Supply, Profit and Rent

Market equilibrium – the price and quantity at which quantity demanded equals quantity supplied

Consumer surplus – the difference between maximum willingness to pay and price

Producer surplus – the difference between price and minimum needed to induce sellers to provide the good or service

Economic rent – the difference between price and opportunity cost

Economic profit – the portion of producer surplus that will be eroded away by entry

The economically desirable (efficient or optimal) value of a good or service is the price at which a market equilibrium generates zero economic profit.
Supply, Demand and Market Equilibrium

The pursuit of self interest drives markets toward a particular P–Q combination.

Excess supply $\rightarrow$ price falls

Excess demand $\rightarrow$ price rises
The market for Birds of America

Economic Rent – payments in excess of opportunity cost
The Demand for Shonibare Installations

![Graph showing the demand for Shonibare Installations with a line labeled D. The x-axis represents the number of Shonibare Installations, and the y-axis represents the price in P ($000). The graph shows a downward sloping line indicating a negative relationship between the number of installations and the price.](image-url)
The Supply of Shonibare Installations
Shonibare Market Equilibrium

Graph showing the market equilibrium with a demand curve (D) and a supply curve (S). The axes are labeled as P ($000) on the y-axis and Shonibare Installations on the x-axis.
The Market for Farm Stand Strawberries

**Economic Profit** = \((P - AC) \times Q\)

Since all costs are sunk, opportunity cost is zero so

**Economic Rent** = \(AC \times Q\)

**Producer surplus** = **Economic Profit** + **Economic Rent**
The Market for Farm Stand Strawberries -- end of day

Lost Economic Profit = (AC - P)xQ
($1.40 - .9)x10

Since all costs are sunk, opportunity cost is zero so

Economic Rent = ACxQ
($1.40x10)
Supply with Production

Production is the creation of goods or services that meet people’s needs through the combination of

Labor services
Capital goods services
Intermediate goods
Natural resources

In the short-run, each producer’s supply slopes up because of the “law” of diminishing returns to those inputs one can vary.

Market supply is the horizontal sum of each producer’s supply.
A short-run market equilibrium arises where demand and supply meet.

That will be a long-run equilibrium so long each producer is just breaking even.
Suppose demand shifts out?

Now producers are earning profits
Entry shifts out supply until economic profits are zero.

So, long-run supply should be horizontal.
But, we know that long-run supply curves slope up! Why do they?

Quality differences
Increasing natural resource depletion costs

\[ PS = \text{Economic Rent} \]