

Crisis facilities as a source of public information

by Lerby Ergun

Financial Markets Department
Bank of Canada
lergun@bankofcanada.ca



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Excerpt

During the COVID-19 financial market crisis, central banks introduced programs to support liquidity in important core funding markets. As well as acting as a backstop to market prices, these programs produce useful trading data on prevailing market conditions. When summary information from this data is shared publicly, it can help market participants understand current conditions and aid the recovery of market functioning.

Topics: Financial institutions, Financial markets, Market structure and pricing

JEL codes: C, C5, C58, D, D5, D53, D8, D83, G, G1, G12, G14

Extrait

Pendant la crise qui a secoué les marchés financiers lors de la pandémie de COVID-19, les banques centrales ont instauré des programmes visant à maintenir la liquidité des marchés de financement essentiels. En plus de soutenir les prix de marché, ces programmes permettent de recueillir des données sur les opérations, qui éclairent sur les conditions de marché courantes. La publication d'informations sommaires qui sont dégagées de ces données permet aux participants aux marchés de mieux cerner les conditions qui prévalent et contribue à rétablir le bon fonctionnement des marchés.

Sujets : Institutions financières; Marchés financiers; Structure de marché et fixation des prix

Codes JEL : C, C5, C58, D, D5, D53, D8, D83, G, G1, G12, G14

Introduction

In early March 2020, financial markets around the world became extremely volatile because of the significant economic uncertainty caused by the COVID-19 pandemic. Further, the need for cash caused large selling pressures in fixed-income markets, and dealers started to show signs of hitting their capital constraints (Fontaine et al. 2021). These pressures added to the large reduction in market liquidity and further fall in prices. As prices fluctuated widely, market participants reassessed the valuation of their securities, which introduced valuation uncertainty. Because fixed-income and core funding markets are central to the transmission of monetary policy, the Bank of Canada introduced 10 extraordinary programs to restore market functioning (see Johnson (2023) for a discussion on the implementation of these facilities). Arora et al. (2020), Arora et al. (2021), and Fernandes and Mueller (2023) document that liquidity in the bond market returned to normal shortly after the Bank announced and launched these programs.

These types of programs can affect financial markets through several channels. Duffie and Keane (2023) lay out three benefits of such programs, namely that they:

- free up intermediaries' capital
- signal to markets that, in times of crisis, these assets will remain liquid
- keep future volatility in check

The literature on the benefits of public price information suggests that a possible fourth benefit could arise from these liquidity facilities. Having the Bank as a central trading partner, these programs accumulate detailed trading information. By anonymizing and aggregating the trade information at the security level, a central bank can balance the trade-off between protecting market participants' sensitive data and providing valuable public information that can help restore price discovery and market functioning. This is because the clarity this published information provides can help market participants regain trust in their valuations and more clearly understand other participants' valuations. While this is not a primary justification for establishing such facilities, it can enhance their overall benefits when implemented effectively.

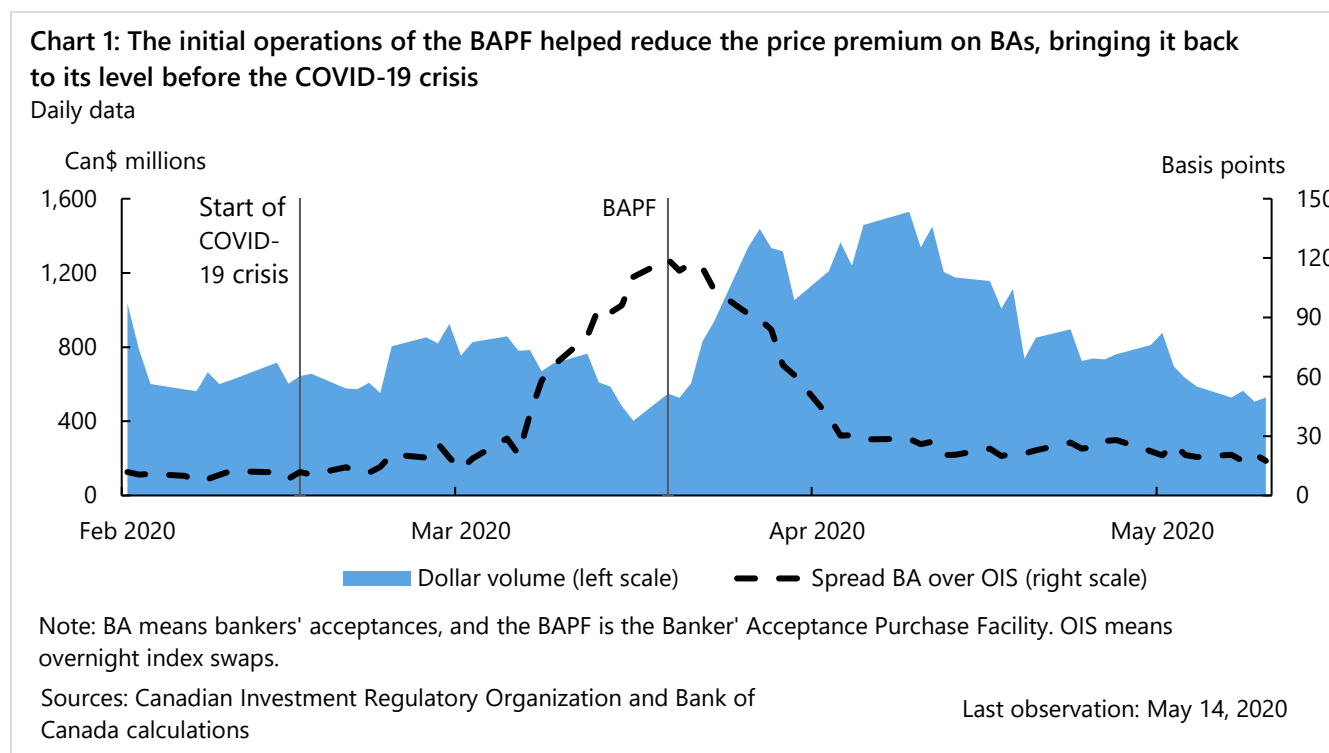
Publicly observed prices play an important role in the functioning of financial markets. They provide insight into current market conditions, fostering a shared understanding among market participants. This shared reference point helps participants negotiate a price and engage in mutually beneficial trades. This is especially true in markets where traded prices are not transparent. Take, for instance, the second-hand car market. The Kelley Blue Book offers a fair market price range for used cars, drawing from data collected across various dealerships. This public source of information can help sellers and buyers better understand the current market conditions and have a common reference point for negotiating. For dealers, the Blue Book value can help set expectations for a car's resale value and give dealers greater confidence in their ability to resell cars.

An illustrative example: The Bankers' Acceptance Purchase Facility

A market where this benefit could have potentially played an important role in Canada is the market for bankers' acceptances (BA). During the pandemic-related financial market turmoil, the BA market, which was an important short-term funding market at the time, became particularly stressed. Before the transition from the Canadian Dollar Offered Rate (CDOR) to the Canadian Overnight Repo Rate Average (CORRA) in 2024, these securities were a key source of short-term funding for small, medium and large corporations

(see McRae and Auger (2018) for a detailed description).¹ BAs are securities issued by corporations and guaranteed by commercial banks. After issuance, they are traded bilaterally, and buyers are easy to find. Prior to the pandemic, investors considered BAs to be safe and liquid assets, essentially a place to park cash in short-term assets that could be liquidated in times of need.

As happened with many other markets around the world, the COVID-19 crisis led to a complete halt in the BA market in Canada. Toward the end of February 2020, investors started selling BAs to secure cash, which initially increased the trading volume of BAs (**Chart 1**, shaded area). By March, investors shifted to holding on to their cash, leading to a decrease in demand for BAs and an increase in the demand to sell existing ones. This sudden shift caused the yield on BAs to rise (**Chart 1**, dashed line).

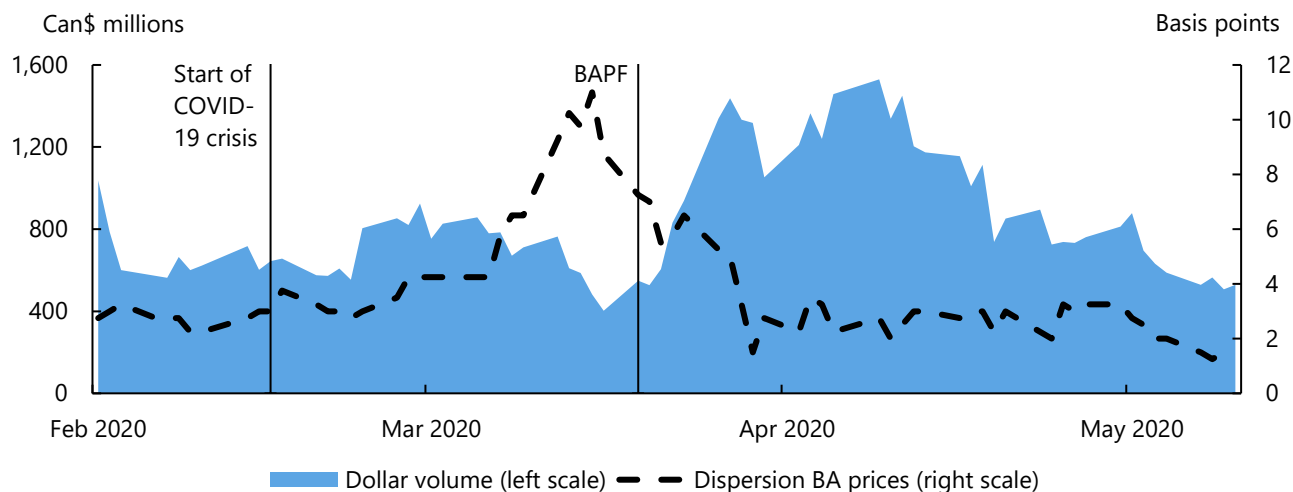


As mid-March approached, investor reluctance to purchase BAs led to a near-complete freeze in the BA market. This resulted in a decline in trading volume and a greater dispersion in traded prices (**Chart 2**, dashed line), both signs of investors' uncertainty of their valuations and their assessment of other investors' valuations.

¹ CDOR was based on the rate in the BA market. Therefore, with the discontinuation of CDOR as the primary Canadian interest rate, the BA market has also since ceased to operate. As CDOR has been replaced by CORRA, a repo rate-based market benchmark, some original investors in BAs have transitioned to bearer deposit notes, government treasury bills, term repos and other substitute money-market instruments.

Chart 2: The initial operations of the BAPF contributed to the recovery of trading volumes in the secondary market and reduced the dispersion in traded prices

Daily data



Note: BA means bankers' acceptances, and the BAPF is the Bankers' Acceptance Purchase Facility.

Sources: Canadian Investment Regulatory Organization and Bank of Canada calculations Last observation: May 14, 2020

Since the BA market was, at the time, a crucial market for small and medium-sized companies to obtain necessary cash and cover their expenses, the Bank intervened. On March 13, the Bank announced the Bankers' Acceptance Purchase Facility (BAPF), which was designed to provide funds to BA holders by purchasing these securities in the secondary market. On March 23, the Bank started offering to purchase a predetermined, weekly amount of BAs.

These purchases played a key role in restoring market functioning. Knowing that the Bank was regularly and actively purchasing these securities, buyers and dealers became more confident and willing to engage in new trades. However, publishing BAPF activities may have helped reduce the range of traded yields, which fell from 8 basis points (bps) to below 6 bps and, further, to pre-crisis levels of 3 bps within a week. Simultaneously, trading volumes surged, highlighting the possible additional role public information was playing in the recovery of both the BA market and the confidence of market participants. The publication took place within 30 minutes after the facility's reverse auction. The Bank announced the amount purchased and the weighted average yield. The aggregated information published by the Bank may have served as a crucial reference point for market participants, helping to restore investor confidence in valuations and improve understanding of others' valuations.

Other evidence

Studies have shown that price transparency is an important channel for the efficient functioning of financial markets. The well-studied and relevant example in the bond market is the introduction of the Trade Reporting and Compliance Engine (TRACE) in 2002 for the US corporate bond market. That market is characterized by bilateral trading where trade information is kept private. This leads to a lot of uncertainty about the going value of these securities and a high degree of asymmetry in the information that buyers

and sellers might have. The empirical literature provides strong evidence that introducing TRACE has had a positive impact on market functioning. Bessembinder, Maxwell and Venkataraman (2006) demonstrate that TRACE has reduced transaction costs, as measured by bid-ask spreads, by increasing the availability of public trade information. Similarly, Goldstein, Hotchkiss and Sirri (2007) find that TRACE has enhanced price discovery and reduced price dispersion, leading to narrower spreads and higher trading volumes. This information particularly benefits small institutional investors who previously had less access to data on bond prices. Edwards, Harris and Piwowar (2007) further note that TRACE has had the most substantial impact on less frequently traded, or “thinly traded,” bonds, where transparency was most lacking. Overall, the evidence suggests that the increased availability of public information through TRACE has led to a more efficient and liquid market by reducing information asymmetry and facilitating fairer pricing.

Recent research by Ergun and Uthemann (2020) shows how publishing aggregated price estimates by dealers lowers not only the dealer’s uncertainty about their own valuations but also their uncertainty of other dealers’ valuations. This effect is strongest in the least transparent part of the market. It further suggests that reliable public prices as focal points are especially crucial during financial crises, when prices fluctuate greatly and trades are rarely observed.

Conclusion

At times of severe financial market stress, many channels help in the recovery of market functioning. In over-the-counter markets where trade information is not publicized, price transparency is likely more important than in markets with centralized exchanges and publicized trading information. During a crisis when valuations fluctuate wildly, participant uncertainty about their own and others' valuations can disrupt financial markets (Heider, Hoerova and Holthausen 2015). Crisis facilities, such as the BAPF that the Bank of Canada used as part of its response to the economic uncertainty during the COVID-19 pandemic, not only provide funds but can also serve as sources of public information about asset valuations. Publicizing the anonymized and aggregated activities of these facilities can help to re-anchor a stressed market by providing market participants with reference points at which to restart trading. The transparency of COVID-19 crisis facilities varies both domestically and internationally, with differences in the granularity of information (prices and quantities) and the timing of information releases. Given the positive effects of post-trade price transparency (Bessembinder and Maxwell 2008), these facilities promptly publicizing anonymized trading activity could support market recovery in times of stress.

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