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A Descriptive Analysis of the Finnish Treasury Bond Market 1991–99

This paper presents a descriptive analysis of the primary and secondary market for Finnish Treasury bonds between 1991 and 1999. Our main findings are summarized as follows.

There were 232 regular Treasury bond auctions in the sample period. In 48 occasions, the Treasury auctioned additional securities the next day. In addition, there were 15 conversion auctions where the Treasury offered to exchange old bonds for new securities. The combined gross proceeds from these auctions were EUR 53 billion.

To assess the costs of issuing Treasury bonds, we investigate the difference between the net proceeds from the Treasury bond auctions and their value in the aftermarket at the time of the auction, i.e. "the amount left on the table". The amount left on the table consists of three components: a sales commission and a redemption fee, both of which are paid directly to the primary dealers, and underpricing, i.e. the difference between the aftermarket price and stop-out price. About 82% of the money left on the table in regular bond auctions, EUR 73 million, was due to redemption fees and sales commissions. Underpricing, on average 0.041% of gross proceeds, accounted for the remaining 18%, or EUR 16 million, of the money left on the table.

Trading revenues of primary dealers derive from three sources: the bid-ask spread, the appreciation of inventory accumulated through trading, and the coupon receipts of bonds in that inventory. Given the absence of inventory data, we focus on the bid-ask spread, i.e. the trading margin. When analyzing the trading margin, we compare the quoted spread with the realized spread, which we measure as the average daily transaction yield for customers minus that for sales to customers. The average realized spread equals 1.14 basis points (bps) compared to the average quoted spread 3.83 bps. The combined trading margin generated by all primary dealers over the sample period was EUR 88 million, i.e. about the same order of magnitude as the combined money left on the table in the primary market.

We also analyze the gross revenues of the primary dealers, estimated as the sum of redemption fees and sales commissions and trading margins, on an annual and per dealer basis. The largest gross revenues per dealer occurred in 1993–96. In 1997–99 the gross revenues per dealer were notably smaller due to the shrinkage in trading margins and the end to the redemption fees.

Treasury bond auctions tend to increase trading volume. There is a notable peak in inter-dealer volume and primary dealers' purchase volume from customers for the auctioned bonds on the auction day. However, there is a much larger peak in primary dealers' sales to their customers on the auction day – about four times the normal sales level, measured from the days immediately around the auction. This pattern is consistent with the notion that the primary dealers purchase a large fraction of the bonds on behalf of their customers and place them in client portfolios immediately after the auction.

Finally, we analyze the development of the price of the auctioned bonds, relative to other benchmark bonds, around the time of the auction. We find evidence of a price decrease in the auctioned bond series before the auction and an increase in its price after the auction. This pattern is strongest in 1992–94 when the funding needs of the Treasury were very large and the secondary market trading volume of Treasury bonds was relatively modest. We also document that the magnitude of the price change is inversely related to the magnitude of primary dealers' net sales of bonds to their customers. ■