

Staff analytical paper / Document analytique du personnel—2026-51

Last updated: October 16, 2026

# Auction Timing Under Limited Information: Evidence from Sovereign Bond Auctions

**Jeffrey Gao**

Markets and Banking Department  
Bank of Canada  
[jgao@bankofcanada.ca](mailto:jgao@bankofcanada.ca)

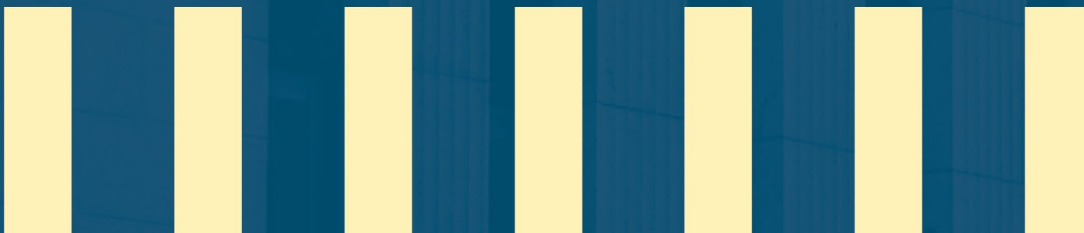
**Adam Epp**

Payments and Regulatory Oversight  
Bank of Canada  
[adamepp@bankofcanada.ca](mailto:adamepp@bankofcanada.ca)

Bank of Canada staff research is produced independently from the Bank's Governing Council and may support or challenge prevailing views. The views expressed in this paper are solely those of the authors and may differ from official Bank of Canada positions. No responsibility for them should be attributed to the Bank.

DOI: <https://doi.org/10.34989/sap-2026-51> | ISSN 3110-9195

© 2026 Bank of Canada



## Acknowledgements

We thank our colleagues at the Bank of Canada and the Department of Finance Canada, particularly Sébastien Bélanger, Eric Braff, Robert Hill, Sophie Lefebvre, Neil Maru, Olena Melin, David Smith, Rishi Vala, Scott Woldum, and Xu Zhang for their helpful discussions and comments. We also thank Andreas Uthemann and Adrian Walton for their assistance with the volatility measures used in this paper, and the market participants who participated in the [2026 Debt Management Strategy Consultations](#) for their valuable insights.

## Abstract

This paper examines how auction timing may affect sovereign issuance outcomes through its interaction with market volatility. Using Canada as a case study, it shows that: (1) higher same-day bond market volatility is associated with larger auction tails, indicating weaker demand conditions; and (2) monetary policy announcements and certain macroeconomic data releases are systematically associated with higher same-day volatility. Together, these findings identify one observable channel linking information available at the schedule-setting horizon to auction outcomes. Within issuance frameworks that prioritize market predictability and operate under limited information sets, the results suggest that auction timing may influence outcomes at the margin.

*Topics: Debt management; Government securities auctions; Market functioning*

*JEL codes: D44, E43, G12, G14, H63*

# 1 Introduction

The decisions of a sovereign debt issuer are anchored in the principles of stable, low-cost government funding, well-functioning markets, and transparency and predictability to market participants. In Canada, these principles guide issuance decisions across both longer and shorter planning horizons.

At the annual planning horizon, the Government of Canada (GoC), with the Bank of Canada (BoC)<sup>1</sup>, determines issuance by instrument through a cost-risk framework that is informed by quantitative modelling and market consultations (Audet et al., 2025). These decisions are communicated in advance through the [Debt Management Strategy \(DMS\)](#), typically ahead of or early in the fiscal year, to provide lead time to market participants.

At the quarterly horizon, these principles are reflected in the [quarterly bond schedule \(QBS\)](#), which sets GoC auction dates. Because these dates are announced several weeks to a few months in advance to ensure transparency and predictability, the GoC and BoC operate with a limited information set when establishing the schedule—a constraint shared across sovereign issuers<sup>2</sup>. As a result, auction timing decisions are made under uncertainty about future market conditions, with scheduled events representing one of the few known predictors of day-to-day variation in those conditions.

While a more limited lever than decisions on size and maturity, the timing of sovereign debt auctions can still have a modest but meaningful effect on market outcomes. This role has taken on greater importance in an environment of elevated sovereign issuance, where auction calendars are dense and markets are frequently required to absorb large volumes of supply across major jurisdictions.

This paper evaluates the role of auction timing in sovereign issuance, using Canada as a case study to assess how observable factors—namely scheduled events—affect outcomes within this limited but meaningful scope of influence. It also draws broader insights for sovereign debt managers facing similar constraints. The analysis focuses on a simple mechanism: how scheduled events relate to market volatility, and, in turn, how volatility relates to auction performance.

Section 2 outlines the Canadian institutional context. Section 3 examines the empirical association between market volatility and auction outcomes, while Section 4 examines how specific events contribute to volatility. Based on these findings, Section 5 discusses the policy implications for sovereign debt issuers. Section 6 concludes.

---

<sup>1</sup> The BoC's involvement in sovereign debt management stems from its role as fiscal agent to the GoC.

<sup>2</sup> Cross-country evidence suggests that most sovereigns allow only modest flexibility in auction-based issuance, such as through flexible sizing or reopenings (Bradley and Gao, 2026).

## 2 Context on GoC bond auctions

### 2.1 Role of the quarterly bond schedule

In Canada, the quarterly bond schedule (QBS) provides the dates, tenors, and maturities of upcoming bond auctions. It is typically published at least one week ahead of each quarter, allowing market participants to anticipate the timing of government bond issuance.

Most aspects of issuance—such as total annual volumes, the number of auctions, and the maturity structure—are set well in advance through the Debt Management Strategy (DMS). The QBS refines this information by specifying the exact timing of auctions within the quarter. These dates are important for dealers and investors, who must plan trading activity, manage balance sheet capacity, and coordinate risk-taking around anticipated supply.

Within the parameters established through the annual debt strategy, auction timing is an important dimension along which debt managers can condition issuance on expected market conditions. However, because auction dates are announced in advance to preserve transparency and predictability, these decisions are made under uncertainty regarding future conditions.

### 2.2 What makes a successful GoC bond auction?

In setting each auction date, the debt manager's goal is to support strong investor demand and, in turn, stable, low-cost funding. The two key performance metrics for GoC bond auctions, [published by the Bank of Canada \(BoC\)](#) and closely monitored by market participants, are the coverage ratio and the tail.

Coverage is defined as the total dollar amount of bids divided by the auction size, net of BoC purchases. It is a common proxy for investor demand (Beetsma et al., 2020). However, its informativeness may be more limited in the Canadian context, as dealers' minimum bidding requirements can partly obscure the underlying demand signal. A similar caveat for the U.S. is noted by Somogyi, Wallen, and Xu (2025).

For Canada's multiple-price auctions, the tail is defined as the auction's cut-off yield (that is, the highest accepted yield) minus its average yield.<sup>3</sup> The tail can be interpreted as reflecting the steepness of aggregate demand near the market-clearing price. As such, it provides a more direct indication of demand conditions at auction. For example,

---

<sup>3</sup> In Canada's multiple-price auctions, bidders pay their accepted bid yields. In U.S. single-price auctions, all successful bidders receive the uniform auction yield. The tail is therefore defined differently: in the U.S., it is commonly measured as the difference between the auction yield and the prevailing secondary market yield.

Somogyi, Wallen, and Xu (2025) use the difference between high and median yields to proxy for the slope of aggregate demand at U.S. Treasury auctions.

The tail also captures price dispersion, which may reflect information asymmetries or reduced market liquidity. A high tail therefore signals potential impairment of the debt manager's objective of well-functioning markets, particularly given the benchmark role of GoC bonds in pricing and hedging other Canadian-dollar instruments.

Accordingly, this paper uses the auction tail as the primary measure of auction performance. Section 3 examines whether auction-day volatility is associated with higher auction tails.

## **2.3 Information available for auction date selection**

QBS decisions face two limitations: incomplete information about future market conditions and limited flexibility to shift issuance across time. While broader volatility regimes or extended periods of market stress may persist, regular and predictable issuance typically limits the ability to respond by moving auctions across weeks or months. At the day-to-day margin, differences in market conditions are considerably harder to predict far enough in advance to inform the QBS.

However, at the time the schedule is set, a subset of relevant information is observable. The practical challenge is therefore not forecasting future market conditions precisely but determining whether that information is informative about the conditions that ultimately prevail.

In particular, the timing of many potentially market-moving events, such as monetary policy announcements and macroeconomic data releases, is known in advance. Because these scheduled events may affect market volatility, their occurrence could be relevant when selecting auction dates.

Timing decisions are also subject to broader operational and market structure considerations. Because not all scheduled events can be avoided, the selection of auction dates involves implicit trade-offs across all these considerations within a constrained and incomplete information set.

Section 4 examines one component of this information set, scheduled events, and evaluates how they relate to realized market volatility.

## 3 Does volatility drive auction demand?

### 3.1 Intuition

Bond market volatility can affect auction demand through dealers' limited capacity to absorb risk. When dealers purchase bonds at auction, they take on inventory exposed to subsequent price movements. Greater price uncertainty raises the risk of holding that inventory, either through greater costs associated with hedging the position or the potential for adverse price movements. Similar intraday risk considerations may also affect end investor participation.<sup>4</sup>

As a result, higher volatility can reduce dealers' willingness to bid aggressively at auctions. This can manifest in less competitive bidding and greater dispersion in bids, as participants require additional compensation for bearing risk.

In multiple-price auctions such as Canada's, price uncertainty can also amplify the effects of the winner's curse, whereby winning bidders risk overpaying relative to prevailing market value. Greater volatility increases this risk, further discouraging aggressive bidding and contributing to weaker auction outcomes.

Empirical evidence across sovereign markets documents a relationship between volatility and auction demand. For Canada, Chang (2023) finds that volatility explains some of the common variation in bidder demand slopes across GoC bond sectors. Beetsma et al. (2020) link higher volatility to weaker auction coverage across European issuers; Shida (2023) finds that volatility reduces bidding volume at German bond auctions; Albuquerque et al. (2024) show that demand elasticity at Portuguese auctions is lower in more volatile conditions; and Nyborg, Rydqvist, and Sundaresan (2002) find that higher auction-day volatility is associated with greater bid shading at Swedish bond auctions.

### 3.2 Measuring volatility

For each auction tenor (2-, 5-, 10-, and 30-year), volatility is measured using the price volatility of the corresponding benchmark bond in the secondary market on the day of the auction. The benchmark bond characterizes prevailing market conditions in the relevant segment of the yield curve. This measure is constructed from high-frequency intraday dealer quotes on the CanDeal platform and captures term-specific market dynamics in Canada.

---

<sup>4</sup> At [debt management consultations](#), several real money investors noted a preference for acquiring bonds in the secondary market near the end of the trading day rather than at auction, citing the price risk associated with holding inventory between the auction and the market close.

Volatility is often proxied using implied volatility measures, such as the Merrill Lynch Option Volatility Estimate (MOVE) index. However, these measures reflect aggregate market volatility and are not specific to the tenor being auctioned.

Because the relevant decision margin is the choice among individual auction days, the analysis focuses on auction-day volatility rather than lagged or rolling measures that primarily reflect more persistent trends. Volatility is measured over the full trading day to reflect the broader price uncertainty surrounding the auction, including the post-auction risk that participants may consider when assessing a new inventory position.

### 3.3 Empirical specification

To assess how volatility relates to auction demand, the analysis estimates a panel regression of auction performance on market volatility, controlling for a range of additional factors. Consistent with the performance definition in Section 2.2, the dependent variable is the log of the auction tail for each bond auction.

The main explanatory variable is the log of same-day secondary market volatility in the corresponding benchmark bond. The specification is estimated using ordinary least squares, with tenor fixed effects included to capture persistent differences in auction dynamics across maturities and HC3 heteroskedasticity-robust standard errors.

In addition to volatility, the regression includes a set of control variables capturing auction characteristics and broader market conditions. These include auction size, the share of the auction purchased by the BoC, the daily yield of the corresponding benchmark bond, the lagged auction tail for the same tenor, and an indicator for reopening auctions. Seasonal effects are captured through quarter-of-year fixed effects. The specification also includes a measure of market illiquidity in that tenor, proxied by the Amihud (2002) price impact measure for the corresponding benchmark bond, based on secondary market trading.

The regression covers 412 GoC bond auctions conducted from 2017 to 2025.

### 3.4 Regression results

**Table 1** reports the baseline regression results linking market and auction characteristics to GoC bond auction performance. Because auction dates may avoid some of the highest-volatility events, the observed sample may underrepresent the range of conditions relevant to auction date selection.

**Table 1: Regression results for log auction tail on same-day log volatility and controls**

| Variable | Coefficient | Standard error | p-value |
|----------|-------------|----------------|---------|
|----------|-------------|----------------|---------|

|                           |           |          |          |
|---------------------------|-----------|----------|----------|
| Constant                  | 0.089     | 0.111    | 0.423    |
| Auction size              | 5.407e-06 | 1.23e-05 | 0.659    |
| Log volatility (full day) | 1.3942    | 0.408    | 0.001*** |
| Reopening indicator       | 0.0117    | 0.017    | 0.498    |
| BoC purchase share        | -0.1276   | 0.361    | 0.724    |
| Benchmark yield           | 0.0143    | 0.015    | 0.347    |
| Log Amihud illiquidity    | 0.0752    | 0.070    | 0.284    |
| Lagged log tail           | 0.1497    | 0.048    | 0.002*** |

Note: Includes tenor and quarter-of-year fixed effects. HC3 robust standard errors are reported.

The central result is that auction-day volatility has a positive and statistically significant relationship with auction tails ( $p = 0.001$ ), providing direct evidence that more volatile market conditions are associated with weaker auction outcomes.

There is also evidence of persistence in auction performance, as the coefficient on the lagged log tail is positive and statistically significant.

### 3.5 Robustness tests

For robustness, **Table 2** reports the regression results using morning volatility, measured from prices observed before the noon auction. This alternative specification reduces the possibility that measured volatility reflects information revealed through the auction process.

**Table 2: Regression results for log auction tail on same-morning log volatility and controls**

| Variable                      | Coefficient | Standard error | p-value  |
|-------------------------------|-------------|----------------|----------|
| Constant                      | 0.087       | 0.114          | 0.443    |
| Auction size                  | 5.328e-06   | 1.24e-05       | 0.657    |
| Log volatility (morning only) | 1.1201      | 0.368          | 0.002*** |
| Reopening indicator           | 0.0133      | 0.017          | 0.445    |
| BoC purchase share            | -0.1303     | 0.370          | 0.725    |
| Benchmark yield               | 0.0147      | 0.015          | 0.339    |
| Log Amihud illiquidity        | 0.0943      | 0.068          | 0.164    |
| Lagged log tail               | 0.1555      | 0.049          | 0.001*** |

Note: Includes tenor and quarter-of-year fixed effects. HC3 robust standard errors are reported.

The results are qualitatively unchanged. The coefficient on morning volatility remains positive and statistically significant. This suggests that the relationship between volatility

and auction performance remains present when only volatility observed before the bidding deadline is considered.

As an additional specification, results are also robust to using one-day lagged volatility, though the estimated effect is smaller, consistent with lagged volatility capturing broader persistence in market conditions rather than the auction-day environment itself.

### 3.6 Variation across the tail distribution

Quantile regressions of auction tail on volatility (**Table 3**) indicate that the relationship varies across the distribution of tail values.

**Table 3: Quantile regression results for auction tail on volatility**

| Bond Term | 10 <sup>th</sup> percentile | 50 <sup>th</sup> percentile | 90 <sup>th</sup> percentile |
|-----------|-----------------------------|-----------------------------|-----------------------------|
| 2-year    | 3.27 (0.002***)             | 6.52 (<0.001***)            | 12.54 (<0.001***)           |
| 5-year    | 0.97 (0.130)                | 5.01 (<0.001***)            | 11.86 (<0.001***)           |
| 10-year   | 0.72 (0.099*)               | 2.72 (<0.001***)            | 5.15 (<0.001***)            |
| 30-year   | 0.88 (0.058*)               | 0.95 (0.018**)              | 2.17 (0.003***)             |

Across all tenors, the relationship between volatility and auction tails is stronger at higher quantiles of the tail distribution. This suggests that volatility is particularly relevant during adverse conditions, when auction performance is already under pressure.

## 4 How do scheduled events impact volatility?

### 4.1 Monetary policy announcements and macroeconomic releases

Section 3 showed that high same-day volatility for a given tenor is associated with weaker auction performance. While volatility on a given day cannot be known in advance, particularly at the horizon relevant for setting the bond schedule, debt managers can use the known occurrence of scheduled events as one observable indicator of market conditions that may prevail on that day. The potential relevance of this information is supported by evidence that a substantial share of asset price movements reflects identifiable news events (Kerssenfischer and Schmeling, 2024).

Major scheduled events can trigger broad repricing and portfolio rebalancing in bond markets as investors update expectations about future economic and policy conditions, which in turn influence interest rates and bond valuations. These repricing episodes can lead many market participants to adjust positions in close succession, generating concentrated trading activity and larger price movements that contribute to higher market volatility.<sup>5</sup>

Monetary policy announcements are among the most important examples of such repricing events. Gürkaynak, Sack, and Swanson (2005) show that both monetary policy actions and FOMC statements affect U.S. Treasury yields, with statements having particularly important effects at longer maturities. Zhang (2021) and Brooks, Katz, and Lustig (2018) document the broader impact of monetary policy shocks across the yield curve.

Macroeconomic releases can similarly alter bond valuations through future yield expectations. In Canada, Martos et al. (2025) show that domestic surprises primarily affect short-term instruments, while U.S. announcements dominate longer maturities. Hayo and Neuenkirch (2012) and Gravelle and Moessner (2001) similarly highlight the importance of U.S. news for Canadian markets.

The analysis therefore focuses on central bank policy announcements (FAD and FOMC) and key macroeconomic releases in both Canada and the U.S.

## 4.2 Empirical results

**Table 4** reports a pooled regression examining how scheduled Canadian and U.S. monetary policy announcements and macroeconomic releases are associated with same-day log volatility across GoC benchmark tenors. The specification is estimated using ordinary least squares, with tenor fixed effects included to capture persistent differences in volatility across maturities and standard errors clustered by date to account for common shocks affecting multiple tenors on a given day.

**Table 4: Impact of scheduled Canadian and U.S. events on GoC bond market volatility—pooled regression results**

| Variable | Coefficient | Standard error | p-value   |
|----------|-------------|----------------|-----------|
| US GDP   | 0.0038      | 0.003          | 0.241     |
| US CPI   | 0.0238      | 0.005          | <0.001*** |
| US PPI   | 0.0077      | 0.004          | 0.036**   |

<sup>5</sup> This volatility can be especially relevant for auctions, as market consultations suggest that auctions often occur within broader positioning and risk-transfer processes, with participants frequently establishing or adjusting exposures before and after issuance.

|                              |        |       |           |
|------------------------------|--------|-------|-----------|
| US Employment                | 0.0238 | 0.006 | <0.001*** |
| US PCE                       | 0.0080 | 0.003 | 0.011**   |
| FOMC                         | 0.0154 | 0.005 | 0.001***  |
| Canadian building permits    | 0.0024 | 0.003 | 0.457     |
| Canadian merchandise trade   | 0.0024 | 0.003 | 0.428     |
| Canadian CPI                 | 0.0145 | 0.003 | <0.001*** |
| Canadian GDP                 | 0.0094 | 0.005 | 0.066*    |
| Canadian Labour Force Survey | 0.0137 | 0.005 | 0.006***  |
| Canadian labour productivity | 0.0025 | 0.005 | 0.647     |
| Canadian payroll employment  | 0.0017 | 0.003 | 0.607     |
| Canadian retail trade        | 0.0019 | 0.003 | 0.491     |
| FAD                          | 0.0233 | 0.005 | <0.001*** |
| Quarter-end                  | 0.0023 | 0.006 | 0.695     |

Note: Includes tenor fixed effects. Standard errors are clustered by date.

For both Canadian and U.S. events, monetary policy announcements, inflation releases, and labour-market reports show the strongest association with volatility. In Canada, FAD, CPI, and the Labour Force Survey exhibit the strongest associations, while most other releases are not statistically significant. Similarly, FOMC announcements, CPI releases, and employment reports stand out among U.S. events.

Taken together, the results indicate that a relatively small set of scheduled events is consistently associated with elevated bond market volatility. Despite differences in institutional context, the most relevant categories of Canadian and U.S. information releases are remarkably similar.

Combined with the findings in Section 3, these results suggest that auction days coinciding with such events may face less favourable market conditions, particularly during periods of market stress.

### 4.3 Day of week effects

Beyond specific scheduled events, day of week may also capture recurring variation in market conditions. To assess whether volatility varies systematically across the week, a fixed-effects panel regression of log volatility on weekday indicators was estimated, with tenor fixed effects and standard errors clustered by date. **Table 5** reports the results.

**Table 5: Day-of-week effects on GoC bond market volatility (panel regression)**

| Variable | Coefficient | Standard error | p-value   |
|----------|-------------|----------------|-----------|
| Monday   | -0.0150     | 0.002          | <0.001*** |
| Tuesday  | -0.0070     | 0.002          | 0.002***  |
| Thursday | -0.0029     | 0.002          | 0.195     |
| Friday   | 0.0026      | 0.002          | 0.283     |

Note: Wednesday is the omitted category. Includes tenor fixed effects. Standard errors are clustered by date.

Volatility is lower on Mondays and Tuesdays, although the differences are modest in magnitude. These differences are materially smaller than those associated with major scheduled macroeconomic and monetary policy events. Moreover, lower-volatility weekdays may not necessarily be preferred from an operational or market-functioning perspective.

## 5 Policy takeaways for sovereign debt managers

### 5.1 Interpreting the role of auction timing

The results identify the interaction between scheduled events and market volatility as a specific channel linking auction timing to auction outcomes. In particular, monetary policy announcements, inflation releases, and labour market reports in both Canada and the U.S. are associated with higher same-day GoC bond market volatility, which in turn is associated with weaker auction performance. This suggests that auction date selection may matter for outcomes at the margin, particularly during periods when volatility is already elevated.

At the same time, auction scheduling decisions extend well beyond volatility considerations. Debt managers must also account for operational constraints, cash management, market functioning, and institutional factors, as well as event risks that may be difficult to quantify due to limited historical data.

While the scope for influencing outcomes is limited, it is not negligible. Even small changes in auction pricing can translate into meaningful cost differences when applied across large issuance volumes.<sup>6</sup>

<sup>6</sup> For illustration, a 1 basis point increase in the average auction yield on a \$5 billion 5-year bond, with an approximate duration of 5, corresponds to a present-value funding cost difference of roughly \$2.5 million. While the auction tail is not a direct measure of yield levels, the example illustrates why small differences in auction pricing can matter at scale.

Taken together, this suggests that auction timing is best viewed as a secondary but scalable margin, where small improvements—applied consistently—can contribute to overall funding efficiency.

## **5.2 Implications under predictable issuance frameworks**

Within predictable sovereign issuance frameworks, limited flexibility to shift issuance narrows the scope for acting on information about future market conditions. Even so, observable scheduled events provide a practical basis for informing auction date selection and potentially improving expected outcomes.

However, the results should not be interpreted as a mechanical scheduling rule. Rather, they provide an empirical indication of relative event risks that can inform trade-offs when multiple feasible auction dates are available.

If a debt manager considers alternate horizons for setting auction dates, the key trade-off is between the quality of incremental information gained at shorter horizons and the potential costs to predictability and transparency for market participants.

As global issuance volumes increase and supply calendars become more congested, the interaction between scheduled events, market volatility, and auction performance may become increasingly relevant.

## **6 Conclusion**

This paper examines how the timing of sovereign bond auctions may affect issuance outcomes through the volatility channel. Using Canada as a case study, it shows that a relatively small set of scheduled events—particularly monetary policy announcements and key macroeconomic releases—are associated with higher bond market volatility, which in turn is linked to weaker auction performance.

The results highlight that the influence of auction timing is limited but well-defined, reflecting the constrained information set under which auction schedules are determined. Together, the findings show how observable information available at the schedule-setting horizon may inform auction timing within predictable sovereign issuance frameworks.

---

## References

- Albuquerque, R., Cardoso-Costa, J. M., and Faias, J. A. 2024. [“Price Elasticity of Demand and Risk-Bearing Capacity in Sovereign Bond Auctions.”](#) *The Review of Financial Studies* 37 (10): 3149–3187.
- Amihud, Y. 2002. [“Illiquidity and Stock Returns: Cross-Section and Time-Series Effects.”](#) *Journal of Financial Markets* 5 (1): 31–56.
- Audet, N., Epp, A., Gao, J., and Ning, J. 2025. [“Modelling the Sovereign Debt Strategy: A Practical Primer.”](#) Bank of Canada Staff Discussion Paper No. 2025-16.
- Beetsma, R., Giuliodori, M., Hanson, J., and de Jong, F. 2020. [“Determinants of the Bid-to-Cover Ratio in Eurozone Sovereign Debt Auctions.”](#) *Journal of Empirical Finance* 58: 96–120.
- Bradley, W., and Gao, J. 2026. [“Distributing Sovereign Debt in a Rising Debt Environment: Outcomes from Canada’s 2024 Debt Distribution Framework Review.”](#) Bank of Canada Staff Analytical Paper No. 2026-18.
- Brooks, J., Katz, M., and Lustig, H. 2018. [“Post-FOMC Announcement Drift in U.S. Bond Markets.”](#) NBER Working Paper No. 25127.
- Chang, B. Y. 2023. [“Estimating the Slope of the Demand Function at Auctions for Government of Canada Bonds.”](#) Bank of Canada Staff Discussion Paper No. 2023-12.
- Gravelle, T., and Moessner, R. 2001. [“Reactions of Canadian Interest Rates to Macroeconomic Announcements: Evidence from the Futures Market.”](#) Bank of Canada Working Paper No. 2001-5.
- Gürkaynak, R. S., Sack, B., and Swanson, E. T. 2005. [“Do Actions Speak Louder Than Words? The Response of Asset Prices to Monetary Policy Actions and Statements.”](#) *International Journal of Central Banking* 1 (1): 55–93.
- Hayo, B., and Neuenkirch, M. 2012. [“Domestic or U.S. News: What Drives Canadian Financial Markets?”](#) *Economic Inquiry* 50 (3): 690–706.
- Kerssenfischer, M., and Schmeling, M. 2024. [“What Moves Markets?”](#) *Journal of Monetary Economics* 145: 103560.
- Martos, B. D., Sekkel, R., Stern, H., and Zhang, X. 2025. [“Is Anyone Surprised? The High-Frequency Impact of U.S. and Domestic Macroeconomic Data Announcements on Canadian Asset Prices.”](#) Bank of Canada Staff Analytical Note No. 2025-10.
- Nyborg, K. G., Rydqvist, K., and Sundaresan, S. M. 2002. [“Bidder Behavior in Multiunit Auctions: Evidence from Swedish Treasury Auctions.”](#) *Journal of Political Economy* 110 (2): 394–424.

- OECD. 2024. [Global Debt Report 2024: Bond Markets in a High-Debt Environment](#). Paris: OECD Publishing.
- Shida, J. 2023. [“Primary Market Demand for German Government Bonds.”](#) *Journal of International Money and Finance* 137: 102909.
- Somogyi, F., Wallen, J., and Xu, L. 2025. [“What Treasury Auctions Reveal About Investor Demand.”](#) Harvard Business School Working Paper No. 26-033.
- Zhang, X. 2021. [“A New Measure of Monetary Policy Shocks.”](#) Bank of Canada Staff Working Paper No. 2021-29.