The Evolution of the Government of Canada's Debt Distribution Framework

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- *In 1998, the Government of Canada adopted a new framework for distributing its debt securities to financial market intermediaries and end investors.*
- *Minor modifications to the current framework were implemented in December 2005 in response to lower government borrowing needs, the high concentration of large users in both the primary and secondary markets for Government of Canada securities, and innovations such as the growth of electronic trading.*
- *The key changes made to the debt distribution framework were an increase in the size of bids that dealers can accept on behalf of customers at auctions of Government of Canada securities and reduced minimum bidding requirements for primary dealers. These changes are expected to attract continued broad and competitive participation in government auctions. In turn, this should support the government's objectives for its debt strategy: to raise stable, low-cost funding and to maintain a well-functioning market.*

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The federal government meets its borrowing requirements mainly by issuing debt securities in domestic financial markets. Since the beginning of the 1990s, the government has issued and distributed debt securities mainly through auctions. The debt distribution framework is important to the Government of Canada for several reasons:

- A well-designed framework supports the ability of the government to sell its securities on a reliable basis at the best price.
- The debt distribution framework supports a well-functioning government securities market by promoting broad participation among dealers and investors. A well-functioning market in turn benefits the broader Canadian fixed-income market by providing investors and intermediaries with a range of assets that are free of credit risk and that also serve as effective pricing benchmarks and hedging instruments. It also allows for a more effective implementation of monetary policy. For these reasons, the market for government securities should be active, competitive, and accessible to interested parties.[1]
- In designing and implementing its debt distribution framework, the government aims to create the proper mix of obligations, privileges, and supporting arrangements for market participants that will help it to achieve its objectives.

1. See Arnone and Iden (2003) and Arnone and Ugolini (2005) for a detailed discussion on the rationale for, and objectives of, the debt distribution framework.

This article discusses how the debt distribution framework has evolved over time to enable the government to meet its debt management objectives. It begins with a brief history, showing how the government used the primary and secondary markets to develop the debt distribution framework. This is followed by a review of the most recent modifications to the framework, which became effective on 13 December 2005.

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Brief History of the Debt Distribution Framework

1867 to World War I

Before World War 1, no formal debt distribution framework existed. The domestic capital market was almost non-existent; there were no organized secondary markets; and the government's financial requirements were modest. The government nevertheless began selling domestic debt just after Confederation, in January 1868, when the new Dominion of Canada called for tenders on $1.5 million of 6 per cent 10-year bonds.[2] The government planned to accept or reject bids for various amounts of bonds at different prices, and a sizable portion of the issue was sold directly to trustees and executors, charitable institutions, and individuals. Following this first issue, the government continued to tender domestic bonds, using the proceeds to repay the foreign debt (mainly denominated in sterling) issued by the provinces before Confederation. Between 1867 and 1900, however, roughly 91 per cent of the financing was still raised in sterling and in U.S. dollars on the London and New York markets. During that period, a limited amount of treasury bills, payable in sterling, were issued and sold to non-Canadian banks in the London market and in continental Europe.

World War I to 1953

With the start of World War I, the government was increasingly forced to rely on the Canadian market to meet its wartime financing needs. As financing in traditional foreign markets like the United Kingdom and the United States became progressively less available, given those countries' own war-financing needs, the government began to issue bonds almost exclusively in Canada. The sharp increase in the issuance of domestic bonds in an underdeveloped domestic market led to a change in the method of issuing Government of Canada bonds. The tender system was replaced by a system of syndication[3] in which primary distributors (banks and investment dealers) purchased bonds from the government for subsequent sale to the general public in exchange for a commission.

During World War I, large quantities of treasury bills (in Canadian dollars) were sold directly to chartered banks to provide financing to the government between war bond issues. In the absence of a secondary market, banks held treasury bills until maturity and did not regard them as a highly liquid asset. Canadian banks continued to use call loans in the New York market as an important source of funds to meet sudden demands for liquidity (see Bank of Canada 1972). The sale of treasury bills was discontinued in the mid-1920s, and a first auction of treasury bills was held in 1934.[4] Regular fortnightly auctions were introduced in 1937.

Financing during World War II was arranged much as it had been during Word War I, except that the government more directly targeted retail investors, whose savings had surged during World War II.[5] Although the government's financial requirements dropped significantly after World War II, a well-developed secondary market for bonds had grown in response to the extensive use of the domestic market to meet the government's borrowing needs. However, an active secondary market for treasury bills still did not exist.

1953 to 1998

The year 1953 was pivotal for the development of the debt distribution framework, when a formal designation

2. For more details, see Bank of Canada (1980) and Branion (1995).

3. The syndication system was in place until the beginning of the 1990s.

4. Shortly after the opening of the Bank of Canada in March 1935, the Bank, as fiscal agent of the Government of Canada, was called on to provide advice on the issuance of Dominion bonds and treasury bills, and to handle the technical aspects of the new issues.

5. The government issued two war loans in 1940 and nine Victory loans between 1941 and 1945, thus providing a total of $13 billion to retail investors. A co-operative method was established to sell these securities under the direction of the National War Finance Committee. National, provincial, and local committees sold the securities to individual investors, and these securities were also available through payroll deduction (Bank of Canada 1980; Watts 1993, 49).

Chart 1

Financing Requirements of the Federal Government

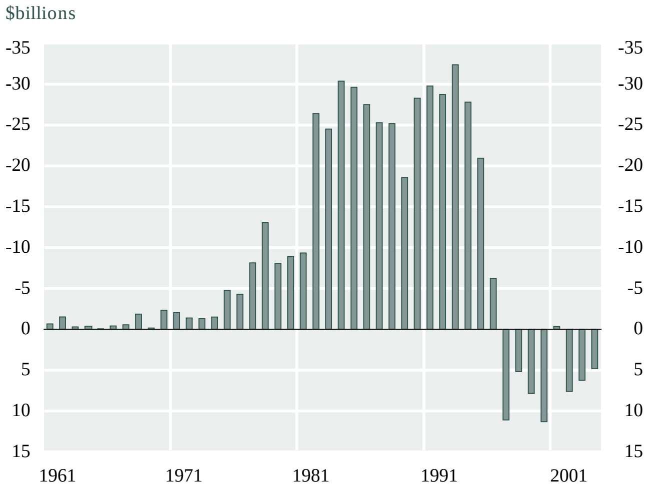
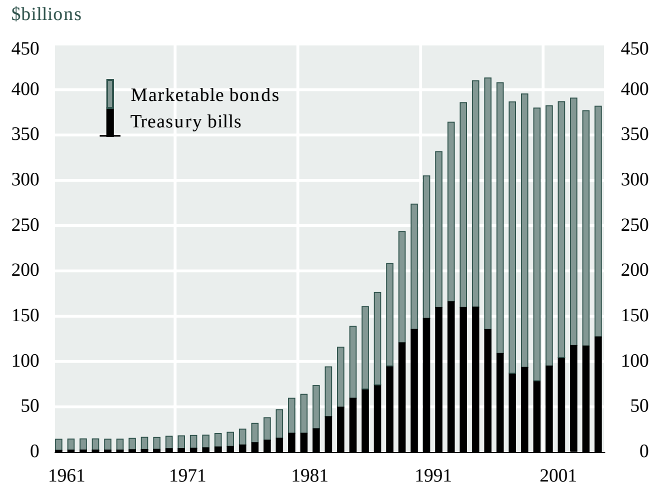


Chart 2

Outstanding Domestic Marketable Debt



of market "jobber" for treasury bills was established. The market-jobber function was created that year primarily to develop the domestic money market to help the Bank of Canada in the conduct of its monetary policy. The Governor of the Bank also saw the need for a secondary market for treasury bills to help develop other money market instruments and to enhance the efficiency of capital markets (see Fullerton 1986). As part of its strategy to expand the distribution of treasury bills beyond banks, the Bank invited interested investment dealers to assume jobber responsibilities (market-making or inventory-positioning) in exchange for privileged access to the Bank for the financing of their inventories of short-term (less than three years) Government of Canada securities.[6] A year later, the Bank encouraged the chartered banks to initiate day-to-day loans with market jobbers. These measures, combined with other initiatives implemented in the 1950s and 1960s, provided benefits to the government beyond those associated with the greater effectiveness of monetary policy.[7] In particular, the development of the money market widened the investor base for short-term government securities, which, in turn, contributed to the low cost of funding for the government.

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In the 1970s and 1980s, the government increased its issuance of bonds and treasury bills to meet its growing financing requirements (Chart 1). Along with the growing size of the government debt (Chart 2), the secondary market for bonds developed to the point that the government and the Bank decided to reintroduce auctions for domestic marketable bonds.[8] The move began with the issuance of 2-year bonds in 1983, followed by a gradual expansion to other maturities. The last syndicated offering of regular coupon-bearing bonds took place in December 1991, for 30-year bonds.[9] The government's move to auctions for the issuance of securities denominated in its domestic cur-

6. Although dealers had to meet a set of requirements to obtain the status of jobber, acquiring the designation was not limited to a set of rules. The Bank regarded these requirements as guidelines and awarded jobber status in recognition of the dealer's presence in the Government of Canada securities market.

7. Providing the details of the measures implemented to develop a secondary market for treasury bills is beyond the scope of this article. See Lundrigan and Toll (1997) and Howard (1998) for more information.

8. Attracted by potential business opportunities as a result of growing government debt, foreign banks and dealers entered the Canadian fixed-income markets as primary distributors.

9. For Real Return Bonds (RRBs), syndicated offerings were used until the first single-price (Dutch) auction, which took place in April 1995. A Dutch auction is one where bonds are sold at the lowest accepted price (or highest yield), i.e., the price necessary to sell the full amount of the issue.

Chart 3

Treasury Bills: Share of Secondary Market Trading

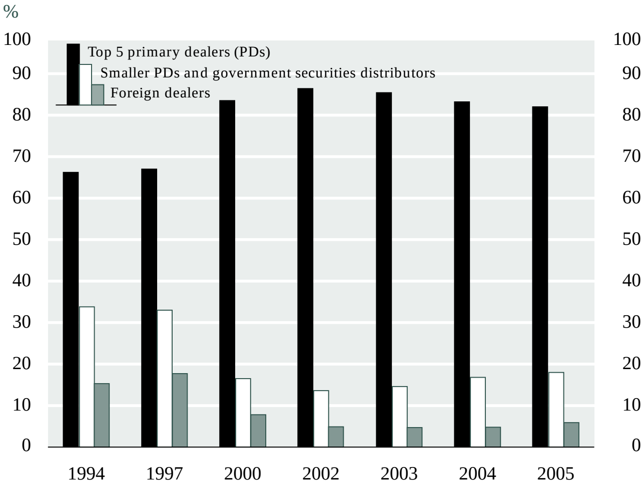
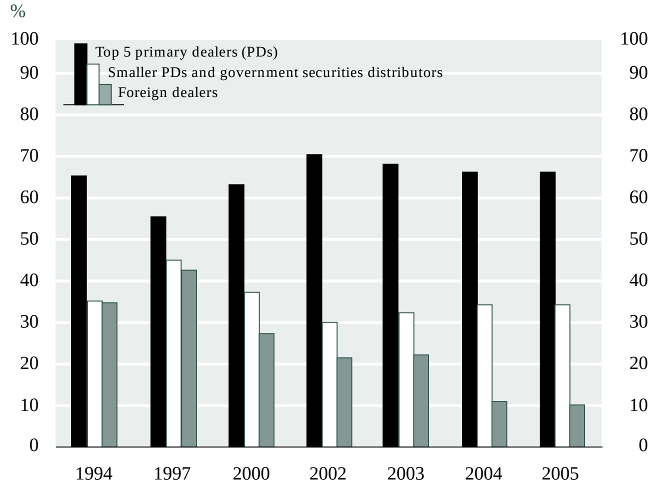


Chart 4

Bonds: Share of Secondary Market Trading



rency was also consistent with the evolution of similar practices among other major sovereign countries.[10]

In the 1970s and 1980s, along with the growing size of the government debt, the secondary market for bonds developed to the point that the government and the Bank decided to reintroduce auctions for domestic marketable bonds.

At that time, a maximum amount for competitive and non-competitive bids applied for both primary distributors and their customers.[11] As well, primary distributors and market jobbers were both expected to maintain a continuous presence in the secondary market and to participate regularly in auctions, at prices consistent with the fair market prices of securities. At every auction, market jobbers had to submit bids at reasonable prices comparable with those of their respective secondary market share, but with no specific requirements to win a particular amount of securities. Dealers' bidding limits included customers' orders, and auction participants were not required to report their net positions.

1998 to 2005

In 1998, the government made several important changes to support the integrity of the debt distribution framework.[12] The changes were motivated by: (i) expected lower auction sizes, owing to reduced government financing requirements (see Chart 1); (ii) the consolidation among major banks and investment dealers that had translated into increased concentration in the trading of Government of Canada securities (Charts 3 and 4);[13] and (iii) the growing influence of individual market participants (investors and dealers). Together, these factors were viewed as having the potential to create excessive concentration (or "squeezes") in the Government of Canada securities market that could reduce investors' and dealers'

10. Most industrialized countries use a debt distribution framework to market government securities. Compared with Canada, the debt distribution frameworks in other developed countries tend to require fewer obligations for dealers at auctions but more obligations in secondary markets, such as continuous market-making and minimum trading volumes during a given period of time.

11. Dealers and customers were allowed to submit non-competitive bids in addition to any competitive bids at each auction. Non-competitive bids were allotted at the average yield of the accepted competitive bids for each tranche of treasury bills and nominal bonds. For RRBs, non-competitive bids were allotted at the highest real yield of accepted bids. These rules are still in place. Non-competitive bids were introduced to favour broad participation at auctions, especially by non-sophisticated investors. Details are provided in Bank of Canada (1993, 1996a).

12. The government published its first discussion paper dealing with the proposed changes in December 1996. A second paper was released in April 1998, and a final document with the new rules was published in August 1998. See Bank of Canada (1996b, 1998a, 1998b).

13. The concentration remained high after 1998 and was a factor in the 2005 review (see the discussion in the next section).

willingness to acquire and trade these securities, thereby reducing liquidity and ultimately increasing the government's borrowing costs.[14] Such squeezes had occurred in the U.S. Treasury market in the early 1990s.

In response, the government introduced a number of initiatives to maintain the integrity of the auction process. Among the key initiatives, distinct bidding limits were established for dealers and customers. To reduce the risk that a market participant could accumulate an undue amount of securities, bidders were required to report their net positions in the securities being auctioned.[15] The Investment Dealers Association of Canada (IDA) introduced its Policy No. 5, "Code of Conduct for IDA Member Firms Trading in Domestic Debt Markets," establishing principles for trading securities in the fixed-income market in Canada. As well, primary distributors and market jobbers were replaced by government securities distributors (GSDs) and a subgroup of GSDs, defined as primary dealers (PDs). Like market jobbers, PDs were required to maintain markets in Government of Canada securities, and the new rules required minimum participation at each auction at a reasonable price as defined in the terms of participation. This reduced the risk of holding an "uncovered" auction in which the government could not sell all of the securities it offered for sale. Other GSDs were not required to make markets or to participate at each auction of government securities. In exchange for greater responsibilities, PDs were granted higher bidding limits on their own behalf and on behalf of customers than those allotted to other GSDs.[16] A further modification was made to support the secondary market for government securities. All GSDs' bidding limits at auctions were tiered, consistent with both their performance in auctions and their trading activity in secondary markets. These modifications were also designed to achieve the balance of interests that is necessary to make the debt distribution framework effective.

14. "Squeezes occur when an auction participant, or group of participants, gains control of the stock of a security and withholds the supply from the cash or repo markets" (Bank of Canada 1998a). In a market where excessive concentration is persistent, dealers are reluctant to post quotes, which negatively affects the price-discovery process, thereby undermining the integrity of the auction process and the liquidity in the secondary market.

15. For example, a dealer or a customer might have acquired a significant quantity of a security that was reissued, which can be accomplished in several ways. Section 6.2 of the "Terms of Participation in Auctions for Government Securities Distributors" provides the rules that apply to the reporting of net positions. The same rules can also be found in section 4.2 of the "Terms of Participation in Auctions for Customers." Both are available on the Bank of Canada's website at www.bankofcanada.ca/en/markets/markets_auct.html.

16. PDs were granted other advantages not extended to GSDs, such as being the privileged counterparties of the Bank of Canada for the conduct of monetary policy.

2005 Revisions to the Debt Distribution Framework

Factors leading to the review

In October 2004, the government published a consultation document on the Bank of Canada's website to generate discussion of the potential changes to the debt distribution framework.[17] The review was motivated by the continued existence of several factors that had led to the previous review in 1998. Overall, the analysis indicated that the debt distribution framework had met its objectives of raising stable, low-cost funding for the government while supporting a well-functioning market.[18]

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Based on some ongoing trends, however, the government felt that minor adjustments were warranted. First, customers' winnings at bond auctions had declined steadily since 1999 (Table 1).[19] The winnings of foreign dealers had also declined compared with those of the large domestic PDs, mainly as a result of the departure of three U.S. PDs from the Canadian

17. For the complete consultation document, see Bank of Canada (2004). See also Bank of Canada (2005a, 2005b, 2005c).

18. Changes to the debt distribution framework were supplemented by initiatives to maintain a well-functioning market, including focusing on regular issuance in key maturity sectors for bonds and treasury bills, building large and liquid benchmarks to target sizes established in consultation with market participants, and introducing a new buyback program to support the issuance of new benchmark bonds. For further details on these initiatives, see the various annual "Debt Management Strategy" documents published on the Department of Finance website at www.fin.gc.ca/purl/dms-e.html.

19. Customers' winnings at RRB auctions have been higher because RRBs are difficult to obtain in the secondary market. RRBs are considered buy-and-hold securities and are not traded as actively as other Government of Canada securities.

Table 1

Distribution of Primary Auction Shares among Participants (%)

	1999	2000	2001	2002	2003	2004	2005
Bonds, excluding Real Return Bonds							
Primary dealers (PDs)	88.7	89.7	85.2	90.5	91.9	96.8	94.5
Non-PD government securities distributors (GSDs)	2.6	2.3	6.9	3.2	1.7	1.5	3.9
Customers	8.7	8.1	7.9	6.3	6.3	1.8	1.6
Foreign dealers*	31.4	28.6	19.0	17.9	15.9	18.6	14.0
Real Return Bonds							
PDs	48.3	45.7	39.4	50.7	33.9	51.3	49.1
Non-PD GSDs	4.9	2.0	4.4	1.3	0.6	0.9	0.8
Customers	46.9	52.3	56.2	47.9	65.5	47.8	50.2
Foreign dealers*	30.6	15.4	10.0	9.1	8.6	9.2	12.4
Treasury bills							
PDs	84.1	86.7	87.0	84.1	84.9	85.2	89.1
Non-PD GSDs	3.3	1.3	1.6	1.7	1.8	1.8	2.3
Customers	12.6	12.0	11.4	14.2	13.3	13.0	8.6
Foreign dealers*	16.1	13.4	14.3	13.9	8.7	12.0	13.7

* Foreign dealers are also included in the PD or non-PD GSD categories.

fixed-income market in 2001. As well, the concentration among the larger dealers trading in the secondary market was still high (Charts 3 and 4). In 1997, 30 dealers were distributing Government of Canada securities, compared with 19 today. Finally, the government noted an emerging trend in the greater use of electronic systems for trading fixed-income securities. Trading volume using electronic trading systems is growing but is still a very small percentage of the market.

The revisions

The changes to the debt distribution framework, which became effective on 13 December 2005, centred on two themes: broadening access to the auctions and maintaining the integrity of the auction process. Table 2 summarizes the changes, which are described below. Readers may also refer to the new “Terms of Participation in Auctions for GSDs and Customers,” as well as to the “Standard Terms,” which are available on the Bank’s website.[20]

1. *Measures to attract broad and competitive participation at auctions*
   The competitive and non-competitive bidding limits that PDs and GSDs can submit on behalf of customers were increased. These changes were introduced to enable dealers to accept larger orders from customers and to provide greater access for customers at auctions. The government also affirmed that qualifying Alternative Trading Systems (ATSs)[21] could become GSDs. ATSs have the potential to provide an additional channel for the government to distribute its debt and to broaden and increase the participation of non-sophisticated investors at auctions. Finally, the government reduced the bidding obligations of PDs in order to support auction participation.[22]
2. *Measures to maintain the integrity of the auction process*
   All GSDs that are not PDs are required to participate periodically in auctions. This requirement was established to promote active participation in auctions among a range of participants in the domestic capital market.

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In designing the framework for the distribution of Government of Canada securities, the government sought to balance a number of interests. Broad participation is encouraged by allowing market intermediaries (i.e., GSDs) and customers to bid at auctions. GSDs

20. Details are available at www.bankofcanada.ca/en/markets/markets_auct.html under “Rules and Terms” and “Standard Terms for Auctions.”

21. ATSs are electronic platforms used for the trading of securities.

22. The method of calculating the bidding limits of GSDs has also been modified to better reflect their participation in a broad range of government securities operations. See section 9 of the “Terms of Participation in Auctions for Government Securities Distributors” at www.bankofcanada.ca/en/auction/aucpa1v2.pdf for additional details.

enjoy a privileged status at auctions by virtue of the requirement for customers to submit orders through them. The resulting knowledge of customer orders provides distributors with market information that can help them to make more informed bids at auctions. Customers receive indirect assured access by submitting their bids (competitive or non-competitive) through GSDs. Customers may use as many GSDs as they choose to submit their bids. PDs are awarded higher bidding limits relative to other GSDs on the basis of their performance at auctions and their trading activity in secondary markets.[23] Higher bidding limits go hand-in-hand with bidding obligations for PDs, in order to support the consistent success of auctions.

23. PDs are also the sole counterparties: (i) for the Bank of Canada's open market operations to support the implementation of monetary policy; (ii) for term-repo operations that are typically conducted to offset the increase in the demand for bank notes; and (iii) for securities lending from the Bank of Canada's balance sheet to temporarily support the liquidity of the Government of Canada securities when these securities are unusually expensive on the repo market.

Table 2

Changes to the Debt Distribution Framework†

	Competitive bidding limits		Non-competitive bidding limits		Acceptable price range for submission of bids at auctions		Minimum participation requirements	
	1998	2005	1998	2005	1998	2005	1998	2005
Primary dealers (PDs)								
For own account	Treasury bills: 25 per cent Bonds: from 10–25 per cent	No change	$3 million	No change	Cut-off yield + 5 basis points**	**Cut-off yield + 10 basis points**	50 per cent of their maximum bidding limit at every auction	No change
For customers	Limited to the PD's bidding limit	**Limited to 25 per cent of the tender**	$3 million	**• $10 million • $3 million for RRBs***	None	No change	None	No change
In aggregate	Limited to 40 per cent of the tender	No change	$6 million	**• $13 million • $6 million for RRBs**	None	No change	50 per cent of their maximum bidding limit at every auction	No change
Government securities distributors (GSDs)								
For own account	Treasury bills: 10 per cent Bonds: from 1–9 per cent	No change	$3 million	No change	None	No change	None	**One successful bid (competitive or non-competitive) every six months on their own behalf or on behalf of customers**
For customers	Limited to the greater of 5 per cent or the GSD's bidding limit	**Limited to 10 per cent of the tender**	$3 million	**• $10 million • $3 million for RRBs**	None	No change	None	None
Customers	25 per cent	No change	$3 million	**$5 million**	None	No change	None	No change

† Changes appear in bold.
* Real Return Bonds
** Secondary market yield + 5 basis points in case of strong RRB auctions; on a trial basis since 1 June 2004

Conclusion

The debt distribution framework is evolving in response to changes in market conditions and in the government's funding requirements. The trend towards greater concentration in both the primary and secondary markets, along with financial innovations, will continue to represent a challenge for the future effectiveness of the framework. A sound and effective debt distribution framework is key to the government's objectives for its debt strategy of raising stable low-cost funding and maintaining a well-functioning market.

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