

Discussion Paper

The Importance of Short-Selling to Government Bond Markets

Market participants must be able to sell government bonds that they do not, at the time, hold in inventory. In this paper this shall be referred to as “going short”.

The ability to go short is critical to the price formation, liquidity and thus efficient functioning of the government bond markets

Selling short facilitates:

- Market making
- Price discovery
- The development of a repo market
- Hedging and risk management

A number of studies have demonstrated that the ability to sell short contributes to the accurate/efficient valuation of the instruments concerned. If short selling of government bonds is banned, market participants with negative information that do not hold inventory, will be constrained from selling and their information will not be fully reflected in the prices of those bonds. Restrictions on short selling can in this way increase the magnitude of overpricing and subsequent corrections or reduce the speed of price adjustment to private information.

Short selling can also enhance liquidity by increasing the number of potential sellers in the market. This increases efficiency by tending to increase trading volumes and reducing transaction cost (through a reduction in bid/offer spreads).

A liquid government bond market will generally result in a lower borrowing cost for the government. Also, if the government bonds are liquid across all tenors, then the resulting liquid yield curve serves as a very useful benchmark for the corporate bond market and the interest rate hedging markets.

Traders in the non-government bond market and derivative markets (e.g. swaps) will typically look to take short positions in government bonds to hedge their interest rate risk as will underwriters when launching a new corporate bond issue. So the ability to short government bonds is also key to the development of the corporate bond and derivative markets.

A liquid government bond market therefore adds considerably to the quality and depth of the domestic debt capital markets.

The liquidity of the secondary bond market depends in large part on market makers. Market makers must be willing and able to continuously quote fine two way prices. This assures buyers that they can go to a market maker and quickly sell the bonds, if need be, at a fair price for reasonable amounts. This knowledge makes the bonds more attractive, generates more demand and yet more liquidity. Market makers must be able to quote for most issues (or at least a reasonable broad range of issues), most of the time

However, bond dealers cannot hold for sale the whole range of government bonds in inventory at all times. **Market makers must be able to sell bonds they do not hold in inventory.** It allows the dealers to make a market, or quote a price, for bonds they do not hold and therefore they are able to quote across the whole yield curve. Conversely, if the dealers cannot go short, they can provide a two way quote only for bonds that they own (and once those have been sold then they also must stop quoting). As a result, where dealers are prohibited from going short, markets are not as liquid as they otherwise would be.

Another difficulty arises when the buyer is an **investor who is trading outside the normal trading hours.** If the dealer currently cannot either sell short or access the market to source a bond, the order cannot be filled and the price is not fixed until the next business day. This can be discouraging for investors. If the dealer could go short, he could sell the bond there and then cover the position when the market opens.

The ability to go short is critical to the development of a **repo market**, itself useful in developing the liquidity of the government bond market.

In those markets where a dealer is allowed to go short and does sell the bond, he needs to deliver it on the settlement day. There are two options: he can either buy that bond in the market or borrow it. The fact that the trader has two options makes it easier to make the trade. At a price, he will be able to deliver the bonds he sold even if the trade takes place late in the day or after hours.

The repo market is important to the liquidity of the government bond market because it facilitates the shorting of the government bond by allowing the dealer to cover the short position. It helps the trading activity.

It is also important because it allows the dealer to hold a short position. It might be, for example, that a trade sees a profit opportunity because a particular bond is mispriced in the market: it has a lower yield than he thinks it should have and the trader expects that the price will drop. He can therefore sell the bond short, cover the sale through a repo and then buy the bond at a later date, when the price has dropped. Often, to hedge his interest rate risk the trader will take a long position in a bond which he judges is not mispriced (or is cheap), so that the net bond position is neither short nor long. This type of trading activity is very healthy for the market as it smoothes out the yield curve, eliminating points where the low liquidity has resulted in mispriced bonds. Once the mispriced points have been eliminated, the market makers will be able to give tight two way quotes more confidently because the price is less uncertain.

The repo market also allows traders to fund their portfolio. When they sell the bonds through a repo to another dealer who has gone short, they receive cash in exchange. This cash is often used to buy the bonds. Financing through repos is typically low cost financing.

The repo market is also a better market for those providing the financing: the transaction is economically similar to a secured loan and therefore lower risk. Relative to a secured loan, it has an additional advantage in that while the repo buyer provides cash he does not also transfer his liquidity: should he need liquidity he can repo or sell the bonds he received in the repo transaction. If the transaction was structured as a loan, there is no easy way to generate liquidity. As liquidity is at a premium at this time, this advantage is not negligible.

In summary, the ability to “go short” is of substantial importance to market making and to the repo market. Both are important to the liquidity of the government bond market. Going short allows the development of corporate bond markets, hedging and other risk management techniques. The ability to go short improves the price discovery process and helps stabilize the market.

The vast majority of developed financial markets allows short selling of government bonds and allows repo markets.