**Classwork – Lessonn No 4 – Essay discussion – Q3**

**“Growing affluence has led to the demand for consumer durables which has induced greater production but bad weather has worsened the harvest in the main region of agricultural production while regional political instability has disrupted the production of oil to meet global demand.”**

**Discuss the impact of the above development on the market for oil and related products. [25]**

I. Economic Causation

II. Draw Diagram

III. Description of Diagram

IV. Evaluation/Analysis

Introduction

Market for the oil product and related product like bio-fuel and grains can be understood by examining the changes in market forces of demand and supply as a result of changes in the events stated in the pre-amble.

Explain that the impact on market implies the determination of price and output level when the market demand is equal to market supply at respective market

Main body

1. **Explain how the events affect the price and output level set in the oil market**

I. Economic Causation

* ↑ in dd – affluence of the society (Explain how the affluence of the society will raise market dd for oil) 🡪↑Y🡪↑Purchasing power🡪↑dd for more consumer durables
* ↓ in ss – political instability (Explain how political instability will affect the market ss of oil? Disruption of oil 🡪↓SS

II, III. Draw Diagram/Description of Diagram

🡪P↑ (Draw diagram / description of diagram)

Price of Oil

S1

S0

P1

P0

D1

D0

Qty of Oil

Q0

Q1

↑ in dd> ↓ in ss 🡪 international/global market demand

IV. Evaluation

🡪Evaluation - P↑ sharply as the dd/ss are both price-inelastic

οWhy dd/ss are both price-inelastic?

dd is price-inelastic 🡪high degree of necessity demand

ss is price-inelastic 🡪 limited availability of resources (finite supply)

1. **Explain and evaluate how change in price of oil and bad harvest will affect the bio-fuel market**

I. Economic Causation

🡪Explain how the rise in price of oil and had harvest will affect the bio-fuel market 🡪↓ss🡪 reduce source of resources

🡪Rise in demand for bio-fuel as it is a substitute for oil/ss may not ↑ extensively as it is limited by bad harvest🡪↑Poil🡪↓Qtyddoil🡪↑dd for bio-fuel🡪↑Pbio-fuel

II, III. Draw Diagram/Description of Diagram

Price of bio-fuel

P0

D1

D0

S1

S0

P1

Qty of bio-fuel

Q1

Q0

IV. Evaluation – Price-inelastic supply of bio-fuel

1. **Explain and evaluate how changes will affect the grain market**

I. Economic Causation

1. Increase in demand for corn as they are derived demand for bio-fuel
2. Decrease in the supply due to had harvest
3. Will create impact on other grains like rice as rice and corn are related as competitive ss 🡪 ↑ in dd for corn 🡪 ↑ in dd for land 🡪 ↑COP for rice 🡪 less land for rice farming 🡪 ↓ in ss of rice 🡪 ↑P of rice

II, III. Draw Diagram/Description of Diagram

How the price and output level will change for corn and rice markets (2 Diagrams)

↑dd for corn🡪↑Pcorn🡪↑Qtysscorn

↓ss for rice 🡪↑Price

IV. Evaluation

Comment on the extent of impact on corn and rice – Both market have price-inelastic supply (Why?)

sion

***Why ↑dd for bio-fuel is little?***

*🡪bio-fuel is not the only alternative for oil*

***Why ↓ in ss for bio-fuel is extensive?***

*🡪bad harvest will reduce the production of bio-fuel significantly 🡪 it is the main resource for the production of bio-fuel*

Introduction

The market condition for production of oil and other related products like bio-fuel and grains can be understood by examining the changes in market forces of demand and supply as a result of changes in the events stated in the pre-amble. This can be attained when there is market equilibrium such that the market demand is equal to the market supply and the price and output level is set .

Main Body

For the oil market, there will be an increase in demand for oil as there is growing affluence in many economies which will lead to greater demand for consumer durables. Consequently, there will be a rise in production of these goods which will induce a rise in the demand for oil, since it is a derived demand. As for the supply of oil, the political instability in the oil producing economies will lead to a reduction in the supply as the production is disrupted. Consequently, it can be observed that there will be a reduction in supply and increase in demand which will lead to an excess demand condition that will raise price level. As the increase in demand is greater than the reduction in supply since the market demand is the result of global growth and the supply is only affected by a low production, there will be a fall in quantity in the oil market.

Price of Oil

S1

S0

P1

P0

D1

D0

Q1

Q0

Qty of Oil

As seen from the diagram, the rise in demand from D0 to D1 which is greater than the fall in supply from S0 to S1 which will create the excess demand condition that will lead to a sharp rise in price level from P0 to P1 and a rise in quantity from Q0 to Q1.

The price in this oil market will rise as both the demand and supply is price-inelastic. The demand for oil is price-inelastic as there is a high degree of necessity of demand for oil since it is an essential resource while the supply is price-inelastic as there is a limited supply of crude oil since there is a limited natural endowment and is unevenly distributed.

As for the **bio-fuel market**, there will be a rise in market demand for the resources as it is a substitute for oil. The fall in quantity demanded for oil contributed by the rise in price of oil will lead to an increase in demand for bio-fuel. Hence, this will lead to an excess demand condition which will induce an increase in the price of bio-fuel.

Price of

Bio-fuel

S0

Q1

P1

P0

D1

D0

Q0

Qty of Bio-fuel

As seen from the diagram, the increase in demand for bio-fuel from D0 to D1 will lead to a sharp rise in price of bio-fuel from P0 to P1 as there is a price-inelastic supply, implying that there will be a less than proportionate increase in the quantity supplied when price increases. This price of bio-fuel will rise sharply as the supply is price-inelastic in the bio-fuel market since there is a limited supply of resources like corn which is limited by long gestation period and bad harvest.

Lastly, the grain market like corn and oil will also be affected as the economic conditions stated in the pre-amble affecting the market demand and supply of grain like corn and rice. Since corn is a derived demand for the bio-fuel market, the increase in demand for bio-fuel will lead to a rise in demand for corn which will contribute to an excess demand in the market for corn and thus, price level for corn will rise, inducing an increase in the quantity supplied of rice. This will affect the supply of rice in the market for rice as rice and corn are related competitive supply, given that the production of both goods required the same resources. Consequently, the supply of rice will fall as there is a greater demand for land, limiting the land space for production of rice which will lead to a rise in cost of production for rice. Hence, the supply of rice will be reduced and the price level of rice will increase while its quantity will fall.

S0

S1

S0

P1

P1

Price of Rice

Price of Rice

P0

P0

D0

D1

D0

Q1

Q0

Q0

Q1

Qty of Corn

Qty of Corn

As seen from both diagrams, the demand for corn increases from D0 to D1 which will contribute to an excess demand condition that will lead to a rise in price of corn from P0 to P1 which will induce an increase in quantity supplied of corn from Q­0 to Q1. This will cause a decrease in supply of rice from S0 to S1 which will lead to an increase in price of rice from P0 to P1 and the fall in quantity of rice from Q0 to Q1.

Both the demand for corn and rice are price-inelastic as these goods have a high degree of necessity of demand since these are staple food. Conversely, the supply of corn and price are price-inelastic since there are long gestation periods in the production process. Therefore, the rise in price for both markets is sharp.

Conclusion

In sum, the changes in the market forces of demand and supply of the respective resource markets will affect the market equilibrium price and output level of the respective markets as the markets are inter-linked. The extent of rise in price for the respective markets can also be accounted with the knowledge of price-elasticity of supply and demand.