**JC1 Economics H2 – Essay Discussion – Set A**

**Mid-year Revision**

**Essay Question 1**

**With economic growth and the Singapore government’s move away from direct taxes towards indirect taxes, examine the impact on business sales and revenue of various types of goods and services. [25]**

Implication of the terms:

economic growth – increase in income – increase demand for normal and decrease demand for inferior good

direct tax – decrease direct tax – more disposable income – increase purchasing power

indirect tax – decrease in supply – change in price and output depends on PED (specific or GST % based)

business sales - quantity

business revenue – revenue (PXQ)

Introduction

The occurrence of economic growth and introduction of indirect tax will affect the market demand and supply of different types of goods and services, which can be classified as normal or inferior goods and services. Consequently, there will be changes in market equilibrium, indicating changes in prices and output level and thus, affect the sales revenue. To understand this impact, there is a need to use the concept of demand and supply and elasticity of demand and supply to examine the impact.

Main Body

**1) Identify and explain the meaning of the inferior and normal good – how it will determine under the influence of price-elasticity of demand and income elasticity of demand.**

In order to have a good understanding of how the quantity of the market and sales revenue will change, there is a need to provide an understanding of the normal and inferior under the concept of price-elasticity of demand and the income elasticity of demand.

For goods like property which are classified as normal or luxury goods, the income elasticity of the demand will be positive and elastic as the proportion of income spent on this good is large while the price-elasticity of demand will be price-elastic demand as the substitution and income effect increases or decrease the quantity demanded in the same direction, contributing to a more than proportionate change in quantity demanded in relation to the extent of change in price of the normal or luxury good.

For goods like rice which are classified as inferior good, the income elasticity of demand will be negative and inelastic as the proportion of income spent on the good is small while the price elasticity of demand is price-inelastic as the direction of change in quantity demanded substitution effect differs from the income effect but the latter is greater that the substitution effect, contributing to a less than proportionate change in quantity demanded in relation to the extent of change in price of the inferior good.

**2) Explain how economic growth will affect the market demand for inferior and normal good.**

With economic growth, the rise in real GDP will mean a rise in disposable income which will affect the market demand for the different types of goods and services.

For normal good such as houses or property, the rise in income will lead to an increase in demand for the goods. This will lead to a rise in price and quantity demanded and thus, it contributes to an increase in sales revenue.

Q0

Q1

Qx

D1

S0

Px

P0

P1

D0

**Diagram 1 – Normal Good**

As seen from Diagram 1, the increase in demand from D0 to D1 for good X, which is normal good, will lead to a rise in price from P0 to P1 and increase in quantity demanded from Q0 to Q1. This will raise total revenue from TR0 (P0 x Q0) to TR1 (P1 x Q1) for the normal good.

For inferior good such as rice, the rise in income will lead to a fall in demand for the good and this will lead to a reduction in sales revenue.

Q1

Q0

Qx

D0

S0

Px

P1

P0

D1

**Diagram 2 – Inferior good**

As seen from Diagram 2, the fall in demand from D0 to D1, which is an inferior good will lead to a fall in price from P0 to P1 and decrease in quantity from Q0 to Q1. Consequently, the total revenue will fall from TR0 (P0 x Q0) to TR1 (P1 x Q1).

Analysis

The rise or fall in quantity in the market when there is a change in market demand due to rise in income will depend on the price-elasticity of supply. If the supply is price-inelastic, the change in quantity will be less than proportional for the good in relation to the change in price level when there is a change in demand. On the other hand, if the supply is price-inelastic, the change in quantity supplied will be more than proportional for the good in relation to the change in price level when there is a change in demand.

As for the impact of the introduction of indirect tax, this can be seen from how it leads to increase in cost of production of the good which will lead to a reduction in the supply of the good. The impact on the market equilibrium of the good and its sales revenue will depend on the types of goods and services, based on the classification of a normal or inferior good.

For normal good, **the price elasticity of demand will be price elastic** and thus, a fall in the supply as a result of imposition of indirect tax will cause a slight rise in price and a more than proportionate decrease in quantity. The sales revenue before tax will be excessively reduced as the loss in revenue due to decrease in quantity is greater than the gain in revenue due to increase in price.

S1

D0

Qx

P0

Q1

S0

Q0

P1

Px

**Diagram 3 – Normal Good**

For inferior good, **the price-elasticity of demand will be price-inelastic** and thus, a fall in the supply as a result of the imposition of indirect tax will cause a sharp rise in price but a less than proportionate decrease in quantity demanded. **The revenue before tax will increase** as the gain in revenue due to increase in price is greater than the loss in revenue due to decrease in quantity demanded.

S1

D0

Qx

P0

Q1

S0

Q0

P1

Px

**Diagram 4 – Inferior Good**

 As for the revenue after tax, it will depend on the price-elasticity of supply. If the supply is price-inelastic, the producers are likely to experience more loss in revenue after tax than when the supply is price-elastic as the tax incidence is large and the fall in quantity demand is greater due to the larger than proportional fall in quantity demanded.

Conclusion

 In conclusion, the degree of impact of the introduction of indirect tax and economic growth can be better understood with the use of demand and supply analysis and the various concepts of elasticity of demand and supply as they help to classify the goods into different types of goods to provide an analysis of the impact.

Essay Q2 – Essay Outline

**Population growth and rising income are driving up food demand. There is a shift in consumer preference towards organic food which is believed to be healthier. However, climate changes has led to floods, droughts and types of extreme weather which threatens the global food supply.**

**Discuss the impact these events are likely have on expenditures by consumers on organic and non-organic food. (25)**

**Analysis -**

**Demand and supply factors**

**Demand – pop growth, income, change in taste and preference (substitution)**

**Supply – bad weathers – fall in ss.**

**Organic and non-organic – substitutes, demand curve (PED), PES (price inelastic)**

**Introduction**

**Characteristics of the goods**

**Requirement – expenditure will change (change in P and Q)**

**Economic principles – demand and supply analysis / PED and PES)**

**Main body**

1. **Demand condition for both organic and non-organic food**
* **Normal and inferior (organic food)**
* **PED – income and degree of substitution (Organic food)**
* **Organic food – ped elastic**
* **Non-organic – ped inelastic**
* **Taste and preference – increase in demand for organic food**
1. **How the condition will cause change in demand**

**Increase in income – increase demand for organic food and decrease demand for non-organic food**

**Increase in population – increase in demand for both types of food**

**Change in taste and preference – increase in demand for organic food and decrease in demand for non-organic**

**Why there is an increase in demand for organic food**

**Why there is a decrease in demand for non-organic food**

**(PES is inelastic, increase in demand for organic food and decrease for non -organic food)**

1. **Decrease in supply affect both markets**

**Organic market is price elastic – decrease in supply – decrease in revenue**

**Non-organic market – price inelastic – decrease supply – increase in price – an increase in total revenue**

1. **Analysis**

**TE = P XQ – change in dd and ss will change in P and Q and therefore, contributes to change in TE**

**Degree of change is dependent on PED and PES.**

**Conclusion**