

Homework Assignment 2

1. A firm is using two inputs, x_1 and x_2 , to produce one output, y . The input prices are w_1 and w_2 , respectively. The price of x_1 (w_1) has increased, while w_2 has remained unchanged. The firm has responded to this by changing how much of each input it uses without altering the quantity of its output.
 - (a) What has happened to the firm's use of x_1 and x_2 ? Show your answer graphically.
 - (b) Have the overall costs of the firm gone up or down?
2. Show who bears the burden of an excise tax in the short run and long run. Is the tax burden borne by the consumer or the producer, or by both?
3. Taxi licenses and public transport: discuss the implications of expanding public transport network on the cost of taxi licenses.
4. Patents offer inventors a temporary monopoly and thus allow them to enjoy higher profits than in a competitive environment while the patent lasts. This allows them to sell their products well above the marginal cost. It has been argued that in the case of life-saving medications (for example antiviral drugs against AIDS), the patent protection should be short-lived or none so that the medicines can be distributed cheaply, especially in less developed countries. Discuss.

References

- Varian, H. R. (2014). *Intermediate Microeconomics: A Modern Approach*. 9th ed. W. W. Norton & Company.