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Staff analytical paper / Document analytique du personnel—2026-55

Last updated: November 19, 2026

Hedge Funds and Rising Government Debt Issuance: Evidence from Government of Canada Bond Auctions

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DOI: https://doi.org/10.34989/sap-2026-55 | ISSN 3110-9195

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Acknowledgements

We thank our colleagues at the Bank of Canada and the Department of Finance Canada, particularly Sébastien Bélanger, Matthew Emde, Sophie Lefebvre, Neil Maru, Philippe Muller, Charles Perreault, and Jabir Sandhu, for their helpful discussions and comments. We also thank participants in the 2026 Debt Management Strategy Consultations for their insights, as well as attendees of the 4th Public Debt Management Conference for the exchange of views.

Abstract

Government of Canada (GoC) bond issuance increased rapidly after 2019 without a corresponding expansion in traditional sources of demand. Over this period, hedge funds became increasingly active participants at GoC bond auctions. We explain how hedge funds' volume-based business models make them responsive to higher issuance and show that they bid more competitively than other investor types. Together, these characteristics help explain both the growth in hedge fund auction allocations and the continued strength of GoC auction performance. However, hedge fund participation depends heavily on repo financing and dealer balance sheet capacity. Rising funding costs may be limiting further growth in hedge fund participation, while greater reliance on hedge funds may increase investor base vulnerabilities during periods of market stress. These findings highlight the importance of maintaining a resilient investor base and efficient funding market infrastructure as sovereign borrowing needs continue to grow. Building on Epp and Gao (2025), this paper provides auction evidence through 2026 and further develops its treatment of repo funding and policy implications.

Topics: Debt management; Financial markets; Financial institutions; Financial stability

JEL codes: D44, G, G12, G2, G23, H63

1 Introduction

Over the past six years, Government of Canada (GoC) nominal bond issuance through auction more than doubled, rising from $122 billion in fiscal year (FY) 2019–20 to $313 billion in FY 2025–26 (Bank of Canada 2026a), partly reflecting higher fiscal needs in response to the Covid-19 pandemic. Over the same period, the total stock of GoC bonds increased from $597 billion to $1,275 billion (Bank of Canada 2026b). This growth has occurred while the dealer base has remained mostly static, growth in dealer balance sheet capacity has been slow, and dealer profit margins have declined (Bradley and Gao 2026). Despite this, GoC bond auctions have continued to perform well by standard metrics such as coverage and average yield.

In this paper, we show that the increase in hedge fund participation at auctions since 2020 has played an important role in supporting this performance. We find that hedge funds have been particularly responsive to increased GoC bond issuance because larger, more liquid benchmarks support the volume-based strategies they commonly pursue. Using bid-level auction data, we further show that hedge funds bid more competitively than other investor types and are often willing to pay higher prices within a given auction.

We also examine the potential limits and risks of this trend. Hedge fund participation depends heavily on cost-effective access to repurchase agreement (repo) financing through dealer balance sheets, whose capacity is finite. Since 2024, the growth of hedge fund auction allocations has moderated, consistent with higher funding costs weighing on the economics of leveraged relative value strategies. Hedge funds may also be more likely than other investor types to scale back activity or amplify market volatility during periods of stress.

Given these risks, we discuss policy actions taken to support a more resilient investor base and market structure, including measures aimed at broadening investor participation and improving funding market efficiency.

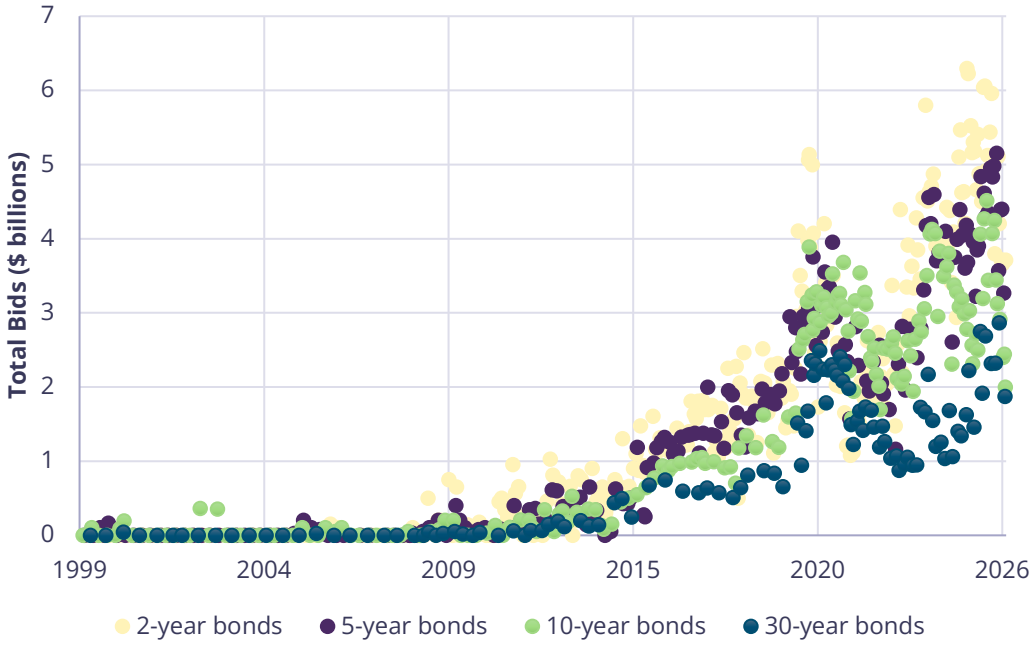
Relative to Epp and Gao (2025), this paper extends the auction evidence through 2026 and develops a more integrated analysis of how repo funding conditions shape both the benefits and the potential limits of hedge fund participation.

2 Hedge fund participation has increased alongside Government of Canada issuance

Since FY 2019–20, annual GoC bond issuance has increased considerably across all tenors: from $53 billion to $121 billion in the 2-year sector, from $33 billion to $84 billion

in the 5-year sector, from $13 billion to $85 billion in the 10-year sector, and from $4 billion to $24 billion in the 30-year sector (Bank of Canada 2026a). **Chart 1** shows that hedge fund bidding has also increased alongside this growth in issuance.

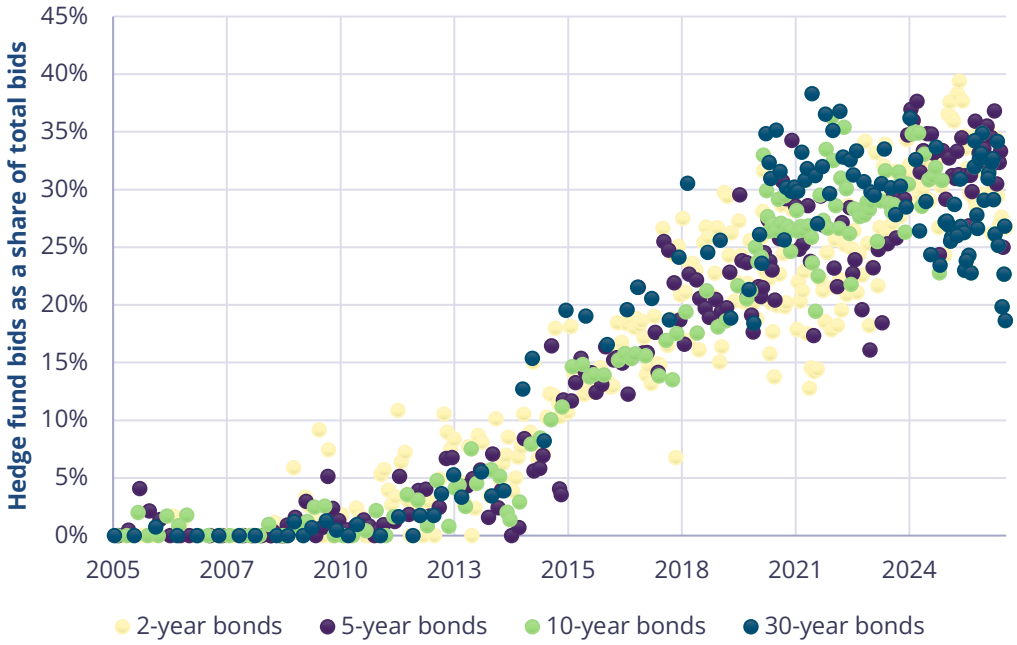
Chart 1: Hedge fund bidding volumes at Government of Canada bond auctions have grown since 2010—and substantially since 2020



Sources: Department of Finance Canada and Bank of Canada calculations
Last observation: June 2026

Between 2010 and 2019, the increase in hedge fund bidding broadly mirrored the moderate rise in debt issuance during that period. Hedge funds' increased participation was not matched by the other investor types, whose shares of auction bidding generally remained stable or declined. As a result, hedge funds have accounted for an increasing share of total bids at auction (**Chart 2**).

Chart 2: Hedge fund bidding as a share of total bids at Government of Canada bond auctions has also grown



Sources: Department of Finance Canada and Bank of Canada calculations
Last observation: June 2026

3 Hedge funds have been responsive to higher Government of Canada bond issuance

Hedge funds' business models help explain the increase in their bidding amid higher debt issuance. Hedge funds typically seek to identify perceived market mispricings and then take large positions to profit from them, often using leverage obtained through repurchase agreements (repos).

Many hedge funds active in GoC markets employ relative value strategies based on pricing relationships between GoC bonds and (1) other GoC bonds, (2) CAD spread products, or (3) derivatives such as futures or swaps (Uthemann and Walton 2026). In the highly liquid and efficient GoC bond market, these pricing discrepancies are typically small. At debt management consultations, market participants also noted that relative value opportunities have become increasingly crowded, potentially reflecting broader adoption of quantitative and technology-driven trading approaches. As a result, hedge funds often rely on large positions to compensate for slim margins and to achieve their target returns.

Market participants highlighted that a larger GoC debt stock supports these positions in several ways. It increases the amount of bonds available to hold, provides a larger pool of collateral for leveraged financing, and enhances market liquidity. Greater liquidity lowers the transaction costs associated with entering and exiting positions. For GoC bonds, high liquidity is an important part of their appeal relative to other sovereign bond markets and has supported their growing role in global fixed income portfolios.

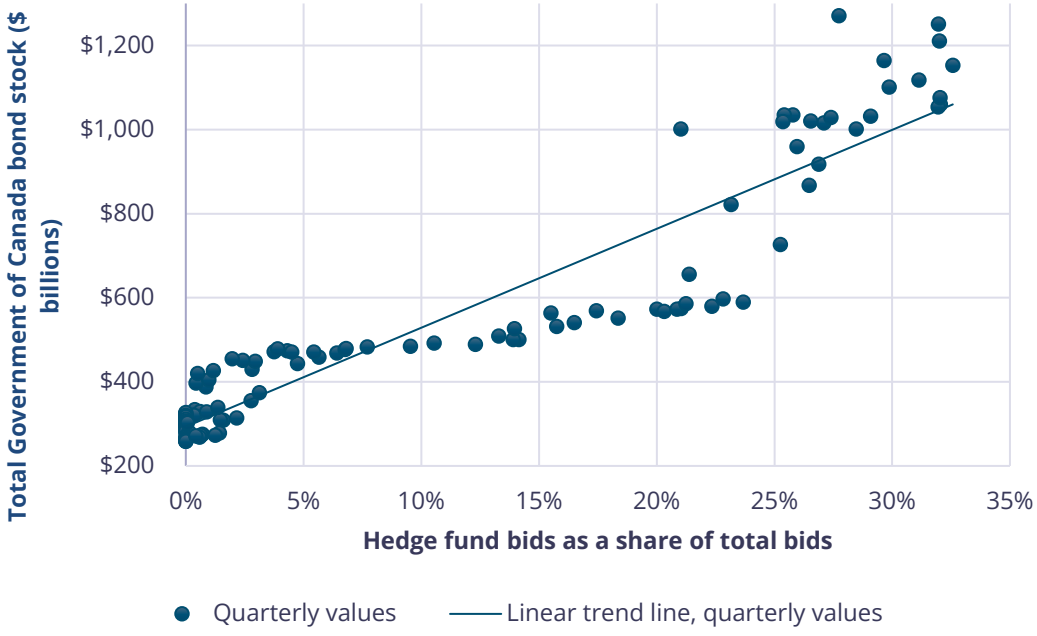
Consistent with this mechanism, higher GoC bond issuance has been accompanied by a substantial increase in hedge fund repo borrowing to finance GoC bond positions. Gross hedge fund repo borrowing increased from $41 billion at the start of 2020 to $114 billion by the end of 2025 (Bank of Canada 2026c). In 2024 and 2025, higher hedge fund net repo borrowing contributed to sustained upward pressure on CORRA (Canadian Overnight Repo Rate Average) above target, alongside other market structure factors such as the transition to T+1 settlement and inefficient recirculation of GoC bond maturity flows (Plong and Maru 2024a, 2024b; Fontaine, Maru and Tchamova 2026).

The incentive created by a larger debt stock is especially strong for hedge funds because they have greater flexibility than other investor types to use leverage and scale their positions (Sandhu and Vala 2023). Dealers face internal risk limits and regulatory constraints, while real money investors generally rely less on leverage to achieve their investment objectives.

Similar patterns have been observed internationally, where growing sovereign debt markets have been accompanied by greater hedge fund reliance on repo-financed relative value strategies (Sushko and Todorov 2025; Berg, Karunamuni and Stemp 2025). In the United States, hedge funds have increasingly relied on leverage to support cash-futures basis strategies in a growing Treasury market (Hammack 2025).

Regardless of strategy, auctions can be an efficient means of acquiring large GoC bond positions. **Chart 3** shows the strong positive relationship between hedge fund bidding shares and the total stock of GoC bonds since 1999.

Chart 3: Hedge fund participation in bond auctions has increased alongside the GoC bond stock



Sources: Department of Finance Canada and Bank of Canada calculations
Last observation: June 2026

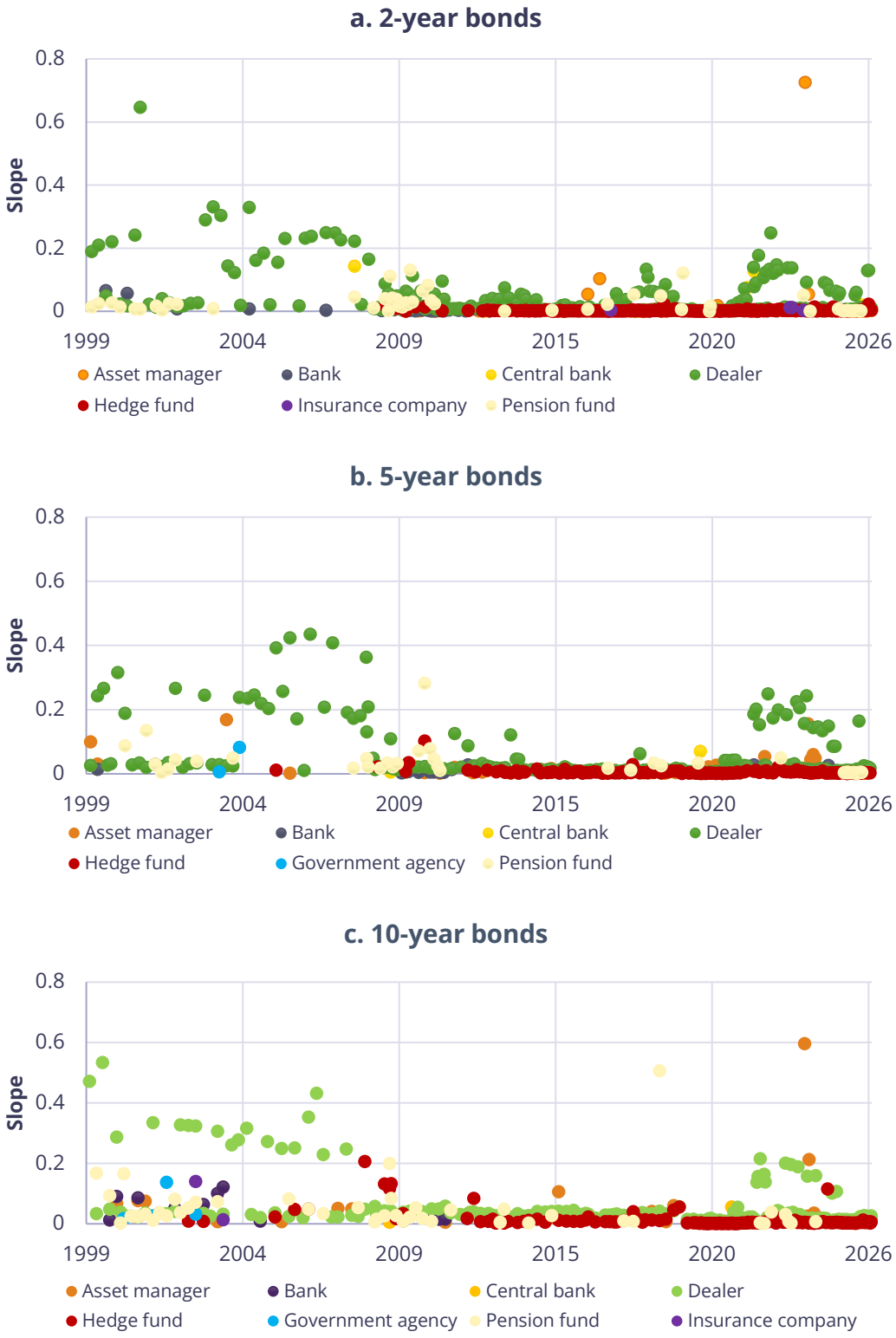
4 Hedge funds bid more competitively than other investor types at Government of Canada auctions

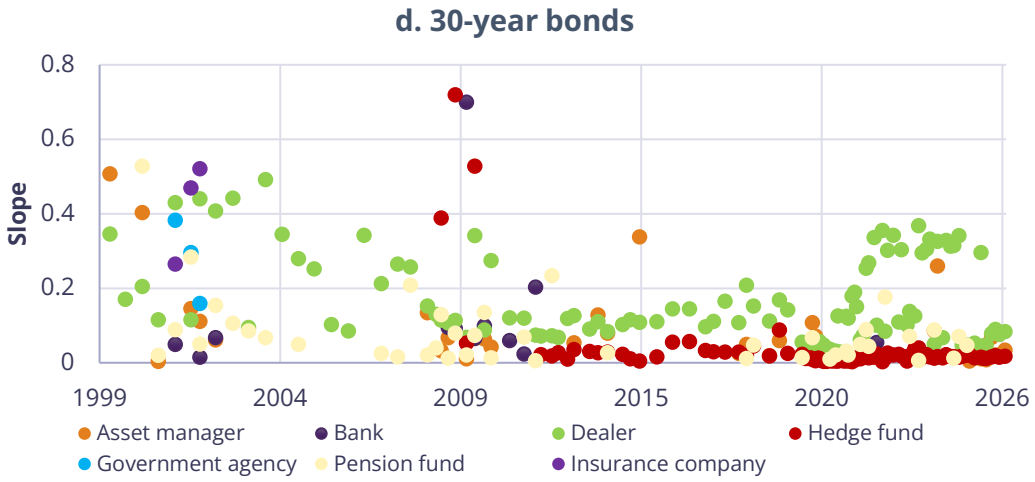
To assess bidding competitiveness, we build on Chang (2023), who estimates the slope of an effective demand curve for each GoC bond auction. We adapt this methodology to estimate demand function slopes by investor type, aggregating bidder-level demand curves using quantity-yield pairs and weighting each bidder by its maximum bid amount. This distinction across investor types is important because different sovereign debt investors can have different demand for that debt (Fang, Hardy and Lewis 2022; Eren, Schrimpf and Xia 2023). We use the estimated slope as a measure of price sensitivity at auction, with a lower slope indicating that bid quantities vary less with yields.

Chart 4 shows that hedge funds have consistently had the lowest estimated slope among investor types. This indicates that, since becoming active in GoC auctions around 2010, hedge funds have generally bid more competitively than other investors.

Chart 4: Hedge funds generally bid more competitively than other investor types at Government of Canada bond auctions

Slope of demand function, by type of investor





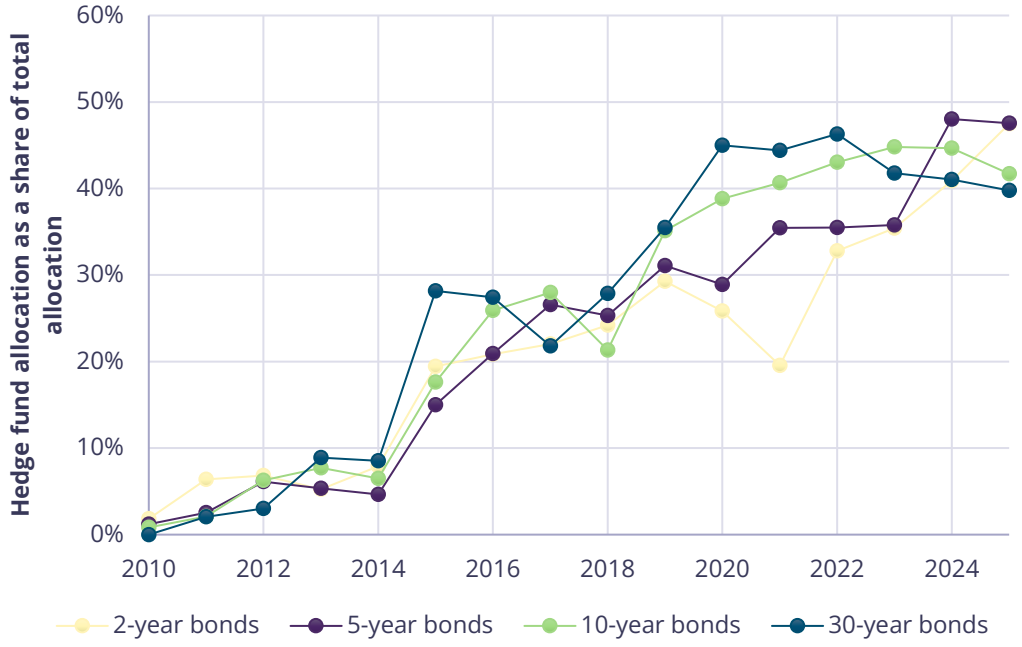
Sources: Department of Finance Canada and Bank of Canada calculations
Last observation: June 2026

This more competitive bidding is consistent with hedge funds' volume-based business models. Since profitability often depends on scale, hedge funds may be willing to bid more competitively to help establish larger positions. Allen et al (2024) show that customers at GoC auctions—most of which are hedge funds—are willing to pay more for bonds than dealers are, partly because hedge funds face fewer regulatory constraints and can pursue more profitable strategies.

Related evidence can be seen in the repo market, where hedge funds may accept higher costs on individual transactions to maintain access to financing. They tend to fund positions at the high end of the repo rate range (Plong and Maru 2024b), likely reflecting their lower bargaining power relative to dealers (Adams et al 2025) and the collateral involved. Market feedback also suggests that hedge funds may avoid seeking marginally better terms if doing so could reduce future dealer balance sheet allocation. Belkacem, Schneider and Walton (2026) also find that hedge funds, on average, face higher repo transaction costs than other investor types.

The combination of higher bidding volumes and more competitive bids has led to an increasing share of GoC bonds being allocated to hedge funds at auction (**Chart 5**). Consistent with this bidding behaviour, hedge funds' allocation shares at auction are generally higher than their bidding shares.

Chart 5: Hedge funds' share of auction allocations has increased from 0% to over 40% in the past 15 years



Sources: Department of Finance Canada and Bank of Canada calculations
Last observation: December 2025

5 Hedge funds have become increasingly important to auction performance as other investor types participate less

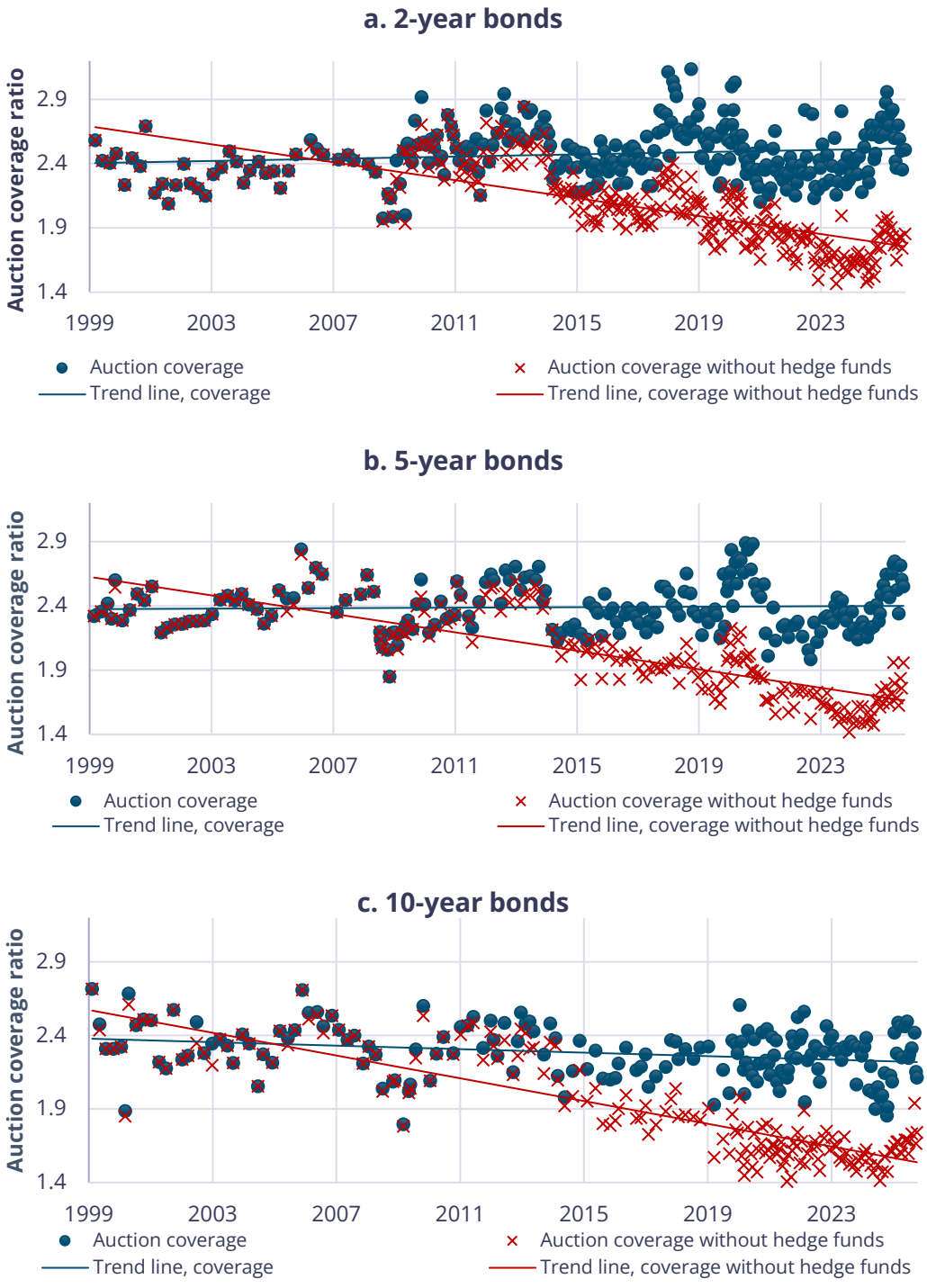
The greater participation of hedge funds at auctions since 2020 has helped sustain auction performance despite substantially higher debt issuance, in line with Canada's debt management objectives of raising low-cost funding and maintaining a well-functioning market for its securities.

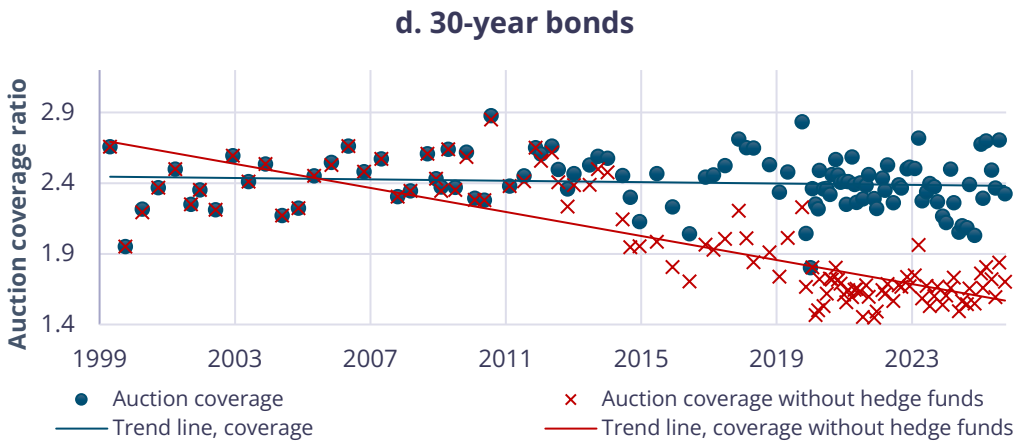
To assess the contribution of hedge funds, we estimate key auction metrics under a counterfactual scenario in which hedge funds do not participate and the bidding behaviour of other investors remains unchanged. These estimates should be interpreted as illustrative rather than precise because other investors would likely adjust their behaviour if hedge funds exited. Nevertheless, they provide a useful indication of how the importance of hedge funds has evolved over time.

One key metric of auction performance is the auction coverage ratio, defined as the total bids relative to auction size, net of Bank of Canada purchases. Lower coverage may indicate reduced market capacity to absorb growing GoC debt issuance. As shown in

Chart 6, actual auction coverage has remained relatively stable over time. In the counterfactual scenario, however, coverage trends downward after 2010, with the decline becoming much more pronounced after 2020.

Chart 6: In a counterfactual scenario that excludes hedge funds at auctions, coverage declines significantly, especially after 2020





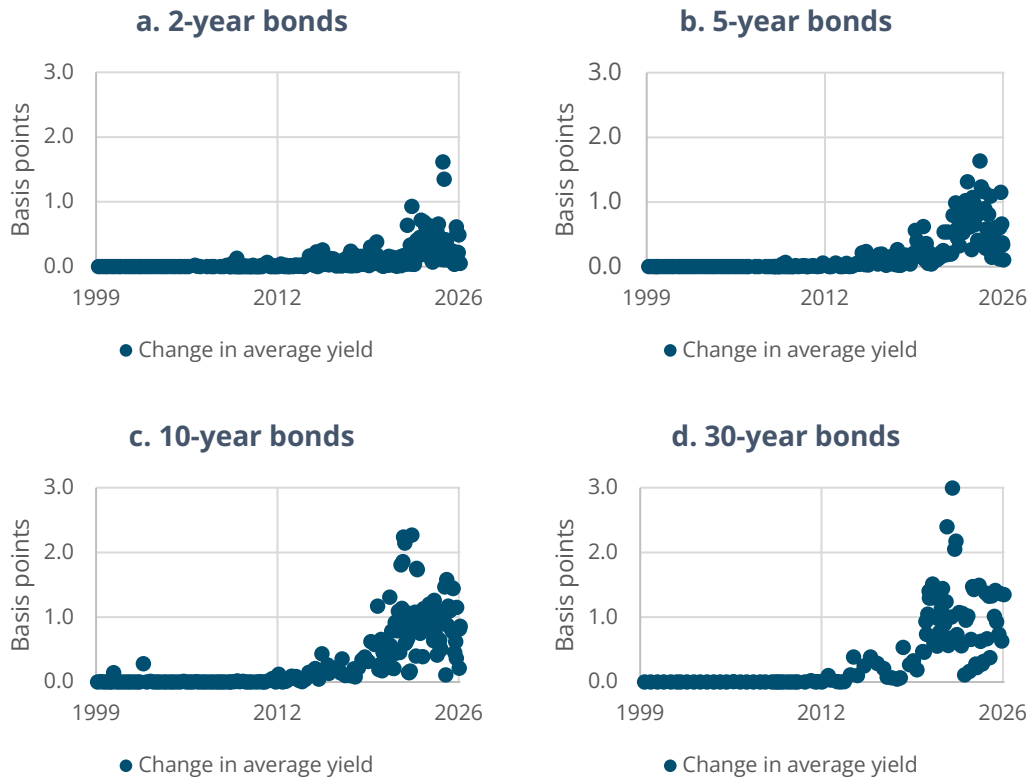
Sources: Department of Finance Canada and Bank of Canada calculations
Last observation: June 2026

The growing difference between actual and counterfactual coverage suggests that debt issuance has grown faster than participation from the traditional investor base. Auction participation has become less attractive for dealers, as they have faced increasing balance sheet costs associated with intermediation—a trend also observed internationally (OECD 2025; Aquilina et al 2024). At the same time, reduced participation by real money investors reflects increasingly competitive auction pricing, the ability to acquire smaller positions efficiently in the secondary market, and timing gaps between auction events and benchmark dates.

Another measure of auction performance is the average auction yield, which captures the government's borrowing cost. **Chart 7** shows that average auction yields would have been materially higher in the absence of hedge funds, with the effect increasing over time and becoming particularly pronounced after 2020.

Across tenors, this effect suggests that hedge funds have become increasingly important to the cost-effective distribution of GoC debt and now play an important role in auction pricing, consistent with market feedback that they have become marginal buyers at GoC auctions. A similar development has been observed in the US Treasury market, where growth in Treasury supply has relied increasingly on hedge funds as marginal sources of demand (Kahn and McCormick 2026).

Chart 7: In a counterfactual scenario that excludes hedge funds at auction, average auction yields are considerably higher, especially after 2020



Sources: Department of Finance Canada and Bank of Canada calculations
Last observation: June 2026

6 The benefits of hedge fund participation come with funding and investor base risks

Hedge funds have played an increasingly important role in GoC debt distribution. However, that participation depends heavily on access to repo financing and dealer balance sheet capacity. As a result, the sustainability of this participation depends not only on the size and liquidity of the GoC market, but also on the economics of funding those GoC positions.

Dealer balance sheet capacity is finite and shaped by factors such as the number of active dealers, internal risk limits, regulation, and clearing infrastructure. As noted frequently during market consultations, these pressures have increasingly operated through funding costs rather than the availability of financing itself. Dealer balance sheet constraints have raised the cost of accessing repo financing through both higher secured funding rates (Adams et al 2025) and higher effective repo transaction costs (Belkacem,

Schneider and Walton 2026). Because many hedge fund strategies in GoC bonds rely on leverage, scale, and relatively small pricing discrepancies, higher funding costs can meaningfully reduce the expected profitability of those strategies even when financing remains available.

This dynamic cuts directly against the mechanism that attracted hedge fund participation in the first place. Higher GoC issuance helped attract hedge funds by supporting larger and more scalable positions within profitable strategies. Rising funding costs, however, weaken that same mechanism by narrowing the set of GoC strategies that meet required return thresholds.

These funding costs may thus be limiting further growth in hedge fund auction participation at the margin. This interpretation is consistent with the recent moderation in hedge fund allocations at GoC bond auctions. Hedge funds accounted for 44 percent of auction allocations in 2024, 45 percent in 2025, and 41 percent in the first half of 2026, while the outstanding stock of GoC bonds increased by over 20 percent, from $1.05 trillion to $1.30 trillion, over the same period.

Beyond repo dependence, greater reliance on a single investor type may also reduce investor base resilience. Foreign non-bank investors tend to exhibit greater flight risk than other investor types (Arslanalp and Tsuda 2012). In the GoC market, this category is largely associated with hedge funds. As a result, their growing importance may make the investor base less stable at the margin.

Foxall and Gao (2026) discuss this broader risk in the context of OECD sovereign debt markets. As bank holdings of sovereign debt declined after the global financial crisis and central bank holdings fell with quantitative tightening, hedge funds increasingly became marginal buyers in some markets. While this can support debt absorption in normal conditions, it can also increase exposure to correlated deleveraging and investor outflows during periods of stress. Consistent with this concern, the Bank of Canada (2026c) notes that hedge funds' growing reliance on repo financing could amplify price movements and contribute to government bond market dysfunction if positions were rapidly unwound.

Evidence of this procyclicality can be seen during episodes of volatility in both Canada and abroad. Sandhu and Vala (2023) find that hedge fund activity intensified selling pressures in the GoC bond market during the Covid-19 stress episode. Similar dynamics were observed during the March 2020 disruption in the US Treasury market, where the unwinding of hedge fund positions contributed to market strains (Banegas, Monin and Petrasek 2021; Barth and Kahn 2021).

Several characteristics of hedge funds reinforce this possibility. Hedge funds face refinancing risk on leveraged positions and may reduce exposures in response to margin

calls or changes in risk appetite. Many hedge funds active in the GoC market participate because of global relative value opportunities rather than a structural need to hold Canadian sovereign debt. As a result, they may be more likely than domestic real money investors to scale back activity during a Canada-specific or global stress event. Andrews and Gadgil (2024) similarly argue that hedge fund incentive structures can amplify volatility in stress periods.

These risks qualify the paper's central finding. Hedge funds have played an important role in supporting GoC auction performance during a period of higher issuance, but their growing role has also created new dependencies and vulnerabilities.

7 These risks can be mitigated by developing a more resilient dealer base and market structure

For policymakers, the key implication is that maintaining a resilient investor base and efficient funding markets has become increasingly important to the cost-effective distribution of GoC debt. Although hedge funds have helped absorb a growing share of issuance, participation from dealers and real money investors has not expanded at the same pace. As a result, achieving the government's funding objectives has become increasingly dependent on repo market capacity and the viability of hedge fund strategies. Any significant deterioration in either could impair the government's ability to raise stable, low-cost funding and maintain well-functioning markets.

To support a more resilient investor base, Canada recently implemented reforms to its debt distribution framework to attract additional entrants into the intermediate Government Securities Distributor dealer class, specifically by reducing the high barriers to entry for foreign dealers (Bradley and Gao 2026). The objective is both to enhance aggregate dealer capacity and to foster broader and more diverse international participation, which is currently concentrated among hedge funds at GoC auctions.

A second area of focus is repo market infrastructure. As funding costs have become a more important constraint on hedge fund participation, measures that improve the efficiency of collateral and funding markets could support greater capacity to absorb GoC debt issuance.

Central clearing represents one such avenue. Auger and Walton (2026) find that its benefits can extend beyond dealers and reduce financing costs for clients when implemented in a coordinated manner. Relatedly, the Canadian Collateral Management Service (CCMS) can improve collateral management efficiency and support broader market participation (Muller and Padalko 2025). Greater adoption of these initiatives

could reduce funding frictions across the repo market. The Bank of Canada's planned participation in CCMS for its repo operations beginning in 2027 could further support broader adoption of this service.

8 Conclusion

This paper examines the rapid increase in hedge fund participation at Government of Canada bond auctions during a period of substantially higher debt issuance. We find that hedge funds have been responsive to higher issuance and have bid more competitively than other investor types. Together, these factors help explain the growth in hedge fund auction allocations and the continued strength of GoC auctions despite significantly higher issuance.

However, hedge fund auction participation depends heavily on access to repo financing and dealer balance sheet capacity. Rising funding costs may therefore limit further growth in hedge fund participation, while greater reliance on hedge funds may increase investor base vulnerabilities during periods of market stress.

The policy challenge is to sustain the benefits provided by hedge fund participation while ensuring it is complemented by a resilient market structure, including a diverse investor base, a competitive dealer community, and efficient funding market infrastructure. As sovereign borrowing needs continue to grow, maintaining that resilience will remain important for the cost-effective distribution of GoC debt.

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