

Impact of rise in price of gasoline

Literature, Russian Literature



Impact of Rise in Price of Gasoline

Oil acts as an input to the refinery of gasoline. Rise in price of input causes the supply of good to decrease (Mankiw, 1998). Hence rise in the price of oil is likely to cause the supply of gasoline to fall. Supply curve of gasoline will shift to left and equilibrium price of gasoline will rise and equilibrium quantity will fall.

Price S2 S1

E2

P2 E1

P1

D1

Q2 Q1 Quantity

Y-axis shows the price of gasoline and x-axis shows the demand and supply of gasoline. Due to increase in the price of gasoline the supply curve S1 shifts leftward. There is new supply curve S2 intersecting demand curve at point E2 which is the new equilibrium. New equilibrium quantity has decreased from Q1 to Q2 and new equilibrium price has increased from P1 to P2.

Gasoline is the compliment of automobiles. Decrease in supply of gasoline is likely to push its price up. Hike in price of compliment tends to decrease the demand for good. In this case the demand for both luxury cars and economy cars will decrease. However due to differing nature of luxury and economy cars their demand will decrease in different proportions in response to change in price of gasoline. Luxury cars are likely to consume more gasoline hence their demand likely to be more responsive to increase in price of

gasoline relative to economy cars that are fuel-efficient and take relatively little portion of consumption. Demand for luxury cars will, thus, decrease more than that of economy cars. These impacts are shown in following figures.

Price

D2 D1 S1

P1 E1

P2 E2

Q2 Q1 Demand and supply (Luxury Cars)

Horizontal axis shows the demand and supply quantity of luxury cars and y-axis represents their price. Initial equilibrium lie at point E1 where demand curve D1 intersects supply curve S. Due to increase in price of gasoline demand curve shifts leftward i-e D2. New equilibrium is E2 where equilibrium quantity has decreased from Q1 to Q2 and equilibrium price has fallen from P1 to P2.

In case of economy cars the same phenomena would repeat. Demand curve for the economy cars will shift to left representing decreased demand for economy cars due to rise in price of gasoline. However the extent of decrement in the demand for economy cars is likely to be lesser relative to that of luxury cars.

As shown in diagram below, X-axis shows the quantity demanded and supplied of economy cars and Y-axis shows their corresponding price. Due to rise in price of gasoline demand curve D1 shifts leftward and new demand curve D2 appears. Initial equilibrium lie at point E1 where equilibrium quantity is Q1 and equilibrium price is P1. New demand curve D2 intersects

supply curve S at point E2. At new equilibrium E2 equilibrium quantity is Q2 and equilibrium price is P2. As it is shown in diagram at new equilibrium, the equilibrium quantity for economy cars has been reduced from Q1 to Q2 and equilibrium price has fallen from P1 to P2 due to increase in price of gasoline.

Price D1 S1

D2

P1 E1

P2 E2

Demand & Supply of

Q2 Q1 (Economy car)

Q no 2. How economists calculate Real GDP?

Real GDP is the money value of all the final goods and services produced in a country in a year using the base year prices. This is a very important measure to compare the real changes in production from year to year. It is the important measure to calculate the economic growth of an economy. GDP cannot be compared to assess growth unless it is adjusted for inflation (IBRD, 2008)

Real GDP is calculated by taking the price of base year and quantities of production from current year. Following simple illustration shows the calculation of real GDP. It is assumed that the economy produces only one good that is Good X.

Year

Good (X)

Price per unit

Nominal GDP

2010 (base year)

2500

\$1000

\$25, 00, 000

2011

4000

\$1500

\$6, 000, 000

In 2011 the real GDP can be calculated by multiplying quantity of production of X in 2011 by price of X in base year i-e 2010. Hence real GDP for 2011 can be calculated as follows;

Real GDP₂₀₁₁ = 4000 * \$1000 = \$4, 000, 000.

REFERENCES:

1. international Monetary Fund., World Bank Group., & World Bank. (1968). Finance & development. Washington: International Monetary Fund and the World Bank, etc
2. Mankiw, N. G. (1998). Principles of economics. Fort Worth, TX: Dryden Press.