

Assignment 1

Management economics
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Introduction

This essay explores important economic concepts and real-life developments in relation to the supply-demand relationship. The discussion in the essay combines theory, application and potential solutions for future problems stemming from disbalance in supply and demand. Therefore, research findings are valuable not only as information, but also in applying an improved management process.

Main body

Task 1 A)

The case study identifies several key economic problems affecting the UK, as well. First, the pandemic must be recognised an unprecedented development requiring from businesses a quick and effective adaptation to adjust to changing supply and demand conditions. More specifically, businesses had to be more cautious regarding their supply and demand chains to ensure smooth and continuous operations (Institute for Government, 2021). This has been quite challenging given the experienced supply chain stress, as reported by the FED Global Supply Chain Barometer (Institute for Government, 2021). Moreover, some businesses had to cope with stricter social distancing and forced closure requirements which additionally disrupted normal operations.

Second, the role of supply shortages must be recognised as one of the key and continuous effects from the pandemic and Brexit, as well. Supply shortages were caused by the lack of drivers (Institute for Government, 2021). In general, the Brexit process and the imposition of stricter migration rules have led to lower immigration in recent years (Migration Observatory, 2021). The outflow of drivers to the EU countries and the significant dependence on migrant labour was particularly problematic amid the pandemic. Thus, the experienced shortage of drivers caused logistics and transportation delays which in turn additionally exacerbated the existing supply chain issues (Institute for Government, 2021). In addition, fuel supply was also restricted in the UK; thereby, contributing to the overall supply problems in general (Institute for Government, 2021).

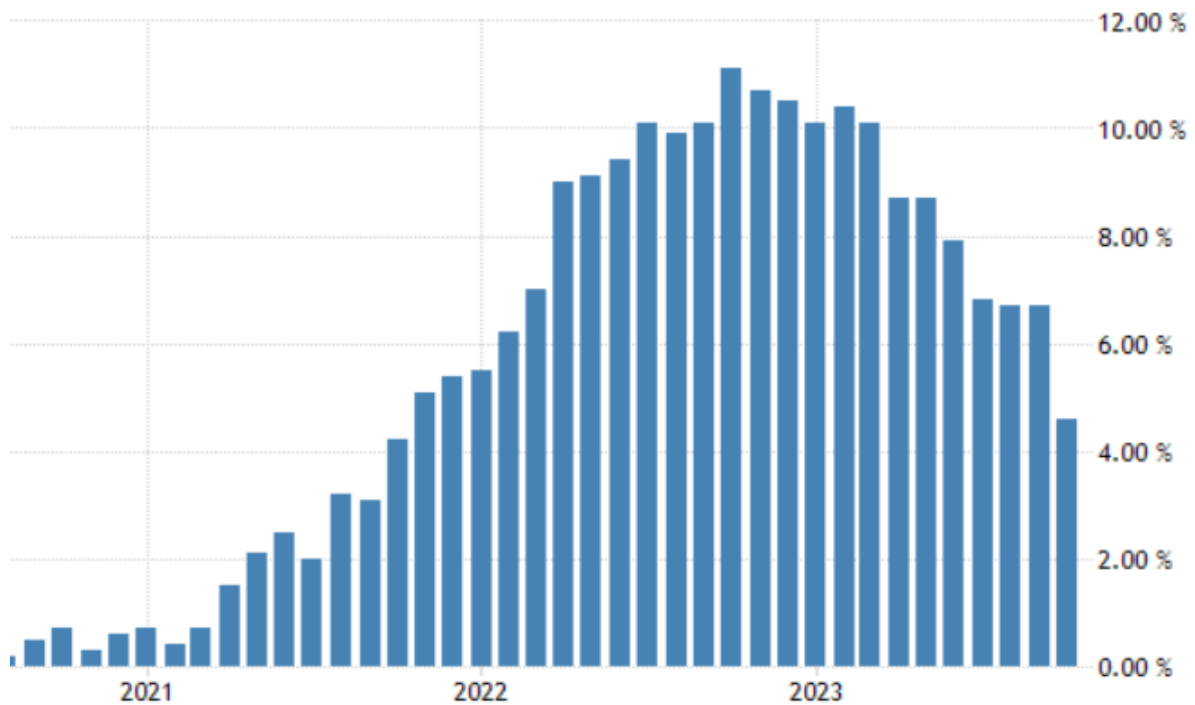
Third, there are also important demand issues mentioned in the case. During the pandemic, demand significantly fluctuated. For example, panic buying frequently

occurred after the announcement of major lockdown periods (Guardian, 2020). In the current case, panic buying also took place in the context of the announced fuel shortages (Institute for Government, 2021). Consumers increased their fuel demand due to the expectations of future fuel shortages, as discussed in the case. As a result, consumer behaviour, which led to higher demand, additionally contributed to the experienced fuel shortages given the already limited supply (Institute for Government, 2021). Considering the role of demand, there have been shifts in preferences. More specifically, the pandemic caused higher demand for physical goods, whereas the post-pandemic period has shifted consumer attention to services once again (Institute for Government, 2021). The analysed fluctuations in demand have posed pressure on supply chains because of the requirements by businesses to quickly adapt to major demand shifts.

Fourth, the major changes in supply and demand have also caused shortages and excesses in the marketplace. For instance, the supply shortages in fuel and the panic buying caused significant price increases (Institute for Government, 2021). The demand changes from services to products and vice versa have also affected prices and quantities demanded. Most importantly, the pandemic- and Brexit-induced shortages of labour and physical goods have played a key role in the observed price increases in the recent years (Institute for Government, 2021).

Taken together, the analysed major supply and demand changes have caused disruptions in the economic activity. The UK's Gross Domestic Product (GDP) is just 1.8% above the pre-pandemic peak in 2019; thereby lagging the other G7 countries (Harari, 2023). More interestingly, the mix of panic buying (higher demand) and restricted supply played a major role in the spike of the UK inflation which reached a maximum annual increase of 11% in October 2022 (Trading Economics, 2023). Inflation is falling, as shown below, but still higher than the normally accepted level of just 2% per annum (BoE, 2023).

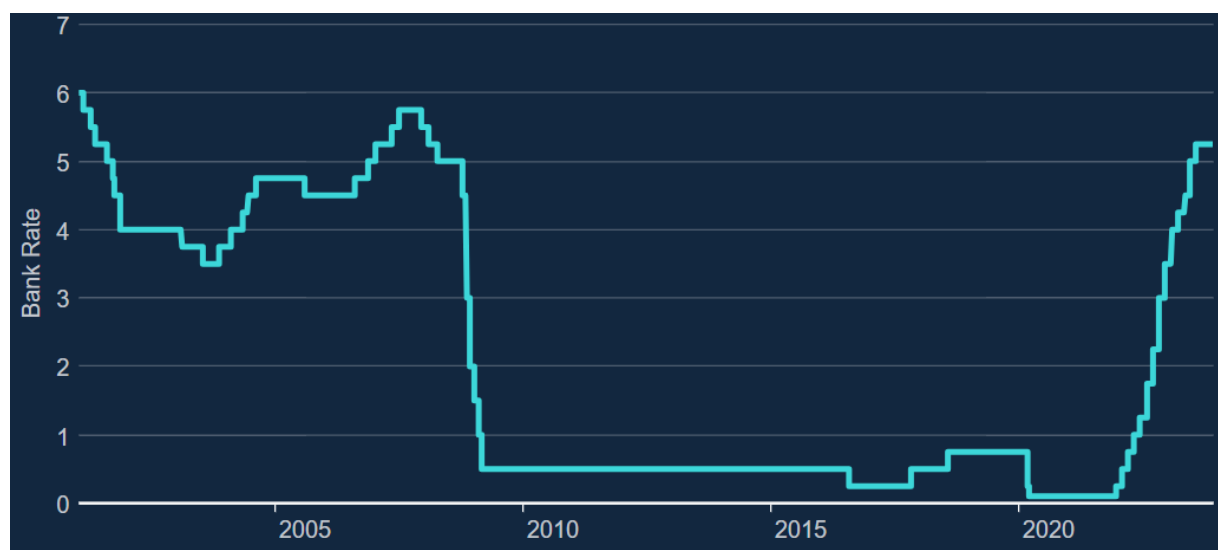
Figure 1 – Annual inflation in the UK (%)



Source: Trading Economics (2023)

To fight the unacceptably high inflation, the Bank of England has systematically increased the interest rates up to a level of 5.25%, as shown below (BoE, 2023). Higher borrowing costs are expected to lower inflation due to lower aggregate demand (Krugman and Wells, 2020).

Figure 2 – Interest rate changes in the UK (%)



Nevertheless, the higher borrowing costs have caused pressure on consumers and firms to cope with the challenges amid the cost-of-living crisis. Thus, more bankruptcies and future economic growth and employment challenges are expected given the high interest rates (Krugman and Wells, 2020).

Task 1 B)

Government intervention can solve some of the observed supply-side issues. For example, relaxing the immigration rules and providing stimuli to foreign drivers is expected to solve the observed labour shortage among drivers. Regulatory changes are also likely to relax some of the existing supply-side issues. For instance, less trade regulation can shorten the time of importing goods from the EU; thereby, improving supply chains. As suggested by Institute for Government (2021), UK businesses face red tape, border checks and other complications which lead to delays and higher costs of doing business. Regulatory changes by the government can eliminate some of the negative effects stemming from the BREXIT-related trade complications. The government can also deliver financial support to the affected by the pandemic businesses and households. Support to businesses can boost the supply, whereas consumer-oriented financial support is positive for demand.

Some of the pandemic-related regulations requiring strict social distancing and forced closure of physical stores can be reconsidered. The end of the furlough can lead to higher supply and a normalisation of business activities. Consumer demand can also increase if people are not forced to respect social distancing rules.

Business organisations and policy makers must also develop management strategies to cope with actual shortages and potential problems in the future. For instance, the information about the aggregate supply can be better monitored and controlled. This approach can help for detecting supply-side issues much earlier than normal. In this light, the development of a network for better coordination between suppliers is of essential importance. In other cases, building of strategic servers of important goods, such as fuel, can create buffers to cope with supply shortages.

A potential long-term solution to the experienced supply shortages can stem from the improved waste management process. Innovation and investments are necessary to minimise waste, boost recycling rates and use the available resources in a more

efficient manner. The development of circular business model also ensures a better utilisation of scarce resource and waste minimisation.

Business organisations must act in a responsible manner to introduce supply chain improvements. Some of the possible solutions to prevent future shortages due to supply chain problems include shorting of the supply chain. Under this scenario, international and geographically distant suppliers are replaced by local ones (JM, 2022). This approach can not only reduce the time and transportation costs of accessing foreign suppliers, but also minimises the risk of excessive delays or other bottlenecks (JM, 2022). A re-organisation of the supply chain may also consider the concept of vertical integration, so that businesses become engaged and in control of more stages of the supply chain (Jenkins, 2023). Often, vertical integration leads to extra costs of doing business due to inefficiencies, but it can be quite positive for enhancing control and minimising the risk of delays and shortages, respectively (Jenkins, 2023).

A more extensive cooperation with suppliers is also possible to improve the decision-making process and eliminating risks which may lead to shortages. Cooperating and coordination of efforts is needed at all levels by including all types of stakeholders. Thus, stakeholder engagement and better management can improve business efficiency and effectiveness, especially in difficult periods (Johnson et al., 2017). To achieve this important improvement, it is necessary to inform stakeholders and involve them, if necessary and depending on the power position, in the process of decision-making.

As evident, there are many policy- and regulation-related areas for improvement. The actions of the government, businesses and other stakeholders determine the response to the observed supply and demand problems.

Task 2 A)

Knowledge about the impact of demand and supply changes is necessary to adopt more flexible pricing decisions. For example, in the light of panic buying prices may be increased to cool the high demand (Osadiya, 2023). Supply restrictions also motivate higher prices by businesses to decrease demand and avoid shortages (Osadiya, 2023). Weak demand or excessive supply are triggers for lower prices to boost demand and avoid the accumulation of unsold inventory (Osadiya, 2023). As seen, there are

different scenarios and effects stemming from the alternations in supply and demand. Therefore, knowledge about the expected effects is quite important to prevent unfavourable developments in the future and react accordingly when such changes are faced by businesses.

Price reductions are also possible in the context of highly competitive markets. In general, intensive competition leads to price pressure and reduced profit margins, as argued by Porter (1979). Therefore, price reductions can be used to enhance consumer demand and total revenue; thereby, neutralising the lower profit margins stemming from high competition.

Knowledge of demand changes also translates in an improved awareness of major consumer trends (Krugman and Wells, 2020). For example, the demand for e-commerce significantly increased during the pandemic (Abbas, 2021). Businesses can improve their competitiveness and productivity by recognising demand-driven changes in consumer behaviour leading to new sales channels, such as in the case of online e-commerce. In addition, marketing strategies can be better adapted to the prevailing demand specifics of consumers. Effective demand-driven marketing strategies are essential for business success in general, as suggested by Kotler et al. (2020).

Demand knowledge is also quite important in avoiding excessive inventories. By precisely knowing demand size, seasonal patterns and preferences, businesses can be better able to supply the necessary products, so that shortages and excesses of inventory are avoided (Slack et al., 2013).

Supply and demand changes may also affect investment activity. In an environment of restricted supply and high demand, businesses may be incentivised to conduct major investments. Thus, funding can be attracted to support capacity increase or other activities aiming to boost supply in the future (Krugman and Wells, 2020). Moreover, the expectations for strong demand over a continuous period in the future can also justify investment decisions.

Eventually, the contributions of effective inventory management, extensive investments and suitable marketing strategies can deliver positive effects on business performance and competitiveness. Thus, the higher profits and market share also provide resources for higher salaries and better work conditions – key factors for satisfied and loyal employees (Hook and Jenkins, 2019). These benefits in the field of

human resource management also contribute to a better performance of business organisations (Hook and Jenkins, 2019).

Knowledge about supply and demand is also quite relevant to manage business risks. Businesses are less likely to experience traumatic episodes of low demand which may cause layoffs and financial losses. In other cases, businesses can also ensure that all supplies are available to serve customers accordingly. Therefore, awareness regarding the contemporary supply and demand trends can be a key to avoiding economically inefficient shortages or excesses (Krugman and Wells, 2020). Demand and supply knowledge also improves the ability to predict key trends and future developments which may adversely affect activities. Taken together, risk management, operational effectiveness and resilience can be considerably improved by performing relevant changes in prices and quantities stemming from the knowledge and impact of changing supply and demand.

Task 2 B)

Elasticity of demand, by definition, measures the changes in the demanded quantity stemming from changes in prices, income or other key variable (Krugman and Wells, 2020). Inelastic demand is associated with insignificant changes in quantity demanded when the price is changed (Krugman and Wells, 2020). In contrast, elastic demand means that quantity demanded tends to experience significant changes when the price is changed (Krugman and Wells, 2020).

In practice, inelastic demand is observed in basic products and necessities (Krugman and Wells, 2020). These are usually utilities, prescription drugs and tobacco products. Luxury goods and non-essential food and beverages tend to have a more elastic demand.

The specifics of demand elasticity can lead to major changes in the behaviour of market prices and quantities demanded. For example, inelastic demand means that consumers are more exposed to market fluctuations and price shocks. Therefore, protection may be needed to cope with adverse episodes of market fluctuations. Products with elastic demand can also impose financial entry barriers to potential new entrants. This is explained by the fact that a company may quit trying to enter the market, if the offered price, which depends on operational costs, profit margin and other internal specifics, cannot be as low as the market one. In an elastic demand

environment, the inability to meet the market price can lead to quite low sales and lack of competitiveness.

Demand elasticity can affect the ways products and services are offered in the marketplace. In the case inelastic demand, the government can increase revenue due to extra taxation. The increased prices lead to a disproportionately low decrease in quantity demanded; thereby, generating extra revenue from the extra tax. This explains the high taxes imposed on tobacco products in the UK. In other cases, the increase in the price of inelastic products, such as energy, can lead to excessive profitability for companies. This has been a major problem in 2022, as many UK energy companies generated speculatively high excessive profits worth £170 billion due to the energy price spikes (Reuters, 2022).

Considering products with elastic demand, taxation by the government is likely to be decreased to generate optimal revenue. This is the case, as higher prices lead to disproportionately high reductions in quantity demanded (Krugman and Wells, 2020). Therefore, it is more economically viable to impose low taxes on products with elastic demand to generate a higher total tax revenue. Considering this, consumers also benefit from lower prices due to the limited tax burden. From the perspective of a business company, selling products with elastic demand may be disadvantageous. This is explained by the fact that competitors' pricing actions can also affect the demand for the sold products. Hence, it is important to monitor the selling strategies of competitors and quickly adapt to ensure consume demand.

Task 2 C)

Businesses must be aware of four basic scenarios stemming from changes in demand and supply.

To begin with, when there is an increase in demand and the supply stays constant, it results in an increase in both prices and quantity (Krugman and Wells, 2020). Increasing customer demand for a certain product indicates a willingness to pay higher prices, hence presenting a lucrative opportunity for sellers to expand their production (Taylor, 2023).

Second, if the supply remains constant, a decrease in demand will result in both lower prices and lower volumes (Krugman and Wells, 2020). When customers lack interest in purchasing a product or service, market prices are reduced to stimulate demand.

Due to diminished earning potential, suppliers will decrease their manufacturing (Taylor, 2023).

Third, if the supply increases while the demand stays the same, it results in a decrease in prices and an increase in quantities (Krugman and Wells, 2020). When the supply surpasses the demand, a broader range of sellers can provide goods and services that are widely accessible. To lure customers away from rivals, sellers will need to reduce their prices (Taylor, 2023).

Last, if supply decreases and there is no change in demand, it results in an increase in prices and a decrease in quantity (Krugman and Wells, 2020). Due to a scarcity of products relative to demand, customers are prepared to pay a higher price to obtain the limited supply (Taylor, 2023).

Conclusion

The analysis discussed important aspects of supply and demand in economics. Relevant examples from the pandemic and the post-pandemic period were included to better explain some contemporary economic developments with the supply-demand relationship. The information could be use in better management of disbalances in the future, so that business performance is optimised.

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