly geographically close countries, ‘nearshoring’, where the supply of goods will likely be more secure.

Extreme Weather Events

Additionally, what contributes to further challenges for supply chains are the now increased extreme weather events that are more than often driven by climate change. Hurricanes, floods, wildfires, and other natural disasters are some prime examples that disrupt transportation networks, damage infrastructure, and collide with the availability of resources. Unpredictable rainfall and temperature changes can disrupt agricultural seasons and traditional growing regions. This forces companies to adapt their sourcing strategies on the fly, potentially leading to consumer shortages and price fluctuations. In a Harvard Business Review study, it was proven that 49% of the surveyed US businesses have dealt with increased climate volatility.²⁴ The 2021 drought in China²⁵, for example, crippled hydropower production, sending shockwaves through factories across the country. The 2023 heatwave and drought in Texas²⁶, a major cotton producer, devastated crops, impacting textile production globally. Building a robust supply chain takes teamwork. Spreading sourcing across different regions and suppliers can lessen the risk

²² Chris Kolmar, “18 Stunning Supply Chain Statistics [2023]: Facts, Figures and Trends”, 24 Oct 2022, <https://www.zippia.com/advice/supply-chain-statistics>

²³ “The supply chain trends shaking up 2023”, <https://kpmg.com/xx/en/home/insights/2022/12/the-supply-chain-trends-shaking-up-2023.html>

²⁴ Sean Ashcroft, “Climate change an ill wind for supply chain risk management”, 6 Feb 2023, <https://supplychaindigital.com/sustainability/climate-change-an-ill-wind-for-supply-chain-risk-management>

²⁵ John Kemp, “Drought-depleted hydropower drives China to turn to coal”, 19 June 2023, <https://www.reuters.com/markets/commodities/drought-depleted-hydropower-drives-china-turn-coal-kemp-2023-06-16/>

²⁶ Kevin Vu, “Texas drought has deepened amid this year’s brutal heat”, 2 Oct 2023, <https://www.texastribune.org/2023/10/02/texas-drought-agriculture-wildfires/>

of disruptions due to localized events. Companies should also depend on renewable resources and adopt environmental technologies to reduce their vulnerability to these threats. Building infrastructure that can withstand extreme weather events is also crucial for long-term business continuity. This could involve flood-resistant buildings, elevated transportation routes, and robust power grids that can withstand extreme weather events.

Cybersecurity threats

Last but not least, in an increasingly digitalized world, cybersecurity threats loom large over supply chains. Cyberattacks can disrupt operations, compromise sensitive data, and erode customer trust. In the ever-evolving landscape of supply chain management, protecting against cybersecurity risks must remain a top priority for businesses post-pandemic. One of the primary cyber risks in supply chains is the vulnerability associated with third-party vendors and partners. Supply chains often involve numerous external parties, each with varying levels of cybersecurity measures. Cybercriminals exploit these weaker links to gain unauthorized access to sensitive data or inject malware into the supply chain network, usually taking advantage of the less-protected systems of contractors and subcontractors to reach their ultimate targets. Businesses must conduct thorough due diligence when selecting vendors, ensuring they meet stringent cybersecurity standards. Regular security audits and contractual obligations can help enforce compliance and reduce third-party vulnerabilities. Breaches pose a significant threat to supply chains, exposing sensitive customer data, financial records, and proprietary information. Implementing encryption, access controls, and regular security assessments can help safeguard sensitive information.

Challenges Faced by Logistics Companies Operating in Conflict Areas

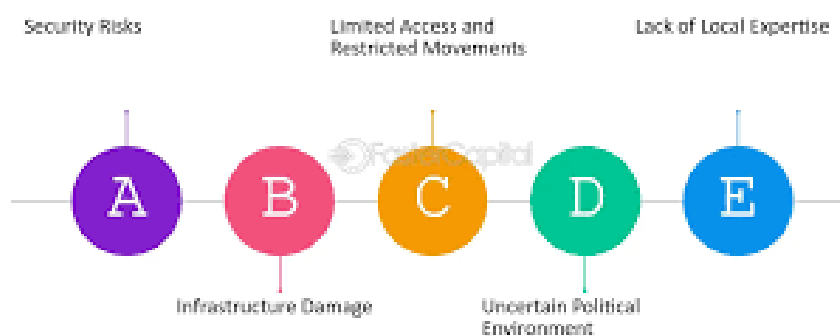


Figure 1: Examples of challenges when operating in conflict areas²⁷

²⁷ 14 Jun 2024,

<https://fastercapital.com/content/Warf-Logistics-in-Modern-Conflict--Supply-Chains-under-Fire.html>

Impact of the crisis

Ongoing supply chain shortages have impacted businesses across the world in a variety of ways, including the suppliers' inability to keep up with customers' demand, delivery delays, and talent shortages that can lead to longer lead times or the time it takes to complete an order, as well as increased material and supply costs. In a recent study from Alcott Global, 50%²⁸ of senior supply chain executives named the talent shortage one of the industry's most significant issues in the next 12 months. From planning to production, all points of the end-to-end supply chain face a similar challenge – there is not enough talent to go around. These gaps range from more manual areas, such as warehouse order picking, to building and maintaining supply-chain systems. In fact, according to a report from DC Velocity, businesses face skills gaps across all levels of seniority with severe shortages of digital and data experts. 58%²⁹ reported a need for more talent in data analytics, optimization, and automation.

Businesses are also facing yet another battle — increased fuel costs. The Russian-Ukraine conflict has driven fuel prices higher on a near-daily basis. In the United States, gas prices have hit an all-time high, and petrol costs in Europe have spiked as high as 62%³⁰ in some areas. These increased costs, in turn, are being passed on to organizations that are already dealing with higher costs due to demand and inflation. For example, Amazon recently announced that it will charge its third-party sellers a 5%³¹ fuel fee. Companies must make tough decisions regarding their supply chain network to control costs if they hope to remain competitive. Ultimately, everyone from producers and distributors to retailers and consumers is affected by the current supply chain crisis. However, the industries hit the hardest are those right in the midst of the supply chain network, including manufacturing and logistics, as well as retailers who depend on the delivery of goods. Businesses should look for strategies to reduce their costs. Creating a supply chain strategy should be a first step to reduce costs based on mapping out all the links in the supply chain, including all suppliers, manufacturers, distributors, and customers. Sales forecasting is also one of the best cost-reduction strategies for supply chains. By looking at sales data, businesses can work out at which times their products sell in the highest volumes, and when certain products don't sell at all. Using this data, and working with their suppliers, they can manage stock more effectively.

²⁸ Alcott Global, "Be Your Success Story: Skills and Narrative in Supply Chain", 18 Jul 2023, <https://alcottglobal.com/supply-chain-article/be-your-success-story-skills-and-narrative-in-supply-chain>

²⁹ DC Velocity, "Report: Labor shortage, skills deficit are hampering hiring efforts", <https://www.dcvelocity.com/articles/58186-report-labor-shortage-skills-deficit-are-hampering-hiring-efforts>

³⁰ Irina Ivanova, "Gas prices surge to new record high of \$4.43 per gallon", 13 May 2022, <https://www.cbsnews.com/news/gas-prices-national-record-high-443-gallon-may-2022/>

³¹ Matt Egan, "Amazon is adding a 5% fuel and inflation surcharge", 14 Apr 2022, [https://edition.cnn.com/2022/04/13/energy/amazon-fuel-surcharge/index.html#:~:text=New%20York%20\(CNN%20Business\)%20Amazon,worsened%20significantly%20in%20recent%20months.](https://edition.cnn.com/2022/04/13/energy/amazon-fuel-surcharge/index.html#:~:text=New%20York%20(CNN%20Business)%20Amazon,worsened%20significantly%20in%20recent%20months.)

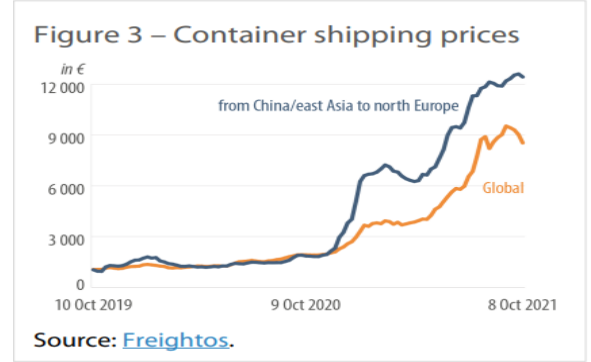
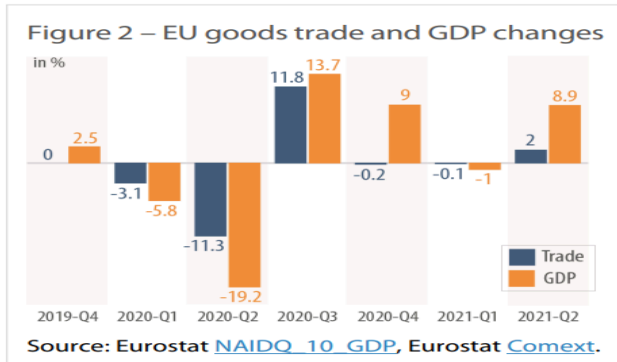


Figure 2 and Figure 3: Impact of the pandemic on supply chain³²

Insight into the future

Throughout the last few years, companies of all sizes have had to reset their operational strategies in hopes of revitalizing their bottom line and retaining their customer base. Building resilience against supply chain stocks is much more important along with the need for faster decision-making. That’s why, according to Gartner³³ “through 2024, 50% of supply chain organizations will invest in applications that support artificial intelligence and advanced analytics capabilities.”³⁴ This means that it will be increasingly important for today’s supply chain leaders to adopt a holistic perspective with Artificial Intelligence (AI) and analytics in the years to come. Artificial intelligence and analytics to inform inventory build allow flexible access to capital so that companies can place their orders when they need to and ultimately, meet customer demand. Additionally, companies can improve resilience by diversifying their supplier base, building contingency plans, investing in robust risk management strategies, and using technology to enhance visibility and adaptability.

MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

China

China has developed a long-term strategic-development agenda during the last decades and in conjunction with its wealth of natural resources and its investment in technological innovation, enabled the country to become a global manufacturing leader, accumulating significant competitiveness in the process. Being the world's largest manufacturing producer, China's role is crucial in the global supply chain, and due to its role in high-end manufacturing and technological innovation, it

³²“Resilience of global supply chains, Challenges and solutions”, [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698815/EPRS_BRI\(2021\)698815_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698815/EPRS_BRI(2021)698815_EN.pdf)

³³ “Powering Future Supply Chain Productivity”, <https://www.gartner.com/en/supply-chain/topics/future-of-supply-chain>

³⁴ “Supply Chain Challenges in 2024 & How to Overcome Them”, Aug 08 2024, <https://www.extensiv.com/blog/supply-chain-management/challenges>

may be more resilient to supply-chain reconfiguration for companies in technology- and innovation-oriented industries. Many companies, though, are now reducing reliance on Chinese manufacturers. Tariffs, trade wars, shooting wars, and political and consumer pressure have all played their part.

The current sentiment toward the supply chain in China is apprehensive at best. Chinese supply chain risk increased due to the ongoing trade war with the US³⁵, the pandemic, and geopolitical upset. Many companies are now looking to countries like India, Mexico, and Vietnam for manufacturing goods. As of July 2023, it was proven that Mexico has taken China's place as America's top trade partner.³⁶

United States of America (USA)

Legislation is restricting regulations all over the world, and legislation affecting supply chain management in the United States is extensive and complex. Unfortunately, supply chain disruptions are occurring too often nowadays due to rapid inflation, geopolitical tensions, severe weather, and COVID-19, and the Biden Administration has been undertaking a range of initiatives that intend to build resilient supply chains that reflect the administration's policies around national security, foreign policy, human rights, and the U.S. economy. In February 2021³⁷ President Biden ordered a whole-of-government approach to tackle supply chain disruptions brought on by the COVID-19 pandemic. The Administration's steady efforts to improve supply chains in the short-, medium-, and long-term have lowered costs for consumers and lowered inflation across the economy.

Moreover, the U.S. is witnessing a manufacturing renaissance, with companies building new facilities at a record pace not seen in decades. Spending on new manufacturing construction rose to an annual rate of \$114.7 billion in 2022, a staggering 40% increase year-over-year, and a 62% increase over the past five years, according to the U.S. Census Bureau³⁸. This reshoring trend is driven by several factors, including the CHIPS and Science Act, rising labor and transportation costs, U.S. tariffs on China, geopolitical tensions, and a desire to reduce single-source dependency and enhance supply chain resilience.

³⁵ Wei Xu , Manish Shakdwipee, "China's Role in Supply-Chain Strategies", 8 Jan 2024, <https://www.msci.com/www/blog-posts/china-s-role-in-supply-chain/04308457853>

³⁶ <https://www.statista.com/chart/7749/most-important-trading-partners-of-the-united-states/>

³⁷ U.S. Department of Transportation, "Biden-Harris Administration Announces New Milestone in First-of-its-Kind Supply Chain Initiative", 20 Mar 2024, <https://www.transportation.gov/briefing-room/biden-harris-administration-announces-new-milestone-first-its-kind-supply-chain>

³⁸ Bindiya Vakil, SCB Contributor, "Five Key Challenges Facing U.S. Manufacturing", 13 June 2024, <https://www.supplychainbrain.com/blogs/1-think-tank/post/39794-five-key-challenges-facing-us-manufacturing>

United Kingdom (UK)

Brexit has been the most significant supply chain disruptor in the United Kingdom, primarily due to delays and red tape following the 2021 Trade and Cooperation Agreement (TCA)³⁹, a free trade agreement signed on 30 December 2020, between the European Union (EU), the European Atomic Energy Community (Euratom), and the United Kingdom (UK). The majority of businesses are struggling to find new suppliers to reestablish supply. The ongoing consequences of Brexit are also affecting European companies. Sources in the sector note that while the situation has mostly stabilized, there is more paperwork to complete and that shipping still takes longer than it did previously. There is broad consensus among industry representatives that companies need to make a strategic decision about warehousing. Some businesses are finding the need to have physical warehousing and distribution presence in both the EU and the UK to mitigate some of the procedural challenges and take advantage of the opportunities. This duplication adds costs.

Germany

Germany, which is known as one of Europe's largest economic powers and the world's third-largest supplier⁴⁰, is starting to slow down, thus affecting supply chains and manufacturers in developing countries. The coronavirus pandemic, the war in Ukraine, inflation, and rising production costs are just some of the reasons for the downward trend seen in the German industry. Together with increasingly higher costs generated by the energy sector (gas, electricity, fuels), this results in rising inflation in Germany and the rest of the EU. Carriers and forwarders are seeking to optimize vehicle utilization, and consolidate and combine routes to resist the ever-increasing cost pressures caused not only by rising fuel costs but also by a shortage of drivers.

United Nations Global Compact Organization

The United Nations plays a big role in designing and implementing international regulations that have significant impacts on the operation and

³⁹ European Commission, https://commission.europa.eu/strategy-and-policy/relations-united-kingdom/eu-uk-trade-and-cooperation-agreement_en

⁴⁰ Anna Palluch, "The impact of the German economy on the supply chain", 8 Sep 2022, <https://cargoon.eu/en/community/blog/market-review/the-impact-of-the-german-economy-on-the-supply-chain/>

management of global supply chains. The United Nations created the UN Global Compact which is an organization that aims to mobilize a global movement of sustainable companies and stakeholders. The UN Global Compact attempts to mobilize a global movement by supporting companies to be responsible and to advance societal goals⁴¹. The organization has created a set of ten principles that they expect companies to abide by. The ten principles fall under the broader categories of human rights, labor, environment, and anti-corruption⁴². The UN Global Compact encourages companies to make sustainability a priority from the top of the organization. If the chief executive sees the supply chain as an extension of their workforce and community, the company can set expectations for best practices across its supply chain. These can include key areas such as selection, training, auditing, and remediation. This promotes a broader understanding within an organization of how decisions made beyond procurement can affect the supply chain. Moreover, the UN Global Compact has developed guidance, such as the Decent Work Toolkit for Sustainable Procurement, the Guide to Traceability, and the Practical Guide for Continuous Improvement, to assist companies in developing more sustainable supply chain practices.

Better Work

Better Work is a partnership between the UN's International Labour Organization and the International Finance Corporation (a member of the World Bank Group). It brings together governments, global brands, factory owners, unions, and workers to improve working conditions in the garment industry and seeks to make the sector more competitive⁴³. Better Work has developed a strategy for 2022 to 2027 that already involves 13 countries and aims to create strong partnerships across the supply chain, with an increased focus on tackling the fundamental challenges that were exposed by the COVID-19 pandemic⁴⁴. With this new strategy, Better Work aimed to turn the crisis into an opportunity to forge a more sustainable, resilient, inclusive, transparent, and just garment industry.

⁴¹ United Nations Global Compact, <https://unglobalcompact.org/handbook/non-business>

⁴² United Nations Global Compact, <https://unglobalcompact.org/what-is-gc/mission/principles>

⁴³ Better Work, <https://betterwork.org/our-strategy/>

⁴⁴ "BETTER WORK STRATEGY 2022-2027

Sustaining Impact",

<https://betterwork.org/wp-content/uploads/Better-Work-Global-Strategy-2022-27-1.pdf>

International Labor Rights Forum (ILRF)

ILRF is a human rights organization that advances dignity and justice for workers in the global economy. It seeks to hold global corporations accountable for labor rights violations in their supply chains, advance policies and laws that protect workers, and strengthen workers' ability to advocate for their rights. The ILRF works with trade unions, faith-based organizations, and community groups to support workers working in the supply chain and their families⁴⁵.

BLOCS EXPECTED

Bloc 1

The first Bloc should consist of countries that are more affected by the problem and have had previous engagement with it. In that sense, Member States should aim to find feasible and efficient solutions to combat supply chain disruptions. Since most of them are More Economically Developed Countries (MEDCs), like the United States of America, the United Kingdom, and China, they can provide great help, for example, funding organizations and enhancing equipment.

Bloc 2

The second bloc should consist of countries that are less affected by supply chain disruptions, mostly because they have more important matters to face. They should, however, try to seek solutions to battle this ongoing crisis. This bloc consists of mostly Less Economically Developed Countries (LEDCs).

TIMELINE OF EVENTS

Date	Description of event
November 17th, 2019	Beginning of the COVID-19 Pandemic with the first human cases in the People's Republic of China.
2021	Labor shortages due to COVID-19 continue
February 24, 2022	Russia-Ukraine War breaks out.

⁴⁵ Global Labor Justice, <https://laborrights.org/about>

January 2023	The Digital Operational Resilience Act was put into force.
June 6, 2023	The Council adopted the general approach of the Internal Market Emergency and Resilience Agreement on 6 June 2023. ⁴⁶
February 2024	The Indo-Pacific Economic Framework for Prosperity Agreement entered force ⁴⁷
October 7, 2023	War in Palestine (Gaza) occurs, meanwhile Houthi attacks appear in the Red Sea.

RELEVANT RESOLUTIONS, TREATIES AND EVENTS

The Department of Operational Support⁴⁸

The Office of Supply Chain Management was established under the General Assembly RES/72/266B⁴⁹ to shift the management paradigm in the United Nations as an operational support pillar of the Department of Operational Support. The report of the Secretary-General (A/72/492/Add.2)⁵⁰ sets out the terms of reference for the Office of Supply Chain Management, which is headed by the Assistant Secretary-General. The Office of Supply Chain Management with its Logistics and Procurement Divisions is tasked with supporting an effective supply chain that would allow the organization to have the right goods and services at the right place, at the right time, and at the right cost, while ensuring the requisite segregation of duties. The Office supports operations through the provision of operational reporting, business intelligence, vendor outreach, and performance management, as well as through the establishment of baselines and the monitoring of key performance.

Resolution B/72/266⁵¹

According to General Assembly resolution B/72/266, the Office of Supply Chain Management was established within the Department of Operational Support

⁴⁶ Council of the EU, "SMEI / IMERA: Council and Parliament strike a provisional deal on crisis preparedness", 1 Feb 2024, <https://www.consilium.europa.eu/en/press/press-releases/2024/02/01/single-market-emergency-instrument-council-and-parliament-strike-a-provisional-deal-on-crisis-preparedness/>

⁴⁷ U.S. Department of State, https://www.state.gov/ipef-supply_chain-agreement

⁴⁸ "DEPARTMENT OF OPERATIONAL SUPPORT", <https://operationalsupport.un.org/en>

⁴⁹ "Resolution adopted by the General Assembly", 5 July 2018, <https://documents.un.org/doc/undoc/gen/n18/214/83/pdf/n1821483.pdf>

⁵⁰ <https://documents.un.org/doc/undoc/gen/n18/079/05/pdf/n1807905.pdf>

⁵¹ <https://documents.un.org/doc/undoc/gen/n23/423/98/pdf/n2342398.pdf>

on 1 January 2019. It specializes in monitoring progress towards ensuring a responsive and responsible supply chain function that properly supports all the activities of the UN Organization by ensuring the availability of the right goods and services, at the right place, at the right time, and at the right cost, while ensuring transparency and accountability, increasing cooperation within the United Nations system, and using innovation and leveraging technology to streamline processes, manage risk and provide responsible solutions.

Joint Statement on Cooperation on Global Supply Chains

On 20/07/22 and the occasion of the Supply Chain Ministerial Forum, the Governments of the United States of America and 18 partner economies signed a joined statement of cooperation⁵² since the shocks to global supply chains from pandemics, wars, and conflicts, extreme climate impacts, and natural disasters have created the urgent need to further strengthen supply chains and to work to reduce disruptions and to build long-term resilience. Australia, Brazil, Canada, Costa Rica, the Democratic Republic of the Congo, the European Union, France, Germany, India, Indonesia, Italy, Japan, Mexico, the Netherlands, the Republic of Korea, Singapore, Spain, the United Kingdom, and the United States agreed to work together on crisis response and to engage on these work businesses, workers, academia, labor and civil society, including women, representatives from local and other communities, consistent with Participants' domestic laws and international obligations, and different levels of government to alleviate near-term transportation, logistics, and supply chain disruptions and bottlenecks as well as the long-term resilience challenges that make supply chains vulnerable.

PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

Internal Market Emergency and Resilience Agreement (IMERA)

The Internal Market Emergency and Resilience Agreement of the European Commission (IMERA)⁵³ is intended to anticipate, prepare for, and respond to the impact of future crises. It builds on lessons learned during recent emergencies such as COVID, Russia's war in Ukraine, and the energy supply crisis and provides continuous monitoring for possible upcoming crises by establishing an emergency mode to be activated whenever a threat becomes clear, and puts in place governance so that member states can coordinate their response. It also creates an 'advisory group' formed by the Commission and the member states to assess a given situation and recommend responses. As a last resort, the IMERA provides emergency

⁵²"Joint Statement on Cooperation on Global Supply Chains", 20 July 2022, <https://www.state.gov/supply-chain-ministerial-joint-statement/>

⁵³European Parliament, "Internal Market Emergency and Resilience Act (IMERA)", 26 Feb 2024, [https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI\(2023\)739338](https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2023)739338)

measures such as targeted information requests to economic operators, priority-rated requests for crisis-relevant products, a fast-track procedure to bring certain products onto the market, and derogations from product-specific rules. It also creates an ‘advisory group’ formed by the Commission and the member states to assess a given situation and recommend responses. “The new legislative instrument [is] aimed precisely at guaranteeing an internal market that ensures the stability of supply chains for critical goods and services, secures welfare and prepares us to face the challenges ahead,”⁵⁴ Belgian Economy Minister Pierre-Yves Dermagn said in a statement.

Indo-Pacific Economic Framework for Prosperity Agreement (IPEF)

The Indo-Pacific Economic Framework for Prosperity Agreement⁵⁵ focuses on a plethora of factors seeking to advance resilience, sustainability, inclusiveness, economic growth, fairness, and competitiveness for the 14 IPEF economies. The Framework also will provide tangible benefits that fuel economic activity and investment, promote sustainable and inclusive economic growth, and benefit workers and consumers across the region. Since its launch, the IPEF Partners have engaged in intensive discussions to scope out each of the four pillars of the Framework, covering Trade, Supply Chains, Clean Economy, and Fair Economy respectively. IPEF negotiations have proceeded relatively smoothly for three of the four pillars, including supply chains, clean economy, and fair economy pillars, but ran into trouble around fair and resilient trade and failed to be negotiated in time for the Asia-Pacific Economic Cooperation Summit⁵⁶.

Digital Operational Resilience Act (DORA)

The Digital Operational Resilience Act (DORA)⁵⁷ is an EU regulation that entered into force on 16 January 2023 and will apply as of 17 January 2025. It aims to further strengthen the Information Technology (IT) security of financial entities. DORA sets uniform requirements for the security of network and information systems of companies and organizations operating in the financial sector and critical third parties that provide ICT-related services to them. The act creates a regulatory framework on digital operational resilience by which all firms need to make sure they can withstand, respond to, and recover from all types of Information and Communication Technology (ICT)-related disruptions and threats. The new rules constitute a very robust framework that boosts the IT security of the financial sector, preventing and mitigating cyber threats. “The Digital Operational Resilience Act

⁵⁴ Thomas Moller-Nielsen, “EU equips single market for crisis management”, 2 Feb 2024, <https://www.euractiv.com/section/economy-jobs/news/eu-equips-single-market-for-crisis-management/>

⁵⁵ Erin L. Murphy, “IPEF: Three Pillars Succeed, One Falter”, 21 Nov 2023, <https://crsreports.congress.gov/product/pdf/IF/IF12373>

⁵⁶ <https://www.csis.org/analysis/ipef-three-pillars-succeed-one-falters>

⁵⁷ “Digital Operational Resilience Act (DORA)”, https://www.eiopa.europa.eu/digital-operational-resilience-act-dora_en

(DORA) aims to achieve a high common level of digital operational resilience across European financial entities. This is a welcome step in an increasingly connected world that is ever more exposed to cross-border information and communication Technology (ICT) risks and cyber risks.” stated Anneli Tuominen, Member of the Supervisory Board of the ECB, for Eurofi Magazine.

POSSIBLE SOLUTIONS

Establishing Alternative Routes

Investing in identifying and establishing alternative logical routes, involving complex transit pathways that can adapt to changing conditions in conflict-affected areas is a critical aspect of any comprehensive strategy to combat supply chain challenges. These routes must meet stringent standards for transportation, maintaining proper temperature control and handling to ensure the integrity and safety of the supplies for example. By diversifying the supply chain, organizations can reduce dependency on single routes and mitigate the risk of disruptions. To achieve these, countries should invest in policies and must press for a host of measures—tax, labor protections, and environmental standards.

Enhancing Pedigree Systems

Enhancing Pedigree Systems refers to improving the systems used for tracking and managing lineage and genetic information in animals, plants, or humans and it is crucial for tracking supplies throughout the supply chain. The Pedigree System is a supply chain platform that provides blockchain-enabled asset management and traceability solutions. It is proposed as a platform for the public and governments to explore the information in each part of the food chain and provide necessary information about the food industry. Such a system will ensure transparency and traceability, thus allowing organizations to monitor the movement of each item from its origin point to its final destination. By ensuring that all parties in the supply chain are accountable, organizations can better manage risks and ensure that supplies reach their intended recipients in a timely and secure manner. The Pedigree System platform will be run by a multi-stakeholder consortium, supported by a dedicated Platform Management Organization and overseen by a Governance Board. This collaborative approach ensures that the platform benefits from diverse expertise, maintains regulatory compliance, and operates effectively on a global scale. By involving both public and private sector entities, the platform can address the complex needs of modern supply chains while promoting transparency, accountability, and efficiency. Moreover, the monitoring of the Pedigree System will involve a multi-layered approach to ensure its integrity, compliance, and effectiveness across different regions and industries.

An involved part should, first of all, be a dedicated consortium or governing body composed of key stakeholders to set the rules, standards, and protocols for data management, security, and system operations and will also be responsible for making strategic decisions regarding the platform's evolution and responding to emerging challenges. Moreover, another part will be national and international regulatory bodies will play a crucial role in monitoring the system to ensure compliance with relevant laws, standards, and best practices. These regulators may include food safety agencies, health departments, customs authorities, and other governmental bodies.

Strategic Stockpiling

Strategic stockpiling refers to the creation of reserves of essential supplies aimed at protecting the supply chain against unexpected disruptions. By following this approach, it is ensured that there will always be a buffer of critical items available, which can be particularly important in conflict zones where supply lines are unstable and unpredictable. Stockpiling calls for a more resilient response to emergencies, guaranteeing that needs will be met even when regular supply channels are at stake.

However, stockpile strategies engage some important limitations that must be taken into consideration, such as expiry and different needs that cannot be predicted. Such a situation emerged during the pandemic when hospitals and first responders faced dire shortages of critical equipment such as ventilators and protective masks, but it became clear that the national stockpiles did not have nearly enough of such supplies to meet these needs. Effective national programs should, therefore, address flexibility to ensure that it has lots of options, relationships, and suppliers across the private sector for securing basic needs. The governments would also need to know what supplies they have, where those supplies are, and when those supplies expire. The governmental institutions overseeing emergency preparation need to have leadership that can review information as it becomes available and work with experts to secure and distribute supplies efficiently. This would be an ongoing process, rather than a system that is put in place only in the event of crises.

Quality Checks

Conducting quality checks at every stage of the supply chain is vital. This includes rigorous testing and monitoring at the point of manufacture, during transit, and at local contribution centers. Implementing quality control measures ensures

that supplies maintain their efficacy and safety, therefore reducing the risk of compromised goods reaching vulnerable populations. Continuous oversight helps in identifying and addressing issues promptly and maintaining trust and reliability in the supply chain.

Collaboration with Local Authorities and Non-Governmental Organizations (NGOs)

Establishing solid relationships with local authorities and Non-Governmental Organizations (NGOs) is an essential step for navigating the complexities of a conflict zone. These collaborations provide invaluable on-the-ground insights and assistance, thus promising smoother operations and better adaptation to local conditions. Rainforest Alliance, an international non-governmental organization, openly invites companies to work with them to analyze and improve their supply chains' sustainability and corporate social responsibility records. Many companies in the coffee, chocolate, tea, building supplies, and other industries have taken them up on it. Working with NGOs on supply chain issues can be tricky, but usually it is better than working against them.

Moreover, local partners can offer guidance on cultural nuances, security concerns, and logistical challenges, enhancing the effectiveness and reach of supply chain efforts in these areas.

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