

Homework Using Supply and Demand

Economics 304

- 1). Explain the relationship between elasticity and slope of a linear demand curve. Be specific, use equations and graphs if possible.

In general the steeper slopes suggest more inelastic supply or demand. However, the elasticity also varies along a linear supply & demand curve



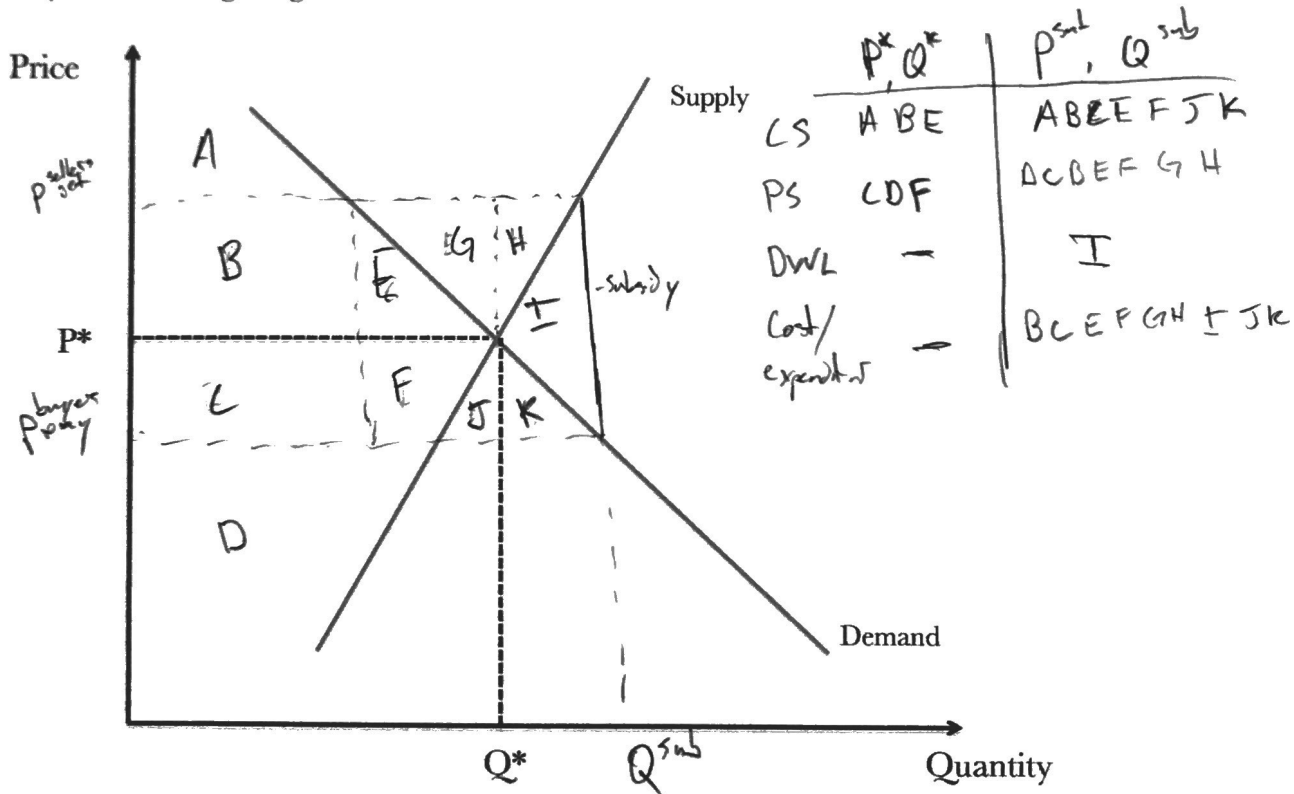
For Example

- 2) Explain the notion of tax incidence in the supply and demand model and how it relates to the concept of elasticity.

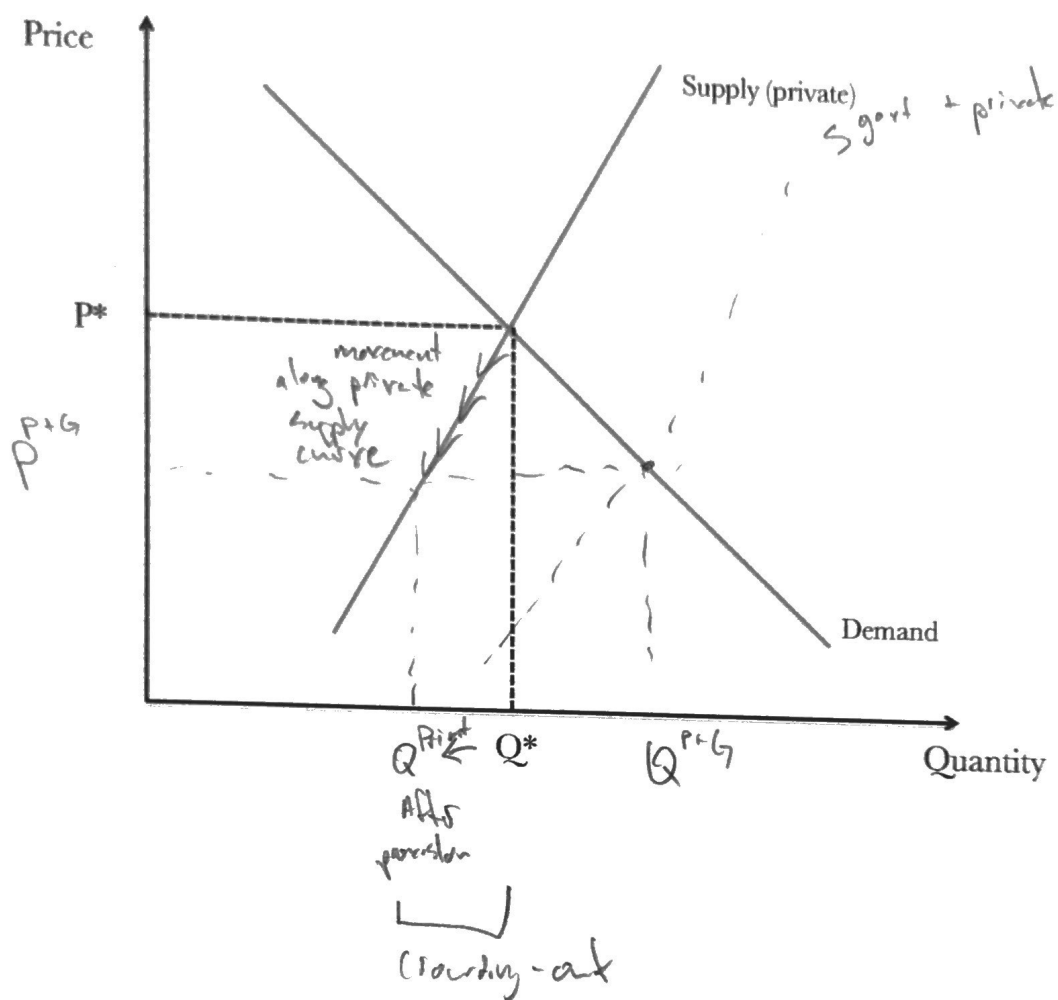
a Tax incidence is the idea of how the amount of a tax that is paid is split between buyers & sellers. In this respect, the more elastic side of the market "escapes" paying the tax, while the inelastic side, which isn't sensitive to the price increase pays more of the tax burden.

3. Public policy in the United States has often tried to encourage the production and use of certain products, e.g. solar panels, which produce electricity from the sun.

A) A popular policy is to provide a subsidy for solar panels. On the graph below show a subsidy wedge, the quantity and the price consumers pay and producers receive. On the same graph show the welfare implications compared to the competitive equilibrium. Be clear in how you are labeling things.



B) Another policy is the government provision of a good. Show on the graph provided how government provision of solar panels will effect the price, quantity and private producers. Be specific.

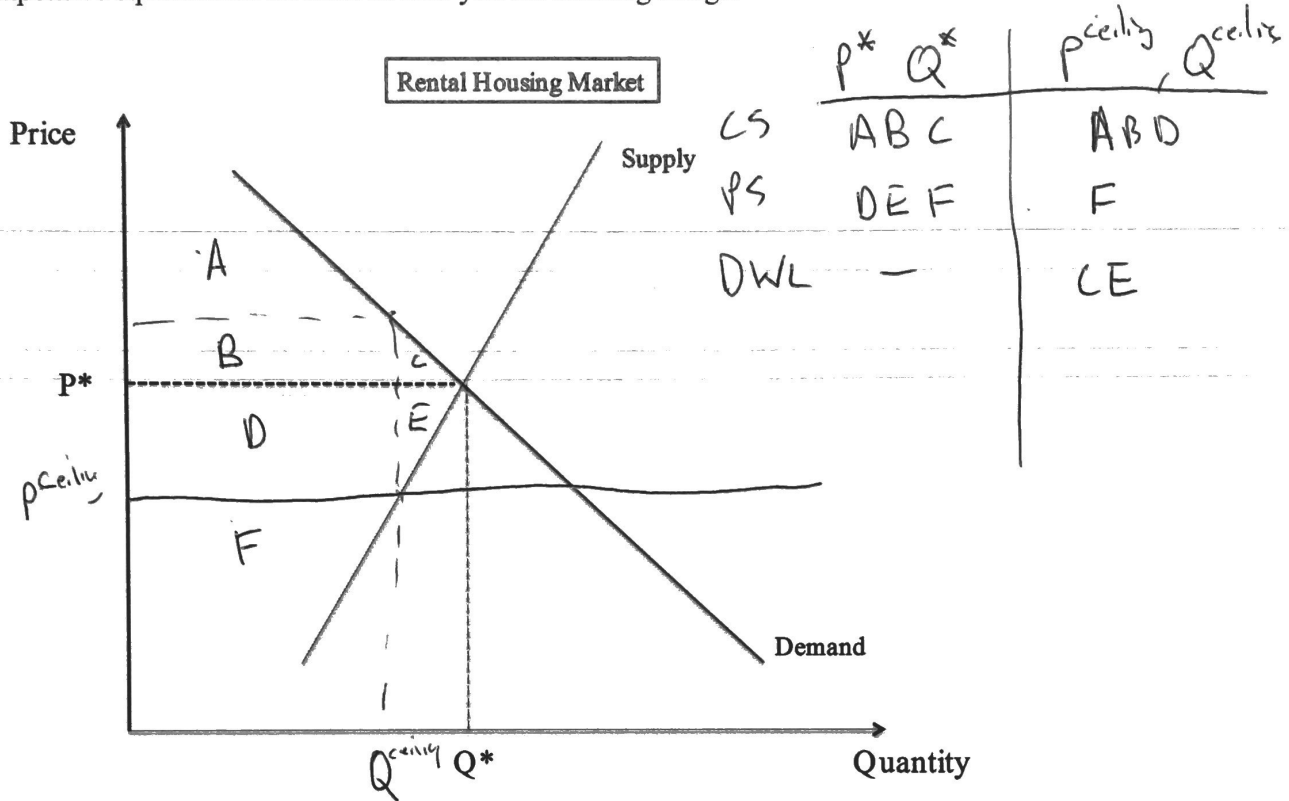


C) Describe the economic concept of crowding out and where it shows up in this model / graph.

Crowding-out is $Q^* \rightarrow Q^{\text{private}}$
 reduction in quantity produced by the private sector as a result of the govt producing/ entering the market and bidding the price down from P^* to P^{P+G}

4. This question examines the market for housing in the United States.

Rent control in the form of a price ceiling is a popular affordable housing policy in the U.S. On the graph below depict a binding price ceiling and the welfare changes compared to the competitive equilibrium. Be clear in how you are labeling things.



C) Describe the concept of deadweight loss and where it comes from in this scenario.

Deadweight loss is area CE, its the reduction in total economic surplus from a policy, like a price control. It also show that there is not a "free lunch" in the govt. transferring some economic surplus from producers to consumers (area D), which results in the loss of economic surplus in CE.

5. The City of Norfolk is looking for new revenue sources. It is considering imposing a tax on two goods: movie tickets and wine. The price elasticity of demand for the goods are -0.47 for movie tickets and -1.89 for wine.

A) (15 pts) Which good should it tax if the goal is to raise revenue? If the government wants to tax only one good, which good should it tax if the goal is to discourage consumption? Explain your answer. It would be helpful to use graphs in your explanation.

B) (15 pts) Describe the idea of the incidence of a tax. For each good (movie tickets and wine) who faces the higher tax incidence, consumers or producers? Why?

A) Raising revenue you should tax the inelastic goods (movie tickets)

tax the elastic good to discourage consumption

