

MANAGEMENT ECONOMIC

- STUDENT NAME:VERONICA-DANIELA FLORIA
- STUDENT ID:2115140
- MODULE CODE:LCBB5008
- LECTURER NAME:RIAZ BHATTI

Introduction

Management economics is essential as it provides a systematic framework for effective decision-making, enhancing the efficiency and profitability of the organisations. Management economy helps efficiently allocate resources, ensuring that scarce resources are utilised in the best possible way to maximise output and minimise costs. This essay addresses question one by discussing the fundamental economic problems identified in the case study and suggesting various ways to resolve these problems. Question two is addressed by evaluating the significance of demand and supplies relevant to the case study, assessing the difference between elasticity and elasticity of demand concerning price changes in fuel cost and explaining the laws of supply and demand.

Question 1

Fundamental economic problems identified in the case study

Analysing the case study, one of the problems identified is the Covid-19 rules of doing business. The COVID-19 pandemic introduced unprecedented changes to businesses' operations, including social distancing measures, remote work policies and lockdowns. These changes disrupted traditional business models and supply chains globally. According to a study by Jallow, Renukappa and Suresh (2021), the COVID-19 pandemic necessitated rapid adjustments in business operations, highlighting vulnerabilities in global supply chains and the need for organisations to enhance more resilient systems. Companies had to quickly adapt to new working methods, which often meant investing in digital infrastructure and altering supply chain management strategies. The case study, “The Fed Global Supply Chain Barometer, noted that recent pressures have been notably more severe than ever since the index began, highlighting the severe impact of the pandemic on global son supply chains (Institute for Government, 2021).

Demand shortages due to increased demand are another problem identified in the case study. The pandemic caused a significant shift in consumer behaviour, with increased demand for goods such as household items and electronics, while sectors like travel and hospitality experienced declining service. This led to supply chain disruption as manufacturers and suppliers struggled to meet the sudden surge in demand (Guerrieri et al., 2022). These changes in consumer behaviour during the pandemic, such as stockpiling and panic buying due to the increased cost of living as people stayed home, made the demand for home goods disrupt the supply chain. According to the Institute for Government (2021), there has been a shift in consumer appetite from services to goods during the pandemic, partly driving pressure on supply chains.

Supply shortages, such as shortage of drivers, are another problem during the COVID-19 pandemic coupled with Brexit in the UK. This shortage severely impacted the delivery and distribution of goods, leading to supply chain delays and increasing costs. A study by Wang, Wood and Wang (2022) emphasises the critical role of labour availability in maintaining supply chain efficiency and how the disruptions lead to widespread economic consequences. The exodus of the drivers who left the UK was difficult to replace, probably due to Brexit and the COVID-19 pandemic (Institute for Government, 2021). Another problem identified is the effects of Brexit on the demand and supply chain facilities. Brexit introduced new trade barriers, customs checks, and regulatory differences that complicated the flow of goods and services between the UK and the EU. This resulted in additional delays and costs for businesses relying on international supply chains. The Institute for Government (2021) discusses how Brexit has affected the UK-EU trade relations, highlighting increased logistical challenges. For instance, from the case study, the impact of COVID-19 saw many EU drivers leave the UK, creating a remarkable shortage of drivers (Institute for Government, 2021).

A fuel supply shortage is another problem experienced in the case study due to the combined effects of driver shortages and increased demand (Krueger and Anderson, 2014). This resulted in significant fuel supply issues, particularly in areas relying on just-in-time delivery systems. The International Energy Agency (IEA) highlights how disruptions in transportation logistics lead to fuel supply challenges, especially in regions with limited storage capacity (Gleeson, 2021). Due to these constraints, high shortages were recorded, with the level of fuel forecourts in the worst-hit areas of the country averaging about 20% during the peak of the crisis (Institute for Government, 2021).

Ways in which the economic problems can be resolved

Government intervention is one of the solutions that can be used to solve UK firms' economic challenges. Implementing targeted regulations to address specific supply chain issues, such as streamlining customs procedures post-Brexit, will be essential to facilitate smoother trade flows for the firms. Adjusting immigration policies will help attract and retain critical labour practices such as drivers and other workers to fill shortages. For instance, the UK could introduce temporary visas for EU drivers to help keep them. Providing financial assistance to businesses affected by supply chain disruptions, such as grants and tax breaks, will help businesses stay afloat during high operational costs (Ali, Rangone and Farooq, 2022). Enhancing the capacity of government agencies to support businesses in navigating regulatory changes and supply chain disruptions will help to provide timely information and resources to firms operating in the global industry. Adjusting trade policies to incentivise businesses will help maintain stable supply chains and increase local production; tax credits for investments in automation and technology will help mitigate labour shortages in firms (Casadei and Iammarino, 2021). It will also be essential to foster collaboration between the business and the government to help identify critical issues and develop

joint solutions. Regular forums and advisory panels will help facilitate business engagement with the government.

Relaxing some of the stringent COVID-19 rules will help the government to reduce the impact of COVID-19 on supply chains carried out by the organisations. Reviewing and adjusting COVID-19 regulations will help to balance public health with economic needs (Bauer et al., 2021). For instance, the government can ensure that restrictions on transportation and logistics are eased, which will help alleviate supply chain practices while maintaining necessary safety measures. Developing a shortage management team strategy will help to manage shortages and supply chain disruptions faced by UK firms. These teams will effectively monitor channel routes, establish contingency plans and coordinate responses to emerging issues. Creating and improving supplier collaboration networks is another solution that will help to enhance communication and relationships between firms and suppliers (Azadegan and Dooley, 2021). This will entail sharing real-time data on inventory levels, demand forecasts, and production schedules to optimise supply chain performance. The government must develop long-term partnerships with key suppliers to enhance reliability and resilience. These collaborative initiatives will help to include joint investment in technology and infrastructure improvements, increasing the supply chain for the firms (Rauch and Schleicher, 2015).

Implementing lean manufacturing and just-in-time inventory practices will help minimise waste and improve efficiency. These include optimising production processes, reducing excess inventory, and recycling materials where possible. Investing in technology and automation will help improve precision in production and reduce errors that lead to waste. Working with suppliers to lower prices is another solution that will help to reduce costs without compromising quality. This will involve bulk purchasing, long-term contracts and joint cost-saving initiatives. Collaborating on efficiency

improvements that lower production costs for both parties will help increase efficiency in the supply chain. This will include process optimisation, technology upgrades, and shared logistic solutions. Conducting comprehensive assessments of the nitre supply chain will be essential to identify vulnerabilities and areas that require improvement. This will entail evaluating suppliers, logistics and internal processes. This solution will help diversify the supply base, reduce dependency on single sources, and mitigate risks associated with supply disruptions.

Question 2

Relevance of Demand and supply relevant to the case study

The case study highlights the crucial role of demand and supply chain dynamics, including pricing strategy to reduce and manage demand and supply pressure. Pricing strategies are essential in managing the pressures of demand and supply (Krueger and Anderson, 2014). Adjusting prices helps businesses to control and mitigate shortages and stabilise supply chains. For instance, businesses increase prices during high-demand periods to reduce excessive consumption and prevent stockouts. Conversely, during low demand, price reductions help to stimulate consumption and clear excess inventory. According to the Institute for Government (2021), the rapid increase in demand at a time when supply was already constrained led to high shortages. Competition and driving prices to be low and reduced prices are significant factors in demand and supply in the case study. Competition plays a vital role in driving prices down and improving market effect. According to Brown and MacKay (2023), businesses are incentivised to optimise their operations, reduce costs, and offer better prices to attract consumers in a competitive market. The shift in consumer appetite from services to goods increased supplier competition (Institute for Government, 2021). This composition can drive efficiency improvements and cost reduction, helping to manage supply chain pressures.

Demand and supply in the case study help expand business productivity by aligning production capacity with market demand, optimising resource utilisation and scaling operations efficiently. For inactive, companies leverage demand forecasting and supply chain optimisation that help to expand their platforms and enhance productivity (Krueger and Anderson, 2014). The need for businesses to adapt to increased demand for goods highlights the importance of growing productivity (Browning and Zupan, 2020). Understanding demand and supply dynamics is crucial for developing an effective market strategy and promoting the business concept. Organisations ensure that they identify consumer preferences and market trends that help tailor their marketing efforts to promote their products and services effectively. This targeted approach helps increase market share and sales, expanding the organisation's profitability. Demand and supply help to balance inventory management strategies as systems such as Just-In-Time help minimise excess stock and reduce holding costs, aligning inventory levels with actual demand (Shokouhifar, Sabbaghi and Pilevari, 2021). This approach improves operational efficiency and reduces the risk of stockouts or overstocking.

Effective demand and supply management attracts investments and supports business growth. Companies that demonstrate strong marketing and effective supply chain management attract investors through Initial Public offerings (IPOs) that fund expansion and innovation. Managing demand and supply effectively leads to excellent worker retention and satisfaction through high salary payments, enabling the businesses to offer competitive salaries and benefits (Krishna and Garg, 2022). As a result, this helps to contribute to a more stable and productive workforce. Offering higher wages helps to mitigate labour shortages and stabilise supply chains. Demand and supply help manage risk and maintain the equilibrium of demand and supply (Browning and Zupan, 2020). Proactive risk management is essential for maintaining the equilibrium of demand and

supply organisations to identify potential disruptions and develop contingency plans to mitigate risks and ensure continuity. The severe pressure on international supply chains from the case study underscores the need for robust risk management strategies to maintain equilibrium and prevent disruptions (Institution for Government, 2021). Demand and supply help manage shortages, and supply helps shift market demand by matching supply with demand. As a result, the business avoids overproduction and waste while meeting consumer needs. Institute for Government (2021) states that the pandemic induced shifts in demand for goods versus services, highlighting the need for agile supply chain management to respond to changing market conditions.

Difference between elasticity and inelasticity of demand

The elasticity of demand measures how the quantity demanded of a product changes in response to a change in a market variable, such as price or income (Yadav et al., 2021). A product with high elasticity will see significant changes in demand when its price or other factors change. On the other hand, inelasticity demand refers to the static quantity demanded of a good or service when its price changes (Howard and Liebersohn, 2021). When the price of an inelastic product goes up or down, consumers' buying habits remain largely unchanged. In elastic demand, the prices are more flexible and competitive, making businesses cautious with price increases, leading to a significant drop in demand. In elastic demand, prices can be adjusted with minimal impact on demand, giving businesses greater flexibility to increase prices without losing customers (Browning and Zupan, 2020). Elastic demand entails products being more susceptible to demand fluctuation during economic changes, while inelastic demand products are more stable during economic fluctuations; thus, businesses offering essentials such as utilities maintain steady demand regardless of the economic conditions (Krueger and Anderson, 2014). Markets with elastic demand often have lower entry barriers, allowing more competition and market sensitivity to price

changes. On the other hand, markets with an inelastic demand tend to have higher entry barriers, such as regulatory constraints and high initial investment, making them less competitive.

Businesses that incorporate the elasticity of demand optimise pricing to balance demand and revenue, which helps to set the optimum price (Browning and Zupan, 2020). For example, a fuel company adjust prices to maximise sales volume and profits, considering consumer sensitivity to fuel price changes. Governments impose lower taxes on illegal goods to avoid significant drops in demand (Vargas-Lopez et al., 2022). For instance, fuel taxes are often adjusted to avoid major consumer behaviour and economic activity disruptions. Businesses stimulate demand by lowering their policies, which in turn increases sales. Fuel discounts encourage higher sales volumes during off-peak seasons. However, businesses need to closely watch competitors' pricing strategies as field companies must constantly adjust prices based on com, petite actions and market conditions, impacting profitability (Pottier, 2022). Price elasticity changes over time as consumer preferences and market conditions evolve. Businesses that incorporate inelasticity of demand increase their prices without significantly reducing demand (Browning and Zupan, 2020). Fuel companies increase prices during shortages or high-demand periods, boosting their revenues. However, companies may excessively increase prices, leading to consumer backlash and regulatory intervention (Browning and Zupan, 2020). Significant fuel price hikes during crises lead to public outrages and government action to regulate prices.

The laws of supply and demand

Increased demand with unchanged supply states that when demand increases while supply remains unchanged, prices and quantities increase (Krueger and Anderson, 2014). As more

consumers want a product, they become willing to pay higher prices. Sellers respond by increasing production to capitalise on the higher prices.

Decreased demand with unchanged supply states that when demand decreases while supply remains unchanged, prices and quantities decrease (Krueger and Anderson, 2014). This shows that if consumers lose interest in a product, sellers lower prices to entice buyers. As a result, reduced profitability leads to producers to cut back on production.

Increased supply with unchanged demand states that when supply increases while demand remains unchanged, prices decrease and quantities increase (Krueger and Anderson, 2014). An abundance of goods leads to more competition among sellers, who reduce prices to attract customers. As a result, lower prices stimulate higher consumption.

Decreased supply with unchanged demand, that when supply decreases while demand remains unchanged, prices increase and quantities decrease (Guerrieri et al., 2022). This creates a shortage of goods compared to steady demand and causes consumers to compete for the limited products available, driving prices up. As a result, higher prices lead to increased overall consumption. With less of the product available, consumers compete to secure a limited amount of the product, driving prices up (Krueger and Anderson, 2014). Higher prices typically lead to reduced consumption, thus decreasing the quantity sold.

Conclusion

Management economics is essential to every organisation as it helps to make sound business decisions that lead to sustainable growth and success. The principles of supply and demand are essential for businesses to determine and apply as they help to formulate pricing strategies, manage competition, expand productivity, optimise inventory and attract investments. By leveraging these

principles, businesses navigate market fluctuations, address economic challenges and achieve sustainable growth. However, the impacts of the COVID-19 pandemic highlighted the importance of discipline and demand in mitigating the challenges facing firms in the UK.

References

Ali, S., Rangone, A. and Farooq, M. (2022). Corporate taxation and firm-specific determinants of capital structure: Evidence from the UK and US multinational firms. *Journal of Risk and Financial Management*, 15(2), p.55.

- Azadegan, A. and Dooley, K. (2021). A typology of supply network resilience strategies: complex collaborations in a complex world. *Journal of Supply Chain Management*, 57(1), pp.17-26.
- Bauer, S., Contreras, S., Dehning, J., Linden, M., Iftekhar, E., Mohr, S.B., Olivera-Nappa, A. and Priesemann, V. (2021). Relaxing restrictions at the pace of vaccination increases freedom and guards against further COVID-19 waves. *PLoS computational biology*, 17(9), p.e1009288.
- Brown, Z.Y. and MacKay, A. (2023). Competition in pricing algorithms. *American Economic Journal: Microeconomics*, 15(2), pp.109-156.
- Browning, E.K. and Zupan, M.A. (2020). Microeconomics: Theory and applications. John Wiley & Sons.
- Casadei, P. and Iammarino, S. (2021). Trade policy shocks in the UK textile and apparel value chain: Firm perceptions of Brexit uncertainty. *Journal of International Business Policy*, 4(2), p.262.
- Gleeson, M. (2021). International energy agency calls time on new fossil fuels. *Green Left Weekly*, (1311), p.10.
- Guerrieri, V., Lorenzoni, G., Straub, L. and Werning, I. (2022). Macroeconomic implications of COVID-19: Can negative supply shocks cause demand shortages?. *American Economic Review*, 112(5), pp.1437-1474.
- Howard, G. and Liebersohn, J. (2021). Why is the rent so darn high? The role of growing demand to live in housing-supply-inelastic cities. *Journal of Urban Economics*, 124, p.103369.

Institute for Government (2021) Institute for Government analysis of ONS, Business Impact of COVID-19 Survey (BICS).

<https://www.instituteforgovernment.org.uk/publication/supply-chains/causes>

Jallow, H., Renukappa, S. and Suresh, S. (2021). The impact of COVID-19 outbreak on United Kingdom infrastructure sector. *Smart and sustainable built environment*, 10(4), pp.581-593.

Krishna, C. and Garg, A. (2022). Employee Retention: An Important Factor for Strategies Development. *ANWESH: International Journal of Management & Information Technology*, 7(1).

Krueger, A.B. and Anderson, D.A. (2014). *Explorations in economics*. New York: BFW / Worth Publishers.

Pottier, A. (2022). Expenditure elasticity and income elasticity of GHG emissions: A survey of literature on household carbon footprint. *Ecological Economics*, 192, p.107251.

Rauch, D. and Schleicher, D. (2015) Like Uber, But for Local Governmental Policy: The Future of Local Regulation of the 'Sharing Economy'. George Mason Law & Economics Research Paper No. 15-01. Available at: <http://ssrn.com/abstract=2549919>

Shokouhifar, M., Sabbaghi, M.M. and Pilevari, N. (2021). Inventory management in blood supply chain considering fuzzy su

Vargas-Lopez, A., Cicatiello, C., Principato, L. and Secondi, L. (2022). Consumer expenditure, elasticity and value of food waste: A Quadratic Almost Ideal Demand System for

evaluating changes in Mexico during COVID-19. *Socio-Economic Planning Sciences*, 82, p.101065.

Wang, M., Wood, L.C. and Wang, B. (2022). Transportation capacity shortage influence on logistics performance: evidence from the driver shortage. *Heliyon*, 8(5).

Yadav, D., Kumari, R., Kumar, N. and Sarkar, B. (2021). Reduction of waste and carbon emission through the selection of items with cross-price elasticity of demand to form a sustainable supply chain with preservation technology. *Journal of Cleaner Production*, 297, p.126298.