INTERNATIONAL MONETARY FUND

IMF Country Report No. 23/286

CANADA

2023 ARTICLE IV CONSULTATION—PRESS RELEASE AND STAFF REPORT

July 2023

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2023 Article IV consultation with Canada, the following documents have been released and are included in this package:

- A **Press Release**.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on a lapse-of-time basis, following discussions that ended on June 12, 2023, with the officials of Canada on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on July 13, 2023.
- An **Informational Annex** prepared by the IMF staff.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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International Monetary Fund
Washington, D.C.

IMF Executive Board Concludes 2023 Article IV Consultation with Canada

FOR IMMEDIATE RELEASE

Washington, DC – **July 27, 2023:** The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Canada and considered and endorsed the staff appraisal without a meeting.

The Canadian economy is decelerating, accompanied by a sharp decline in headline inflation. But, as in other similar countries, core inflation has been stickier, and short-term expectations remain elevated against the background of still-tight labor markets. Meanwhile, the financial system appears broadly resilient, despite global banking stresses and ongoing mortgage resets at higher interest rates, and the housing market is rebounding again, partly reflecting the substantial increase in immigration.

Growth registered 3.4 percent in 2022, slowing sharply at the end of the year before rebounding in Q1:2023, driven primarily by strong trade and consumption. Looking ahead, the contractionary stance of monetary and fiscal policies is expected to slow activity, with growth declining to 1.7 percent this year. Headline inflation fell from its June 2022 peak of 8.1 percent to 3.4 percent by May 2023, benefiting from significant base effects associated with energy prices, while core inflation has declined more moderately, from around 6 percent last year to 3.7 percent in May.[2] With continued tight policies and slowing growth, inflation is expected to approach the 2-percent target by end-2024.

With the world moving from one crisis to the next, risks to a highly open economy like Canada are substantial and compound domestic vulnerabilities related to inflation expectations, the housing market, and household leverage. The outlook thus remains uncertain, and shocks could push the economy into a mild recession.

Looking further ahead, the government is positioning Canada as a reliable supplier of critical minerals and energy and has had some success in attracting some major new green investments. Key long-term challenges relate to further strengthening the investment climate, boosting productivity growth, and implementing Canada's ambitious policies to achieve its climate mitigation targets.

Executive Board Assessment[3]

The economy is slowing, but disinflation still has a way to go. Policy tightening is feeding through to the economy. Growth is gradually slowing, although the housing market is rebounding again, while the financial sector has so far been largely resilient to the domestic

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[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

[2] The data presented in the Press Release were based on information available as of July 13, 2023.

[3] The Executive Board takes decisions under its lapse-of-time procedure when the Board agrees that a proposal can be considered without convening formal discussions.

cycle as well as to global financial stress. Headline inflation has come down substantially, but core inflation has been slower to move, as the labor market is still tight and near-term expectations remain elevated. The external position in 2022 was moderately weaker than the level implied by medium-term fundamentals and desirable policies. The outlook is subject to important downside risks, and shocks could tip the economy into a mild recession.

Tight macro policies thus remain necessary. Assuming the economy evolves in line with baseline projections, monetary policy should remain restrictive, but it will be important for decisions to remain data dependent. Quantitative tightening should continue, while some further enhancements to monetary policy communication could be pursued. Fiscal consolidation is proceeding, although at a slower pace than previously envisaged, partly reflecting welcome new spending initiatives introduced in the 2023 budget. While Canada has fiscal space to accommodate these initiatives, care will need to be taken that fiscal policy supports inflation reduction goals. A quantitative fiscal framework, including a specific debt anchor and a supporting operational rule, would enhance policy credibility and communication, while helping to assess the tradeoffs between spending needs and the pace of consolidation. Given the recent rebound in housing prices, measures to promote housing affordability, particularly through increased supply, remain necessary.

Current challenges in the financial sector underscore the importance of enhancing policies in a number of areas. The Canadian financial sector faces risks on several fronts, including from high household leverage and housing-market developments, from rising interest rates, and from global banking stresses. While the sector has remained resilient to date, there is scope to strengthen capital and liquidity requirements on smaller banks and to expand the stress testing of NBFIs. Progress continues to be made on the 2019 FSAP recommendations, but recent global market volatility has underscored the importance of addressing persistent issues of data gaps and fragmentation. Canada’s AML/CFT framework is generally appropriate but further focus could be placed on the assessment and mitigation of cross-border money laundering risks, particularly in the banking and real-estate sectors. The proposed establishment of a Canada Financial Crimes Agency is welcome, as are steps to move toward establishing beneficial-ownership registries.

Structural challenges need to be addressed. Productivity growth must be enhanced and the investment climate made more attractive. Canada is currently among the world’s top-ten emitters of greenhouse gases, but announced climate mitigation policies should go a long way toward delivering its NDCs. Adverse competitiveness implications of these policies may be significantly mitigated by exchange rate flexibility and by well-designed recycling of carbon tax revenues, and any remaining effects could be addressed through international cooperation, such as on a carbon price floor. Green industrial policies can help the economy to transition and may be a needed response to policies of major trading partners, but their design poses some risks. Meanwhile, Canada should continue to eschew approaches that distort trade.

Canada: Selected Economic Indicators

(Percentage change, unless otherwise indicated)

Nominal GDP (2022): Can$ 2,785 billion (US$ 2,139 billion)
GDP per capita (2022): US$ 54,015
Main exports: Oil and gas, autos and auto parts, gold, lumber, copper.

Quota: SDR 11,023.9 million
Population (2022): 39.6 million

						Projections			
	2020	2021	2022	2023	2024	2025	2026	2027	2028
Output and Demand									
Real GDP	-5.1	5.0	3.4	1.7	1.4	2.2	1.9	1.7	1.7
Total domestic demand	-6.0	6.6	4.7	-0.5	1.5	2.6	2.1	2.0	2.0
Private consumption	-6.1	5.0	4.8	3.9	2.3	3.5	2.6	2.6	2.6
Total investment	-7.4	13.9	7.0	-9.5	0.8	2.5	2.2	1.8	1.7
Net exports, contribution to growth	0.3	-2.1	-1.5	2.2	-0.1	-0.4	-0.2	-0.3	-0.4
Unemployment and Inflation									
Unemployment rate (average) 2/	9.7	7.5	5.3	5.5	6.2	6.1	6.0	6.0	6.0
CPI inflation (average)	0.7	3.4	6.8	3.6	2.5	2.0	1.9	1.9	2.0
Saving and Investment 1/									
Gross national saving	20.1	23.5	24.2	21.5	21.4	21.2	21.0	20.8	20.5
General government	-6.8	-0.7	2.5	2.5	2.4	2.4	2.5	2.5	2.5
Private	26.9	24.3	21.7	18.9	19.0	18.8	18.5	18.3	18.0
Personal	32.3	22.7	12.0	2.6	2.2	-0.3	-2.0	-2.2	-1.8
Business	-5.5	1.5	9.7	16.3	16.7	19.1	20.5	20.5	19.8
Gross domestic investment	22.3	23.8	24.5	23.0	22.9	22.9	23.0	23.0	23.0
General Government Fiscal Indicators 1/ (NA basis)									
Revenue	41.8	41.5	40.6	40.7	40.6	40.7	40.7	40.9	41.0
Expenditures	52.7	45.9	41.4	41.4	41.3	41.2	41.1	41.1	41.1
Overall balance	-10.9	-4.4	-0.8	-0.7	-0.7	-0.6	-0.4	-0.2	-0.2
Gross Debt	118.9	115.1	106.7	105.8	103.5	101.0	98.8	96.7	94.7
Net debt	15.7	15.4	13.9	14.3	14.4	14.4	14.2	14.0	13.6
Money and Credit (Annual average)									
Household Credit Growth	5.2	10.8	9.9	5.0	3.6	3.5	3.5	3.5	3.5
Business Credit Growth	-0.9	-12.7	6.4	3.4	3.6	3.5	3.5	3.5	3.5
Balance of Payments									
Current account balance 1/	-2.2	-0.3	-0.3	-1.5	-1.5	-1.7	-1.9	-2.1	-2.4
Merchandise Trade balance 1/	-1.8	0.2	0.8	-0.2	-0.3	-0.7	-0.9	-1.1	-1.4
Export volume (percent change)	-7.9	1.7	1.9	5.9	1.2	2.1	3.4	3.4	3.1
Import volume (percent change)	-7.1	8.7	6.2	-1.7	1.7	3.8	4.2	4.6	4.5
Terms of trade	-3.4	14.4	5.3	-9.0	-0.2	0.3	0.0	0.0	0.0

Sources: Haver Analytics and Fund staff calculations.
1/ Percent of GDP.
2/ In percent.

INTERNATIONAL MONETARY FUND

CANADA

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION

July 13, 2023

KEY ISSUES

Conjuncture. Growth is slowing and headline inflation falling rapidly, but, as in other countries, core inflation has been stickier and short-term expectations elevated in the context of still-tight labor markets. The financial system appears broadly resilient despite global banking stresses and ongoing mortgage resets at higher interest rates. With the world moving from one crisis to the next, risks to a highly open economy like Canada are substantial and compound domestic vulnerabilities related to inflation expectations, the housing market, and household leverage. The outlook thus remains uncertain, and shocks could push the economy into a mild recession.

Macro policy advice. Monetary policy should stay focused on the fight against inflation and data dependent. A restrictive stance will likely be needed for a while to move inflation back toward target by end-2024. Given the rise in debt since the pandemic and the need to cool the economy and tame inflation, fiscal policy also should remain tight. The new spending priorities in the 2023 budget are welcome but have come at the cost of slower fiscal consolidation. In this regard, a clearly specified quantitative fiscal framework would not only further enhance policy credibility and communication but also facilitate assessment of the various policy tradeoffs. Financial sector resilience could be bolstered by expanding stress testing of nonbanks, strengthening capital and liquidity requirements on small and medium-sized banks, enhancing federal-provincial supervisory cooperation, and addressing persistent data gaps. Given the rebound in housing prices, policies to improve housing affordability remain of essence.

Structural policies. The government is positioning Canada as a reliable supplier of critical minerals and energy and has had success in attracting some major new green investments. The design of some incentives, however, could pose some risks, and policies to encourage investment could be improved further, including in the areas of competition, FDI barriers, and governance. More generally, Canada's long-term prospects will also depend on boosting productivity growth, attracting and deploying immigrants productively while ensuring that housing supply keeps pace, and pursuing close international cooperation—e.g., to avoid a race to the bottom on green subsidies, and to agree on a carbon price floor—to ensure that the government's ambitious and welcome climate policies go hand in hand with continued economic progress.

Approved By
Luis Cubeddu (WHD) and Martin Čihák (SPR)

Discussions took place both in Ottawa and remotely via videoconference during May 17–June 12, 2023. The team comprised K. Mathai (head), L. Azoor, T. Kass-Hanna, L. Liu, L. Masterson, Y. Yang (all WHD), F. Lutz (FIN), and P. Morales (MCM), with additional analytical contributions from M. Ghazanchyan (WHD), and support from I. Thomas (LEG) on AML/CFT issues. Additional research and administrative assistance were provided by E. Bae, S. Coquillat, and J. Thangaraj. P. Jennings, R. Cunningham, and M. Villeneuve (all OED) joined many of the mission's meetings, and R. Valdés (WHD) participated in the concluding discussions with Deputy Prime Minister Freeland and Governor Macklem.

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CONTEXT

1. **The global economy, along with Canada, has faced one shock after another**. The pandemic, Russia's war on Ukraine, surging inflation, and—most recently—banking stresses in key advanced economies have reverberated around the world. As a highly open economy, Canada has had to contend with these shocks, as well as their interactions with domestic vulnerabilities, including stubbornly high inflation expectations, housing-market risks, and elevated household leverage.

2. **While these shocks have created important challenges, they also offer new opportunities for Canada.** Last year's jump in commodity prices, for instance, put pressure on Canadian households' purchasing power but also benefited the country's large agricultural and extractive sectors. And looking ahead, while the threat of geoeconomic fragmentation may imply slower global growth and weaker cross-border trade and investment, it could also open a lane for Canada as a reliable supplier of energy, as well as critical minerals and technology relevant for the climate transition.

3. **To position the economy best to take advantage of these opportunities, some longstanding challenges will need to be addressed**. Productivity growth is relatively weak in international comparison, driven by a range of factors such as interprovincial trade barriers[1] and low corporate investment. While the business climate is generally favorable, efforts in key areas (e.g., competition and governance) would help to boost private investment. In the absence of rapid productivity growth, Canada has relied heavily on skills-based immigration to bolster aggregate GDP growth, but here too there is scope for improvement, in addressing the country's specific labor needs. Canada does relatively well on gender inclusion issues, and the initiative to provide subsidized childcare may already be further encouraging female labor force participation.

4. **In addition, Canada's climate policies should deliver for both the climate and the economy.** Canada is one of the world's top-ten emitters of greenhouse gases (GHGs) and has committed to reducing these emissions by 42.5 percent in 2030 relative to 2005, requiring structural change in a broad set of economic sectors. The country's pricing-centered mitigation strategy should largely deliver on its appropriately ambitious Nationally Determined Contributions (NDCs), and exchange rate flexibility and well-tailored revenue recycling efforts should help to mitigate many of the adverse aggregate competitiveness implications of the planned ramp-up in carbon taxes. Canada's decision to offer large subsidies for green investment was a response to similar actions in major trading partners, but the design of some incentives could pose some risks. International cooperation—to avoid a race to the bottom on subsidies and also to agree a carbon price floor—will be of critical importance.

5. **The policymaking environment remains stable.** Prime Minister Trudeau's Liberal Party—in power since 2015—lost its parliamentary majority in 2019 and did not regain it in the 2021 election, but a multiyear agreement with the New Democratic Party has bolstered the government's ability to

[1] See 2019 Article IV Consultation on Canada.

legislate. Policy priorities, as laid out in the 2023 Budget, include improving affordability, advancing reconciliation and inclusion, and boosting investment to build Canada's clean economy.

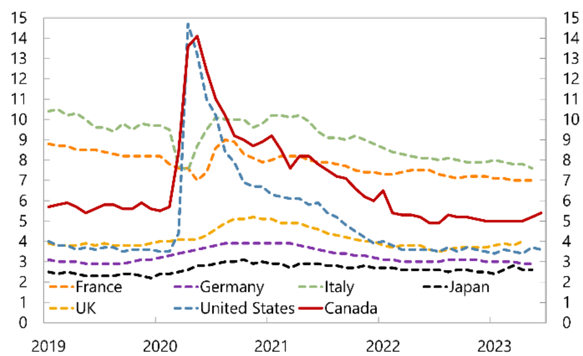
RECENT DEVELOPMENTS

6. The Canadian economy is gradually slowing but has been more resilient than expected. After slowing sharply in Q4:2022 (albeit partly reflecting a drawdown of inventories), activity accelerated in Q1:2023 on the back of strong trade and consumption, which offset weaker investment. The economy remains in excess demand for now, with the output gap estimated at +0.4 percent.

7. In line with these trends, labor markets are easing but remain tight. Vacancies have dropped noticeably, and firms are reporting fewer labor bottlenecks and shortages, supported in part by a significant increase in immigration (see Box 1) and in labor force participation, which may have been bolstered by the government's investment in a Canada-wide early learning and childcare system. Meanwhile, unemployment rate remains very low at 5.4 percent in June, and wage growth has outpaced inflation.

Canada: Unemployment Rate

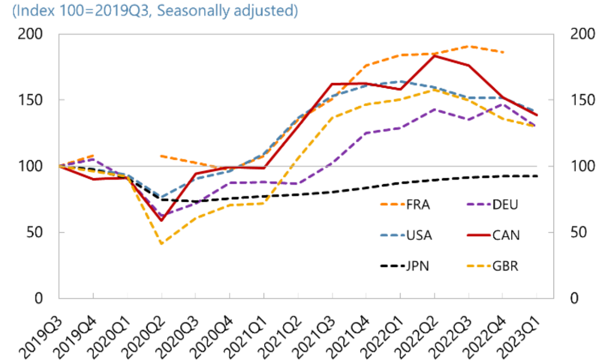
(Percent, Seasonally adjusted, Monthly)



Sources: StatCan, INS/E, StatBun, INS, MoHLW, ONS and BLS

Canada: Total Job Vacancies

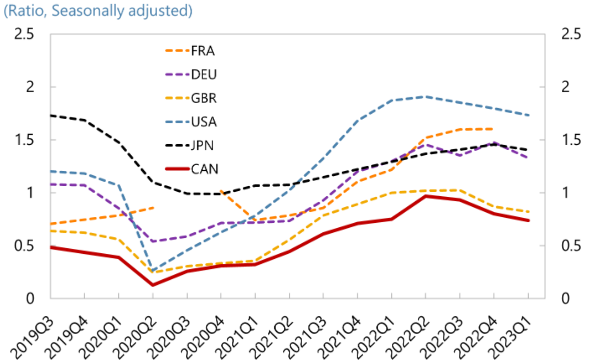
(Index 100=2019Q3, Seasonally adjusted)



Sources: Haver Analytics and IMF staff calculations

Canada: Job Vacancies per Unemployed Person

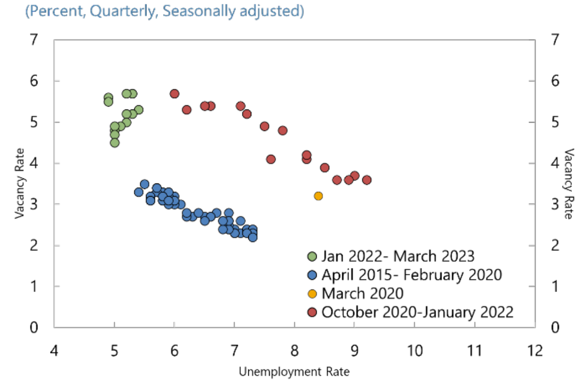
(Ratio, Seasonally adjusted)



Sources: Haver Analytics and IMF staff calculations

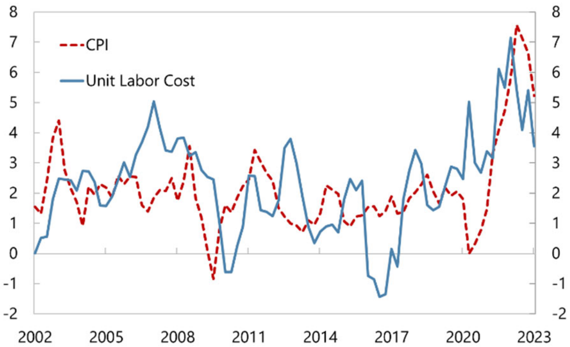
Canada: Beveridge Curve

(Percent, Quarterly, Seasonally adjusted)



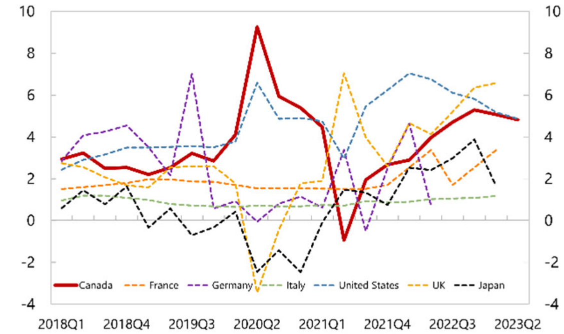
Sources: Statistics Canada and IMF staff calculations

Canada: Unit Labor Cost
(Percent, Growth rate, YoY, Seasonally adjusted)



Sources: Statistics Canada and IMF staff calculations

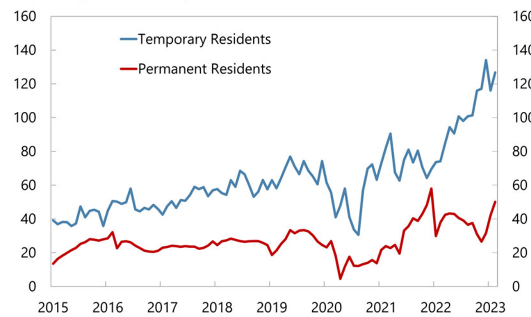
Canada: Average Hourly Wage
(Percent, Growth YoY)



Sources: StatCan, INSEE, DBB, INS, BLS and IMF staff calculations

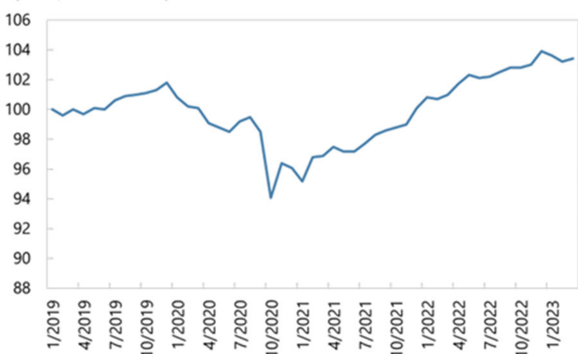
8. **Following a sharp correction, the housing market is now rebounding.** While about half of the surge in house prices during the pandemic was erased during 2022, prices have risen again since the start of the year, while rents have climbed throughout. Stronger-than-anticipated housing prices and rents may reflect a combination of supply bottlenecks, strong demand (fueled by the rapid post-pandemic increase in immigration), and reduced turnover from owners locked into cheaper mortgages. That said, current levels of housing prices and rents appear to be broadly in line with fundamentals, although continued efforts to improve housing affordability will be required going forward.[2]

Canada: Inflows of Immigrants
(Monthly, Thousands of persons, SA)



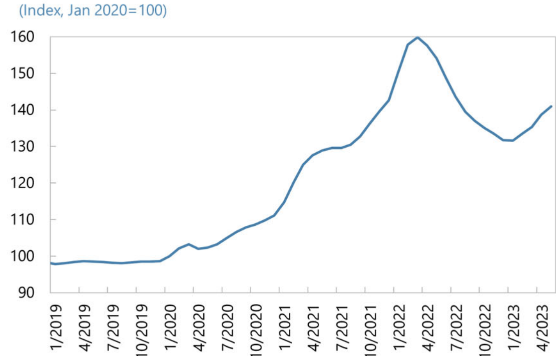
Sources: IRCC and IMF staff calculations

Canada: Rent Prices
(Index, 100=Jan 2019)



Sources: Statistics Canada

Canada: Housing Prices
(Index, Jan 2020=100)

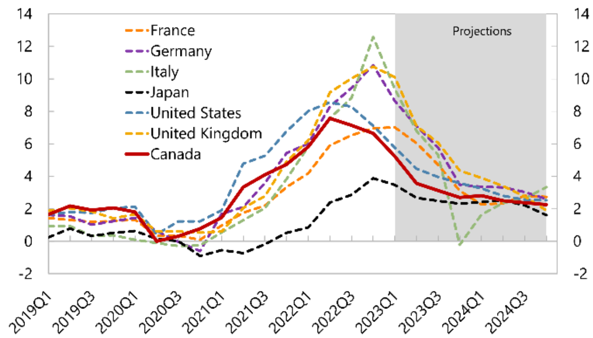


Sources: CREA and IMF staff calculations

[2] Although the house-price/income ratio has increased much more sharply in Canada than in comparator countries—by 36.4 percent since 2015, according to OECD data, as against the OECD average of 22.9 percent—the Andrle and Plasil (2019) model suggests that real income growth and mortgage rate movements do a good job of explaining the runup in Canadian prices. Of course, fundamentals-driven price growth does not imply that those prices are affordable.

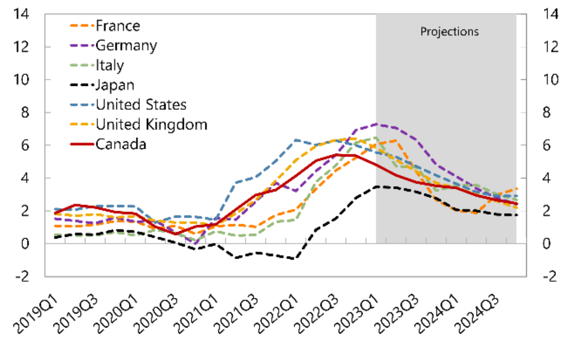
9. Headline inflation has declined sharply from its mid-2022 peak, but core has been stickier. Headline inflation fell from a peak of 8.1 percent y/y in June 2022 to 3.4 percent in May, aided by substantial base effects related to energy prices. Declines in core inflation have been more moderate—from a peak of around 6 percent y/y last year to 3.7 percent in May—reflecting high services inflation, robust wage growth, and stubbornly high near-term inflation expectations. In fact, on a three-month annualized basis, the Bank of Canada's (BoC's) preferred measures of core inflation rose to 3.7 percent on average in May, up from around 3.6 percent in the first three months of the year.

Canada: CPI Inflation
(Average, YoY percent change)



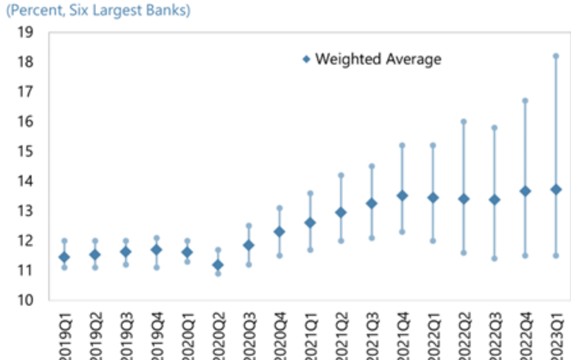
Sources: World Economic Outlook and IMF staff calculations

Canada: Core Inflation
(Percent)



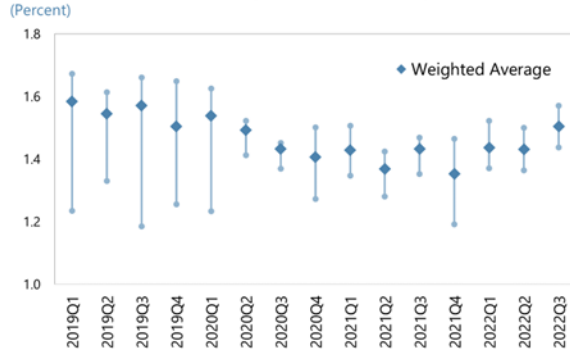
Sources: World Economic Outlook and IMF staff calculations

Canada: CET1 Ratio
(Percent, Six Largest Banks)



Sources: Capital IQ and IMF staff calculations

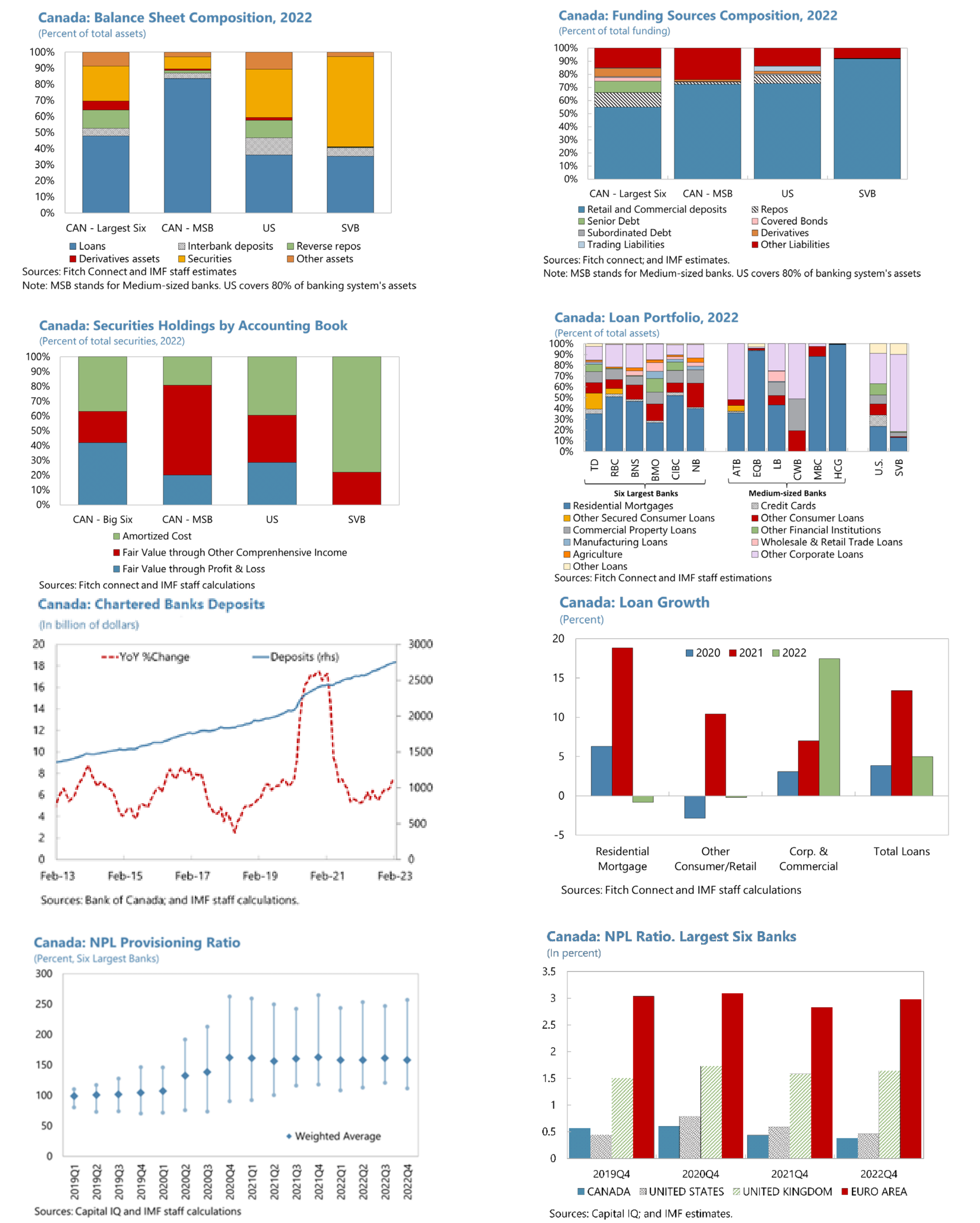
Canada: Net Interest Margin (NIM). Six Largest Banks
(Percent)



Sources: Capital IQ and IMF staff calculations

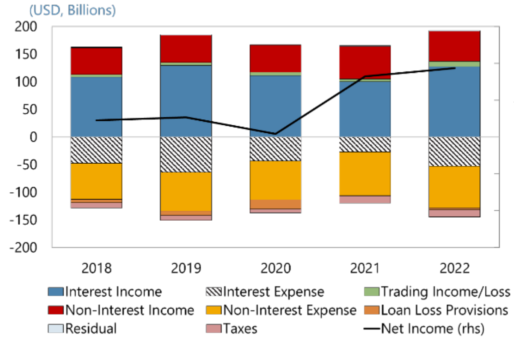
10. The banking system has remained resilient in the face of recent global financial stress. The high degree of concentration, with the six largest banks accounting for 92 percent of total assets, implies that almost all of the system is subject to the most stringent regulation and supervision. Banks are well capitalized and liquid and have stayed profitable, supported by increases in net interest income during the tightening cycle, while unrealized losses on securities (which represent about 0.3 percent of total assets) have been partially mitigated by proactive hedging. Funding sources are well diversified, and deposit growth has stayed robust, in contrast to the outflows observed at U.S. banks. Credit growth has remained strong on the back of an expansion of commercial lending and credit quality remains healthy, with average NPL ratios below 0.4 percent, despite some minor deterioration.

Text Figure 1. Financial Sector Developments



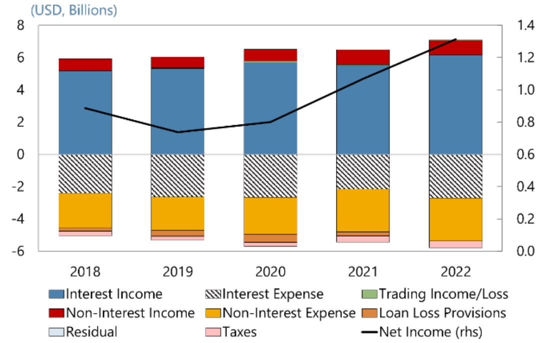
Text Figure 1. Financial Sector Developments (concluded)

Canada: Net Income of Six Largest Banks
(USD, Billions)



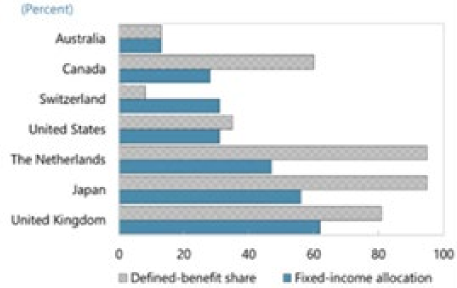
Sources: Fitch connect; and IMF estimates.

Canada: Net Income of Medium-Sized Banks
(USD, Billions)



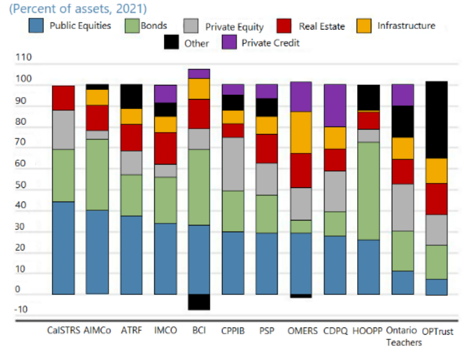
Sources: Fitch connect; and IMF staff estimations.

Canada: Fixed-Income Allocation and Share of Defined Benefit Plans
(Percent)



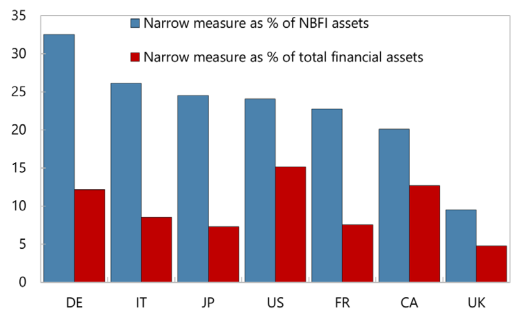
Sources: GFSR, April 2023

Canada: Pension Fund Asset Mix
(Percent of assets, 2021)



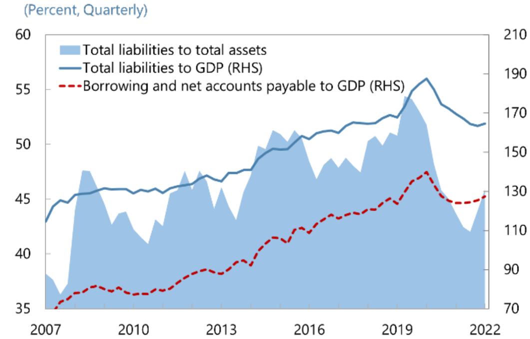
Source: Fitch Ratings

Canada: FSB Narrow Measure
(Percent, 2022)



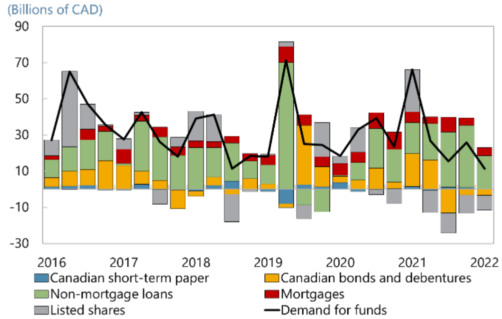
Sources: FSB, Global Monitoring Report on Non-bank Financial Intermediation, 2022

Canada: Corporate Indebtedness and Leverage
(Percent, Quarterly)



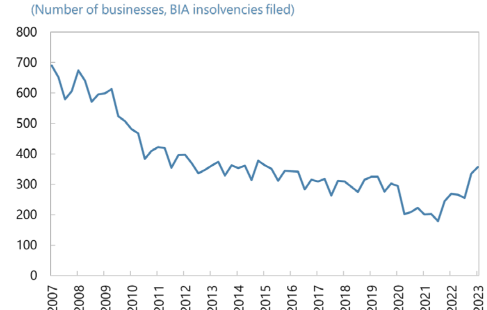
Sources: Statistics Canada and IMF staff calculations

Canada: Demand for Funds by Private NFCs
(Billions of CAD)



Sources: Statistics Canada and IMF staff calculations

Canada: Business Insolvency Rate
(Number of businesses, BIA insolvencies filed)



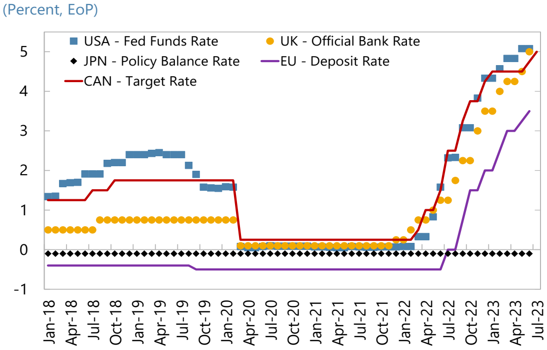
Source: Statscan and IMF staff calculations

11. Small and medium-sized banks (SMSBs) have weathered recent turmoil reasonably well. These institutions have less well diversified balance sheets—in particular, heavier exposures to residential mortgages and commercial real estate,[3] as well as a high share of broker-sourced deposits—but, like the six largest banks, they too have remained profitable and well above regulatory capital minima. Moreover, only about 25 percent of their deposits are uninsured, mitigating the risk of outflows.

12. While data gaps prevent a full analysis, nonbanks also appear to be healthy. As highlighted in the last FSAP, Canadian pension funds and other institutional investors are well known internationally for their sophisticated investment and funding strategies. While these strategies likely involve increased leverage and liquidity risk, most of these institutions appear to have ample liquidity to meet their obligations, as well as access to a Bank of Canada backstop. There appears to be substantially less reliance on liability-driven investment (LDI) strategies than in the United Kingdom, and Canadian pension funds appear to have more diversified assets than their UK counterparts, including public and private equity, bonds, and—to a lesser extent—real estate, infrastructure, and private credit, *inter alia*. At end-2021, the FSB's narrow measure of NBFIs[4] represented 20.1 percent of NBFI sector assets and 12.7 percent of total financial assets.

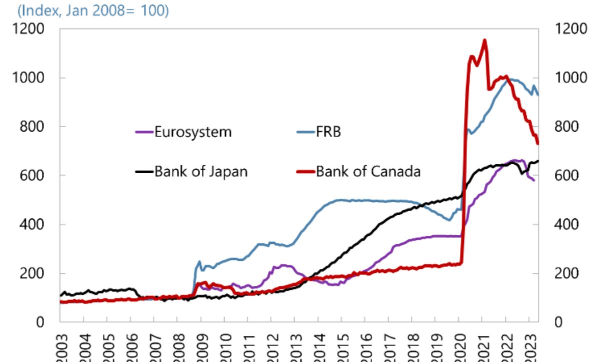
13. Following a "conditional pause" for several months, monetary policy was again tightened in June and July. Citing the need to assess the impact of past tightening, the BoC put its rate hikes on hold following its eighth consecutive increase in late January, becoming one of the earliest major central banks to do so. But with strong Q1:2023 growth and the upside inflation surprise in April, among other developments, the BoC raised the key policy rate in June and again in July, taking it to 5 percent. Quantitative tightening continues in the background, with the BoC allowing securities to roll off its balance sheet as they mature, complementing the restrictive policy stance and helping to regularize debt markets.

Canada: Nominal Policy Rates
(Percent, EoP)



Sources: Haver Analytics

Canada: Central Bank Balance Sheets
(Index, Jan 2008= 100)



Sources: BoC, ECB, FRED, and IMF staff calculations

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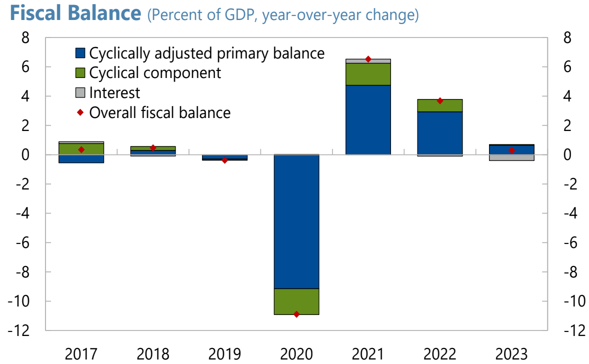
[3] That said, small and medium-sized banks in Canada are less exposed to CRE than U.S. regional banks are: CRE exposures represent about 20 percent of their loan book, as opposed to 36 percent in the U.S. (Large banks too are less exposed to CRE in Canada than in the U.S.: 9 percent versus 16 percent.) CRE exposures in both countries are much higher than in Europe (6 percent). Finally, it is worth noting that the CRE sector in Canada is less dependent on lending from small and medium-sized banks than is the case in the U.S.: these banks account for only 8 percent of CRE bank lending, while in the U.S., banks with total assets less than $250 billion account for three-quarters of CRE bank lending.

[4] The narrow measure includes NBFIs involved in credit intermediation activities that may pose bank-like financial stability risks and/or regulatory arbitrage.

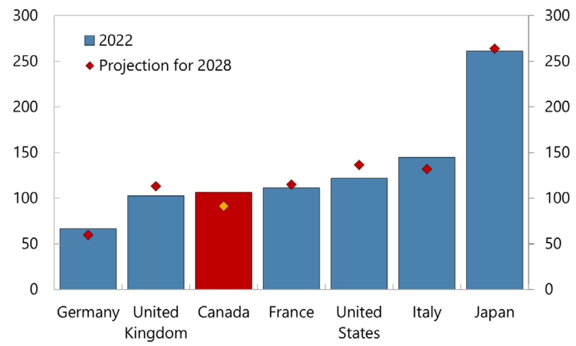
14. The fiscal stance is mildly contractionary. With the unwinding of federal pandemic support combined with a broadly neutral stance at the provincial level, the general government's cyclically adjusted primary deficit narrowed sharply during 2021–22, by 4½ percent of GDP in 2021 and a further 2¾ percent of GDP in 2022. During 2023, fiscal policy is expected to remain slightly contractionary, albeit much less so than in previous years and also less than previously envisaged, largely reflecting new spending measures adopted in the 2023 federal and provincial budgets (see ¶24). Still, Canada has some fiscal space on account of a low overall risk of sovereign stress (see Annex I) and a relatively moderate level of gross debt compared to that of other G7 economies.[5]

Canada: Decomposition of Changes in General Government Fiscal Balance (Percent of GDP, year-over-year change)



Sources: StatsCan, Department of Finance, and IMF staff calculations.

Canada: General Government Gross Debt (Percent of GDP)



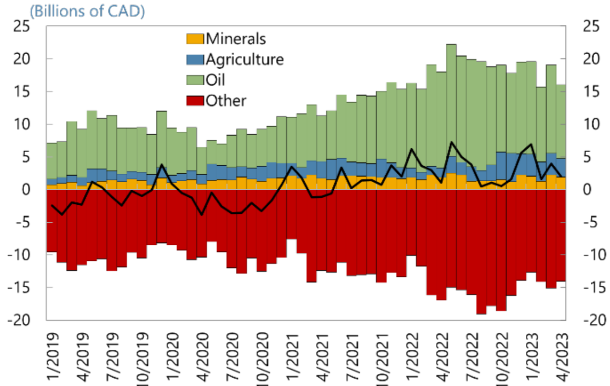
Sources: IMF World Economic Outlook

15. The external position has remained broadly unchanged. The external current account deficit was unchanged during 2022, as the rising goods trade surplus (supported by improvements in the terms of trade following the Russian invasion of Ukraine) was offset by declining investment income and a wider services deficit as outbound tourism resumed. During the first months of 2023, the current account deficit has remained generally unchanged as the lower goods trade surplus has been offset by improvements in the services balance supported by some depreciation of the real exchange rate.[6] Meanwhile, Canada's net international investment position (NIIP) remained positive, with recent downward adjustment (from 52 percent of GDP in 2021 to 30 percent of GDP in 2022), reflecting movements in global equities and interest rates. Canada's external position in 2022 is assessed as moderately weaker than the level implied by medium-term fundamentals and desirable policies (see Annex II).

[5] While net debt is substantially lower than in comparators, this partly reflects definitional differences. In particular, Canada's net debt corresponds to net financial liabilities as reported by Statistics Canada. The financial assets used in the calculation includes sizeable equity and investment fund shares. Statistics Canada made a methodological change last December to value assets at market value instead of book value, which substantially revised up the values of equity and investment fund shares and lowered net public debt over the period 1990 to 2020. For further details, see "An overview of revisions to the Financial and Wealth Accounts, 1990 to 2022."

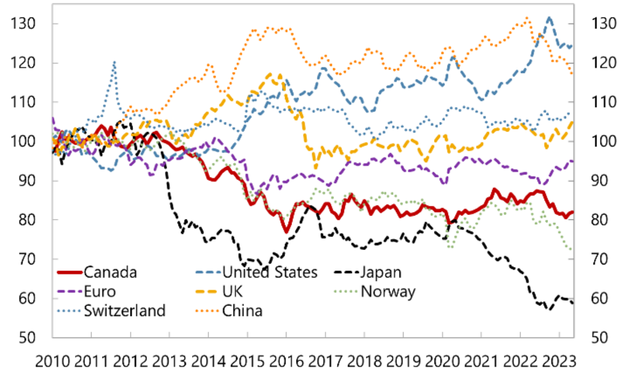
[6] As of June 2023, the Canadian dollar has weakened substantially against the dollar and other partner currencies. The REER has depreciated by 4.6 percent relative to the 2022 average.

Canada: Trade Balance of Goods
(Billions of CAD)



Sources: Statistics Canada and IMF staff calculations

Canada: Real Effective Exchange Rate
(Index 100=Jan 2010, CPI based)

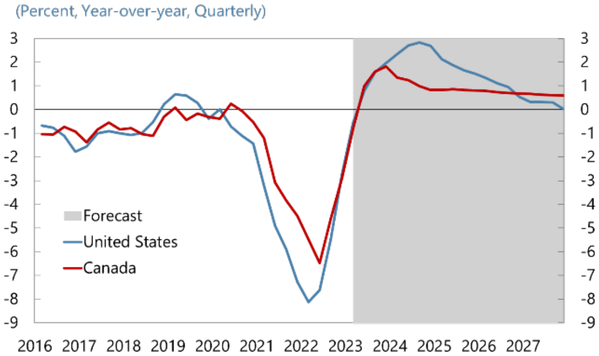


Sources: JP Morgan and IMF staff calculations

OUTLOOK AND RISKS

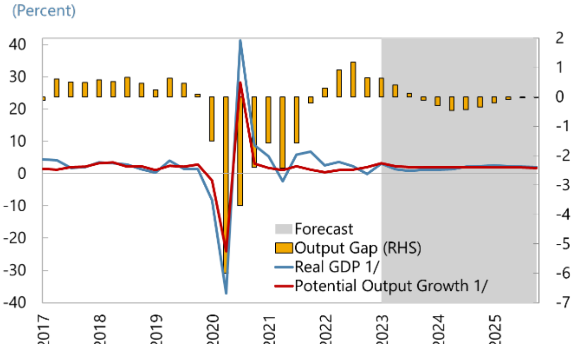
16. Real GDP growth is likely to bottom out in 2023Q3. With inflation still well above target, a restrictive monetary policy stance will be needed for some time. As inflation declines the *ex post* real policy rate will continue to rise, peaking at 2 percent by end-year, broadly consistent with a simple Taylor rule. This is expected to reduce consumption by households facing higher mortgage payments, while lowering credit growth to consumers and businesses. Combined with a mildly contractionary fiscal stance and weak external demand, tightening financial conditions are expected to weigh on residential construction and business investment. Growth should moderate to around 1.7 percent on average in 2023, and unemployment should gradually rise to slightly above its long-term level of 6 percent next year. Quarterly growth is expected to bottom out by Q3:2023, with housing construction and sales activity also reaching a trough then. A negative output gap is expected to arise in the coming four quarters before closing by end-2025.

Canada: Real Interest Rates
(Percent, Year-over-year, Quarterly)



Note: Real interest rate is central bank policy rate minus CPI inflation rate
Sources: Statcan, BLS, BoC, FRB, and IMF staff calculations

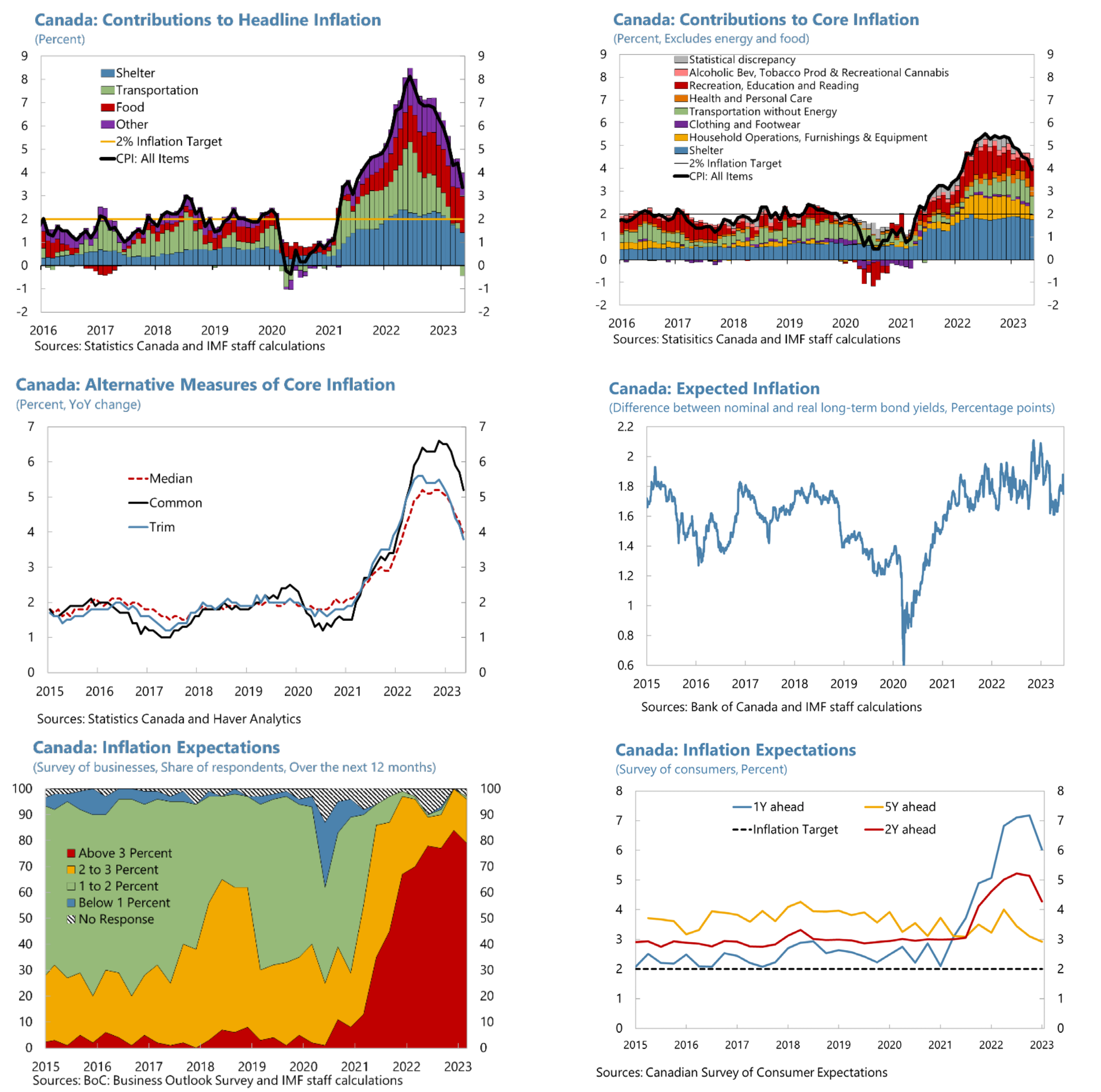
Canada: Output Gap
(Percent)



Sources: WEO and IMF staff calculations
1/ Annualized, QoQ Growth

17. Inflation is expected to approach the 2 percent target by end-2024. Headline inflation should ease to around 3 percent by the end of the third quarter, supported by continued moderation in commodity prices. But even with the tight monetary and fiscal policy stance, core inflation may take another 6 months to reach that level, given still-elevated inflation expectations by consumers and firms, robust wage growth, and rising shelter costs. In addition, to the extent that the BoC diverges more substantially from the Fed's rate path, any resultant weakening of the Canadian dollar could put further pressure on inflation.

Text Figure 2. Inflation Expectations



18. As the economy responds to restrictive policies, the financial sector is expected to remain resilient, although financial stability risks have clearly increased:

- Canadian banks are projected to remain well capitalized and able to continue providing credit (though credit growth will naturally slow as monetary transmission works through). Net interest margins should continue to benefit from higher interest rates, assuming banks can reprice loans faster than deposits (which seems likely in such a highly concentrated sector). Funding costs may, however, come under pressure, although to date deposit outflows have not materialized. Banks may continue to build provisions as credit performance continues to normalize towards pre-pandemic levels. It is also worth noting that medium-sized banks' less diversified balance sheets make them more vulnerable to rising interest rates, an economic slowdown, and/or a sudden loss of confidence. Even though these banks account for less than 7 percent of banking-system assets, problems in one or few institutions could undermine stability elsewhere through direct interconnections or a broader loss of confidence.

- Banks are heavily exposed to residential real estate. Although mortgages tend to be fixed-rate or fixed-payment products, these are usually for no more than five-year terms, and staff analysis suggests that 40 percent of mortgages are likely to reprice by 2023, and nearly 70 percent by 2025, higher than in the U.S. and higher than in the past in Canada. The concomitant risks, however, are partly offset by: (i) the low share of high-LTV loans (only 8 percent of loans have an LTV above 80 percent), coupled with mandatory mortgage insurance for those high-LTV loans; (ii) the low share of high-debt-service-ratio loans (only 14 percent have a DSR above 25 percent); (iii) the high share of loans to owner-occupied real estate, which is generally less prone to default; (iv) households' large cumulative savings (much higher than pre-pandemic, although data on the *joint* distribution of savings and mortgages are unavailable); and (v) the full-recourse nature of mortgages in most provinces (boosting borrowers' incentives to honor their obligations). Staff scenario analysis suggests that the banking system is resilient to shocks to the residential mortgage portfolio (see Box 2). Still, mortgage loans bear close watching, as high interest rates and easing labor income weigh on households' debt-servicing capacity.

- The commercial real estate (CRE) sector has come under pressure since the pandemic, given the rise in teleworking and online shopping, and loans to this sector have been a concern in many countries. That said, CRE is much stronger in Canada than elsewhere, partly because of the strength of multifamily housing, just ½ percent of CRE assets are currently impaired, and CRE exposures represent less than 10 percent of total loans.[7] Moreover, credit risks are mitigated by the fact that eighty percent of these loans have LTVs between 40 and 80 percent, and those with higher LTVs are covered by mortgage insurance. All that said, pressures could mount given high interest rates and slowing activity, and medium-sized banks and credit unions are less diversified in terms of asset classes and geography and could thus be more susceptible to CRE-related risk.

- Finally, inherent vulnerabilities in the NBFI sector related to financial leverage, liquidity, and interconnectedness could amplify the effects of episodes of financial distress and underscore the importance of closing data gaps and strengthening monitoring. In addition, turmoil in the U.S. financial system increases the probability of contagion.

[7] CRE exposures at large banks are well diversified with multifamily and social housing representing the largest share (33 percent), followed by industrial (16 percent), retail (15 percent) and office (13 percent).

19. Risks to the outlook are generally to the downside. The conjuncture is uncertain, and there are many risks that, if they materialize, could push the economy into a mild recession. Against this background, close monitoring of economic developments, agile and data-driven monetary policy, and clear policy communication will be critical. Annex III presents a number of key risks, but of particular note are the following:

- Inflation could prove stickier than expected, driven by stronger-than-expected wage, shelter, and non-shelter services inflation or by a miscalibration of monetary policy by major central banks, which would require additional rounds of monetary tightening that would further weigh on growth. On the other hand, a quicker normalization of global supply chains and moderation in other inflation components could help lower inflation more quickly, allowing a less restrictive monetary stance that would boost output relative to the baseline.

- A more abrupt slowdown in the U.S. and/or the rest of the world would also have important negative spillovers to Canada, including through the commodity channel. Sustained and/or growing banking turmoil abroad, for instance, could spread to Canada and induce a tightening in credit conditions, which could weaken business and consumer confidence and interact with high household debt to dampen growth and inflation. And if unemployment rose sharply, this could trigger mortgage defaults and an adverse macrofinancial feedback loop, which could tilt the Canadian economy into recession. In such a scenario, an easier monetary stance would be appropriate, combined with the provision of liquidity to the financial system, and supported by targeted fiscal support to the vulnerable. Heightened financial stress could also justify activation of a temporary increase in deposit insurance coverage and could possibly trigger some recapitalization needs among smaller banks.

20. Authorities' views. There was substantial alignment on the outlook for the Canadian economy. The authorities agreed that while the Canadian economy has proven surprisingly solid, growth would slow in the coming quarters and that inflation would ease, while the financial sector would stay resilient. The BoC has tools to provide liquidity against good collateral in the event of severe stress.

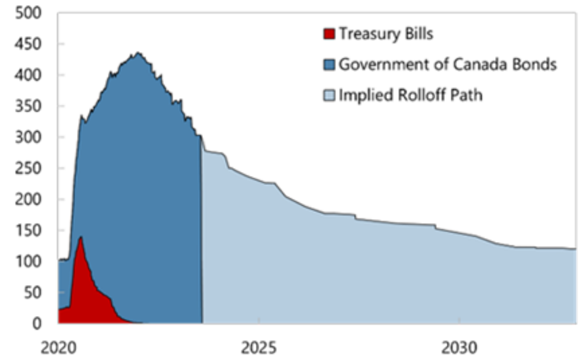
POLICY DISCUSSIONS

A. Addressing Macroeconomic Imbalances

21. Monetary and fiscal policy must continue working together to bring inflation down to target. Tight policies are necessary to slow demand and to continue to bring down core inflation and contain wages, which are growing much faster than productivity. Policymakers cannot be content until inflation is all the way back to 2 percent, and the longer the process takes, the higher the risk is that expectations become entrenched at higher levels, ultimately increasing the costs of disinflation. In terms of the policy mix, the BoC should naturally take the lead in achieving price stability, although a tight fiscal stance will also be required to support the disinflation effort and reduce public debt and rebuild buffers.

22. The BoC should maintain its restrictive monetary stance but remain data dependent. The real policy rate has not been positive for long, and the economy needs more time under a restrictive stance to burn off excess demand and for the labor market to cool.[8] Further rate hikes by the Fed could also justify a BoC response, as too large a divergence could create inflationary pressures through the exchange rate. Given uncertainty about whether and how monetary policy transmission has changed since the pandemic—while the rise in household leverage and increasing popularity of variable-rate mortgages may have made the economy more sensitive to interest-rate changes, the increase in household savings may work in the opposite direction (see Box 3)—a cautious and data-dependent approach will be required. Cutting rates too early could put disinflation at risk. In support of its restrictive stance, the BoC should continue to allow its balance sheet to shrink naturally as government bonds mature. While, the financial sector has proven resilient to date, and any stresses that emerge should be manageable with existing lender-of-last-resort tools (such as the BoC's standing liquidity facility and overnight standing repo facility), a substantial tightening of financial conditions would also need to be factored into the monetary stance.

Canada: Bank of Canada Total Assets Implied Rolloff
(Billion CA$)



Sources: Sources: Bank of Canada, Haver Analytics, and IMF staff calculations.

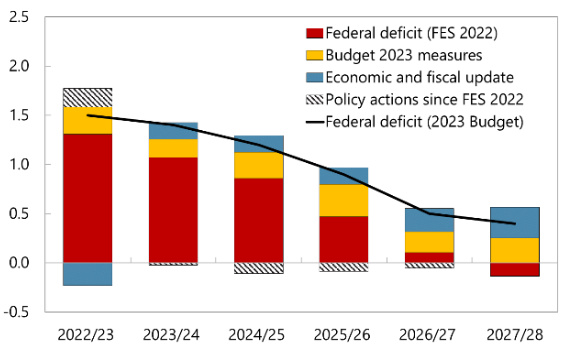
23. The complicated interplay between competing objectives underscores the importance of effective monetary policy communication. The BoC is already very strong in this area,[9] and it continues to make advances, such as starting to present alternative scenarios in the quarterly Monetary Policy Report (MPR) and to publish summaries of Governing Council deliberations, as recommended in the IMF's Central Bank Transparency Review last year. Further practical improvements to the MPR could include providing quarterly, and not just annual, paths for key variables, and including downloadable data appendices to support primary tables and charts. Consideration could be given to reducing the five-year lag with which internal staff forecasts are released publicly. Ex post evaluations of the Bank's inflation forecast errors (one of which was conducted last year) could be done on a regular basis. Finally, as proposed in the 2022 Article IV, the BoC could contemplate steps to help the market and broader public better understand its reaction function. For example, consideration could be given, at the appropriate time, to the publication of a policy rate path consistent with the BoC's economic projections, which would be revised on a regular basis in response to incoming data.

24. While the overall fiscal stance remains contractionary, the recently introduced 2023 federal budget implies a weaker fiscal outlook. The federal debt ratio now increases in the first year before resuming its decline, and it ends the five-year horizon 3 percent of GDP higher than envisaged in the 2022 Fall Economic Statement (40 percent of GDP versus 37 percent). The spending

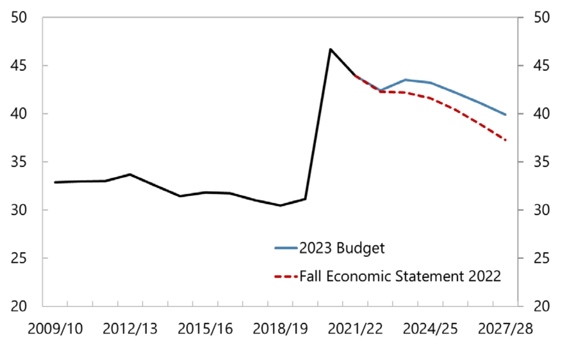
[8] It may also require additional time for corporate pricing behavior to regularize.

[9] See 2022 IMF Central Bank Transparency Review.

package aims to: (i) help citizens better afford the cost of living (including through a GST credit); (ii) upgrade health and dental care; and (iii) boost investment for a clean economy, via a sizable ramp-up in green fiscal incentives introduced partly in response to the far-reaching subsidies in the U.S. Inflation Reduction Act.[10] Provincial governments also have introduced spending packages to improve affordability and support the green transition, and the general government fiscal trajectory has also worsened.



Sources: 2020 Federal Budget and IMF staff calcualtions.



Sources: Department of Finance Canada.

25. Fiscal policy should be kept tight, including to support disinflation goals. The new spending measures are backloaded (with only about ¼ percent of GDP to be spent in the first year) and thus unlikely to substantially worsen inflationary pressures, but at the same time, with headline inflation already falling rapidly, the case for additional support for affordability is narrowing. Moreover, while the new initiatives tackle important issues, about two-thirds of the new spending was accommodated by slowing the pace of fiscal consolidation. Canada still has some fiscal space, and debt is moderate in international comparison, but—as elsewhere—it spiked after the pandemic. Rebuilding fiscal buffers can give the government the fiscal space needed to respond to future downturns and to finance the fiscal costs of the green transition and other longer-term challenges. In addition, it can also help in addressing Canada's moderately weak external position.

Canada: Cumulative Fiscal Impact of New Measures in 2023 Budget
(FY2022/23 to FY2027/28)

	$C billion	% GDP
Spending measures	**67.3**	**2.2**
1. Affordability	**5.2**	**0.2**
Grocery rebate	2.5	0.1
Indigenous housing	1.9	0.1
Better affordability for students and others	0.9	0.0
2. Health care	**31.3**	**1.0**
Additional health care transfers	24.0	0.8
Dental care	13.3	0.4
less previous provisions	*-6.0*	*-0.2*
3. Clean economy	**20.9**	**0.7**
Investment tax credit for clean electricity	6.3	0.2
Investment tax credit for clean technology manufacturing	4.5	0.1
Investment tax credit for clean hydrogen	5.6	0.2
Others	4.6	0.2
4. Reconciliation and inclusion	**9.1**	**0.3**
5. Global leadership and defense policy update	**0.7**	**0.0**
Offsetting measures	**-21.5**	**-0.7**
1. Effective government incl. spending cut	**-9.9**	**-0.3**
2. Taxation	**-11.6**	**-0.4**
Raising minimum tax on the wealthiest	-3.0	-0.1
Global minimum tax	-5.1	-0.2
Tax on share buyback and dividends to financial	-6.2	-0.2
less previous provisions	*2.7*	*0.1*
Total net fiscal impact	**45.8**	**1.5**

Source: 2023 Federal Budget and IMF staff calculations.

[10] While the 2022 budget and Fall Economic Statement together introduced investment tax credits (ITCs) for green activities with a 5-year cost just under Can$10 billion (0.3 percent of GDP), the latest budget adds several new measures costed at roughly double this amount, and with take-up expected to increase over time, the 10-year costs for the three main measures alone are projected at Can$54 billion.

26. A quantitative fiscal framework could help both in assessing and communicating the tradeoff between desirable spending initiatives and the speed of consolidation. Canada has a strong track record of fiscal discipline since the 1990s, and it has unwound almost all of the fiscal support provided during the pandemic. The government's commitment to medium-term debt reduction provides general guidance but leaves flexibility in the pace of consolidation. Canada could consider a quantitative framework—designed in a way to allow flexibility to deal with exceptional circumstances—in order to guide market expectations, enhance credibility and accountability, and allow an assessment of the various tradeoffs. Such a framework could include a debt anchor, supported by escape clauses that could be triggered in the case of large shocks, as well as an operational rule to determine how to return to the anchor following shocks. While it would impose tighter constraints on fiscal choices, it could provide policymakers with latitude to make choices within those constraints. And as illustrated in past analytical work, more credible communication about fiscal plans through the introduction of a specific debt anchor would reduce the output costs of consolidation.[11] Many of Canada's peers with similarly strong fiscal records have benefited from well-designed fiscal rules appropriate to their own specific conditions.

27. A set of policies centered around measures to promote increased supply is needed to address housing affordability. Rising interest rates have aggravated short-term affordability concerns (see Box 2), and the increase in immigration may further bolster house prices. Despite the recent rebound, Canadian house prices and rents appear to be in line with fundamentals, including because of strong post-pandemic immigrant inflows. That said, close monitoring will be required and additional policies to promote housing affordability should remain at the top of the government's agenda—the 2023 budget introduced a tax-advantaged vehicle to help first-time homebuyers save up for their down-payments, and the 2022 budget introduced a Housing Accelerator Fund to provide incentives for municipalities to expand housing supply (see Annex IV). More needs to be done, however, especially on the supply side, including through further efforts to expedite permitting and incentives to promote densification.[12] Consideration could also be given to creating a permanent discussion forum for relevant stakeholders, including federal, provincial, and municipal officials responsible for both housing and immigration, as well as representatives of the construction industry and advocacy groups.

28. Authorities' views. The authorities agreed on the need for tight macro policies to bring inflation back to target and on the need for the BoC to remain data dependent. They noted that the planned introduction of a "Digital Monetary Policy Report" would facilitate the development of many of the communications enhancements, such as the introduction of interactive data charts and tables, that the mission recommended. Both the IMF and BoC agree with the importance of explaining the BoC's reaction function. To that end, the BoC has begun publishing a Summary of Deliberations of its

[11] See the 2022 Article IV report for the analysis.

[12] The authorities also introduced a temporary federal ban (which was recently softened) on nonresidents' purchases of Canadian real estate, which had already been subject to earlier provincial and municipal taxes. These policies constitute capital flow management measures under the Fund's Institutional View on the Liberalization and Management of Capital Flows. They could be eliminated or harmonized into broad-based tax measures that are targeted more generally at speculative activity of residents and nonresidents alike.

Governing Council to provide further context on interest rate discussions and provides alternative scenarios in its Monetary Policy Report when appropriate. On fiscal policy, the authorities emphasized their strong consolidation since the pandemic, firm commitment to debt reduction over the medium term, and strong fiscal track record compared to peer countries. They were doubtful that a more specific fiscal rule would improve fiscal performance while still allowing adequate flexibility to respond to shocks and substantial investment needs, including in connection with the green transition. Finally, they agreed that increasing supply should be the focus of housing policy and noted the idea of a discussion forum oriented toward practical, actionable solutions.

B. Safeguarding Financial Stability

29. Financial regulation and supervision could be further strengthened in a few areas:

- Regarding banks, while deposit insurance appears adequate, with more than 90 percent of depositors covered, there may be scope to further protect depositors at small banks. Separately, the authorities rely on Pillar 2 of the Basel Framework along with other ad hoc stress testing tools to examine capital and liquidity requirements appropriate for each individual SMSB's idiosyncratic and systemic risks, but there may be an argument, at this unsettled time in the global banking sector, to extend the Domestic Stability Buffer, which was recently increased for larger banks, to SMSBs as well.

- In the case of nonbank financial institutions (NBFIs), more routine and compulsory top-down stress tests performed by federal and provincial regulators would complement exercises currently performed by the institutions themselves. Supervisors may also need additional powers to compel provision of information from pension funds and asset managers, as the current voluntary approach to assessing market liquidity risks from these institutions may have limits.

- Coordination between federal and provincial supervisors could be further strengthened, and efforts are necessary to address data privacy legal provisions that sometimes constrain the sharing of supervisory information.

30. The authorities have continued to make progress against most of the 2019 FSAP recommendations (see Annex V). OSFI is currently conducting a review of Guideline B-20 on residential mortgage underwriting. OSFI is considering broadening tools to mitigate risk associated with household indebtedness, including incorporating loan-to-income (LTI) and debt-to-income (DTI) restrictions. These measures, if introduced, will enhance the credit quality of mortgage loans. Interagency cooperation among federal and provincial financial regulators and supervisors continues to improve, although the identification and estimation of vulnerabilities within the financial system at large are constrained by some persistent data gaps (e.g., with respect to some NBFIs as well as to SMEs). Recent global financial stress episodes underscore the importance of resolving these data gaps and the related, and persistent, problem of data fragmentation. Finally, the FSAP's recommendation to strengthen the oversight of large public pension funds and increase the transparency of their financial disclosures is even more relevant in the current context of volatile Markets and should therefore be prioritized.

31. AML/CFT frameworks should continue to keep pace with evolving risks, including those related to the inflow of foreign proceeds of corruption and other financial crimes.[13] Canada was assessed as substantially effective in risk-based supervision of intermediaries in its 2016 assessment by the Financial Action Task Force.[14] The recently published update to the National Risk Assessment[15] identifies high inherent money-laundering vulnerabilities in sectors including banking, legal, and real estate, underscoring the importance of risk-sensitive supervisory presence. In this regard, the lack of coverage of legal professionals in the AML/CFT preventive framework continues to be a key shortcoming that should be remedied. The authorities should also further deepen understanding of cross-border money-laundering risks and appropriately tailor supervisory tools to address these risks.

32. Ongoing amendments to the Canada Business Corporations Act include welcome provisions for a publicly accessible federal beneficial ownership registry (see Annex V)**.** Since only 10–15 percent of Canadian legal entities are incorporated federally, it will be important for provinces to set up their own registries or to establish harmonized approaches to data collection and publication to ensure a pan-Canadian approach to beneficial ownership transparency. Separately, the establishment of a *real property* beneficial ownership registry in British Columbia is another welcome development, and the federal government should aim to incentivize adoption of similar registries elsewhere, with a focus on regions with high-risk markets, to reduce the potential for regulatory arbitrage.

33. Authorities' views. The authorities agreed with the rationale behind staff's recommendations but given Canada's decentralized regulatory system, they find the current, collaborative approach that uses a combination of required and voluntary data collection to be effective in gathering information and assessing liquidity risks. Separately, the authorities appreciated staff's recognition of progress being made on AML/CFT issues.

C. Confronting Structural Challenges Including Climate Change

34. Boosting productivity growth is critical for long-run economic prospects. Canada has long relied on factor accumulation—in particular, aggressive skills-based immigration policies—to support aggregate growth, but this is not a recipe for growing per capita income or living standards. For that, government efforts to raise female labor force participation via the provision of subsidized childcare are much more apt and may already be bearing fruit. But, more fundamentally, the country must boost productivity growth. The green transition itself may help in this regard (e.g., on account of the increased investment it would require), but as discussed in prior staff reports, lagging

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[13] In line with the Framework for Enhanced Engagement on Governance, paragraphs 32 and 33 update the assessment of frameworks to prevent the facilitation of laundering of foreign proceeds of corruption in the Canadian economy. Canada's measures to criminalize and prosecute the bribery of foreign public officials (the "supply side of corruption") will be assessed during a future Article IV consultation.

[14] [Canada 2016 Mutual Evaluation Report.]()

[15] Updated Assessment of Inherent Risks of Money Laundering and Terrorist Financing in Canada 2023, https://www.canada.ca/content/dam/fin/programs-programmes/fsp-psf/nira-neri/nira-neri-eng.pdf.

productivity is rooted in a variety of causes including barriers to domestic trade, suboptimal infrastructure investment, regulatory burdens, tax inefficiencies, product market distortions, and now also the permanent learning and productivity losses due to the pandemic. In addition, and as discussed in Box 4, addressing housing supply constraints and thus limiting persistent house price growth can not only improve housing affordability but also improve the allocation of capital and boost productivity and potential growth. Moreover, attracting and deploying immigrants productively could also help boost Canada's long-term growth potential (see Box 1).

35. Priority should be given to harness new industrial opportunities. Canada is rich in "transition minerals" as well as many forms of energy including LNG. Against the background of possible geoeconomic fragmentation,[16] Canada has an important chance to gain market share as a reliable global supplier of these commodities. It also has opportunities to establish itself as part of the supply chain for green sectors, such as electric-vehicle production.[17] But much more investment will be required, for which further improvements in Canada's investment climate will be needed. Staff analysis suggests scope for improvement here, in particular in the areas of competition policy, FDI barriers, and governance (see Box 5).

36. The government's green subsidies are welcome, although their design could be strengthened. Investment tax credits to clean electricity and green energy and technology featured in the 2023 federal budget, plus complementary measures in 2022, as well as the additional production subsidies recently granted to one automaker and now under consideration for another, can all support Canada's transition to a greener economy by helping to incentivize investment in key sectors. That said, Canada should avoid policies that can lead to a "race to the bottom," distort investment decisions across borders, and contribute to global fragmentation, including through potentially triggering retaliatory measures by other countries. Moreover, the current strong focus on electric vehicles—and their batteries in particular—as key to Canada's green industrial development will require a cautious approach given rapid technological change. International experience also suggests that evenhandedness and transparency can best be served by offering a standard, time-bound incentive regime rather than negotiating company-specific packages. And ensuring that subsidies are designed in a manner that is WTO-consistent is critical to counter geoeconomic fragmentation.

37. Canada deserves substantial credit for its multipronged climate mitigation strategy centered around carbon pricing. As one of the world's top-ten emitters of greenhouse gases, Canada has recognized that it must be an important part of the global solution. Given the scope of the problem, climate leaders like Canada that have managed to forge domestic consensus in favor of substantial mitigation policies must do everything in their power to maintain that consensus and ensure climate policy certainty, which will help promote the needed investments.

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[16] See IMF SDN 2023/001.

[17] Cf., Volkswagen's recently announced intention to invest in a major EV battery facility in Canada, partly facilitated by government subsidies.

38. Canada's announced policies should go a long way toward achieving its NDC for 2030. While staff analysis suggests that carbon pricing and other policies could produce a 30 percent reduction in emissions by 2030 relative to 2005 (see Box 6), the expeditious implementation of all elements of Canada's Emissions Reduction Plan (ERP), including the separate cap on emissions in the oil and gas industry, along with clean electricity regulations, could deliver the 40-45 percent commitment in the NDC. These steps, along with future technological advances, should also help Canada on its road to net zero by 2050. Importantly, negative competitiveness spillovers from carbon taxation across countries can be mitigated through the effective recycling of associated revenues and exchange rate flexibility (Box 7). More generally, consideration should be given to a differentiated international carbon price floor, an effort that Canada could help lead.

39. Authorities' views. The authorities reiterated their commitment to carbon pricing and agreed that full implementation of the ERP would put the NDCs within reach. The authorities noted that the U.S. Inflation Reduction Act raises important competitiveness issues. The authorities indicated that in developing a response to the IRA, fiscal considerations were taken into account, leading to focused but broadly accessible investment tax credits as well as production subsidies to select companies, who are expected to anchor the future industrial landscape.

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40. The economy is slowing, but disinflation still has a way to go. Policy tightening is feeding through to the economy. Growth is gradually slowing, although the housing market is rebounding again, while the financial sector has so far been largely resilient to the domestic cycle as well as to global financial stress. Headline inflation has come down substantially, but core inflation has been slower to move, as the labor market is still tight and near-term expectations remain elevated. The external position in 2022 was moderately weaker than the level implied by medium-term fundamentals and desirable policies. The outlook is subject to important downside risks, and shocks could tip the economy into a mild recession.

41. Tight macro policies thus remain necessary. Assuming the economy evolves in line with baseline projections, monetary policy should remain restrictive, but it will be important for decisions to remain data dependent. Quantitative tightening should continue, while some further enhancements to monetary policy communication could be pursued. Fiscal consolidation is proceeding, although at a slower pace than previously envisaged, partly reflecting welcome new spending initiatives introduced in the 2023 budget. While Canada has fiscal space to accommodate these initiatives, care will need to be taken that fiscal policy supports inflation reduction goals. A quantitative fiscal framework, including a specific debt anchor and a supporting operational rule, would enhance policy credibility and communication, while helping to assess the tradeoffs between spending needs and the pace of consolidation. Given the recent rebound in housing prices, measures to promote housing affordability, particularly through increased supply, remain necessary.

42. Current challenges in the financial sector underscore the importance of enhancing policies in a number of areas. The Canadian financial sector faces risks on several fronts, including from high household leverage and housing-market developments, from rising interest rates, and from global banking stresses. While the sector has remained resilient to date, there is scope to strengthen capital and liquidity requirements on smaller banks and to expand the stress testing of NBFIs. Progress continues to be made on the 2019 FSAP recommendations, but recent global market volatility has underscored the importance of addressing persistent issues of data gaps and fragmentation. Canada's AML/CFT framework is generally appropriate but further focus could be placed on the assessment and mitigation of cross-border money laundering risks, particularly in the banking and real-estate sectors. The proposed establishment of a Canada Financial Crimes Agency is welcome, as are steps to move toward establishing beneficial-ownership registries.

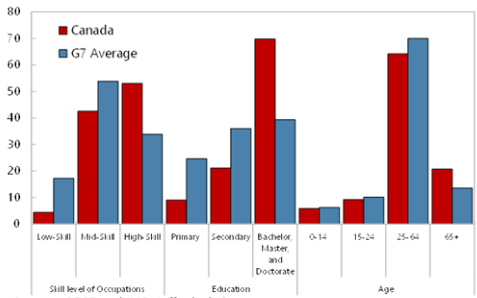
43. Structural challenges need to be addressed. Productivity growth must be enhanced and the investment climate made more attractive. Canada is currently among the world's top-ten emitters of greenhouse gases, but announced climate mitigation policies should go a long way toward delivering its NDCs. Adverse competitiveness implications of these policies may be significantly mitigated by exchange rate flexibility and by well-designed recycling of carbon tax revenues, and any remaining effects could be addressed through international cooperation, such as on a carbon price floor. Green industrial policies can help the economy to transition and may be a needed response to policies of major trading partners, but their design poses some risks. Meanwhile, Canada should continue to eschew approaches that distort trade.

44. Staff recommend that the next Article IV consultation be held on the standard 12-month cycle.

Box 1. Immigration as a Source of Labor Supply in Canada[1]

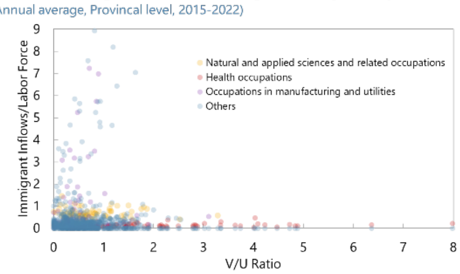
Immigration has been a crucial driver of Canada's labor force and economic growth for decades. As of 2021, non-native-born Canadian residents accounted for close to one-quarter of the population, the highest rate in the G7. Reflecting the country's heavy focus on economic, as opposed to family-based and other categories of immigration, the shares of high-skilled and highly educated immigrants are both above the G7 average. Regression analysis using immigrant flow data suggests that skill composition (as reflected in intended occupation) among immigrants has generally matched local labor market demands at the occupation level, but the matching is particularly weak in health, manufacturing, and sciences-related occupations, with healthcare facing consistent demand/supply imbalances in all provinces.

Canada: 2016 Population of Immigrants
(Percent, Share of immigrant population, Census data)



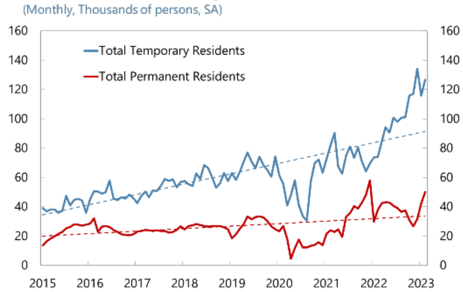
Sources: OECD and IMF staff calculations

Canada: Immigrants vs. Labor Tightness by Occupation
(Annual average, Provincal level, 2015-2022)



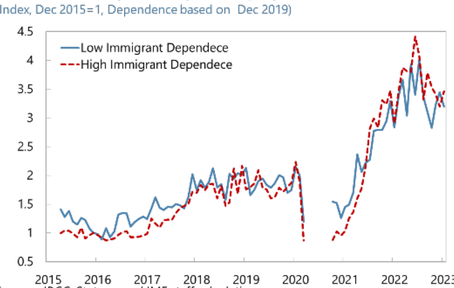
Sources: IRCC, Statcan and IMF staff calculations
Note: Observations by 1-digit National Occupation Code (NOC 2011). Occupations for immigrants are intended occupations reported at entry.

Canada: Inflows of Immigrants
(Monthly, Thousands of persons, SA)



Sources: IRCC and IMF staff calculations

Canada: Industry Vacancy-Unemployment Ratio
(Index, Dec 2015=1, Dependence based on Dec 2019)



Sources: IRCC, Statcan, and IMF staff calculations
Note: Industry V/U averaged by dependence catagory then indexed to 1

The COVID-19 pandemic triggered a major shock to international migration, and monthly immigrant arrivals during 2020–21 averaged about 15,000 lower than before the pandemic, resulting in a cumulative shortfall of nearly half a million immigrants to Canada. Since early 2022, migrant inflows have rebounded sharply, recouping most of the cumulative losses during the pandemic.

The immigrant shortfall contributed to increased labor market tightness, as reflected in a sharper rise in the vacancy-unemployment ratio in industries that have historically had a larger share of foreign-born workers. Regression analysis at the occupation and provincial levels finds that migrant shortfalls in 2020 raised the V/U ratio by about ¼ percentage points in the following year. Correspondingly, the recent immigration rebound has likely played a role in reducing vacancies and increasing employment.

Table 1. Effects of Immigration Flows on Labor Market Tightness

Dependent variable: V/U ratio	Model 1	Model 2	Model 3
Immi_gr_t-1	-0.274***	-0.629***	-0.140
	(0.105)	(0.111)	(0.255)
Immi_gr_t	-0.315***	-0.557***	-1.033***
	(0.088)	(0.101)	(0.366)
Foreign_born_t*immi_gr_t-1		1.428***	0.870
		(0.346)	(1.193)
Foreign_born_t*immi_gr_t		0.943***	2.496**
		(0.180)	(1.239)
COVID*Immi_gr_t-1			-0.651**
			(0.269)
COVID*Foreign_born_t			0.910**
			(0.359)
Output_gap	0.040***	0.040***	0.040***
	(0.009)	(0.009)	(0.009)
Controls	Y	Y	Y
Year FE	Y	Y	Y
Povince FE	Y	Y	Y
Occupation FE	Y	Y	Y
Province#Occupation FE	Y	Y	Y
Number of Observations	587	587	587
Adj. R-squared	0.845	0.853	0.860
Robust standard errors in parentheses	*** p<0.01, ** p<0.05, * p<0.1		

[1] See M. Chin, L. Liu, and L. Masterson, "Immigration as a Source of Labor Supply: Evidence from Canada and the U.S.", forthcoming IMF Working Paper, for further details.

Box 2. Mortgage Analysis

The rise in interest rates combined with the higher cost of living has made borrowers more vulnerable to financial distress. In addition, a significant decline in housing prices could have implications for financial stability. Against this backdrop, we examine household resilience and effects on the banking system in two scenarios. Our results suggest that households will continue to face payment increases during the coming years, however credit risks will be mitigated by structural characteristics of the loan portfolio (e.g., low share of high-LTV, high-DSR loans, low historical PDs). The scenarios have a 3-year horizon and comprise: a baseline scenario following April WEO projections, and an adverse scenario simulated using the Global Macro Financial Model (GFM) (Vitek, 2018). The adverse scenario features the major risks in the February 2023 GRAM: i.e., the intensification of regional conflicts, supply-disruptions, synchronized sharp slowdown, de-anchoring of inflation expectations, and significant commodity price volatility.

Scenarios

	Real GDP Growth		Inflation		Unemployment		Personal Income		Short Term Rate		Long Term Rate		House Price	
Year	Baseline	Adverse	Baseline	Adverse	Baseline	Adverse	Baseline	Adverse	Baseline	Adverse	Baseline	Adverse	Baseline	Adverse
2022	2.1	2.1	6.6	6.6	5.1	5.1	2.4	2.4	3.9	3.9	2.8	2.8	2.2	2.2
2023	1.4	-2.1	3.0	5.1	6.0	6.3	6.1	6.3	4.3	5.4	3.3	6.4	7.0	-8.9
2024	1.8	0.1	2.1	4.8	6.2	7.3	0.4	0.8	2.9	4.4	3.2	4.5	8.6	11.4
2025	2.2	5.0	1.9	1.8	6.1	6.9	5.8	7.7	2.6	2.6	3.1	2.6		

To examine household resilience, we first link lending rates to short and long-term rates through econometric models. The short-term rate is an important determinant of all lending rates (variable and fixed rates at different terms), while the long-term rate turns out to be important only for fixed rates of more than 3 years. These models are used to project lending rates conditional on scenarios, which are then used to project loan monthly payments. For variable-rate loans with fixed payments, lenders are assumed to automatically increase the mortgage payment when the trigger rate is reached so that the interest portion of the payment continues to be covered. (Note that this is a conservative assumption, as some lenders allow negative amortization instead, at least to some extent.)

Lending Rates

VARIABLES	Variable	Fixed Rate< 1	Fixed Rate 1-3	Fixed Rate 3-5	Fixed Rate> 5
L.Dependent Variable	0.224*	0.642***	0.788***	0.125	0.145
	(0.115)	(0.135)	(0.124)	(0.168)	(0.195)
Short Term Rate	0.957***	0.259***	0.302***	0.478***	0.404***
	(0.113)	(0.0648)	(0.0757)	(0.0882)	(0.102)
Long Term Rate				0.391***	0.535***
				(0.117)	(0.154)
Constant	1.274***	1.640**	0.410	1.393***	1.260***
	(0.244)	(0.652)	(0.317)	(0.325)	(0.356)
Observations	39	39	39	39	39
R-squared	0.886	0.782	0.895	0.898	0.879

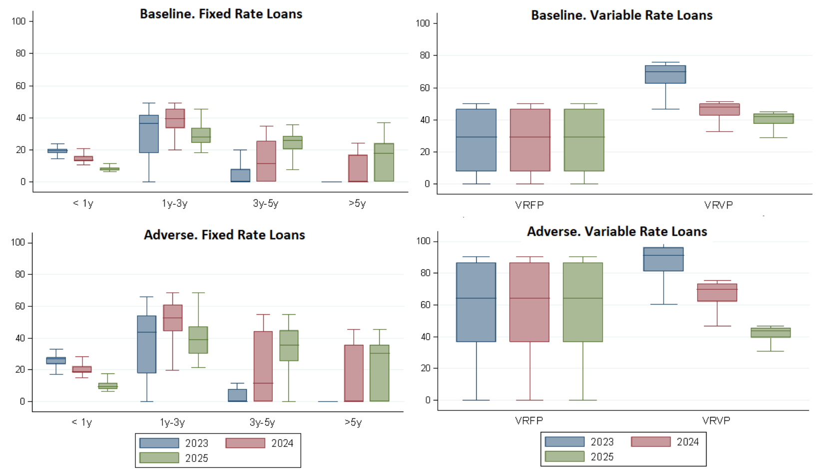
*** p<0.01, **p<0.05, *p<0.1

Under the baseline, 40 percent of loans (i.e., 38 percent of loan amounts) would, by 2023, face a payment increase relative to February 2022 (when the BoC started raising rates). This share would increase to 71 percent (67 percent of loan amounts) by 2025. Under the adverse scenario, these shares are only marginally higher, but what differs substantially between the scenarios is the size of the monthly payment increase. Under the baseline, 13 percent of loans face a payment increase of more than 50 percent in 2023. This rises to 26 percent under the adverse scenario.

Despite large increases in monthly payments, there are several mitigating factors that could curtail mortgage defaults, including the low share of high-LTV and high-DSR loans, the fact that loans that reprice are not concentrated in those more vulnerable segments, and the presence of mandatory insurance for loans with LTV above 80 percent. In addition, more than 50 percent of loans are concentrated in borrowers in the top two income quintiles, and 86 percent correspond to owner-occupied real estate, which is generally less prone to default. Nonetheless, 77 percent of loans are uninsured and for 48.5 percent of loans that repriced in 2022, the new interest rate is higher than the qualifying rate used as part of the stress test, and this share is expected to increase in the coming years.

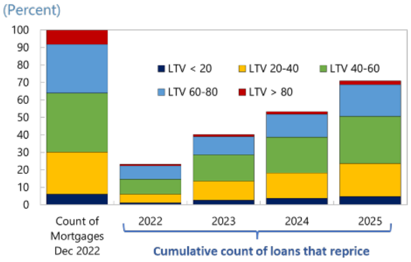
Box 2. Mortgage Analysis (concluded)

Monthly Payment Increase, relative to Feb 2022



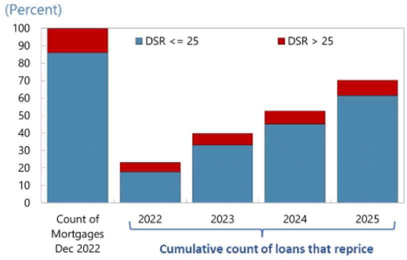
To analyze the effects on the banking system, the DSR is projected based on estimated payment increases and personal income from the scenarios. The mortgage DSR increases from 7.6 percent in 2022 to 8.7 percent in 2024 under the adverse scenario. A link between the DSR and probabilities of default (PDs) is found through panel data regressions for the largest 6 banks. The model suggests that a higher mortgage DSR is associated with increases in PDs. Unemployment and inflation are also linked to higher PDs.

Combined LTV of Loans Subject to Payment Increase
(Percent)



Sources: OSFI; and IMF estimations.

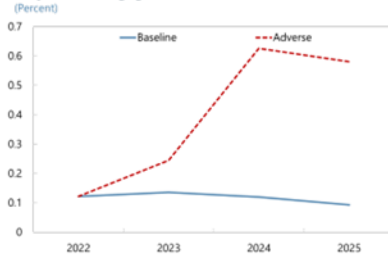
Loans subject to payment increase by Debt Service Ratio
(Percent)



Sources: OSFI; and IMF estimations.

Under the adverse scenario the aggregate mortgage PD increase from 0.12 in 2022 to 0.63 percent in 2024. A simple model is used to link banks LGDs to the house price trajectories under both scenarios: $LGD_t = 1 - (1 - LGD_0) * HP_t / HP_0$. Based on the projected PDs and LGDs, estimated mortgage credit losses over the scenario horizon amount to less than 2 percent of CET1 Capital under the adverse scenario, which results in a drop on CET1 ratio by 25 bps. Under the baseline scenario credit losses amount to less than 0.25 percent of CET1 capital. Overall, our results suggest that households will continue to face payment increases during the coming years, however credit risks will be mitigated by structural characteristics of the loan portfolio (e.g., low share of high-LTV, high-DSR loans, low historical PDs).

Projected Mortgage PD
(Percent)



Sources: Moody's, OSFI, and IMF estimations.

Models Probability of Default

VARIABLES	Logit (PD)	
L.Logit (PD)	0.864***	0.863***
	(0.0158)	(0.0159)
Mortgage DSR	0.0698***	0.0699***
	(0.0132)	(0.0132)
Unemployment	0.0846***	0.0847***
	(0.00913)	(0.00917)
Inflation	0.0427***	0.0427***
	(0.00679)	(0.00682)
Constant	-1.989***	-1.995***
	(0.191)	(0.192)
Observations	552	552
Bank FE	NO	YES
R-squared	0.896	0.896

*** p<0.01, ** p<0.05, * p<0.1

Box 3. Monetary Policy Transmission in Canada

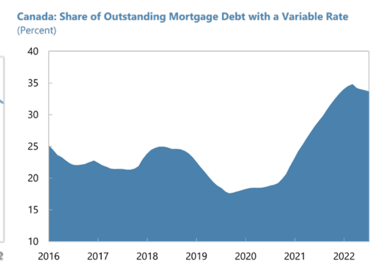
Canada's monetary policy response to post-pandemic inflation has been resolute and forceful, but the nature, speed, and scale of this tightening cycle are unprecedented, prompting large uncertainties around monetary policy transmission. Several developments since the pandemic may have weakened the effectiveness of the transmission: (i) the government's extraordinary COVID-19 support could have strengthened household balance sheets and eased liquidity constraints, dampening transmission through *the credit channel*; (ii) wealth gains from surging house prices (which are not expected to be fully reversed) may have weakened the functioning of *the asset price channel*; and (iii) synchronous monetary tightening across advanced economies may have, ceteris paribus, limited appreciation of the Canadian dollar, undermining the *exchange rate channel*.

Other factors, by contrast, may have strengthened transmission—rising household leverage and the shift toward variable-rate and shorter-tenor fixed-rate mortgages, in particular, could have made consumption and investment more responsive to monetary policy shocks, as is well documented in the recent literature. The prevalence of short to medium tenor fixed-rate mortgages (one to five years) in Canada also makes the mortgage channel more effective than in the United States, which has a larger share of long-term fixed-rate mortgages (15, 20 and 30 years).

Effects of Household Debts and Mortgage Strucure on Monetary Policy Transmission

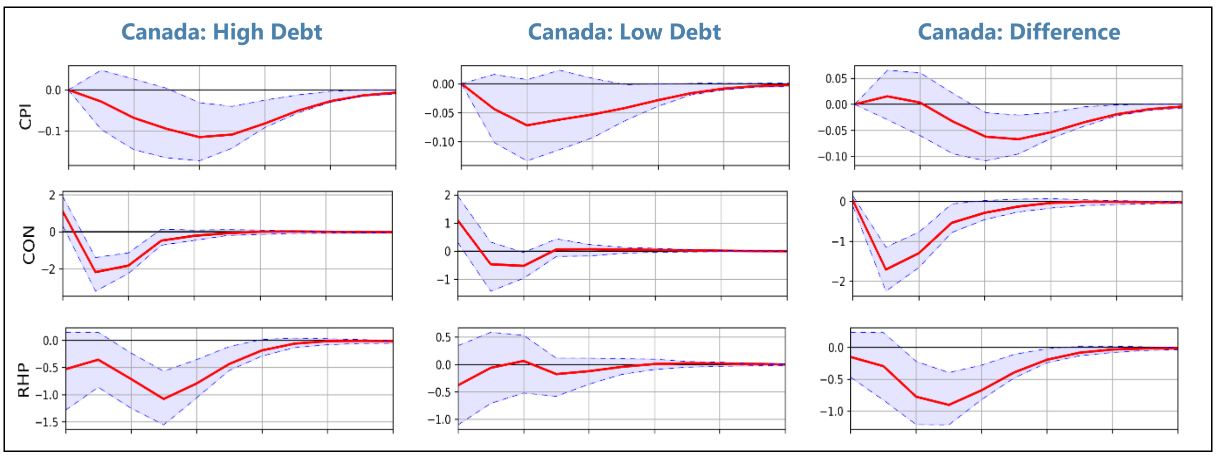
Studies	Influencing factors	Impact on transmission	Methodology	Sample
Corrigan et al. (2021)	Household debt	Stronger with higher debt	Model simulation	Canada
Kim and Lim (2020)	Household debt, mortgage structure	Stronger with higher debt; and with more adjustable-rate loans	Interacted PVAR	Cross-country
Cloyne, Ferreira and Surico (2020)	Household balance sheet	Transmission driven by mortgagors (not outright owners)	Household panel analysis	US, UK
Gelos et al. (2019	Household debt, share of liquid asset	Stronger with higher debt and lower liquid assets	Household panel analysis	US
Kaplan, Moll and Violante (2018)	Heterogenous agents	Weaker due to relaxation of budget constraint for pooer households	Model simulation	US
Garriga, Kydland and Sustek (2015)	Mortgage structure	Stronger with adjustable rate mortgage structure	Model simulation	US

Sources: Statistics Canada



Sources: Bank of Canada and IMF staff calculations.

Impulse responses from a simple interacted VAR model (with household debt to GDP ratio as interacted variables) estimated on quarterly Canadian data during 1990–2022 confirm that consumption, investment, and real house prices are more responsive to monetary policy shocks when household debt is higher.[1]

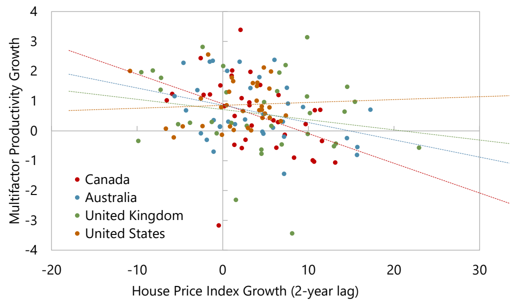


[1] Other variables in the VAR include investment, credit growth, current account, and REER. Monetary policy shocks are identified based on Cholesky ordering in the reported results, but alternative identification methods are also being explored.

Box 4. Housing Booms and Productivity Growth[1]

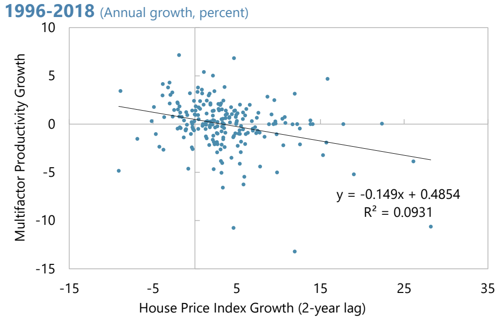
Canada has had a longstanding housing boom, the recent correction notwithstanding. And it has also had a longstanding problem with productivity growth. Could these two phenomena be related? A negative correlation between house-price and productivity growth is evident in many advanced economies, and the relationship seems to be particularly strong in Canada, at both aggregate and provincial levels.[2]

Canada: Real House Prices and Productivity, 1988-2021
(Annual growth, percent)



Sources: OECD and IMF staff calculations

Canada: Provincal Real House Prices and Productivity, 1996-2018 (Annual growth, percent)



Sources: CREA, StatCan, and IMF Staff Calculations.

The literature has identified three main channels explaining this negative correlation: (i) *a collateral channel,* through which an increase in real-estate values disproportionately benefits firms holding such assets and leads to an inefficient reallocation of resources; (ii) *a bank-lending channel*, through which an increase in mortgage demand during a housing boom crowds out commercial lending and leads to lower investment and productivity growth; and (iii) *an home-ownership channel,* which restricts labor mobility during housing boom-bust cycles and in turn impacts productivity growth.

Table 1: Effects of Changes in House Prices, 2000-2022

Variable	Step 1 Firm Productivity	Step 2 Firm Investment Ratio	Step 3 Industry Productivity
Initial Tangible Assets	-0.092*	0.038**	-0.089***
	(0.012)	(0.018)	(0.018)
Δln(Real House Price)		-0.072**	0.087**
		(0.039)	(0.041)
Δln(Real House Price)*Initial Tangible Assets		0.228**	-0.167**
		(0.103)	(0.084)
Controls	Y	Y	Y
Year FE	Y	Y	Y
Location FE	Y	Y	Y
Firm FE	Y	N	N
Industry FE	N	N	Y
Industry#Year FE	Y	Y	N
No. of Obs.	5404	7634	3913

***p<0.01, **P<0.05, *p<0.1

The collateral channel is particularly relevant for Canadian firms, especially among small and medium sized enterprises (SMEs), given their heavy reliance on collateral to obtain bank lending.[3] To examine the relationship between house prices and productivity in Canada, a three-step empirical analysis is employed to test the collateral channel using Compustat data on publicly traded Canadian firms. In the first step, firm-level regressions find that firms holding larger tangible assets on a net basis (a proxy for real estate assets) at the beginning of the sample tend to be less productive.[4] This could arise because borrowers of low credit quality must pledge more collateral and therefore need to invest more in real estate, or alternatively, large real estate holdings reduce firms' productivity by crowding out other investment opportunities or by allowing inefficient incumbents to remain in the market.

The second step tests how changes in real estate prices affect firm-level investment. The result suggests that increases in real house prices lead to lower investment for firms holding a smaller share of tangible assets, but increase investment for those with larger tangible assets, therefore confirming the collateral channel. Given that firms holding a larger share of tangible assets also tend to be less productive (step 1), the final step tests the aggregate effect of the collateral channel at the industry level. The result shows that changes in house prices are in general positively correlated with average industry productivity, but the relationship

Box 4. Housing Booms and Productivity Growth[1] (concluded)

turns negative for industries with larger average holdings of tangible assets, thereby confirming resource misallocation associated with the collateral channel at least in some Canadian industries.

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[1] See L. Liu, F. Lutz, and Y. Yang, "Housing Market Boom and Productivity Growth in Canada", forthcoming IMF Working Paper, for further details.

[2] The negative correlation is also observed in some Southern European and Nordic countries, although less obvious at the aggregate level in the U.S.

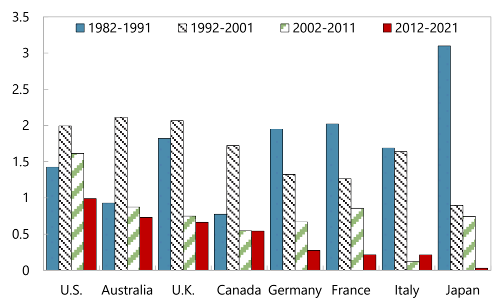
[3] According to the OECD (2022), around 70 percent of Canadian SMEs need collateral to obtain bank lending, and anecdotally real estates are one of the most commonly acceptable forms of collateral for SMEs. SMEs constituted 98 percent of all businesses in Canada and employed more than two-thirds of the private sector labor force.

[4] Results are robust to alternative firm-level productivity measures.

Box 5. Canada's Investment Climate[1]

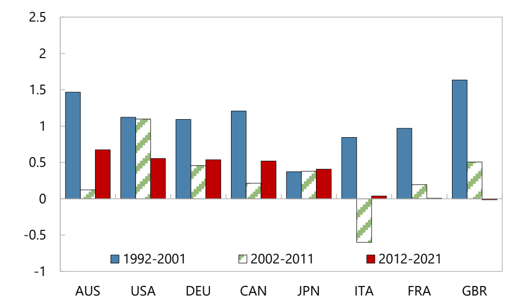
Canada's productivity growth has been muted during recent decades and weakened notably relative to the U.S. Specifically, labor productivity growth has remained slightly lower than in major comparator countries during most of the last four decades. During 2012–21, labor productivity growth registered 0.54 percent, slightly above the G7 average of 0.45 percent, but still notably below the growth rates observed in leading economies including the U.S. and Australia. Similarly, multifactor productivity (MFP) growth lagged, particularly during the early 2000s, but has done better more recently.

Canada: Main Competitor Countries Labor Productivity Growth
(Percent change, Period average)



Sources: National Statistics, Haver Analytics, and IMF staff calculations

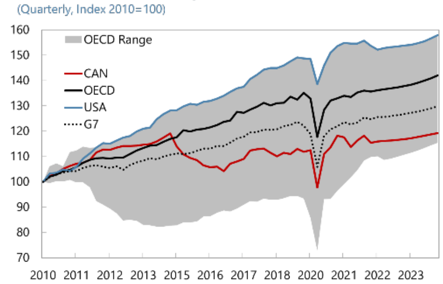
Canada: Main Competitor Countries Multifactor Productivity Growth
(Percent change, Period average)



Sources: OECD and IMF staff calculations

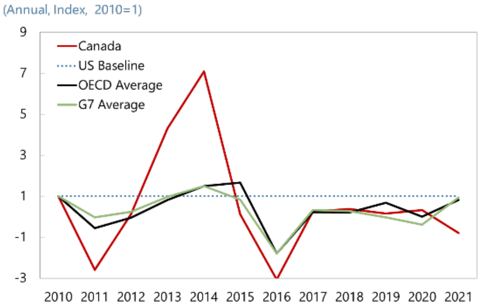
Weakening productivity and investment performance in recent years—especially since the collapse of oil prices in 2014—echo some observers' concerns that Canada's investment climate is worsening relative to that of comparator countries. Gross fixed capital formation is now in the lowest quartile of OECD countries and far below the level in the U.S., while labor productivity too is below U.S. levels, albeit close to other OECD countries through 2020.

Canada: Gross Fixed Capital Formation
(Quarterly, Index 2010=100)



Sources: OECD and IMF staff calculations

Canada: Labor Productivity Relative to the US
(Annual, Index, 2010=1)

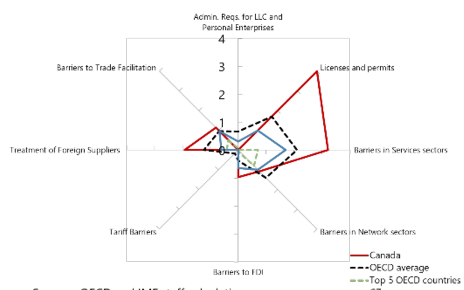


Sources: OECD and IMF staff calculations

Box 5. Canada's Investment Climate[1] (continued)

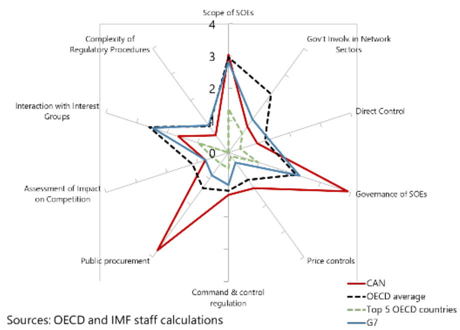
One issue appears to relate to competition in product markets. Regulatory barriers appear to be above the OECD average, with weaknesses related to public procurement and SOE governance, as well as the licensing of new entrant businesses. Staff's sentiment analysis based on the application of natural-language processing techniques to Twitter data confirms that competition may be an issue. There has been a growing focus on competition over the years, and the ratio of negative comments has been on the rise, with the exception of the pandemic year 2021.

Canada: Barriers to Domestic and Foreign Entry
Index, Min=0, Max=6



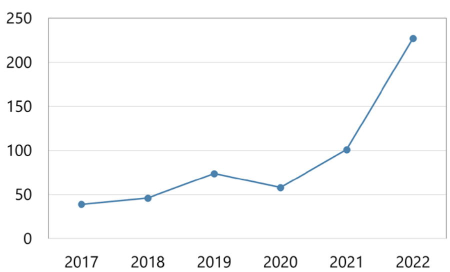
Sources: OECD and IMF staff calculations

Canada: Distortions Induced by State Involvement
Index, Min=0, Max =6



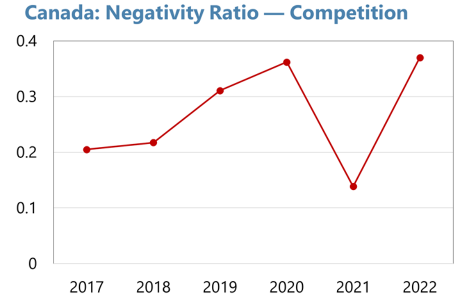
Sources: OECD and IMF staff calculations

Canada: Twitter Comments — Competition



Sources: Twitter and IMF staff calculations

Canada: Negativity Ratio — Competition

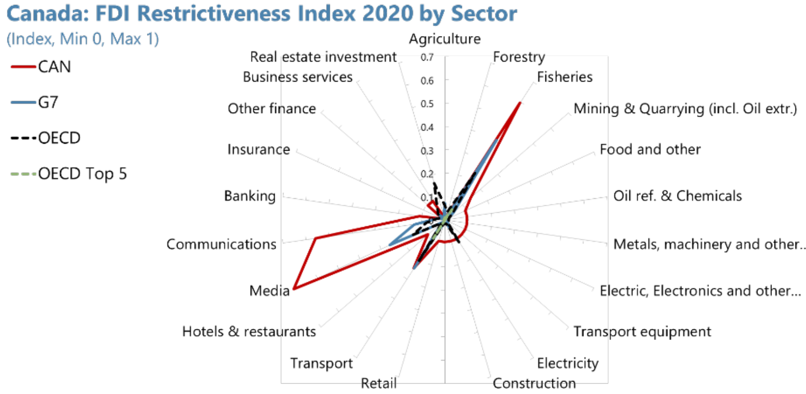


Sources: Twitter and IMF staff calculations

The authorities have taken a number of recent steps in this area, including strengthening the powers of the competition bureau, increasing its budget, and launching a review of its governing legislation.

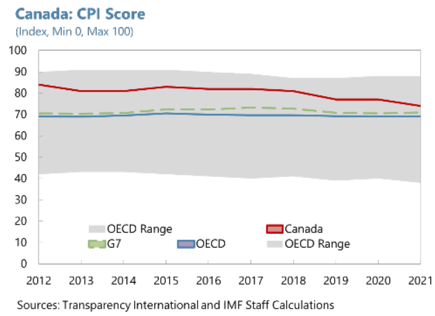
Barriers to FDI continue to be high relative to comparator countries. Restrictions are highest in the sectors media, communications, and fisheries but are above the G7 average in most sectors. The OECD 2023 economic survey for Canada highlights foreign-ownership limits in network sectors like telecommunications, airlines, and banking as a major challenge.

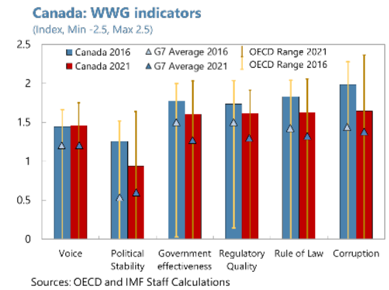
Canada: FDI Restrictiveness Index 2020 by Sector
(Index, Min 0, Max 1)



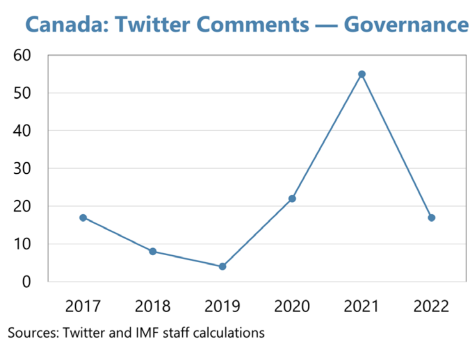
Sources: OECD and IMF Staff Calculations

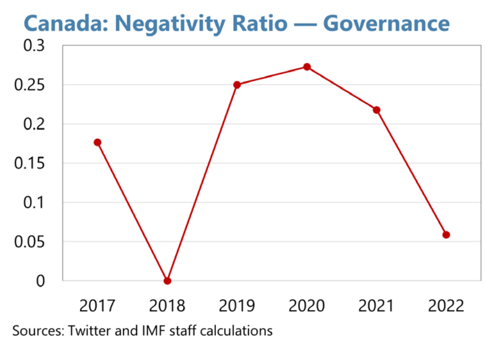
Box 5. Canada's Investment Climate[1] (continued)

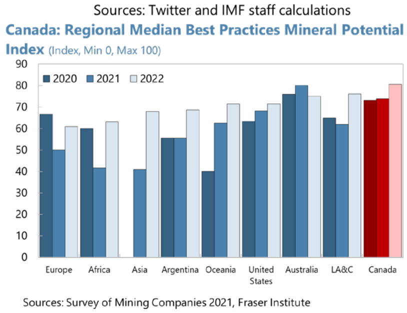


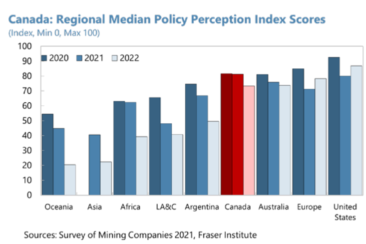


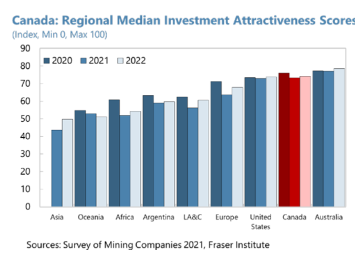
Governance indicators are strong, but there are signs of slippage in recent years. Scores on the Worldwide Governance Indicators compiled by the World Bank have declined in all but one category (especially "government stability and corruption") during the last five years. Similar trends are reported by the Corruption Perception Index and the political risk rating of the International Country Risk Guide. Twitter content analysis suggests that prior to the pandemic, there was an upward trend in negative perceptions of governance, which subsequently declined following the pandemic. Overall, the negativity ratio, defined as the ratio of negative comments over the total number of comments, was not increasing.







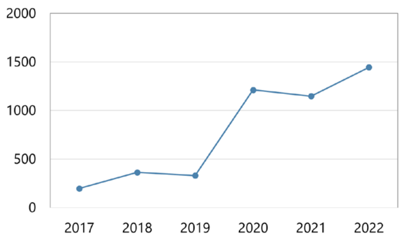




Finally, Canada's mining sector continues to be an attractive investment destination, but policy uncertainty is an issue. The Fraser annual survey of mining companies assesses the perception of the attractiveness of mining jurisdictions based on government policies, geologic mineral potential, and overall attractiveness. Although some provinces (e.g., Newfoundland and Labrador, Alberta, and New Brunswick) performed strongly according to the PPI, respondents continue to cite policy uncertainty—particularly around disputed land claims, protected areas, and environmental regulations—as a major deterrent to mining investment in Canada. Compared to 2021, respondents were less concerned about potential labor shortages, and government stability. On indigenous policies, there has been no significant change in negative sentiment, based on results from Twitter analysis.

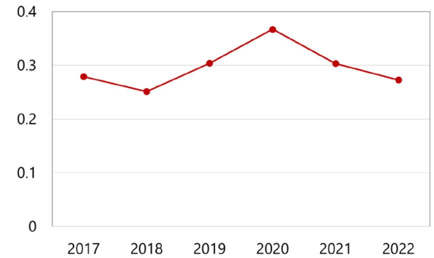
Box 5. Canada's Investment Climate[1] (concluded)

Canada: Twitter Comments — Indigenous



Sources: Twitter and IMF staff calculations

Canada: Negativity Ratio — Indigenous



Sources: Twitter and IMF staff calculations

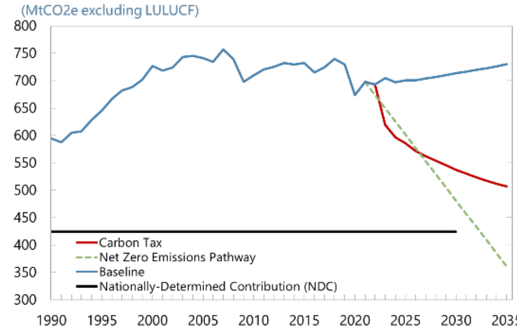
[1] See F. Lutz, L.M. Masterson, and Y. Yang, "Canada's Investment Climate," forthcoming IMF Working Paper, for further details.

Box 6. Canada's Mitigation Policies

Canada has set ambitious mitigation targets, including achieving net zero by 2050 and reducing greenhouse gas (GHG) emissions in 2030 by 42.5 percent below its 2005 level (and 15 percent below the 1990 level). This Nationally Determined Contribution (NDC) submitted for the 2015 Paris Agreement is comparable to those in the U.S., Europe, and Japan. To complement these overarching goals, the federal government has set targets for sales shares of zero-emission vehicles (ZEVs), the phaseout of coal generation, and forest carbon sequestration.

Canada: GHG Emissions vs. Paris Pledge

(MtCO2e excluding LULUCF)

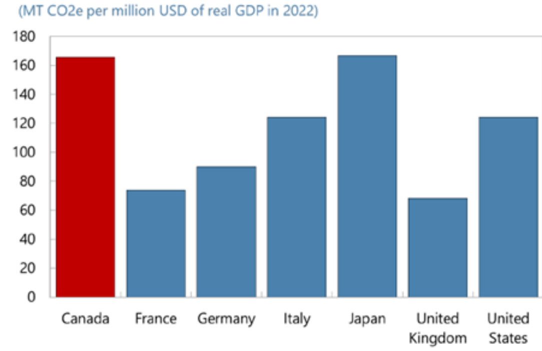


Sources: IMF staff calculations

Note: NDC target is a 42.5% reduction in absolute emissions by 2030 vs. 2005.

Canada: Implied Average NDC CO2 Target Level 2030

(MT CO2e per million USD of real GDP in 2022)



Sources: OECD and International Monetary Fund

To achieve its targets, Canada has implemented a comprehensive suite of mitigation policies, centered around carbon pricing. The carbon tax is currently at Can$65/ton and is slated to increase to Can$170/ton by 2030—an admirable and ambitious plan that makes Canada a global leader in carbon pricing. Provinces and territories are required to have carbon prices (either a tax or an equivalent emissions trading system) at these levels, and if they fall short, a federal carbon pricing backstop comes into effect, including a fuel charge and an output-based performance standard (OBPS) for energy intensive, trade exposed (EITE) industries. In addition, there are federal incentives at the sectoral level including tax credits for ZEVs, emission rate standards for vehicles and power generators, and building retrofit programs, as well as public financing to support low-carbon investments. Moreover, in the 2022 and 2023 federal budgets, substantial new investment tax credits were introduced for targeted green sectors, and most recently the government offered substantial production subsidies that succeeded in attracting a major new EV battery factory.

Box 6. Canada's Mitigation Policies (concluded)

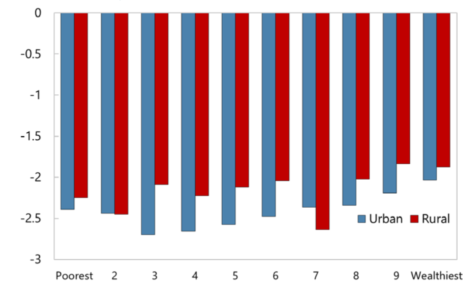
Canada's mitigation policies should go a long way toward achieving its NDCs. The IMF/World Bank CPAT tool—a spreadsheet-based model providing projections of fuel use and GHG emissions for the major energy sectors in 188 countries[1]—suggests that Canada's carbon pricing alone should deliver a 23 percent reduction in emissions relative to BAU in 2030. Additional measures including to support low-carbon investments and feebates (see below) to complement efforts to reduce GHG emissions in the transport sector would stretch the overall reduction to around 30 percent. This is not the entire NDC, and there also appears to be further to go in terms of meeting the 2050 net zero objective—but it is important to note that not all of Canada's mitigation measures are modeled here, nor are possible technological developments over the coming decades.

The analysis also suggests—as expected—that the incidence of carbon pricing on consumption is tilted somewhat toward poorer deciles of the population. This underscores the importance of intentional fiscal policies to protect the vulnerable during the climate transition.

Canada's policies should trigger a sharp reduction in industrial emissions, but much less of a response from transport given that: (i) prices for transportation fuels increase relatively little (since the carbon content of transportation fuels is low relative to that of coal (and to some extent natural gas)) and also given the significant existing taxes on transportation fuels); and (ii) the turnover of the vehicle fleet is relatively slow. Adding a feebate could thus help reduce emissions from the transport sector.

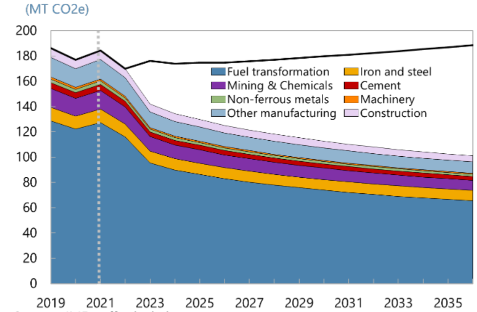
[1] See Black and others (2023).

Canada: Relative Mean Consumption Effect
(Percent of consumption, Household Decile)



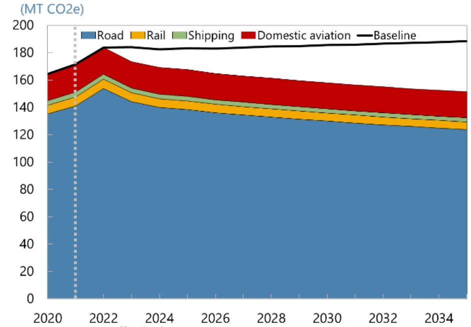
Sources: IMF staff calculations

Canada: Industrial CO2 emissions
(MT CO2e)



Sources: IMF staff calculations
Note: Industrial emissions exclude services and food & forestry

Canada: Transport CO2 emissions
(MT CO2e)



Sources: IMF staff calculations

Box 7. Domestic and Cross-Border Effects of Climate Policies in North America[1]

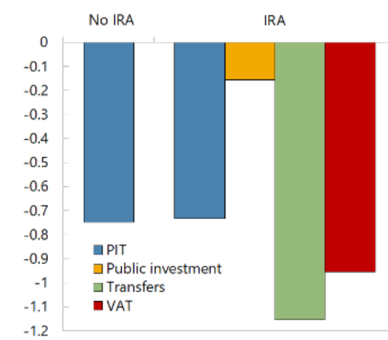
Divergent climate policies in Canada and the United States have raised competitiveness concerns for Canadian industries. With Canada's carbon pricing at the center of the country's emission reduction plan, the main concern has revolved around the increased cost of production faced by domestic firms compared to foreign ones that are not subject to carbon taxes, notably in the United States—Canada's dominant trading partner. This competitive disadvantage could lead to job losses, weaker production, and reduced investment as firms relocate abroad, also giving rise to carbon leakage in the process. Such concerns intensified last year as the U.S. enacted a package of green tax credits and subsidies as part of its Inflation Reduction Act (IRA) (although similar subsidies were later introduced in Canada's budget). The competitive disadvantage was thus initially feared to have extended beyond carbon-reliant industries affected by Canada's own carbon pricing system to include Canadian industries working in the green sectors.

Such competitiveness concerns may be attenuated by exchange rate flexibility, alternative revenue recycling schemes, and subsidy financing sources.[2] A stylized two-country general equilibrium model with two sectors (brown and green) shows that carbon taxation on the brown sector in the domestic economy and/or

Box 7. Domestic and Cross-Border Effects of Climate Policies in North America[1] (concluded)

production subsidies for the green sector in the foreign economy could be equivalent to "beggar-thyself" and "beggar-thy-neighbor" policies, respectively.[3] The competitive disadvantage due to divergent climate policies is manifested through weaker terms of trade. However, the model also points to alternative policy and structural designs that may dampen this channel. First, under flexible exchange regimes, the nominal exchange rate would be expected to work as buffer, partially reversing the aggregate competitiveness effects induced by climate policies. Second, alternative budget balancing assumptions could also partially offset: (i) the increased cost of production faced by domestic brown firms subject to carbon taxation; and (ii) the decreased cost of production faced by foreign green firms eligible for production subsidies. For example, distributing carbon tax revenues to households in the form of transfers can address the regressive distributional effects of mitigation policies (as currently designed in the federal backstop carbon pricing system), but the stylized model shows that using these revenues to reduce distortionary payroll taxes could yield efficiency benefits and address implications for competitiveness. By contrast, the increase in corporate income tax needed to finance green subsidies (as designed in the IRA) could partially reduce efficiency (in the U.S.) and thus also partially offset the adverse implications for Canada's competitiveness.

Canada: Carbon Pricing Implications on GDP in 2030
(Percentage change relative to Business-as-Usual)



Sources: IMF staff calculations

Using the IMF-ENV model,[4] we find that Canada's carbon pricing policy would reduce GHG emissions by around 29 percent relative to BaU, at a cost of between 0.2 and 1.2 percent of GDP.
The lower-end cost estimate obtains if carbon tax revenues are used to finance productive (possibly green) investment, while the higher-end obtains if these revenues are returned to households via transfers, whereas decreasing distortionary taxation in the form of decreasing personal income tax (PIT) or value-added tax (VAT) lead to moderate cost. Put another way, the choice of recycling scheme has a first-order impact on the output costs of mitigation. While the federal backstop design has opted for recycling mostly through direct transfers to households, some provinces use a mix of recycling targets that include some elements of decreasing distortionary taxation and increasing investment, among others. The costs to Canada's GDP are relatively less sensitive to the IRA's green subsidies in the U.S. (as suggested by the comparison between the blue bars), given that the financing of these measures is mostly through an increase in the corporate income taxes in the US, supporting the intuition of the analytical findings above. These results suggest that differences in carbon taxation are the main drivers of competitiveness/efficiency losses but that these can be substantially modified through careful choices on how carbon tax revenues are recycled. That said, policymakers may not be focused entirely on efficiency concerns and may also need to use these revenues to achieve equity objectives. However, transfers could be better targeted to the most vulnerable households to minimize their efficiency costs.

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[1] J.M. Fournier, T. Kass-Hanna, L. Masterson, A. Paret, and S. Thube, 2023, "Cross-Border Effects of Climate Measures in North America", forthcoming IMF Working Paper. Business-as-Usual refers to a scenario in which carbon pricing in Canada stays at its current level of Can$65, absent of the implementation of IRA in the USA, and unchanged policies in the rest of the world.

[2] These concerns are also partly mitigated by the specific design of Canada's output-based performance standard (OBPS) and the United States' subsidies.

[3] This holds particularly when nominal exchange rates are exogenous or fixed and when budgets are balanced by lump-sum transfers or taxes.

[4] The IMF-ENV is a global recursive dynamic computable general equilibrium (CGE) model developed by the IMF's Research Department. See Box 1 of Chateau, Jaumotte, Schwerhoff (2022) for an overview of the model.

Table 1. Canada: Selected Economic Indicators

(Percentage change, unless otherwise indicated)

Nominal GDP (2022): Can$ 2,785 billion (US$ 2,139 billion) | Quota: SDR 11,023.9 million
GDP per capita (2022): US$ 54,015 | Population (2022): 39.6 million
Main exports: Oil and gas, autos and auto parts, gold, lumber, copper.

				Projections					
	2020	2021	2022	2023	2024	2025	2026	2027	2028
Output and Demand									
Real GDP	-5.1	5.0	3.4	1.7	1.4	2.2	1.9	1.7	1.7
Total domestic demand	-6.0	6.6	4.7	-0.5	1.5	2.6	2.1	2.0	2.0
Private consumption	-6.1	5.0	4.8	3.9	2.3	3.5	2.6	2.6	2.6
Total investment	-7.4	13.9	7.0	-9.5	0.8	2.5	2.2	1.8	1.7
Net exports, contribution to growth	0.3	-2.1	-1.5	2.2	-0.1	-0.4	-0.2	-0.3	-0.4
Unemployment and Inflation									
Unemployment rate (average) 2/	9.7	7.5	5.3	5.5	6.2	6.1	6.0	6.0	6.0
CPI inflation (average)	0.7	3.4	6.8	3.6	2.5	2.0	1.9	1.9	2.0
Saving and Investment 1/									
Gross national saving	20.1	23.5	24.2	21.5	21.4	21.2	21.0	20.8	20.5
General government	-6.8	-0.7	2.5	2.5	2.4	2.4	2.5	2.5	2.5
Private	26.9	24.3	21.7	18.9	19.0	18.8	18.5	18.3	18.0
Personal	32.3	22.7	12.0	2.6	2.2	-0.3	-2.0	-2.2	-1.8
Business	-5.5	1.5	9.7	16.3	16.7	19.1	20.5	20.5	19.8
Gross domestic investment	22.3	23.8	24.5	23.0	22.9	22.9	23.0	23.0	23.0
General Government Fiscal Indicators 1/ (NA basis)									
Revenue	41.8	41.5	40.6	40.7	40.6	40.7	40.7	40.9	41.0
Expenditures	52.7	45.9	41.4	41.4	41.3	41.2	41.1	41.1	41.1
Overall balance	-10.9	-4.4	-0.8	-0.7	-0.7	-0.6	-0.4	-0.2	-0.2
Gross Debt	118.9	115.1	106.7	105.8	103.5	101.0	98.8	96.7	94.7
Net debt	15.7	15.4	13.9	14.3	14.4	14.4	14.2	14.0	13.6
Money and Credit (Annual average)									
Household Credit Growth	5.2	10.8	9.9	5.0	3.6	3.5	3.5	3.5	3.5
Business Credit Growth	-0.9	-12.7	6.4	3.4	3.6	3.5	3.5	3.5	3.5
Balance of Payments									
Current account balance 1/	-2.2	-0.3	-0.3	-1.5	-1.5	-1.7	-1.9	-2.1	-2.4
Merchandise Trade balance 1/	-1.8	0.2	0.8	-0.2	-0.3	-0.7	-0.9	-1.1	-1.4
Export volume (percent change)	-7.9	1.7	1.9	5.9	1.2	2.1	3.4	3.4	3.1
Import volume (percent change)	-7.1	8.7	6.2	-1.7	1.7	3.8	4.2	4.6	4.5
Terms of trade	-3.4	14.4	5.3	-9.0	-0.2	0.3	0.0	0.0	0.0

Sources: Haver Analytics and Fund staff calculations.
1/ Percent of GDP.
2/ In percent.

Table 2. Canada: Balance of Payments, 2020–28
(Percent of GDP)

				Projections					
	2020	2021	2022	2023	2024	2025	2026	2027	2028
Current Account									
Current account balance	-2.2	-0.3	-0.3	-1.5	-1.5	-1.7	-1.9	-2.1	-2.4
Merchandise trade balance	-1.8	0.2	0.8	-0.2	-0.3	-0.7	-0.9	-1.1	-1.4
Exports, goods	23.6	25.4	28.0	27.0	26.3	25.9	25.8	25.8	25.7
Export volume growth (percentage change)	-7.9	1.7	1.9	5.9	1.2	2.1	3.4	3.4	3.1
Imports, goods	25.5	25.2	27.2	27.1	26.6	26.5	26.6	26.8	27.0
Import volume growth (percentage change)	-7.1	8.7	6.2	-1.7	1.7	3.8	4.2	4.6	4.5
Services balance	-0.4	-0.2	-0.6	-0.7	-0.6	-0.5	-0.4	-0.4	-0.3
Primary Income Balance	0.4	0.0	-0.3	-0.5	-0.4	-0.4	-0.5	-0.6	-0.7
Secondary Income Balance	-0.3	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Capital and Financial Accounts									
Financial account balance	2.2	0.1	0.3	1.5	1.5	1.7	1.9	2.1	2.5
Direct investment, net	-0.9	-1.6	-1.4	-0.2	-1.7	-0.7	-0.6	-1.2	-1.0
Portfolio investment, net	4.1	2.1	5.4	-0.6	-0.6	-0.4	0.3	-0.1	-0.1
Other investment, net 1/	-0.9	0.6	-3.3	2.3	3.8	2.8	2.2	3.4	3.6
Capital account balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
International reserves	-0.1	-1.0	-0.5	0.0	0.0	0.0	0.0	0.0	0.0
Statistical discrepancy	-0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum Items									
Terms of trade (percent change)	-3.4	14.4	5.3	-9.0	-0.2	0.3	0.0	0.0	0.0
Net international investment position 2/	43.3	52.1	30.2	27.7	25.3	22.6	19.8	17.0	14.0
Assets	293.4	301.5	265.1	265.0	263.4	262.9	260.9	260.4	260.0
FDI	113.7	115.5	103.6	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Portfolio 2/	123.5	133.7	104.9	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Other	51.0	47.0	51.4	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Reserves	5.2	5.4	5.2	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Liabilities	250.1	249.4	234.9	237.3	238.1	240.3	241.0	243.4	246.0
FDI	74.6	78.9	74.6	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Portfolio 2/	115.9	114.2	102.1	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Other	59.7	56.3	58.2	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Gross external debt	143.2	135.5	128.6	133.9	135.5	138.1	139.7	142.6	145.5
Real effective exchange rate 3/	-1.1	4.8	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

Sources: Haver Analytics and Fund staff calculations.
1/ Includes bank, nonbank, and official transactions other than reserve transactions.
2/ Based on market valuation of portfolio stocks and official international reserves.
3/ Percentage change.

Table 3. Canada: General Government Fiscal Indicators, 2020–28 1/
(Percent of GDP, unless otherwise indicated)

	2020	2021	2022	2023	2024	2025	2026	2027	2028
				Projections					
Federal Government									
Revenue	15.4	15.4	14.6	14.7	14.7	14.8	14.9	15.0	15.1
Income taxes	10.5	10.1	9.7	9.8	9.7	9.7	9.7	9.9	10.0
Expenditures	25.5	19.5	15.9	15.7	15.7	15.7	15.7	15.7	15.7
Program spending	24.6	18.5	14.8	14.3	14.2	14.2	14.1	14.1	14.2
Transfers	16.2	12.5	9.9	9.6	9.7	9.8	9.9	10.0	10.1
Interest payments	1.0	0.9	1.1	1.5	1.5	1.5	1.6	1.6	1.4
Budgetary balance	-10.1	-4.0	-1.2	-1.1	-1.0	-0.9	-0.8	-0.7	-0.5
Cyclically-adjusted balance 2/	-9.4	-3.8	-1.4	-1.1	-0.9	-0.8	-0.8	-0.7	-0.5
Net federal debt	27.2	29.4	26.8	26.7	26.6	26.5	26.4	25.9	25.2
Gross federal debt	57.4	56.1	52.5	51.4	50.5	49.4	48.3	47.2	46.1
Provincial and Local Governments									
Revenue	28.7	27.3	26.8	27.0	27.0	26.9	26.9	26.9	26.9
Income taxes	7.0	7.0	7.0	7.1	7.0	7.0	7.0	7.0	7.0
Expenditures	30.0	28.5	27.4	27.4	27.4	27.3	27.2	27.1	27.1
Interest payments	1.9	1.7	1.7	1.8	2.0	1.9	1.7	1.7	1.8
Budgetary balance	-1.3	-1.2	-0.6	-0.5	-0.5	-0.4	-0.3	-0.2	-0.2
Canada/Quebec Pension Plans									
Revenue	3.8	3.8	3.8	3.7	3.6	3.6	3.6	3.6	3.6
Total spending	3.2	2.9	2.8	2.9	2.9	3.0	3.0	3.0	3.0
Budgetary balance	0.6	0.8	1.0	0.8	0.7	0.7	0.7	0.6	0.6
Consolidated General Government 3/									
Revenue	41.8	41.5	40.6	40.7	40.6	40.7	40.7	40.9	41.0
Expenditure	52.7	45.9	41.4	41.4	41.3	41.2	41.1	41.1	41.1
Overall balance	-10.9	-4.4	-0.8	-0.7	-0.7	-0.6	-0.4	-0.2	-0.2
Primary balance	-10.5	-5.0	-1.3	-0.6	-0.5	-0.4	-0.3	-0.2	-0.2
Cyclically-adjusted balance 2/	-9.2	-3.7	-1.1	-0.8	-0.6	-0.5	-0.4	-0.2	-0.2
Fiscal impulse	9.0	-5.5	-2.6	-0.3	-0.2	0.0	-0.1	-0.1	-0.1
Net public debt	15.7	15.4	13.9	14.3	14.4	14.4	14.2	14.0	13.6
Gross public debt	118.9	115.1	106.7	105.8	103.5	101.0	98.8	96.7	94.7
Memorandum Items									
Real GDP growth (percentage change)	-5.1	5.0	3.4	1.7	1.4	2.2	1.9	1.7	1.7
Nominal GDP growth (percentage change)	-4.5	13.6	10.9	2.1	3.8	4.2	3.9	3.8	3.8
Three-month treasury bill (percent)	0.5	0.1	2.3	4.6	3.6	2.8	2.6	2.6	2.5
Ten-year government bond (percent)	0.8	1.4	2.8	3.3	3.3	3.1	3.1	3.0	3.0

Sources: Statistics Canada; DoF Canada; provincial budget reports; Haver Analytics; and IMF staff estimates.
1/ National Accounts basis.
2/ Percent of potential GDP.
3/ Includes federal, provincial, territorial, and local governments; and Canada and Quebec pension plans.

Table 4. Canada: Statement of General Government Operations and Balance Sheet, 2014–22 1/

(Percent of GDP, unless otherwise indicated)

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Government Operations									
Revenue	38.6	40.0	40.4	40.4	41.1	40.6	41.9	41.5	40.9
Taxes	26.8	28.2	28.5	28.6	29.0	28.6	30.0	29.4	28.8
Social contributions	4.6	4.8	4.8	4.6	4.6	4.6	4.8	4.7	4.7
Grants	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Other revenue	7.2	7.0	6.9	7.2	7.4	7.4	7.0	7.4	7.3
Total expenditure	38.4	40.0	40.8	40.5	40.7	40.6	52.7	45.9	41.5
Expense	38.2	39.6	40.3	39.8	40.0	40.3	52.1	45.6	40.9
Compensation of employees	11.9	12.1	12.2	12.0	12.0	12.0	13.0	12.4	11.9
Use of goods and services	8.2	8.5	8.6	8.6	8.6	8.5	9.4	8.9	8.6
Consumption of fixed capital	3.2	3.3	3.3	3.3	3.3	3.3	3.5	3.3	3.3
Interest	3.2	3.1	3.0	2.9	3.0	3.0	3.0	2.7	2.8
Subsidies	0.9	0.9	1.0	0.9	1.0	1.1	4.8	3.0	1.4
Grants	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3
Social benefits	9.0	9.7	10.0	10.0	9.9	10.0	15.7	12.6	10.3
Other expense	1.7	1.7	1.9	2.0	2.0	2.0	2.5	2.4	2.4
Net acquisition of nonfinancial assets	0.2	0.4	0.5	0.6	0.6	0.3	0.6	0.3	0.6
Gross operating balance	3.6	3.7	3.4	3.8	4.3	3.6	-6.7	-0.8	3.2
Net operating balance	0.4	0.4	0.1	0.6	1.1	0.4	-10.2	-4.1	-0.1
Net lending or borrowing	0.2	0.0	-0.4	-0.1	0.4	0.0	-10.8	-4.3	-0.7
Balance Sheet (Market Value)									
Net worth	1.9	1.5	5.8	13.7	16.9	16.0	9.8	25.7	35.8
Nonfinancial assets	46.6	42.4	46.7	47.2	47.5	46.2	52.8	60.1	56.0
Net financial worth	-44.7	-40.9	-40.9	-33.4	-30.6	-30.2	-42.9	-34.4	-20.1
Financial assets	70.9	80.6	81.6	85.6	86.2	89.2	111.2	107.2	99.4
Currency and deposits	4.6	4.7	5.3	5.4	5.4	5.5	9.9	8.2	7.3
Securities other than shares	13.6	15.4	14.6	14.6	15.0	16.0	18.0	17.8	16.2
Loans	16.2	19.3	19.0	18.8	18.9	19.4	23.3	23.4	22.6
Shares and other equity	22.4	25.4	26.4	28.5	29.0	30.3	35.8	35.4	31.4
Insurance technical reserves	2.4	2.7	2.9	4.4	3.9	4.4	5.8	7.4	6.1
Other accounts receivable	11.9	13.1	13.3	14.0	14.0	13.5	18.4	15.1	15.8
Financial liabilities 2/	115.6	121.6	122.6	119.0	116.9	119.3	154.1	141.6	119.6
Currency and deposits	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
Securities other than shares	77.7	82.0	83.1	79.3	78.2	79.8	109.0	100.0	81.4
Loans	6.4	7.5	6.3	7.0	6.9	7.6	7.7	7.4	7.1
Shares and other equity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Insurance technical reserves	16.1	15.5	16.5	16.3	15.4	16.1	17.5	13.7	12.5
Other accounts payable	15.1	16.3	16.3	16.1	16.1	15.6	19.7	20.2	18.3
Memorandum Items:									
Nominal GDP (in billions of Can$)	1,995	1,990	2,026	2,141	2,236	2,314	2,210	2,510	2,783

Sources: Statistics Canada; and Haver Analytics.

1/ Government Finance Statistics basis.

2/ Includes unfunded public sector pension liabilities.

Table 5. Canada: Financial Soundness Indicators, 2014–22
(Percent, unless otherwise indicated)

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Assets									
Total assets 1/	4,191	4,679	5,028	5,291	5,689	6,130	6,971	7,267	8,151
Percent of GDP	210.1	235.1	248.2	247.2	254.5	265.0	315.5	289.6	292.9
Capital Adequacy									
Total capital ratio	14.2	14.2	14.8	14.8	15.2	15.3	16.1	17.1	17.3
Tier 1 ratio	11.9	12.1	12.5	12.9	13.2	13.2	13.9	15.1	15.4
Capital to assets	4.5	4.6	4.7	4.8	4.8	4.7	4.6	4.8	4.8
Credit Risk									
NPLs net of provisions to capital	5.1	5.0	5.7	4.5	4.8	4.5	4.2	2.9	2.6
NPLs to Gross Loans	0.5	0.5	0.6	0.4	0.5	0.5	0.5	0.4	0.3
Profitability									
Return on assets	1.1	1.0	1.0	1.1	1.2	1.1	0.8	1.1	1.2
Return on equity	18.0	16.7	16.0	17.1	17.3	16.2	13.2	17.3	18.1
Interest margin on gross income	54.0	53.9	54.1	53.4	53.5	55.3	56.4	54.0	54.2
Trading income to gross income	3.3	3.3	3.6	3.7	4.7	3.8	4.2	3.4	6.4
Non-interest expenses to gross income	59.2	60.1	59.2	57.8	56.4	57.4	56.1	56.6	53.7
Liquidity									
Liquid assets to total assets	10.9	11.4	10.9	10.7	10.6	9.8	15.4	15.1	13.2
Liquid assets to short-term liabilities	50.5	45.4	54.6	49.4	48.5	44.1	78.0	79.5	57.9
Customer deposits to loans	102.1	104.1	104.3	102.7	101.4	100.7	109.5	113.1	110.1
Real estate markets									
Residential real estate loans to total loans	38.1	36.5	36.4	35.8	34.3	33.3	34.5	36.4	35.0
Commercial real estate loans to total loans	3.0	3.1	3.4	3.4	3.4	3.3	3.4	3.4	3.2
FX and Derivative Risk									
FX Assets to Total Assets	49.0	56.5	51.4	46.5	60.2	47.4	43.9	50.6	52.1
FX loans to total loans	30.1	33.4	34.3	35.5	37.2	38.5	37.8	35.8	38.2
FX liabilities to total liabilities	49.0	48.3	54.9	53.8	54.3	49.0	52.9	42.9	57.1

Sources: IMF FSI database; and IMF staff calculations.
1/ Billions of Canadian dollars.

Table 6. Canada: Medium-Term Scenario, 2018–28
(Percentage change, unless otherwise indicated)

						Projections					
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
National Accounts in constant prices											
Real GDP	2.8	1.9	-5.1	5.0	3.4	1.7	1.4	2.2	1.9	1.7	1.7
Q4/Q4	2.7	1.8	-2.9	3.9	2.1	1.6	1.8	2.2	1.7	1.7	1.7
Net exports 1/	0.2	0.7	0.3	-2.1	-1.5	2.2	-0.1	-0.4	-0.2	-0.3	-0.4
Final domestic demand	2.7	1.3	-3.8	5.8	2.7	1.1	1.6	2.6	2.1	2.0	2.0
Private consumption	2.6	1.5	-6.1	5.0	4.8	3.9	2.3	3.5	2.6	2.6	2.6
Public consumption	3.2	1.0	1.3	6.4	2.0	0.4	0.4	0.4	0.5	0.6	0.6
Private fixed domestic investment	2.5	1.6	-1.8	9.9	-2.3	-3.8	1.6	2.8	2.4	1.9	1.7
Public investment	2.7	-3.1	5.5	0.9	2.1	1.4	1.2	1.2	1.4	1.5	2.0
Change in inventories 1/	-0.1	-0.1	-1.7	1.0	2.3	-1.2	-0.2	0.0	0.0	0.0	0.0
Nominal GDP	4.4	3.5	-4.5	13.6	10.9	2.1	3.8	4.2	3.9	3.8	3.8
Employment and inflation											
Unemployment rate 3/	5.9	5.7	9.7	7.5	5.3	5.5	6.2	6.1	6.0	6.0	6.0
Employment	1.8	2.1	-5.6	5.0	4.0	2.0	0.7	1.4	1.3	1.2	0.7
CPI inflation	2.3	1.9	0.7	3.4	6.8	3.6	2.5	2.0	1.9	1.9	2.0
Core CPI inflation (y/y)	1.9	2.1	1.1	2.4	5.0	4.0	2.9	2.2	2.0	2.0	2.0
GDP deflator	1.6	1.6	0.6	8.2	7.2	0.3	2.3	1.9	2.0	2.1	2.1
Potential output growth	2.6	2.1	-1.4	3.0	1.2	2.2	2.0	1.9	1.8	1.7	1.7
Output gap 4/	0.6	0.4	-3.4	-1.4	0.8	0.3	-0.4	-0.1	0.0	0.0	0.0
Indicators of fiscal policies											
Federal fiscal balance	0.3	-0.4	-10.1	-4.0	-1.2	-1.1	-1.0	-0.9	-0.8	-0.7	-0.5
Billions of Can$	6.8	-9.9	-224.2	-101.1	-34.7	-29.9	-29.1	-26.2	-24.7	-22.1	-18.4
General government fiscal balance 5/	0.4	0.0	-10.9	-4.4	-0.8	-0.7	-0.7	-0.6	-0.4	-0.2	-0.2
Billions of Can$	8.0	-0.4	-241.1	-110.0	-22.6	-19.5	-21.2	-17.2	-11.8	-8.2	-5.2
General government gross debt	90.8	90.2	118.9	115.1	106.7	105.8	103.5	101.0	98.8	96.7	94.7
General government net debt	11.6	8.5	15.7	15.4	13.9	14.3	14.4	14.4	14.2	14.0	13.6
Three-month treasury bill 3/	1.4	1.7	0.5	0.1	2.3	4.6	3.6	2.8	2.6	2.6	2.5
Ten-year government bond yield 3/	2.3	1.6	0.8	1.4	2.8	3.3	3.3	3.1	3.1	3.0	3.0
External indicators											
Current account balance 2/	-2.4	-2.0	-2.2	-0.3	-0.3	-1.5	-1.5	-1.7	-1.9	-2.1	-2.4
Merchandise trade balance 2/	-1.0	-0.8	-1.8	0.2	0.8	-0.2	-0.3	-0.7	-0.9	-1.1	-1.4
Export volume	2.8	0.8	-7.9	1.7	1.9	5.9	1.2	2.1	3.4	3.4	3.1
Import volume	2.6	-0.1	-7.1	8.7	6.2	-1.7	1.7	3.8	4.2	4.6	4.5
Terms of trade	0.4	-0.9	-3.4	14.4	5.3	-9.0	-0.2	0.3	0.0	0.0	0.0
Real effective exchange rate	-0.6	-0.9	-1.1	4.8	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Saving and investment 2/											
Gross national saving	21.0	21.1	20.1	23.5	24.2	21.5	21.4	21.2	21.0	20.8	20.5
General government	4.5	3.9	-6.8	-0.7	2.5	2.5	2.4	2.4	2.5	2.5	2.5
Private	16.5	17.1	26.9	24.3	21.7	18.9	19.0	18.8	18.5	18.3	18.0
Gross domestic investment	23.4	23.0	22.3	23.8	24.5	23.0	22.9	22.9	23.0	23.0	23.0
Personal savings 6/	0.6	2.1	14.0	11.0	6.1	1.3	1.1	-0.1	-1.0	-1.1	-0.9
Memorandum Items											
Nominal GDP (billions of Can$)	2,236	2,314	2,210	2,510	2,783	2,840	2,947	3,071	3,191	3,313	3,440

Sources: Haver Analytics; and IMF staff estimates.

1/ Contribution to growth.
2/ Percent of GDP.
3/ Percent.
4/ Percent of potential GDP.
5/ Includes federal, provincial, territorial, and local governments; and Canada and Quebec pension plans.
6/ Percent of disposable income.

Table 7. Canada: External Debt, 2010–22 1/
(End of period, market value)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
(In percent of GDP)													
Total All Sectors	73.6	75.8	84.3	86.4	93.9	111.9	116.0	114.8	119.7	125.7	143.2	135.5	128.6
Short-term	21.7	22.6	24.2	24.3	28.1	34.3	35.9	35.2	40.0	46.2	52.5	51.2	51.1
Long-term	41.3	44.5	50.8	51.7	55.6	66.1	68.2	69.6	69.2	69.2	79.4	74.0	68.2
General Government	17.4	20.2	22.4	20.6	20.1	22.1	22.4	22.7	21.0	20.4	27.2	27.3	22.0
Short-term	1.6	3.1	3.2	2.7	2.3	2.2	2.0	1.3	1.7	1.7	3.1	3.7	1.8
Long-term	15.8	17.1	19.2	17.8	17.8	19.9	20.5	21.4	19.3	18.8	24.0	23.6	20.2
Monetary Authorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Banks	19.4	20.2	24.8	26.7	32.4	40.9	43.3	43.7	48.9	54.8	60.4	58.1	62.6
Short-term	17.3	16.6	17.8	18.3	22.8	28.1	29.4	29.4	32.7	38.5	43.4	42.4	43.7
Long-term	2.1	3.6	7.0	8.4	9.5	12.8	13.9	14.3	16.1	16.3	17.0	15.6	18.9
Other Sectors	26.1	26.5	0.5	0.5	0.5	0.6	0.7	0.9	1.2	1.4	1.5	1.4	1.3
Short-term	2.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Long-term	23.4	23.8	0.5	0.5	0.5	0.6	0.7	0.9	1.2	1.4	1.5	1.4	1.3
(In billions of US dollar)													
Total All Sectors	1,234	1,323	1,549	1,545	1,615	1,610	1,750	1,958	1,962	2,240	2,485	2,683	2,643
Short-term	363	394	444	435	483	494	542	601	656	823	910	1,014	1,050
Long-term	692	776	933	925	957	950	1,029	1,188	1,134	1,232	1,379	1,466	1,400
General Government	292	353	411	368	346	317	339	387	344	364	472	541	453
Short-term	27	54	58	49	40	32	30	22	28	29	55	73	38
Long-term	265	299	353	319	306	286	309	365	316	334	417	468	415
Monetary Authorities	0	0	0	0	0	0	0	0	0	0	1	1	1
Banks	326	353	455	477	557	588	654	746	801	975	1,049	1,149	1,287
Short-term	290	290	327	328	393	405	443	501	537	685	754	840	898
Long-term	35	63	128	149	164	184	210	245	264	290	295	309	388
Other Sectors	437	463	9	9	8	8	11	16	20	25	27	29	27
Short-term	45	49	-	-	-	-	-	-	-	-	-	-	-
Long-term	392	414	9	9	8	8	11	16	20	25	27	29	27

Sources: Haver Analytics and IMF staff estimates.

1/ Short-term instruments include: money market, loans, deposits, trade credits, and other debt liabilities.

Long term includes: bonds and notes, loans, and other debt liabilities.

Table 8. Canada: Monetary Statistics, 2017–22
(Billions CAD, end of period, market value)

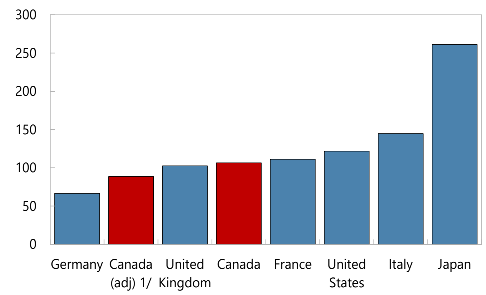
	2017	2018	2019	2020	2021	2022
Monetary Authority						
Net foreign assets	108	114	110	114	134	144
Foreign assets	109	115	111	115	135	145
Foreign liabilities	0	1	1	1	1	1
Deposit-taking corporations						
Net foreign assets	-266	-284	-277	-247	-301	-377
Foreign assets	816	949	1241	1379	1464	1717
Foreign liabilities	1082	1233	1518	1626	1765	2095
Chartered Banks						
Net foreign assets	5	30	1	-18	-42	-87
Net domestic assets	-213	16	-140	4224	4020	4211
Lending to private sector	2701	2854	3011	3081	3359	3650
Residential Mortgages	1131	1163	1223	1326	1474	1567
Business loans (residents and non-residents)	1000	1097	1176	1152	1250	1404
Broad Money M3	2285	2430	2621	2927	3161	3417
Currency in cirrculation	2285	2430	2621	2927	3161	3417
Currency deposits in Chartered Banks	0	2430	2621	2927	3161	3417
Memorandum items 1/				(percent)		
M3 growth	4.9	6.3	7.9	11.7	8.0	8.1
Chartered bank lending to the private sector growth	6.0	5.7	5.5	2.3	9.0	8.7
Chartered bank loan to deposit ratio	1.5	1.5	1.4	1.3	1.3	1.3

Source: Statistics Canada, Bank of Canada, and IMF staff calculations
1/ Computed as the ratio of the change in the stock divided by last period's stock and therefore includes valuation changes.

Annex I. Sovereign Risk and Debt Sustainability Assessment

Staff assess the overall risk of sovereign stress to be low and Canada has some fiscal space. Following the unwinding of the sizable fiscal support in response to the COVID-19 pandemic, Canada's gross debt declined from its peak of 119 percent of GDP in 2020 to 106¾ percent in 2022. Under the baseline scenario, the gross debt-to-GDP ratio is projected to remain broadly unchanged in 2023 but resume its declining path over the medium term, reflecting fiscal consolidation and favorable growth-interest rate differentials. The medium-term risk assessment indicates moderate debt stress and liquidity risk, but the government's holdings of large financial assets (about 92¾ percent of GDP at end-2022) would provide a comfortable buffer.[1]

Canada: General Government Gross Debt
(Percent of GDP, 2022)



Sources: IMF World Economic Outlook
1/ Canada (adj) is general government debt adjusted for accounts payable.

1. **Background.** General government consolidated gross debt stood at 106¾ percent of GDP at end-2022, about 16½ percentage points above the pre-pandemic level.[2] Excluding accounts payable (in line with common international practice), gross debt was about 89¼ percent of GDP in 2022, among the lowest in the G7. It is also important to note that Canada's general government holds sizable financial assets (about *92¾* percent of GDP in market value at end-2022), which include a broad range of assets (currency and deposits, debt securities, loans, and equity holdings, etc.).[3] Around one-quarter of these assets are highly liquid (currency, deposits, and bonds) and about 30 percent are invested in equity and investment shares, of which more than half relate to pension fund investments. The net debt-to-GDP ratio—calculated as the difference between total liabilities and total financial assets—fell to 14 percent in 2022 from its peak of 15¾ percent in 2020.

2. **Market perceptions**. Confidence in Canada's sovereign debt remains high. Canada had AAA ratings from all 3 major ratings agencies from 2002 to June 2020, when Fitch downgraded it to AA+. As of late June 2023, Canada's benchmark ten-year bond yields were around 3½ percent, about 35 basis points below U.S. ten-year Treasury yields.

3. **Baseline**. Fiscal consolidation is expected over the projection horizon. The primary deficit at the consolidated general government level is projected to decline from 1¼ percent of GDP in 2022 to 0.2 percent by 2028.

---

[1] Canada's financial assets holdings include sizeable equity and investment fund shares (about 30 percent of total financial assets). Statistics Canada introduced a methodological change last December to value assets at market value instead of book value, which substantially revised up the values of equity and investment shares from 1990 to 2022. For further details, see "An overview of revisions to the Financial and Wealth Accounts, 1990 to 2022."

[2] Gross debt at the general government consolidated level includes debt held by the federal government, provincial and territorial governments, local governments, and social security funds.

[3] General government holdings of financial assets rose sharply during the pandemic, from 81¾ percent of GDP in 2019 to about 103 percent in 2020 before falling modestly to 92½ percent of GDP in 2022. Part of the sharp increase was driven by implementation of COVID-19 emergency support measures—such as loans to business and tax deferral (account receivable)—and frontloading government borrowing, which are expected to wind down over the medium term.

- *Gross debt dynamics*. The gross debt-to-GDP ratio is projected to decline steadily from its peak of 119 percent in 2020 to about 94¾ percent by 2028, reflecting fiscal consolidation and favorable growth-interest rate differentials.

- *Net debt dynamics*. The general government has sizable financial assets, with around one quarter being highly liquid. The net debt ratio is expected to decline to 13½ percent by 2028 from its peak of *15¾* percent in 2020.

- *Gross financing needs*. Gross financing needs were nearly 19 percent of GDP in 2022. Government borrowing costs are expected to increase as monetary policy continues to tighten, but nevertheless, gross financing needs are expected to remain within the range of 19–22 percent of GDP through the projection horizon—higher than the recent historical average but similar to levels in 2009–13.

4. Realism. Projection errors in recent years for real GDP growth, the primary balance, and inflation were moderate and broadly in line with those in other economies.[4] There is no evidence of a systematic projection bias in the baseline assumptions that could undermine the SRDSA. Projected deficit reduction in the near term is realistic, close to the median range of adjustment in historical and cross-country experience, whereas the slightly ambitious debt reduction is driven largely by the withdrawal of unprecedented fiscal support during the pandemic.

5. Accounting issues for international comparisons:

- Canada's general government gross debt includes sizable accounts payable (about 17 percent of GDP at end-2022), which many advanced economies do not report.

- Canada reports general government net debt as total liabilities less total financial assets, which includes sizable equity and investment fund shares. Most other advanced economies remove both accounts payable and receivable as well as equity holdings.

- Unfunded pension liabilities are included in Statistics Canada's reporting of general government gross debt, but are excluded as reported here, so as to maintain comparability with other countries.

[4] That said, there were large errors in forecasting the primary balance in 2020 and inflation in 2021, when uncertainty was particularly large.

Annex I. Figure 1. Canada: Risk of Sovereign Stress

Horizon	Mechanical signal	Final assessment	Comments
Overall	...	Low	Staff's assessment of the overall risk of sovereign stress is low, as risks in the near and medium terms are mitigated by the government's sizeable holdings of financial assets and the strength of institutions.
Near term 1/			
Medium term	Low	Low	Medium-term risks are assessed as low, aligned with the aggregate mechanical signal. While the debt fanchart and the GFN modules point to mechanical moderate risk signals, risks are migitated by the government's large liquid asset holdings.
Fanchart	Moderate	...	
GFN	Moderate	...	
Stress test	...	...	
Long term	...	Low	Staff assess the long-term risk of sovereign stress is low, since no significant increase in fiscal costs stemming from pensions or health is envisioned, while climate-related risks are also contained. The analysis also shows no significant large amortizations are expected over the forecast horizon.
Sustainability assessment 2/	Not required for surveillance countries	Not required for surveillance countries	
Debt stabilization in the baseline			Yes

DSA Summary Assessment

Commentary: The overall risk of sovereign stress in Canada is low. Following a sharp increase due to sizable COVID-19 emergency support, public debt has come down off its peak in 2020. Under the baseline scenario, the gross debt-to-GDP ratio is projected to continue declining over the medium term, reflecting fiscal consolidation and favorable growth-interest rate differentials. While the debt fanchart module indicates a moderate risk signal, the government's sizable financial assets would provide a comforable buffer. Medium-term liquidity risks as analyzed by the GFN Financeability Module are moderate. Long-term risk of soverign stress remains low, given contained fiscal costs associated with pensions, health, climate, and debt amortization.

Source: Fund staff.

Note: The risk of sovereign stress is a broader concept than debt sustainability. Unsustainable debt can only be resolved through exceptional measures (such as debt restructuring). In contrast, a sovereign can face stress without its debt necessarily being unsustainable, and there can be various measures—that do not involve a debt restructuring—to remedy such a situation, such as fiscal adjustment and new financing.

1/ The near-term assessment is not applicable in cases where there is a disbursing IMF arrangement. In surveillance-only cases or in cases with precautionary IMF arrangements, the near-term assessment is performed but not published.

2/ A debt sustainability assessment is optional for surveillance-only cases and mandatory in cases where there is a Fund arrangement. The mechanical signal of the debt sustainability assessment is deleted before publication. In surveillance-only cases or cases with IMF arrangements with normal access, the qualifier indicating probability of sustainable debt ("with high probability" or "but not with high probability") is deleted before publication.

Annex I. Figure 2. Canada: Debt Coverage and Disclosures

	CG	GG	NFPS	CPS	Other	Comments
1. Debt coverage in the DSA: 1/	CG	GG	NFPS	CPS	Other	
1a. If central government, are non-central government entities insignificant?					n.a.	

2. Subsectors included in the chosen coverage in (1) above:

		Subsectors captured in the baseline	Inclusion	Comments
CPS / NFPS / GG: expected / CG	1	Budgetary central government	Yes	
	2	Extra budgetary funds (EBFs)	No	Not applicable
	3	Social security funds (SSFs)	Yes	
	4	State governments	Yes	
	5	Local governments	Yes	
	6	Public nonfinancial corporations	No	
	7	Central bank	No	
	8	Other public financial corporations	No	

3. Instrument coverage:	Currency & deposits	Loans	Debt securities	Oth acct. payable 2/	IPSGSs 3/

	Basis of recording		Valuation of debt stock		
4. Accounting principles:	Non-cash basis 4/	Cash basis	Nominal value 5/	Face value 6/	Market value 7/

5. Debt consolidation across sectors:	Consolidated	Non-consolidated

Color code: chosen coverage; Missing from recommended coverage; Not applicable

Reporting on Intra-Government Debt Holdings

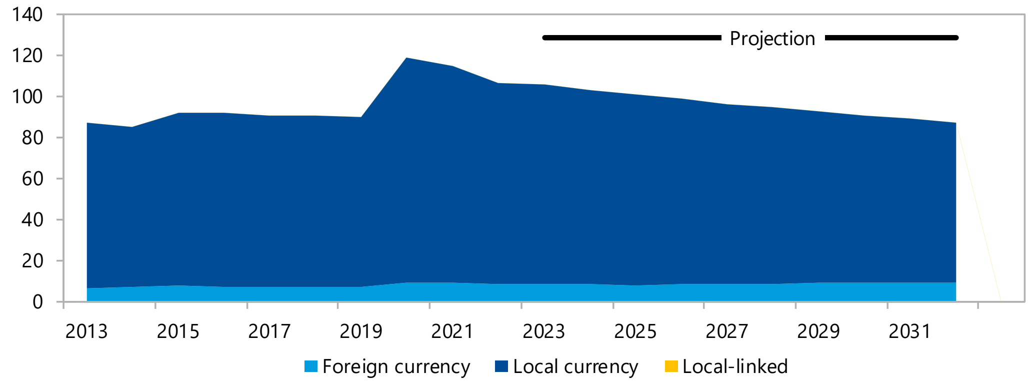
		Issuer \ Holder	Budget. central govt	Extra-budget. funds	Social security funds	State govt.	Local govt.	Nonfin. pub. corp.	Central bank	Oth. pub. fin corp	Total
CPS / NFPS / GG: expected / CG	1	Budget. central govt									
	2	Extra-budget. funds									
	3	Social security funds									
	4	State govt.									
	5	Local govt.									
	6	Nonfin pub. corp.									
	7	Central bank									
	8	Oth. pub. fin. corp									
		Total									

1/ CG=Central government; GG=General government; NFPS=Nonfinancial public sector; PS=Public sector.
2/ Stock of arrears could be used as a proxy in the absence of accrual data on other accounts payable.
3/ Insurance, Pension, and Standardized Guarantee Schemes, typically including government employee pension liabilities.
4/ Includes accrual recording, commitment basis, due for payment, etc.
5/ Nominal value at any moment in time is the amount the debtor owes to the creditor. It reflects the value of the instrument at creation and subsequent economic flows (such as transactions, exchange rate, and other valuation changes other than market price changes, and other volume changes).
6/ The face value of a debt instrument is the undiscounted amount of principal to be paid at (or before) maturity.
7/ Market value of debt instruments is the value as if they were acquired in market transactions on the balance sheet reporting date (reference date). Only traded debt securities have observed market values.

Commentary: The coverage in this SRDSA is at the general government consolidated level, which includes the federal government, provincial and territorial governments, local governments, and social security funds.

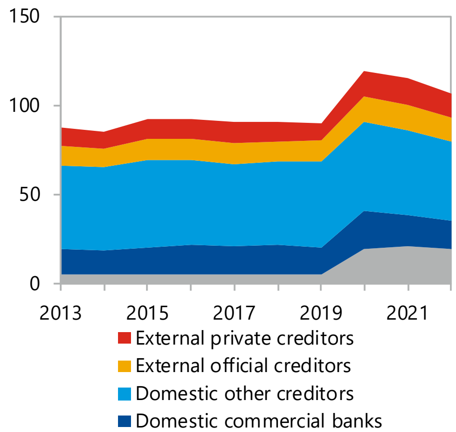
Annex I. Figure 3. Canada: Public Debt Structure Indicators

Debt by Currency (Percent of GDP)



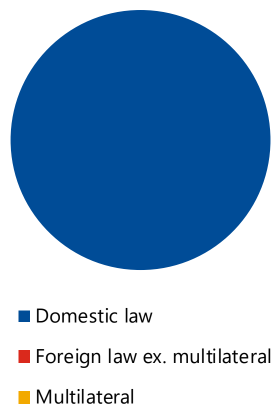
Note: The perimeter shown is general government.

Public Debt by Holder (Percent of GDP)



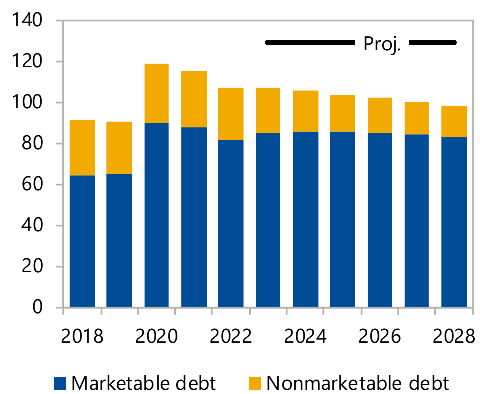
Note: The perimeter shown is general government.

Public Debt by Governing Law, 2022 (Percent)



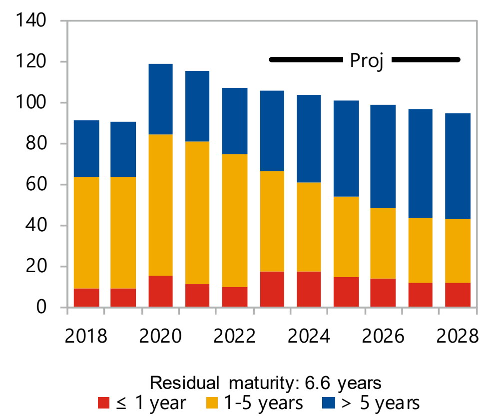
Note: The perimeter shown is general government.

Debt by Instruments (Percent of GDP)



Note: The perimeter shown is general government.

Public Debt by Maturity (Percent of GDP)



Note: The perimeter shown is general government.

Commentary: Gross public debt includes sizable accounts payable (about 17 percent of GDP at end-2022), and dominated by local-currency instruments. Average debt maturity is assumed to be gradually lengthened over the medium term.

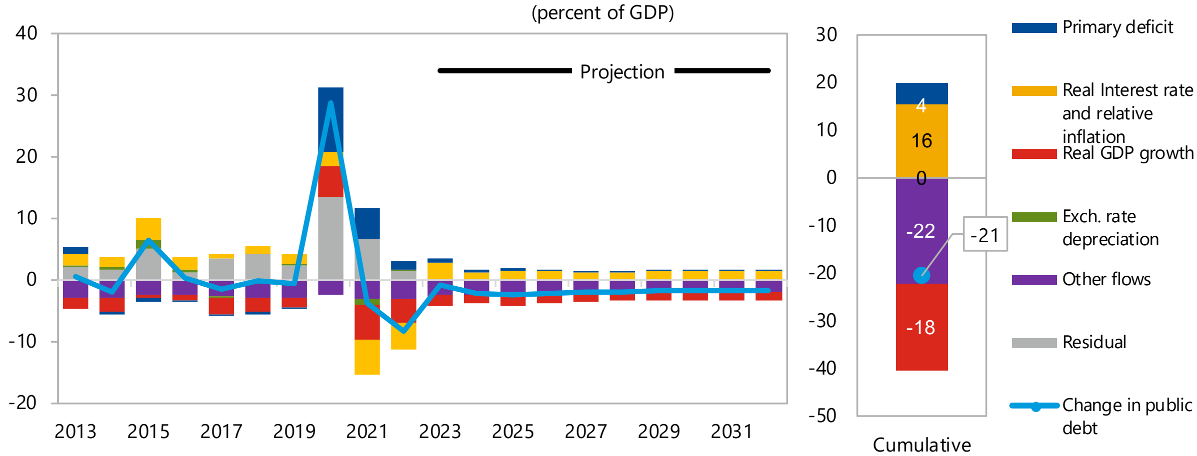
Annex I. Figure 4. Canada: Baseline Scenario

(Percent of GDP unless indicated otherwise)

	Actual	Medium-term projection						Extended projection			
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Public debt	106.7	105.8	103.5	101.0	98.8	96.7	94.7	92.9	91.1	89.4	87.7
Change in public debt	-8.4	-0.8	-2.3	-2.5	-2.2	-2.1	-2.0	-1.8	-1.8	-1.7	-1.7
Contribution of identified flows	-9.8	-0.9	-2.2	-2.5	-2.2	-2.0	-1.9	-1.8	-1.8	-1.7	-1.7
Primary deficit	1.3	0.6	0.5	0.4	0.3	0.2	0.2	0.3	0.3	0.4	0.4
Noninterest revenues	37.4	37.4	37.4	37.4	37.5	37.6	37.7	37.7	37.7	37.7	37.7
Noninterest expenditures	38.7	38.1	37.9	37.8	37.8	37.9	37.9	38.0	38.1	38.1	38.2
Automatic debt dynamics	-7.8	1.0	-0.4	-0.8	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2
Real interest rate and relative inflation	-4.3	2.8	1.1	1.4	1.4	1.3	1.2	1.3	1.3	1.3	1.3
Real interest rate	-4.7	2.9	1.1	1.5	1.4	1.3	1.2	1.3	1.3	1.3	1.3
Relative inflation	0.4	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Real growth rate	-3.8	-1.8	-1.5	-2.3	-1.9	-1.6	-1.6	-1.6	-1.5	-1.5	-1.5
Real exchange rate	0.3	...	...	...	...	...	...	...	...	...	...
Other identified flows	-3.2	-2.6	-2.4	-2.1	-2.0	-1.9	-1.8	-1.8	-1.9	-1.9	-2.0
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(minus) Interest Revenues	-3.2	-3.3	-3.3	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2
Other transactions	0.0	0.7	0.9	1.2	1.3	1.4	1.5	1.4	1.4	1.3	1.3
Contribution of residual	1.4	0.1	-0.1	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
Gross financing needs	18.9	19.6	20.8	22.1	21.3	20.8	19.8	20.1	22.1	22.6	22.0
of which: debt service	20.8	22.2	23.6	24.9	24.2	23.8	22.8	23.0	25.0	25.4	24.8
Local currency	n.a.	20.8	22.4	23.8	23.4	23.1	22.3	22.4	24.1	24.7	24.2
Foreign currency	n.a.	1.4	1.2	1.1	0.8	0.7	0.6	0.6	0.8	0.8	0.6
Memo:											
Real GDP growth (percent)	3.4	1.7	1.4	2.2	1.9	1.7	1.7	1.7	1.7	1.7	1.7
Inflation (GDP deflator; percent)	7.2	0.3	2.3	1.9	2.0	2.1	2.1	2.0	2.0	2.0	2.0
Nominal GDP growth (percent)	10.9	2.1	3.8	4.2	3.9	3.8	3.8	3.7	3.7	3.7	3.7
Effective interest rate (percent)	2.6	3.2	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.5	3.5

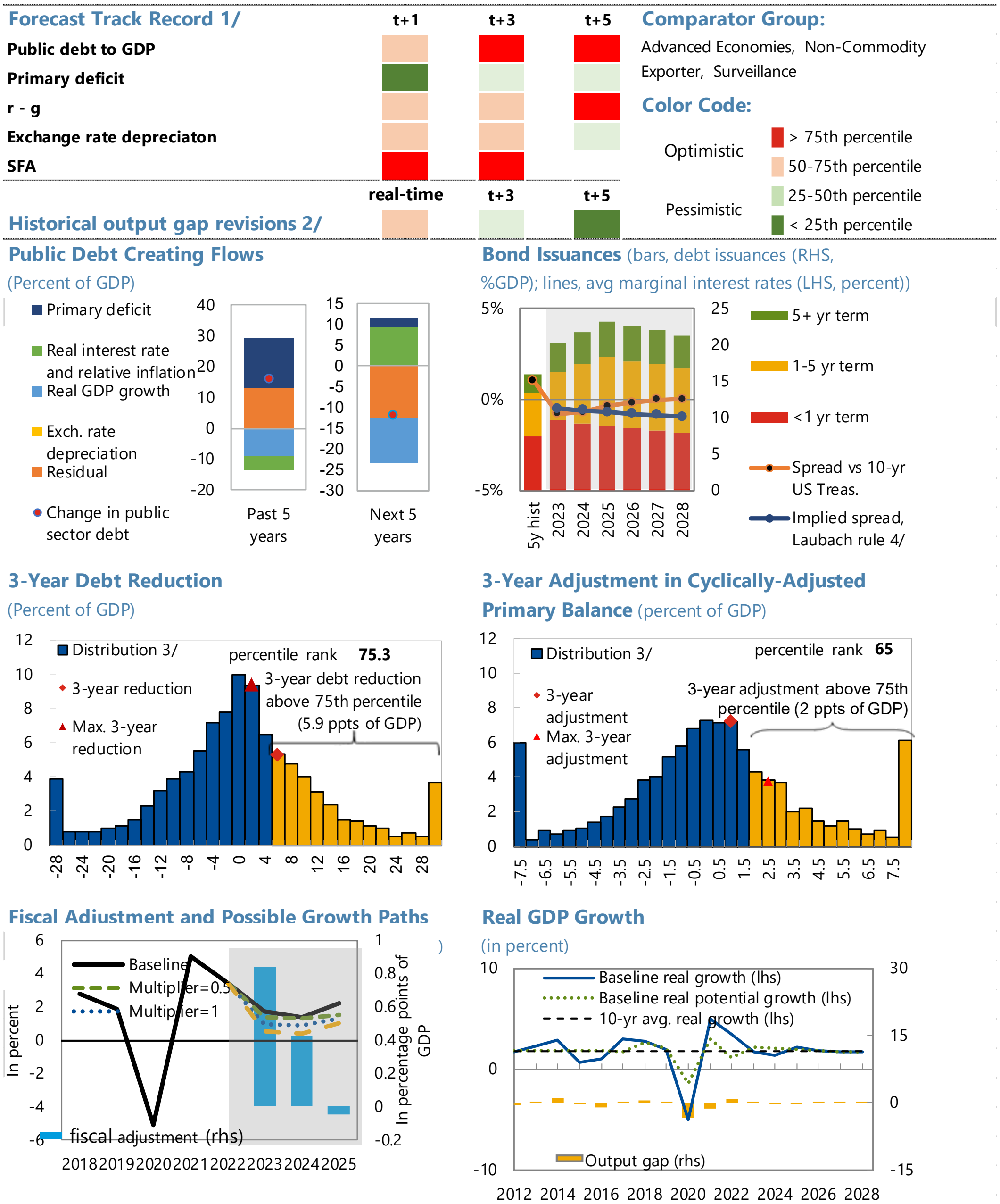
Contribution to Change in Public Debt

(percent of GDP)



Commentary: Taking into account the large holdings of financial assets, which also includes equity and investment fund shares, the net debt-to-GDP ratio stood at 14 percent of GDP at end-2022, and is projected to fall to 13¾ percent 2028. The decline in debt-to-GDP ratio is largley driven by real GDP growth and interest revenue.

Annex I. Figure 5. Canada: Realism of Baseline Assumptions



Commentary: The recovery from COVID-19 imparted complicated effects on the growth path. However, realism analysis does not point to major concerns: past forecast errors were moderate and broadly in line with those in other economies. The projected deficit reduction is close to the median of the distribution, whereas the slightly ambitious debt reduction reflects largely the withdrawal of sizable COVID-19 fiscal support. The large contribution of the residual to debt accumulation in the past five years was driven mostly by unprecedented liquidity support measures implemented in 2020, such as funding for emergency loans, tax deferral, and purchase of assets, notably mortgages. These loans and deferrals are expected to be paid off in the next five years, resulting in large negative contribution of the residual to debt accumulation.

Source : IMF Staff.

1/ Projections made in the October and April WEO vintage.

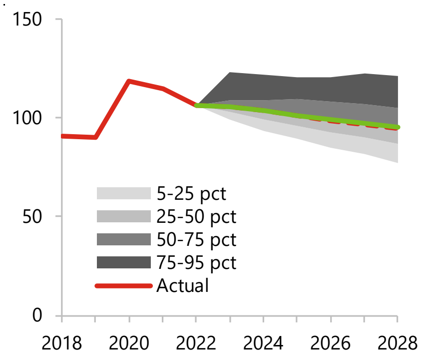
2/ Calculated as the percentile rank of the country's output gap revisions (defined as the difference between real time/period ahead estimates and final estimates in the latest October WEO) in the total distribution of revisions across the data sample.

3/ Data cover annual obervations from 1990 to 2019 for MAC advanced and emerging economies. Percent of sample on vertical axis.

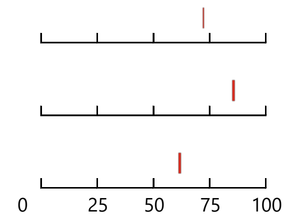
4/ The Laubach (2009) rule is a linear rule assuming bond spreads increase by about 4 bps in response to a 1 ppt increase in the projected debt-to-GDP ratio.

Annex I. Figure 6. Canada: Medium-Term Risk Analysis

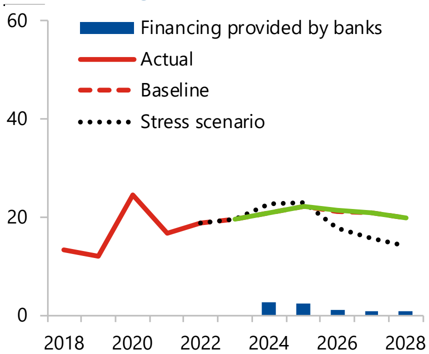
Final Fanchart (Pct of GDP)



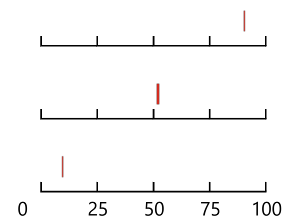
Debt fanchart module	Value	Contrib 1/	Percentile in peer group 2/
Fanchart width *(percent of GDP)*	43.7	0.6	
Probability of debt non-stabilizaiton *(percent)*	50.1	0.4	
Terminal debt-to-GDP x institutions index	16.0	0.3	
Debt fanchart index (DFI)		1.4	
Risk signal: 3/		**Moderate**	



Gross Financing Needs (Pct of GDP)

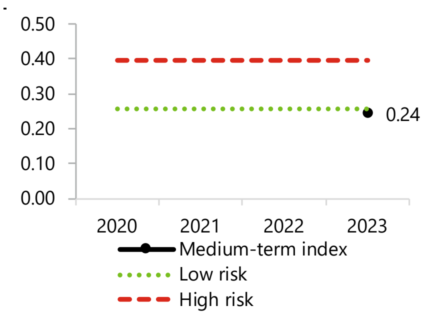


Gross financing needs (GFN) module	Value	Contrib 1/	Percentile in peer group 2/
Average baseline GFN *(percent of GDP)*	20.7	7.1	
Banks' claims on the gen govt *(pct bank assets)*	6.1	2.0	
Chg. In banks' claims in stress *(pct banks' assets)*	0.5	0.2	
GFN financeability index (GFI)		9.2	
Risk signal: 4/		**Moderate**	



Banking crisis | Commodity prices | Exchange rate | Contingent liab. | Natural disaster

Medium-Term Index (Index Number)



Medium-term risk analysis

	Value	Norm. Value	Weight	Contribution
Debt fanchart index	1.40	0.31	0.50	0.16
GFN finaceability index	9.20	0.18	0.50	0.09
Medium-term index		0.24		
Risk signal: 5/		**Low**		
Final assessment:		**Low**		

Prob. of missed crisis, 2023-2028, if stress not predicted: 9.1 pct.

Prob. of false alarms, 2023-2028, if stress predicted: 43.2 pct.

Commentary: Both the debt fanchart and the GFN Modules point to moderate level of risk. The overall risk, however, is mitigated by the government's large financial asset holdings. A large exchange rate shock is expected to have very limited impacts on debt and GFN given the small share of foreign-currency denominated debt.

Source: IMF staff estimates and projections.

1/ See Annex IV of IMF, 2022, Staff Guidance Note on the Sovereign Risk and Debt Sustainability Framework for details on index calculation.

2/ The comparison group is advanced economies, non-commodity exporter, surveillance.

3/ The signal is low risk if the DFI is below 1.13; high risk if the DFI is above 2.08; and otherwise, it is moderate risk.

4/ The signal is low risk if the GFI is below 7.6; high risk if the DFI is above 17.9; and otherwise, it is moderate risk.

5/ The signal is low risk if the GFI is below 0.26; high risk if the DFI is above 0.40; and otherwise, it is moderate risk.

Annex I. Figure 7. Canada: Long-Term Risk Analysis

Large Amortization Trigger

Projection	Variable	Risk Indication
Medium-term extrapolation	GFN-to-GDP ratio	
	Amortization-to-GDP ratio	
	Amortization	
Medium-term extrapolation with debt stabilizing primary balance	GFN-to-GDP ratio	
	Amortization-to-GDP ratio	
	Amortization	
Historical average assumptions	GFN-to-GDP ratio	
	Amortization-to-GDP ratio	
	Amortization	
Overall Risk Indication		

Commentary: The large amortization module is not triggered, as the analysis shows no significant large amortizations are expected over the forecast horizon.

Annex II. External Sector Assessment

<table>
<tr><td colspan="8"> Overall Assessment: The external position in 2022 was moderately weaker than the level implied by medium-term fundamentals and desirable policies. The current account (CA) balance remained marginally in deficit, with a decline in investment income and services more than offsetting the effect of stronger terms of trade—notably for energy products—on goods exports. With commodity prices expected to be softer on average in 2023, the CA deficit is expected to widen to 1.5 percent of GDP in 2023 and remain in deficit over the medium term as export prices decline further and domestic demand continues to recover. Potential Policy Responses: Policies should aim to boost Canada's competitiveness in non-fuel goods exports and in services exports and to diversify Canada's export markets. These policies include: (i) introducing measures to improve labor productivity; (ii) removing nontariff trade barriers; (iii) investing in R&D and physical capital; (iv) investing in the green transformation; and (v) promoting FDI. A medium-term fiscal consolidation plan would also help in stabilizing debt and supporting external rebalancing. </td></tr>
<tr><td>Foreign Asset and Liability Position and Trajectory</td><td colspan="7"> Background. After swelling to 52.1 percent of GDP in 2021 with the boom in global equities during the pandemic, Canada's NIIP dropped sharply in 2022 as stock markets fell, registering 30.2 percent of GDP, broadly in line with the 2017-19 average. At the same time, gross external debt decreased to 128.6 percent of GDP, of which around 51.1 percent of GDP is short-term debt. Assessment. Canada's foreign assets have a higher foreign-currency component than do its liabilities, which provides a hedge against currency depreciation. The NIIP level and trajectory are sustainable. </td></tr>
<tr><td>2022 (% GDP)</td><td colspan="2">NIIP: 30.2</td><td>Gross Assets: 265.1</td><td colspan="2">Debt Assets: 87.3</td><td>Gross Liab.: 234.9</td><td>Debt Liab.: 128.5</td></tr>
<tr><td>Current Account</td><td colspan="7"> Background. The estimated CA balance remained at -0.3 percent of GDP in 2022, reflecting the decline in investment income and services which offset the effect of a stronger trade balance. Assessment. The cyclically adjusted CA was -1.3 percent of GDP in 2022, as against the EBA's CA norm for Canada of 2.2 percent of GDP, implying a gap of -3.4 percent of GDP for 2022. Part of this gap, however, is explained by biases in measuring inflation and retained earnings, while COVID-19 adjustors for travel (including tourism) and transportation were assessed to be immaterial.[1] Taking these factors into account, IMF staff assess the CA gap to be in the range between -2.3 and -1.3 percent of GDP, with a midpoint of -1.8 percent of GDP. </td></tr>
<tr><td>2022 (% GDP)</td><td>CA: -0.3</td><td>Cycl. Adj. CA: –1.3</td><td>EBA Norm: 2.2</td><td>EBA Gap: –3.4</td><td>Other Adj.: 1.6</td><td>COVID-19 Adj.: 0.0</td><td>Staff Gap: -1.8</td></tr>
<tr><td>Real Exchange Rate</td><td colspan="7"> Background. The average REER for 2022 was broadly unchanged from the 2021 average (just 0.1 percent stronger). As of June 2023, the REER was 4.6 percent below the 2022 average. Assessment. The EBA REER index model points to an overvaluation of 1.9 percent in 2022, while the REER level model suggests an undervaluation of 10.5 percent. Consistent with the staff CA gap, staff assess the REER to be overvalued by between 5.1 and 8.5 percent, with a midpoint of 6.8 percent.[2] </td></tr>
<tr><td>Capital and Financial Accounts: Flows and Policy Measures</td><td colspan="7"> Background. FDI saw net outflows of 1.3 percent of GDP in 2022 (comparable with levels in 2021 and 2020). Net portfolio inflows rose to 5.4 percent of GDP in 2022, up from 2.1 percent in 2021, while other investments moved from net inflows in 2021 of around 0.6 percent of GDP to net outflows of 3.34 percent of GDP in 2022. Errors and omissions were small at 0.1 percent of GDP. Assessment. Canada has an open capital account. Vulnerabilities are limited by a credible commitment to a floating exchange rate. </td></tr>
<tr><td>FX Intervention and Reserves Level</td><td colspan="7"> Background. Canada has a free-floating exchange rate regime and has not intervened in the FX market since March 2011 (joint or otherwise). Canada has limited reserves, but its central bank has standing swap arrangements with the U.S. Federal Reserve and four other major central banks. (The Bank of Canada has not drawn on these swap lines.) Assessment. Policies in this area are appropriate to the circumstances of Canada. The authorities are strongly committed to a floating regime which, together with the swap arrangements, reduces the need for reserve holdings. </td></tr>
<tr><td>Notes</td><td colspan="7"> 1/ The statistical treatment of retained earnings on portfolio equity and of net interest outflows (which are recorded in nominal terms and thus artificially boosted by currently high inflation) is estimated to generate a downward bias in the income balance of 0.6 and 1 percent of GDP, respectively, totaling 1.6 percent of GDP. 2/ The semi-elasticity of the CA with respect to the REER is set to 0.27. </td></tr>
</table>

Annex III. Risk Assessment Matrix[1]

Risks	Likelihood	Expected Impact	Policy Response
Global Risks			
1. **Intensification of regional conflict(s).** Escalation of Russia's war in Ukraine or other regional conflicts and resulting economic sanctions disrupt trade (e.g., energy, food, tourism, and/or critical supply chain components), remittances, refugee flows, FDI and financial flows, and payment systems.	**High**	**Medium.** As a major commodity exporter, Canada has been hit less hard than others by the war and the ensuing rise in commodity prices, but these, along with supply chain disruptions, still drive inflation higher.	Policies should focus on further increasing the resilience of supply chains and of the financial sector.
2. **Deepening geo-economic fragmentation and geopolitical tensions.** Broader and deeper conflict(s) and weakened international cooperation lead to a more rapid reconfiguration of trade and FDI, supply disruptions, technological and payments systems fragmentation, rising input costs, financial instability, a fracturing of international monetary and financial systems, and lower potential growth.	**High**	**Medium.** With the US as its major trading partner and neighbor, Canada may benefit from supply chain nearshoring and diversion of US investment and trade. On the other hand, like all countries, Canada will be negatively impacted by the weaker global demand induced by fragmentation.	Authorities should work actively to strengthen the rules-based multilateral trading system, and deepen international and regional economic cooperation, including on climate policies.
3. **Abrupt global slowdown or recession.** Global and idiosyncratic risk factors, including the risk of monetary policy miscalibration by major central banks. combine to cause a synchronized sharp growth downturn, with recessions in some countries, adverse spillovers through trade and financial channels, and markets fragmentation.	**Medium**	**High.** Global and idiosyncratic risk factors could combine to trigger a "hard landing" in the U.S. and a synchronized global downturn, which would quickly spillover into Canada given the strong trade and financial cross-country interlinkages.	Both monetary and fiscal policy would need to respond to a global recession. The strength of the reaction would depend on developments in inflation and commodity prices.
4. **Systemic financial instability.** Sharp swings in real interest rates, risk premia, and assets repricing amid economic slowdowns and policy shifts trigger insolvencies in countries with weak banks or non-bank financial institutions, causing markets dislocations and adverse cross-border spillovers.	**Medium**	**Medium.** Although the Canadian financial sector has proved to be resilient in the first half of 2023, a deepening banking turmoil in the U.S. and Europe could eventually spill over to Canada via financial interlinkages or a generalized loss of confidence.	Addressing data fragmentation and data gaps is crucial, especially for regional banks and NBFIs. The macroprudential toolkit may need to be expanded to cover NBFIs, and federal-provincial cooperation should be enhanced.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. The conjunctural shocks and scenario highlight risks that may materialize over a shorter horizon (between 12 and 18 months) given the current baseline. Structural risks are those that are likely to remain salient over a longer horizon.

Risks	Likelihood	Expected Impact	Policy Response
5. **Commodity price volatility.** A succession of supply disruptions (e.g., due to conflicts and export restrictions) and demand fluctuations (e.g., reflecting China reopening) causes recurrent commodity price volatility, external and fiscal pressures, and social and economic instability.	**Medium**	**Medium.** While increased commodity prices would undermine the disinflation effort, the resulting windfall revenues to Canada's exporting sector would boost growth. On the other hand, a negative terms of trade shock would worsen external sector imbalances.	Monetary policy would need to remain data-driven supported by effective communication to ensure that headline inflation increases and pass-through to core inflation do not de-anchor inflation expectations. Policies should be targeted to boost competitiveness and productivity of Canada's exporting sectors (see annex II).
6. **Cyberthreats.** Cyberattacks on critical domestic and/or international physical or digital infrastructure (including digital currency and crypto ecosystems) trigger financial and economic instability.	**Medium**	**High.** Given the strong reliance of its public sector, financial sector, businesses, and critical infrastructure on cybernetworks, Canada could be highly impacted by cyberattacks.	Strengthen defenses (in the financial sector and elsewhere in the economy) to prevent cyberattacks and take steps to build resilience to ensure continuity of operations when attacks occur.
Domestic Risks			
8. Entrenched inflation expectations	**Medium**	**High.** Although headline inflation has been dropping fast, core inflation has moved by less, wage growth remains high, and there is a chance that the past year of high inflation may have de-anchored expectations more than realized.	To ensure a regularization of inflation expectations, the central bank should continue communicating a strong commitment to the inflation target and its willingness to increase the policy rate further if needed.

Annex IV. Progress on Past Article IV Policy Recommendations

2022 Article IV Policy Recommendations	Action Taken
Macro Policy Advice	
Monetary policy: maintain the policy rate at or above 4 percent for most of 2023 and keep reducing the Bank of Canada's (BoC) balance sheet.	The BoC raised its key policy rate to 4.25 percent at end-2022 and to 4.75 percent in June 2023. Its balance sheet continued to shrink, complementing rate hikes.
Fiscal policy: save further revenue windfalls and accelerate deficit reduction from the 2023 budget onwards.	Deficit reductions envisaged in the 2023 budget are lower than the projections in fall 2022, largely reflecting deteriorated economic outlook and smaller tax base, but also new spending measures adopted in the 2023 budgets.
Housing: adopt further policy measures, particularly on the supply side, to improve housing affordability.	The 2023 budget launched the new Tax-Free First Home Savings Account; and also announced the government's intention to support the reallocation of funding from the National Housing Co-Investment Fund's repair stream to its new construction stream.
Policy Toolkit Reforms	
Fiscal framework: adopt a specific debt anchor, supported by an operational rule; and consider introducing rules-based automatic stimulus.	The authorities were unconvinced of the need for a quantitative debt anchor in Canada. They view Canada's strong fiscal track record as giving them credibility to operate a more flexible framework that focuses on debt reduction but can respond to changing circumstances.
BoC communication: add more quantitative discussion of changes in the policy stance associated with alternative scenarios; and publish the rate path underpinning the quarterly economic forecast.	The BoC started publishing summaries of Governing Council deliberations in January 2023. When appropriate, the BoC also presents alternative scenarios in the quarterly Monetary Policy Report (MPR). It is preparing for the introduction of a "Digital Monetary Policy Report." All of these initiatives are intended to further enhance communication and help markets and the public to better understand its reaction function.
Financial regulation: establish a comprehensive regulatory regime for cryptoassets; and address shortcomings in the AML/CFT framework.	Following the publication of an interim crypto exposure advisory last year, OSFI launched consultations in April on international recommendations related to fiat-referenced cryptoasset arrangements and activities. New legislation was tabled in March to create a federal beneficial-ownership registry; and the Updated Assessment of Inherent Risks of Money Laundering and Terrorist Financing in Canada was published in 2023.
Climate Policy Priorities	
Develop a comprehensive strategy to help the economy and workers transition away from carbon-intensive products and processes.	The government presented the Canadian Sustainable Jobs Act to parliament on June 15, to support the creation of sustainable jobs for workers in a net-zero economy.

Annex V. State of Progress in the Implementation of 2019 FSAP Key Recommendations[1]

Recommendations	Timeframe	Progress by June 2023
Raise required capital for mortgage exposures at both banks and mortgage insurers to fully account for through-the-cycle risks; increase risk-based differentiation in mortgage pricing (OSFI, AMF; DOF)	NT; MT *	OSFI: OSFI's CAR Guideline has been updated and became effective on February 2023. The updated Guideline includes a more risk sensitive approach for risk weighting mortgages under the Standardized Approach (SA) whereby more granularity with respect to LTV ratios has been included. In addition, higher risk mortgages (e.g. those that rely on rental income) will be subject to higher capital requirements. The updated CAR Guideline includes a new requirement that all IRB bank PD models be based on data samples that include a minimum of 10 percent of data from stress periods. In addition, OSFI continues to monitor the risk profiles of federally regulated deposit-taking institutions' RESL lending activities. They are actively assessing the risks posed by variable rate fixed payment mortgages and fixed rate mortgages that will renew with higher payments to determine whether the current capital treatment is fit-for-purpose or revisions are warranted such as a Pillar II add on. Finally, a project to review capital requirements for multi-unit properties within the Mortgage Insurer Capital Adequacy Test (MICAT) that is applicable to all Canadian mortgage insurance companies is ongoing. Currently, OSFI is assessing the impact of various methodologies under consideration through the review of results of a quantitative impact study in which affected mortgage insurers participated. This project anticipates that capital requirements for multi-unit business will rise effective Jan. 2025. AMF: The AMF revised its two approaches (Standard Approach (SA) and Internal Ratings Based (IRB) Approach) used to determine risk-weighted assets for mortgage exposures in its Capital Adequacy Requirements Guideline. For the SA approach, a new loan-to-value (LTV) bucket has been introduced for uninsured mortgage loans and more conservative risk-weights must be applied. On the IRB approach, a new "Loss Given Default (LGD) downturn" has been introduced to account for through-the-cycle risks. This new LGD account for possible real estate bubbles in the determination of risk weighted assets on mortgage exposures. All these changes have been published and have been in effect since February 2023.
Develop the policy framework for managing ahousing market downturn (BOC, AMF, BCSC, OSC)	NT *	OSFI: OSFI has introduced a crisis preparedness framework to improve internal preparedness of idiosyncratic events at a DTI. Training was provided in spring 2022 and work continues on the framework to incorporate systemic concerns and overall governance. In January 2023, OSFI launched a public consultation of Guideline B-20 on Residential Mortgage Underwriting Practices and Procedures. OSFI was interested in stakeholder feedback on a set of proposed complementary debt service ability measures designed to better control prudential risks arising from high consumer indebtedness. https://www.osfi-bsif.gc.ca/Eng/osfi-bsif/med/Pages/b2020230112-nr.aspx AMF: The AMF has updated its Residential Hypothecary Lending Guideline twice in the last three years and has publicly expressed its intention to review it in the coming year to ensure its robustness against various housing market downturns, e.g. several successive increases in interest rates. In June 2021, the rate to be used in the calculation of debt service for uninsured mortgages was changed to the greater of the contractual mortgage rate plus 2 percent and a fixed floor rate

[1] Prepared by staff based on information reported by the authorities.

Recommendations	Timeframe	Progress by June 2023
		initially established at 5.25 percent. An annual review of the proposed rates, or as needed, was also introduced. In June 2022, to quickly adapt to market volatility, the reference to fixed rates in the formula for calculating the qualifying rate for uninsured mortgages was removed. The reserve and the floor rate, which until then were fixed values, will now be determined by the AMF in the guideline and should allow for quick adjustments if needed. An expectation was also added to require updates to the residential property value used for the purposes of calculating the loan-to-value ratio (LTV) and determining lending thresholds within the limits of the LTV. The AMF pays close attention to household indebtedness and continues to closely monitor developments in combined loan plans (e.g., home equity lines of credit), reverse mortgages and residential equity mortgages.
Modernize the systemic risk oversight framework, underpinned by a federal- provincial platform (potentially, HOA) to discuss systemic issues and formulate policy responses, supported by enhanced transparency (HOA, BOC)	NT *	BOC: The Systemic Risk Surveillance Committee (SRSC) continues to meet at a regular frequency to facilitate information sharing and collaboration on the assessment of vulnerabilities and risks to the Canadian financial system. This recently included the formation of an SRSC subgroup on liquidity mismatch in open-ended investment funds and SRSC subgroup on investor demand for housing. The Bank of Canada continues to include a box in its FSR on the activities of the HoA during the prior year.
Develop a comprehensive systemic risk surveillance framework, supported by a more unified approach to data collection; address data gaps, particularly related to cross-sectoral exposures, unregulated nonbank financial intermediation, and funding market activities (BOC, competent authorities, governments)	NT/MT *	BOC: The Bank continues to focus SRSC discussion on vulnerabilities or potential vulnerabilities that can be informed by members' data. The current cooperative approach through SRSC delivers some value but faces limitations. In some instances, no SRSC member has access to data required to assess a vulnerability (e.g. high frequency holdings data for some NBFI). Having data distributed across agencies limits cross market analysis and forming a complete view of vulnerabilities (e.g. risk taking may cross cash and derivatives markets). Not all agencies have the same expertise to perform analysis of this data with a view to identifying vulnerabilities. OSFI: OSFI has worked with industry to developing and expanding data sets for key portfolios (including granular reporting on RESL exposures and leveraged lending exposures). Further where other FISC agencies have also expanded or acquired data sets, there is discussion and information sharing between agencies. More broadly, since 2021, OSFI and its partner agencies the Bank of Canada and the Canada Deposit Insurance Corporation have been working on the Data Collection Modernization (DCM) initiative. DCM is a key component of the agencies' efforts to meet their evolving regulatory data requirements, essential for fulfilling their respective mandates and strategic plans. DCM will modernize data collection technology and provide the agencies with access to more timely, granular, and trustworthy data. Improvement in overall data usability will support the agencies in their risk intelligent decision-making. Additional planned benefits include efficiencies, reduced regulatory burden on FRFIs (Federally Regulated Financial Institutions), standardized data definitions, and real-time advanced analytics.

Recommendations	Timeframe	Progress by June 2023
Enhance risk monitoring of banks' funding, risk-taking by nonbanks, housing finance-related vulnerabilities, and cross-border and intra-system interconnectedness; carry out Canada-wide surveillance in key sectors such as banking and insurance (BOC lead; HOA, SAC; OSFI, AMF)	NT *	AMF: The AMF ensures that the D-SIFI cooperative under its supervision regularly participates in the BOC's macro stress-test (MST) exercises. The feedback received from the BOC following the MST is a valuable input to the AMF's supervision. Furthermore, the AMF is participating with many other regulators in a climate- related crisis simulation exercise led by the BOC. The AMF actively participates at the semi-annual SRSC meetings. In addition to these initiatives, the AMF is an active member of CUPSA (Credit Union Prudential Supervisory Association), which is working on an effective risk data sharing mechanism with its members. CSA: The CSA actively participates in the Heads of Agencies' Systemic Risk Surveillance Committee (SRSC) and relevant SRSC subgroup.
Strengthen oversight of large public pension funds, and increase transparency of their financial disclosures (DOF, provincial governments)	NT	There continue to be plans to consider whether enhanced oversight of large public pension funds and increased transparency of their financial disclosures is necessary. There is no timeline for this initiative to date.
Strengthen autonomy and governance of financial sector authorities, including BOC andOSFI (powers), and FICOM (overall); clarify the roles and responsibilities of the authorities in charge of overseeing systemically important FMIs (DOF, provincial governments; BOC; AMF,BCSC, OSC)	MT	DOF: OSFI has the required autonomy and governance to carry out its mandate. OSFI's guidelines are enforceable in practice as regulated entitiesrecognize that OSFI has intervention powers that are legally enforceable. BoC: The BOC and provincial authorities (AMF, BCSC, OSC) continue to co-operate effectively in oversight of systemically important FMIs. The current arrangements, with overlapping responsibilities, reflect the federal-provincial division of powers. Therefore, no changes were made in response to the FSAP recommendation. AMF: The MoUs with BoC and CDIC signed in 2018 are fully operational and effective. The AMF is holding technical and quarterly meetings with both organizations to exchange on different subjects of interest. The AMF also holds meetings on a regular basis with the Québec Minister of Finance (MFQ) to discuss topics related to the resolution framework, including the resolution plan for Desjardins Group, the governance (formalization of the Resolution Board), the funding (establishment of backstop funding arrangements), etc. A joint work plan is being implemented to follow up on the aspects requiring further work and improvements. CSA: The CSA and BoC continue to coordinate and cooperate with each other to ensure at the Provincial level (CSA) and Federal level (BoC) each continues to meet its mandate. This coordination and cooperation were documented through the establishment of an MOU "Respecting the Oversight of Certain Clearing and Settlement Systems" between certain CSA jurisdictions (AMF, BCSC and OSC) and the BoC in 2014, with a main objective to ensure that they promote the safety and efficiency of the clearing and settlement systems in a consistent and coordinated fashion. Further to the existing MOU, the BOC and the CSA entered into a Memorandum of Understanding Respecting the Resolution of Certain Clearing and Settlement Systems among the BOC, OSC, AMF, BCSC (the MoU), effective January 13, 2022. The CSA and BOC met as frequently as needed at the onset of the covid-19 pandemic to effectively identify

Recommendations	Timeframe	Progress by June 2023
		and address emerging issues and continue to meet frequently (at least bi-weekly) to discuss all oversight matters for those FMIs they mutually oversee in an effort to ensure consistency in approach to regulation wherever possible.
Complete the Cooperative Capital Markets Regulatory System initiative (DOF, provincial governments)	MT	DOF: Despite the Capital Markets Authority Implementation Office having paused its operations in March 2021, and the federal Canadian Securities Transition Office having ceased operations in March 2022, the Government of Canada remains committed to working with participating provinces and territories to implement the Cooperative System, which would strengthen investor protection and enforcement, reduce costs for Canadian companies, and support financial stability. CSA: Work has ceased on the Capital Markets Regulatory Authority and no future progress is expected. The CSA continues its work harmonizing the regulation of Canadian financial markets. In its 2022-2025 Business Plan, the CSA undertook to continue enhancing its collaboration with federal and provincial agencies on the monitoring of systemic risks, in support of the development of mitigation strategies, as well as on enforcement matters to strengthen the detection, prosecution and deterrence of white-collar crime and securities law violations.
Enhance inter-agency cooperation, particularlybetween federal and provincial authorities, with additional MoUs (OSFI, AMF, other relevant provincial authorities)	NT *	OSFI: The Heads of Agencies Committee (HoA) meets regularly to share information and perspectives on emerging issues, trends and market developments. Terms of Reference for the HoA are at https://www.bankofcanada.ca/core-functions/financial-system/financial-system-committees/heads-regulatory-agencies-terms-of-reference/ The committee is supported by sub Heads of Agencies (sub HoA) and Systemic Risk Surveillance Committee (SRSC). AMF: The AMF participates in the Heads of Agencies (HoA) quarterly meetings. The AMF also meets regularly with other relevant provincial authorities though its membership in the Credit Union Prudential Supervisors Association (CUPSA), and in the Canadian Consumer Protection for Financial Institution Failures. As part of the MoUs signed in 2018, the AMF holds technical and quarterly meetings with both federal organizations, BoC and CDIC. Regarding the potential MoU with OSFI, discussions have resumed after they were put on hold for two years during the pandemic. The discussions are now between the legal departments of both organizations, which will assess the protection of the confidentiality of the information that would be shared through the MoU. . CSA: In spring of 2022, the Heads of Agencies (HoA) members signed an MoU for the protection of confidential information shared among the HoA. There is an agreement in principle from those Systemic Risk Surveillance Committee (SRSC) members that are not part of the HoA to adhere to the MoU.
Address shortcomings in the regulatory and supervisory frameworks related to credit risk of mortgage exposures; adopt a common loan forbearance framework in all jurisdictions (OSFI, AMF, other provincial credit union supervisors)	NT	OSFI: On June 28, 2022, OSFI issued a supplementary Advisory to Guideline B-20 that clarified treatment of certain innovative real estate secured lending products. Among other things, this guidance reinforced LTV limits for combined mortgage-HELOC loan plans (CLPs) and reverse mortgages. On January 12, 2023, OSFI launched an initial consultation on Guideline B-20 with a focus on debt serviceability measures. The B-20 review will continue over 2023-24. AMF: The AMF has been working on a Non-Performing Loans and Forbearance Guideline. It is expected to come into force in December 2023.

Recommendations	Timeframe	Progress by June 2023
Strengthen legal foundation underpinning insurance group-wide supervision; apply theregulatory framework more consistently to group-side supervision (OSFI, AMF; DOF, Québec government)	NT	AMF: Legislative amendments are required to meet this recommendation. The discussions with the Québec Ministry of Finance are still ongoing about possible legislative amendments to address AMF's lack of legal powers over unregulated holding companies and to enhance its group-wide supervision capability.
Complete reforms in the areas of OTC derivatives and duties towards clients; increasethe focus of oversight on high-impact firms; ensure the capacity to handle market-wide stress (CSA, relevant provincial governments)	NT	<u>Derivatives</u> The CSA (Canadian Securities Administrators, Canada's umbrella organization of provincial and territorial securities regulators) has developed a Business Conduct Rule and published it for a third comment period in January 2022, and in April 2018 published for consultation a Registration Rule to help protect participants in the OTC derivatives markets. The CSA is focusing on completing the Business Conduct rule, which is scheduled for the summer of 2023. The Registration rule will be the next priority. Amendments to the Trade Reporting Rules are proposed to update trade repository governance, risk and operational requirements and to better align with Principles for Financial Market Infrastructures. The CSA will work to finalize the rule by the end of 2023. Mandatory Clearing Rules have been in effect since September 1, 2022. <u>Client Focused Reform (CFR)</u> The reforms demonstrate a shared commitment by the CSA and the SROs to changes that require registrants to promote the best interests of clients and put clients' interests first. CFRs are relevant to all categories of registered dealers and registered advisers, with some application to investment fund managers, and require that registrants establish a process for identifying material conflicts of interest and implement the KYC, KYP, suitability, and relationship disclosure reforms. The CFR conflicts of interest requirements came into force on June 30, 2021, and the remaining requirements came into force on December 31, 2021. <u>Oversight of high-impact firms</u> The CSA stated that their oversight of impact firms is sufficient, but they will continue to consider ways to improve their processes and oversight of these firms. Some jurisdictions (Ontario) already have a formal process for determining which are high impact firms while other jurisdictions have informal processes that the Committee is finalizing. <u>Market Disruption Coordination</u> The reforms on the capacity to handle market-wide stress and market disruption are complete. The CSA Market Disruption Plan was first tested by CSA staff on September 18, 2019, and more recently on October 26, 2021. The September 2019 test focused on the dissemination of information and responses amongst applicable CSA staff, while the October 2021 test also facilitated testing of communication and coordination with other regulators and financial market infrastructures. Both tests were successful: CSA participants executed the Plan as expected and coordination and communication were efficient and effective. Planning has started on the 2023 test of the CSA Market Disruption Plan. The test will take place the first week of December 2023. From a global perspective, a number of CSA jurisdictions as well as the Bank of Canada participated in the Quantum Dawn V cybersecurity exercise, which is the biennial drill held by the Securities Industry and Financial Markets Association (SIFMA). SIFMA's 2019 test invited Canadian

Recommendations	Timeframe	Progress by June 2023
		capital market stakeholders to participate. CSA staff participated as observers in SIFMA's November 2021 exercise.
Task the SAC with responsibility of overseeing Canada-wide crisis preparedness, thus performing the roles of the coordination body at the federal level and the federal coordinatorwith key provincial authorities; strengthen CDIC's operational independence (MoF; SAC; DOF)	NT *	DOF: The agencies continue to develop and maintain inter-agency contingency planning and crisis management frameworks. Conducting regular tabletop exercises to test implement coordinated crisis preparedness measures aimed at addressing stress events under different scenarios.
Expand recovery planning to all deposit-taking institutions and resolution planning to those performing critical functions; further develop the valuation framework for compensation; adopt depositor preference; strengthen resolution powers (OSFI; AMF and CDIC; DOF and Québec government)	NT *	OSFI: All D-SIBs must have recovery plans, and OSFI uses a range of criteriato determine which other banks must prepare recovery plans. AMF: Recovery and resolution plans for Desjardins Group, the only Québec-chartered financial institution designated as a D-SIFI by the AMF, are continually updated by Desjardins Group and the AMF. Regarding the implementation of a valuation framework, the AMF is assisted by an external firm. To date, two of the five deliverables planned over the two-year period (summer 2021/23) have been finalized, namely the "Methodologies and Approaches" adapted to a cooperative structure, as well as the "Valuation Process" that will be part of the playbooks. The third deliverable on the "Identification of required financial data, or any other information needed to perform the valuations" should be approved by June 2023. The introduction of the depositor preference is under the federal purview. As part of the MoU with CDIC, the AMF raised this topic at a quarterly meeting (November 24, 2022) and intends to pursue discussions at a technical meeting to know more about the federal government's intentions. With respect to strengthening resolution powers, a legislative inventory was shared with the Québec Ministry of Finance in the summer 2022. A formal power to require changes to improve the financial institution's resolvability is part of the request. Given the absence of this power and as an alternative only, the AMF could benefit from its integrated structure and issue written instructions to the Federation (Desjardins) if it believes there may be issues in implementing the recovery plan that could also be considered as impediments in resolution. As a result of a legislative amendment passed in December 2021 to harmonize the AMF's powers with those applicable at the federal level, the AMF no longer has the power to write down shares and liabilities. The Resolution Board still has to be formalized. Despite this situation, the operating rules of the Board, its governance charter as well as a framework for coordination between the AMF and the Board during resolution planning and management are being developed. Discussions are still underway with the Québec ministry of Finance to formalize backstop funding arrangements.
Operationalize emergency lending assistance (ELA) with key provinces; improve testing to ensure smooth ELA operations (BOC;	NT *	The Bank undertook its first ELA test draw with a provincially regulated financial institution in 2022. It focused on the institution's legal and operational preparedness to provide collateral and receive/repay the funds. Building on information-sharing MoUs set up previously (QC: 2018; BC and ON: 2020), the Bank has maintained ongoing engagement with provincial regulators to help ensure that they can make informed lending decisions should the need for ELA arise. (#) The Bank is also actively engaged

Recommendations	Timeframe	Progress by June 2023
British Columbia, Ontario and Québec governments)		with ON and BC to finalize indemnity agreements with these provinces, a condition for PRFIs to be eligible for ELA. AMF: The third iteration of the Resolution plan for Desjardins Group and the 2022/26 work plan were submitted to the BOC in June 2022. Among other things, the work plan calls for meetings between the AMF and the BOC to identify the work that needs to be done to operationalize the ELA, such as setting up an effective process and obtaining or establishing the legal and financial documentation for the ELA. A simulation exercise of ELA was conducted by the Bank of Canada and Desjardins Group in October 2022. To obtain a very large amount through ELA, certain preparatory measures could be implemented to make some significant assets available to be pledged quickly. The subject is currently being discussed with the Desjardins Group. The AMF intends to harmonize the implementation of these preparatory measures for both the recovery and the resolution plans. (#): Similar engagement also continues with other provinces with whom they have information-sharing MoUs (i.e., AB, SK, MB, NS, NB).
Further develop contingency plans for market-wide liquidity provision, particularly intervention in securities markets and foreign-currency liquidity provision (BOC; DOF, provincial governments)	NT *	BOC: The BOC is routinely involved in testing Swapline facilities for foreign vs domestic currency liquidity with several major central banks. These tests include trade confirmation, settlement, and reversal of foreign vs domestic currency flows at small nominal amounts. The Bank has also drafted program terms and conditions for a US dollar repo facility should such a facility need to be implemented.
Selected Recommendations. Technical Note. Systemic Risk Oversight And Macroprudential Policy		
Expand the scope of macroprudential toolkit to address risks that may originate from lending by nonbank financial institutions and to limit policy leakages (DOF)	I *	**DOF:** No update available. The majority of lending activity is federally and provincially regulated, and Statistics Canada actively tracks the size of the non-prudentially regulated sector.
Develop a set of prudential instruments to deal with emerging risks stemming from home equity lines of credit and other risky mortgage products (DOF, OSFI)	I *	**OSFI:** On June 28, 2022, OSFI issued a supplementary Advisory to Guideline B-20 that clarified treatment of certain innovative real estate secured lending products. Among other things, this guidance reinforced LTV limits for combined mortgage-HELOC loan plans (CLPs) and reverse mortgages. On January 12, 2023, OSFI launched an initial consultation on Guideline B-20 with a focus on debt serviceability measures. The B-20 review will continue over 2023-24. **AMF:** In July 2022, the AMF publicly expressed its intention to review its Residential Hypothecary Lending Guideline in the coming year to include expectations dedicated to the sound management of home equity lines of credit and other risky mortgage products by financial institutions.

Recommendations	Timeframe	Progress by June 2023
Expand the application of the cyclical capital requirements to all other deposit-taking institutions (OSFI, provincial supervisors of deposit taking institutions)	I *	**AMF:** No change.
Note: Institutions in the parenthesis are the agencies with leading responsibilities. The * denotes macro-critical. In terms of the timeframe, I, NT and MT stand for immediate (within one year), near-term (within one year) and medium-term (within 2–3 years).		

INTERNATIONAL MONETARY FUND

CANADA

July 13, 2023

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By	The Western Hemisphere Department (in consultation with other departments)

CONTENTS

FUND RELATIONS

(As of June 22, 2023)

Membership Status: Joined 12/27/1945; Article VIII

General Resources Account:	**SDR Million**	**Percent of Quota**
Quota	11,023.90	100.00
Fund holdings of currency	7,768.91	70.47
Reserve Tranche Position	3,265.59	29.62
Lending to the Fund		
New Arrangements to Borrow	33.30	

SDR Department:	**SDR Million**	**Percent of Allocation**
Net cumulative allocation	16,553.99	100.00
Holdings	17,287.05	104.43

Outstanding Purchases and Loans: None.

Latest Financial Arrangements: None.

Projected Obligations to Fund:

(SDR Million; based on existing use of resources and present holdings of SDRs):

Forthcoming

	2023	2024	2025	2026	2027
Principal					
Charges/Interest		0.22	0.22	0.22	0.22
Total		0.22	0.22	0.22	0.22

Implementation of HIPC Initiative: Not Applicable.

Implementation of Multilateral Debt Relief Initiative (MDRI): Not Applicable.

Implementation of Post-Catastrophe Debt Relief (PCDR): Not Applicable.

Exchange Rate Arrangements: The authorities maintain a “free floating” exchange rate regime. The Canadian authorities do not maintain margins with respect to exchange transactions. However, the authorities may intervene to maintain orderly conditions in the exchange market. There are no taxes or subsidies on purchases or sales of foreign exchange. Canada has accepted the obligations under Article VIII, Sections 2(a), 3, and 4 of the IMF’s Articles of Agreement, and maintains an exchange system that is free of restrictions on the making of payments and transfers for current international transactions and multiple currency practices. Canada maintains exchange restrictions for security reasons, based on UN Security Council Resolutions, that have been notified to the Fund for approval (most recently in June 10, 2014) under the procedures set forth in Executive Board Decision No. 144–(52/51).

Last Article IV Consultation: The Staff Report for the 2022 consultation with Canada was considered by the Executive Board on Monday, December 5, 2022 (IMF Country Report No. 2022/361). Canada is on a 12-month consultation cycle. The Financial Sector Assessment Program (FSAP) took place in 2000, and was updated in 2008, 2014, and 2019.

2023 Article IV Consultation: Discussions took place in Ottawa and by video conference during May 23 through June 1. The team comprised K. Mathai (head) T. Kass-Hanna, L. Liu, L. Masterson, Y. Yang (all WHD), F. Lutz (FIN), and P. Morales (MCM), with additional inputs from M. Ghazanchyan (WHD) and I. Thomas (LEG). Additional research and administrative assistance were provided by L. Azoor, E. Bae, S. Coquillat, and J. Thangaraj. The team was supervised by L. Cubeddu (WHD). P. Jennings, R. Cunningham, and M. Villeneuve (all OED) joined many of the mission’s meetings, and Rodrigo Valdes (WHD) participated in the concluding discussions. The mission met with Deputy Prime Minister and Minister of Finance Freeland, Governor Macklem, Interim Deputy Minister Leswick, Senior Deputy Governor Rogers, Deputy Governors Beaudry, Gravelle, and Kozicki, Superintendent Routledge, and other senior officials from the federal government, provincial governments, the Bank of Canada, and regulatory bodies. The mission also met representatives from the financial and business sectors, academics, and think-tank experts. The concluding statement was issued on June 20, 2023.

Technical Assistance: Not Applicable.

Resident Representative: Not Applicable.

STATISTICAL ISSUES

General. Data provision is adequate for surveillance.

Real Sector. Statistics Canada provides timely and adequate data in monthly, quarterly, and annual frequency, thereby facilitating the analyses of economic developments and policy assessments within a quantitative macroeconomic framework. The CPI is disseminated monthly. The weights are based on 2020 expenditure data from the Household Final Consumption Expenditure (HFCE) series. Statistics Canada is working toward updating the CPI weights on an annual basis in the future. A range of producer price indices are disseminated on a monthly and quarterly basis covering raw materials, industrial products, and services. In terms of residential property, Statistics Canada disseminates a monthly price index for new houses and a quarterly price index for new condominium apartments. In addition, the CSNA use a Residential Property Price Index (RPPI), compiled by a commercial data source, that covers both new and second-hand dwellings.

Fiscal Sector. Statistics Canada provides timely quarterly and annual data (a Statement of Government Operations along with a Balance Sheet) on the general government and its subsectors, following the *Government Finance Statistics Manual 2014* (*GFSM 2014*). It also compiles data on the functional classification of expenditure. In addition, the Department of Finance Canada provides monthly and annual data on the federal government's budget (according to the national presentation) and tax policies. The provided data enable adequate assessment of the impact of fiscal policy measures on Canada's economic performance.

Financial Sector. The Bank of Canada disseminates on its website balance sheet data for the central bank and chartered banks on a weekly and monthly basis, respectively. It also reports data on some key series of the Financial Access Survey (FAS), including the two indicators (commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs).

Financial Soundness Indicators. Canada reports all core financial soundness indicators (FSIs) and some additional FSIs for all sectors.

External Sector. Statistics Canada provides timely information on a quarterly frequency on the balance of payments, external debt, and the international investment position. Canada provides data for the Coordinated Portfolio Investment Survey, Coordinated Direct Investment Survey, Data Template on International Reserves and Foreign Currency Liquidity, and Currency Composition of Official Foreign Exchange Reserves.

Data Standards and Quality. Canada is an adherent to the Special Data Dissemination Standard Plus (SDDS Plus) since April 11, 2017, and publishes the data on its National Summary Data Page. Canada's latest SDDS Plus Annual Observance Report is available on the Dissemination Standards Bulletin Board. Canada completed the transition plan under the SDDS Plus for the residential real estate price index and debt securities data categories in 2022 and uses timeliness flexibility options for central government operations and debt. A data module Report on the Observance of Standards and Codes (ROSC) for Canada was published in May 2002.

Table 1. Canada: Table of Common Indicators Required for Surveillance
(as of June 22, 2023)

	Date of latest observation	Date received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of Publication[6]
Exchange Rates	Same day	Same day	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	June 15, 2023	June 22, 2023	W	W	W
Reserve/Base Money	September, 2022	June 2, 2023	M	M	M
Broad Money	September, 2022	June 2, 2023	M	M	M
Central Bank Balance Sheet	June 14, 2023	June 16, 2023	W	W	W
Consolidated Balance Sheet of the Banking System	April 30, 2023	June 22, 2023	M	M	M
Interest Rates[2]	Same day	Same day	D	D	D
Consumer Price Index	April 2023	June 16, 2022	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	2023 Q1	June 2, 2023	Q	Q	Q
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	2023 Q1	June 2, 2023	Q	Q	Q
Stock of Central Government and Central Government-Guaranteed Debt	2023 Q1	June 14, 2023	Q	Q	Q
External Current Account Balance	2023 Q1	June 2, 2023	Q	Q	Q
Exports and Imports of Goods and Services	2023 Q1	June 2, 2023	Q	Q	Q
GDP/GNP	2023 Q1	June 2, 2023	Q	Q	Q
Gross External Debt	2023 Q1	June 2, 2023	Q	Q	Q
International Investment Position[5]	2022 Q4	June 2, 2023	Q	Q	Q

[1] Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[6] Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).