Chapter 8—Application: The Costs of Taxation

MULTIPLE CHOICE

1. A tax on a good
   a. raises the price buyers pay and lowers the price sellers receive.
   b. raises both the price buyers pay and the price sellers receive.
   c. lowers both the price buyers pay and the price sellers receive.
   d. lowers the price buyers pay and raises the price sellers receive.

   ANS: A DIF: Challenging REF: 163

2. When a good is taxed
   a. both buyers and sellers are worse off.
   b. only buyers are worse off because they ultimately pay the majority of the tax.
   c. only sellers are worse off because the government holds them responsible for collecting the tax.
   d. neither buyers nor sellers are worse off since tax revenue is used to provide goods and services that would otherwise not be provided by the market.

   ANS: A DIF: Average REF: 163

3. A tax placed on a product causes the price the buyer pays
   a. and the price the seller receives to be higher.
   b. and the price the seller receives to be lower.
   c. to be lower and the price the seller receives to be higher.
   d. to be higher and the price the seller receives to be lower.

   ANS: D DIF: Challenging REF: 163

4. A tax placed on kite buyers will shift
   a. demand upward, causing both the price received by sellers and the equilibrium quantity to fall.
   b. demand downward, causing both the price received by sellers and the equilibrium quantity to fall.
   c. supply downward, causing the price received by sellers to fall and equilibrium quantity to rise.
   d. supply upward, causing the price received by sellers to rise and equilibrium quantity to fall.

   ANS: B DIF: Challenging REF: 163

5. Buyers of a product will pay the majority of a tax placed on a product when
   a. the tax is placed on the seller of the product.
   b. the demand is more elastic than supply.
   c. supply is more elastic than demand.
   d. the tax is placed on the buyer of the product.

   ANS: C DIF: Challenging REF: 163

6. If a tax is imposed on a market with elastic demand and inelastic supply,
   a. buyers will bear most of the burden of the tax.
   b. sellers will bear most of the burden of the tax.
   c. the burden of the tax will be shared equally between buyers and sellers.

d. it is impossible to determine how the burden of the tax will be shared.

ANS: B DIF: Challenging REF: 163

7. Whether a tax is levied on the buyer or seller of the good does not matter because
   a. sellers always bear the full burden of the tax.
   b. buyers always bear the full burden of the tax.
   c. buyers and sellers will share the burden of the tax.
   d. sellers bear the full burden if the tax is levied on them, and buyers bear the full burden if the tax is levied on them.

ANS: C DIF: Average REF: 163

8. A tax imposed on a market with an inelastic demand and an elastic supply will cause
   a. sellers to pay the majority of the tax.
   b. buyers to pay the majority of the tax.
   c. the tax burden to be equally divided between buyers and sellers.
   d. the tax burden to be divided, but it cannot be determined how.

ANS: B DIF: Challenging REF: 163

9. A tax placed on chocolate will
   a. reduce the equilibrium price of chocolate and increase the equilibrium quantity.
   b. increase the equilibrium price of chocolate and reduce the equilibrium quantity.
   c. increase the equilibrium price of chocolate and increase the equilibrium quantity.
   d. reduce the equilibrium price of chocolate and reduce the equilibrium quantity.

ANS: B DIF: Challenging REF: 163

10. A $2.00 tax placed on the sellers of potting soil will shift the supply curve
   a. right (downward) by exactly $2.00.
   b. left (upward) by less than $2.00.
   c. left (upward) by exactly $2.00.
   d. right (downward) by less than $2.00.

ANS: C DIF: Average REF: 163

11. Which of the following is the most correct statement about tax burdens?
   a. A tax burden falls most heavily on the side of the market that is elastic.
   b. A tax burden falls most heavily on the side of the market that is inelastic.
   c. A tax burden falls most heavily on the side of the market that is closer to unit elastic.
   d. A tax burden is distributed independently of relative elasticities of supply and demand.

ANS: B DIF: Challenging REF: 163

12. When a tax on a good is enacted,
   a. buyers and sellers share the burden of the tax regardless of who it is levied on.
   b. buyers always bear the full burden of the tax.
   c. sellers always bear the full burden of the tax.
   d. sellers bear the full burden if the tax is levied on them, but buyers bear the full burden if the tax is levied on them.

ANS: A DIF: Challenging REF: 163

13. Total tax revenue received by government can be expressed as
   a. T/Q.

b. T + Q.
c. T(Q).
d. T - Q.

ANS: C DIF: Average REF: 163

14. The benefit from a tax is measured by the
    a. benefit received by those people who gain from government's expenditure of the tax revenue.
    b. cost of collecting (administering) the tax.
    c. interest saved because the government did not borrow the funds.
    d. government's surplus, which is tax revenue minus government expenditures.

    ANS: A DIF: Average REF: 163

15. When the government places a tax on a product
    a. the cost of the tax to buyers and sellers will be less than the revenue raised from the tax by the government.
    b. the cost of the tax to buyers and sellers will equal the revenue raised from the tax by the government.
    c. the cost of the tax to buyers and sellers exceeds the revenue raised from the tax by the government.
    d. without additional information, such as the elasticity of demand for this product, it is impossible to compare tax cost with tax revenue.

    ANS: C DIF: Challenging REF: 163

16. When a tax is imposed on a good we know that the losses to buyers and sellers
    a. are equal to the revenue raised by the government.
    b. are less than the revenue raised by the government.
    c. exceed the revenue raised by the government.
    d. cannot be compared to the tax revenue raised by the government since the amount of the tax will vary from good to good.

    ANS: C DIF: Challenging REF: 163

17. Deadweight loss measures the
    a. loss in a market to buyers and sellers that is not offset by an increase in government revenue.
    b. loss in revenue to the government when buyers choose to buy less of the product.
    c. loss of efficiency in a market as a result of government intervention.
    d. lost revenue to businesses because of higher prices to consumers from the tax.

    ANS: A DIF: Average REF: 162

18. A tax has a deadweight loss because
    a. it induces the government to spend more.
    b. it induces buyers to consume less and sellers to produce less.
    c. it causes a disequilibrium in the market.
    d. the loss to buyers is greater than the loss to sellers.

    ANS: B DIF: Average REF: 162

19. When evaluating the size of the deadweight loss due to a tax we know that the
    a. greater the elasticities of supply and demand, the greater the deadweight loss.
    b. smaller the elasticities of supply and demand, the greater the deadweight loss.

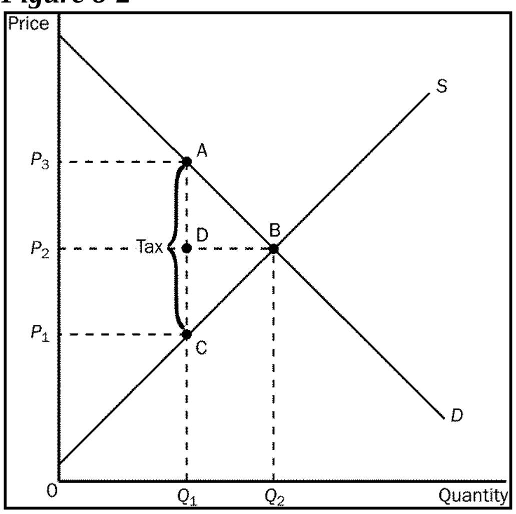
c. smaller the decrease in both quantity demanded and quantity supplied, the greater the deadweight loss.
d. primary factor that determines the size of the deadweight loss in the percentage the tax is of price.

ANS: A DIF: Average REF: 162

20. Assume that the demand for pretzels is relatively inelastic and that the demand for potato chips is relatively elastic. If the same percentage tax were placed on both goods, the tax on which product would create a larger deadweight loss?
a. the tax on pretzels
b. the tax on potato chips
c. The taxes would create the same amount of deadweight loss.
d. This question is impossible to answer without knowing the price of both pretzels and potato chips.

ANS: B DIF: Average REF: 162

Figure 8-2



21. **Refer to Figure 8-2**. The equilibrium price before the tax is
a. P_1.
b. P_2.
c. P_3.
d. None of the above are correct.

ANS: B DIF: Average REF: 162

22. **Refer to Figure 8-2**. The price that will be paid after the tax is
a. P_1.
b. P_2.
c. P_3.
d. impossible to determine.

ANS: C DIF: Average REF: 162

23. **Refer to Figure 8-2**. The price sellers receive after the tax is
a. P_1.
b. P_2.
c. P_3.

d. impossible to determine.

ANS: A DIF: Average REF: 162

24. **Refer to Figure 8-2**. The per unit burden of the tax on buyers is
a. P_3 - P_1.
b. P_3 - P_2.
c. P_2 - P_1.
d. Q_2 - Q_1.

ANS: B DIF: Challenging REF: 162

25. **Refer to Figure 8-2**. The per unit burden of the tax on the sellers is
a. P_3 - P_1.
b. P_3 - P_2.
c. P_2 - P_1.
d. Q_2 - Q_1.

ANS: C DIF: Challenging REF: 162

26. **Refer to Figure 8-2**. The amount of the tax imposed is
a. P_3 - P_1.
b. P_3 - P_2.
c. P_2 - P_1.
d. Q_2 - Q_1.

ANS: A DIF: Challenging REF: 162

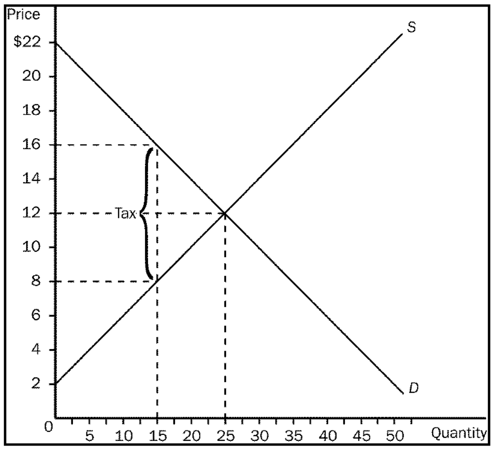
27. The amount of tax revenue received by the government is equal to the area
a. P_3 A C P_1.
b. A B C.
c. P_2 D A P_3.
d. P_1 C D P_2.

ANS: A DIF: Challenging REF: 162

28. The amount of deadweight loss associated with the tax is equal to
a. P_3 A C P_1.
b. A B C.
c. P_2 A D P_3.
d. P_1 D C P_2.

ANS: B DIF: Challenging REF: 162

Figure 8-6



29. **Refer to Figure 8-6**. The equilibrium market price before the tax is imposed is
    a. $16.
    b. $12.
    c. $8.
    d. $4.

    ANS: B DIF: Easy REF: 167

30. **Refer to Figure 8-6**. The price buyers pay after the tax is
    a. $16.
    b. $12.
    c. $8.
    d. $4.

    ANS: A DIF: Average REF: 167

31. **Refer to Figure 8-6**. The price sellers receive after the tax is
    a. $16.
    b. $12.
    c. $8.
    d. $4.

    ANS: C DIF: Average REF: 167

32. **Refer to Figure 8-6**. Consumer surplus before the tax was levied equaled
    a. $150.
    b. $125.
    c. $75.
    d. $45.

    ANS: B DIF: Challenging REF: 167

33. **Refer to Figure 8-6**. Producer surplus before the tax equaled
    a. $150.
    b. $125.
    c. $75.
    d. $45.

    ANS: B DIF: Challenging REF: 167

34. **Refer to Figure 8-6**. After the tax is levied, consumer surplus would be

a. $150.
b. $125.
c. $75.
d. $45.

ANS: D DIF: Challenging REF: 167

35. **Refer to Figure 8-6**. After the tax is levied, producer surplus would be
a. $150.
b. $125.
c. $75.
d. $45.

ANS: D DIF: Challenging REF: 167

36. **Refer to Figure 8-6**. The reduction in consumer surplus caused by the tax would be
a. $100.
b. $80.
c. $70.
d. $60.

ANS: B DIF: Challenging REF: 167

37. **Refer to Figure 8-6**. The reduction in producer surplus caused by the tax would be
a. $100.
b. $80.
c. $70.
d. $60.

ANS: B DIF: Challenging REF: 167

38. **Refer to Figure 8-6**. The total surplus before the tax would equal
a. $350.
b. $300.
c. $250.
d. $200.

ANS: C DIF: Challenging REF: 167

39. **Refer to Figure 8-6**. The total surplus with the tax would equal
a. $240.
b. $230.
c. $220.
d. $210.

ANS: D DIF: Challenging REF: 167

40. **Refer to Figure 8-6**. The amount of deadweight loss in this market resulting from the levying of the tax is
a. $20.
b. $30.
c. $40.
d. $50.

ANS: C DIF: Challenging REF: 167

41. **Refer to Figure 8-6**. The benefits to the government (total tax revenue) would be
    a. $150.
    b. $120.
    c. $100.
    d. $80.

    ANS: B   DIF: Challenging   REF: 167

42. Assume that a tax is levied on a good and that the government uses the revenue to clean up lethal toxic waste that would cause irreparable harm to a large number of people. In this case which of the following would NOT occur?
    a. a decrease in consumer surplus to consumers of the taxed good
    b. a decrease in producer surplus to producers of the taxed good
    c. a probable increase in the total economic welfare of society
    d. a decrease in the total economic welfare of society

    ANS: D   DIF: Average   REF: 167

43. Assume that a tax is levied on a good and the government uses the funds to build statues of the Governors of each of the 50 states. In this case which of the following would NOT occur?
    a. a decrease in consumer surplus to consumers of the taxed good
    b. a decrease in producer surplus to producers of the taxed good
    c. a probable decrease in the welfare of society that exceeds the deadweight loss from the tax
    d. a deadweight loss larger than the loss in both consumer and producer surplus

    ANS: D   DIF: Challenging   REF: 167

44. The deadweight economic loss from taxes
    a. does not depend on tax rates.
    b. is higher when tax rates are higher than when tax rates are lower.
    c. is lower when tax rates are higher than when tax rates are lower.
    d. does not depend on the slope of the demand curve.

    ANS: B   DIF: Average   REF: 165

45. The greater the elasticities of demand and supply the
    a. smaller the deadweight loss from a tax.
    b. less intrusive a tax will be on a market.
    c. greater the deadweight loss from a tax.
    d. more equitable the distribution of a tax between buyers and sellers.

    ANS: C   DIF: Average   REF: 167

46. If the supply of a good is relatively elastic, changing the price causes
    a. a relatively small change in the amounts that buyers are willing to buy.
    b. a relatively small change in the amounts sellers are willing to sell.
    c. a relatively large change in the amounts sellers are willing to sell.
    d. no change in the amounts sellers are willing to sell.

    ANS: C   DIF: Challenging   REF: 167

47. Assume that the demand for diamonds is more elastic than the demand for gasoline. The tax levied on diamonds will cause the loss of consumer surplus to be
    a. zero.
    b. relatively large.
    c. relatively small.

d. either small or large (depending on the elasticity of supply).

ANS: B DIF: Average REF: 167

48. Assume that the demand for diamonds is more elastic than the demand for gasoline. A tax levied on gasoline will cause the loss of consumer surplus to be
a. zero (because raising the price of gasoline has no effect on the amount purchased).
b. relatively large.
c. relatively small.
d. either small or large--depending on the elasticity of supply.

ANS: C DIF: Average REF: 167

49. A tax placed on land would cause
a. a huge deadweight loss.
b. no deadweight loss.
c. landlords to not bear any of the burden of the tax.
d. enough tax revenue so that all other taxes could be eliminated.

ANS: B DIF: Average REF: 170

50. When the size of a tax is doubled, the deadweight loss from the tax
a. increases by the size of the tax.
b. doubles.
c. remains constant.
d. increases by a factor of four.

ANS: D DIF: Average REF: 163

51. The "underground" economy refers to
a. mining and excavation.
b. illegal activities (such as prostitution and illegal drugs).
c. barter and other activities conducted "under the table" to avoid being taxed.
d. All of the above are correct.
e. Both b and c are correct.

ANS: D DIF: Average REF: 172

52. Tax cuts and deregulation may cause output in an economy to increase because of all of the following EXCEPT
a. increasing the value of output by reducing deadweight tax burdens.
b. luring the underground economy to the surface.
c. increasing incentives to produce.
d. reducing competition.

ANS: D DIF: Average REF: 173

53. A tax of $10 per unit is imposed on a certain market. The tax reduces the equilibrium quantity in the market by 200 units. The deadweight loss from the tax is
a. $2000.
b. $1000.
c. $500.
d. There is not enough information to answer the question.

ANS: B DIF: Average REF: 173

54. Suppose that the equilibrium quantity in the market for widgets has been 200 per month. Then a tax of $5 per widget is imposed on widgets. The price paid by buyers increases by $2 and the after-tax price received by sellers falls by $3. The government is able to raise $750 per month in revenue from the tax. The deadweight loss from the tax is

a. $250.
b. $125.
c. $75.
d. $50.

ANS: B DIF: Challenging REF: 163

55. Suppose that policymakers are considering placing a tax on either of two markets. In Market A, the tax will have a significant effect on the price consumers pay, but it will not affect equilibrium quantity very much. In Market B, the same tax will have only a small effect on the price consumers pay, but it will have a large effect on the equilibrium quantity. In which market will the tax have a larger deadweight loss?

a. Market A
b. Market B
c. Deadweight loss will be the same in both markets.
d. There is not enough information to answer the question.

ANS: B DIF: Challenging REF: 163

56. Suppose that the equilibrium quantity in the market for widgets has been 200 per month. Then a tax of $5 per widget is imposed on widgets. As a result, the government is able to raise $750 per month in revenue. But at the same time, an underground market in widgets is created which did not previously exist. The government uses the funds raised in the legal widget market to completely suppress the underground widget market. The action has no effect on the legal market; the government still collects $750 per month in revenue. By itself, the government's crackdown on the underground market

a. increased the deadweight loss to society from the widget tax.
b. decreased the deadweight loss to society from the widget tax.
c. had no effect on the deadweight loss to society from the widget tax.
d. might have increased, decreased or had no effect on the deadweight loss to society from the widget tax.

ANS: A DIF: Challenging REF: 163

57. Which of the following would likely have the smallest deadweight loss?

a. a head tax (i.e., a tax everyone must pay regardless of what one does or buys)
b. an income tax
c. a tax on compact discs
d. a tax on caviar

ANS: A DIF: Challenging REF: 163

58. As more people become self-employed and so can determine how many hours they work per week, we would expect that the deadweight loss from the Social Security Tax would

a. increase and the revenue generated from it would rise.
b. decrease and the revenue generated from it would rise.
c. increase and the revenue generated from it would fall.
d. decrease and the revenue generated from it would fall.

ANS: C DIF: Challenging REF: 163