

Why Ask? The Role of Asking Prices in Transactions

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“2009 Mercedes C300 Sport 4MATIC — \$19,000 or Best Offer” —*Craigslist*

Many goods are offered for sale with an *asking price*. When a seller posts an asking price, it’s typically implied that this is the price he is willing to accept in exchange for his good but that he would also entertain offers below the asking price. For example, when potential buyers read the advertisement above, they understand that they can either offer \$19,000 and be sure of getting the car, as long as it hasn’t sold yet, or they can offer less than \$19,000, in which case they may not get the car, depending on how much the seller values it and whether any other buyers offer more.

This method of selling a good or service appears in a variety of markets and goes by many names. For example, it’s often called the *listing price* in the housing market or the *sticker price* in the market for new cars. Companies are typically listed for sale with an *offer price*. In the classified section, sellers will often announce a price followed by the phrase “or best offer,” while Internet auction sites like eBay allow sellers the option of posting a “buy-it-now” price. While each of these markets may work slightly differently, they all share the feature that sellers post some price, and buyers can either pay that price or try to buy it for less.

As consumers, we often take it for granted that sellers use different conventions to sell different types of goods and services. However, the methods that sellers use to determine whom they trade with and at what price are more than a matter of habit or tradition. These different methods can lead to very different outcomes, both for potential buyers and the seller, and even for the economy as whole. For example, if the seller of the car above doesn’t include an asking price, some potential buyers might not contact him because they think the car is out of their price range. On the other

hand, if the seller chooses only one price at which he will trade, and specifies that he will accept nothing less, he might miss out on a buyer who would have been willing to pay just a little bit less than the chosen price. Now, suppose all the cars for sale in the economy were being sold to the “wrong” buyer at the “wrong” price. Suddenly these small mismatches at the microeconomic level would aggregate up to a big problem at the macroeconomic level!

For this reason, a fundamental task of economic theory is to understand why different goods are sold using different pricing mechanisms and how these mechanisms determine both what types of buyers end up buying a particular good or service and how much they end up paying. While certain methods of price determination have been studied extensively, the reason why a seller would benefit by using an asking price remains an open question. This article explores the most common explanations for why sellers use asking prices, how the asking price a seller chooses affects the ultimate selling price and time on the market, and why this method of selling a good can lead to more efficient trading outcomes.

ASKING PRICES: A MIX OF POSTED PRICES, AUCTIONS

Before we explore the reasons why a seller might choose to sell a good with an asking price, it’s helpful to note that an asking price combines elements of two popular methods of price determination: *posted* (or “take-it-or-leave-it”) prices and auctions.

A posted price is one that a seller sets as nonnegotiable, and customers can either buy at that price or not buy at all. Most transactions take place with posted prices: milk at the supermarket, meals at a restaur-

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rant, shoes at a department store, and so on. Auctions, on the other hand, are less ubiquitous. In a typical *first-price* auction, each would-be buyer places a bid, and the one who places the highest bid wins, so long as it exceeds the seller's own value for his good. Auctions are more common when the good for sale is unique, like a piece of art, a company, or an oil field. They are also commonly used when a good is expected to elicit a wide range of bids.

When a seller posts an asking price, a buyer can pay that price and trade with certainty, as is the case with a posted price. However, if nobody offers the asking price, then the good is sold to the highest bidder, as in an auction.¹ In this sense, an asking price is a hybrid of a posted price and an auction. Therefore, in order to understand why asking prices are an attractive selling method, it's helpful to explore the advantages of posted prices versus auctions.

THE ADVANTAGES OF POSTED PRICES

While there are many reasons why a seller might find it profitable to use posted prices, here we will focus on two of the most well-established explanations. First, buyers tend to like posted prices because they provide them with certainty: As long as the good is available, buyers know they can buy it at the posted price. Hence, by using a selling method that is appealing to buyers, a seller can attract more buyers. Second, a posted price can signal important information to buyers, either about the good for sale or about the seller's motivation to sell the good. In this case, the posted price can help sellers attract the right buyers. Let's explore both of these explanations in greater detail.

When a seller posts a price at which he is always willing to sell, potential buyers can be assured that, as long as the good is still available, they can buy it with certainty. This can be especially important to a buyer who is either averse to risk or impatient. For example, suppose you waited until the day before your anniversary to buy your spouse a present. The prospect of bidding for a gift and finding out at midnight that you didn't get it isn't terribly appealing. Instead, you would naturally seek out a store where you could be certain to walk out with a gift in hand.²

This element of certainty can also be important to buyers who have made a significant investment before making a purchase, either in terms of money or time. For example, suppose you are remodeling your kitchen. You spend months

picking out paint colors, tiles, and custom-made cabinets. It would be pretty frustrating if, at the end of all this, there was uncertainty over whether the appliances that fit in just right would be available at a price within your budget. Again, in this situation, you would naturally be attracted to a vendor who posted fixed prices; indeed, you might even be willing to pay him a little more for the certainty of getting your appliances when your kitchen was ready!³

A second advantage of posted prices is that they provide a seller with the opportunity to send a signal that

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contains information relevant to buyers. For example, sometimes it's difficult for buyers to discern the quality of a good from an advertisement, or even from looking at the good. In these cases, the price itself can convey information about the quality of the good, such as how well it was manufactured, the types of materials that were used, or how long it's expected to last.⁴ When prices serve this signaling function, they steer buyers toward the right sellers. That is, buyers looking for higher-quality goods are drawn to sellers of high-priced goods, while those willing to accept lower quality in exchange for a lower price seek out sellers of lower-priced goods.⁵

Prices can also provide a channel for sellers to signal something about their own motivation to sell, which can be completely unrelated to the quality of the product. For example, a store that is going out of business might drop its prices, as in the typical slogan "Everything must go!" A store that did not have the same sense of urgency would have no incentive to drop its prices as low.⁶ As a result, prices can again play a valuable signaling role and help ensure that buyers who are more price-sensitive end up trading with sellers who are more motivated to sell.

THE ADVANTAGES OF AUCTIONS

The main advantage to a seller of using an auction is that it offers a way to *price discriminate* — that is, to charge different buyers different prices, depending on how much each buyer is willing to pay. In other words, auctions offer

sellers greater flexibility than posted prices do, since posted prices place certain limitations on a seller. One way to think about this inflexibility is to realize that a posted price acts as both a ceiling and a floor on the possible price that the seller can charge.

For example, when it turns out that there are buyers who are willing to pay a lot — that is, when demand is high — posted prices act as a ceiling on the price the seller can get. Auctions, on the other hand, place no such upper bound on the eventual transaction price. Posted prices are also limiting when demand is low, as they serve as a floor on prices. This can have important consequences: When the seller has committed not to sell below his posted price, it's possible that a sale may not occur even if there is a buyer who values the good more than the seller. This would not happen if the good were sold via an auction instead.

In short, auctions offer two advantages over posted prices. First, they allow sellers to sell their goods to the buyers who value them the most. Second, they do not rule out profitable sales in cases when no big spenders make offers.

ASKING PRICES: A MIDDLE GROUND

Asking prices are a way to capture some aspects of all the advantages discussed above. Because an asking price offers the buyer some degree of certainty, using this mechanism could stimulate demand and thus increase profits. Moreover, as we noted earlier, asking prices can serve as a signal to would-be buyers about the quality of the good being sold or the seller's eagerness to sell. Yet, asking prices also allow sell-

ing posted prices, auctions, bargaining, and any other way one could imagine.⁷ Consider situations in which buyers have to incur a cost in order to learn how much they value a good. For example, in the real estate market, this cost can be interpreted as the time and energy spent going to see a house, researching the quality of the school district, finding out how long it would take to commute to work, and so on. When buyers face such hurdles, sellers will often choose to use an asking price, as it provides the best balance between the flexibility of an auction, which helps the seller get a good price, and the certainty of a posted price, which helps attract buyers. However, if the buyers' cost of learning their valuation is small enough, this balance shifts and an auction is the optimal way to sell a good. On the other hand, for goods that are similar and more or less interchangeable — so that there is nothing to learn by going to inspect any one particular seller or store — posted prices are optimal.

DISCUSSION AND CONCLUDING REMARKS

Why do certain types of buyers end up buying certain goods or services? Why do they end up paying what they do? Basic economic theory predicts that a good or service should sell for the price that equates supply with demand: Those willing to pay at least that price will buy; those willing to accept that price or less will sell.

Yet, anyone who has ever bought a house or car, walked through a bazaar, or perused Craigslist knows that some goods aren't sold at a single price, and they are not always acquired by the buyer who is willing to pay the most. To understand these types of markets, economists have to dig deeper into the details of how prices and allocations are determined. In this article, we have explored one particular method of price determination: asking prices. We have proposed several reasons why sellers might find it profitable to sell their goods or services with an asking price and how this pricing mechanism can lead to the "right" buyer ultimately getting a particular good or service.

What, then, does the theory tell us about how asking prices affect actual sale prices and how long it takes to sell a good? When sellers use asking prices, economists expect to see certain patterns in the data. First, there should be a particular type of price dispersion, with some sales taking place at the asking price and then other sales taking place

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ers to engage in some price discrimination. They leave open the possibility of getting top dollar from a high-valuation buyer. However, since the asking price is not a take-it-or-leave-it offer, price-conscious buyers still have a chance. As a result, the seller does not have to forgo profitable sales.

Indeed, in some situations, using an asking price can be the seller's best, or most profitable, way of selling a good among all possible methods for determining prices, includ-

at various prices below the asking price. Second, we should expect a relationship between the asking price that a seller chooses and the amount of time the good spends on the market, though this relationship depends on the reason for using an asking price to begin with. If the asking price is being used to offer buyers certainty or if it is a signal of the seller's motivation to sell, then lower asking prices should attract more buyers and hence shorten the good's time on the market. If, however, the asking price is a signal of quality, then it's unclear whether a low asking price will be associated with a long or short time on the market.

NOTES

¹ Of course, there is also a third possibility: that two buyers end up offering the asking price at the same time and a bidding war ensues. In this case, the good can end up selling for more than the asking price. This is more common in some markets than it is in others — houses will sometimes sell above the listing price, while new cars almost never sell for more than the sticker price. To learn more about the relationship between asking prices and bidding wars, see the paper by James Albrecht and his coauthors, along with my own work with Ludo Visschers and Ronald Wolthoff.

² To read more about how this type of certainty can be attractive when buyers are risk averse, see, for example, the articles by Eric Budish and Lisa Takeyama or Timothy Mathews.

³ In the 1990s, Yongmin Chen and Robert Rosenthal, along with Michael Arnold, were among the first to note that buyers would appreciate a cap on the maximum price they would have to pay before they made a significant investment.

⁴ The idea that prices may provide a signal about quality has been around for quite some time. See Asher Wolinsky's 1983 article for an early formalization of this idea and Alain Delacroix and Shouyong Shi's 2013 article for a more recent contribution.

⁵ You might ask, "Why doesn't a seller just say that he is selling a higher- or lower-quality good?" Economists would call this *cheap talk*, since any seller could (and would like to) make such a claim. However, when a seller who must pay a lot to make a high-quality good commits to accepting no less than a certain price, he is taking an action that a seller who produces lower-quality products at a lower cost wouldn't take. Hence, setting and committing to this posted price is informative about the quality (and cost) of the good that a seller produces. Economists call this outcome a *separating equilibrium*.

⁶ Albrecht and his coauthors use this explanation to try to understand how housing prices can sometimes signal the urgency with which sellers want to sell their houses.

⁷ I describe and analyze these situations more formally in my paper with Visschers and Wolthoff.

With a workable theory such as this, economists can begin to identify the underlying causes of differences in prices and allocations in these markets and forecast changes. In the housing market, for example, the ratio of asking prices to actual sale prices varies widely from one location to another and can change significantly over time. A theory of asking price mechanisms offers a means to interpret such variations in a way that standard pricing theory can't. And given the housing market's impact on economic conditions, interpreting house price movements is a vital part of understanding the overall economy. ■

REFERENCES

- Albrecht, J.W., P.A. Gautier, and S.B. Vroman. "Directed Search in the Housing Market," forthcoming in *Review of Economic Dynamics*.
- Arnold, M.A. "Search, Bargaining and Optimal Asking Prices," *Real Estate Economics*, 27: 3 (1999), pp. 453–481.
- Budish, E.B., and L.N. Takeyama. "Buy Prices in Online Auctions: Irrationality on the Internet?" *Economics Letters*, 72 (2001), pp. 325–333.
- Chen, Y., and R.W. Rosenthal. "Asking Prices as Commitment Devices," *International Economic Review*, 37:1 (1996), pp. 129–155.
- Delacroix, A., and S. Shi. "Pricing and Signaling with Frictions," *Journal of Economic Theory*, 148 (2013), pp. 1,301–1,332.
- Lester, B., L. Visschers, and R.P. Wolthoff. "Competing with Asking Prices," Federal Reserve Bank of Philadelphia Working Paper 13-7 (2013).
- Mathews, T. "The Impact of Discounting on an Auction with a Buyout Option: A Theoretical Analysis Motivated by eBay's Buy-It-Now Feature," *Journal of Economics*, 81:1 (2004), pp. 25–52.
- Wolinsky, A. "Prices as Signals of Product Quality," *Review of Economic Studies*, 50:4 (1983), pp. 647–658.