



Global trade, e-commerce and supply chain disruptions

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Abstract

This research paper examines the impact of globalization on international trade, impact of e-commerce and impact of supply chain disruptions. A quantitative approach was adopted and a survey research method was applied to collect secondary data from newspapers, subject related articles, reference book, internet etc. The research contributes to the scholarly literature on Global Trade, E-Commerce and Supply Chain Disruptions. The role of foreign trade in achieving a quicker pace of economic development is thus well recognized. The impact of the E-commerce B2C industry on Supply Chain Management (SCM) has become a crucial topic over the last decade, as traditional supply chain activities have increasingly transitioned into information technology-oriented practices. A number of large corporations and startups are vying for dominance in the e-commerce B2C sector, which has influenced several key variables in the supply chain—such as supplier operations, consumer purchasing behavior, logistics, inventory management, and warehousing. In a highly competitive economy, understanding the overall impact of the e-commerce sector on SCM is essential. The research identifies insights of practical value to policymaker entrepreneur intent on constructing small and medium sized enterprises (SME) resilience in today's more complex global trading world.

Keywords: Global trade, e-commerce, impact of e-commerce, supply chain, disruption, innovation

Introduction

International/Global trade is the exchange of capital, goods, and services across international borders or territories because there is a need or want of goods or services.

Global trade, also known as international trade, is simply the exchange of goods and services across international boundaries.

International trade is the purchase and sale of goods and services by companies in different countries. Consumer goods, raw materials, food, and machinery all are bought and sold in the international marketplace.

International trade allows countries to expand their markets and access goods and services that otherwise may not have been available domestically. As a result of international trade, the market is more competitive. This can ultimately result in more competitive pricing and cheaper products. Some countries engage in national treatment of imported goods, treating them as equivalent to those same products produced domestically. International trade, economic transactions that are made between countries. Among the items commonly traded are consumer goods, such as television sets and clothing; capital goods, such as machinery; and raw materials and food. Other transactions involve services, such as travel services and payments for foreign patents. International trade transactions are facilitated by international financial payments, in which the private banking system and the central banks of the trading nations play important roles.

International trade and the accompanying financial transactions are generally conducted for the purpose of providing a nation with commodities it lacks in exchange for those that it produces in abundance; such transactions, functioning with other economic policies, tend to improve a

nation's standard of living. Much of the modern history of international relations concerns efforts to promote freer trade between nations. This article provides a historical overview of the structure of international trade and of the leading institutions that were developed to promote such trade.

Importance of International Trade

- **Expands market reach:** Companies can market their products internationally, resulting in higher revenue streams.
- **Develops global collaboration:** Trade agreements strengthen diplomatic ties and foster peaceful relations among countries.
- **Boosts worldwide production:** International trade enhances the global production landscape as nations leverage their unique strengths and resources.
- **Creates employment opportunities:** As businesses expand into international markets, they generate new domestic job opportunities.
- **Enables cultural interchange:** International trade facilitates the exchange of culture, as nations share ideas and practices along with their products.
- Availability of products worldwide
- Reduce vulnerability and dependence on the domestic market
- Increase in product quality because of competition and higher quality standards required in other countries
- Fair trade raises working conditions
- Contributes to the economy

Need of International trade?

- Enhance sales and profits through market expansion.

- Exporting is profitable. In fact, 60% of small companies that engage in exporting derive 20% of their annual earnings from exports
- Reduce cost of products by importing less expensive raw materials and through foreign manufacturing.
- Learn new ideas and management techniques.

International trade and Economic Growth

The issues of international trade and economic growth have gained substantial importance with the introduction of trade liberalization policies in the developing nations across the world. International trade and its impact on economic growth crucially depend on globalization. As far as the impact of international trade on economic growth is concerned, the economists and policy makers of the developed and developing economies are divided into two separate groups. One group of economists is of the view that international trade has brought about unfavourable changes in the economic and financial scenarios of the developing countries. According to them, the gains from trade have gone mostly to the developed nations of the world. Liberalization of trade policies, reduction of tariffs and globalization have adversely affected the industrial setups of the less developed and developing economies. As an aftermath of liberalization, majority of the infant industries in these nations have closed their operations. Many other industries that used to operate under government protection found it very difficult to compete with their global counterparts. The other group of economists, which speaks in favour of globalization and international trade, come with a brighter view of the international trade and its impact on economic growth of the developing nations. According to them developing countries, which have followed trade liberalization policies, have experienced all the favourable effects of globalization and international trade. China and India are regarded as the trend-setters in this case. There is no denying that international trade is beneficial for the countries involved in trade, if practiced properly. International trade opens up the opportunities of global market to the entrepreneurs of the developing nations. International trade also makes the latest technology readily available to the businesses operating in these countries. It results in increased competition both in the domestic and global fronts. To compete with their global counterparts, the domestic entrepreneurs try to be more efficient and this in turn ensures efficient utilization of available resources. Open trade policies also bring in a host of related opportunities for the countries that are involved in international trade. However, even if we take the positive impacts of international trade, it is important to consider that international trade alone cannot bring about economic growth and prosperity in any country. There are many other factors like flexible trade policies, favourable macroeconomic scenario and political stability that need to be there to complement the gains from trade. There are examples of countries, which have failed. However, instances like this cannot stand in the way of international trade activities that are practiced across the different nations of the world.

E-Commerce Introduction

Electronic commerce, or E-Commerce, is the buying and selling of goods and services over the internet. It includes all online transactions and can happen through websites,

mobile apps, or social media, connecting businesses to consumers (B2C) or other businesses (B2B). Normally e-commerce is used to refer to the sale of physical products online, but it can also describe any kind of commercial transaction that is facilitated through the internet. E-commerce can be conducted on computers, tablets, smartphones, and other smart devices. E-commerce refers to commercial activities including the electronic buying or selling products and services which are conducted on online platforms or over the Internet. E-commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange, inventory management systems, and automated data collection systems.

E-commerce has revolutionized the way businesses operate and has created new opportunities for entrepreneurs and consumers alike. One of the primary benefits of e-commerce is that it offers a more convenient and efficient way to conduct business. Consumers can browse and purchase products from the comfort of their own homes, while businesses can reach a global audience without the need for a physical storefront. E-commerce has also enabled businesses to streamline their operations by automating many of the tasks involved in the sales process, such as inventory management, order processing, and shipping.

E-commerce has continued to grow in popularity and importance, particularly in light of the COVID-19 pandemic, which has led to a surge in online shopping as people seek to minimize in-person interactions. As a result, businesses that are able to adapt to the e-commerce landscape are likely to have a competitive advantage in the years to come. The first-ever online sale was in 1994 when a man sold a CD by the band Sting to his friend through his website Net Market, an American retail platform. This is the first example of a consumer buying a product from a business through the World Wide Web or e-commerce as we commonly know it today.

History of E-commerce

Most of us have shopped online for something at some point, which means we've taken part in e-commerce. So it goes without saying that e-commerce is everywhere. But very few people may know that e-commerce has a history that predates the internet.

E-commerce actually goes back to the 1960s, when companies used an electronic system called the Electronic Data Interchange to facilitate the transfer of documents. It wasn't until 1994 that the very first transaction took place. This involved the sale of a CD between friends through an online retail website called Net Market. The industry has evolved rapidly since then, with companies like Alibaba and Amazon becoming household names around the world. The introduction of free shipping, which, at least on the surface, reduces costs for consumers, has also helped increase the popularity of the e-commerce industry.

Definition of E-Commerce

'E-commerce, or electronic commerce, is the process of buying and selling goods and services over the internet through various digital devices and platforms.

Types of E-commerce

There are types of e-commerce that can describe almost every transaction that takes place between consumers and businesses.

- **Business-to-Consumer (B2C)**

When a good or service is sold to an individual consumer by a business, e.g., we buy a pair of shoes from an online retailer. B2C e-commerce companies sell directly to the product's end-user instead of distributing goods through an intermediary such as another retailer.

- **Business-to-Business (B2B)**

Similar to B2C, an e-commerce business can sell goods to another company. When a good or service is sold by a business to another business. B2B transactions often entail larger quantities, more detailed specifications, and longer lead times. The buyer can also arrange for recurring orders if the purchase is for ongoing manufacturing processes.

- **Business-to-Government (B2G)**

In this model, businesses sell products or services to government agencies through online portals or marketplaces. Some e-commerce businesses serve as government contractors, providing goods or services to government agencies and other entities. Often these arrangements require bidding on projects through an established procurement process and can involve large quantities of a given item.

- **Consumer-to-Consumer (C2C)**

When a good or service is sold by a consumer to another consumer. Individuals can sell things to other individuals on their individual websites or through e-commerce platforms that facilitate the process.

- **Consumer-to-Business (C2B)**

When a consumer's own products or services is sold to a business or organization, e.g., an authority offers exposure to their online audience in exchange for a fee or a photographer licenses their photo for a business to use. Some platforms allow individuals to more easily engage with companies and offer their services, especially related to short-term contracts or freelance opportunities.

- **Consumer-to-Government (C2G)**

Although not an e-commerce relationship in the traditional sense, C2G is a way for individuals to interact with government. For example, uploading your federal tax return to the Internal Revenue Service website can be considered an e-commerce transaction as it involves an exchange of information. Taxpayers can also pay what they owe or request a refund for the amount they may have overpaid.

- **Government-to-business (G2B):** In this model, government agencies sell products or services to businesses through online portals or marketplaces.

- **Government-to-consumer (G2C):** In this model, government agencies provide products or services directly to consumers through online portals or marketplaces.

Uses of E-commerce

- **Online retail:** One of the most well-known uses of e-commerce is online retail, where businesses sell products directly to consumers through their online store, website, or mobile app.

- **Digital products and services:** E-commerce is also commonly used for the sale of digital products and services, such as music, e-books, software, and online courses.

- **Business-to-business transactions:** E-commerce can be used for B2B transactions, where businesses sell products or services to other businesses.

- **Online marketplaces:** E-commerce marketplaces, such as Amazon and eBay, provide a platform for businesses and individuals to sell their products to a large audience.

- **Auction sites:** Online auction sites, such as eBay, allow users to bid on and purchase items from other users.

- **Online banking and financial services:** E-commerce is used extensively for online banking and financial services, including payment processing, bill payment, and money transfers.

- **Online booking and reservations:** E-commerce is used for booking and reservations of flights, hotels, rental cars, and other travel-related services.

- **Food delivery:** E-commerce platforms are used for online ordering and delivery of food from restaurants.

- **Online advertising:** E-commerce is also used for online advertising, where businesses can advertise their products and services to a large audience.

Advantages and Disadvantages of E-commerce

Advantages

E-commerce offers buyers and sellers a number of advantages:

- **Convenience:** E-commerce can happen 24 hours a day, seven days a week. Consumers can buy at their convenience, and business owners can make sales while they sleep.

- **Increased selection:** Many stores offer a wider array of products online than they could ever carry in their brick-and-mortar counterparts. And many stores that solely exist online offer consumers exclusive inventory that is unavailable elsewhere.

- **Potentially lower start-up costs:** E-commerce companies may require a warehouse or manufacturing site, but they usually don't need a physical storefront. The cost to operate digitally is often less expensive than needing to pay rent, insurance, building maintenance, and property taxes.

- **International sales:** As long as an e-commerce store can find a way to ship its products to its customers, it can sell to anyone in the world and isn't limited by physical geography.

- **Opportunity to collect valuable data:** Willingly or unknowingly, consumers share a lot of information on their interests and shopping habits when they buy or even just browse online.

- E-commerce enables fast and secure shopping.
- It is making digitalized world.
- E-commerce also enables to choose different goods & services according to your choice.
- It is a simple way of selling and buying products and services.
- E-commerce replaced the paper work as all transactions are through internet today.
- It provides better management system, as it has a centralized database.
- E-commerce via internet covers a large number of customers worldwide.
- E-commerce has several payment modes.

Disadvantages

There are also some drawbacks that come with e-commerce. Those can include:

- **Limited customer service:** If you shop online for a computer, you cannot simply ask an employee to demonstrate a particular model's features in person. And although some websites let you chat online with a staff member, that is not a typical practice. A disadvantage for shoppers, this can also be a money-saver for retailers.
- **Lack of instant gratification:** When you buy an item online, you must wait for it to be shipped to your home or office. However, e-traders like Amazon now make the waiting game a little bit less painful by offering same-day delivery as a premium option for select products.
- **Inability to touch products:** Online images do not necessarily convey the whole story about an item, and e-commerce purchases can be disappointing when the items don't live up to the buyer's expectations. Case in point: an item of clothing may be made from shoddier fabric than its online image indicates.
- **Dependence on technology:** If a website crashes or must be temporarily taken down for any reason, the business is effectively closed until things return to normal.
- **Greater competition:** Although the low cost of starting an e-commerce business can be an advantage, it also means means competitors can just as easily enter the market.
- E-commerce has no universal standard for quality and reliability.
- E-commerce works through internet, it is possible that navigation on internet itself may be slow.
- Strong security is required in e-commerce as all transactions are through internet.
- There is high risk of buying unsatisfactory products through e-commerce.
- It uses public key infrastructure which is not safe.
- Customers also trap in banking fraud which is quite frequent.
- Hackers also try to get access of data or to destroy data in e-commerce.

Example of E-commerce

Amazon is a behemoth in the e-commerce space. In fact, it is the world's largest online retailer and continues to grow.

While its success has been unusually spectacular, its history is not unlike many other e-commerce businesses. The company launched its business with an e-commerce-based model of online sales and product delivery. It was founded by Jeff Bezos in 1994 as an online bookstore and over the years has expanded to include everything from clothing to housewares, power tools to food and drinks, and electronics. Today it also makes a significant portion of its revenue from services to consumers, other businesses, and governments. Company sales increased by 11% in 2024, totaling \$638 billion, compared to \$574.79 billion in 2023. Amazon's operating income rose to \$68.6 billion in 2024, up from \$36.6 billion in 2023

Supply Chain Disruption

Introduction

Disruptions are unforeseen disturbances that affect a business's operations. Several businesses are involved in the supply chain. Imagine a disruption or unforeseen disturbance in it. Supply chain disruption can clog the entire flow of goods, causing multiple problems at all stages.

A smoothly functioning supply chain can ensure that raw material is transformed into finished goods and is seamlessly available for consumers. However, a supply chain disruption means losses for all involved: suppliers, manufacturers, transporters, distributors, retailers, and consumers. The supply chain is a chain of activities. Even if a link is broken, the entire supply chain becomes disrupted. The world noticed the far-reaching impact of supply chain disruption during COVID-19.

Causes of Supply Chain Disruption

Now, you would want to know what causes supply chain disruptions. Are only significant events responsible for large-scale disruption of activities, or do minor localized problems cause a big scare?

The important causes of supply chain disruptions is as under:

- **Natural Disasters:** Infrastructure is critical for the functioning of the supply chain. Natural disasters can damage factories, roads, railways, ports, and other infrastructure. Floods, earthquakes, cyclones, landslides, and other natural disasters can make moving goods through the supply chain difficult.
- **Pandemics:** We all saw worldwide lockdowns very recently during the COVID-19 pandemic. These lockdowns disrupted supply chains by halting people's movement, leading to paused manufacturing.
- **Political Instability:** Businesses have always suffered the consequences of political upheaval. Supply chain disruptions are not far from places facing political conflicts. Here are the problems supply chains face politically
- **Notorious Protests & Strikes:** Politically motivated and funded protests are not new to the world, especially in democracies. The ambitions of some notorious elements can put people's livelihoods at risk and disrupt consumers. Workers' strikes have often been misused as a means to blackmail businesses.
- **Local Conflicts and Coups:** Conflicts between groups and rebels have long-term impacts on the supply chains.

The Middle East is prone to such conflicts. Most recently, the problem of pirates in the Indian Ocean due to the Houthi Rebels conflict led to the abduction of many trade shipments, which had to be rescued by the Indian Navy. It disrupted the supply chains by blocking the route to the Suez Canal, forcing ships to take a longer route.

- **Wars:** Wars lead to the formation of naturally conflicted groups. Supply chain disruption is the major setback created by wars. Some wars are deliberately designed to affect supply chains. Currently, two major wars are happening involving Russia-Ukraine and Israel-Hamas.
- The oil supply chain saw disruption due to the Russia-Ukraine war.
- The Israel-Hamas war has choked the Middle-Eastern trade routes, the Suez Canal, to be precise.
- It has increased the distance between the West and the East.
- **Sanctions:** You may see sanctions as the by-product of wars and conflicts, but they are equally responsible for supply chain disruptions. Who pays the price? All those who are associated with the supply chain.
- **Favoritism:** Political favoritism can be the death knell of supply chains. Every powerful leader wants his representatives to control the supply chains, and their ambitions can cause disruptions.
- **Economic Shifts:** The economic cycles of recession, recovery, growth, and expansion keep repeating. Each one has a different effect on the supply chains. High inflation can cause a recession, which leads to supply chain disruptions. Reduced demand or sudden spikes in demand can overwhelm the supply chains.
- **Supplier Failures & Breakdowns:** The supply chain comprises many small players and some bigger ones. If one of the large suppliers faces issues in production, breakdowns or bankruptcy, it can lead to supply chain disruption.
- **Cyber attacks:** Hacking and cyber attacks are the most significant risks of technology. It's not uncommon for crucial supply chains to be infected by malware. Such attacks have the power to bring the supply chain to halts.
- **Accidents:** Accidents in factories or during transportation can cause the loss of product. Without the product, supply chain disruption is inevitable.
- **Hoarding:** Hoarders prevent essential goods from reaching the markets, creating artificial scarcity. They disrupt the supply chain to raise prices. As the prices rise, hoarders sell their products to capitalize on the starved customers.

We have tried to cover many points, but it is only possible to enumerate some causes in just one blog. Even the most

negligible cause can lead to a wide-scale supply chain disruption.

Types of Supply Chain Disruption

Internal Disruptions

When factors from within a company cause the disruption, it is called an internal disruption. The issues include:

- Poor Inventory Management
- Machinery Breakdown
- Labour Problems

External Disruptions

When the causes of supply chain disruption are beyond the control of a company, they are called external disruptions. These include:

- Natural Disasters
- Economic Sanctions
- Wars & conflicts
- Pandemics
- Sudden Disruption

Some events, like natural disasters, occur without warning. There is no time to prepare for the damage they create.

Some activities that disrupt the supply chain are pre-planned. These include:

- Renovation or Infrastructure development
- Technology upgradation
- Machine overhauling
- Strikes or conflicts
- Hoarding
- Hostile Takeovers

These activities do cause supply chain disruption, but only temporarily.

However, there can be notoriously planned cyber attacks, terrorism, wars, conflicts or coups that are aimed at causing widespread disruption.

Effects of Supply Chain Disruptions

To understand the importance of the supply chain for businesses, you should first see the effects of supply chain disruption. Here's how disruptions can affect various players:

- **Production Halts:** Disruptions in the supply chain lead to the non-availability of raw materials. Without it, production halts, leading to heavy losses for manufacturers.
- **Delayed Deliveries:** Production or transport delays inevitably lead to delays in goods delivery. Shipments get delayed, leaving the customer's demands unmet.
- **Unavailability of goods:** Supply chain disruptions can make essential goods like food and medicines scarce, leaving customers stranded.
- **Increased Costs:** The scarcity of goods can lead to unwanted inflation. This inflation benefits hoarders who accumulate essential goods and sell them at high prices later.
- **Loss of Revenue:** The businesses involved in the supply chain lose money because they cannot sell goods

to customers. Customers might also turn to competitors for their products.

- **Customer Dissatisfaction:** A company's reputation is built on serving its customers well. However, supply chain disruptions can leave a bad taste, and customers can move to competitors.

Managing Supply Chain Disruptions

Supply chains are often vulnerable to various disruptions. Some of them are also beyond our control and cannot be stopped. However, you can prepare in advance and take steps to manage supply chain disruptions:

- **Buy from Multiple Suppliers:** Instead of relying on a single supplier, you can diversify. Having multiple suppliers can help you avoid the consequences of supply chain disruption. You can always bank on others if things go south with one supplier.
- **Use Technology:** Using advanced technology, you can manage the entire supply chain and always locate the goods. Tools like AI, blockchain, predictive analysis, etc, are very helpful in identifying problems and finding solutions beforehand.
- **Develop Contingency Plans:** Creating contingency plans can help you find alternatives in challenging situations. Multiple suppliers, transportation routes, machinery and workforce can help you manage supply chain disruptions.
- **Improve Communication:** Proper communication is the key to everyone's preparedness. When information is available beforehand, there are fewer chances of oversight and more chances of quick recovery.
- **Localise your Supply Chain:** Going global is a boon, but not for supply chains. There can be any number of risks and fallouts that lead to supply chain disruptions. It is better to source your raw material locally to ensure no significant surprises.
- **Maintain Safety Stock:** Companies tie their hands by depriving them of enough raw materials for cost-cutting. Keeping only the required amount and relying on JIT (Just-in-time) inventory can prove fatal. Hence, you should always keep a reserve stock that ensures the safety of operations.

Conclusion

In conclusion it can be said that, international trade, E-Commerce and Supply Chain Disruption leads to economic growth provided the policy measures and economic infrastructure are accommodative enough to cope with the changes in social and financial scenario that result from it.

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