Econ Dept, UMR

Presents

The Supply Side of the Market in Three Parts:

I. An Introduction to Supply and Producer Surplus
II. The Production Function
III. Cost Functions

Starring

- Supply
  - Production
  - Cost
- Producer Surplus

Featuring

- The Law of Diminishing Marginal Product
- The MP/P Rule
- Economic Cost vs. Accounting Cost
- Economic Profit vs. Accounting Profit
- The Unimportance of Sunk Cost

Part I: Introduction to Supply and Producer Surplus

What is Supply?

- It is the relationship between quantity supplied and price, c. p., within a specific period.
- Or, it is the relationship between necessary compensation and willingness to offer something of value

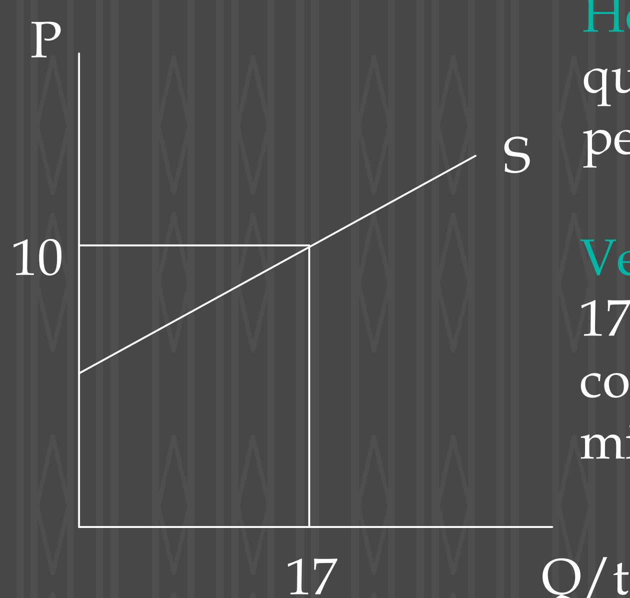
Individual vs. Market Supply

- Market supply is the horizontal sum of individual supplies
- As with demand, it is market supply that commands our interest

And we will use the supply of a firm as an example of the general supply concept

- Supply is a schedule that relates prices for a firm’s product and the quantity that the firm will offer for sale at each of those prices in a specific time.

Two Ways to View Supply



Horizontally: At $10 the quantity supplied is 17 units per period

Vertically: The supply of the 17th unit requires a minimum compensation of $10, that is min WTA = $10

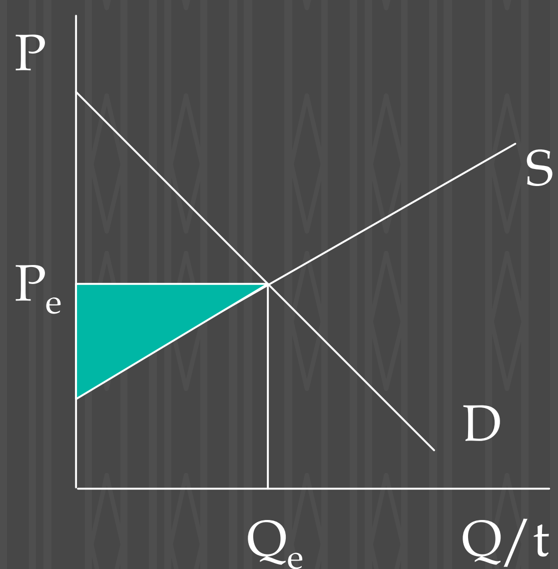
And Remember

- Supply is the offer of something of value; anything, your time, friendship, charity at the minimum compensation necessary
- We use firms and their supply of products as illustrative of supply concept, but not meaning these concepts are limited to firms and their supply
- Another important application of supply is labor: the minimum compensation necessary to induce work

We use Supply to estimate Producer Welfare

- Producer Surplus is an economic measure of welfare of sellers, producers, suppliers
- Producer Surplus is the difference between the reward received and the minimum compensation necessary to induce the effort or resource to its current use

Producer Surplus in a Market

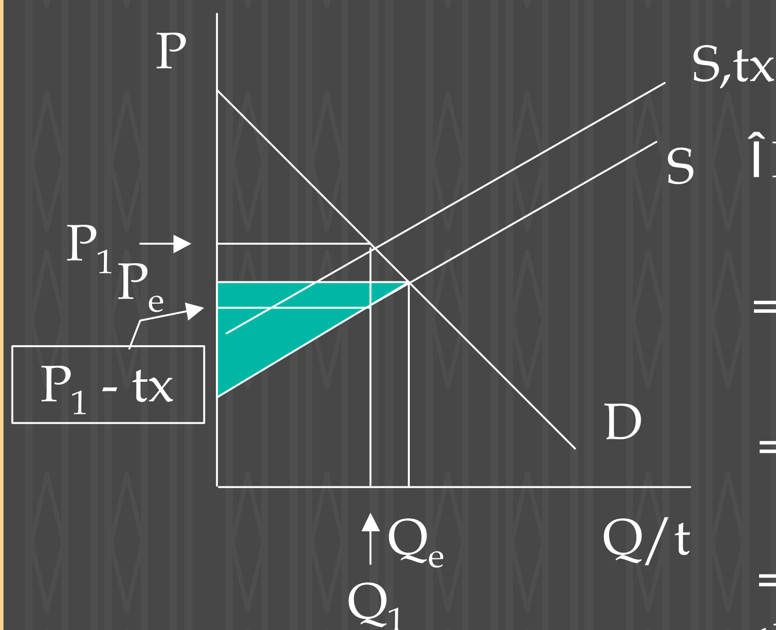


At P_e, Q_e, the producer surplus is the shaded area. The difference between total revenue P*Q and the minimum willingness to accept to induce a supply of Q_e which is the area under the supply curve from the origin to Q_e

Change in Producer Surplus

- Price controls, taxes, technological changes, demand or supply shifts lead to welfare changes
- To estimate the change in producer welfare we estimate producer surplus with and without the change

Change in Producer Surplus due to an increase in taxes



Î PS = $PS_{w/o\ tx}$ - $PS_{w\ tx}$

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= TR - area under the supply curve

The End

You are ready for Part II

on the Production Function