

JJC J2H2 Prelim Essay Q1

- 1 Crude oil is an important commodity that is used to generate electricity, produce gasoline and other petroleum products used for industrial production. Oil price has fallen from a peak of over \$110 per barrel in 2014 to below \$40 per barrel in 2015.

Using examples from various industries, discuss why prices of oil-related products fall to a different extent when there is a fall in the price of crude oil. [25]

Introduction

In the free market, price of oil is determined by the interaction of demand and supply forces. Excessive increase in supply exceeding demand can lead to oil price falling.

Explain how a fall in price of crude oil will reduce the cost of production of firms producing oil-related products causing their price to fall.

However, the extent of fall in prices tend to vary among different products and in different markets due to various reasons.

Relative PED values of the products

- The demand for some products such as a particular brand of laptop such as Acer tend to be price elastic. This is due to the availability of substitutes from many different brands. Given an increase in supply due to cheaper cost of production, this leads to a less significant fall in price.
- On the other hand, the demand for some products such as petrol is price inelastic as there are **few substitutes** to fuel vehicles. Due to its price **inelastic** demand, when there is an increase in supply, petrol will experience a **more significant** decrease in **price than** for a price elastic demand curve. Explain with aid of diagram.
- However, the elasticity of the demand for products may change over time.

Existence of monopoly/market power

- Some firms, for example, petroleum companies in Singapore have high barriers to entry. With their high monopoly power as a result of high barriers to entry, they have a greater ability to set prices. Although they may experience a lower cost of production as a result of lower crude oil prices, they may choose to pass down less cost savings to consumers in the form of lower prices.
- However, if there is an increase in contestability of its market, a firm is more willing to reduce price.

Changes in fuel tax and subsidies

- Some countries may choose to increase petrol tax or reduce subsidies for petrol following a fall in crude oil prices. This again offset any large fall in prices of petrol.

Mutual interdependence in oligopolistic firms

- Firms in oligopolistic market tends not to change their prices and there is price stickiness due to the existence of kinked demand curve. In addition, in the case of collusive oligopolies, there is also a tendency to collude and hence prices may not fall.

Existence of Economies of Scale

- Some firms are able to enjoy greater internal economies of scale as their firms expand. Thus with a fall in prices resulting in a larger output, they are able to enjoy more cost

- savings from internal economies of scale. Assuming that they pass on this cost savings to consumers, they are able to lower prices to a larger extent. Give example.
- However as output increases, some firms may experience internal diseconomies of scale instead. There may be greater miscommunication resulting in less efficiency and higher unit cost of production.

Proportion of total cost related to oil-related input or use of electricity vs labour cost

- Labour cost may constitute a large proportion of total cost and a rising labour cost may offset the fall in cost as a result of cheaper electricity and cheaper petroleum raw material used. Give example.

Explain that the fall in price of products is also affected by changes in demand

- Fall in supply may be partially offset by rising demand leading to a less drastic rise in prices in some products. Explain with example.

Conclusion

Stand: A combination of factors affect the extent of price fall in different firms following a fall in price of crude oil.

In reality, different types of firms experience different extent of fall in prices in their products as a result of a fall in crude oil prices. This is usually due to a combination of factors mentioned above.

Differences depends on:

Criteria 1: Nature of products

Criteria 2: Constraints to a firm reducing price due to economic outlook, business risks and uncertainty.

Criteria 3: Constraints due to government intervention

Marking scheme

Level	Knowledge, Application, Understanding, and Analysis	Marks
L3	Well-developed analytical explanation of the relevance of different factors that influences the extent of fall in price.	15 – 20
L2	Descriptive explanation of the relevance of different factors that influences the extent of fall in price.	9 – 14
L1	For an answer that shows some knowledge of relevance of different factors that influences the extent of fall in price.	1 – 8
Evaluation (5m)		
E3	For a well-reasoned judgement on the reasons for the differences in fall in prices.	4 - 5
E2	For an attempt at judgement	2 – 3
E1	For an unexplained judgement	1