

Recitation #9 [10/29/2021]

1. Consider a competitive market in which the government will be imposing an ad valorem tax of τ . Aggregate demand curve is $x(p) = Ap^\epsilon$, where $A > 0$ and $\epsilon < 0$, and aggregate supply curve $q(p) = \alpha p^\gamma$, where $\alpha > 0$ and $\gamma > 0$. Denote $\kappa = (1 + \tau)$. Assume that a partial equilibrium analysis is valid.
 - (a) Evaluate how the equilibrium price is affected by a marginal increase in the tax, i.e., a marginal increase in κ .
 - (b) Describe the incidence of the tax when $\gamma = 0$.
 - (c) What is the tax incidence when, instead, $\epsilon = 0$?
 - (d) What happens when each of these elasticities approaches ∞ in absolute value?
 - (e) Redo your analysis in part (a) the relative change in price due to ad valorem tax τ . How would you compare your results to the effects of a unit tax t in example 6.3?