

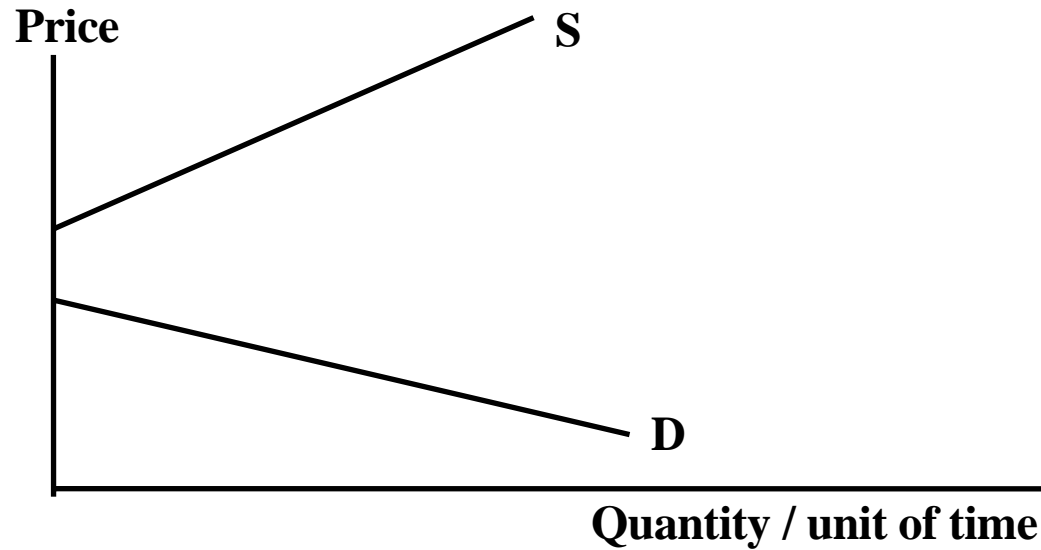
DEMAND AND SUPPLY ANALYSIS

- I. Lets combine the demand and supply schedules for tractors and determine what the market, or equilibrium price will be.

P	Qd/yr	Qs/yr	Excess Qd or Qs
-----	-----	-----	-----
\$10,000	500	100	400 EXd
\$20,000	450	150	300 EXd
\$30,000	400	200	200 EXd
\$40,000	350	250	100 EXd
\$50,000	300	300	
\$60,000	250	350	100 EXs
\$70,000	200	400	200 EXs
\$80,000	150	450	300 EXs
\$90,000	100	500	400 EXs

II. Graphic Representation of Selected Goods and Market Situations:

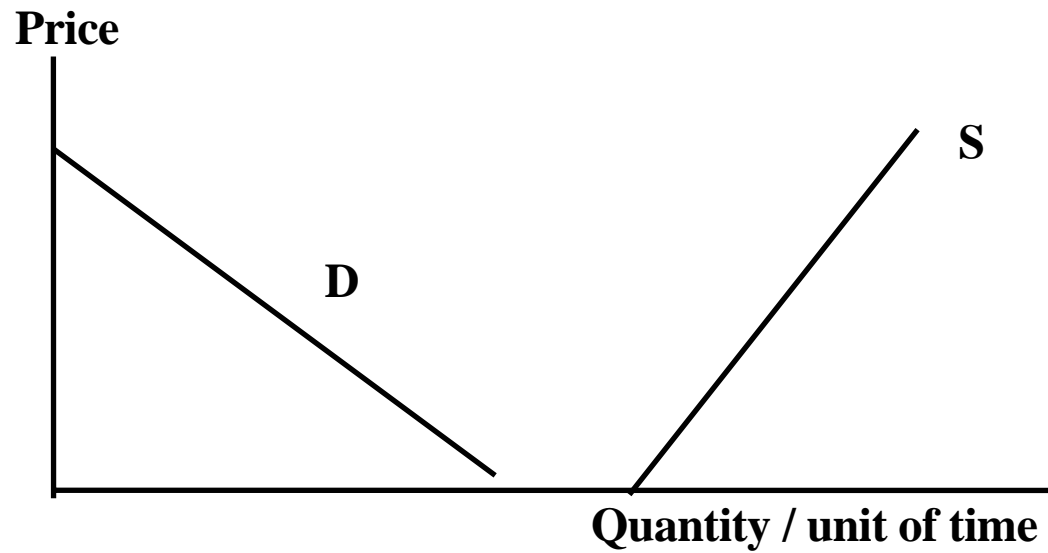
A)



Does a market exist for this good?

- **No. The good costs too much to produce.**

B)

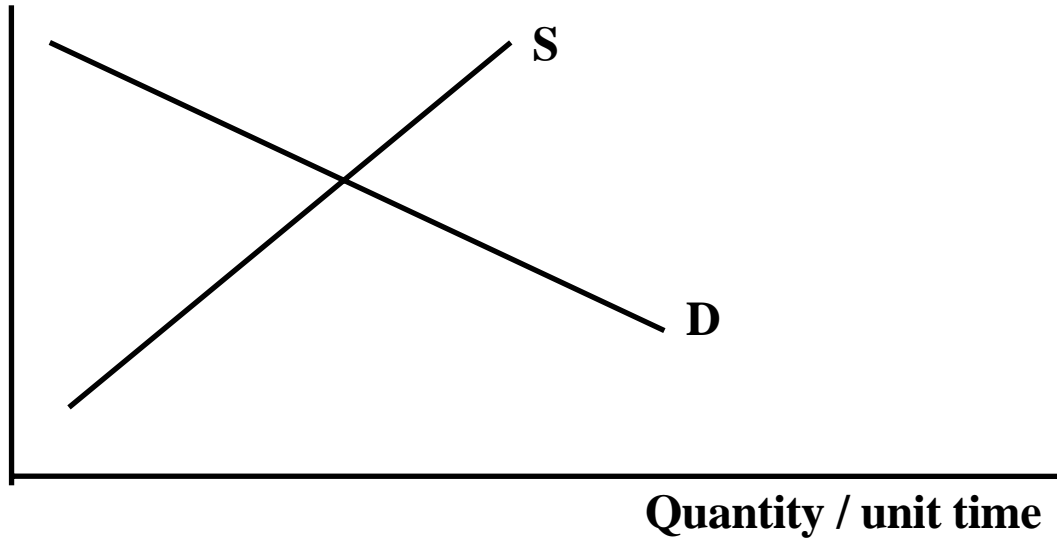


What does this graph represent?

- **A free good. The entire quantity demanded is available at a price of zero.**

C)

Price

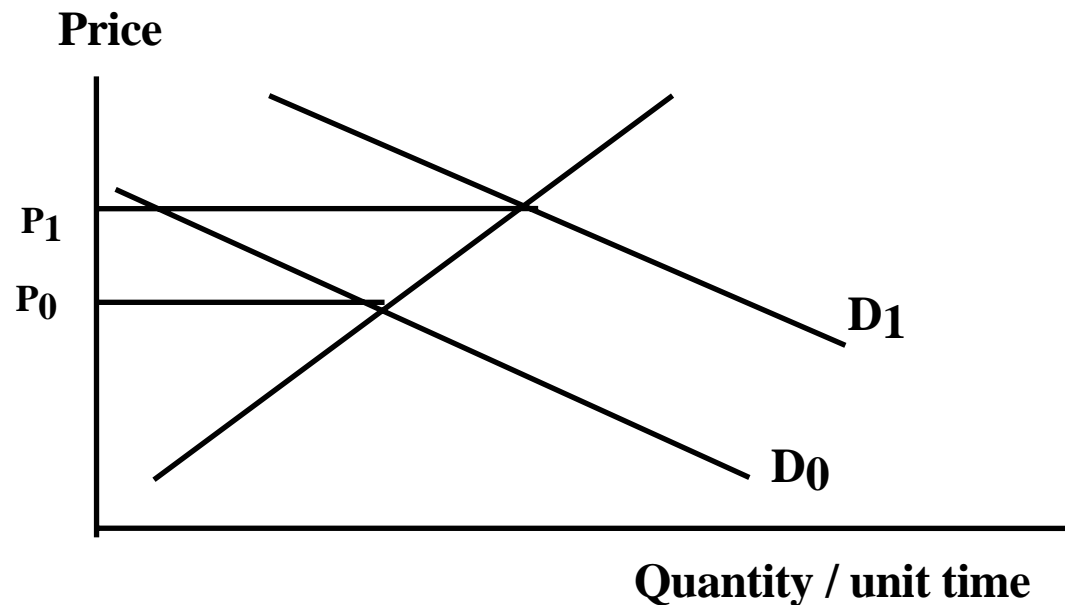


What does this graph represent?

- A scarce commodity.

III. How is price affected when demand curves shift?

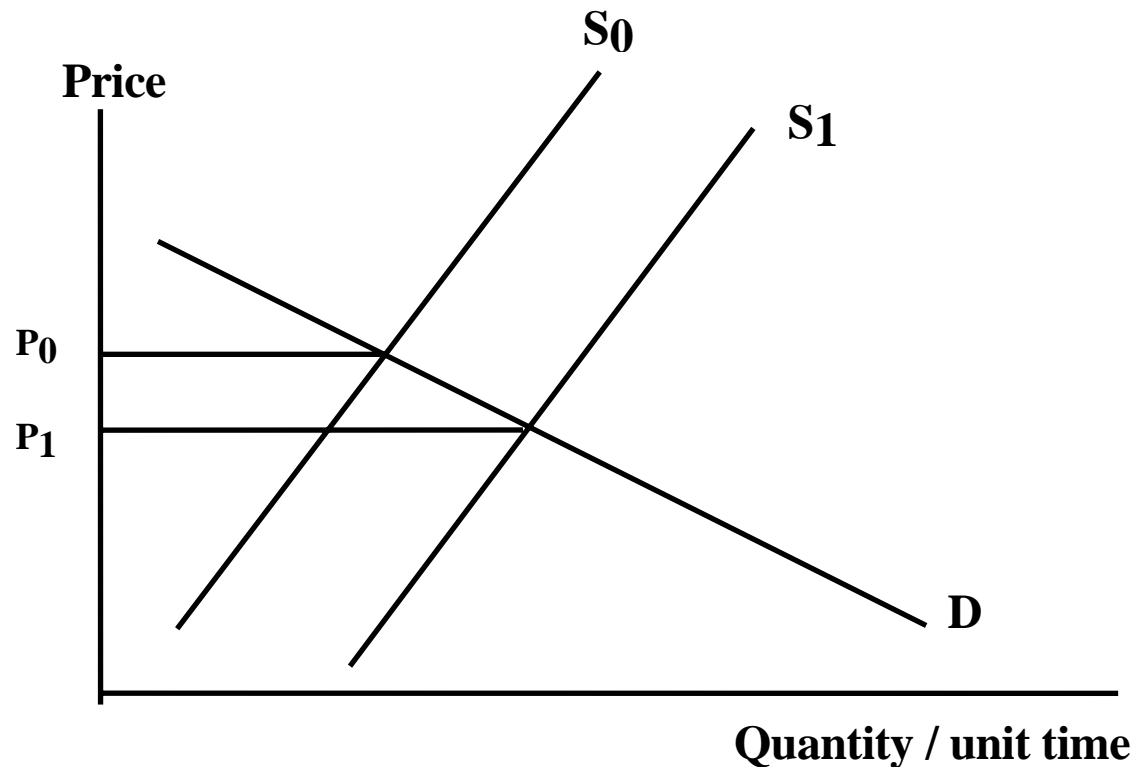
- An increase in demand while holding supply constant will cause a price increase.
- A decrease in demand while holding supply constant will cause a price decrease.



In this case, the increase in demand caused price to rise from P₀ to P₁.

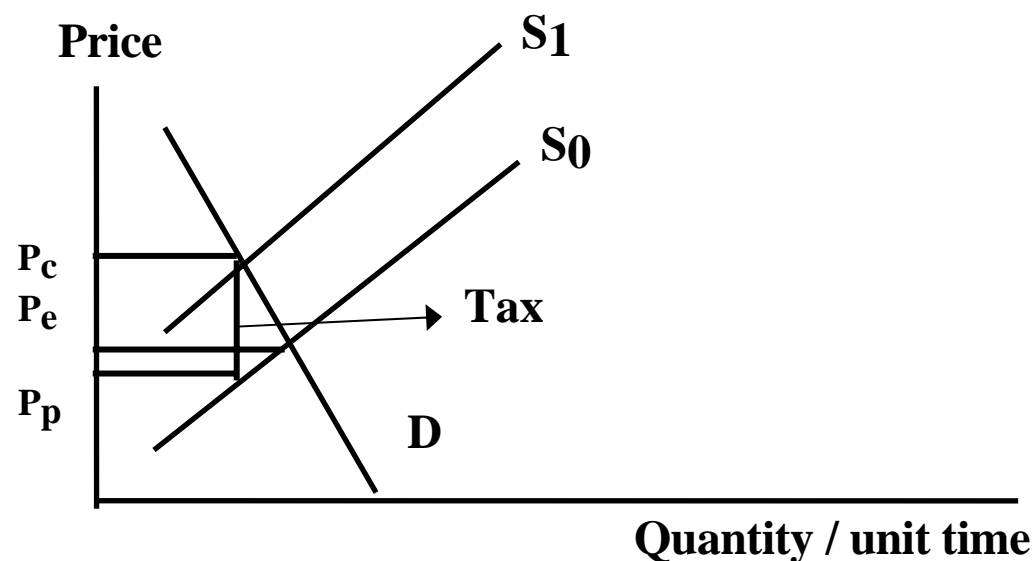
IV. How is price affected when supply curves shift ?

- An increase in supply while holding demand constant will cause a price decrease.
- A decrease in supply while holding demand constant will cause a price increase.



In this case, the increase in supply caused the price to fall from P₀ to P₁.

V. The affect of a chewing tobacco tax charged to producer:



Tax = \$.05 on every pack, charged to the producer

This serves to shift the supply curve up \$.05 to S1

P_p = price after the tax, price the producer receives

P_c = Price after the tax, price the consumer pays

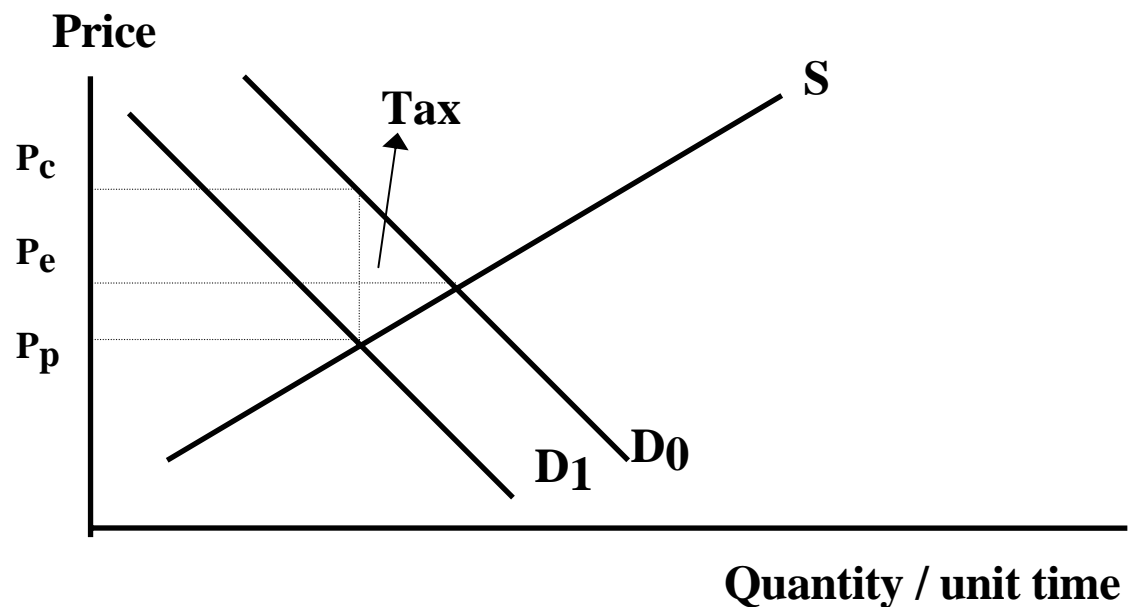
Q_t = quantity demanded after the tax

Notice that $P_c - P_e < \text{tax}$. Therefore, the tax is not completely passed to the consumer.

The producer bears some of the burden of the tax.

- A) If the demand curve was perfectly inelastic, the entire tax would be passed to the consumer.**
- B) If the demand curve was perfectly elastic, the entire tax would be paid by the producer.**

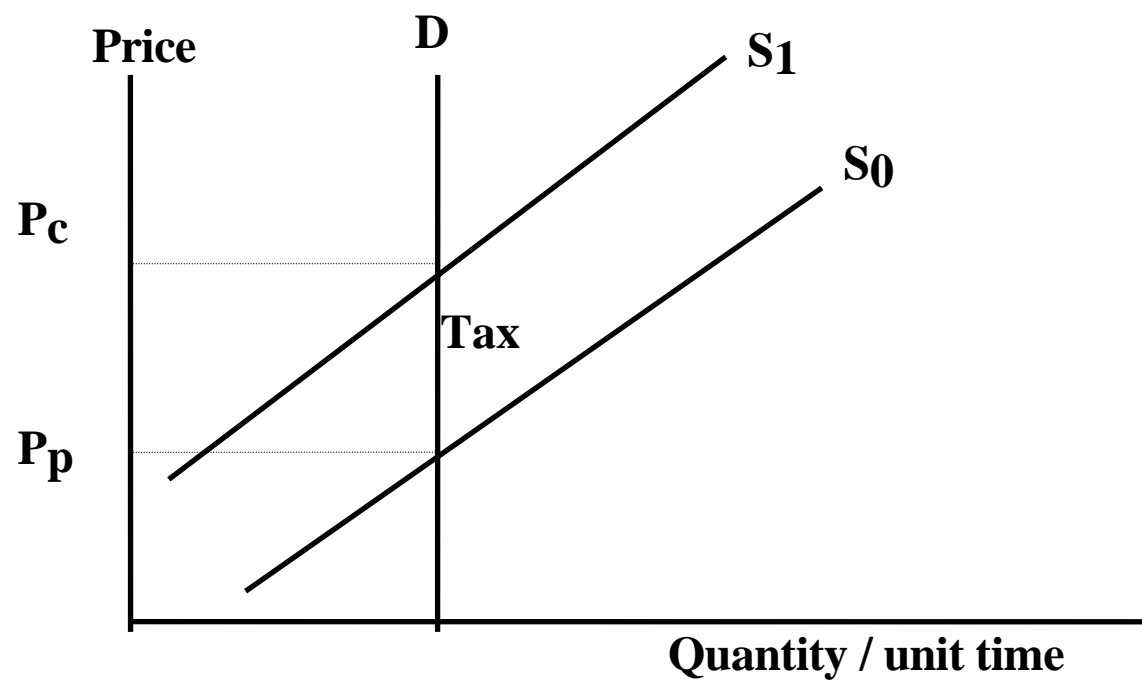
VI. What if a sales tax (paid by consumers) is placed on chewing tobacco ?



- 1) Demand curve shifts down by the amount of the tax because the tax reduces disposable income.**
- 2) Therefore it makes no difference on whether a tax is placed on the consumer or on the producer.**

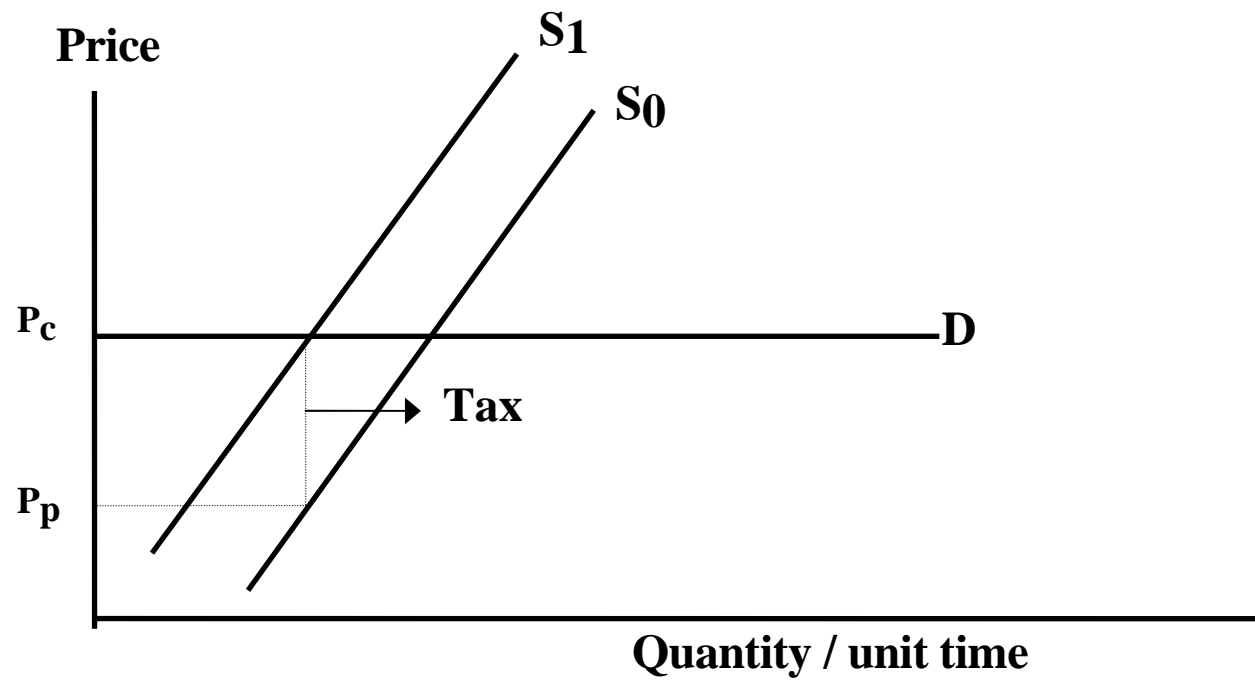
VII. Who bears the burden of an excise or sales tax ?

A) If demand is perfectly inelastic:



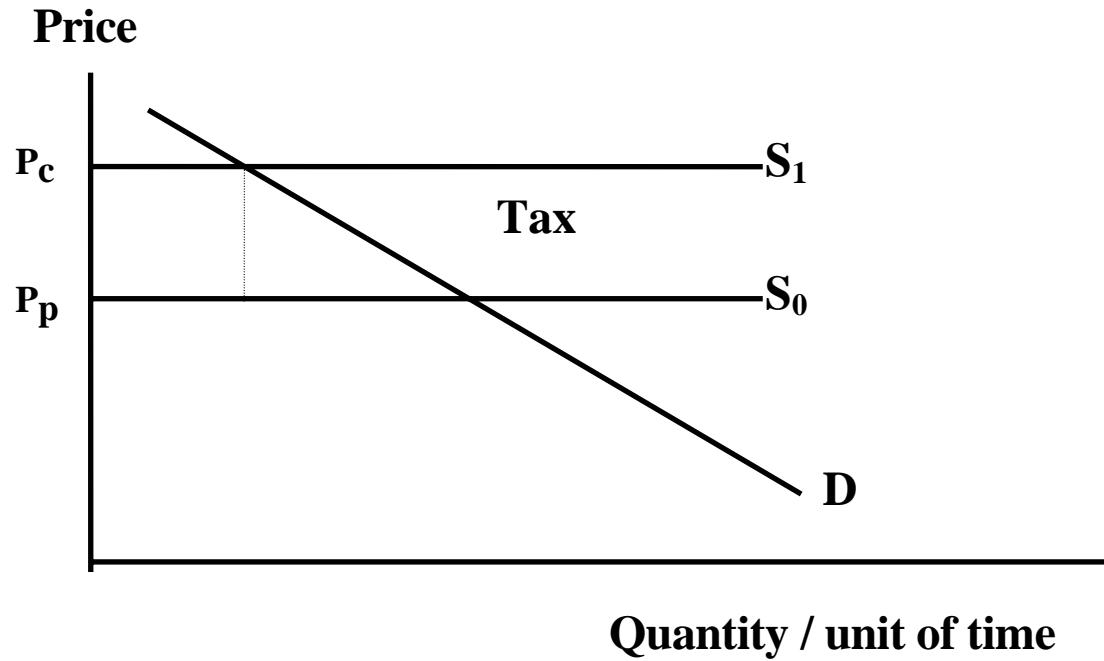
In this case, the consumer pays the entire tax.

B) If demand is perfectly elastic:



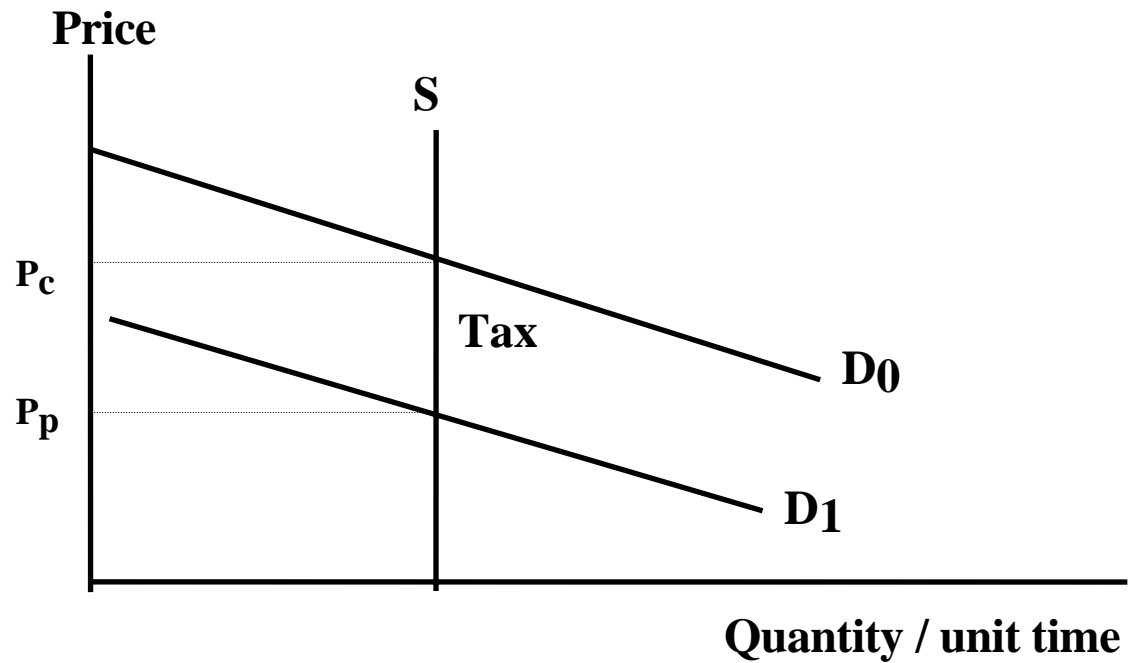
In this case, the producer pays the entire tax.

C) If the supply curve is perfectly elastic:



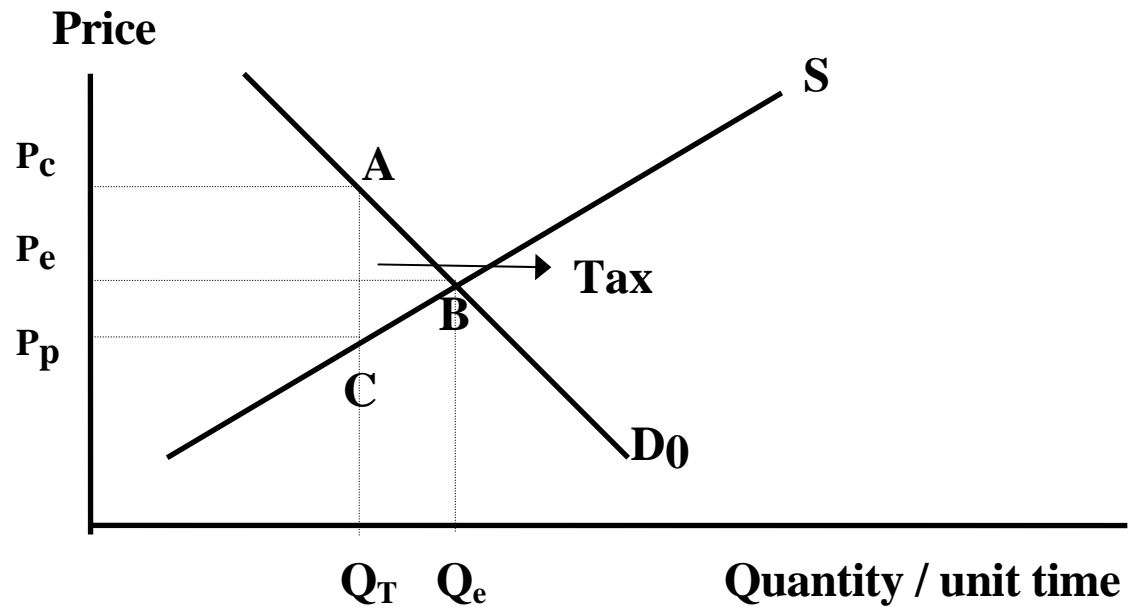
In this case, the consumer pays the entire tax.

D) If the supply curve is perfectly inelastic:



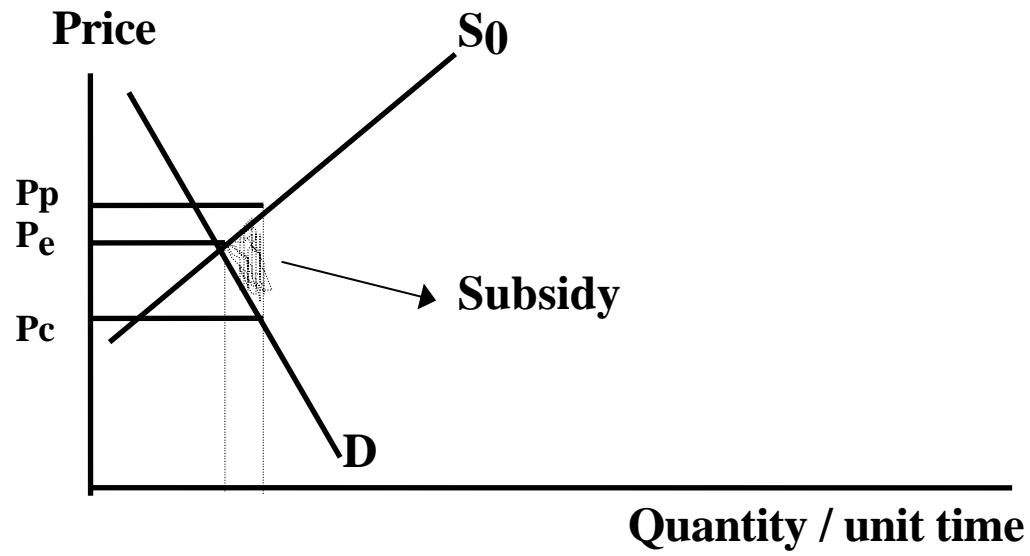
In this case, the producer pays the entire tax.

VIII. The easiest way to see the affect of an excise tax is to insert a wedge on the LEFT HAND side of equilibrium.



- A) Look at a \$.50 excise tax.**
- B) Area under the demand curve represents the value of the commodity to society.**
- C) Area under the supply curve represents the value of the resources or the cost to society.**
- D) What does the shaded triangle represent?**
- It is a lost to society, a welfare loss, or an efficiency loss.**
 - Why? We have saved resources by reducing production but the value of the output not produced is greater than the resources saved.**

IX. The effect of a subsidy:



- A) Wedge is inserted on the RIGHT HAND side of equilibrium.**

- B) The result is too much production.**

- C) Who actually pays the subsidy? Tax payers: consumers.**

- D) Again we have an efficiency loss equal to the shaded triangle. The value of the extra output is less than the value of the resources used to produce it.**