

Question #61221, Economics, Other

a. There has been a breakthrough in the manufacturing of solar-powered motor vehicles that will substantially reduce their costs of production. Use demand and supply curves to illustrate what will happen to:

i) the equilibrium price and quantity of solar-powered motor vehicles.

ii) the equilibrium price and quantity of conventional motor vehicles.

b. In an attempt to increase the use of solar-powered motor vehicles the government decides to set a minimum price for solar-powered vehicles that is below the market price. Do you think this is a good idea? Explain your decision using graphs.

Answer:

a. Figure 1 illustrates supply and demand curves.

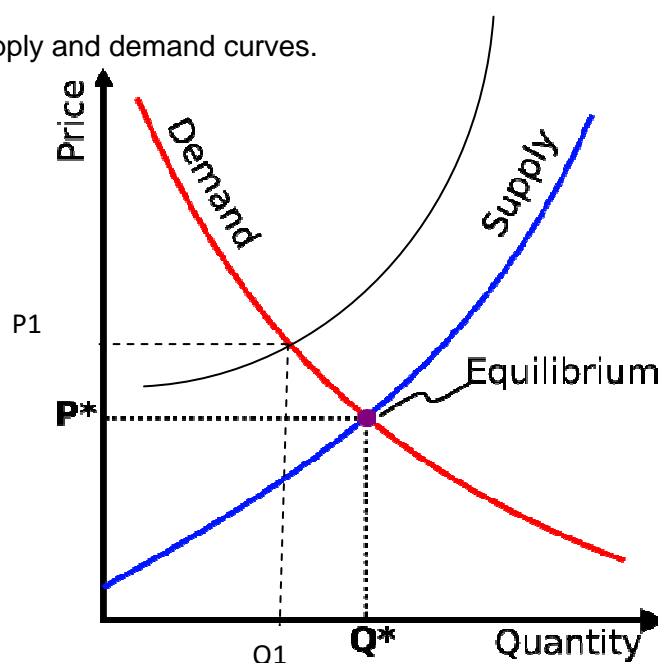


Figure 1 – Supply and demand curves

From this it is clear that as the price for electric vehicles will fall, demand for them will rise. Therefore, conventional vehicles will be substituted by electric vehicles. Demand for conventional vehicles will fall. Consequently, the price for them will rise ( $P_1$ ) and supply will decrease ( $Q_1$ ).

b. From the Figure 1 with the price lower than those at the market demand for electric vehicles will rise. However, such price will not be beneficial for producers (possibly, it will not cover their production costs). Therefore, supply of electric vehicles will fall as not very much producers will be able to take such high financial risks. I think that in order to intensify the spread of electric vehicles without any damage to producers the government must compensate the difference between market price and those lower one (subsidies).