Nobel Prize in Economic Sciences

drishtiias.com/printpdf/nobel-prize-in-economic-sciences-1

Why in News

The **Royal Swedish Academy of Sciences** awarded **Sveriges Riksbank Prize in Economic Sciences, 2020 to Paul Milgrom and Robert Wilson** (both from the USA) for their work on **commercial auctions.**

Key Points

- **About:**
  - Sveriges Riksbank Prize in Economic Sciences, 2020 is given in memory of Alfred Nobel and is popularly (but incorrectly) known as **Nobel Prize for Economics.**
    - As it is not one of the five Nobel prizes that Alfred Nobel established in his will in 1895, it is not a Nobel Prize.
  - It was **created in 1968** by **a donation from Sweden's central bank Sveriges Riksbank to the Nobel Foundation** to commemorate the bank's 300^{th} anniversary and includes a 10 million Swedish kronor award money — roughly Rs 8.33 crore.
    - It is officially titled the **"Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel".**

- **The 2020 Edition:**
  - Milgrom and Wilson **improved the auction theory and invented new auction formats** for auctioning off many interrelated objects simultaneously, on behalf of a seller motivated by **broad societal benefit rather than maximal revenue.**
  - Their work will **benefit sellers, buyers and taxpayers around the world.** It will help in auctioning **goods and services,** such as radio frequencies, which are **difficult to sell in traditional ways.**
  - Wilson developed the **theory for auctions of objects with a common value —** a value which is uncertain beforehand but, in the end, is the same for everyone. **Examples** include the future value of radio frequencies or the volume of minerals in a particular area.
  - Wilson's work showed why rational bidders tend to bid under their own estimate of the worth due to worries over the **"winner's curse".**

    The **winner's curse** is a tendency for the winning bid in an auction to exceed the intrinsic value or true worth of an item.
  - Milgrom came up with a more general theory of auctions, by analysing **bidding strategies in different auction forms.**

- **Auction Theory**
    - Auction theory studies **how auctions are designed, what rules govern them, how bidders behave and what outcomes are achieved.**
    - The oldest form of auction is the auction of a bankrupt person's property to pay off his creditors. This simple design of such an auction is the highest open bidder getting the property (or the commodity in question).
    - Over time, the format of auctions has **widened** to include other commodities **such as spectrum for radio or telecom use,** carbon dioxide emission credits, electricity or the right to collect the local garbage etc.
    - Different auction models are needed for **depending upon the commodities, purpose of the auction and the entities conducting the auction.**

        For e.g. Maximizing the profit may be the motive of a private auction while making a service affordable can be the purpose of auctioning a service by the government. Wrong auction design can lead to a second-hand market where companies trade among themselves with little revenue accruing to the government or little benefit to the public.
    - How an auction is designed, has a **tremendous impact not just on the buyers and the sellers but also on the broader society.**
    - **Three key variables** need to be understood while designing an auction.
        - **Rules of Auction** i.e. closed/sealed bids, single bids versus multiple bids.
        - **Commodity or service being put up for auction** i.e. how does each bidder value an item.
        - **Uncertainty** regarding which bidder has what information about the object, or even the value another bidder associates with the object.

Source: TH