

Economics 103 Fall 2007 Section F01

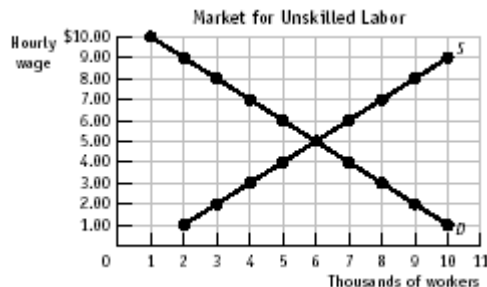
Multiple Choice

1. When the government imposes a price floor in a market, which of the following inefficiencies may occur?

- The good may be offered for sale with inefficiently low quality.
- The good may be offered for sale with inefficiently high quality.
- A shortage of the good may occur.
- A black market may develop, where the good or service is exchanged at a price higher than the price floor.

1. When the government imposes a price floor (a minimum price) in a market, a surplus results. Since producers will be competing with one another for customers but not on the basis of price, they may offer some perks with the good. Answer: B.

The accompanying figure describes the market for unskilled labor in a particular town. Use this graph to answer the next two questions.



2. If the government imposes a minimum wage of \$6.00, then

- employment will fall to 5,000 workers and unemployment will be equal to 1,000 workers.
- employment will fall to 6,000 workers and unemployment will be equal to 2,000 workers.
- employment will fall to 5,000 workers and unemployment will be equal to 2,000 workers.
- employment will fall to 6,000 workers and unemployment will be equal to 1,000 workers.

2. At a \$6 minimum wage, 7,000 workers will be looking for jobs, but firms will only want to hire 5,000 of them. There will be 2,000 unemployed workers. Answer: C.

3. At a minimum wage of \$6.00, unemployment will result because

- 1,000 workers will lose jobs, and 1,000 workers will enter the labor force but not find jobs as the wage rises from \$5.00 to \$6.00.
- 2,000 workers will lose jobs as the wage rate rises from \$5.00 to \$6.00.
- 2,000 workers will enter the labor force but not find jobs as the wage rate rises from \$5.00 to \$6.00.
- 5,000 workers will lose jobs as the wage rate rises from \$5.00 to \$6.00.

3. As the wage rises from the equilibrium wage of \$5 to the \$6 minimum wage, 1,000 workers will lose their jobs (firms would hire 6,000 workers at a wage of \$5, but at \$6 only 5,000 will be hired). Also, 1,000 workers who were not willing to work at \$5 enter the labor force at a wage of \$6 but are not able to find jobs. Answer: A.

4. When the government imposes a tax in a market and collects the tax from the producers,

- a. the price of the good rises by the full amount of the tax.
- b. the supply curve shifts down by the full amount of the tax.
- c. the supply curve shifts up by the full amount of the tax.
- d. both the demand and supply curves shift up by the full amount of the tax.

4. When the government imposes a tax in a market and the tax is collected from the producers, the supply curve will shift up by the full amount of the tax. Producers want the same price for supplying a particular quantity plus the tax. Answer: C.

5. Consider the labour market for unskilled workers. With more job-training schemes in Canada, the demand for labour will shift to the and the wage rate as well as employment will .

- a. right; increase
- b. left; decrease
- c. right, decrease
- d. left, increase

5. A job-training program shifts the demand for labour curve to the right. Answer: A.

6. The government might impose a price ceiling in a market for a good if it believed that the price in the market was:

- a. Too high for the consumers of the good
- b. Too low for the consumers of the good
- c. Too high for the producers of the good
- d. Too low for the producers of the good

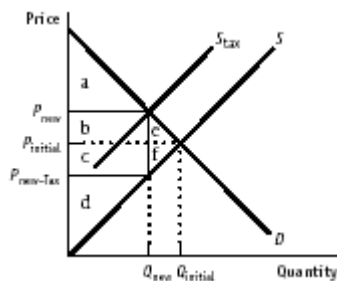
6. When the government imposes a price ceiling (a maximum price) It does so because it believes that the equilibrium price is too high. The producers want a high price but consumers want a lower price. By setting a maximum price below the equilibrium price, the government is trying to help the consumers. Answer A.

7. Rent controls are inefficient because they result in

- a. cheaper house for some renters than in the absence of the controls
- b. lower-quality housing for some renters than in the absence of controls.
- c. shorter waits for rent-controlled housing.
- d. a surplus of rent-controlled apartments.

7. Rent controls are a price ceiling and create shortages of apartments. Owners have little incentive to keep up these apartments, and consequently they are often of lower quality. Answer B.

Use the accompanying figure to answer the next three questions.



8. Before the government introduces a tax in the market, consumer surplus is represented by

- a. areas a, b, and c.
- b. areas a, b, and e.
- c. areas e and f.
- d. areas c, f, and d.

8. Consumer surplus is the area under the demand curve and above the market price. This includes areas a, b, and e. Answer: B.

9. After the government introduces a tax in the market, the government's revenue is represented by

- a. areas a, b, and c.
- b. areas a, b, c, and d.
- c. areas e and f.
- d. areas b and c.

9. The government's revenue is the per-unit tax ($= P_{\text{new}} - [P_{\text{new}} - \text{Tax}]$) times the new quantity exchanged (Q_{new}). This area is represented by areas b and c. Answer: D.

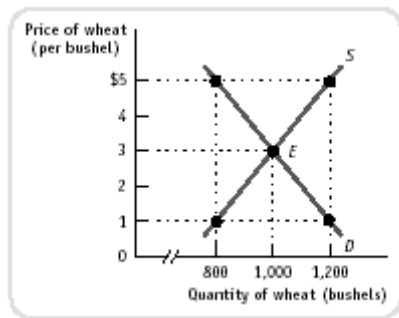
10. The deadweight loss from the tax is equal to

- a. areas a, b, and c.
- b. areas a, b, and e.
- c. areas e and f.
- d. areas b, c, e, and f.

10. The deadweight loss is the combined loss of consumer and producer surplus when the government imposes the tax. This is areas e and f. Answer: C.

Problem

Suppose the Canadian government is considering the use of price supports to provide income assistance to Canadian wheat farmers. It has two schemes in mind. Scheme A uses price floors, which it will maintain by buying up the surplus wheat production. Scheme B uses target prices in combination with quotas. In Scheme B, the government limits overall production and gives the farmer an amount equal to the difference between the market price and the target price for each unit sold. Consider the market for wheat depicted in the accompanying diagram:



- If the government sets a price floor of \$5.00, how many bushels of wheat are produced? How many are purchased by consumers? By the government? How much income do wheat farmers earn? How much does the program cost the government?
- Suppose the government sets a target price of \$5.00 and a quota of 1,000 bushels. How many bushels of wheat are purchased by consumers and at what price? By the government? How much revenue do wheat farmers receive? How much does the program cost the government?
- Which program costs wheat consumers more? Which program costs the government more? Explain.
- What are the inefficiencies that arise in each case?

With a price floor of \$5, the quantity of wheat supplied is 1,200 bushels. The quantity demanded is only 800 bushels: there is a surplus of 400 bushels. The government therefore has to buy up the surplus of 400 bushels, at a price of \$5 each:

the program costs the government $400 \times \$5 = \$2,000$. Wheat farmers sell 1,200 bushels (800 to consumers and 400 to the government) and therefore make $1,200 \times \$5 = \$6,000$ in revenue.

b. If the government sets a target price of \$5, the market reaches equilibrium at a price of \$3 and a quantity of 1,000 bushels. There is neither surplus nor shortage. The government does not buy any wheat under this policy. For each bushel sold, the government pays farmers a subsidy of \$2 (to make up the difference between the market price of \$3 and the target price of \$5), so the government pays a total of $1,000 \times \$2 = \$2,000$. Wheat farmers sell 1,000 bushels and make \$5 for each bushel (\$3 from consumers and \$2 from the government), for \$5,000 total revenue.

c. The price floor policy is more expensive for consumers: they pay \$5 per bushel (compared to \$3 under the target price policy). Both policies are equally expensive for the government.

d. When there is a price floor for wheat, the most striking inefficiency is the waste of resources (the wheat bought by the government is presumably thrown away). This does not occur under the target price policy: under that policy, all wheat produced is bought by consumers.