

# Welfare Economics

- *Welfare economics* is the study of how the allocation of resources affects economic well-being.
- Buyers and sellers receive benefits from taking part in the market.
- The equilibrium in a market maximizes the total welfare of buyers and sellers.

# What Does Consumer Surplus Measure?

- *Consumer surplus*, the amount that buyers are willing to pay for a good minus the amount they actually pay for it, measures the benefit that buyers receive from participating in the market.

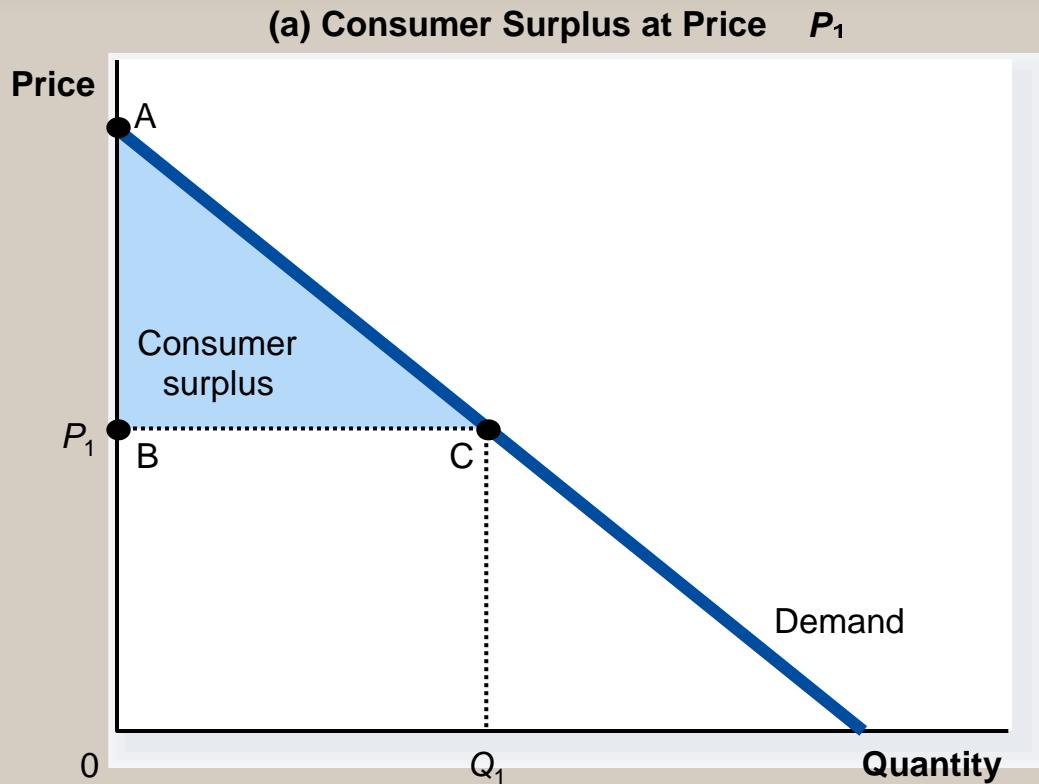
# CONSUMER SURPLUS

- *Willingness to pay* is the maximum amount that a buyer will pay for a good.
- It measures how much the buyer values the good or service.
- *Consumer surplus* is the buyer's willingness to pay for a good minus the amount the buyer actually pays for it.

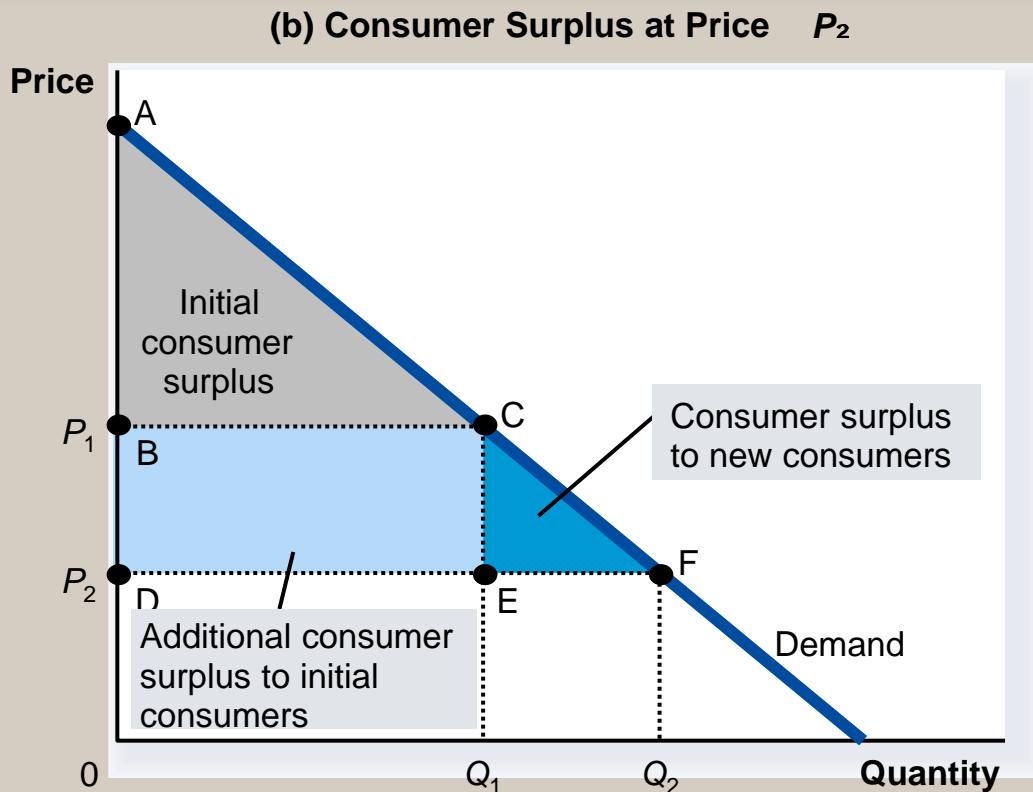
# Using the Demand Curve to Measure Consumer Surplus

- The market demand curve depicts the various quantities that buyers would be willing and able to purchase at different prices.
- The area below the demand curve and above the price measures the consumer surplus in the market.

### Figure 3 How the Price Affects Consumer Surplus



### Figure 3 How the Price Affects Consumer Surplus



# What Does Consumer Surplus Measure?

- *Producer surplus*, the amount that sellers receive from selling a good minus the amount that it cost to produce it, measures the benefit that sellers receive from participating in the market.

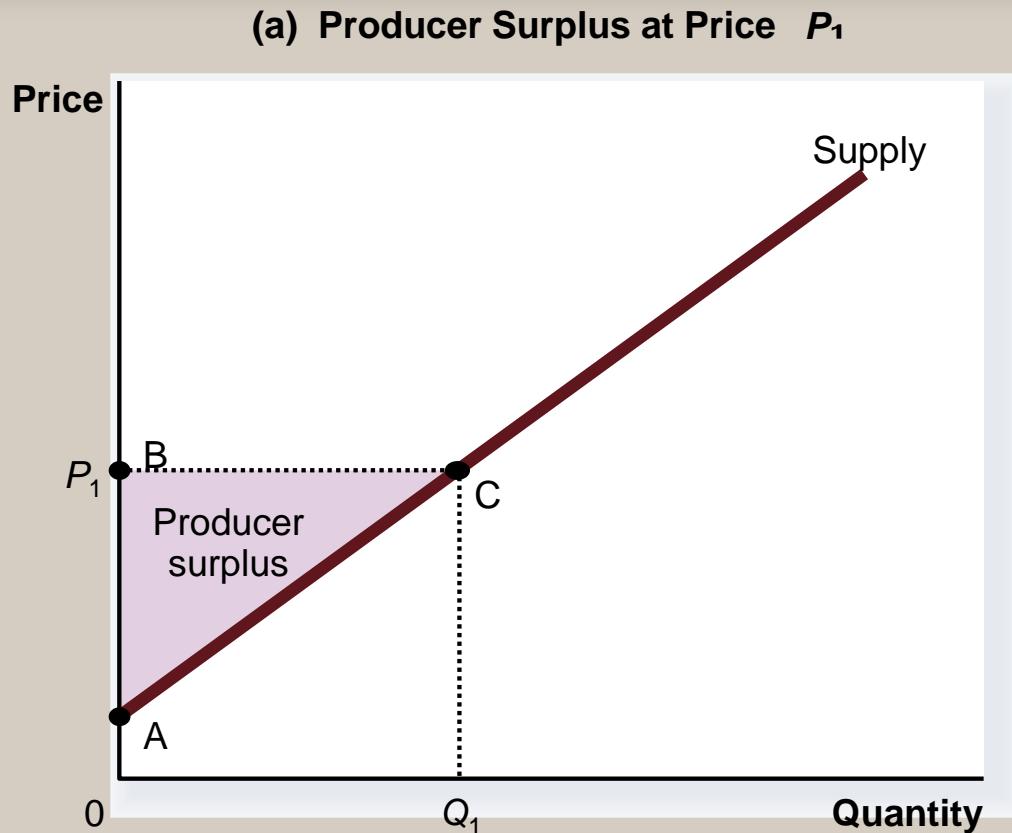
# PRODUCER SURPLUS

- *Willingness to sell* is the minimum amount that a seller will sell a good for.
- It measures the cost to the seller of producing the good or service.
- *Producer surplus* is the price the seller receives for a good minus the amount it cost to produce it.

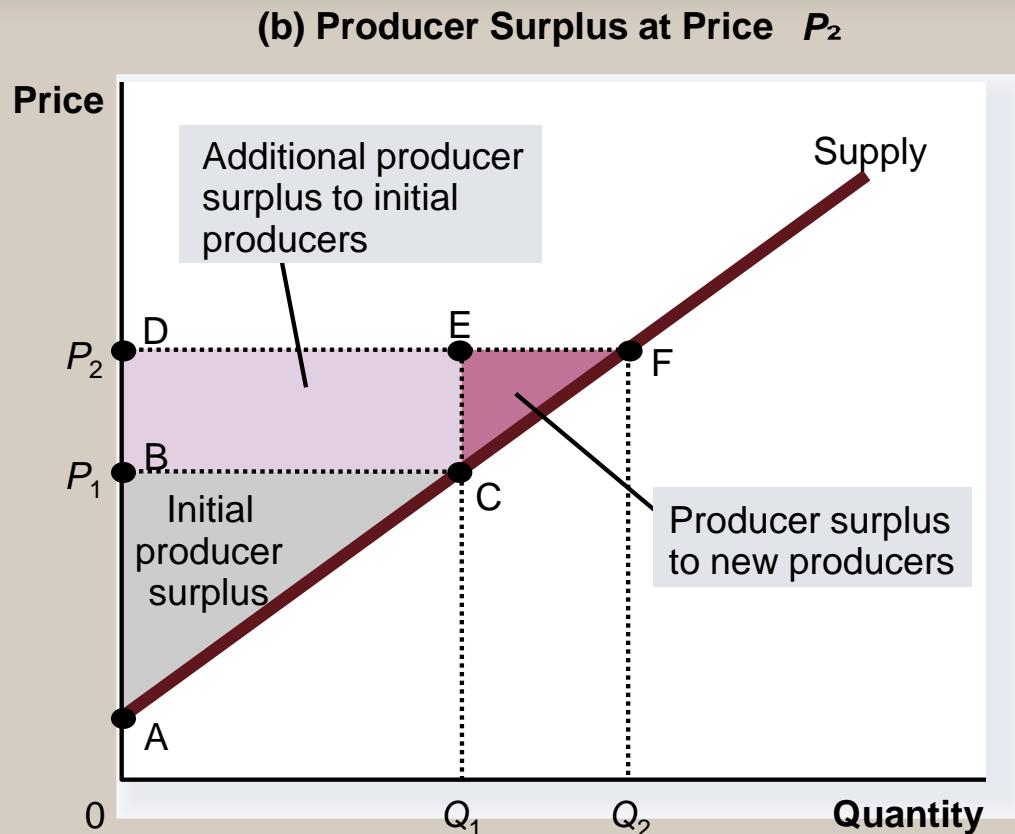
# Using the Supply Curve to Measure Producer Surplus

- The market supply curve depicts the various quantities that sellers would be willing and able to sell at different prices.
- The area below the price and above the supply curve measures the producer surplus in a market.

## Figure 6 How the Price Affects Producer Surplus



## Figure 6 How the Price Affects Producer Surplus



# MARKET EFFICIENCY

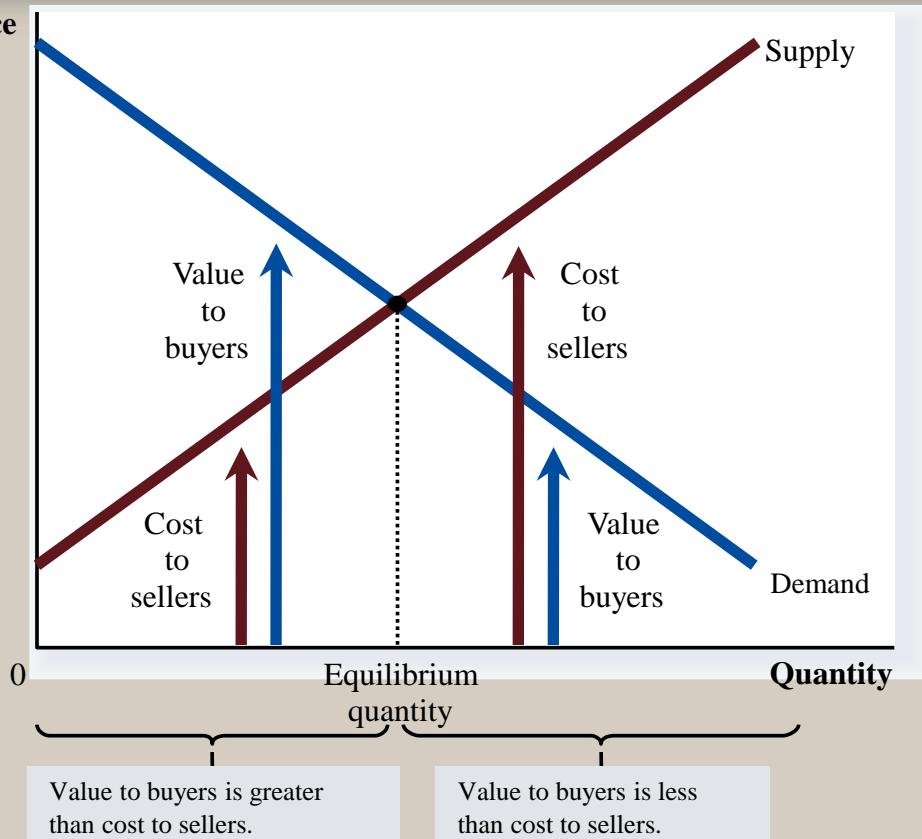
- Three Insights Concerning The Competitive Market Equilibrium Outcome
  - Goods consumed by buyers who value them most highly measured by WTP (D).
  - Goods produced by sellers with lowest opportunity cost of production measured by WTS (S).
  - Sum of CS & PS, total well-being is maximized.

# The Efficiency of the Equilibrium Quantity

- Buyers



- Sellers

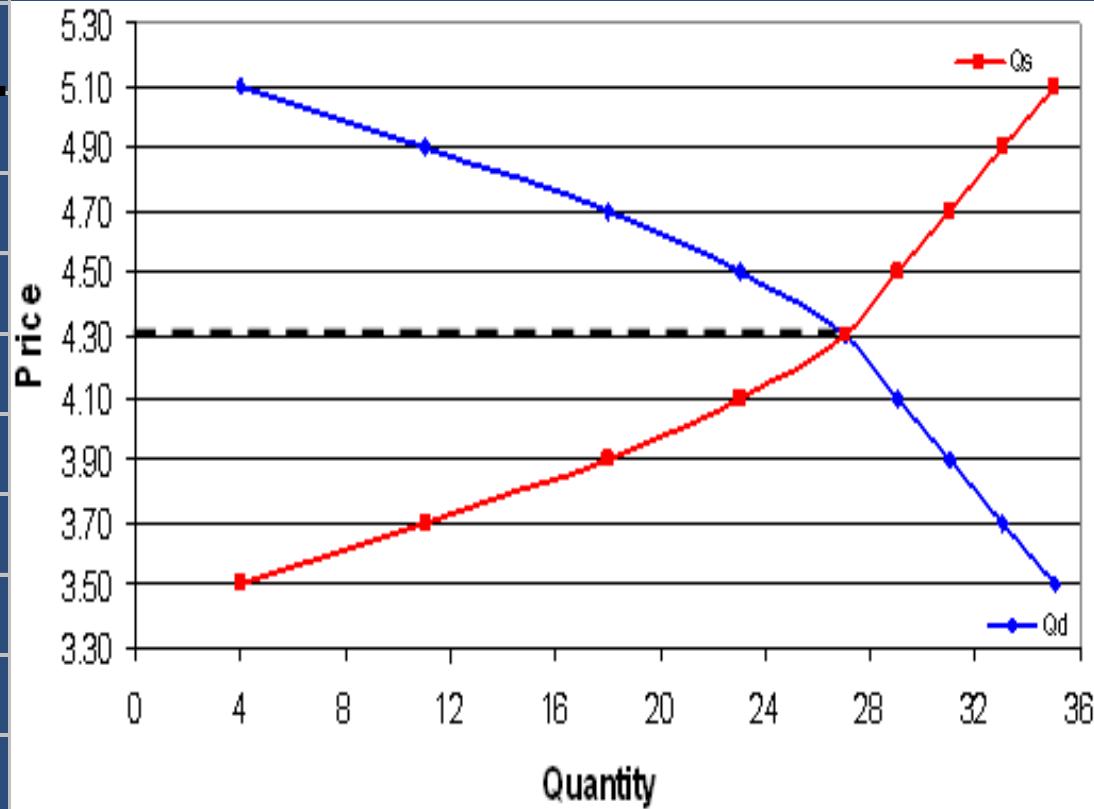


- Buyers
- Sellers



# In the Chips

P	Qd	Qs
3.50	35	4
3.70	33	11
3.90	31	18
4.10	29	23
4.30	27	27
4.50	23	29
4.70	18	31
4.90	11	33
5.10	4	35



- Buyers



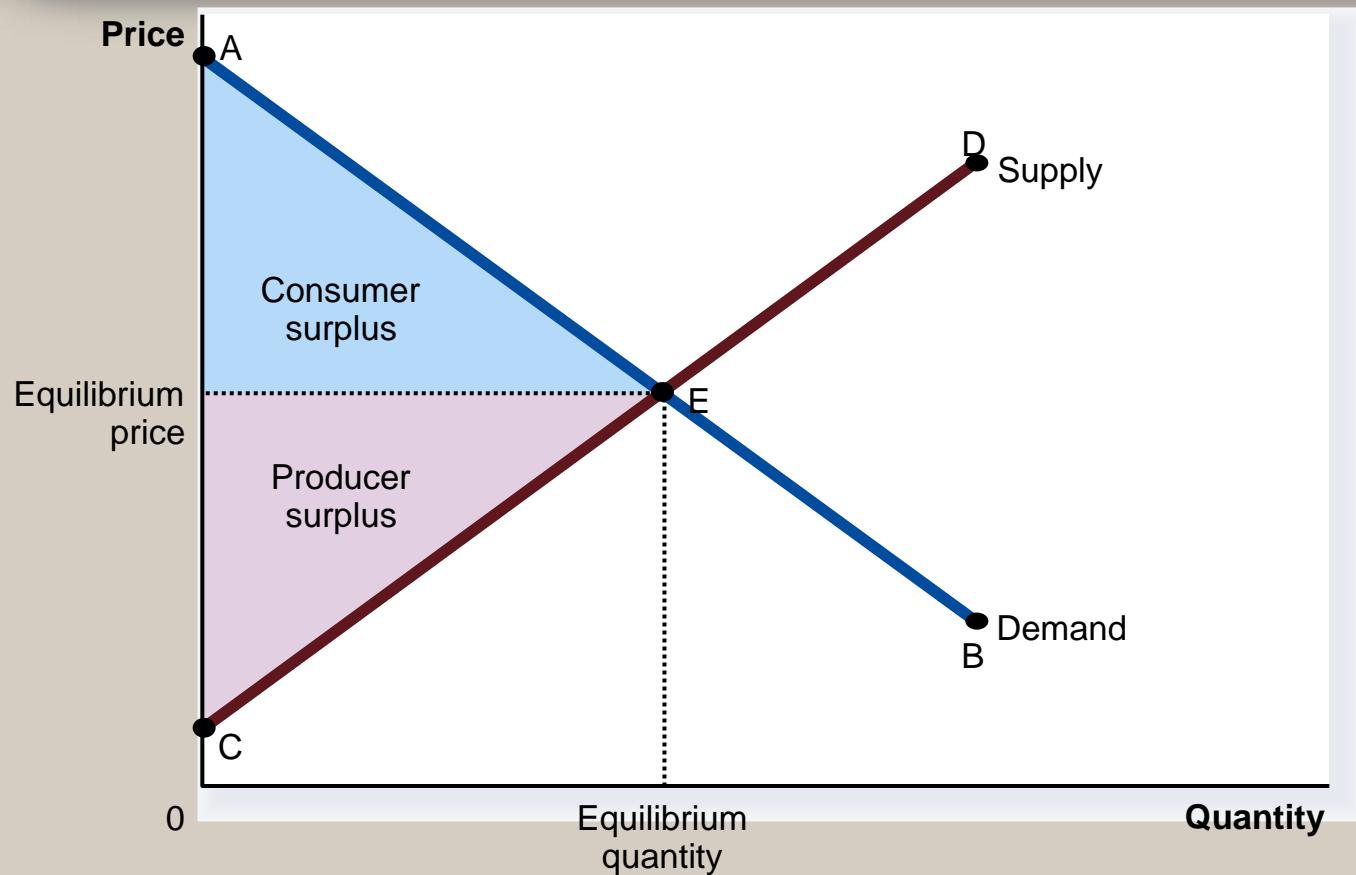
- Sellers



# Market Forces & Equilibrium

- Price floats to where  $Q_s = Q_d$  and the market clears.
- This price facilitates all transactions that can improve the well-being of market participants.
- Goods purchased by those with highest value.
- Goods produced by those with lowest opportunity cost.
- The well-being of society is maximized.

## Figure 7 Consumer and Producer Surplus in the Market Equilibrium



# Summary

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- Consumer surplus is the buyers' willingness to pay for a good minus the amount they actually pay for it.
- Consumer surplus measures the benefit buyers get from participating in a market (in \$).
- Consumer surplus can be computed by finding the area below the demand curve and above the price.

# Summary

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- Producer surplus is the amount sellers receive from selling a good minus their opportunity cost of production.
- Producer surplus measures the benefit sellers get from participating in a market (in \$).
- Producer surplus can be computed by finding the area below the price and above the supply curve.

# Summary

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- An allocation of resources that maximizes the sum of consumer surplus and producer surplus is efficient.
- The competitive market equilibrium outcome maximizes the sum of consumer surplus and producer surplus and thus maximizes the well-being of market participants.
- All transactions that could possibly improve the well-being of market participants have taken place.