Bank of Canada  **Banque du Canada**

Submission on the CSA Alternative Trading System ("ATS") Proposal

On 2 July 1999, the Ontario Securities Commission, together with the other members of the Canadian Securities Administrators ("CSA") staff, published for comment a series of documents collectively referred to as the "Alternative Trading System Proposal" (the "Proposal") and requested comments from interested parties. The Bank of Canada has prepared a submission which comments on the issues raised, with particular attention paid to the implications for Canadian markets for fixed-income securities. The Bank of Canada submission is provided in the text that follows.

A.General Comments

The Bank of Canada welcomes the CSA's initiative and consultative process in proposing new regulation for ATSs. We appreciate the opportunity to respond to the CSA Proposal directly. The Bank of Canada concurs with the CSA that electronic trading systems represent a significant source of change for financial markets, and that there is a need for an appropriate regulatory framework within which all markets both new and traditional, can operate. In terms of the Proposal's transparency provisions, the implications for fixed-income investors are generally viewed as positive by the Bank of Canada. Specifically, the Bank of Canada has, for several years, supported developments that increase the level of transparency in the Government of Canada (GoC) securities market such as screen-based information systems that display prices and trades in the secondary market for GoC securities.

In what follows, we provide a brief description of how the fixed-income (and government securities) markets are structured and how trading practices differ from equity markets. We also provide some examples of where the regulation contained in the CSA, which has largely

been informed by equity markets concerns, may not necessarily be appropriate or applicable to fixed-income markets. Note that the comments provided below are not meant to be exhaustive or complete, but are presented to illustrate the potential impact of the CSA's ATS Proposal on fixed-income markets.

B.Current Market Microstructure

As opposed to most equity markets, fixed-income markets in Canada are multiple-dealer (or quote-driven) markets. Under this market structure, dealers (market makers) intermediate all transactions. The microstructure of government securities or, more generally, fixed-income markets is most easily understood by examining how trading takes place in these markets. There exist two parallel and, in effect, separate markets: a public trading environment were customers trade exclusively (and bilaterally) with market makers —what we call the customer (public) sphere— and a interdealer trading environment, where dealers trade among themselves exclusively —what we call the interdealer sphere. The interdealer sphere is segmented further into two trading mechanisms. Dealers have the choice of either trading bilaterally with each other or trading indirectly and anonymously with each other via an interdealer broker (IDB). Given this structure, customers seeking market making services (i.e., liquidity) will be served exclusively by dealers (the market makers) and, thus, do not trade with each other for these services.[1] Moreover, dealers have exclusive access to interdealer brokers.

It is important to note that the (final) customer (or account) in fixed-income markets refers almost exclusively to financial institutions such as mutual funds and insurance companies (and other non-market maker broker-dealers). This differs from equity markets where a much greater proportion of customers are individual (personal) investors. Institutional investors differ from personal investors in their degree of sophistication, the amount of market information they posses or have access to, and their ability to extract rents from dealers.

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To be exact, market makers (dealers) act as principle when trading with customers. There are instances when dealers will act as agents for customers in a fixed-income transaction, but this implies that the dealer is not acting as a market maker in this instance (and, by definition, customers are not seeking liquidity).

Canadian multiple-dealer debt markets also differ from Canadian, and most foreign equity markets in the fact that they are decentralized, whereas equity markets are generally centralized. Dealer and customer orders alike do not "meet" or get executed in a single physical (or electronic) location. Nor is the market integrated in such a way that customer orders (via brokers acting as agents) get (electronically) matched against the best bid or ask.[2] Given the current lack of transparency in Canadian marketable debt markets, it is possible for simultaneous customer-dealer transactions to occur at different prices. As transparency in the interdealer sphere improves, as *data consolidators* similar to CanPX or GovPX take hold, customers will be able to assure themselves of trading at prices equal to, or better than, the best bid or ask price available in the interdealer sphere (also known as the inside spread). Finally, it should be emphasized that, because trading in fixed-income securities takes place via multiple dealers and in two separate trading spheres, there does not exist a *primary* or *central* marketplace as is the case for most Canadian equity markets.

C.IDBs as Marketplaces

The definition of a *marketplace* in the CSA Proposal effectively excludes traditional dealer (to client) trading activity from the marketplace concept. However, interdealer brokers (IDBs) will, under this definition, be considered marketplaces. This, in turn, implies that the IDB *marketplace participants* are the dealers in this case, since they are the only entities that have access to IDBs. Under the assumption that IDBs will choose to be ATSs, the Proposal's main impact on the current structure of Canadian fixed-income markets comes from the market consolidation/integration regulation.

Given the fact that there are currently several IDBs, the market-integration provisions imply that dealers subscribing to only one IDB would not only be able to view the (standing) orders at all IDBs, but would be able to execute against any one of those displayed orders even when that dealer does not subscribe to that IDB's services. Given that most fixed-income market makers subscribe to all existing fixed-income IDB systems, this market-consolidation provision would not, *at this time*, significantly increase the degree of market-consolidation

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2 For example, even though NASDAQ operates as an OTC market (as does Canadian fixed-income markets), it is nonetheless integrated or linked together electronically. Dealers acting as market makers in the NASDAQ market get orders routed to them if they have the best standing bid or ask quotations.

that currently exists in the interdealer sphere. Moreover, the structure of the interdealer sphere would be little changed with the continued existence of two parallel trading environments.

However, going forward, a *major structural change* would occur if a client-to-client ATS arrived on the scene. This would engender a significant change in the structure of the fixed-income market, since customers would not only be able to trade among themselves, which in itself would alter significantly the current structure, but would have access to execution against orders in the dealer sphere. This would remove the effective separation that currently exists between the interdealer sphere and the customer sphere, centralizing fixed-income markets.

This may affect the current fixed-income (and the government securities) market structure in a number of ways. First, under the proposed CSA regulation, the future arrival of an ATS platform that allows customer-to-customer fixed-income trading would necessarily reduce the size of the customer base transacting with dealers. Customers will have the option of bypassing the current set of dealers to complete trades. This ATS would essentially act as a new competitor to the current set of dealers, possibly engendering reduced bid-ask spreads (reduced trading costs) as dealers try to hold on to their market shares.

Another, likely more profound, consequence of the proposal is that the dynamics of market making will be fundamentally altered. Currently, the two-sphere parallel trading environment permits dealers to anonymously unwind risky inventory positions without directly signalling the size (and direction) of their trade intentions, thus avoiding the possibility of other dealers taking advantage of them with this information. Basically, this parallel trading environment allows the dealers to share their position risks, taken on while trading with customers, with the rest of the dealer sphere. Given that the bid-ask spread the dealer offers to the customers depends on the dealer's ability to manage its position risks, and this in turn depends partly on the setup of the IDB system and the two-sphere nature of the market, it is possible that the public customers may be subject to less liquidity (wider bid-ask spreads) as a result of the proposed ATS regulation and the arrival of a customer sphere ATS that has access to IDBs (and the interdealer sphere). In summary, because the Proposal introduces principles associated with agency auction markets (like the TSE) to quote-driven dealer markets, and the fact that the level of support in terms of market making afforded by the dealer is critical,

it could be argued that attempts to undermine the role of the dealer could seriously reduce the liquidity and efficiency[3] of the secondary market and could ultimately raise the cost to issuers of government securities.

There are likely to be other more subtle positive or negative implications from the proposed market-integration regulation that would require further study.

D.Terminology

Throughout the Proposal, there are often references to market structures that do not exist in fixed-income markets. We provide a few examples here. There are references to *order books* or *limit orders*. Fixed-income dealer's don't hold customer limit orders (on their books) as is the case for the NASDAQ market makers. As such, customer or investor limit orders do not exist in these markets and in turn there are no order books. The term *board lots* is not used in fixed-income markets.

E.Implications of Regulation Aimed at Reducing (Equity) Fragmentation

F.Phase in of Consolidation Plan

The market-consolidation/integration plan proposed by the CSA would require that each ATS (IDBs) be linked to a principal market. However, without an existing principal market for fixed-income securities it is not clear how this consolidation plan can be implemented.

G.Registering as an Exchange (per cent rule)

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3 Efficiency is related to the price discovery process in that, a market that functions well (and is efficient) is one that incorporates all information concerning the value of an asset into its price.

Under the Proposal, if trading volumes (in any type of ATS security) on an ATS are equal to, or greater than, 40 per cent of the average daily dollar value trading volume in that security on all ATSs that trade in it, that ATS would be required to register as an exchange. This type of percentage rule may translate into a fixed-income IDB becoming an exchange, which in turn would require that IDB to provide a listing function for fixed-income issuers such as the Government of Canada. It is unlikely that the Government of Canada would adhere to listing regulations.

This is an example of the Proposal's attempt to limit the degree of fragmentation that would be engendered with the proliferation of equity ATSs. However, as mentioned above, fixed-income markets are currently decentralised (fully fragmented) and, thus, it is not clear how efforts to maintain a certain degree of centralization for equity markets can be equally applied to fixed- income markets without affecting, perhaps negatively, the liquidity and efficiency of these markets.

H.Trading Rules and Market Regulation

I.Market Regulation SROs

The proposed Trading Rules are those that will be enforced by an SRO that ATSs must either join (i.e., an exchange) or have a contract with. Given the current lack of an existing national SRO for market regulation, the CSA Proposal suggest that ATSs will use existing exchanges to do such regulation. The problem with this is that exchanges have only regulated trading in equity securities. Given that IDBs will be considered ATSs under the Proposal, exchanges are likely to be ill suited to regulate trading in fixed-income securities. Moreover, it is unclear how market-regulation surveillance performed by an exchange would not conflict with pre-existing Investment Dealers Association (IDA) regulations such as the IDA Code of Conduct (a.k.a. IDA Policy #5).

J.Front Running

The Bank's interpretation of the Proposal's front running regulation is that front running occurs when a *marketplace participant* (dealers are marketplace participants in IDB type ATSs) transacts in a *marketplace* with the knowledge of an existing or potential order to transact in the same security on a marketplace. (Or, when a marketplace participant informs somebody else of the existing or potential order.)

How does this influence fixed-income trading practices? The extent of the affect hinges on the underlined passage. Under the current market structure, dealers perform their market-making in a two-stage process. When trading with customers, dealers will rebalance their inventory position in the interdealer sphere (or, alternatively, wait for an offsetting customer order or hedge their position in the futures market). Given that dealers have proprietary knowledge of their own customer orders, one could argue that dealers are in essence always front running the other dealers as they rebalance their inventory using interdealer trades. Dealers know that this is the nature of the game and trade with each other in the interdealer sphere given this mutual awareness. However, because existing and potential customer (dealer-to-customer) orders are *not* occurring in a *marketplace* (IDBs), dealers would not be in violation of the front running rules (and, thus, would not have to display publicly their customer orders) under the Bank's interpretation of the proposed ATS regulation.

It should be made explicitly clear, however, whether the Proposal's front running regulation, applies only to front running transactions that occur in a *marketplace* (in an ATS). If this underlined phrase (*on a marketplace*) were left out of the definition of front running, then this regulation would likely seriously impinge upon the current two-stage trading process. In this case, in order to comply with the proposed regulation it is probable that dealers will be forced to reveal their proprietary customer order flow to IDB marketplace participants (other dealers) if they chose to trade in an IDB. This would likely have a material negative impact on the liquidity the dealers would offer to customers.[4] At a minimum, it would likely reduce

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4 This is one example where greater transparency, the real-time display of customer-dealer transactions, is likely to be detrimental to the quality of fixed-income markets. Delayed reporting of these trades, would likely not be detrimental to the efficiency and liquidity of the markets. The concerns around reporting dealer-customer fixed-income transaction parallel concerns being voiced about the London Stock Exchange's delayed reporting of large transactions. Note that there is currently no definitive

the amount of trading that dealers conducted via IDBs.

K.Short Selling Does Not Represent Market Manipulation

A dealer in fixed-income markets (the government securities market in particular) sells "short" a security it does not own by carrying out a parallel transaction in the repo market. In fact much of the repo market activity stems from the need to cover short sales. When it comes time to deliver the security the dealer does not own, the dealer will enter into a repo transaction (a reverse repo transaction to be precise) with another dealer or a customer. The dealer can close out its repo position some time in the future by purchasing the cash security. Short sellers in the fixed-income market are almost exclusively dealers. This short selling allows dealers to leverage a relatively small amount of market-making inventory into a much greater amount of inventory, aiding the dealer in providing its market-making services to customers. Note also that dealers can use short sales to hedge their (long) undesired inventory positions.

Therefore, selling a cash government security short does not necessarily imply market manipulation nor a dealer's desire to move the price of a particular security but often reflects the natural course of market-making business for dealers. Restricting the dealers' ability to sell short may, in fact, reduce market liquidity since, as mentioned above, the dealers' market- making activities are influenced by their ability to hedge their undesired inventory positions and their ability to fund these positions.

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view, in academic circles, on the appropriate level of dealer-customer transaction transparency.