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Fundamental Economic Problems

The world economy is greatly altered by COVID-19, especially in the UK. It also drives consumer behaviour, crumbles up supply chains, and enhances the present economic challenges. Fundamental economic problems in the UK are found in the case study discussed in brief.

Covid-19 rules of doing business: As a result of the unexpected changes associated with COVID-19, organisations face an abrupt and unmatched transition. Social distancing and restrictions greatly influence different industries disrupting production and consumption due to the lockdown during COVID-19. The key changes in rules of doing business in the UK during the pandemic involve flexible and remote work, financial support, initiatives through the government, and emphasis on online business. COVID-19 rules of doing business in the UK are inspired to adopt and practice remote and flexible working arrangements to reduce risk and must make policies for remote and flexible working arrangements (CIPD, 2021). Additionally, consumer demand increased for online shopping and home delivery services. For this organisation, the emphasis is on online presence. The government also take action to help business through loans, breaks, and grants.

Shortage of demand: At the beginning of the pandemic, the demand for food and groceries increased due to the people's stocked-up mindset. They want to pantries in anticipation of lockdowns and shortages. This was the result of a temporary shortage of many items in the UK like flour, pasta, toilet paper, and so on. Shortage of personal protective equipment was increased to a great extent. The demand for gloves, masks, gowns, and hand sanitisers posed serious intimidation to the people. The government takes action to control the shortage of personal protective equipment (Roy and Chakraborty, 2021). Covid – 19 also responsible for the shortage of semiconductors which include cars to smartphones. For this, production process delays and the price of the product increased.

Shortage of supply of drivers: Due to the lockdown during the pandemic, it was difficult for people to train and take people's driving tests. For this, there was a great influence on supply chains in the UK. Due to the shortage of HGV drivers stores and supermarkets are hardly suffered to fill their pantries with goods. This led to frustration and anxiety for consumers, and it also reduced the reputation of the UK industry.

The Effects of BREXIT on the Demand and Supply Chain Facilities: Brexit associated with COVID-19 also increased the risk and decreased consumer belief or confidence, which resulted in decreasing the demand for goods. After departing, new border maintenance, customs checks, and rules and regulations create difficulty in importing and exporting products between the EU and the UK. More specifically, for BREXIT the UK faces difficulties such as a lack of fresh produce, high costs for business, insufficient labour for transportation, and logistics (Thissen et al., 2020).

Others: Panic buying exists when people are anxious about the effects of COVID-19 and when people have a poor level of belief in the government (Roy and Chakraborty, 2021). And high level of social deprivation exists in panic-buying behavior. It is the cause of a shortage of essential goods like fuel. This shortage of fuel raises the complexity of continuing the production process. The shortage of drivers, disturbance of the supply chain, and panic buying behaviour drove up the costs of fuel. The fluctuations in prices make the economy uncertain for the consumer and business (Litra, 2012). Belitski et al. (2022) show this connection between the increased inflation rate and debts during crises. In economic downturns like the coronavirus pandemic, business and personal loans are encouraged. Several companies have gone bankrupt and had to lay off workers due to the government's furlough system (OECD, 2021). People lose their jobs because businesses can not handle rising costs and declining revenue. Changes in consumer spending from services to products have affected many economic sectors. The hospitality and entertainment sectors have lost a lot, but home improvement and e-commerce have grown. These are the fundamental economic problems found in the case study.

Various Ways of Solving Economic Challenges

There are various ways to face the challenges of economics. Some of them are described below:

The intervention of the Government: To face the economic challenges government can take important action. Some of the actions include regulation, immigration, financial support, communication, and so on (Institute for Government, 2021). Some of them are discussed in brief:

- Government interventions can improve supply chain transparency, accountability, and shock resistance through regulation and immigration (Cowell, 2018). Consider that governments can require businesses to plan for interruptions or stockpile inventory. For businesses to hire foreign workers in skills shortages, governments may ease immigration restrictions.
- Financial support and communication: Governments may fund companies to purchase advanced technologies and procedures to support network robustness. Business partners and the public can learn about supply chain disruptions from governments (OECD, 2021). It reduces doubt and clarifies expectations.
- Invest in government agency capacity to respond to supply chain interference. For instance, governments can constitute specific groups of officials to aid business operations in times of turbulence and even offer logistics (Institute for Government, 2021).
- Business Collaboration and Taxes: Governments and businesses can collaborate to address supply chain challenges. Examples include inviting ministries and businesses to discuss specific issues and possible solutions. Taxes can also encourage companies to invest in supply chain resilience. Governments could offer tax breaks to companies that invest in new technologies or processes to strengthen their supply chains (Sodhi and Tang, 2021).

Loosening COVID-19 strict regulations: The pressure on supply chains might be relieved by relaxing some of COVID-19 strict rules. Such as lifting social distancing measures so that firms operate at full scale and easing of movement of goods and services across borders by relaxing travelling regulations (Roy and Chakraborty, 2021).

Shortage management team strategy development: A shortage management team is one of the strategies that businesses deploy to identify and manage possible shortages in their supply chains. It should involve monitoring for possible shortages, mitigation strategies, and communication with relevant stakeholders (Ivanov and Dolgui, 2022).

Evaluating one's supply chain: Businesses also need to develop their internal capacity to constantly evaluate and enhance their operations, which will increase the resilience of their supply chains (Sodhi and Tang, 2021). Therefore, this evaluation should involve the identification and management of risks, contingency arrangements, and innovations in technologies and procedures.

Following the above ways, it is possible to mitigate the challenges of economics.

Relevance of Demand and Supply in the Case Study

Pricing Strategy to Manage Demand and Supply Pressure: The post-COVID-19 demand and supply dynamics have created disturbances in different sectors like fuel supply among others. This calls for a strategic approach to implementing an effective pricing strategy that will lead one ahead in dealing with the challenges. Ivanov and Dolgui (2022) indicate that price adjustment is one of the strategies for minimizing pressures placed on a supply chain by demands and supply variations. An example of this kind is dynamic pricing whereby fuel prices can be controlled concerning equilibrium between demand and supply.

Competition and Price Reduction: Pricing strategies are highly influenced by the nature of the competing environment. This is exemplified by the shortage of fuel supplies in the UK leads to high competitiveness among suppliers. In a bid to be competitive, companies may have to lower their prices. Competition-induced price reduction may help reduce the effect caused by the supply shortage and make goods affordable to people (Nagle and Muller, 2018).

Business Productivity and Expansion: Business productivity and growth are enhanced by controlling effective demand and supply. This is exemplified by online platforms such as Amazon which use state-of-the-art supply chain management systems. These systems allow effective control of inventories, thereby minimizing cases of the product being out of stock, or excessive quantities in stock (Panigrahi, 2023). Therefore, such a balanced demand and supply system paves the way for the growth of firms due to higher production as well as satisfied customers.

Marketing Strategy and Business Concept Promotion: They shape marketing strategies by demand and supply dynamics. Marketing can be an important channel in the case study for businesses impacted by disruptive supply chains to share their

resiliency and loyalty to meet clients' requirements. It will lead to an improvement in brand image and customer retention when combined with the current market conditions (Sodhi and Tang, 2021).

Balancing Inventory Management: The JIT inventory management system is part of a strategic approach, directly linked to demand and supply changes (Institute for Government, 2021). Some firms including those dealing with fuel could use JIT to make it simpler to run their business procedures and save on storage costs. Choi et al. (2023) explain that JIT reduces the necessity of excessive stock that is a perfect match for demand and lessens the probability of shortage.

Finance Attraction Through Investments: Appropriate management of demand and supply may also attract financial investment to an organisation through, for example, Initial Public Offerings. Investors become confident when they see resilience and flexibility during periods of supply chain failures or shortages (Belitski et al, 2022). Business enterprises can raise considerable money to facilitate investment into infrastructure, technology, and labour through the process of a public offering.

Greater Worker Retention and Satisfaction: Greater worker productivity results in better customer service, which drives a higher demand for the workforce that consequently results in increased employee retention and satisfaction. Paying competitive salaries also becomes necessary for maintaining qualified staff in sectors that are experiencing a labour shortage. As per Panigrahi (2023), high salaries promote job satisfaction and commitment among employees hence reducing turnovers even in strenuous conditions.

Managing Shortage and Shifting Market Demand: Shortages, particularly of medicine supplies can be addressed by proper demand and supply management and changing market demands. Businesses also must be able to adapt to changes; they align production and distribution through market-driven practices (Cowell, 2018). This flexibility helps companies respond better to shocks outside their control, as in the example of European Union truckers leaving.

Difference Between Elasticity and Inelasticity of Demand

Elasticity: The shift in demand for a product or service due to a change in one variable like price, or income that customers consider as a part of making buying decisions is

known as elasticity of demand (Besanko and Braeutigam, 2013). The most common economic variables influence the demand for commodities which are the price of goods or services, the price of related goods or services, and the income level of consumers.

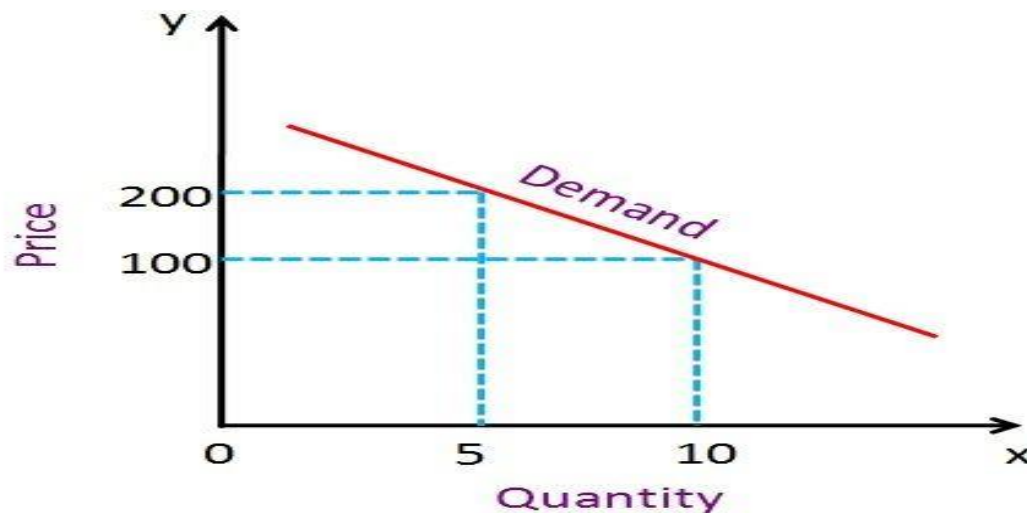


Figure 01: Elasticity of demand (author)

Figure 01 shows that as the prices increased from 100 to 200 the demand for quantity decreased from 10 to 5. It happens because if a 1% price change results in more than or equal to 1% changes in the demand for quantity and it expresses the elasticity of demand.

The common formula for the elasticity of demand is:

$$E = \frac{\text{Proportionate change in quantity demand}}{\text{Proportionate change in another economic variables}}$$

Three types of elasticity of demand are:

- Price Elasticity of Demand (PED): Price elasticity means the percentage change in quantity demand in response to the percentage change in price (Besanko and Braeutigam, 2013). The formula for income elasticity is given below:

$$PED = \frac{\text{Proportionate change in quantity demand}}{\text{Proportionate change in price}}$$

- Cross Elasticity of Demand (XED): Cross elasticity measures a change in the price of one good that causes a shift in the demand for another (Nagle and

Muller, 2018). The formula for calculating the cross elasticity for X and Y is given as:

$$XED = \frac{\text{Proportionate change in quantity demand for one good X}}{\text{Proportionate change in prices for another good Y}}$$

- **Income Elasticity of Demand (YED):** Income elasticity refers to the responsiveness of potential buyers to changes in income (Besanko and Braeutigam, 2013). The formula for income elasticity is given below:

$$YED = \frac{\text{Proportionate change in quantity demand}}{\text{Proportionate change in income}}$$

Inelasticity: The term inelasticity often refers to the situation when the price goes up or down but the consumer buying behaviour or quantity demand remains unchanged or very little change (Pindyck, 2018). The formula of inelasticity of demand is given as:

$$\text{Inelasticity of demand} = \frac{\text{Proportionate change in quantity demand}}{\text{Proportionate change in prices}}$$

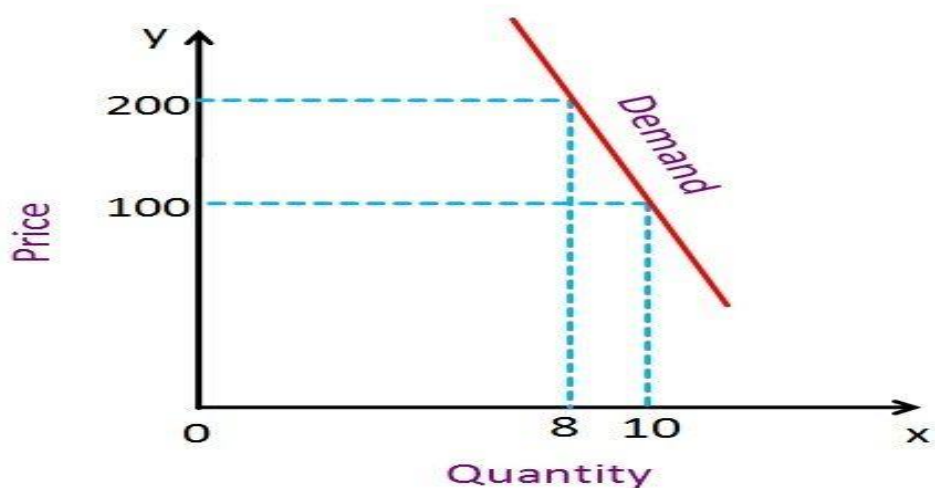


Figure 02: Inelasticity of Demand (author)

Figure 2 shows that the ratio of changes in quantity of demand is less than in response to changes in the price. The value of inelasticity of demand must be less than 1 which means a good is considered relatively inelastic if the changes in the price of 1% in response to a change in demand less than 1%.

Elasticity of Demand vs Inelasticity of Demand

Criteria	Elastic Demand	Inelastic Demand

Price flexibility	High price elastic; consumers are price sensitive.	Low price elasticity: Price variations do not influence consumer behaviour as they should (Pindyck, 2018).
Protection during market fluctuations	Changes in this price significantly impact on the quantity demanded, leaving it vulnerable to market fluctuation (Pindyck, 2018).	Market fluctuations are minimally affected by price because of comparatively wider protection against changes in price and quantity demanded.
Entry Barriers (Financial, Legal, Political)	New entrants have lower entry barriers because consumers are sensitive to price change, thus creating an easy competition environment (Nagle and Muller, 2018).	High entry barrier since consumers are insensitive to price change, and hence few new entrants in the market (Cowell, 2018).

The elasticity of demand vs inelasticity of demand, reference to price changes in the cost of fuel

Criteria	Elastic Demand	Inelastic Demand
Responsiveness to price changes of fuel like gasoline and insulin.	Consumers reducing the use of gasoline in case of a price increase and vice-versa.	Consumers remain constant in using insulin in case of price increases or reduce

The Laws of Supply and Demand

The laws of supply and demand comprise the foundations of economics which describe dynamics between a market's desire for a good or service and the availability of such goods.

The laws of demand state that as the prices increase of goods or services, the demand for quantity of goods and services decreases and vice versa if all the other variables are held constant (Besanko and Braeutigam, 2013). On the other hand, the laws of supply refer to the price of a good or service increases, the supply of that product also increases if the other variables remain held constant (NETSUITE.COM, 2023). Graphical representations of the law of demand and supply are given below:

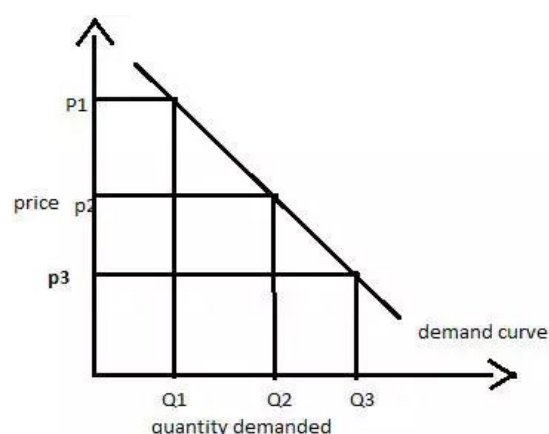


Figure 03: The laws of demand (author)

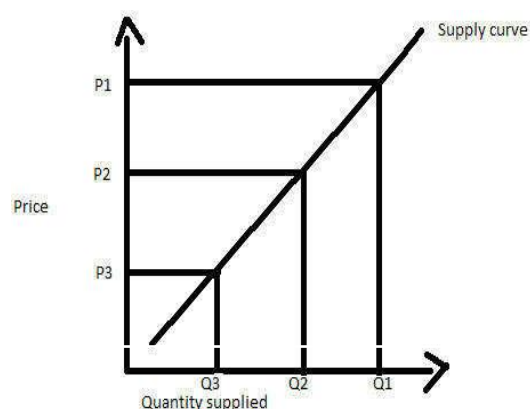


Figure 04: The laws of supply (author)

There are four basic types of laws of demand and supply that business owners have to keep in mind while purchasing and selling products.

The Increased Demand: Prices and quantities go up when there is an increase in demand but unchanged supply. Consumers' interests increase and this enables sellers to hike up prices taking advantage of the high demands and increasing supplies to increase profitability (Pindyck, 2018).

Decreased Demand: When quantity remains unchanged while demand declines, prices and quantities fall. On the other hand, when there is a reduction in consumer demand, sellers decrease prices as they endeavour to stimulate buying (NETSUITE.COM., 2023). This leads the suppliers to decrease production due to reduced profit potential.

Increased Supply: Prices go down while quantities rise when supplies grow at the same time with demand steady. Additional suppliers lead the market to become overcrowded and suppliers begin lowering their prices to draw consumers from competitors (Pindyck, 2018).

Decreased Supply: As supplies shrink and remain at equilibrium with persisting demand, prices go up but quantities go down. Consumers have to spend more money

on the same products in case of shortage (Cowell, 2018). With the scarcity of products, suppliers increase prices and produce less in order to capitalize on their supply status.

These dynamics portray how supply and demand determine each other, the pricing strategies, production decisions as well and general behavior in the market. Businesses that want to stay relevant need a sophisticated understanding of these laws in order not to be misled by ever-changing dynamics in the market.

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