# ECON

Introduction

The report consists with the two case studies related to the economics. Case study one is about price changes of copper in several years relating to Demand, Supply and Market Equilibrium. Hence, there are some questions that answered with an explanation, graphically and mathematical method. Case study two is about Indifference curve. The answer has explained using indifference curve graph.

Case Study 01 - The Behavior of Copper Prices

    a.   i. In 1988 – 1989 and in 1995
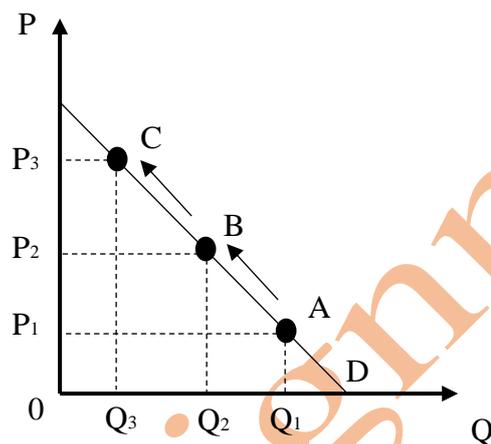
In this situation, all the factors that affect to demand other than the price remained constant. Therefore, price changing shows graphically as shifting the price levels on the demand curve which is changing only the quantity of demand. Above graph shows the copper price increment in year 1988, 1989 and 1995 due to the miners' strike in Peru and Canada which affect to decrease copper supply. According to the demand curve, the point of P1 shows the price of 1988. The demand is high and it has a lower price. But, point P2 shows the price level of 1989, it has increased and demand decreased. The price level of 1995 shows by point P3 where, the price is very high comparing with the previous years and demand quantity has become very low.

ii. In 1980 and 1982
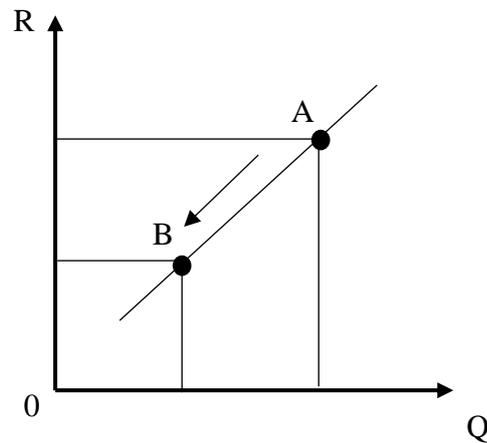
According to the theory of income elasticity of demand, the situation in year 1980 and 1982 has explained as below. Rescissions in those years have contributed to the price decrease of copper. That happened due to the rescission customer's revenue decreased and thereby the demand quantity also deceased. Here, the income elasticity of copper prices has calculated as 1.3. It is a plus value and even the price of copper is low, demand quantity also decreased. Hence, copper can be identified as an ordinary good. In the above graph, point A shows the situation of year 1980 and point B shows 1982 situation, where revenue decreased and at the same time quantity also decreased. Due to that reason, price of copper also decreased. So, the graph illustrates that the positive relationship between revenue and demand quantity.

iii. From year 2005 to 2007
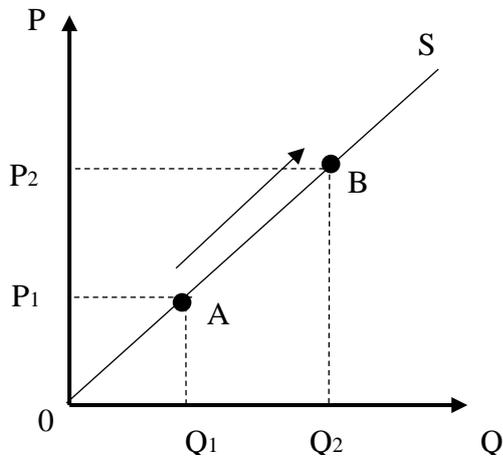
According to the theory of supply, when all the factors that affect to the supply remained constant other than the price, the supply quantity also gradually increase. In the subjected years made new investments in mines and thereby, production of copper also increased. And, equal to that, copper supply increased and released to the market. According to the positive relationship in the supply curve, when supply quantity increases, automatically the price of the product also increases. Point A shows the price and quantity level of year 2005 and point B shows increased price level and supply quantity level.

b.
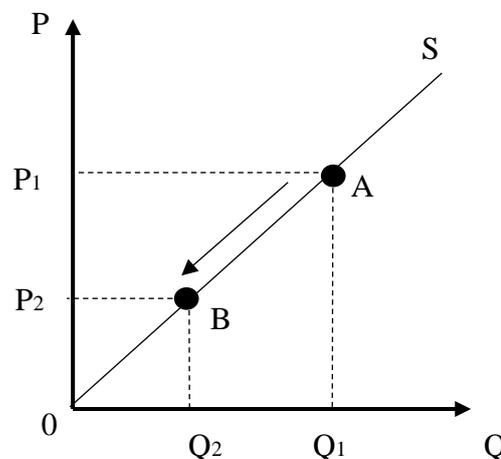
Up to the year of 2007, prices of copper were increased. But, after 2007 again, it has faced for a gradual price decreased. Copper producers also predicted the price reduction of copper. There were a few reasons for that price reduction. Most of the copper consumption was goes for electric equipment construction. But, with the radical decrease of electric power generation in the industrial zone, it shows a sign for copper price reduction. Further, there were a number of substitute goods instead of copper available at a lower price. Thereby, customers tend to buy those leaving from the copper products. According to the above graph, it shows a price reduction of supply changing that a point is moving on the supply curve. Price of the copper product decreased from point A to point B and according to that supply quantity also decreased.

b. Demand Equation - $Md = 18 - 3p$

Supply Equation - $Ms = -6 + 9p$

Therefore, Market Equilibrium is;

$$Md = Ms$$
$$18 - 3p = -6 + 9p$$
$$18 + 6 = 9p + 3p$$
$$24 = 12p$$
$$\underline{2 = p}$$ Hence, Market Equilibrium Price = 2Rs.

Substitute market equilibrium price $p = 2$, to the demand equation

Md = 18 – 3p

Md = 18 - 3*2

Md = 18 - 6

Md = 12

Therefore,

Market equilibrium price = 2Rs

Market equilibrium quantity = 12

d. demand curve after demand dropped by 20%

Demand curve Md = 18 - 3p

Demand curve after demand dropped by 20%

Md = 4/5 * 18 - 3p

Md = 14.4 – 3p

e. Market equilibrium price

Demand Equation - Md = 14.4 – 3p   Supply Equation - Ms = -6 + 9p

Md = Ms

14.4 – 3p = -6 + 9p

14.4 + 6 = 9p + 3p

20.4 = 12p

1.7 = p

Substitute market equilibrium price p = 1.7 to demand equation

Md = 14.4 – 3p

Md = 14.4 – 3* 1.7

Md = 14.4 – 5.1

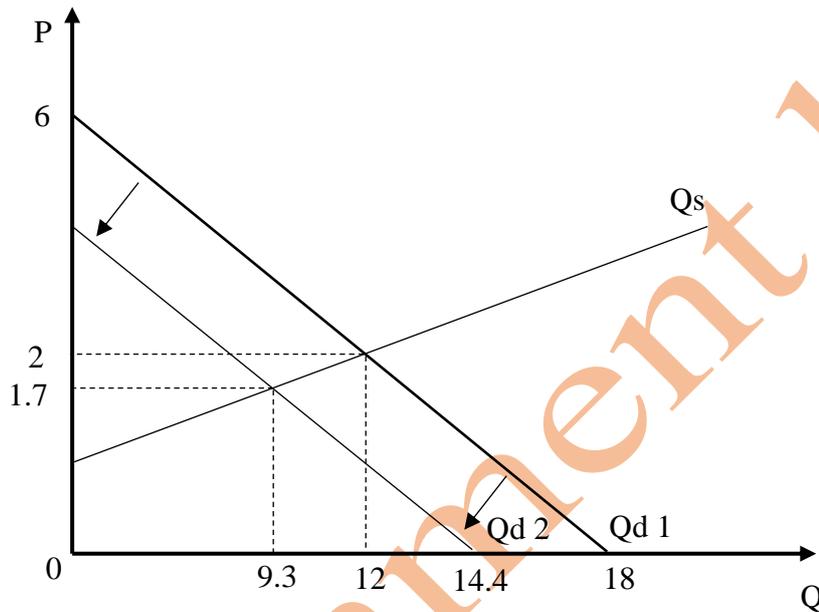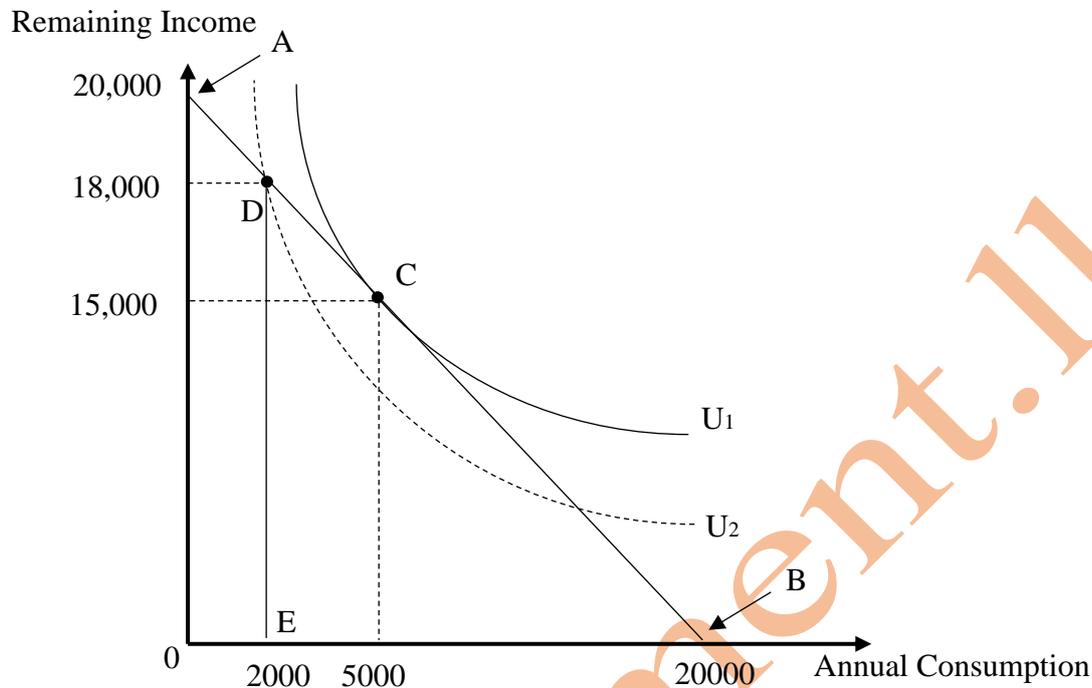Md = 9.3

Therefore,

Market equilibrium price =1.7Rs

Market equilibrium quantity = 9.3

f. Market equilibrium graph, before and after the demand dropped by 20%

Case Study 02 - Gasoline Rationing

Remaining Income

20,000 ····· A

18,000 ····· D

15,000 ····· C

U₁

U₂

B

0   2000 5000   20000   Annual Consumption

E

As indifference curve is used to show represent of two different goods. Therefore, above the indifference curve for the analysis of case study 02. In the case of goods are rationed, less is existing than customers may willing to purchase the goods. Customers may be poorer gasoline rationing. A maximum number of 20000 gallons are accessible to consumption to the customer as the point B. customer selects the point C on the indifference curve U1, consuming 5000 gallons. On the other hand, according to the point E, with gasoline gallons' limit of 2000 gallons, customer shifts on the indifference curve U2 where D is situated.

Conclusion

According to the case study 01, it has explained the separated supply and demand situations with graphs. There were economic situations such as demand price increase, revenue elasticity of demand, demand quantity increase, supply price increase etc. also as there were calculations for demand price and quantity, supply price and quantity, market equilibrium price and quantity. Then, it graphs the demand curve, the supply curve and finally market equilibrium.

As the third question of case study 02, it has given an explanation and requirement for indifference curve and graphs related to the indifference curve. Finally, it has explained the situation according to the given details in the gasoline market properly.

References

Ahumada, H., Alvaredo, F., Canavese, A., and Canavese, P. (2004). The Demand for Currency Approach and the Size of the Economy: A Critical Assessment. Delta Ecole. Normale Superieure, Paris, Discussion Paper.

Lippert, O., and Walker, M. (2009). The Underground Economy: Global Evidences of its Size and Impact. Vancouver, B.C.: The Frazer Institute.

Schneider, F., and Enste, D.H. (2010). Economies: Size, Causes, and Consequences. Journal of Economic Literature, 38(1):77-114

Thomas, J. (2012). The Underground Economy in the United States: A Comment on Tanzi. IMF-Staff Papers, 33(4):782-789.

Williams, C.C., and Windebank, J. (2011). Beyond Profit Motivated Exchange: Some Lessons from the Study of Paid Informal Work. European Urban and Regional Studies, 8(1):49-61.