Distribution methods for debt securities

Q 7-05. How do states sell and distribute debt securities?

The chief means of selling sovereign debt instruments are by private placement, syndicated underwriting, or by competitive auction. These activities are accomplished generally through agents or intermediaries. The most efficient choice among these options will depend upon the current level of development of the domestic debt market and institutions to support it.

Q 7-05.01. How can states use intermediaries to sell their debt?

A state may undertake the task of distributing its debt securities using its own staff or it may contract or otherwise enlist the services of agents. It is probably more efficient for governments to use agents to distribute their debt securities to the public than to undertake the distribution themselves. Agents, either underwriters or primary dealers, are expected to take the debt issue onto their own books for distribution through their networks of buyers. Part of agents' value lies in their more efficient networks and distribution channels and their willingness to take on the risk burden in finding a market for the securities.

Although there may not be an explicit cost to using agents, it is reasonable to expect that agents will sell on debt for more than they acquired it from the state. It should be remembered, however, that actively distributing debt itself would also entail direct costs for the state.

Q 7-05.02. How should the information needs of agents be addressed?

In many finance ministries, there is a hesitation to share debt-planning information of any kind with their agents. The justification often given for this is that such information may be sensitive or may tie the state's hands in carrying out its functions. As well intentioned as this view may be, it is not in the best interest of the ministry of finance because it impedes the intermediaries' work.

Agents are valuable partners in debt distribution; a hostile or suspicious attitude keeps them from achieving efficiency. The agents serving the ministry need reliable information in order to set up sales within their clients and distribution network. The schedule of dates for issuing debt should be publicly available for a minimum of three months in advance. The schedule should include the dates of settlement and the tenors offered. The actual amount of each security to be offered need not be declared until a closer date, but reasonable limits should guide the amount by which a given tenor will vary from one offering to the next. Such regular and predictable issuance will lead to a high degree of transparency regarding near-term debt offering amounts and clarity on longer-term trends.

The ministry of finance should build lines of communication and interaction with their agents and other market entities. Information should flow in both directions; the agents need to know what the ministry is considering and the ministry needs to understand market conditions. It is critical, however, that the information flows from the ministry are fair to all parties. The rules should encourage a level playing field of information among all agents if market efficiency is to be achieved.

Q 7-05.03. What is gained by predictability?

If the ministry of finance insists on surprising the marketplace with the supply of debt coming to market, it is likely to lose in the end. If no firm schedule is maintained, there is a high probability that agents will not be ready to take on the debt burden when the state issues it. The subsequent volume could only then be absorbed by the market if it is subjected to significant discounting in price. If the ministry of finance persistently brings a smaller supply of debt to the market than agents have been led to expect,[1] it risks the departure of agents in pursuit of more profitable opportunities. If the ministry of persistently brings a larger supply of debt to the market than agents have been led to expect, agents are likely to demand a premium in their earnings to compensate for the additional burden of clearing the market.

The advantage of predictability is that it helps intermediaries to anticipate better the task ahead of them and to make the necessary arrangements to accomplish it.

Q 7-05.04. Should agents be expected to buy the entire state debt portfolio?

If agents must absorb the entire debt issuance onto their own balance sheets, the state is likely to consume quickly the available capital of the agents. This limits the ability of the agents to continue serving the state and may lead to some crowding out of investment in the private sector. Agents provide greater capacity when they serve as distribution channels rather than as final buyers of state debt securities.

Q 7-05.05. How should the state treat financial institutions as agents?

In countries with underdeveloped financial markets, banks and similar financial institutions, rather than brokers and dealers, often constitute the majority of players in the sovereign debt market. These banks can serve in debt distribution albeit imperfectly. For two reasons, ministries of finance should exercise caution against over-reliance on banks in this function. Because these banks are less likely to have a network of customers to whom the debt may be sold on, ministries may expect the banks themselves to absorb the debt issue. The falls into the problem

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[1] By delivering a smaller supply, the ministry might hope to gain by securing a better price as buyers compete.

discussed above: agents cannot be expected to hold all the debt on their balance sheet. The second problem arises if the banks do tie up their reserves in sovereign debt. In doing this, funds will not be available for productive lending in the economy.

Q 7-05.06. What are the issues when using underwriters?

When debt issuance is done through underwriting, one or more securities firms or banks, form a syndicate to buy an entire issue of bonds from the issuer and re-sell them to investors. The security firm takes the risk of holding unsalable debt. Underwriting can be an efficient distribution system; underwriters served the United States Treasury for many years and are still used to some extent by many European debt offices.

The primary issuance is arranged by book runners who arrange the bond issue, have the direct contact with investors, and act as advisors to the sovereign issuer in terms of timing and price of the bond issue. The book runners' willingness to underwrite must be discussed prior to opening books on a bond issue, as there may be limited market appetite for the security.

The main risk for the state in using syndication lies in the fact that the price or interest rate are determined by inference from market data or by the market expertise of the underwriter rather than by direct market pricing. If the government has less expertise than the syndicate, the asymmetries in market information will likely result in the government paying a disproportionate share of the financing costs.

Q 7-05.07. How are bonds distributed by private placement?

In a private placement, the bond is issued directly to the lender and is not distributed through the larger bond market. Because the cost of issuance for a publicly auctioned bond can be prohibitive for a smaller loan, it is common for smaller bonds to avoid the underwriting and auction process with a private placement bond.

The challenge in using private placement is to determine the appropriate price and rate. That private placement is being used argues that price discovery cannot be done competitively through the market. There is no market price for the benchmark; private placement would not be used otherwise. Setting the price may hinge on non-economic considerations or on the relative bargaining powers of the lender and the borrower.

Q 7-05.08. How are bonds sold by auction?

In most developed countries, government bonds are distributed through public sale auctions. The auctions are generally open so that both members of the public and banks may bid for the bonds. Bidding may be on the coupon rate for a par price or on the price for a stated coupon rate[2]. Both cannot be set simultaneously by the auction mechanism.

The choice of bidding on rate or price has some impact on the treasury and future budgets. If bidding is on the coupon rate, the total amount of funds that the treasury will take in from the sale, assuming the entire lot is sold, will be known in advance. The cost of financing the borrowing, however, is unknown until the conclusion of the auction. If bidding is on the price, the amount of the future stream of coupon payments is known, but how much money will be borrowed is not.

Q 7-05.09. What are the choices if the sale is by auction?

Auction mechanisms require care in developing to maintain a level playing field, to protect against collusive practices, and to obtain the best possible terms for borrowing. The principal decisions are whether the auction will be conducted secret bidding or open cry and whether the auction will yield a multiple price or single price determination. In both situations, strategic or game theoretic considerations on the part of the participants will drive their behavior under these choices.

Q 7-05.10. What are the implications of using secret bid or open cry auctions?

Open cry auctions are the very model of a perfectly competitive market in the view of a micro-economist. What this assumes, however, is that no one bidder has significant market strength to affect market prices or dynamics that drive other bidders' decisions. For states with a nascent sovereign debt market, this is rarely true. When there are only a few bidders, there is a significant risk of collusion in setting bids. An open cry market makes it easier for such a scheme to be successful because it is easy to determine who has broken faith with the bloc and this allows group discipline to be enforced. A secret bid in this case weakens the power of collusive arrangements because it is not immediately clear who has broken ranks.

Once the number of bidders becomes sufficiently large, even if some brokers are serving as order-takers for other bidders, the risk of collusive behavior abates. At that point, however, an open cry model may also be infeasible for sheer physical considerations.

Q 7-05.11. What are the implications of using single or multi-price auctions?

[2] For a zero coupon bond (or a treasury bill), bidding on price is equivalent to bidding on yield.

The advantage for the seller in using multi-price auctions lies in capturing additional revenue forgone by the seller in single price markets.[3] By selling to each buyer at an individual price, the seller maximizes his revenue. The ability to extract the additional revenue is a measure of the seller's monopoly power for some market good. The risk of exercising such power too strongly is to encourage the use of substitute goods.

In multi-price auctions, an unintended second consideration comes into play. Bidders' success is based not just whether or not they obtain the security on which they have bid, but on the price they paid for the instrument relative to the prices paid by all other successful bidders. Every bid above the auction cutoff might be seen as paying an unnecessarily high price for the debt security. After all, the next lowest successful bid got the same security for a slightly more favorable price.

This situation leads to the "winner's curse" paradox in which a successful bid itself is evidence of having paid too much for an asset. The rational response by all bidders in auctions in this case is to bid less aggressively by including a risk premium in the bid to prevent the bidder from winning by bidding a price higher than necessary to win. The net effect across all bidders is to lower the full set of bids with an increase in financing costs for the state.

A single-price ("Dutch") auction reduces the risk of the "winner's curse" and encourages more aggressive bidding. In a single-price auction, all successful bids are won at the same price. This frees the bidders to pursue the security in the auction without secondary considerations about relative bids. The result is a likely lower financing cost for the borrower.

Q 7-05.12. What are primary dealers?

Primary dealers are financial entities designated by the ministry of finance or by the central bank to serve as market makers in government securities. As such, they are expected to participate actively and regularly in the sale or auction of all government debt.

Primary dealer systems are present in many countries including Canada, France, Italy, Spain, the United Kingdom, and the United States. In the United States, primary dealers purchase a large share of the U.S. Treasury securities (bills, notes, bonds, and TIPS) sold at auction, and resell them to the public. The primary dealers form a worldwide network that distributes new U.S. government debt.

Q 7-05.13. On what basis are primary dealers selected?

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[3] This additional revenue is referred to in economics as "consumer surplus" and is equal to the area under the demand curve that is above the market-clearing price.

A primary dealer should be expected to maintain a prolonged relationship with the ministry or the central bank and with the debt market. The selection of primary dealers should be based upon their commitment to maintaining a market for sovereign debt, the strength of their capital structure, and their reputation in the market.