ECNS 432
Ch. 3

Housekeeping

- Quiz #1 next Tuesday
  - Based on all the material we have covered this week
  - Check out HW problems #1 & #2 from Chapter 3 for practice

Ch. 3: Micro Foundations of CBA

- Micro theory provides the basic technical foundations for CBA

- For simplicity, we assume perfect competition for awhile (at least through this chapter)

- **<u>Demand side</u>**:
  - **<u>Q.</u>** On the demand-side, what is our measure of welfare?
  - **<u>Ans.</u>** Consumer surplus…one of the basic concepts in CBA
  - Under most circumstances, changes in CS can be used as a reasonable measure of the benefits to consumers of a policy change.
  - **<u>Q.</u>** From a social perspective, what is CS? (i.e. define it)…graphically?
  - **<u>Ans.</u>** CS = Total benefits (area under demand curve) – Total expenditures

  [show TBs formally and show graphically the increase in CS from a price drop due to some policy]

Micro Foundations of CBA

- **<u>Taxes</u>** are important in CBA b/c governments have to finance their projects…taxation is a source of financing

<p style="color:red; text-align:center;">[work through tax problem</p>

<p style="color:red; text-align:center;">-tax revenue as a transfer</p>

<p style="color:red; text-align:center;">-what is the cost of the tax?</p>

<p style="color:red; text-align:center;">-leakage</p>

<p style="color:red; text-align:center;">-leakage and elasticity of demand]</p>

Micro Foundations of CBA

- **<u>Supply side</u>**

  [lets consider a market supply curve]

- **<u>Social Surplus</u>**
  - In CBA, we often care about the market as a whole
  - In the absence of impacts on government, the sum of CS and PS is called social surplus (SS) (aka Total Surplus)

    [insert graph showing mkt. equilibrium]
  - **<u>Q.</u>** When is it possible for government to enhance social surplus?
  - **<u>Ans.</u>** Only in presence of mkt. failure

Micro Foundations of CBA

- *Allocative efficiency can only be obtained when the price paid by consumers for a good equals the marginal social cost of producing the good
  - This important result can be used to formulate efficient pricing policies

- Government Surplus and Allocative Efficiency
  - We can also think of social surplus (SS) as including government surplus
    - $\Delta SS = \Delta CS + \Delta PS + \Delta GS$
    - Ex. Often, government incurs majority of the costs of a project and enjoys none of the benefits. For example, building of rent-free housing

[insert target pricing example with welfare analysis]

Micro Foundations of CBA

- Economists refer to the DWL that results from a tax as <u>excess tax burden</u>

  - The ΔDWL resulting from raising an additional dollar of tax revenue is called the marginal excess tax burden (METB)

    [wrap up ch.3 by working problems #1 and #2]