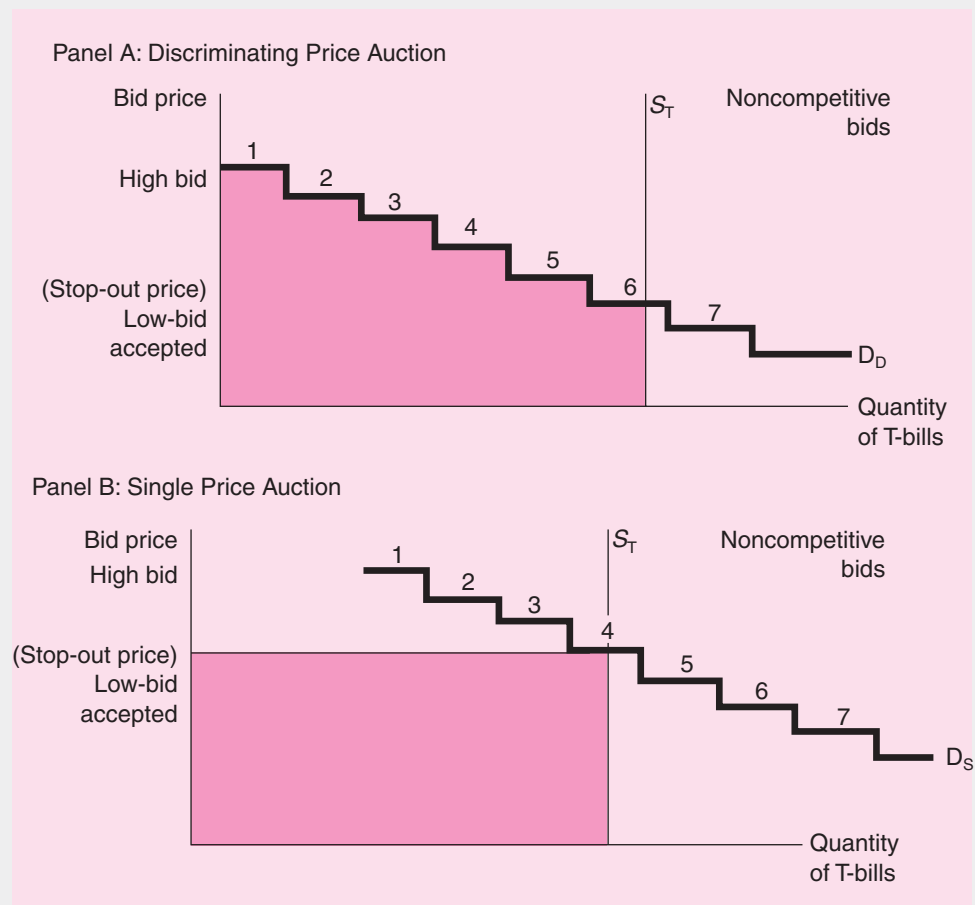


APPENDIX 5A: Single versus Discriminating Price Treasury Auctions

The single price auction was fully adopted by the U.S. Treasury in 1998. Under this model, all Treasury security bidders pay the same price for the Treasury security—the lowest price of the competitive bids accepted. Prior to 1998, Treasury security auctions were “discriminating” price auctions in that different successful bidders paid different prices (their bid prices). The Treasury found that single price auctions tend to result in the distribution of auction awards to a greater number of bidders than under discriminating price auctions. Also, the Treasury found that single price auctions result in more aggressive bidding. Successful bidders avoid the so-called winner’s curse, the risk that one bidder will pay more than others. However, the Treasury also found that the more aggressive bidding results in overall higher bid prices and thus increased revenues (or reduced costs) to the Treasury for funding the federal debt.¹⁸

We illustrate this increase in revenue in Figure 5–11. Panel A in Figure 5–11 shows the Treasury auction results under a discriminating price auction. The revenue to the U.S. Treasury from the auction is represented by the shaded area under the demand curve (D_D) for the Treasury security being auctioned. Panel B shows the Treasury auction results under a single price auction. In a single price auction, bidders bid higher because they do not pay the price they bid. Thus, there is no penalty (i.e., the bidder pays no more) for bidding a higher price and the demand curve for the security being auctioned shifts up and to the right (to D_S). Even though some of the successful bidders will pay less for the securities, with this shift up in the demand for the security, the revenue (the shaded area under the demand curve (D_S)) to the Treasury may increase.

Figure 5–11 Single Versus Discriminating Price Treasury Auctions



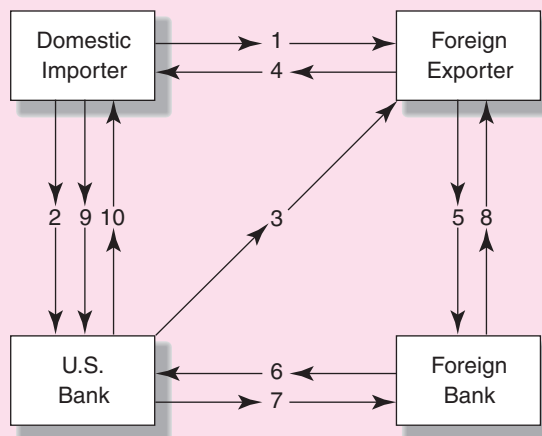
¹⁸See “Uniform Price Auctions: Update of the Treasury Experience,” Department of Treasury, October 1998.

APPENDIX 5B: Creation of a Banker's Acceptance

In this appendix, we describe the process by which an international trade-related banker's acceptance is created. The process is illustrated in Figure 5–12. The creation of a banker's acceptance generally begins when a domestic importer, after placing a purchase order from a foreign exporter (1), is asked by the foreign exporter for a guarantee of payment from the domestic importer's bank before the goods are shipped.¹⁹ In compliance with this request, the domestic importer arranges a letter of credit through its U.S. bank (2). The bank subsequently notifies the foreign exporter (3) that, upon meeting the delivery requirements, the exporter is entitled to draw a time draft against the letter of credit at the importer's bank (i.e., withdraw money) for the amount of the transaction. After the export order is shipped (4), the foreign exporter presents the time draft and the shipping papers to its own (foreign) bank (5), who forwards these to the domestic importer's U.S. bank. The foreign exporter involves the foreign bank so as to act as a repository of funds associated with the time draft. The U.S. bank stamps the time draft as accepted and the draft becomes a banker's acceptance (6). The U.S. bank returns the stamped time draft (now a banker's acceptance) to the foreign exporter's bank and payment is made (7) to the foreign exporter's bank (and implicitly, to the foreign exporter) on the maturity date (e.g., in three months' time). Alternatively, if the foreign exporter wants cash payment immediately it can sell or discount the acceptance with its (foreign) bank. In this case, the U.S. bank immediately forwards to the foreign exporter's bank the discounted value of the banker's acceptance (7). In either case,

At this point, the U.S. bank returns the stamped time draft (now a banker's acceptance) to the foreign exporter's bank and payment is made (7) to the foreign exporter's bank (and implicitly, to the foreign exporter) on the maturity date (e.g., in three months' time). Alternatively, if the foreign exporter wants cash payment immediately it can sell or discount the acceptance with its (foreign) bank. In this case, the U.S. bank immediately forwards to the foreign exporter's bank the discounted value of the banker's acceptance (7). In either case,

Figure 5–12 Creation of Banker's Acceptance



1. Purchase order sent.
2. Letter of credit requested.
3. Notification of letter of credit and draft authorization.
4. Order shipped.
5. Time draft and shipping papers sent to foreign bank.
6. Time draft and shipping papers sent to U.S. bank; banker's acceptance created.
7. Payments sent to foreign bank.
8. Payments sent to foreign exporter.
9. Payment to U.S. bank.
10. Shipping papers delivered.

¹⁹One might think of the domestic importer being a U.S. firm such as IBM that purchases a fleet of cars for its executive staff. The foreign exporter might be DaimlerChrysler, a German company, that sells the cars to IBM. The U.S. bank used by IBM might be Bank of America and DaimlerChrysler's bank can be thought of as Deutsche Bank.

the foreign bank pays the foreign importer for the goods (8) (either on the maturity date of the banker's acceptance or immediately based on a discounted value). At this point, the U.S. bank effectively pays the domestic importer's bill for the purchases, either through its payment in full on the maturity date or the discounted value immediately. When the banker's acceptance matures, the domestic importer must pay its U.S. bank for the purchases (9), and the U.S. bank sends the domestic importer the shipping papers (10).

If the foreign exporter discounts the banker's acceptance with its foreign bank before maturity, the foreign bank can either hold the acceptance as an investment until it matures or sell the banker's acceptance in the secondary market.