# The Price Mechanism and Resource Allocation

**AS Economics Presentation 2005** 

## Markets

- A market is the place where buyers and sellers meet to exchange a product. Markets require:
  - Consumers i.e. buyers
  - Producers or firms i.e. sellers
  - Goods or services to trade (a recognizable output)
- Examples of markets include:
  - Housing market: home owners and potential buyers
  - Labour market: employers and workers
  - Stock market: share owners and potential buyers
  - Foreign exchange market: trading currencies

## Sub Markets – Market Segmentation

- The market for most goods can be segmented broken down into sub markets
- The market for houses
  - (i) sub markets for terraced, semi-detached and detached homes
  - (ii) the market for rented properties and owner occupied housing
- The market for cars is made up of sub markets for family saloon cars, hatchbacks and high performance sports cars
- The travel industry is heavily segmented

## Functions of the Price Mechanism

- The price mechanism is the means by which decisions of consumers and businesses interact to determine the allocation of resources between different goods and services
- (1) The signaling function
  - If prices are rising because of stronger demand from consumers, this is a signal to suppliers to expand output to meet the higher demand
  - When demand is strong, higher market prices act as an incentive to raise output (production) because the supplier stands to make a higher profit
- (2) The rationing function
  - Prices serve to ration scarce resources when demand in a market outstrips supply
  - When there is a shortage of a product in the market, the price will rise and thus deter some consumers from purchasing the product

## Adam Smith and the 'Invisible Hand'

- The 18th Century economist Adam Smith one of the founding fathers of modern economics, described how the invisible or hidden hand of the market operated in a competitive market through the pursuit of self-interest to allocate resources in society's best interest
- This remains the central view of all free-market economists, i.e. those who believe in the virtues of a free-market economy with minimal government intervention

## Auctions as a means of allocating scarce resources

- Auctions as a means of allocating resources and determining market prices have gained enormously in popularity in recent years
- "Economists certainly love auctions, because they enable buyers and sellers to come together with full knowledge of supply and demand. Barriers to entry are minimal; an item simply goes to the buyer willing to pay the most for it.
- Raising the number of bidders, in theory, should result in higher demand and higher prices for a good. Increasing the supply of goods at auction lowers their price. Rationing goods at auction is silly, since it leaves money on the table" (The Economist)

## Recent examples of auctions

- Auctioning in November 2000 of licenses for third generation mobile phone services / radio spectrums in the UK and across Europe
- E-Commerce auctioning (e.g. E-bay and QXL)
- Traditional auctioneers markets for example those trading in fine art, livestock, David Beckham's soccer boots, Enron ensignia and the auctioning off of Napsters assets
- Auctions for internationally traded commodities including coffee and tobacco
- Auctions for marketable pollution permits
- Bidding for the rights to televise sporting events such as the FA Cup and the Olympic Games broadcasting rights

## Types of Auctions

#### (a) Sellers Auction:

 Where items are sold to the highest bidder – in a sellers auction there are normally many buyers and one seller

#### (b) Procurement Auction:

 Where an item is purchased from the lowest bidder, typically in a procurement auction there are many sellers (e.g. companies bidding for a tender for a project) and only one buyer

### Different auction rules

- (1) High-bid auction:
- Where the buyers submit sealed bids and the winner is the high bidder.
- (2) Second-price (or Vickrey) auction:
- This has the same rules as the high-bid, except that the winner pay only the second-highest bid to achieve incentive compatibility
- (3) English open-cry auction:
- In this auction the buyers call out bids publicly. The winner is the last buyer to bid, and he pays his winning bid.
- (4) Dutch auction:
- A Dutch auction occurs when a list of sequentially lower prices are offered by the seller, until a potential buyer accepts one of these prices and then pays that price for the product

#### Potential Problems with Auctions

- The time spent by buyers bidding at auction
- Imperfect and asymmetric information
- Insufficient buyers if the number of buyer (bidders) is small, the auction process may not work optimally (when there are only a few bidders
- The possibility of implicit or explicit collusion among bidders
- Bidders may start to build into their bidding behaviour an expectation of the valuations placed on the product by other bidders (seen or unseen)
  can give rise to the winners' curse where it is sometimes the most optimistic, and least well informed, bidder who wins at auction
- Auctions can lead to bid-sniping particularly if an auction house runs a close-off period for bids. E-Bay is the classic example of this
- Auctions focus solely on price