**Elasticity in Business**

Student’s Name

Department Affiliation, University Affiliation

Course Number: Course Name

Professor’s Name

Assignment Due Date

**Elasticity in Business**

Elasticity is an economic concept that is widely applied in business to make important decisions regarding the pricing of products and services and forecasting demand for products that will be produced. Fundamentally, elasticity refers to the measure of sensitivity or responsiveness of one variable towards a change in another variable or variables (Gans et al., 2020). Elasticity evaluates how a change in one variable influences a change in another variable (Gans et al., 2020). For example, a fluctuation in the price of a product can affect or influence the quantity of demand for that product. That is, when the price of the product reduces, the demand for the same product will be expected to rise and vice versa. Therefore, the concept of elasticity is valuable for businesses as it provides insights into the relationship between changes in prices and the resulting impact on the quantity demanded or supplied (Gans et al., 2020). Consequently, by measuring elasticity, one can easily gauge how sensitive demand or supply is to changes in other variables like income, price, or availability of substitutes (Mithani, 2009). As such, the concept of elasticity is valuable for understanding consumer behavior and market dynamics in such a manner that facilitates informed decision-making by businesses.

There are four main types of elasticity namely income elasticity, demand elasticity, cross elasticity, and price elasticity (Mithani, 2009). However, to fully appreciate the importance of elasticity in business price elasticity becomes essential because one needs to comprehend the dynamics and mechanisms behind Price Elasticity of Demand (PED) and Price Elasticity of Supply (PES). These two concepts play an integral role in understanding how changes in product prices influence consumer demand and supplier response. Therefore, by exploring the intricate dynamics between PED and PES, businesses can delve deeper into the foundation of elasticity and its implications for market behavior.

**Price Elasticity of Demand (PED)**

PED evaluates how the demand responds to a change in the price. Specifically, PED describes the percentage change in the demand for a commodity as a result of a given percentage change in the price of the same product (Baye & Prince, 2021). It establishes the level at which price fluctuations affect the quantity desired by individuals, providing significant insights into market dynamics. The value of PED is established by dividing the change in demand by its change in price. By computing PED, it becomes feasible to ascertain if a particular good or service is elastic (responsive to variations in price) or inelastic (not highly responsive) (Mithani, 2009).

PED is important in contemporary business because it empowers business owners and leaders with the right information to predict and project potential changes in consumer preferences and thereby be in a position to modify pricing strategies to attract a higher demand. Products that have a higher elasticity are considered highly sensitive or responsive to changes in demand even in the face of slight price changes (Baye & Prince, 2021). Therefore, when making pricing determinations to optimize revenue and effectively meet customer demands, it is essential for businesses to thoughtfully assess and analyze PED.

Different values of price elasticity of demand (PED) can indicate varying degrees of elasticity. For example, when the PED is above 1, it confirms that the demand is elastic. This implies that a slight alteration in price will result in a considerable adjustment in the quantity demanded (Gans et al., 2020). In more straightforward language, the value of a PED greater than 1 indicates that consumers are highly receptive to variations in pricing and are inclined to make substantial modifications to their purchasing choices based on price fluctuations, thereby impacting the broader dynamics of the market.

On the other hand, when the PED is less than 1, the demand for the particular commodity is said to be inelastic (Gans et al., 2020). This implies that a change in price leads to a relatively minimal alteration in the quantity of demand (Gans et al., 2020). This suggests that consumers are not highly responsive to price changes and are more inclined to continue purchasing regardless of price variations. Therefore, any increase or decrease in the price of the commodity will only have a minor impact on consumer behavior. This lack of sensitivity to pricing allows businesses to retain some influence over their prices without encountering substantial fluctuations in demand.

It is also highly likely that the value of PED computed equals 1. In this case, it will be described as unitary elastic, which signifies that the proportional change in quantity demanded for the product precisely corresponds to the proportional change in price (Baye & Prince, 2021). In simpler terms, a PED value of 1 indicates that as the price of a product rises by a certain percentage, the quantity demanded decreases by an equivalent percentage. Likewise, if there is a decrease in price by a specific percentage, there will be a proportionate increase in quantity demanded. It is important to emphasize that unitary elasticity represents a state of balance between price and sensitivity to demand.

**Price Elasticity of Supply (PES)**

PES measures the responsiveness of the quantity supplied of a commodity to changes in price (Gans et al., 2020). This shows how quickly producers and manufacturers change their production levels in response to changes in price. PES serves as an indicator of suppliers' adaptability to variations in market prices. From basic economic theory, it can be deduced that when prices go high, producers would want to increase their production levels to produce more so that they sell more quantities at higher prices. The value of PES is arrived at by dividing the percentage change in the quantity of a good supplied by the percentage change in the price of the same good. PES helps businesses evaluate whether producers can swiftly adjust their output levels in response to fluctuations in prices (Gans et al., 2020). This allows businesses to have a deeper understanding of supply dynamics and evaluate how sensitive suppliers are to shifting market conditions, ultimately providing valuable insights for decision-making processes concerning pricing strategies and market equilibrium.

When the value of PES is less than 1, it is described as inelastic supply. In such a scenario, producers encounter difficulties in adjusting their production levels promptly to changes in price. As a result, the variations in the price only lead to smaller changes in the quantity of the product supplied. Inelastic supply can occur due to different factors, including limited production capacity, constraints on adjusting inputs and resources within the given timeframe, or other barriers that prevent producers from efficiently responding to market signals (Gans et al., 2020). Consequently, when there are fluctuations in prices, producers with an inelastic supply have limited and less perceptible reactions to those changes in prices as compared to producers in elastic supply conditions, which occurs when the value of PES is greater than 1. These dynamics have significant implications for market equilibrium, and pricing mechanisms, and also affect the overall efficiency and responsiveness of supplier behavior within the economic system.

On the other hand, when the value of PES is equal to 1, the condition is described as unitary elasticity. In this condition, any change in price leads to a corresponding change in the quantity of the quantity supplied. Therefore, the relationship between the quantity supplied and price fluctuations is accurately proportional. This concept of unitary elasticity provides valuable insights into how producers adapt to changes in market conditions and aids in determining the equilibrium point between supply and demand (Fibich, 2005). It suggests that suppliers can precisely adjust their production levels based on fluctuations in price, thereby ensuring stability and balance within the market.

**Factors Affecting Elasticity**

The factors that affect the elasticity of supply and demand include the availability of substitutes, necessity vs. luxury products, brand loyalty, time horizon, income levels, and market competition. The availability of substitutes affects the elasticity of demand primarily because consumers can readily switch to the available substitutes whenever the prices of a specific product go up (Waschik et al., 2010). Ultimately, this reduces the demand for the specific product whose prices have gone up. In the same way, necessities and luxuries also affect the elasticity of demand. In the case of necessities, consumers will continue purchasing them regardless of changes in prices because they need them in their day-to-day activities. Therefore, price fluctuations do not affect the demand for necessary goods and services. On the other hand, luxury products are more elastic and any slight changes in their prices can affect demand. When prices of luxury products rise, consumers will avoid buying them and therefore reduce the demand for the specific luxury products.

The element of time is also important in evaluating elasticity because elasticity is not a constant value and can vary over time. For example, in the short term, certain products may exhibit less responsiveness in demand due to consumers being unable to swiftly change their habits or find alternative options. This is most likely to occur when choices are limited, resulting in difficulties for consumers to make immediate adjustments (Waschik et al., 2010). However, as time progresses, demand has the potential to become more responsive. Similarly, brand loyalty is also an important factor in evaluating elasticity. For example, products with strong brand loyalty have inflexible demand, implying that fluctuations in price have a lesser impact on consumers who may be loyal to that brand. This is because loyalty creates a strong bond between brands and consumers, resulting in reduced sensitivity towards the price changes (Fibich, 2005). Changes in the income levels of consumers also affect demand because an increase in income generally results in a proportional increase in demand for those items. Conversely, inferior goods tend to demonstrate a contrasting relationship, where an increase in income leads to a decrease in demand for such products.

**Conclusion**

The concept of elasticity is important in business because it aids in making informed decisions that support business operations especially when it comes to pricing and production strategies. As elucidated in this paper, elasticity measures the sensitivity or responsiveness of one variable towards a change in another variable or variables. As indicated in the paper, there are four main types of elasticity namely income elasticity, demand elasticity, cross elasticity, and price elasticity. However, to fully appreciate the importance of elasticity in business price elasticity becomes essential because one needs to comprehend the dynamics and mechanisms behind price Elasticity of Demand and Price Elasticity of Supply.

References

Baye, M. R., & Prince, J. (2021). *Managerial economics and business strategy*. Lexington Books.

Fibich, G. (2005). The dynamics of price elasticity of demand in the presence of reference price effects. *Journal of the Academy of Marketing Science*, *33*(1), 66-78. <https://doi.org/10.1177/0092070304267108>

Gans, J., King, S., Byford, M., & Mankiw, G. (2020). *Principles of microeconomics*. Cengage AU.

Mithani, D. M. (2009). *Introductory managerial economics*. Global Media.

Waschik, R., Fisher, T., & Prentice, D. (2010). *Managerial economics: A strategic approach*. Routledge.