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Auction

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(Redirected from [Auctions](#))

"Auctioneer" redirects here. For the DC Comics supervillain, see [Auctioneer \(comics\)](#).

An auction is a **process of buying and selling** goods or services by offering them up for bid, taking bids, and then selling the item to the winning bidder. In **economic theory**, an auction may refer to any mechanism or set of trading rules for exchange.

There are several variations on the basic auction form, including time limits, minimum or maximum limits on bid prices, and special rules for determining the winning bidder(s) and sale price(s). Participants in an auction may or may not know the identities or actions of other participants. Depending on the auction, bidders may participate in person or remotely through a variety of means, including telephone and the internet. The seller usually pays a commission to the auctioneer or auction company based on a percentage of the final sale price.



An auctioneer and her assistants scan the crowd for bidders.

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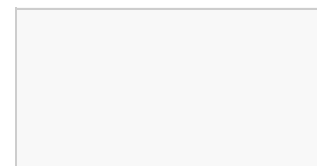
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History of the auction

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The word "auction" is derived from the Latin *augēre*, which means "to increase" or "augment".^[4]

For most of history, auctions have been a relatively uncommon way to negotiate the exchange of goods and commodities. In practice, both



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- Lietuvių
- Magyar
- Nederlands
- 日本語
- Norsk (bokmål)
- Polski
- Português
- Русский
- Simple English
- Slovenčina
- Српски / Srpski
- Suomi
- Svenska
- Tiếng Việt
- Українська
- Walon
- 中

haggling and sale by set-price have been significantly more common.^[5] Indeed, prior to the seventeenth century the few auctions that were held were sporadic and infrequent.^[6]

Nonetheless, auctions have a long history, having been recorded as early as 500 B.C.^[7] According to Herodotus, in **Babylon** auctions of women for **marriage** were held annually. The auctions began with the woman the auctioneer considered to be the most beautiful and progressed to the least. It was considered illegal to allow a daughter to be sold outside of the auction method.^[6]

During the **Roman Empire**, following military victory, Roman soldiers would often drive a spear into the ground around which the spoils of war were left, to be auctioned off. Later slaves, often captured as the "spoils of war", were auctioned in the forum under the sign of the spear, with the proceeds of sale going towards the war effort.^[6]

The Romans also used auctions to **liquidate** the assets of debtors whose property had been confiscated.^[8] For example, **Marcus Aurelius** sold household furniture to pay off debts, the sales lasting for months.^[9] One of the most significant historical auctions occurred in the year 193 A.D. when the entire Roman Empire was put on the auction block by the **Praetorian Guard**. On **March 23** The Praetorian Guard first killed emperor **Pertinax**, then offered the empire to the highest bidder. **Didius Julianus** outbid everyone else for the price of 6,250 drachmas per Guard^[citation needed], an act that initiated a brief civil war. Didius was then **beheaded** two months later when **Septimius Severus** conquered Rome.^[10]

From the end of the Roman Empire to the eighteenth century auctions lost favor in Europe,^[11] while they had never been widespread in Asia.^[6]

In some parts of England during the seventeenth and eighteenth centuries **auction by candle** was used for the sale of goods and leaseholds. This auction began by lighting a candle after which bids were offered in ascending order until the candle spluttered out. The high bid at the time the candle extinguished itself won the auction.^[12]

The oldest **auction house** in world is **Stockholm Auction House** (*Stockholms Auktionsverk*). It was established in Sweden in 1674.^{[13][14]}

During the end of the 18th century, soon after the **French Revolution**, auctions came to be held in **taverns** and **coffeehouses** to sell art. Such auctions were held daily, and catalogs were printed to announce available items. Such **Auction catalogs** are frequently printed and distributed before auctions of rare or collectible items. In some cases these catalogs were elaborate works of art themselves, containing considerable detail about the items being auctioned.^[citation needed]

Sotheby's, now the world's second-largest auction house,^[13] held its first auction in 1744. **Christie's**, now the world's largest auction house,^[13] was established around 1766. Other early auction houses that are still in operation include **Dorotheum** (1707), **Bonhams** (1793), **Phillips de Pury & Company** (1796), **Freeman's** (1805) and **Lyon & Turnbull** (1826).^[15]

During the **American civil war** goods seized by armies were sold at auction by the **Colonel** of the division.^[9]



Artemis, Ancient Greek marble sculpture. In 2007, a **Roman-era bronze sculpture** of "**Artemis and the Stag**" was sold at **Sotheby's** in New York for US\$28.6 million, by far exceeding its estimates and setting the new record as the most expensive sculpture as well as work from antiquity ever sold at auction.^{[1][2]}



An 18th century Chinese *meiping* porcelain vase. **Porcelain** has long been a staple at **art sales**. In 2005, a 14th century Chinese porcelain piece was sold by the **Christie's** for £15.68 million, or \$30.6 million. It set a world auction record for any ceramic work of art.^[3]

Thus, some of today's auctioneers in the U.S. carry the unofficial title of "colonel".

The development of the internet, however, has lead to a significant rise in the use of auctions as auctioneers can solicit bids [via the internet](#) from a wide range of buyers in a much wider range of commodities than was previously practical.^[5]

Types of auction

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Primary types of auction

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- **English auction**, also known as an *open ascending price auction*. This type of auction is arguably the most common form of auction in use today.^[4] Participants bid openly against one another, with each subsequent bid higher than the previous bid.^[16] An auctioneer may announce prices, bidders may call out their bids themselves (or have a proxy call out a bid on their behalf), or bids may be submitted electronically with the highest current bid publicly displayed.^[16] In some cases a maximum bid might be left with the auctioneer, who may bid on behalf of the bidder according to the bidder's instructions.^[16] The auction ends when no participant is willing to bid further, at which point the highest bidder pays their bid.^[16] Alternatively, if the seller has set a minimum sale price in advance (the 'reserve' price) and the final bid does not reach that price the item remains unsold.^[16] Sometimes the auctioneer sets a minimum amount by which the next bid must exceed the current highest bid.^[16] The most significant distinguishing factor of this auction type is that the current highest bid is always available to potential bidders.^[16] The English auction is commonly used for selling goods, most prominently antiques and artwork,^[16] but also secondhand goods and [real estate](#). At least two bidders are required.
- **Dutch auction** also known as an *open descending price auction*.^[4] In the traditional Dutch auction the auctioneer begins with a high asking price which is lowered until some participant is willing to accept the auctioneer's price.^[16] The winning participant pays the last announced price.^[4] The Dutch auction is named for its best known example, the Dutch [tulip](#) auctions. ("Dutch auction" is also sometimes used to describe online auctions where several identical goods are sold simultaneously to an equal number of high bidders.^[17]) In addition to cut flower sales in the [Netherlands](#), Dutch auctions have also been used for perishable commodities such as fish and tobacco.^[16] In practice, however, the Dutch auction is not widely used.^[4]
- **Sealed first-price auction**, also known as a *first-price sealed-bid auction* (FPSB). In this type of auction all bidders simultaneously submit sealed bids so that no bidder knows the bid of any other participant. The highest bidder pays the price they submitted.^{[4][16]} This type of auction is distinct from the English auction, in that bidders can only submit one bid each. Furthermore, as bidders cannot see the bids of other participants they cannot adjust their own bids accordingly.^[16] Sealed first-price auctions are commonly used in tendering, particularly for government contracts and auctions for mining leases.^[16]
- **Vickrey auction**, also known as a *sealed-bid second-price auction*.^[18] This is identical to the sealed first-price auction except that the winning bidder pays the second highest bid rather than their



own.^[19] This is very similar to the proxy bidding system used by eBay, where the winner pays the second highest bid plus a bidding increment (e.g., 10%).^[20] Although extremely important in auction theory, in practice Vickrey auctions are rarely used.^[16]

Secondary types of auction

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- **All-pay auction** is an auction in which all bidders must pay their bids regardless of whether they win. The highest bidder wins the item. All-pay auctions are primarily of academic interest, and may be used to model lobbying/bribery (bids are political contributions) or competitions such as a running race.^[21]
- Buyout auction is an auction with a set price (the 'buyout' price) that any bidder can accept at any time during the auction, thereby immediately ending the auction and winning the item.^[22] If no bidder chooses to utilize the buyout option before the end of bidding the highest bidder wins and pays their bid.^[22] Buyout options can be either *temporary* or *permanent*.^[22] In a temporary buyout auction the option to buy out the auction is no longer available after the first bid is placed.^[22] In a permanent buyout auction the buyout option remains available throughout the entire auction until the close of bidding.^[22] The buyout price can either remain the same throughout the entire auction, or vary throughout according to preset rules or simply at the whim of the seller.^[22]
- **Combinatorial auction** is any auction for the simultaneous sale of more than one item where bidders can place bids on an "all-or-nothing" basis on "packages" rather than just individual items. That is, a bidder can specify that he or she will pay for items A and B, but only if he or she gets *both*.^[23] In combinatorial auctions determining the winning bidder can be a complex process where even the bidder with the highest individual bid is not guaranteed to win.^[23] For example, in an auction with four items (W, X, Y and Z), if Bidder A offers \$50 for items W & Y, Bidder B offers \$30 for items W & X, Bidder C offers \$5 for items X & Z and Bidder D offers \$30 for items Y & Z, the winners will be Bidders B & D while Bidder A misses out because the *combined* bids of Bidders B & D is higher (\$60) than for Bidders A and C (\$55).
- Lloyd's syndicate auction. See [\[1\]](#) ↗.
- No-reserve auction (NR), also known as an *absolute auction*, is an auction in which the item for sale will be sold regardless of price.^{[24][25]} From the seller's perspective, advertising an auction as having no reserve price can be desirable because it potentially attracts a greater number of bidders due to the possibility of a bargain.^[24] If more bidders attend the auction a higher price might ultimately be achieved because of heightened competition from bidders.^[25] This contrasts with a *reserve auction*, where the item for sale may not be sold if the final bid is not high enough to satisfy the seller. In practice, an auction advertised as "absolute" or "no-reserve" may nonetheless still not sell to the highest bidder on the day, for example, if the seller withdraws the item from the auction or extends the auction period indefinitely,^[26] although these practices may be restricted by law in some jurisdictions or under the terms of sale available from the auctioneer.
- Reserve auction is an auction where the item for sale may not be sold if the final bid is not high enough to satisfy the seller - that is, the seller *reserves* the right to accept or reject the highest bid.^[25] In these cases a set 'reserve' price known to the auctioneer, but not necessarily to the bidders, may have been set in advance below which the item may not be sold.^[24] A reserve auction is safer for the seller than a no-reserve auction as they are not required to accept a low bid, but this could potentially result in a lower final price than might otherwise be the case if this means that less interest is generated in the sale.^[25]
- **Reverse auction** is a type of auction in which the role of the buyer and seller are reversed, with the primary objective to drive purchase prices downward.^[27] In an ordinary auction (also known as **forward auction**), buyers compete to obtain a good or service.^[27] In a reverse auction, sellers compete to provide a good or service by offering progressively lower quotes until no supplier is willing to make ^[27]

a lower bid.

- Silent auction is a variant of an English auction where bids are written on a sheet of paper. At the predetermined end of the auction the highest listed bidder wins the item.^[28] This auction is often used in **charity** events, with many items auctioned simultaneously with a common finish time.^[28] The auction is "silent" in that there is no auctioneer,^[28] the bidders writing their bids on a bidding sheet often left on a table near the item.^[29] Other variations of this type of auction may include sealed bids.^[28] The highest bidder pays the price he or she submitted.^[28]
- **Walrasian auction** or *Walrasian tâtonnement* is an auction in which the auctioneer takes bids from both buyers and sellers in a market of multiple goods.^[30] The auctioneer progressively either raises or drops the current proposed price depending on the bids of both buyers and sellers, the auction concluding when supply and demand exactly balance.^[31] As a high price tends to dampen demand while a low price tends to increase demand, in theory there is a particular price point somewhere in the middle where supply and demand will match.^[32]

Time requirements

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Each type of auction has its specific qualities such as pricing accuracy and time required for preparing and conducting the auction. The number of simultaneous bidders is of critical importance. Open bidding during an extended period of time with many bidders will result in a final bid that is very close to the true market value. Where there are few bidders and each bidder is allowed only one bid, time is saved, but the winning bid may not reflect the true market value with any degree of accuracy. Of special interest and importance during the actual auction is the time elapsed from the moment that the first bid is revealed to the moment that the final (winning) bid has become a binding agreement.

Auctions: characterization

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Auctions can differ in the number of participants:

- In a *supply* (or *reverse*) auction, *m* sellers offer a good that a buyer requests
- In a *demand* auction, *n* buyers bid for a good being sold
- In a **double auction** *n* buyers bid to buy goods from *m* sellers

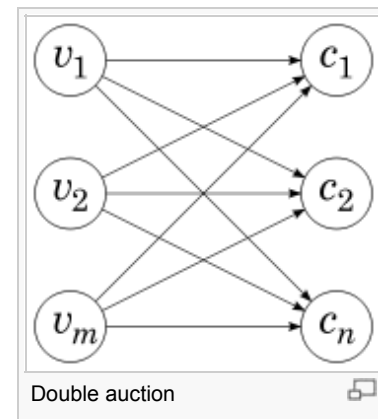
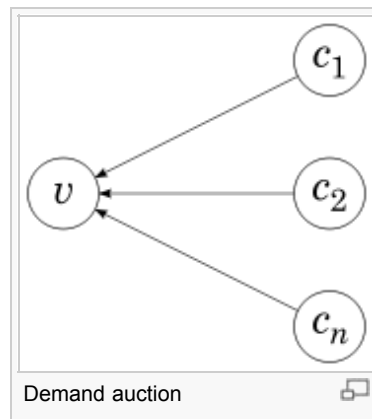
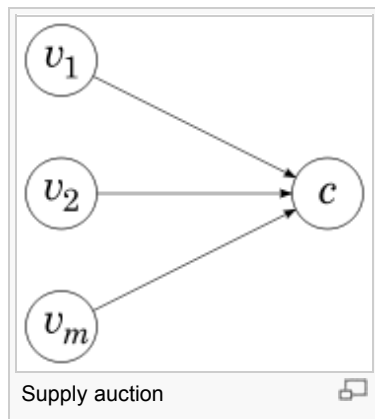
Prices are *bid* (or *offered*) by buyers and *asked* by sellers. Auctions may also differ by the procedure for bidding (or asking, as the case may be):

- In an *open* auction participants may repeatedly bid and are aware of each other's previous bids.
- In a *closed* auction buyers and/or sellers submit sealed bids

Auctions may differ as to the price at which the item is sold, whether the first (best) price, the second price, the first *unique* price or some other. Auctions may set a **reservation price** which is the least/maximum acceptable price for which a good may be sold/bought.

Without modification, *auction* generally refers to an open, demand auction, with or without a **reservation**

price (or *reserve*), with the item sold to the highest bidder.



Common uses for auctions

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Auctions are publicly and privately seen in several contexts and almost anything can be sold at auction. Some typical auction arenas include the following:

- the [antique](#) business, where besides being an opportunity for [trade](#) they also serve as social occasions and entertainment
- in the sale of [collectibles](#) such as stamps, coins, classic cars, fine art, and luxury real estate
- the wine auction business, where serious collectors can gain access to rare bottles and mature vintages, not typically available through retail channels
- in the sale of all types of [real property](#) including residential and commercial [real estate](#), farms, vacant lots and land.
- for the sale of consumer [second-hand goods](#) of all kinds, particularly farm (equipment) and house clearances and online auctions.
- sale of industrial machinery, both surplus or through insolvency.
- in [commodities](#) auctions, like the fish wholesale auctions
- in [livestock](#) auctions where sheep, cattle, pigs and other livestock are sold
- in [wool](#) auctions where international agents purchase lots of wool
- [Thoroughbred](#) horses, where yearling horses and other bloodstock are auctioned.
- in legal contexts where [forced](#) auctions occur, as when one's farm or house is sold at auction on the [courthouse](#) steps.
- travel tickets. One example is [SJ AB](#) in Sweden auctioning surplus at Tradera (Swedish eBay).

Although less publicly visible, the most economically important auctions are the commodities auctions in which the bidders are



Farm clearing sale, Woolbrook, NSW.



Grass-fed [cattle](#) at auction, [Walcha](#), NSW



Wool buyers' room at a wool auction, Newcastle, NSW.

[businesses](#) even up to [corporation](#) level. Examples of this type of auction include:

- sales of businesses
- [spectrum auctions](#), in which companies purchase licenses to use portions of the [electromagnetic spectrum](#) for communications (e.g., mobile phone networks)
- [private electronic markets](#) using combinatorial auction techniques to continuously sell commodities (coal, iron ore, grain, water...) to a pre-qualified group of buyers (based on price and non-price factors)
- [timber](#) auctions, in which companies purchase licenses to log on government land
- timber allocation auctions, in which companies purchase timber directly from the government [Forest Auctions](#)
- electricity auctions, in which large-scale generators and consumers of electricity bid on generating contracts
- environmental auctions, in which companies bid for licenses to avoid being required to decrease their environmental impact
- [debt](#) auctions, in which governments sell [debt instruments](#), such as [bonds](#), to investors. The auction is usually sealed and the uniform price paid by the investors is typically the best non-winning bid. In most cases, investors can also place so called *non-competitive bids*, which indicates an interest to purchase the [debt instrument](#) at the resulting price, whatever it may be
- auto auctions, in which car dealers purchase used vehicles to retail to the public.

Bidding strategy

[[edit](#)]



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Bid shading

[[edit](#)]

Bid shading is placing a bid which is below the bidder's actual value for the item. Such a strategy risks losing the auction, but has the possibility of winning at a low price. Bid shading can also be a strategy to avoid the [Winner's curse](#).

Chandelier Bidding

[[edit](#)]

A practice, especially by high-end art auctioneers, of raising false bids at crucial times in the bidding process in order to create the appearance of greater demand or to extend bidding momentum for a work on offer. To call out these nonexistent bids, auctioneers might fix their gaze at a point in the auction room that is difficult for the audience to pin down.

In the United Kingdom, this practice is legal on Property Auctions up but not including the reserve price, and is also known as "Off The Wall" bidding.^{[[33](#)]}

Collusion

[\[edit\]](#)


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Whenever bidders at an auction are aware of the identity of the other bidders there is a risk that they will form a "ring" and thus manipulate the auction result, a practice known as [collusion](#). By agreeing to bid only against outsiders, never against members of the "ring", competition becomes weaker, which may dramatically affect the final price level. After the end of the official auction an unofficial auction will take place among the "ring" members. The difference in price between the two auctions will then be split among the members.

On the opposite side, the owner of the object being auctioned may increase competition by taking part in the bidding himself (but drop out of the bidding just before the final bid). In Britain and many other countries Rings and the bidding on one's own object are illegal.

In an English auction a dummy bid is a bid made by a dummy bidder acting in collusion with the auctioneer or vendor, designed to deceive genuine bidders into paying more. In a First price auction a dummy bid is an unfavourable bid designed so as not to become the winning bid. (The bidder does not want to win this auction, but he wants to make sure that he will be invited to the next auction).

In South Australia a dummy bid ([shill](#), schill) is a criminal offense but a vendor bid or a co-owner bid below the [reserve price](#) is permitted, if clearly declared as such by the auctioneer. These are all official legal terms in Australia, but may have other meanings elsewhere. A co-owner is one of two or several owners (who disagree among themselves).

In Sweden and many other countries there are no legal restrictions, but it will severely hurt the reputation of an auction house that knowingly permits any other bids except genuine bids. If the reserve is not reached this should be clearly declared.

Suggested opening bid (SOB)

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There will usually be some kind of (rough) estimate as to what the object will fetch. In an ascending open auction it is considered important that there should be at least a 50 percent increase in the bids from start to finish. To accomplish this the auctioneer must start the auction by announcing a Suggested Opening Bid, SOB, that is low enough to be immediately accepted by one of the bidders. Once there is an Opening Bid there will quickly be several other higher bids submitted. Experienced auctioneers will often select an SOB that is about 45 percent of the (lowest) estimate. Thus there is a certain margin of safety to ensure that there will indeed be a lively auction with many bids submitted. Several observations indicate, that the lower the SOB, the higher the final winning bid will be. This is due to the increase in number of bidders attracted by the low SOB. When 50 bidders compete with each other the winning bid will be about twice as high as when only two bidders compete. Sometimes with [English auction](#) there will be more than 50 bidders.

A [Chi-square distribution](#) shows many low bids but few high bids. Bids "show up together"; without several low bids there will not be any high bids.

Another approach to choosing a SOB: The auctioneer may achieve good success by asking the expected final sales price for the item, as this method suggests to the buyer the amount of the item's particular value. For instance, say an auctioneer is about to sell a \$1,000 car at a sale. Instead of asking \$100, hoping to entice wide interest (for who wouldn't want a \$1,000 car for \$100?), the auctioneer may still suggest the opening bid of \$1,000; although the first bidder may finally begin bidding at a mere \$100, the

final bid may more likely approach \$1,000.

Auction terminology

[[edit](#)]

- [Appraisal](#)
- Auction block
- [Bidding](#)
- Buyer's premium - [fee](#) paid by the buyer to the auction house
- Buyout price
- [Commission](#)
- [Consignee](#)
- [Consignor](#)
- Dummy bid
- Dynamic closing
- [Escrow](#)
- Hammer price - nominal price at which a lot is sold; on top the buyer pays buyer's premium and taxes
- [Increment](#)
- Job lot
- Knocked down to
- [Lot](#)
- Minimum bid
- No reserve
- Outbid
- Opening bid
- Proxy bid (aka absentee bid)
- Registration deposit
- Relisting
- Reserve price
- [Sniping](#)
- [Vendor](#)
- Vendor bid

JEL classification

[[edit](#)]

The [Journal of Economic Literature](#) (JEL) [classification code](#) for auctions is D44.^[34]

See also

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- Types of auction:
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 - [Chinese auction](#)
 - [Estate sale](#)
- Other topics:
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- [Auction sniping](#)
- [Dollar auction](#)
- [Game theory](#)
- [Online auction tools](#)
- [Online auction business model](#)

Further reading

[\[edit\]](#)

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