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Foreword

This Economic Survey was prepared by Katja Schmidt and Gilles Thirion under the supervision of Pierre Beynet. Research assistance was provided by Béatrice Guérard, editorial assistance by Elodie Lormel and Michelle Ortiz and communication assistance by Laura Fortin and François Iglesias.

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Information about this and previous Surveys and more information about how Surveys are prepared is available at https://www.oecd.org/en/topics/economic-surveys.html.

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Basic statistics of	f Canada, 2024
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LANE	D, PEOPLE A	ND ELECTO	ORAL CYCLE		
Population (million, 2023)	40.1		Population density per km ² (2023)	4.6	(39.2)
Under 15 (%, 2023)	15.3	(16.9)	Life expectancy at birth (years, 2022)	81.3	(80.6)
Over 65 (%, 2023)	19.4	(18.2)	Men (2022)	79.1	(78.0)
International migrant stock (% of population)	22.2	(15.7)	Women (2022)	83.6	(83.2)
Latest 5-year average growth (%)	1.6	(0.4)	Latest general election April-20		
	EC	ONOMY			
Gross domestic product (GDP)			Value added shares (%, 2021, OECD: 2023)		
In current prices (billion USD)	2 240.6	240.6 Agriculture, forestry and fishing			
In current prices (billion CAD)	3 069.1		Industry including construction	27.1	(27.1)
Latest 5-year average real growth (%)	1.6	(1.7)	Services	71.1	(70.2)
Per capita (thousand USD PPP, 2023) ²	64.4	(59.0)			
GENE	RAL GOVER	NMENT (Pe	r cent of GDP)		
Expenditure (OECD: 2023)	44.7	(42.4)	Gross financial debt (OECD: 2023)	107.3	(110.5)
Revenue	42.6	(37.8)	Net financial debt (OECD: 2023)	8.4	(67.0)
		AL ACCOU	NTS		
Exchange rate (CAD per USD)	1.37		Main exports (% of total merchandise exports)	0E E	
PPP exchange rate (USA = 1)	1.14		Fueis	25.5	
In per cent of GDP			Transportation	12.7	
Exports of goods and services	32.5	(30.5)	Machinery and electronics	10.3	
Imports of goods and services	32.7	(30.1)	Main imports (% of total merchandise imports)		
Current account balance	-0.5	(-0.7)	Machinery and electronics	24.3	
Net international investment position	61.9		Transportation	18.5	
			Chemicals	9.8	
LABOU	R MARKET,	SKILLS AN	JINNOVATION		
Employment rate (aged 15 and over, %)	61.3	(58.0)	Unemployment rate, Labour Force Survey (aged 15 and over, %)	6.4	(4.9)
Men	65.1	(65.4)	Youth (aged 15-24, %)	13.0	(11.1)
Women	57.6	(51.0)	Long-term unemployed (1 year and over, %, 2023)	0.4	(1.0)
Participation rate (aged 15 and over, %)	65.5	(61.0)	Tertiary educational attainment (aged 25-64, %, 2023)	63.3	(41.0)
Average hours worked per year	1 685	(1 742)	Gross domestic expenditure on R&D (% of GDP, 2022, OECD: 2021)	1.6	(2.9)
	ENV	RONMENT			1
Total primary energy supply per capita (toe, 2023)	7.4	(3.7)	CO ₂ emissions from fuel combustion per capita 13 (tonnes, 2023)		(7.6)
Renewables (%, 2023)	16.1	(12.5)	Water abstractions per capita (1 000 m ³ , 2015) 0		
Exposure to air pollution (more than 10 μ g/m ³ of PM 2.5, % of population, 2020)	0.0	(56.5)			
	S	OCIETY		-	
Income inequality (Gini coefficient, 2022, OECD: latest available)	0.300	(0.316)	Education outcomes (PISA 2022 score)		
Relative poverty rate (%, 2021, OECD: 2020)	11.9	(11.7)	Reading		(476)
Median disposable household income (thousand USD PPP, 2022, OECD: 2021)	44.4	(30.0)	Mathematics	497	(472)
Public and private spending (% of GDP)			Science	515	(485)
Health care (2023)	11.2	(9.2)	Share of women in parliament (%, 2023)	30.7	(32.8)
Pensions (2022, OECD: 2021)	5.9	(9.9)	Net official development assistance (% of GNI, 2022)	0.4	(0.4)
Education (total spending, 2020)	6.0	(5.1)			

¹ The year is indicated in parenthesis if it deviates from the year in the main title of this table. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 80% of member countries. ² OECD aggregate refers to weighted average. Source: Calculations based on data extracted from databases of the following organisations: OECD, International Energy Agency, International Labour Organisation, International Monetary Fund, United Nations, World Bank.



Executive Summary

Key messages

Canada's economy has been resilient, with growth picking up over 2024. However, its per capita GDP performance has lagged behind other OECD countries in recent years. The economy is now facing significant headwinds from rising tariffs with the United States, given the strong interlinkages between the two economies, and the uncertain global economic context. Furthermore, Canada faces several structural economic challenges, including weak productivity, high household debt coupled with low housing affordability, and strong exposure to physical climate risks. Canada's population has grown strongly in recent years, leading the government to adjust and recalibrate immigration targets in response. While high population growth has bolstered labour input growth, it has also further strained an already subdued labour productivity performance.

In this context, this survey contains these four main messages:

- Canada's policy framework for macroeconomic stability remains strong, with robust public finances and a well-capitalised banking sector. However, there is room to improve the efficiency of the tax system and to further reduce risks from the mortgage market. In response to the trade shock, monetary and fiscal policies should remain flexible and be prepared to act if negative risks materialise.
- Rapid population growth has exacerbated previous housing affordability challenges. To rebuild housing
 affordability, the government has rightly focused on measures to incentivise housing supply and provide
 support for vulnerable populations. Zoning laws should be further reformed, the permitting process
 expediated, and social and affordable housing availability further strengthened.
- Climate change requires a substantial acceleration of adaptation efforts. Policies should aim to improve risk disclosure, prevent land development in risk-prone areas, enhance infrastructure resilience and strengthen insurance coverage.
- Strengthening Canada's productivity performance requires a combination of policies, including rebalancing R&D support, reducing regulatory barriers in internal markets, enhancing competition and the digitalisation of the economy, and fully utilising women's skills and talents in the workforce.

Canada's economy has been resilient, but per capita GDP growth has been weak

A challenging economic environment in recent years has intensified Canada's structural challenges, especially its low productivity growth. Per capita growth has been weak due to sluggish productivity gains. This underscores the critical need for reforms to bolster potential output and enhance competitiveness.

Canada experienced a strong recovery from the pandemic, but its GDP per capita growth has lagged in recent years, particularly compared to its close neighbour, the United States. High population growth after the pandemic has boosted labour supply but was not met with similar productivity-enhancing investment. Lower per capita GDP growth also reflects lower productivity of recent immigrants, comprising many low-skilled non-permanent residents. Past interest rate hikes have weighed on consumer spending, given high household debt and comparatively short mortgage terms. Housing affordability has suffered. While exports of commodities perform strongly, the competitiveness of other exports and a high export market concentration remain important challenges.

Strong labour productivity growth is crucial to sustain economic growth in high-income countries. Canada's productivity performance has lagged its peers. Limited investment in key innovative assets, such as intellectual property and digital technologies, has held back productivity growth. This is compounded by weak business dynamics and limited competitive pressures. Long-standing interprovincial barriers to trade and labour mobility further prevent Canada from capitalising on larger markets.

Canada aims to achieve net-zero emissions by 2050, a goal that demands substantial policy action. As a major producer of crude oil and natural gas, Canada's economy is both carbon- and energy-intensive. Carbon pricing rightly has held a central place in the national emissions reduction strategy, even though the recent removal of the federal fuel charge has eliminated the direct price signal for consumers. Other important new policies, such as the cap-and-trade system for the oil and gas sector, are on the way. In addition to emission reduction efforts, and with the physical impacts of climate change expected to intensify, even greater efforts in climate adaptation will be necessary.

The growth outlook is weakening and fraught with uncertainties

Canada's GDP growth rebounded in 2024 following a period of softness. Inflation has returned to the target rate. GDP growth received continuous support from high population growth. However, the rise in trade barriers with the United States is significantly weighing on the economic outlook.

Economic activity has strengthened in 2024 following a sluggish period in 2023 (Figure 1). Private consumption has been supported by high population growth and lower interest rates in the second half of 2024, though still elevated mortgage costs continue to constrain household spending. Business investment per worker remains weak in Canada compared to other OECD countries. Several policy measures aim to support investment in green sectors. Canada has also failed to take full advantage of the growth of its export markets as of the end of 2024. It has lost market share despite robust growth in exports of crude oil and other commodities.

Labour market pressures have eased. The labour market has softened with job vacancies coming down and the unemployment rate increasing over 2024. Wage growth is also moderating but remains high compared to productivity growth. **Price pressures have decreased, and headline inflation has come down to its target rate.** Service inflation remains still above 2%, partly driven by still elevated shelter inflation.

However, trade uncertainty and tariffs have significantly worsened the economic outlook (Table 1). GDP is expected to decline from the second quarter of 2025 due to sharply falling exports to the United States, driven by higher tariffs. Household consumption and business investment will be negatively affected by trade tensions and high uncertainty. Labour market conditions will deteriorate in 2025. In 2026, GDP is projected to slowly recover as the economy adjusts to the new tariff environment. Lower interest rates will support business investment and household consumption as uncertainty declines. However, slower population growth will be less supportive of consumption growth. Headline inflation is expected to rise only slightly above the target rate, as the upward pressure from higher tariffs on consumer prices is partly offset by lower energy prices due to the removal of the fuel charge. Core inflation will be somewhat higher.

Uncertainties for the outlook are substantial, both regarding future tariff levels and their effects on the Canadian economy. Tariff levels could go lower or

higher than where they stand currently. The significant magnitude of the tariff shock, the strong interlinkages of cross-border supply chains, and the uncertainty on the direction of future trade policies make their impact highly uncertain. However, on the positive side, if these tariffs prompt addressing long-standing structural issues, such as strengthening internal markets in Canada, this could have lasting positive offsets.

Figure 1. GDP per capita growth has fallen behind other OECD countries



Note: OECD euro area 17 covers OECD Member countries also Member of the Euro area. 2024 data are compiled using population projections. Source: OECD Economic Outlook database.

StatLink as https://stat.link/a5ok8f

Table 1. Tariffs are reducing growth prospects

Annual growth rates, unless specified

	2023	2024	2025	2026
Gross domestic product	1.5	1.5	1.0	1.1
Private consumption	1.9	2.4	1.9	0.9
Government consumption	2.2	3.2	2.3	1.9
Fixed capital formation	-1.6	0.1	1.6	1.3
Exports	5.0	0.6	-0.3	-0.2
Imports	0.3	0.6	0.4	0.3
Unemployment rate, %	5.4	6.4	7.1	7.3
Consumer price index	3.9	2.4	2.1	2.1
Fiscal balance, % GDP	0.1	-2.1	-1.9	-1.7
Current account balance, % GDP	-0.6	-0.5	-0.8	-1.0
Policy rate (period average)	4.8	4.3	2.4	2.3

Source: OECD Economic Outlook database.

Balancing short-term macro-economic support to mitigate the impact of tariffs with mediumterm debt reduction

Public finances are robust, gross public debt is close to the OECD average and net debt and the primary deficit are low. They can absorb the deterioration of the fiscal deficit resulting from the tariff shock. In the medium term, fiscal policy must find the right balance between high spending pressures related to new social programmes, housing, and infrastructure, while also aiming to further reduce the debt-to-GDP ratio.

As inflation declined, the central bank lowered its policy rate from 5.0% to 2.75% by April 2025. Quantitative tightening has ended in March 2025 and the Bank of Canada returned to routine balance sheet management. Keeping a broadly neutral stance at the current juncture is appropriate. However, the central bank should remain vigilant in case negative risks to growth or prices materialise.

The banking sector appears well capitalised. However, risks, particularly those related to the domestic mortgage market, remain significant and warrant careful oversight and a pursuit of stringent prudential regulation.

Fiscal deficits have been reduced more rapidly than in other OECD countries after the pandemic-related surge and remain low in international comparison. The primary deficit of the general government stood at -0.3% of GDP in 2024. Gross debt was 107% of GDP and net debt 8% of GDP in 2024. The gross debt-to-GDP ratio is expected to broadly stabilise at current levels, slightly above 100% of GDP, without further fiscal action, provided that increases in age-related spending are offset. However, public spending pressures related to new social programmes, housing, defence, and infrastructure warrant effective spending control and the reduction of less priority spending through efficient spending reviews. After the impact of the recent trade shock on the fiscal balance has subsided, debt should be brought on a declining path in the medium-term.

The tax structure could be better aligned with growthand environmental objectives. This strategy should include shifting a proportion of taxation from income to consumption taxes, by gradually phasing out zero-rate items. Canada has a well-designed and comprehensive carbon pricing system, which should be preserved. The recent removal of the fuel charge weakens the carbon price signal for consumers and slows down Canada's carbon emission reduction strategy.

Tax advantages for SMEs should be reduced. Some government programmes favour investments made by smaller firms over larger ones. Preferential tax treatment for smaller firms could create distortions. The preferential corporate tax rate for SMEs should be discontinued and R&D incentives harmonised across small, medium-sized, and larger firms.

Improving housing affordability

Significant increases in house prices and rents have deteriorated housing affordability. Various existing government programmes aim at improving the availability of housing. Still, more can be done to increase the supply of housing and expand social and affordable housing support.

House prices and rents have increased more strongly than in most other OECD countries (Figure 2). This is due to an insufficient supply of housing and a mismatch between available housing and demand, with a lack of rental and affordable housing. Recent strong immigration has amplified these housing challenges. Density restrictions have prevented more mediumdensity development in urban centres. Relatively long approval times and permitting issues have further weighed on housing construction. The social housing stock is small and relatively old, with demand far outstripping supply.

Several government programmes are designed to increase housing supply and to support vulnerable populations. These initiatives are welcome and should be continued. Municipalities should continue and be further incentivised to enable medium-density housing in urban areas. Additionally, greater efforts could be made to expedite the permitting process. Additional public funding is needed to boost social and affordable housing, either by incentivising housing developers or through a stronger direct federal and provincial involvement in the social and cooperative sectors.

It is also vital to expand the workforce in the construction sector to address labour shortages, provide sufficient funds for infrastructure to support housing development, and improve energy performance standards for buildings to promote energy-efficiency in the residential sector, which is currently very low.

Figure 2. House prices have increased strongly

Index 2007 Q1 = 100 220 Canada United States OFCD ---- Euro area 200 180 160 140 120 100 80 60 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 Source: OECD Economic Outlook database StatLink msp https://stat.link/ypdk2h

Real house prices

Adapting to climate change

Climate-related risks from rising temperatures and extreme weather events are increasingly impacting the economy and communities. To address these challenges, a shift is needed from disaster recovery to proactive risk mitigation and investment in climate-resilient infrastructure.

Canada is vulnerable to rising temperatures and natural disasters from river and coastal flooding and wildfires. The frequency and severity of natural disasters have increased and will continue to do so (Figure 3), requiring a policy shift from emergency response to disaster prevention. Canada launched its first National Adaptation Strategy in 2023. Achieving its targets requires a substantial acceleration of adaptation efforts.

Public policy plays a crucial role in steering climate change adaptation, providing information, setting efficient regulations, and directly intervening in cases of significant financial costs and externalities. For example, improved mapping and increased public awareness of flood risks are crucial to mitigate exposure to floods. Land development in high-risk flood and fire zones should be restricted. Independent

advisory bodies should be established to advise on flood risk management. Additionally, upgrading stormwater infrastructure and enhancing coastal flood defences require public sector involvement. There is scope to enhance the use of fire-resistant landscaping and firebreaks around critical infrastructure to limit wildfire damages.

Insurance coverage is underdeveloped, leaving many households in high-risk areas uninsured. Consequently, disasters often result in high out-ofpocket payments or public payouts. Broader flood insurance coverage is necessary, based on effective risk-sharing. This should be paired with strong incentives for risk reduction, such as linking premium discounts to adaptation initiatives. Providing targeted support to individuals and businesses for adaptation investments could complement these policies.

Figure 3. Insurance costs from natural disasters have rapidly increased

Annual amount of catastrophic losses in Canada



Note: The chart shows the share of economic losses insured based on the midpoint of two estimates: the share of total losses that were insured, and the average of the share of insured losses across each individual event. Presenting the midpoint of the two estimates mitigates bias in the data from events with large total losses and low reported insured losses.

Source: Insurance Bureau of Canada calculations based on estimates from Catastrophe Indices and Quantification Inc. (CatIQ), as of August 2024.

StatLink and https://stat.link/bh1a7m

Raising business sector productivity

Canada's productivity growth has been lagging best performing OECD countries for many years. Factors such as low investment activity and low business R&D spending contribute to this productivity gap. Addressing these weaknesses will be crucial to benefiting from ongoing transformations in new technologies, notably the green transition and Artificial Intelligence (AI).

Most of the low productivity growth can be attributed to a low productivity performance within sectors. Canada's industry composition plays only a minor role. However, the relatively important resource sector (oil production, notably) periodically accounts for substantial swings in productivity growth. Challenges for growth and productivity come from weak business and firm growth dynamics, along with low investment in assets that are key for innovation.

Business R&D, a key driver of productivity growth, is low, representing only 1% of GDP compared to the OECD average of 2%. Existing R&D tax incentives should be streamlined for both smaller and larger companies and include more direct support. The preferential small business tax rate should be repealed to avoid potentially limiting firm growth. There is also room to improve access to finance, particularly for young firms without tangible assets, which could facilitate their growth.

The regulatory environment poses a burden on productivity growth. Internal trade barriers remain significant and should be reduced more quickly.

Barriers on foreign investment should be revisited. Additionally, improving mutual recognition, including on foreign credentials, of qualifications across provinces would lower internal barriers to labour market mobility.

There is room to further harness the benefits of digital technologies. The digital intensity of the economy could be increased and the competitive environment for digital firms strengthened. There is also room to improve access to digital and telecommunication services and lower their costs by boosting competition in this sector.

There is potential for a better utilisation of labour resources. Overqualification rates are elevated, particularly among immigrants. Women remain under-represented in some key STEM fields and in leadership positions. The gender gaps in working hours and wages remain significant. To fully realise the potential of women in the labour force, the government should continue expanding the availability of affordable childcare and strengthening policies for parental leave, equal pay, anti-discrimination, and flexible work.

Figure 4. Productivity growth has been lagging other OECD countries



GDP per hour worked, average annual growth over 2000-23

Note: OECD is an unweighted average. Source: OECD Productivity Statistics database

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MAIN FINDINGS	KEY RECOMMENDATIONS			
Promoting economic growth and safe	guarding against macroeconomic risks			
Headline inflation has reached the 2% target. Tariffs exert two opposing influences on inflation, they increase import prices while simultaneously reducing demand, and hence prices.	Pursue a broadly neutral monetary stance in response to the anticipated trade shock. Be prepared to act in case negative risks to growth or prices materialise.			
Household debt levels are high. The riskiness of mortgage lending and debt servicing costs continue to increase.	Continue to closely monitor housing market developments and mortgage market risks.			
Fiscal deficits have been declining faster than in other countries after the pandemic-related increase, but the economic slowdown is expected to weigh on the fiscal outlook. Past significant new spending measures have increased long-term spending needs.				
The federal government is conducting a new round of spending review for the federal budget. The spending review focuses mainly on operational expenses and ad-hoc savings.	Conduct more systematic and period spending reviews and broaden the scope of the current review.			
The share of revenues from indirect taxes (GST/HST) is comparatively low, while the share of revenues from incomes and profits is high.	Gradually increase GST/HST tax rates and move away from zero-rates for items such as basic groceries, agricultural products, and prescription drugs to fund a decrease in personal income taxes.			
Taxation on energy and transportation is low in OECD comparison.	Preserve the existing, comprehensive carbon pricing system, including the fuel charge for consumers.			
Improving hous	ing affordability			
Residential zoning was until recently tilted towards single-detached housing, even in metropolitan areas. Approval times for new housing projects can be long and the permitting process cumbersome in some municipalities	Ensure that municipalities continue to reform zoning laws, eliminating single-unit zoning and enable medium-density housing in urban areas. Expedite the permitting process by developing electronic and one-stop systems and improving the tracking of approvals			
The non-market and affordable housing stock is relatively old and decreasing.	d and Preserve and protect affordable rental housing, by putting in place acquisition strategies and dedicated acquisition funds, such as the announced Canada Rental Protection Fund.			
The construction sector faces significant labour shortages.	Expand the construction sector workforce through higher intakes in dedicated training programmes and apprenticeships.			
Recent high immigration, especially of non-permanent residents, put a strain on the housing market.	Align policy support for housing with immigration targets.			
Adapting to climate	change challenges			
A lack of sufficient climate-related risk awareness prevents individuals and businesses from adapting more effectively. Most people in high flood risks areas are unaware of the risks they face.	Step up efforts to enhance flood maps and ensure public availability. Mandate disclosure of climate-related risks in the sale of residential and commercial properties.			
Land-use planning currently does not sufficiently account for climate- related risks.	Create independent bodies to advise on flood risk management, suggest urban development limits, and require authorities to 'comply or explain'.			
A large share of high-risk properties is uninsured due to lack of affordable insurance option.	Improve the availability and the risk-sharing of flood insurance through an increase in the overall coverage and a more effective re-insurance programme between private and public actors.			
Public and private investment in adaptation can significantly reduce climate-hazard risks and dimmish costs. Step up support for investment in climate resilient infrastructure t existing federal programmes and by ensuring sufficient function municipal and provincial levels.				
Raising business	sector productivity			
Despite generous SR&ED tax credit breaks, Canada's R&D investment intensity is weak. The larger credit for small firms leads to distortions and favours Canadian controlled businesses.	Harmonise the SR&ED tax credit for R&D activities across small and larger firms, and consider reinstating capital costs in the credit base.			
The focus on tax-based support for R&D means there is too much weight on general subsidy for research.	Make more use of direct grants to support R&D, including to support digital technologies such as artificial intelligence.			
Access to affordable financing for Canada's small and medium-sized enterprises (SMEs) still needs improvement.	Target SME financing programmes at young and innovative firms lacking financial track records or tangible assets.			
Internal barriers to trade have large economic costs and limit the efficiency and scope of labour markets.	Accelerate reduction in internal barriers to trade, including by widening the scope and powers of the Canadian Free Trade Agreement.			
High rates of overqualification among immigrant employees point to underutilisation of skills.	Better harmonise the recognition of foreign immigrant skills across provinces.			
The gender gap on participation rates and wages remains significant. Women are also underrepresented in leadership positions.	Continue to implement the roll-out of access to affordable childcare as planned. Increase the representation of women in leadership positions by strengthening awareness raising programmes			



1 Macroeconomic developments and policy challenges

Katja Schmidt

Canada's recent economic growth has been supported by strong population growth. Per capita growth has remained weak. Investment and exports have shown slower momentum, while elevated household debt and higher debt service costs have moderated consumer spending. Monetary policy began easing in June 2024, reducing the policy rate to 2.75% by April 2025, as inflation came down to the target rate. Trade tensions and higher tariffs exert downward pressure on the economic outlook. Further monetary easing should be implemented if the economic situation strongly deteriorates and assuming that tariff-related inflationary pressure remains under control. Public finances are generally sound, which provides fiscal space to accommodate the expected worsening of the fiscal deficit from the trade shock, but medium-term spending pressures could be better managed through more systematic and periodic spending reviews. In the long term, the tax structure could be better aligned with growth and environmental objectives by shifting taxes from income to consumption and environmental taxes. The comprehensive carbon pricing system should be preserved, including the fuel charge which should be reinstated. Finally, while the banking sector is stable and well capitalised, it has high exposure to the domestic mortgage market. The supervisor should remain vigilant and monitor risks carefully.

1.1. Higher tariffs are set to weigh on Canada's outlook, compounding an already weak per capita growth performance

Canada's economic growth picked up over 2024 after a period of softness. This was also supported by continued high population growth, and lower interest rates in the second half of the year. Inflation returned to the target rate of 2%. However, since February 2025, trade relations between the United States and Canada have been marked by escalating tariffs and countermeasures. These measures strongly weigh on the economic outlook, given strong trade links with the United States and the interconnectedness of North American supply chains for some products. Uncertainty related to trade policy has also increased on a global scale and is contributing to reduced investment and hiring plans by businesses. Additionally, structural weaknesses continue to weigh on Canada's economic performance, including a weak productivity growth, a high household debt burden and a strained housing market. Canada should address its structural weaknesses, to continue taking full advantage of its strengths, including a highly skilled workforce, abundant natural resources, and stable economic institutions, in order to sustain long-term growth in an external environment characterised by tensions and uncertainty.

1.1.1. Following trade tensions, the economic outlook has worsened considerably

The Canadian economy is highly exposed to trade tensions with the United States (see Box 1.1 for tariff measures). In 2024, 76% of Canada's goods exports went to the United States and 62% of its goods imports were sourced from the United States. Trade with the United States accounted for 16% of Canadian GDP and more than 2.6 million jobs in Canada in 2023, considering both direct and indirect effects (Statistics Canada, 2025_[1]). Canada accounts for about 14% in goods imports of the United States and about 17% in goods exports of the United States.

While the exemption from tariffs for cross-border trade under the United States-Mexico-Canada Agreement (USMCA/CUSMA) has shielded the Canadian economy from a more severe impact, the economic consequences of these tariff measures will still be significant. They also need to be assessed in the context of tariff increases of the United States on other countries. Higher global tariffs are expected to reduce global trade flows and weigh on global activity, further diminishing Canadian external demand, in addition to the lower demand from the U.S. However, effective tariffs on some countries for U.S. imports have increased more significantly than those on Canadian imports, which could lead to some favourable import substitution effects towards Canada, partially offsetting the overall lower U.S. import demand. The overall impact on the Canadian economy will also depend on how revenues from the countermeasures are recycled back to households and businesses, as well as the response of monetary and fiscal policy. Exchange rate flexibility will likely cushion some negative effects.

Overall, the impact on Canadian GDP of these tariffs is expected to be significantly negative, given the strong trade links of the Canadian economy with the U.S. Estimates vary based on the assumed effective tariff level, which is evolving. The current overall tariff arrangements would reduce Canadian GDP levels by around 2.2% according to simulations by The Budget Lab of Yale with GTAP (The Budget Lab, 2025_[2]). This corroborates OECD estimates that find that Canadian real GDP will be around 1¾% lower at the end of 2026 than in a scenario without tariffs, assuming a slightly higher 50% share of USMCA-compliant goods. Export and consumer demand would be most adversely affected, leading to a decline in investment. An increasing share of USMCA-compliant goods would mitigate the negative effect, while a suspension of the USMCA exemption would significantly amplify the adverse impact on GDP. After 2026, the economy is expected to recover as production and supply chains adapt to the new tariff environment. However, tariffs are likely to have lasting negative effects on GDP levels, productivity, and employment due to their distortionary effects (Bank of Canada, 2025_[3]).

Regarding the impact on consumer prices, retaliatory tariffs directly increase the cost of imported goods, which in turn affects consumer prices. Approximately 13% of Canada's CPI basket consists of goods imported from the United States (Bank of Canada, $2025_{[3]}$), whereas approximately 5% would be affected by retaliatory tariffs. Higher tariffs on U.S. imports of industrial goods would also affect U.S. export prices and subsequently Canadian import prices, due to highly integrated supply chains. The upward effect of tariffs on prices is anticipated to push inflation higher, particularly when tariffs are introduced.

The impact of tariffs will vary across sectors and products based on their trade reliance relative to total production. Industries heavily dependent on U.S. trade with limited short-term market diversification potential will be most affected. The manufacturing sector was among the sectors with the highest exposure to the U.S. market in 2023, relying on demand from the United States for 42% of its value added (Statistics Canada, 2025_[1]). In manufacturing, metal processing and the production of transport equipment, including automobiles, are the sectors most exposed to U.S. demand (Statistics Canada, 2025_[1]). With U.S. export dependency ratios of their value added exceeding 60%, they will be potentially the hardest hit.

Box 1.1. Tariff measures on U.S. imports from Canada, retaliatory tariffs and fiscal support

As of the cut-off date for this Survey, the following additional tariffs affecting United States-Canada trade have been implemented since February 2025:

- Tariffs of 25% on goods and 10% on energy resources and potash imported from Canada to the United States for goods that do not fall under the United States-Mexico-Canada Agreement (USMCA/CUSMA)
- Tariffs of 25% on steel and aluminium and derivative product imports from Canada to the United States
- Tariffs of 25% on non-USMCA compliant automobiles and parts and a 25% tariff on the non-U.S. content in USMCA-compliant automobiles imported from Canada to the Unites States

Determining the share of USMCA compliance of trade is challenging, as it depends on the local content of each product and the completion of relevant rules-of-origin (ROO) reporting. According to data from the U.S. International Trade Commission, 38% of goods imported from Canada to the United States were USMCA compliant in 2023. Most of other goods traded under the World Trade Organisation's (WTO) Most-Favoured-Nation (MFN) status, with low or zero MFN tariff rates. However, Canadian exporters who previously relied on MFN status without claiming USMCA preference may now have a stronger incentive to fill the ROO requirements and claim USMCA eligibility, increasing the share of trade falling under USMCA over time.

Assuming a USMCA compliance share of 50% means an effective tariff increase for U.S. imports from Canada by about 13 percentage points, rising from a near-zero effective bilateral tariff rate of 0.1% in 2024.

In response to U.S. tariffs, Canada has implemented retaliatory tariffs of 25% on CAD 60 billion worth of imports from the United States, which represents about 8% of total Canadian imports. These tariffs cover a range of products, including food and beverages, cosmetics, appliances, apparel, computers, certain paper products, and steel and aluminium products. In addition, the Canadian government has also implemented a 25% tariff on non-USMCA compliant (fully assembled) vehicles, and a 25% tariff on non-Canadian and non-Mexican content of USMCA compliant (fully assembled) vehicles imported into Canada from the United States, representing about CAD 35 billion worth of imports.

The Canadian government has also implemented several targeted support and liquidity measures for businesses and households. These include exceptional relief on tariffs through remission, deferrals of tax payments for businesses, financing through financial Crown corporations, a loan programme for large businesses (the Large Enterprise Tariff Loan Facility) and temporary changes to employment insurance for workers, such as waiving the one-week waiting period and reducing the hours required to qualify for regular benefits and increasing the weeks of entitlement.

Latest OECD economic projections (see Table 1.1) estimate that GDP growth is set to remain robust in the first quarter of 2025 before declining in the second quarter due to reduced exports to the United States, driven by higher tariffs. Household consumption and business investment are also expected to be adversely impacted by trade disruptions, rising prices, and heightened uncertainty. Imports are anticipated to decrease less than exports, leading to a strong negative net export contribution to GDP growth in 2025. The output gap is expected to widen again in 2025. In 2026, GDP is expected to gradually recover as the economy adapts to the new trade environment. This projection assumes that tariffs will remain at their current levels and the USMCA compliance share will stay close to 50%. Lower interest rates would bolster business investment and household consumption as uncertainty diminishes. However, slower population growth will provide less support for aggregate demand, especially

consumption growth. It should, however, result in a more significant expansion of per capita GDP and a better balance in the housing market.

	2021	2022	2023	2024	2025	2026
	Current prices	P	ercentage ch	ange, volun	ne (2017 pric	es)
	(CAD billion)		-	-		
Gross domestic product (GDP)	2536	4.2	1.5	1.5	1.0	1.1
Private consumption	1374	5.5	1.9	2.4	1.9	0.9
Government consumption	543	3.2	2.2	3.2	2.3	1.9
Gross fixed capital formation	603	-1.2	-1.6	0.1	1.6	1.3
Housing	246	-10.2	-8.2	-0.7	3.5	1.7
Final domestic demand	2520	3.3	1.1	2.0	1.9	1.2
Stockbuilding ^{1,2}	13	1.9	-1.1	-0.5	-0.7	0.0
Total domestic demand	2533	5.2	0.0	1.5	1.3	1.2
Exports of goods and services	791	4.2	5.0	0.6	-0.3	-0.2
Imports of goods and services	788	7.5	0.3	0.6	0.4	0.3
Net exports ¹	3	-1.0	1.6	0.0	-0.2	-0.2
Other indicators (growth rates, unless specified)						
Employment		4.1	3.0	1.9	1.2	0.7
Unemployment rate (% of labour force)		5.3	5.4	6.4	7.1	7.3
GDP deflator		7.9	1.4	3.0	2.5	2.0
Consumer price index		6.8	3.9	2.4	2.1	2.1
Core consumer prices		5.0	3.9	2.6	2.7	2.3
Terms of trade		4.6	-5.8	-1.0	-0.4	0.0
Household saving ratio, net (% of disposable income)		3.9	3.6	5.9	6.5	6.3
Trade balance (% of GDP)		0.6	0.1	-0.3	-0.6	-0.8
Current account balance (% of GDP)		-0.3	-0.6	-0.5	-0.8	-1.0
General government fiscal balance (% of GDP)		0.6	0.1	-2.1	-1.9	-1.7
Underlying general government fiscal balance (% of potential GDP)		-0.6	-0.7	-1.9	-2.0	-1.7
Underlying government primary fiscal balance (% of potential GDP)		1.1	1.1	0.0	-0.2	0.0
General government gross deb ¹³ (% of GDP)		98.8	104.0	107.3	107.2	107.1
General government net debt3 (% of GDP)		8.2	10.8	8.4	8.3	8.2
Policy interest rate, average		2.4	4.8	4.3	2.4	2.3
Three-month money market rate, average		2.2	4.7	4.4	2.5	2.4
Ten-year government bond yield, average		2.8	3.4	3.3	3.0	2.9

Table 1.1. Macroeconomic indicators and projections

1. Contributions to changes in real GDP, actual amount in the first column.

2. Including statistical discrepancy.

3. Adjusted for pension liabilities.

Source: OECD Economic Outlook database and OECD calculations.

On the consumer price side, inflation has declined from a peak of 8.1% in mid-2022 to rates around 2% in the second half of 2024. Inflation is expected to be pushed upwards by higher tariffs, which will increase import prices. However, starting April 1, this will be partly offset by lower energy prices resulting from the removal of the federal fuel charge. Core inflation is anticipated to increase more significantly in 2025, boosted by higher import prices, before gradually declining in the course of 2026.

The uncertainties surrounding the projections are substantial, particularly concerning trade measures. This includes uncertainties about the tariff levels for Canada themselves, which might be further increased or lowered. Tariffs imposed in addition by the U.S. administration on other countries might increase or remain at their current levels after the 90-day suspension period on July 8, 2025. Additionally, there is significant uncertainty regarding the extent to which tariffs will pass through to the Canadian economy. This is due to the unprecedented magnitude of the tariff shock in recent decades, during which there has been a significant increase in supply chain integration, and the strong interconnectedness of North American economies. Risks also relate to potential stronger effects of trade measures on financial conditions and the volatility of financial markets. However, the outlook is not entirely bleak,

as the tariff measures could also accelerate reforms in Canada, particularly in reducing internal trade barriers, which would have positive long-term growth effects.

Vulnerability	Possible outcome
Renewed strong increase in house prices and household indebtedness	A significant increase in house prices due to an insufficient response of housing supply, could lead to a further increase in household debt, coupled with a rise in the riskiness of household lending (see next section). This could lead to higher default rates and higher risks to financial stability.
Deterioration in United States-Canada economic relations	Further escalating trade tensions and barriers would severely weigh on economic prospects.
Severe climate-related events, such as flooding.	An adverse climate-related event, such as a flood, can lead to disruptions in the provision of goods and services, weighing on economic activity and growth in the region. It could also harm critical infrastructure, and lead to additional fiscal costs.

Table 1.2. Events that could lead to major changes in the outlook

1.1.2. Beyond trade tensions, GDP per capita has been weak

GDP growth had strengthened in 2024 (Figure 1.1, Panel A). However, with population growth outpacing GDP growth, GDP per capita has trended lower and fallen below pre-pandemic levels (Figure 1.1, Panel B). Canada's population grew by 3% annually in 2023 and the first half of 2024. The government has adjusted and recalibrated its immigration targets in response and population growth has since begun to slow (see Box 1.2 for details). High population growth has boosted potential growth, over 2023 and 2024 by increasing the working-age population, thereby supporting labour input growth. However, the surge in working-age population has likely weighed on labour productivity growth, exerting downward pressure on the capital stock per worker, as capital adjusts more slowly. The skill composition of recent immigration, which included many students and temporary workers, has also likely reduced average labour productivity, weighing on per capita GDP growth. Per capita real income growth in Canada was broadly in line with other G7 countries during 2023 and 2024, except for the United States (Figure 1.2).

Figure 1.1. GDP growth has been supported by high population growth



Note: OECD euro area 17 covers all OECD Member countries also Member of the Euro area. In Panel B, 2024 data are compiled using population projections (based on published data). Source: OECD Economic Outlook database.

StatLink and https://stat.link/fpykct

Figure 1.2. Real household disposable income has been trending sidewards



Real gross disposable income per capita of households and NPISH

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Business investment has been very weak from 2022 through 2024 and has not yet surpassed pre-COVID levels (Figure 1.3). Sluggish business investment remains one of the main drivers of the weak productivity performance in Canada (see Chapter 4). With high population growth, the previous decline in investment per worker has been accelerating. In 2023 and 2024, the government has introduced substantial investment tax credits to support investment in green sectors, partly in response to the U.S. Inflation Reduction Act (see Box 1.3).



Figure 1.3. Business investment has remained weak

StatLink ms https://stat.link/t3l5yv

Box 1.2. Canada experienced very high population growth, driven by a high number of nonpermanent residents

Canada's population grew rapidly, by 3.0% in 2023 and 2.6% in 2024. This is much faster than in other OECD countries such as the United States or countries in Europe (Figure 1.4). Almost all the population growth in Canada is attributable to international migration, which includes both permanent and non-permanent immigration. For permanent residents (PR), this growth is in line with government targets, fixed in the 3-year *Immigration Levels Plan* by Immigration, Refugees and Citizenship Canada (IRCC). In 2024, 484 000 permanent residents settled in Canada (Statistics Canada, 2025_[4]), for a planned IRCC target of 485 000 immigrants (Government of Canada, 2023_[5]). The 2025-27 *Immigration Levels Plan* foresees a significant decrease in overall permanent resident admissions to 395 000 in 2025, 380 000 in 2026 and 365 000 in 2027 (Government of Canada, 2024_[6]), revised downwards from the 500 000 targets in 2025 and 2026 in the 2024-26 plan. The new plan also prioritises admissions of those already in Canada, with over 40% of PR admissions in 2025 expected to come from non-permanent residents.

In 2022, the Immigration and Refugee Protection Act (IRPA) was amended to permit category-based selection within the Federal High Skilled Program (Government of Canada, 2023_[5]). This change signified a notable shift in Canada's immigration framework, which had previously relied almost exclusively on a points-based system evaluating an immigrant's human capital. The newly implemented category-based selection is designed to meet labour market needs, enabling the selection of immigrants with specific skill sets for industries experiencing labour shortages. Similarly, the Provincial Nominee Program, which has seen a consistent increase in PR numbers, also facilitates the selection of immigrants with specialised skills for sectors facing labour shortages across provinces and territories.



Figure 1.4. Population growth

Total population

A notable recent trend in Canadian immigration was the strong increase in non-permanent residents (NPRs). Their numbers have risen sharply in the past few years and net inflows reached 552 000 in 2022 and 821 000 in 2023 (Figure 1.5). This increase has affected all categories, including asylum seekers, international students, and temporary workers, along with their families. The largest contingents were international students, representing approximately 42% of NPRs, and temporary workers, comprising about 44% (Government of Canada, 2024_[7]). The substantial growth in international students can be attributed to various factors, such as the expansion of curriculum licensing arrangements and the removal of the 20-hour weekly limit on off-campus employment. This expansion has subsequently influenced the issuance of post-graduate work permits and spousal temporary work permits, both under the International Mobility Program.

StatLink ms https://stat.link/cnwr3b

In response to this significant influx of non-permanent residents, the Canadian government, in 2024, announced reforms to the temporary resident programmes, such as an annual cap on international students study permits and tighter eligibility requirements for the post-graduate work programme and work programmes for spouses of non-permanent residents. The 2025-2027 *Immigration Levels Plan* also introduced – for the first time – targets for NPRs. The overarching goal is to decrease the proportion of non-permanent residents to 5% of the total population by the end of 2026 (Government of Canada, 2024_[8]). As a result, the number of non-permanent residents decreased throughout 2024, reaching its lowest level since the first quarter of 2022 by the end of the year.

Figure 1.5. Permanent and temporary immigration

Number of permanent and (net) non-permanent residents in Canada, 4-quarter moving average



Box 1.3. Canada's response to the U.S. Inflation Reduction Act

The federal government has announced six major investment tax credits (ITCs) and production-based support for targeted green sectors in recent years. These initiatives were implemented partly in response to the U.S. *Inflation Reduction Act* (IRA), amid concerns that the IRA's green subsidies and tax credits could create competitive disadvantages for Canadian industry, and to support the decarbonisation of the economy. The cross-border effects of climate mitigation policies depend on several factors, including exchange rate flexibility, revenue recycling schemes for carbon taxes, and financing sources for subsidies (especially if they are financed by higher taxes). Fournier et al. (2024_[9]) show, using the IMF-ENV model, that the competitive effects of the IRA subsidies would be relatively limited for Canada and confined to energy sectors. Canada would still lose some market share in electricity, iron and steel.

The initiated ITCs support investment in clean energy and other clean technologies: 1) carbon capture, utilization, and storage (CCUS); 2) clean technology; 3) clean hydrogen; 4) clean technology manufacturing; 5) clean electricity; and 6) EV supply chain. Budget 2024 estimates the fiscal costs of all the six ITCs at CAD 93 billion, or 3.2% of 2023 GDP, over 2022-23 to 2034-35 (Government of Canada, 2024_[10]). PBO estimates cost slightly higher at CAD 103 billion (Parliamentary Budget Office (PBO), 2024_[11]). The IRA allocates approximately USD 400 billion, or 1.5% of 2023 GDP, towards clean energy and climate initiatives according to the initial estimates by the Congressional Budget Office. However, other sources provide higher estimates of the costs of IRA. The Canadian ITCs are comprehensive and come at considerable fiscal costs. Concerning their economic and environmental impact, the Canadian Climate Institute finds that their impact on emission reductions until 2030 will be relatively small (share of 2 to 3 per cent of incremental emissions reductions), but that they will support overall economic competitiveness and attract investment (Canadian Climate Institute, 2024_[12]).

The government also offers financial support for electric vehicle (EV) investments, primarily through production subsidies, to align with the Advanced Manufacturing Production Credit (AMPC) included in the IRA. According to PBO estimates, financial support for EV manufacturing reached CAD 52 billion between October 2020 and April 2024 across thirteen projects (Parliamentary Budget Office (PBO), 2024_[13]). It is inherently challenging to determine how much of this financial support has resulted in additional investment or how much of the investment would have been undertaken without the support.

Current trade tensions should also be an opportunity to review Canada's overall export performance. The latter has been relatively weak in the post-pandemic era. Canada has not yet recovered the export market share that it lost during the COVID-crisis (Figure 1.6, Panel A). This appears to be particularly due to the weak export growth of goods other than commodities. The volume of goods exports remains notably subdued for motor vehicles and parts, as well as for aircraft and other transport equipment, compared to pre-COVID levels (Figure 1.6, Panel B). In contrast, goods exports of energy and agricultural products have increased compared to the end of 2019. In fact, crude oil export volumes reached an all-time high in 2023, more than doubling since 2010 (Statistics Canada, 2023_[14]). They are expected to benefit further in the coming years from the newly available export capacity of the Trans Mountain Expansion pipeline (see Box 1.4). Natural gas exports should benefit from the liquefied natural gas (LNG) terminal being built in Kitimat, British Columbia, expected to be completed in 2025. This terminal will enable the transportation of LNG by sea to countries other than the United States.

Canada is highly dependent on trade with the United States, its biggest trading partner, accounting for 76% of goods exports and 51% of services exports (Figure 1.7). Further diversifying export markets by developing or strengthening other trade agreements, and further improving export infrastructure, particularly for energy exports, would increase the resilience of the economy. The EU and UK markets are more significant destinations for services exports, together responsible for 15% of market share.



Figure 1.6. Export performance has been weak

Note: In Panel A, export performance is calculated as the difference between export growth and export markets' growth, in volume terms. In panel B, merchandise exports, in constant 2017 CAD, seasonally adjusted, are on the Balance of Payment basis. Source: OECD Economic Outlook database; and Statistics Canada.

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Figure 1.7. The United States remains Canada's top trading partner

Note: Panel A and B: Data coming are collected on the basis of the Harmonised System 2017; Panel C and D: Data coming are collected according to the Balance of Payments methodology.

Source: United Nations Comtrade database; and OECD International Trade in Services database.

StatLink and https://stat.link/1s67zd

Box 1.4. Trans Mountain Expansion Pipeline (TMEP)

The Trans Mountain Pipeline transports crude oil and refined petroleum products from Edmonton, Alberta, to refineries and terminals in British Columbia and Washington State. Crude oil is also shipped to offshore markets in Asia and the U.S. west coast via the Westridge Marine Terminal in Burnaby, British Columbia. The expansion of the pipeline, initiated in 2013, aimed to increase the overall capacity of the pipeline. At full capacity, it will nearly triple from 300,000 barrels per day (bpd) to 890,000 bpd. According to the Canada Energy Regulator, the pipeline expansion will account for 17% of the total pipeline export capacity available to Canadian crude oil shippers, representing a significant increase in capacity. The Trans Mountain Expansion Pipeline officially began operations on May 1, 2024.

The new pipeline is expected to boost Canadian oil production and exports over time, particularly to markets in Asia and the U.S. west coast. It should also help reduce the differential between the benchmark price of North American light crude oil (West Texas Intermediate) and Canadian heavy crude oil (Western Canadian Select). Estimates on the total effect of the pipeline on GDP vary. Ernst & Young projects an impact of operational expenditures (e.g. spending on pipeline maintenance, salaries and benefits) on GDP levels of CAD 9.2 billion (0.3% of 2024 GDP) over 20 years from 2024 to 2043, with a significant boost for the GDP of Alberta and British Columbia (Trans Mountain Corporation, 2023_[15]).

1.1.3. The labour market has cooled

The Canadian labour market cooled significantly in 2024. The number of job vacancies declined by almost half from the peaks in spring 2022, bringing the vacancy rate closer to historic norms (Figure 1.8, Panel A). The unemployment rate has trended higher in 2024. Strong population growth, combined with subdued hiring, led to a rise in unemployment. Towards the end of 2024 with economic activity picking up and population growth slowing, labour market conditions started to improve, and unemployment came down. However, this improvement came to a halt in spring 2025, with economic prospects worsening due to trade tensions. Firms reporting labour shortages have decreased compared to the peak in 2021-2022 (Figure 1.8, Panel B). However, shortages in some sectors, particularly in healthcare, construction, and other skilled trades, persist. The total labour market participation rate (15 years and over), after rebounding post-COVID, has somewhat declined since the end of 2023 (Figure 1.9). Fully closing gender gaps in participation and hours worked by 2060 could increase long-term GDP growth per capita in Canada by 0.18% (Fluchtmann, Keese and Adema, 2024_[16]). Policies to increase the participation of women in the labour market are discussed in Chapter 4.

Figure 1.8. The labour market has cooled



Note: In panel A, the unemployment rate refers to the population aged 15 years and over; and the job vacancy rate is the number of job vacancies expressed as a percentage of labour demand; that is, all occupied and vacant jobs. Source: Statistics Canada; and Bank of Canada, Business Outlook Survey.

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Figure 1.9. Participation remains lower for women than for men

Labour force participation rate by gender and age group

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Box 1.5. Estimated impact of structural reforms recommended in the *Survey* on potential GDP and the fiscal balance

Table 1.3 summarises potential medium-term impacts of selected structural reforms proposed in this *Survey*. They suggest that these structural reforms could lift Canada's GDP by around 7% over 10 years and by around 16% in the long run. Simulations are realised with the OECD long-term model (except for 5). These quantifications are illustrative. While other reform proposals in this survey have GDP implications, not all can be quantified due to model limitations.

	Policy	Measure	10-year impact, %	Long-run impact, %
1	Increase R&D spending	Increase gross domestic expenditure on R&D (GERD) by 0.5% of GDP to reduce the gap to the OECD average by half over 5 years	0.1	21/2
2	Reduce the gender labour supply gap	Increase female labour participation by rolling out affordable childcare as planned and reduce the gender average working hour gap with 5 best performing OECD countries by half over 10 years	4.3	4.7
3а	Enhance the business environment – less ambitious scenario	Reduce PMR by 0.08 to the OECD average over 5 years	0.4	1.8
3b	Enhance the business environment – more ambitious scenario	Reduce PMR by 0.25 to reduce gap with 5 best performing OECD countries by half over 10 years	0.8	5.6
4	Improve the tax mix (revenue neutral)	Shift 1% of GDP from labour income taxes (reducing the tax wedge by 2 ¹ / ₂ of labour costs) to consumption taxes over 5 years	0.8	1.1
5	Remove interprovincial non-tariff trade barriers		N/A	4.0
	Total		5½ - 6	14 - 18

Table 1.3. Estimated impacts on potential GDP levels

Note: Enhance the business environment by reducing high barriers to foreign investment and public procurement, lowering entry barriers in service and network sectors, and deregulating digital markets (see Chapter 4).

Source: OECD long-term model (Guillemette and Château, 2023[17]), except 5 (International Monetary Fund, 2019[18]).

Table 1.4 shows the illustrative fiscal impact of proposed structural reforms in this *Survey*. Their impact is overall broadly neutral, except for higher public spending on climate adaptation (Chapter 3). On adaptation, there are trade-offs over time, as higher spending today would lead to lower spending on disasters in the future. The proposed tax reforms (Chapter 1) to improve the tax mix are intended to be revenue neutral. The proposed housing policies (Chapter 2) focus on regulatory policies, and if requiring higher spending (such as for more social and affordable housing), could be financed through savings from existing, lower-benefit programmes. Policies to strengthen productivity (Chapter 4) also focus on regulatory improvements and otherwise, should be financed through budget reallocations.

	Policy	Measure	Impact on the fiscal balance (annual, % of GDP)
1a	Increase R&D spending	Increase gross domestic expenditure on R&D (GERD) by 0.5% of GDP, through higher funding for direct R&D support and financing programmes for young and innovative firms	-0.1 to -0.5
1b	Streamline business taxation	Phase-out the preferential small business tax rate	+0.2
1c	Harmonise the R&D tax credit	Harmonise the SR&ED tax credit across small and larger firms	0
2	Reduce the gender labour supply gap	Make parental leave better shared and strengthen awareness raising programmes	-0.1 to -0.2
4	Improve the tax mix	Shift 1% of GDP from labour income taxes to consumption taxes.	0
6	Strengthen spending reviews	Strengthen government public spending reviews	+0.1 to +0.5
7a	Support social housing	Preserve and protect social and affordable housing	-0.1
7b	Lower demand-side housing support measures	Tighten eligibility criteria for the GST Rental Rebate for purpose-built rental housing and lower support for homeownership	+0.1
	Total – revenue measures		+0.3
	Total – spending measures		-0.2 to -0.3
	Total		Broadly neutral

Table 1.4. Estimated impacts on the fiscal balance

Note: Regulatory measures (e.g. removing interprovincial non-tariff trade barriers or reforming zoning laws) are treated as fiscally neutral and are not shown. Implementation costs for such measures should be generally offset, in the medium term, by lower operational costs due to efficiency gains. The rollout of affordable childcare is not included in this table as additional fiscal cost as already included in the budget. Source: OECD calculations.

1.2. Financial markets are robust but risks have increased

1.2.1. Monetary policy has eased

The Bank of Canada began lowering its policy interest rate in June 2024 as inflation was moving closer to the 2% inflation target (Figure 1.10, Panel A). Wage growth remains relatively dynamic (Figure 1.10, Panel B). The interest rate was subsequently lowered at each Governing Council Meeting to 2.75% in March 2025 before holding rates constant in the April 2025 meeting (Figure 1.11, Panel A). The nominal neutral interest rate – i.e. the rate to which the policy rate would converge, when output is at its potential and inflation is at its target – is estimated to be in the range of 2.25% to 3.25% according to the Bank of Canada (Bank of Canada, 2025_[19]). The policy rate is hence at the midpoint of its neutral range (see Box 1.6 for the monetary policy framework).



Figure 1.10. Inflation has come down to target despite strong nominal wage growth

Source: Statistics Canada, and OECD Economic Outlook database.

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Going forward, the Bank of Canada is set to carefully balance the impact of two opposing influences on consumer price inflation from tariffs: the upward pressure from higher import prices and the downward pressure from lower demand. As long as long-term inflation expectations remain firmly anchored and price increases limited to goods affected by tariffs, monetary policy could look through the inflationary effect of higher tariffs, and lower rates somewhat further to remain in broadly neutral territory. If the growth outlook worsens significantly, additional monetary easing might be needed. However, the Bank of Canada should stay vigilant regarding broader inflationary pressures and be ready to act in the other direction if price increases become more broad-based and inflation expectations are at risk of de-anchoring.

The Canadian dollar has strongly depreciated against the US dollar between September 2024 and March 2025. This development was until November driven by macroeconomic developments – lower inflation and softer growth in Canada relative to the U.S. - with the Bank of Canada reducing rates more quickly than the Federal Reserve and the short-term interest rate gap widening. Following November, high uncertainty related to trade policies and trade tensions have put downward pressure on the CAD and exchange rate risks became the dominant factor (Bank of Canada, 2025[3]). Since March 2025, the value of the Canadian dollar has strengthened again, fully reversing its losses since November, as investors reevaluate U.S. assets given trade policy uncertainty. While this stabilisation limits future inflationary pressures, it will provide less of a competitive boost to sectors hit by tariffs.

In parallel, the Bank of Canada has continued to normalise its balance sheet through quantitative tightening (QT), halting the replacement of maturing Government of Canada (GoC) bonds. This process has proceeded smoothly. The Bank's total assets have declined by about 48% to about CAD 250 billion between April 2022 and March 2025, mainly reflecting the winding down of Government of Canada bond holdings (Figure 1.11, Panel B). The Bank of Canada announced QT to have ended in early March 2025, at which point central bank reserves (or so-called settlement balances) will have returned to a normal range, allowing for the resumption of routine balance sheet management (Gravelle, 2025[20]; Bank of Canada, 2025[21]). The Bank of Canada intends to resume asset purchases gradually, beginning with term repo operations and purchases of Treasury bills, to replace maturing assets and stabilise the balance sheet within a normal range over the course of 2025. Ending QT in March was appropriate as it aligns balance sheet management with the more neutral stance of the policy rate. Maintaining a clear communication on balance sheet management remains essential.

Box 1.6. Canada's Monetary Policy Framework

Canada's monetary policy framework consists of two elements: the inflation-control target and a flexible exchange rate. First introduced in 1991, the inflation target is set jointly by the Bank of Canada and the federal government and reviewed every five years. The most recent renewal extends the framework to the end of 2026. The Bank of Canada acts independently of the government in the conduct of its monetary policy within this framework. The 2022-2026 framework remains centred on the 2% inflation target, using the flexibility of the 1%–3% control range to actively seek the maximum sustainable level of employment when conditions warrant. Canada's floating exchange rate provides a buffer, helping the economy absorb and adjust to external and internal shocks.

Lending rates for households and businesses have decreased since their peaks in the beginning of 2024 (Figure 1.12, Panel A). Overall lending conditions have also eased over the last quarters, both for households and businesses (Bank of Canada, 2024_[22]). The residential real estate market has ceased its decline, with house prices and home sales experiencing a slight recovery since their trough in mid-2023 (Figure 1.12, Panel B). Chapter 2 covers a more detailed discussion of structural housing issues and affordability challenges in Canada. Commercial real estate markets (CRE), particularly the office sector, have been under pressure in recent years (Bank of Canada, 2024_[23]). The office sector has faced very high vacancy rates, especially for offices in large city centres, partly due to the completion of substantial new office space between 2021 and 2023, as well as the ongoing impact of teleworking (JLL, 2025_[24]). Office construction has declined since then, reaching a 20-year low by the end of 2024 (CBRE, 2024_[25]). The industrial and retail sector have been performing relatively better. Exposure of banks and non-bank financial institutions to the CRE sector are relatively limited for larger institutions but higher for small ones – the CRE sector accounts for 10% of total loan portfolios of large banks and 20% of that of small and medium-sized banks – and not concentrated. However, some pension funds and insurance companies with holdings in the sector had to write down the values of certain CRE assets (Bank of Canada, 2024_[23]).



Figure 1.11. Monetary policy has normalised

Note: Panel A shows the midpoint of the federal funds target range for the United States and the deposit facility rate for the Euro area. Source: OECD Economic Outlook database; and Bank of Canada.

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Figure 1.12. Lending rates are decreasing and the residential housing market has begun to stabilise



Note: New lending (funds advanced) refers to new credit extended, new draws on existing credit facilities, mortgage or term-loan renewals and refinancing for a given month.

Source: Bank of Canada; The Canadian Real Estate Association (CREA); and OECD Economic Outlook database.

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1.2.2. Households still face an increasing debt service burden

Household debt, driven mainly by mortgage debt, remains one of the highest in the OECD, standing at just over 171% of household disposable income in the third quarter of 2024 (Figure 1.13, Panel A). However, households have started to deleverage to some extent in recent years. New borrowing by households declined by about half between 2022 and the beginning of 2023 following the past increase of lending rates (Figure 1.13, Panel B). Since then, it has experienced a slight rebound. High household debt results in a significant debt service burden for households. This debt service ratio (DSR) stood at 14.4% on average in the fourth quarter of 2024, close to all-time highs (Figure 1.14, Panel A). For new mortgage loans, the debt service burden is even higher and close to 30% of loans have a DSR exceeding 25%, the threshold used by the Bank of Canada to identify vulnerable households (Bank of Canada, 2024_[26]). For some households – especially those with lower incomes and savings – higher debt servicing costs could put pressure on finances, potentially leading to payment arrears and debt defaults.

Some indicators of households' financial stress have indeed shown some trend increases recently, albeit from very low levels. Rates of mortgage loans in arrears – defined as loans that are 90 days or more past due – increased slightly to 0.17% but remain low in historical comparison (Figure 1.14, Panel B). The rate of arrears for credit card and auto loans, often early warning indictors for households' financial stress, have shown more significant increases. The situation is manageable but requires ongoing close monitoring.

Over the coming years, many households will need to renew existing mortgages at higher interest rates, as many of these mortgages were taken out when interest rates were very low. Of the mortgages outstanding in the beginning of 2024, more than three-quarters are up for renewal by the end of 2026 (Office of the Superintendent of Financial Institutions (OSFI), 2024_[27]). The share of longer-term fixed-rate loans has strongly declined over recent years (Figure 1.15, Panel A). Many borrowers opted for variable-rate loans in 2021 and early 2022, as mortgage rates were substantially lower for these types of loans (Murchison and teNyenhuis, 2022_[28]). As interest rates started rising, shorter-term fixed rates (<5 years) became more popular. Variable rate and short-term fixed rates expose households more strongly to interest rate risks. The median percentage increase in mortgage payments for all mortgages was estimated to be 22% in 2024, 25% in 2025 and 32% in 2026 in May 2024 (Bank of Canada, 2024_[23]). Since these increases depend on lending rates, and lending rates have come down since May, the actual increases might be somewhat lower than initially expected, but they are still likely to be substantial.

An important risk is posed by variable-rate mortgages with fixed payments (VRMFP), which account for approximately three-quarters of all variable-rate loans. For such loans, the portion of the payment going towards interest changes when interest rates change, while the total mortgage payment remains unchanged. At a certain interest rate – known as the trigger rate –, interest payments might increase so much that total mortgage payments are no longer sufficient to cover the interest portion of the loan. Estimates in 2022 suggested that about half of all variable-rate mortgages – or 13% of all mortgages – had reached their trigger rate by the end of October 2022 (Murchison and teNyenhuis, 2022_[28]). When hitting the trigger rate, the mortgage holder may be required to increase monthly payments, given the requirement to remain on contractual amortisation. VRMFP could face high payment increases, unless pre-payments are made to bring down the balance, with a median payment increase at renewal exceeding 50% compared to origination payment in 2025-2026 (Bank of Canada, 2024_[23]). Recent lending rate decreases will eventually provide some relief for households, however, in the near-term payments for households at renewal are still expected to rise.

Mortgage loans are also increasingly taken out without mortgage insurance. In Canada, only about 25% of outstanding mortgage lending is covered by mortgage insurance, which heightens the risk for lenders in the event of default. This is a decline from pre-COVID-19 levels, where close to 40% of all mortgage loans were insured. Government-guaranteed mortgage insurance is only required for all federally regulated mortgages when the borrower's down payment is less than 20% of the home's purchase price, i.e. for loans with a loan-to-value (LTV) ratio higher than 80%. This decline in the proportion of insured mortgages reflects rising house prices, as homes valued over CAD 1 million were not eligible for insurance, which was the case for an increasing number of loans in a situation of strong house price increases. Households therefore had to forego the house purchase or increase the downpayment to at least 20%. This limit was recently augmented by the government to CAD 1.5 million, facilitating accessibility to mortgages for households with lower downpayments. Non-insured mortgages, i.e. loans with LTV ratios below 80%, have less prescriptive regulation, e.g. no prescribed limits on debt servicing, than insured mortgages (Peterson, 2023_[29]).

The amortisation period of mortgage loans has also been lengthening, partly because some banks allowed borrowers to extend the amortisation period to mitigate the rise in debt service costs (Fortier-Labonté and McGillivray, 2024_[30]). Nearly 50% of newly issued or renewed mortgages now have amortisation periods exceeding 25 years, compared to roughly one third before the COVID-19 crisis (Figure 1.15,Panel B). This comes along with a measure in Budget 2024 to allow 30-year mortgage amortisations on insured mortgages for all first-time home buyers and to all homebuyers of new builds as of December 2024 (Government of Canada, 2024_[10]). Longer amortisation periods, while reducing monthly payments and making homeownership more affordable in the short-term, increase long-term vulnerabilities of borrowers to income and market shocks. Since the new measure applies to the insured mortgage markets, the risks are ultimately borne by the public sector.

Currently, borrower resilience to shocks for uninsured mortgages is primarily addressed through "stress testing" at the individual borrower level (the so called minimum qualifying rate, which is currently the greater of the mortgage contract rate plus 2% or 5.25%), see discussion further below. Additional measures to strengthen borrower resilience and manage debt service costs should be considered. This could include debt servicing limits (DSTI) or debt-to-income restrictions for uninsured mortgages at the borrower level, similar to existing DSTI limits for insured mortgages. Debt service is closely associated with default probabilities and negative effects of high housing debt on consumer demand (Bank for International Settlements, 2023_[31]).


Figure 1.13. Households have deleveraged slightly from high debt levels

Source: Statistics Canada; and OECD Household Indicators Dashboard.

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Figure 1.14. But the household debt service burden remains high and indicators of households' financial stress have increased



Source: Statistics Canada; and Bank of Canada.

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Figure 1.15. New mortgages have been increasingly financed by variable-rate and shorter-term fixed rate

2017 2018 2019 2020 2021 2022 2023 2024 2025 2017 2018 2019 2020 2021 2022 2023 2024 Note: New lending (funds advanced) refers to new credit extended, new draws on existing credit facilities, mortgage or term-loan renewals and refinancing for a given month. Source: Bank of Canada.

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1.2.3. Business profits remain elevated amid higher insolvencies

Non-financial corporations have also diminished their leverage. In 2024, the gross debt of non-financial corporations amounted to 163% of GDP, compared to 172% of GDP before the COVID-19 crisis, still relatively high compared to other OECD countries (Figure 1.16, Panel A). Corporate profit margins, which strongly increased after the COVID-19 crisis, have come down but remain elevated on average relative to pre-crisis years (Figure 1.16, Panel B). Business insolvencies rose sharply from early 2023, surged in early 2024, and have since fallen back somewhat, but remain above pre-pandemic levels. According to analyses by the Bank of Canada, high insolvencies represent mainly catch-up effects from low insolvency numbers during pandemic years, where government support programmes kept businesses afloat (Bank of Canada, 2024_[23]).



Figure 1.16. Corporate balance sheets show some deleveraging

Note: In panel B, the operating profit margin is defined as operating profits relative to operating revenues and the after-tax profit margin as aftertax income relative to total revenues.

Source: OECD Financial indicators dashboard: Non-financial corporations; and Statistics Canada.

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1.2.4. The financial system has proven resilient

The Canadian banking system has remained stable and resilient. Capital and liquidity buffers are above regulatory limits, and credit performance remains strong with an average NPL ratio of 0.6%, despite a recent slight deterioration (Figure 1.17). Funding sources are well diversified, and deposit growth of banks has been robust (Bank of Canada, 2024_[23]). The relative strength of Canadian banks was evident during the period of banking stress in the US in 2023, as Canadian banks were relatively unaffected (Bank of Canada, 2023_[32]). Bank profitability has, however, declined since 2023 due to increased funding costs, higher loan-loss provisions and slower balance sheet growth (Figure 1.17, Panel D).

Figure 1.17. Banks' balance sheets appear sound



Note: The IMF Financial Soundness Indicators database does not include the Liquidity Coverage Ratio (LCR), which is part of Basel III, for Canada, this is why the short-term liquidity ratio is shown. OECD and EU are unweighted averages. In Panel A, OECD average excludes Japan, and New Zealand; in Panel B it excludes Chile, Japan, New Zealand, and Switzerland; in Panel C, it excludes Japan, and New Zealand. Source: IMF Financial Soundness Indicators database.

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A vulnerability for domestic banks remains the substantial exposure to the mortgage market. Chartered banks, which are federally regulated by the Office of the Superintendent of Financial Institutions (OSFI) in accordance with stringent Basel III standards, make up a large share of the mortgage market with slightly more than 80% of market share (Canada Mortgage and Housing Corporation, 2024_[33]). They are subject to stringent microprudential guidelines (Guideline B-20 on residential mortgage underwriting), which require, for example, stress testing for mortgage lending. In 2023 and 2024, OSFI further reinforced some of its guidelines. These stringent standards

should help protect banks from potential mortgage fallouts. OSFI has also raised the Domestic Stability Buffer (DSB), a capital add-on for domestically systemically important banks, to 3.5% of total risk-weighted assets in November 2023, and introduced a loan to income (LTI) limit of 450% at the institutional level for newly originated uninsured mortgage portfolios in November 2024. These measures are welcome. OSFI should stay vigilant and maintain stringent regulation given the significant mortgage market risks in the financial system (see also discussion further above).

The risk of borrowers shifting to less regulated, non-bank lenders has not materialised so far. While chartered banks are federally regulated, non-banks are either provincially regulated (such as in the case of credit unions) or less regulated. A potential concern is that households shift to non-bank lenders to finance or renew mortgage loans if they do not meet the requirements of chartered banks in situations of higher financial strain. However, this does not appear to be the case. Mortgage lending by non-bank financial institutions increased at a similar rate as the one of chartered banks and the market share of non-banks in mortgage lending has remained low (around 5% for non-bank, non-credit union mortgage lenders) and broadly stable (Canada Mortgage and Housing Corporation, 2024_[33]). Past *Survey* recommendations to strengthen the coordination between federal and provincial regulators and more closely monitor the non-banking mortgage sector remain valid.

Another segment of the non-bank financial sector, the asset management sector (e.g. pension funds, investment funds and insurance companies) has continued to build up leverage. The last *Survey* highlighted concerns regarding the deterioration in liquidity of the sector, which could entail a destabilising sell-off in fixed-income assets. While there are signs that the asset management sector has increased the holdings of liquid assets in Canada, hedge funds and pension funds have further increased their leverage over the last year, through an increased borrowing in the repurchase agreement (repo) market (Bank of Canada, 2024_[23]). This could pose challenges and contribute to market volatility in the case of a rapid unwinding of hedge funds' positions. Also, hedge funds partly rely on banks for short-term funding. Canada stands out as one of the G7 countries with the largest bank exposure to other (non-bank) financial institutions (which include hedge funds) with a share of more than 4% of total banks' assets (International Monetary Fund. Western Hemisphere Dept., 2024_[34]). This trend highlights the persistent vulnerabilities and risks within the asset management sector and the interconnectedness of the system, necessitating vigilant monitoring.

Recommendations in past Surveys	Actions taken since the previous Survey	
Monetary Policy		
Continue to shrink the central bank's balance sheet and stand ready to raise the policy rate further as warranted to bring inflation sustainably back to target.	The Bank of Canada has reduced its balance sheet by more than 40% since the start of QT.	
Mortgage-borrowing oversight and regulation		
Tighten mortgage insurance to cover only part of lenders' losses in case of default. Keep increasing the private-sector share of the market by gradually reducing the cap on the Canada Mortgage and Housing Corporation CMHC insured mortgages.	Concern about the extent of federal government involvement in mortgage markets via CMHC has diminished as CMHC's market share of mortgage insurance has fallen considerably following a tightening of rules about eligibility for its insurance between 2014 and 2020 (private insurers did not follow suit). The size of the insured market has also shrunk over time, in particular due to the maximum insurable house value set at CAD 1 million (augmented to CAD 1.5 million in 2024).	
Monitor the unregulated mortgage-lending sector more closely to improve understanding of risk exposures. Bolster cooperation and information sharing between federal and provincial financial regulators.	The Canadian authorities are monitoring shadow-banking entities, including through their participation in the Financial Stability Board's information-sharing exercises.	

Table 1.5. Past OECD recommendations on monetary policy and financial-sector regulation and actions taken

1.3. While deficits are low, structural challenges to fiscal policy exist

1.3.1. Deficit and debt levels have decreased rapidly from pandemic-related increases

Canada has reduced its fiscal deficit more rapidly than other OECD countries following the pandemic-related surge. The consolidated budget balance across all levels of government stood at 0.1% of GDP and the primary budget balance at 1.8% of GDP in 2023 (Figure 1.18). General government gross debt (adjusted for pension liabilities) came down by 25% of GDP since the pandemic to 104% of GDP in 2023. In Canada, greater attention is paid to net debt (see Box 1.7), which recorded at 11% of GDP in 2023 (net debt adjusted for pension liabilities). This is close to the level of 15% of GDP observed before the pandemic.



Figure 1.18. General government budgets are lower than in other countries

Note: Shaded areas indicate projections. Euro area 17 includes countries which are both Euro area members and OECD members. Source: OECD Economic Outlook database.

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However, new budget measures in 2023 and 2024 implied significantly higher public spending, leading to the opening of a budget deficit in 2024. The consolidated budget balance of the general government widened significantly from 0.1% of GDP in 2023 to -2.1% in 2024, and the primary budget balance from 1.8% to -0.3% of GDP. This significant increase in 2024 is also in part attributable to a one-time payment of CAD 23 billion (0.7% of 2024 GDP) for the compensation for those harmed by discriminatory underfunding of First Nations Child and Family Services (Government of Canada, 2023_[35]). General government gross debt (adjusted for pension liabilities) increased to 107% of GDP in 2024, although net debt (adjusted for pension liabilities) declined to 8% of GDP. The significantly higher structural spending in 2023 and 2024 affected both federal and provincial budgets. On the federal side, the last budgets included new spending measures, net of new revenue-raising measures, of CAD 82 billion (2.9% of 2023 GDP) from the fiscal year 2022-2023 to the fiscal year 2028-2029 (Government of Canada, 2023_[36]). These measures pushed up long-term spending needs, especially as several important multi-year social reform programmes have been implemented – such as the Early Learning and Childcare Program, the Canada Disability Benefit, the National Pharma Care and Dental Care Plan. Effective expenditure control remains crucial.

Box 1.7. Measuring Canada's debt

Reporting of public debt within Canada focuses mostly on net public debt (gross liabilities minus financial assets). This reflects the fact that Canada has important financial assets holdings, also related to its long-term funded pension plans. Countries, like Canada and Norway, are generally better assessed using net debt to account for their ability to offset liabilities. Canada's debt metrics (both gross and net) include assets and liabilities relating to public-sector employee pensions. This reflects good accounting practice and efforts to ensure long-term fiscal sustainability. In its analyses, the OECD employs gross debt due to the challenges of international comparability in asset valuation – for example, the varied approaches to estimating the assets of state-owned enterprises across different countries. Also, gross debt better reflects the short-term liability burden as many financial assets are not immediately accessible for debt servicing, because they reflect long-term obligations. To maintain the consistency of gross debt figures across countries, gross debt figures are adjusted by excluding unfunded pension liabilities included in some countries' debt figures. This adjustment enhances comparability with those countries where public-sector pension commitments are not represented on the general government's balance sheet.

Canada's gross consolidated general government debt (unadjusted for pension liabilities) stood at 117% of GDP at the end of 2024 and adjusted gross consolidated general government debt at 107% of GDP (Figure 1.19). Net debt of the general government (unadjusted for pension liabilities) recorded at 18% of GDP and adjusted net debt at 8% of GDP at the end of 2024. In unadjusted terms, federal net debt stood at 30% of GDP and provincial and territorial debt at 13% of GDP. Local governments had very low net debt of 2% of GDP. This was partly counterbalanced by the net financial worth of the Canada Pension Plan (CPP) and Quebec Pension Plan (QPP) of 26% of GDP.



Figure 1.19. Net debt is very low

government general government (OECD) government (OECD) Note: Data for the general government gross and net debt come from OECD, data for government subsectors from Statistics Canada. Nominal GDP (in local currency) from OECD is used as denominator for government subsectors' net debt ratios. A negative debt signifies a net financial worth.

Source: OECD Financial indicators dashboard: Government; and Statistics Canada.

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Financial assets of the consolidated general government (including pension plans) amounted to 99% of GDP in 2024. In 2023, about37% of financial assets, or 33% of GDP, were held by public pension plans (essentially CPP and QPP), which are partly earmarked for the payment of future benefits. Pensions plans can invest in a broad portfolio of assets, including public and private equities, government bonds, loans, real estate and other (OECD, 2024_[37]). In 2023, they held broadly 65% of their assets in equity. The federal government held financial assets equivalent to about 25% of GDP, while the remaining assets are mostly held by provincial and territorial governments. Of the consolidated general government funds (around 40% of total financial assets). Smaller proportions are held in debt securities (13%), loans (20%), and other accounts receivable (19%).

Several provincial governments have also introduced significant new spending programmes due to high spending pressures from population growth, infrastructure needs, and new social programmes, worsening the provincial budget outlook. Provinces like Ontario, Quebec, and British Columbia have balanced budget rules, which have been either suspended due to "exceptional circumstances", as in Ontario, or will now be achieved much later, such as in Quebec only in 2029-2030. The provincial budgets did not yet entirely account for the worsening economic outlook due to trade tensions. While some of the additional spending is justified, others, such as the across-the-board tax rebate of CAD 200 in Ontario in 2025 lacked an economic justification. As soon as trade tensions subside, provincial governments should ensure enforcement of balanced budget rules and disactivate the escape clause. Increased spending pressures on provinces should be managed through both enhanced own-revenue generation and sufficient federal government transfers.

The worsening economic outlook due to the trade tensions is expected to further weigh on the fiscal outlook. Given the comparatively favourable fiscal position, Canada should let automatic stabilisers operate to attenuate the negative impact of the trade shock on the economy. Any additional fiscal support that the government may decide to introduce, should be timely, targeted and temporary. If the tariff shock becomes prolonged and has more severe economic consequences, it will be important to allow the economy to adjust to the new environment without safeguarding specific businesses or sectors. Fiscal policy should rather support long-term growth drivers, such as by strengthening investment expenditures or innovation (see Chapter 4). Finally, if the fiscal stance eases, it will be important that is done in good cooperation with monetary policy. This has not always been the case. For example, fiscal policy was expansionary in 2024 while monetary policy has been restrictive in 2023-2024. Consequently, the accommodative fiscal policy has partly counterbalanced the restrictive stance of the Bank of Canada to fight inflation.

1.3.2. Bringing down public debt remains a key objective in the medium term, once trade tensions subside

Successive Canadian governments have placed significant emphasis on maintaining public debt at low and sustainable levels. As a result, both the gross and net debt-to-GDP ratios in Canada are lower than those in many other OECD countries. Risks of sovereign stress are limited. The gross debt level (adjusted for pension liabilities), which receives greater focus in the international context, still has shown a trend increase after the Great Financial Crisis and stands slightly above 100% of GDP (Figure 1.20). While debt levels remain low in international comparison, reducing the government debt in the medium-term can provide additional fiscal space to respond to future economic crises and address long-term fiscal challenges, while maintaining debt sustainability.

Long-term fiscal simulations indicate moderate concerns regarding debt sustainability. The gross debt-to-GDP ratio is expected to broadly stabilise, before slightly increasing again in the outer years, if the primary deficit remains at projected 2026 levels and age-related spending increases are offset (Figure 1.21). Not counteracting age-related spending pressures would, however, lead to unfavourable debt dynamics. Aging-related costs impose a relatively limited burden on Canada's public finances compared to other OECD countries thanks to long-term funded public pension plans. Spending on health and long-term care, pensions and other areas (excluding the energy transition) would still increase by about 3.1% of potential GDP in Canada by 2060 (Guillemette and Château, 2023_[17]). An ambitious decarbonisation of the economy could be an additional source of fiscal pressure, as mitigation costs could be as high as 5% of baseline GDP in Canada by 2050, given currently high per capita CO2 emissions (Guillemette and Château, 2023_[17]). Implementing structural reforms, as outlined in Box 1.5, would bring debt levels lower. A stronger consolidation than currently envisaged would set the debt-to-GDP ratio on a downward trajectory. For example, gradually improving the primary balance to 0.25% of GDP – the level achieved before the COVID-19 crisis – between 2027 and 2029 and keeping it at this level would bring the gross debt-to-GDP ratio below 100% by 2035.



Figure 1.20. Gross debt is above 100% of GDP



StatLink and https://stat.link/9ft0lz

Figure 1.21. Debt is expected to broadly stabilise without further reforms



Note: The scenarios are based on the OECD economic projections until 2026 and the OECD long-term model thereafter. The "no-policy-change" scenario (dotted brown) assumes a constant structural primary balance of 0% of potential GDP from 2026 onwards. The scenario with ageing costs (brown) adds spending pressures from health care, long-term care, and pensions from OECD estimations (Guillemette and Château, 2023_[17]). The scenario with structural reforms (green) adds the impact of structural reforms elaborated in Box 1.5 (reforms 1, 2, 3a, and 4) to the "no-policy-change" scenario with ageing costs.

Source: OECD simulations based on OECD Economic Outlook and the OECD Long-term Model.

StatLink ms https://stat.link/hqmrzn

The fiscal framework in Canada is very flexible, without legislated fiscal targets or formal fiscal rules. Fiscal policy is mainly guided by political commitment to self-imposed fiscal anchors. The federal government has committed to keeping federal deficit-to-GDP ratios on a declining path and below 1% from 2026-2027 onwards. Federal debt-to-GDP-ratios should decrease in 2024-2025 and remain on a declining path thereafter (Government of Canada, 2024_[10]). Several provinces have similar self-imposed fiscal anchors (Ontario, Québec, British Columbia and Manitoba also have legislation that imposes constraints on fiscal policy). However, some recent fiscal measures have put these fiscal anchors at risk. The government should continue to demonstrate strong commitment to its fiscal anchors in normal times and safeguard overall fiscal credibility. Strong future spending pressures from ageing, greening, defence and other policy priorities can make the current flexible fiscal framework vulnerable to incremental spending increases.

While relatively low debt levels in international comparison suggest that this flexible framework has worked well in the past, a stronger formalisation of fiscal anchors could offer additional advantages to help safeguard these achievements for the future. It could strengthen the commitment to targets, improve accountability on fiscal choices, better inform policy decisions and communicate more effectively on fiscal trade-offs. Empirical evidence has shown that fiscal rules are generally associated with better fiscal outcomes, even if the causal relationship is complex and influenced by the design and implementation of the rules (Caselli and Reynaud, 2020_[38]; Heinemann, Moessinger and Yeter, 2018_[39]). Monitoring compliance with current fiscal anchors could also be improved. As regards provinces and territories, previous *Surveys* have made suggestions for more independent oversight of provincial budgets.

1.3.3. The tax structure could be better aligned with growth- and environmental objectives

Canada's tax revenues as a percentage of GDP align closely with the OECD average, reaching 35% of GDP in 2023. The composition of these revenues is however slightly distinctive, with a higher proportion originating from the taxation of income, while the contribution from the taxation on goods and services remains comparatively low (Figure 1.22). As underscored in previous Surveys, Canada has room to make its tax structure more growth friendly, by shifting a higher proportion of taxation from income to consumption. According to the OECD Revenue Statistics, revenues from VAT/GST represent only about 13% of total tax revenues in Canada, compared to an average of 21% in the OECD. International evidence shows that consumption taxes weigh less on growth than taxes on income or profits (Johansson, 2016[40]). Previous Surveys have recommended starting with gradually phasing out zero-rates for items such as basic groceries, agricultural products, and prescription drugs to expand the GST/HST tax base. This could be offset by increasing income support, for example via increasing the existing GST/HST tax credit, for lowand modest income households. In return, personal income taxes could be reduced to make the measure revenue neutral. For example, taxes for individuals with lower attachment to the labour market could be reduced to increase participation. The temporary removal of GST/HST for qualifying goods from December 2024 to February 2025 moved in the opposite direction and was undesirable both from an economic and tax perspective. The measure lacked proper targeting for low-income households, also applied to non-essential goods including unhealthy food products and alcoholic beverages, and further eroded the consumption tax base.

A notable aspect of the Canadian tax system is the high contribution from property taxation, notably from recurrent taxes on immovable property. Revenues from recurrent taxes on immovable property make up almost 9% of total tax revenues, compared to only 3% for the OECD. Recurrent taxes on immovable property are considered one of the more economically efficient forms of taxation (OECD, 2022_[41]). Additionally, these tax revenues primarily go to municipalities, providing a steady and direct source of revenue for local finances. Nevertheless, there is still room for some improvements within the current system. Some municipalities levy higher municipal property taxes on multi-purpose rental properties than on single-detached housing (Dachis, 2024_[42]). Harmonising property tax rates across various dwelling types could make property taxation more efficient and support housing affordability (see Chapter 2).

Figure 1.22. Government revenues are close to the OECD average but rely more heavily on labour income

Decomposition of tax revenue, 2023 or latest available, % of GDP



Note: Taxes on income include taxes on profits and capital gains. Unallocable taxes on income refer to receipts that cannot be identified appropriately as income taxes from individuals and corporate enterprises.

Source: OECD Global revenue statistics database.

StatLink and https://stat.link/x1djo8

Canada also has room to raise environmental taxes. Taxation on energy and transportation accounts for a mere 0.8% of GDP (or 2.6% of total tax revenues), a figure that is much lower than the OECD average of 1.3% (Figure 1.23). Most of this revenue – approximately three-quarters – is generated from energy taxes, which include carbon tax revenues. Canada had an extensive and well-designed carbon pricing framework in place. The federal carbon pricing system set minimum federal standards, while granting provinces and territories the flexibility to implement their own carbon pricing system. All direct proceeds from the federal carbon pricing system were returned to the province or territory of origin, which were than redistributed to households, small businesses and indigenous communities. Central to this framework is a minimum carbon price, set at CAD 95 per tonne of greenhouse gas (GHG) emissions in 2025, with a planned annual increase of CAD 15 per year to CAD 170 by 2030 (Government of Canada, 2021_[43]; Government of Canada, 2024_[44]).

Carbon pricing has played a crucial role in reducing Canada's GHG emissions and reaching its targets for 2030 (OECD, 2023_[45]). However, the integrity of the system was weakened for the first time in 2023 by a temporary three-year suspension on deliveries of heating oil under the federal fuel charge of the federal carbon pricing system, which has subsequently led to rising pressure for additional exemptions. In spring 2025, the government has made regulations that cease the application of the federal fuel charge, i.e. the consumer part of the carbon price, and removed requirements for provinces to have a consumer-facing carbon price. This means that, as of April 1, 2025, the applicable fuel charge for all types of fuels is set to zero. The other component of the carbon price, the Output-Based Pricing System (OBPS) – a regulatory emissions trading system for industry – remains in place. The federal fuel charge was estimated to contribute between 8% and 14% of incremental emission reductions by 2030 (Canadian Climate Institute, 2024_[12]). The removal is unfortunate, as it diminishes the carbon price signal to consumers and reverses the previously implemented gradual phase-in. Canada should reapply the fuel charge and improve communication on the benefits of the system. Lump-sum payments to households should continue to be employed to address distributional concerns, such as via the Canada Carbon Rebate (formerly the Climate Action Incentive Payment). Apart from energy taxes, there is also scope to expand congestion and road-use charges as well as other transport taxes in Canada.

Figure 1.23. Environmentally related tax revenues are low



Environmentally related tax revenue, 2022 or latest available, % of GDP

Note: CAN: Missing data for pollution and resources tax bases, data refer to 2021; COL: Pollution and resources tax bases are confounded. Source: OECD Environmental Related Tax Revenue database.

StatLink and https://stat.link/jsn5dm

Since the last *Survey*, the Canadian government has implemented some additional smaller changes to the tax system. Budget 2024 introduced higher capital taxation, by increasing the inclusion rate for capital gains from one half to two thirds for corporations, and from one half to two third on the portion of capital gains that exceed CAD 250 000 for individuals (Government of Canada, 2024_[10]). Capital gains from the sale of the principal residence and other protected saving and retirement accounts remain exempt from taxation. In return, a lower inclusion rate for capital gains up to CAD 2 million from lifetime entrepreneurial activity was introduced to encourage entrepreneurship (Government of Canada, 2024_[10]). Budget 2023 introduced reforms to the Alternative Minimum Tax (AMT), a mechanism that guarantees a baseline level of taxation for individuals and trusts benefiting from specific exemptions, deductions, or tax credits (Government of Canada, 2023_[36]). These reforms encompass an increment in the AMT rate, together with an increase in the exemption threshold. Other recent tax changes aim to stimulate the supply of housing (see Chapter 2).

These recent tax reforms have been mainly driven by the goal of enhancing tax fairness and entrepreneurship. Relevant studies show that Canada's income tax system is progressive, both in what regards labour and capital income. Effective or marginal effective income tax rates increase along the income distribution (Hourani et al., 2023_[46]; Bazel, 2024_[47]). However, the increase of effective tax rates is steeper moving from lower to middle incomes than from middle to higher income levels. This could be an area for reform if the goal is to enhance progressivity across the entire income distribution. Regarding the taxation disparity between labour and capital income, Canada, like most OECD countries, imposes higher taxes on labour than on capital (Hourani et al., 2023_[46]). However, this difference remains relatively stable across income levels in Canada due to fixed deductions on capital gains. The recent changes in the taxation of capital gains should enhance progressivity slightly at the higher end of the income distribution but will also strengthen incentives to plan capital gains over time to avoid the tax increase.

Canada also moved ahead with the introduction of a Digital Services Tax (DST). It has enacted a 3% tax on digital services revenues in 2024, with the first year of application covering taxable revenues earned since 2022. The tax applies to businesses with more than EUR 750 million in total worldwide revenues and more than CAD 20 million in taxable service revenues in Canada. Canada initially proposed the DST in its 2020 Fall Economic Statement, outlining a 3% tax in the 2021 Budget, which would have applied beginning of 2022. The enactment was deferred until the end of 2023, pending advancements of global discussions on Pillar One of the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting. PBO estimates that the DST will generate about CAD 1.2 billion in annual revenues

(Parliamentary Budget Office (PBO), 2023^[48]). Taxation of digital businesses should be better addressed through a coordinated international approach, and international efforts to implement Pillar One should continue.

1.3.4. Spending reviews could be rendered more systematic and comprehensive

Spending reviews are an important tool for assessing and improving the efficiency and effectiveness of government spending. Several studies show their usefulness to support governments in meeting their fiscal objectives, improve budget allocation for a better alignment with government priorities, and improve spending efficiency and quality over time (Doherty and Sayegh, $2022_{[49]}$; Tryggvadottir, $2022_{[50]}$; Bova, Ercoli and Vanden Bosch, $2020_{[51]}$). Canada conducts periodic spending reviews, at a non-regular interval. A new spending review was announced in Budget 2023 with the goal of reducing the scale of growth in government spending back to a pre-pandemic path. The review is not intended as an overall savings plan but is aimed at reallocating government spending across departments to priority areas.

Most of the ongoing review is on operating expenses, excluding some major transfer programmes. For the first phase, about half of the reductions are intended to come from cutting spending on consulting, other professional services and travel, while the other half are broader "effectiveness gains" not related to specific spending programmes or areas (Government of Canada, 2023_[36]). The implementation process is mostly bottom-up and gives departments the opportunity to propose reallocations from across their portfolio, which are then reviewed by the Treasury Board.

The recent initiation of a spending review in Canada is a welcome step to refocus and prioritise government spending, which saw a significant rise during the pandemic. Present and future spending pressures in Canada warrant a thorough analysis of existing spending programmes and priorities. However, the ongoing review process shows deficiencies. In contrast to Canada's sporadic approach, triggered mainly by political pressure, it is now best practice among OECD countries to conduct more systematic and periodic spending reviews. Countries like the Netherlands and Denmark engage in targeted annual reviews, while Ireland undertakes regular assessments, thereby establishing a robust institutional structure and enhancing the capacities in the Ministry of Finance and respective ministries in executing these reviews effectively (Doherty and Sayegh, 2022_[49]).

Given the substantial current and prospective fiscal pressures, Canada's spending review also warrants more ambitious targets. The savings and reallocations projected at present are relatively modest compared to recent spending increments in budgets. Moreover, the first part of the review concentrates on a very specific spending area – consultancy and other professional services – which has attracted strong media attention in Canada (The Globe and Mail, 2023_[52]). For the remaining part, it focuses mainly on ad-hoc budgetary savings within departments, lacking a central theme or objective. A more strategic approach to the spending review, pinpointing two or three overarching, high-priority areas (or areas deemed non-essential), would likely yield more effective fund reallocation aligned with core government objectives (Doherty and Sayegh, 2022_[49]; Tryggvadottir, 2022_[50]). As it stands, the review in progress is neither exhaustive nor sufficiently focused.

Furthermore, this review could have served as an opportunity to scrutinise fiscal measures and spending initiatives related to the COVID-19 crisis, alongside projections of medium-term fiscal challenges and pressures, adopting a more proactive approach towards expenditure management (Lindquist and Shepherd, 2023_[53]). Lastly, there is ambiguity in the communication regarding the spending review, its purpose (achieving savings or reallocations), and the achieved objectives. Transparent communication and clarity about the review process generally improve the understanding and integrity of the process (Tryggvadottir, 2022_[50]). A dedicated report detailing the objective, scope, targets, and comprehensive outcomes of the review would be beneficial to better track the achievements of the spending review. This point has been also made by the Canadian Fiscal Council (Parliamentary Budget Office (PBO), 2024_[54]). Canada should use the current review to explore how such spending reviews can be integrated into the budgetary framework in a more systematic, recurrent, and comprehensive manner.

Table 1.6. Past OECD recommendations on fiscal policies and actions taken

Recommendations in past Surveys	Actions taken since the previous Survey			
Fiscal policy				
Ensure that fiscal policy continues to work in the same direction as monetary policy by tempering excess demand.	Fiscal policy was expansionary in 2024, while monetary policy switched from restrictive to neutral.			
Fiscal rules and budgeting				
Maintain a credible medium-term plan for lowering federal government debt. This should include the detailing of spending efficiency plans.	The federal budget sets out fiscal objectives to keep federal deficits under 1% of GDP beginning in 2026-2027 and to keep federal government debt on a declining path. Spending efficiency plans are formulated as overarching goals and do not contain details or set priorities.			
Rechannel strong resource revenues towards reducing public debt and/or towards stabilisation funds. Provinces should review royalty regimes in light of recent high commodity prices to ensure they can appropriately handle future surges in commodity prices.	Alberta has introduced legislative changes in 2023 to strengthen its <i>Heritage</i> <i>Savings Fund</i> , notably through retaining investment income within the Fund and making selective contributions to the Fund in 2023 and 2024. Saskatchewan has used higher resource revenues to reduce debt and invest in infrastructure. The federal government has used higher revenues mostly to finance stronger current spending.			
Establish provincial budget agencies, as in Ontario, or, better still, an agency reporting to the Council of the Federation that analyses fiscal forecasts and cost estimates for policy proposals.	No action taken.			
	Taxation			
Maintain shift towards more indirect taxation through higher rates of goods-and-services tax as a policy objective for the longer term. Eliminate GST zero rating for basic groceries.	No action taken. The temporary GST/HST removal for qualifying goods from December 2024 to February 2025 went in the opposite direction and eroded the consumption tax base.			
Reconsider preferential tax rates for small businesses.	No action taken.			
Reduce personal income tax expenditures not warranted on economic or equity grounds, notably the non-taxation of private health plan benefits, capital gains on principal residences and some small business shares.	No progress on major issues.			

MAIN FINDINGS	RECOMMENDATIONS (key ones in bold)		
Monetary policy an	d financial stability		
Headline and core inflation have reached the 2% target. Tariffs exert two opposing influences on inflation, they increase import prices while simultaneously reducing demand, and hence prices.	Pursue a broadly neutral monetary stance in response to the anticipated trade shock. Be prepared to act in case negative risks to growth or prices materialise.		
The Bank of Canada has continued to normalise its balance sheet through quantitative tightening (QT). The Bank announced the end of QT for early March 2025.	Gradually return to routine balance sheet management as planned. Maintain a clear communication on balance sheet management.		
Household debt levels are high. The riskiness of mortgage lending and debt servicing costs continue to increase.	Continue to closely monitor housing market developments and mortgage market risks. Consider implementing borrower-based limits on debt servicing and debt to income for uninsured mortgages.		
The banking system has maintained capital and liquidity buffers above regulatory limits, and credit performance is strong. The Domestic Stability Buffer was increased to 3.5% in November 2023, and a Loan to Income limit was introduced in November 2024.	Stay vigilant and maintain stringent prudential regulation for chartered banks considering mortgage market risks. Strengthen coordination between federal and provincial regulators and closely monitor the non-banking mortgage sector.		
Hedge funds and pensions funds have increased their leverage. Banks' exposure to hedge funds is significant.	Continue to closely monitor risks in the asset management sector and close existing data gaps.		
Fiscal policy and	fiscal frameworks		
Fiscal deficits have been declining faster than in other countries after the pandemic-related increase, but the economic slowdown is expected to weigh on the fiscal outlook.	Allow the spontaneous deterioration of the fiscal deficit ("automatic stabilisers") in response to the trade shock.		
Past significant new fiscal spending measures at both the federal and provincial levels have increased long-term spending needs.	In the medium-term, bring debt on a declining trend in line with fiscal anchors, and ensure efficient expenditure control.		
Fiscal policy in Canada is mainly guided by political commitments on deficit and debt developments rather than formal fiscal rules.	Show strong commitment to self-imposed fiscal anchors and better monitor compliance with them. Strengthen communication on fiscal trade-offs and medium-term fiscal challenges.		
Several provinces are not returning to balanced budget rules, or only very gradually.	Provinces should show clear paths toward attaining their stated fiscal sustainability objectives (e.g. balanced budget rules for those that have them). Increased spending pressures should be managed through enhanced own-revenue generation and sufficient federal transfers.		
The federal government is conducting a new round of spending review for the federal budget. The spending review focuses mainly on operational expenses and ad-hoc savings.	Conduct more systematic and period spending reviews and broaden the scope of the current review. Strengthen transparency and communication about the current spending review.		
Taxation			
The share of revenues from indirect taxes (GST/HST) is comparatively low, while the share of revenues from personal and corporate income taxes is high.	Gradually increase GST/HST tax rates and move away from zero- rates for items such as basic groceries, agricultural products, and prescription drugs to fund a decrease in personal income taxes.		
Taxation on energy and transportation is low in OECD comparison.	Preserve the existing, comprehensive carbon pricing system, including the fuel charge for consumer. Consider increasing congestion and road-use charges.		

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2 Improving housing affordability

Katja Schmidt

Significant increases in house prices and rents in Canada in recent years have reduced housing affordability, which is one of the most pressing and important topics for many Canadian households. These challenges are no longer confined to housing in and around city centres and to the lowest income groups but have become a nationwide issue. Canada has implemented numerous policies to address these challenges, rightly focusing on increasing the overall supply of housing, including the availability of rental housing, and supporting vulnerable populations who often face the most pressing housing needs. This chapter further explores policies to increase housing supply, including reducing regulatory barriers and increasing housing density. It also examines options to expand the stock of affordable and social housing through financial initiatives and housing programmes and to enhance the efficiency of housing taxation. Strong cooperation across levels of government is required. Finally, since housing intersects with many policy areas, improving housing affordability will require policy action on labour shortages, infrastructure, and energy efficiency.

2.1. House price and rental increases have made affordability a critical issue

Housing affordability has become a pressing issue in Canada, characterised by rising housing prices since supply has not kept pace with demand. Real house prices have grown rapidly over the last two decades, stronger than in the United States or the Euro area (Figure 2.1, Panel A). The increase was particularly strong over the pandemic and until 2022. The slowdown of the housing market in the wake of the interest rate hikes led to a slight downward adjustment of real house prices in 2022 and in the first half of 2023. This correction was, however, relatively short-lived, and prices have been moving broadly sideways since mid-2023. Real house prices have outpaced the growth of real disposable incomes by about 60% since the Global Financial Crisis. In the United States and the OECD, the prices have risen broadly in unison with incomes (Figure 2.1, Panel B). The deterioration of price-to-income ratios accelerated during the pandemic.

Increasing house prices have also exacerbated rental market pressures. Rent prices have risen strongly in recent years (Figure 2.2, Panel A). Nominal rents grew on average by 6.3% in 2023 and 7.9% in 2024, exceeding earnings growth in both years (respectively 2.2% and 4.6%). The vacancy rate in the private rental market declined to a historically low level of 1.5% in 2023, before rising slightly to 2.3% in 2024 (Figure 2.2, Panel B). Turnover rates of rental apartments decreased, as renters were less inclined to move in view of strong rental price increases (Canada Mortgage and Housing Corporation, $2024_{[1]}$). High levels of net immigration (see Chapter 1), especially of international students and other non-permanent residents, has increase the demand for rental accommodation in recent years, especially in metropolitan areas. Some delayed catch-up effects from expired temporary COVID-19 rent controls and restrictions could also be at play.



Figure 2.1. House prices and price-to income ratios have risen strongly

Note: The CPI is used as deflator for house prices and the private consumption deflator for disposable income. Source: OECD Economic Outlook database; OECD Household Indicators dashboard; and OECD calculations.

StatLink and https://stat.link/7hndtb

The significant rise in house prices and rents has also pushed up inflation. Shelter accounts for nearly one-third (29%) of total consumption expenditures in the Canadian consumer price index (CPI). The shelter index includes both rents for new and existing rental leases and costs for owner occupied housing (these include mortgage interest costs, property taxes, homeowners' insurance premiums, maintenance and repairs, and other owned accommodation expenses, as well as a measure of replacement costs), as well as service costs for both. Due to its significant impact, shelter has been contributing between around 1.5 and 2 percentage points to inflation since mid-2021 (Figure 2.3).



Figure 2.2. Rents have increased sharply and rental vacancies are at a long-time low

StatLink ms https://stat.link/6lf1nj







A significant proportion of income is spent on housing-related costs in Canada. While housing affordability is a particular concern for low-income households, the issue is broader, affecting middle-income households, too. Direct housing-related spending (mortgage and rent payments) absorbed 19.3% of median disposable income in 2022 (OECD, 2024[2]). This is slightly more than in the OECD average of 18.5%. For low-income households, the housing cost burden is markedly higher, and significantly above the OECD average. Low-income households spent respectively 31% and 36% of disposable income on mortgage- and rent-related expenses (against 27% and 33% on OECD average). About 35% of low-income households are cost over-burdened (defined as when households spend more than 40% of disposable income on mortgage or rent), see Figure 2.4. This compares to a cost overburden rate of only 8% for the total population. Hence, housing affordability challenges disproportionately affect specific population segments such as low-income households. Analysis shows that addressing affordability challenges for low-income households yields the greatest economic returns (Canadian Centre for Economic Analysis, 2023[3]).

Largely echoing the link with low incomes, affordability challenges are more pressing for other vulnerable parts of the population, notably immigrants, elderly people, and single parent households. In 2021, Toronto metropolitan area census information shows that landed immigrants are more likely than the Canadian-born to live in housing that costs more than 30% of their (gross) income, and this gap widens for immigrants who have been in the country for less than 5 years (Ray and Preston, 2024_[4]). Housing affordability is also a concern for non-permanent residents, with just over half residing in affordable housing within the Toronto metropolitan area (Ray and Preston, 2024_[4]). This is exacerbated by the fact that more than 90 percent of landed immigrants live in Canada's metropolitan areas, where housing markets are less affordable, compared to just over two-thirds of those born in Canada (Statistics Canada, 2022_[5]). Other vulnerable populations, such as lone parent households, senior households or persons with disabilities also face higher housing affordability challenges (Thurston, 2023_[6]; Statistics Canada, 2022_[7]).

Figure 2.4. Low-income households are particularly at risk of housing cost overburden



Share of population in the bottom quintile of the income distribution spending more than 40% of disposable income on mortgage and rent, by tenure, in percent, 2022 or latest available

Note: Renters and owners refer to the aggregate share across both renters and owners. Source: OECD Affordable Housing database.

StatLink ms https://stat.link/hefytd

Other indicators also point to a declining housing affordability and an increase in housing stress in recent years. The share of rental units in payment arrears increased from 6.5% in 2022 to 7.8% in 2023 (Canada Mortgage and Housing Corporation, 2024_[1]). The share of rent in arrears is particularly high and increasing in some metropolitan areas: in Toronto metropolitan area it has reached 19.6%. For low-income households, the share of affordable rental units, defined as housing units with shelter costs that are less than 30% of before-tax income, is low across Canada and decreasing. The stock of such units was close to/practically zero in Vancouver, Ottawa and Toronto, and below 20% elsewhere in 2023 (Canada Mortgage and Housing Corporation, 2024_[1]). Homelessness has increased by 38% according to point-in-time counts conducted in late 2022 compared to 2018 (Government of Canada, 2023_[8]). A sizeable minority of households face core housing need, as defined by Statistics Canada (see Box 2.1).

Box 2.1. Core housing need

Statistics Canada has developed an indicator of core housing need, which is widely used for assessing housing related problems. The indicator is based on three thresholds: affordability (a household that spends less than 30% of before-tax income on shelter costs), suitability (a household that has enough bedrooms according to the National Occupancy Standard) and adequacy (a household that does not live in a dwelling in need of major repair). Core housing need refers to whether 1) a household's accommodation falls below at least one of the indicator's thresholds and 2) the household would have to spend 30% or more of its before-tax income to pay the median rent of alternative local housing of acceptable standard. Only private, non-farm, off-reserve Indigenous, and owner- or renter-households with incomes greater than zero and shelter-cost-to-income ratios less than 100% are assessed for core housing need in 2022, with affordability being the most important challenge (77.1% of households in core housing need) (Statistics Canada, 2024[9]). While the indicator was on a declining trend between 2016 to 2021, it recently picked up again from 9.5% in 2021 to 11.1% in 2022 (Statistics Canada, 2024[9]). The share of households in core housing needs was the highest in Peterborough CMA (18.5%), followed by Vancouver CMA (17.4%) and Toronto CMA (17.1%) in 2022 (Canada Mortgage and Housing Corporation, 2024[10]).

2.2. The decline in affordability has been driven by strong growth in demand and inadequate supply

The erosion of housing affordability since the second half of the 2010s has been mainly driven by an insufficient response of supply to an increase in the demand for housing. In addition, policy focused too much on expanding homeownership through demand-side support, which ultimately contributed to rising house prices, and cut back on affordable housing programmes. In more recent years, since the pandemic, temporary factors, such as strong net immigration, especially of international students and other non-permanent residents have exacerbated more structural, long-term pressures on the housing market. This has strained some segments of the housing market, notably rental markets in metropolitan areas.

Overall demand for housing has broadly outstripped supply since the second half of the 2010s. The demand for housing grew with income and population growth, and the long period of low interest rates. The construction of new housing units did not keep pace with increased demand. Household formation, that is the growth in the (net) number of households, reached about 215 000 per year in Canada over the period 2017-2022 (Parliamentary Budget Office (PBO), 2024_[11]; Parliamentary Budget Office (PBO), 2024_[12]) (Figure 2.5). It increased recently to a record high of 452 000 new (net) households in 2023, driven by very strong population growth. Household formation would be higher if attainable housing options existed (Parliamentary Budget Office (PBO), 2024_[11]). The net housing stock increased by a slightly lower rate (206 000 units over the period of 2017-2021). While accelerating lately to about 242 000 new housing units in 2023, the gap with the number of new households entering the housing market has widened, putting upward pressure on house and rental prices.

Figure 2.5. Household formation outstripped housing completions over the last years



Household formation and (net) housing completions

necessary to prevent a further deterioration in affordability.

Without further policy action, housing demand will likely continue to outpace supply in future years. Although recently announced targeted reductions in immigration will reduce the pressure on the housing market somewhat, the demand for housing is expected to remain high in the coming years. The Parliamentary Budget Office estimates that about 390 000 units annually (or 2.3 million new units in total) would be needed between 2025 to 2030 to close the existing housing gap and satisfy future demand from new household formation, assuming that the population evolves in line with updated government's plans (Parliamentary Budget Office (PBO), 2024_[12]). However, there are significant risks to achieving the targeted quick reduction in non-permanent residents, and the need for additional housing is likely to be larger in the short term. While precise estimates of housing needs are challenging to determine and ultimately hinge on economic and social developments, a significant increase in supply will be

The question arises as to why housing supply in Canada has not responded more strongly to increased demand. There has been a strong emphasis on single-detached housing and homeownership in Canada, like in other North American housing markets. This was supported by regulatory frameworks and – until recently – policies to promote homeownership. Single-detached dwellings make up 53% of the residential dwelling stock, compared to only 40% on OECD average, against 33% for flats and apartment buildings (Figure 2.6). The supply of single-detached dwellings is more constrained by the availability of buildable land in urban areas and the development of infrastructure in non-urban areas, which limits overall housing supply (Pârvulescu, Chen and Kavaslar, 2024_[13]; Gray, 2018_[14]). Empirical estimates by the OECD indicate that the long-run supply elasticity in Canada is not significantly different from 1 (Cavalleri, Cournède and Özsöğüt, 2019_[15]). However, regional disparities exist, with a lower elasticity in populous provinces like British Columbia and Québec (Bétin and Ziemann, 2019_[16]), potentially leading to stronger upward price pressure in these provinces.



Figure 2.6. More than half of the dwelling stock comprises detached houses

Occupied residential dwelling types, % of the total residential dwelling stock, 2022 or latest available year

Note: The classification and terminology on types of dwelling may differ slightly from country to country. In general, detached houses refer to dwellings having no common walls with another unit. Semi-detached houses refer to dwellings sharing at least one wall or a row of (more than two) joined-up dwellings. Flats/apartments refer to dwelling units in a building sharing some internal space or maintenance and other services with other units in the building. Other refers to accommodations that are situated in buildings that are for use other than housing (schools, etc.) and mobile homes (caravans, houseboats, etc.). Housing starts in all centres 10 000 and over, Canada, monthly seasonally adjusted values at annual rates, 6-month moving averages.

Source: OECD Affordable Housing database.

StatLink and https://stat.link/6j98fu

Rules regarding land development and usage are crucial factors that influence the types of housing units constructed. Such rules include zoning restrictions (so called zoning bylaws) and land use regulations, but also factors such as government charges and environmental standards. In Canada, provinces establish the overarching framework and guidelines for land use, while municipalities set zoning bylaws within this framework. Residential zoning was until recently strongly tilted towards single-detached housing, even in metropolitan areas (apart from the hyper centres). In 2022, the share of residential land zoned exclusively for single-detached units stood at 64% in the metropolitan area of Vancouver, 62% in Calgary, 21% in Edmonton and 54% in Toronto (Allen, 2022_[17]). High government charges can also weigh on residential development and limit supply responsiveness. Government charges are usually levied by municipal governments on land development, and include permit fees, municipal fees and development charges. High and rapidly increasing government charges in some municipalities might have constrained demand responsiveness. They can also lead to a higher concentration among developers in housing markets, as some charges present an upfront payment for developers, which might favour larger developers, and an incentive to build more expensive (often high-rise) units, since charges are mostly levied by unit. Long approval times and burdensome permitting processes are additional factors that explain why construction has not been more responsive to demand in Canada.

There is also a mismatch between the types of housing units available and the needs of potential residents, culminating in a shortage of rental housing. Purpose-built rental housing, which covers units intended for long-term rent in the private rental market, comprised only a small share of new construction in Canada for a long time. Over the decade from 2010 to 2019, only about 18% of new housing units were for long-term rental occupation, compared to 46% for owner occupation and 36% for condominiums (which can be either renter- or owner-occupied) (Figure 2.7). Only 33 000 renter-occupied units per year were added to the market over this period. Consequently, the stock of available purpose-built rental units is also relatively old, over two-thirds of purpose-built rentals have been built before 1980 (Jean, Bartlett and Norman, 2023_[18]).

Until the policy shift in 2017 with the launch of the National Housing Strategy, policy efforts to increase the supply of rental units have been minimal, while homeownership has been actively supported through various policy tools, such as loan programmes, mortgage insurance support, first-time buyer savings plans, and other incentives and tax credits. However, rising house prices, which have made homeownership less affordable, along with a shift in the composition of households entering the housing market – characterised by smaller households in recent years – and high immigration have driven up the demand for rental housing. Construction has been responding in part and the number of new rental units has increased over the last three years. However, this has not yet been sufficient to meet the accumulated demand in this segment. This demand could also not be filled by condominium rentals which primarily cater to the high-end rental market.

Figure 2.7. Few rental units have been added to the market for many years



Number of started housings per year, by main market type, in all centres of ten thousand inhabitants and over

Source: Statistics Canada.

StatLink and https://stat.link/7t1jma

Canada also has a small supply of social housing. The social housing stock represents only about 3.5% of total dwellings in 2022, compared to 7.1% in the OECD average (Figure 2.8). Affordable and social rental housing units are declining in number (National Housing Council, 2024[19]). In 2021, about 3.8% of all households lived in social and affordable housing (subsidised housing) in Canada (Statistics Canada, 2022[7]). Certainly, social housing models differ widely across OECD countries (OECD, 2021[20]). Some countries maintain significant social housing stocks, while others rely more on direct financial support or transfers to households to cover a share of housing costs. However, in Canada, the private rental market is small, reducing the availability of rental options. Canada has only recently introduced a Canada-wide housing benefit, the Canada Housing Benefit (CHB), which started to provide financial assistance to eligible households in 2020. The benefit is a joint initiative between the federal and provincial governments, aimed at providing financial assistance to low-income households in the private rental market. While benefits help alleviate the strain on household budgets, they remain targeted demand-side measures that do not address the broader lack of rental housing supply.

Figure 2.8. The social rental housing stock is small in Canada

Share of social rental dwellings to total number of dwellings, 2022 or latest year available



Note: The social rental housing stock covers a range of type of social housing for different countries. For Canada, data exclude units managed by the Société d'habitation du Québec (SHQ) for the province of Québec. For details of other countries, refer to the OECD affordable housing database. Source: OECD Affordable Housing database.

StatLink and https://stat.link/q3ik81

Like many other OECD countries, Canada has also seen significant increases in construction costs, which have driven up house prices on the supply side (OECD, 2022_[21]). Between 2017 and 2023, construction costs for residential housing in 11 metropolitan areas increased by over 75%, with particularly sharp rises of nearly 20% per year in 2021 and 2022 (Figure 2.9). In addition to the rising cost of construction materials, Canada is also experiencing skilled labour shortages in the construction sector, which may contribute to driving up prices and wages in the sector. Vacancies in skilled trades related to housing construction reached record highs in 2022 (Statistics Canada, 2024_[22]; Statistics Canada, 2022_[23]). They decreased since then, thanks in part to an increase in new registrations in these professions, but they remain historically high.

Figure 2.9. Residential construction prices have skyrocketed



Residential building construction price index in fifteen metropolitan areas

Note: The fifteen metropolitan areas cover St. John's, Halifax, Moncton, Quebec, Montréal, Ottawa, Toronto, London, Winnipeg, Regina, Saskatoor Calgary, Edmonton, Vancouver, and Victoria. Source: Statistics Canada.

StatLink and https://stat.link/h89a60

2.3. Policy efforts to restore housing affordability need to be stepped up

2.3.1. Several policy campaigns aimed at increasing housing supply have been implemented in recent years, or are underway

The Canadian authorities have recognised the housing challenges and have introduced several policies aimed at addressing housing affordability. The *National Housing Strategy* (NHS), launched in 2017, is a 10-year national plan of CAD 115 billion (including cost-matched funding by provinces and territories) aimed to boost housing supply and support vulnerable populations. The programme comprises direct spending support and loans. In 2019, the federal parliament passed the *National Housing Strategy Act* (NHSA). The NSHA recognises the right to adequate housing as a fundamental human right and defines an obligation to have a national housing strategy. It also established a National Housing Council as an advisory body on housing policies. Since 2023, there have been several new housing initiatives and numerous measures proposed to complement the NHS and address persistent affordability challenges. Notably, the *Housing Accelerator Fund* was launched in 2023 to encourage municipalities to reform zoning laws to allow for higher-density housing. The Fall Economic Statement 2023 proposed the exemption from Goods and Services Tax (GST) for new purpose-built rental projects from 2023 to 2030 to support rental construction (Government of Canada, 2023_[24]). It also established the Department of Housing, Infrastructure, and Communities Canada to enhance policy coordination in these areas.

These policies were further reinforced in 2024 by the *Canada's Housing Plan* 2024 (Government of Canada, 2024_[25]). Coupled with Budget 2024, the plan strengthens some existing housing policy measures and contains several new supply-side but also demand-side policies. Important new supply-side measures are additional efforts to unlock public land for construction, a new *Canada Housing Infrastructure Fund* to support infrastructure needs and further policies to spur the construction of rental housing (Government of Canada, 2024_[26]). The Budget 2024 housing measures amount to CAD 8.5 billion over 6 years (0.3% of 2023 GDP). As part of the Budget plan, there is a target for 3.9 million new homes by 2031. This ambitious goal implies 2 million additional homes on top of the 1.9 million homes that are already expected to be built by 2031. Box 2.2 gives a more detailed overview of the main federal housing programmes launched since 2017.

The policy initiatives also encompass a number of demand-side measures, particularly aimed at supporting firsttime homebuyers. In 2022, the federal government doubled the first-time home buyer's tax credit (HBTC) from CAD 5 000 to CAD 10 000, providing first-time home buyers with up to CAD 1 500 in tax savings. Further measures include a tax-free *First Home Savings Account* and the increase of the maximum amortisation period for first-time homebuyers for newly constructed homes to 30 years. A previous measure, which provided shared equity loans to supplement the down payment for first-time homebuyers, was discontinued in 2024. Such demand-side measures generally fuel higher prices and further exacerbate housing market pressures (Andrews, Caldera Sánchez and Johansson, 2011_[27]). They should be avoided (see also section 2.3.6). The government has also introduced a nationwide levy on vacant homes, known as the *Underused Housing Tax* (UHT), which applies to properties owned by foreign nationals. Additionally, there is a federal prohibition on the purchase of residential properties by non-Canadians in place until 2027. However, both measures are largely symbolic, as foreign investors play a limited role in Canada's housing market. The vacancy tax for foreigners is expected to generate only minimal revenues (Parliamentary Budget Office (PBO), 2024_[28]).

The federal government is also targeting industrial solutions to address the housing crisis. In August 2024, consultations for an industrial strategy for homebuilding were launched to enhance productivity and innovation in the residential construction sector. This initiative aims to promote the adoption of innovative technologies such as 3D printing, advanced building methods and materials, and an increased reliance on prefabrication and modular built homes. Budget 2024 includes CAD 0.1 billion in dedicated funds for this purpose.

Box 2.2. Canada's federal housing measures

The National Housing Strategy (NHS), launched in 2017, includes a comprehensive range of measures aimed at increasing housing supply and construction activity, supporting vulnerable populations, and fostering innovative housing solutions. Canada's Housing Plan, released in April 2024, builds on and reinforces the NHS with a more integrated approach to addressing housing challenges. This box gives an overview of some of the main measures of the NHS, Canada's Housing Plan and other subsequent initiatives.

Increase of housing supply:

- Housing Accelerator Fund (CAD 4.4 billion, until 2027/28): Provides financial rewards to municipalities that move to higher-density zoning and improve permitting processes. The funds are allocated based on proposals from municipalities. As of December 2024, 177 agreements with municipalities had been signed, as well as an agreement with the province of Quebec worth CAD 0.9 billion.
- Apartment Construction Loan Program (CAD 55 billion, until 2031/32): Offers favourable loans (lower interest rates, insurance premiums covered by the programme, longer terms and amortisation periods) for builders and developers to construct rental housing units. The Budget 2024 increased available funds by CAD 15 billion and widened access to the programme.
- Affordable Housing Fund (CAD 14.6 billion, until 2028/29): Provides financial assistance through grants, loans and contributions for the construction and renovation of affordable housing to projects proposed by housing providers, municipalities and the private sector.
- **Rapid Housing Initiative** (CAD 4 billion, until 2023/24): Provides funding for new affordable housing for vulnerable populations in urgent need. Focuses on rapid construction methods and the conversion of existing buildings into affordable housing units.
- **Canada Housing Infrastructure Fund** (CAD 6 billion, until 2033/34): An initiative in the Budget 2024 that provides funding to municipalities for urgent infrastructure needs. It also includes agreement-based funding with provinces and territories for long-term infrastructure priorities.
- Federal Lands Initiative (CAD 0.3 billion, until 2027/28): Supports the sale of federal lands and buildings for affordable housing development.
- **Public Lands for Home Plan** (CAD 0.2 billion): An initiative in the Budget 2024 that proposes additional measures to use public lands for housing development, especially affordable housing.
- Exemption of the Goods and Services Tax (GST) for the construction of new purpose-built rental housing and for student residences from 2023 to 2030 (CAD 4.6 billion). Eligibility requires that new buildings have four or more private apartment units or 10 or more primate rooms (e.g., 10-unit residence for seniors), and 90% must be dedicated to long-term rentals.
- Reduced taxation for rental property developers via an increase in the capital cost allowance rate from 4% to 10% for new purpose-built rental housing projects that begin construction after April 15, 2024 and before 2031 (CAD 1.1 billion until 2028/29).
- **Canada Secondary Suite Loan Program** (CAD 1.6 billion, until 2028/29): Provides low-interest rate loans to households to add secondary suites to their houses.
- Affordable Housing Innovation Fund (CAD 0.6 billion, until 2027/28): Provides funding for innovative housing solutions proposed by housing providers, municipalities and the private sector.
- **Regional Homebuilding Innovation Initiative** (CAD 0.05 billion, until 2025/26): A measure in the Budget 2024 that provides funds for the development of innovative housing technologies, such as designing and upscaling of modular homes, the use of 3D printing, mass timber construction, and panelised construction.

Support for homebuyers and renters:

- First Home Savings Account: A savings account that allows contribution up to CAD 8 000, with a lifetime limit CAD 40 000 for the savings of a first down payment for the purchase of a home. Contributions and withdrawals are tax deductible.
- First-Time Home Buyer Incentive (CAD 1.3 billion, until 2023/24): Provided a shared-equity mortgage with the Government of Canada, which offered 5 or 10% of the home's purchase price to put toward a down payment. The programme is now closed.
- **30-Year Amortisations for First-Time Buyers**: Increases the maximum amortisation period for first-time purchasing newly constructed homes.
- **Tenant protection Fund**: Programme in the 2024 Budget to better protect tenants against unfairly rising rent payments.

Direct support for vulnerable populations:

- **Canada Housing Benefit** (CAD 4.6 billion, until 2027/28): Provides direct financial assistance to lowincome households. The benefit programmes are managed by the provinces. A one-time top-up of CAD 500 was provided to about 800 000 individuals in 2023/24.
- **Reaching home** (CAD 5 billion, until 2027/28): Homelessness strategy that provides financial support to initiatives that provide stable housing and support for homeless people.
- Urban, Rural, and Northern Indigenous Housing strategy (CAD 4.3 billion, until 2030/31): Addresses the specific housing needs of Indigenous people living in these communities through dedicated funding and programmes.

Other

• **Data collection and dissemination**: Supports data collection to inform policy decisions and improve the understanding of housing markets in Canada.

Source: Government of Canada (2024[26]; 2024[25]; 2023[24]; 2023[8]).

At the provincial and territorial levels, initiatives are also in place to increase housing supply and support vulnerable populations. Ontario has passed two housing supply action plans – *More Homes, More Choice* in 2019 and *More Homes Built Faster* in 2022 – to encourage municipalities to increase residential density, review and adjust development fees, and reduce permitting and approval timelines for new constructions (Government of Ontario, 2023_[29]; Government of Ontario, 2019_[30]). British Columbia introduced a 30-Point-Housing-Plan in 2018 to support the construction of affordable and rental housing and tackle speculation and vacancies, complemented in 2023 by a new action plan *Homes for People* (Government of British Columbia, 2023_[31]). Alberta launched a ten-year strategy *Stronger Foundations* in 2021 to increase the supply of affordable housing and support those in need (Government of Alberta, 2021_[32]). Quebec's housing strategy concentrates on building new social and affordable housing units. Certain provinces and municipalities, including the municipalities of Toronto and Vancouver, have implemented vacant home taxes for unoccupied properties. The initiatives above are just some examples of provincial and municipalities.

Many of these programmes, at various levels of government, are sizeable and it may take several years to see their full effect on supply. In the meantime, even stronger efforts could be made to ensure efficient collaboration across levels of government to minimise duplications and maximise the impact of the multiple initiatives underway. For instance, certain NHS initiatives are shared and co-financed by federal and provincial governments, facilitating the pursuit of common housing goals. Other programmes, such as the *Affordable Housing Fund*, receive support only at the federal level, without provincial involvement, although provinces can also apply directly for these funds. This limits its potential impact, as provinces, along with municipalities, wield significant influence over housing supply through mechanisms like zoning, land use planning, and permitting systems, making their involvement crucial. While seeking buy-in from provinces for federal programs may be more time-consuming, it could ultimately enhance the efficiency of initiatives. A good example of a successful coordination between federal and provincial

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levels is the *National Housing Accord* in 2022 in Australia, which set clear commitments and targets for federal and provincial authorities.

2.3.2. Zoning changes to increase density in urban areas should continue

Government programmes have initiated recent changes in planning regulation and zoning. Municipalities have started to adapt their zoning laws to accommodate denser housing in urban areas, encouraged by initiatives like the Housing Accelerator Fund. For instance, the city of Toronto amended its zoning bylaw in May 2023, allowing four-unit multiplexes in all central residential areas. Edmonton adopted a new zoning bylaw in October 2023 (effective as of January 2024), which limits single-detached housing in central areas and permits diverse housing types, including detached, attached, and multi-unit housing up to approximately three floors (subject to rules such as site coverage, minimum site area, maximum dwelling units, etc.) (City of Edmonton, 2024[33]). Vancouver also approved zoning bylaw changes in September 2023, consolidating different low-density residential zones into a single zone and allowing multi-units on a single lot within this zone. Ottawa is currently in the process of developing a new zoning bylaw, which is set to be approved in 2025. Smaller municipalities have likewise implemented zoning changes. While it is too early to assess the success of these latest zoning changes on housing supply in Canada, upzoning in municipalities in other jurisdictions, such as Auckland, New Zealand or Portland, US, have demonstrated the success of such policies (Greenaway-McGrevy and Phillips, 2023[34]). Municipalities should continue and be further encouraged and incentivised to reform zoning laws, eliminating single-unit zoning, and enabling mediumdensity housing in urban areas. Such policies could be bundled with measures to reduce the minimum lot size and eliminate parking requirements, which have been shown to enhance the effectiveness of zoning changes (Hanley, 2023_[35]; Gray, 2018_[14]).

When implementing such policies, it is important to consider measures that enhance public acceptance of densification. Opposition from existing communities often present a big challenge to higher densification. The advantages and disadvantages of densification have been extensively discussed in the literature (Ahlfeldt et al., 2018_[36]; Berghauser Pont et al., 2021_[37]). Positive effects on productivity and innovation, access to jobs, lower traffic-generated pollution, improved services access, lower energy consumption, and more efficient provision of public services stand against negative effects such as subjective well-being, congestion, and open space preservation (Ahlfeldt et al., 2018_[36]). Costs of higher density can be partly mitigated through policies such as preserving parks and green spaces, boosting investment in essential public infrastructure like water, sewage, schools and healthcare and providing urban transport (Lehmann, 2016_[38]). Another strategy to foster acceptance is a gradual increase in density, by promoting initiatives such as building laneway homes, permitting the construction of secondary units on existing lots and adding additional floors on existing buildings. Vancouver has adopted this more gradual approach to densification. Education and outreach programmes could also help to highlight the advantages of higher density for cities in terms of housing affordability, public services, and shorter commuting times.

2.3.3. Greater efforts should be made to expedite the permitting process

Approval processes vary widely across municipalities in Canada according to the type of project, the specific requirements of the area and backlogs in the local planning department. The average approval time in Canada for new housing projects is about 14 months, with significant variations ranging from 3 to 32 months, depending on the municipality (Altus Group, 2022_[39]). Unfortunately, internationally comparable indicators are not easily available. Lengthy approvals impose additional costs on residential development – costs which are often passed on to the end buyer – putting upward pressure on housing prices. A new survey conducted by the Canadian authorities, the Municipal Land Use and Regulation Survey, shows that municipalities with long approval times and higher backlogs in approvals (such as Toronto or Vancouver) face generally higher affordability challenges (Canada Mortgage and Housing Corporation, 2023_[40]).

Further policy efforts should hence aim at streamlining the permitting and approval process, reducing delays, and lowering costs, thereby facilitating new housing developments. This could be achieved through simplifications of

approvals, the introduction of more electronic processing, and a stronger reliance on pre-approved building plans. For example, some communities in British Columbia have used the Housing Accelerator Fund to introduce an AI Epermitting system that has reduced permitting delays significantly. Implementing systems to track the progress of applications can help identify and address delays. For example, New York City's Department of Buildings has a selfservice online system (*DOB NOW: Build*) that allows housing developers and other professionals to track the status of their permits. Also, municipalities should ensure that local planning departments have adequate staffing to ensure quick permitting processes. A key issue to improving approval timelines include staffing resources (Altus Group, 2022_[39]). A faster permitting process should, however, not come at the costs of lower building and environmental standards. This could, for example, be achieved through a tiered system: Projects are categorized based on their complexity and potential environmental impact. Simple projects with minimal impact can be fasttracked, while more complex projects undergo a more thorough review. The city of Burbank, California has such a tiered permitting system in place. Initiatives at the municipal level could be complemented at the federal or provincial level by providing better information on approval times and processes, showing best practices, and offering financial support to enhance approval processes.

Government charges also vary substantially across Canadian municipalities, according to available data. Comprehensive data on development charges are hard to come by since they are not made readily available by municipalities. In a survey conducted in 2019-2020, the Canada Mortgage and Housing Corporation (2022_[41]) found that average government charges per square foot in the three examined large metropolitan areas are the highest in Toronto (CAD 86), closely followed by Vancouver (CAD 70), far ahead of Montreal (CAD 24). In Toronto, they account for between 10% (for single-detached homes) and 24% (for row homes) of the total construction costs of a dwelling unit. Montreal's favourable position is due to public services being primarily financed by general property and provincial taxes in Quebec, which will also be factored into property development decisions. However, the distributional incidence is not the same. While property taxes and other provincial taxes are paid by all residents, government charges are only paid by new buyers or renters. Government charges per dwelling unit (as well as per square foot) in Toronto, Vancouver and Montreal are also substantially lower for single-detached dwellings than for denser dwelling types such as rowhouses or low-rise rentals, representing a fiscal advantage for less dense dwelling types (Canada Mortgage and Housing Corporation, 2022_[41]).

Government fees on development could be better aligned with other housing policy goals. Government fees could be reduced for the development of rental housing units and more compact construction, reflecting their lower public infrastructure and service costs. Conversely, fees could be increased for the development of single-detached housing. For example, *Vancouver's Rental 100 Program* waives the development cost levy for purpose-built rental construction (Jean, Bartlett and Norman, 2023_[18]). Generally, fees should be better reflecting the size of the unit and associated public costs, rather than being charged per unit. Special discounts could be offered for social and affordable housing, making it financially more viable for developers to include these units in their projects. However, as changes to the fee structure entail potential implementation costs and higher administrative burdens, their implementation should be carefully assessed and gradually put into place. Additionally, reporting of data on government charges in municipalities could be improved.

2.3.4. More affordable and social housing will be needed

Increasing overall housing supply is not a sufficient condition for improving housing affordability. In Canada, low housing affordability affects particularly low-income households, who often face difficulties to access the private rental market (see discussion above). Therefore, providing social housing is necessary. This need has been recently emphasised by the National Housing Council, which also offers several policy proposals (National Housing Council, 2024_[19]). A first important step could be to establish a comprehensive social and affordable housing strategy, as a joint federal-provincial initiative, to assess needs and help to better manage and allocate existing federal and provincial funds and loans to social and community housing providers. Providing federal, provincial, or urban underused land for affordable social housing construction, as done through the *Federal Lands Initiative* and envisioned with the *Public Lands for Homes Plan*, also is a useful policy measure. In addition, more funds are likely to be needed at both the federal and provincial level to address this issue.

Some OECD countries, regions or municipalities mandate minimum shares of social or affordable housing in buildings or municipalities (OECD, $2022_{[21]}$). The experience with such inclusionary zoning is, however, at best mixed. While inclusionary zoning can provide benefits for a small number of low-income households, it can also drive-up prices for other households and reduce total housing development (Hamilton, 2018[42]; Gray, 2018[14]). Housing developers often opt to pay a penalty fine to bypass such regulations. In Canada, Montreal implemented inclusionary zoning in January 2021, requiring that each new residential project exceeding 450 sqm must include 20% social housing, 20% affordable housing, and 20% family housing, known as the 20-20-20 bylaw (City of Montréal, 2024_[43]; City of Montréal, 2023_[44]). Despite these commendable efforts by the City of Montreal to provide more affordable and social housing, the results have been relatively disappointing so far, as they have not significantly increased the construction of social housing (Polèse, 2023[45]). Most developers preferred to pay the penalty fee, which has consequently been increased. This highlights the importance of carefully implementing minimum requirements and tailoring them to local housing conditions. One option could be to exempt moderately priced or medium-density housing from minimum requirements to maintain affordability and housing supply for medium-income households. Also, offering direct financial incentives to private housing developers, such as reduced or waived development fees, affordability bonuses, or tax abatements, might be more effective in encouraging the inclusion of affordable housing units in new housing construction projects.

Other potential avenues to increase the supply of affordable housing include maintaining the affordability of existing units and the provision of more attractive financing for the not-for-profit sector. To preserve and protect affordable rental supply, acquisition strategies and dedicated acquisition funds could put affordable older rental housing in the hands of developers that guarantee to keep rents affordable (Task Force for Housing & Climate, 2024[46]; Ellen et al., 2020[47]). For example, British Columbia put in place CAD 500 million in rental protection funds to allow co-operatives and other not-for-profit organisations to buy older rental buildings to preserve them as lowcost rental housing. The federal government also announced a CAD 1.5 billion Canada Rental Protection Fund to support community housing providers in acquiring units and preserving rents, with specific characteristics yet to be finalised. Tax incentives or access to capital could be offered to developers that renovate and improve existing affordable rental units. Enhanced assistance and more attractive financing options, along with reduced development fees or expedited permitting processes, should be offered to not-for-profit housing providers to help the construction of affordable housing. For instance, the city of Vancouver implemented a streamlined permitting process for non-profit housing projects, significantly reducing the time and cost associated with development. The federal government introduced in June 2024 a new co-operative housing development programme worth CAD 1.5 billion until 2028. This programme offers access to forgivable and low-interest repayable loans to build and converse affordable rental co-operative housing. All these are welcome initiatives, which could be further expanded.

2.3.5. Some adjustments in housing taxation should be considered

As regards tax policies to foster housing supply, the federal government put in place a temporary 100% GST/federal portion of HST rebate for new purpose-built rental housing (PBRH) and student residences. This measure augments an existing 36% rebate of federal GST/federal portion of HST for residential units with a fair-market-value of below CAD 450 000 (the rebate is gradually phased-out for units with a fair-market-value of between CAD 350 000 and 450 000). Ontario, Nova Scotia, Prince Edward Island and Newfoundland and Labrador, as well as more recently New Brunswick, have announced that they will mirror the federal PBRH rebate and provide a 100% rebate of the provincial portion of HST (Government of Canada, 2024_[48]). Eligibility criteria only require that properties have a minimum of four private apartment units or ten private rooms or suits, with 90% of them being held for long-term rental. Tax rebates for housing construction can be effective, if they are carefully designed and monitored, including clear eligibility criteria (OECD, 2022_[21]). In this specific case, they could cover some of the up-front costs for rental developments, which would otherwise only be recoverable over the rental period. The rebate is, however, relatively generous, covering all new purpose-built rental construction, regardless of the unit price or value. It should be complemented by an affordability condition that mandates a certain percentage of units to be affordable for low-and middle-income households. Additionally, it is not guaranteed that providers will pass the lower GST/HST on to rental prices, and the tax break might simply result in windfall gains for developers. The programme's effectiveness,

especially in terms of stimulating additional housing supply and lowering rental prices, should be better monitored. Another tax measure to promote rental housing that could be considered is offering tax breaks to homeowners who commit to renting out dwellings at below-market prices. Examples of such policies include France's *dispositif Pinel* (for newly acquired dwellings) and capital gains tax discounts in Australia (OECD, 2022_[21]).

Other elements of the Canadian tax system indicate some marginal reform potential to improve housing affordability. Canada's provincial and municipal governments make substantial use of recurrent taxes on immovable property (see Chapter 1). However, there is evidence that some municipalities levy higher property taxes (per unit and square foot) on multi-purpose rental properties than on single-detached units (Dachis, 2024_[49]). Property tax rates should, at a minimum, be harmonised across different dwelling types and should not disadvantage multi-purpose rental units (Task Force for Housing & Climate, 2024_[46]). To promote rental and higher density housing, property taxes on these housing type could even be set lower than for less dense dwelling types (such as single-detached homes). The federal government could enhance its guidance in property taxation, for example, by negotiating some minimum federal standards with desirable features, while leaving the decision on the tax rate in the hand of municipalities. Canada's provincial and municipal governments also levy property transaction taxes, which depend on property assessment values. Such taxes have been found to limit property transactions, but such likely negative effects are countered by positive effects, such as lower speculative activities (OECD, 2022_[21]).

Like most other OECD countries, Canada excludes owner-occupied housing from capital gains taxation, thereby supporting homeownership. The Canadian authorities might consider taxing capital gains on main residences above a high threshold, to diminish distortions and allow equal treatment across different savings instruments (OECD, 2022_[21]). Regarding the taxation of mortgage-financed, owner-occupied housing, Canada has the highest marginal effective tax rate (METR) in the OECD, mostly because mortgage interest is not tax deductible compared to most other OECD countries (Figure 2.10). This is good practice because imputed rents are not taxed. Allowing interest payments to be tax-deductible for housing investments would unduly favour homeownership investments.



Figure 2.10. Marginal taxation of debt-financed, owner-occupied housing is quite high

Marginal effective tax rate for debt-financed, owner-occupied housing

Note: METR stands for "marginal effective tax rate" for owner-occupied, debt-financed housing investments. Source: OECD (2021_[50]).

StatLink and https://stat.link/91s43e

The federal government has also adopted an annual 1% tax on vacant or underused housing, on top of the vacancy taxes already in use in various provinces and municipalities (British Columbia, Toronto, Ottawa). The impact of the federal levy is expected to be minimal, as it applies only to foreign-owned residential property (as well as to Canadians who own homes through certain trusts, corporations or partnerships). Some provincial and municipal vacant home taxes are more efficiently designed, as they apply to all unoccupied properties, which is better practice.

Regarding the housing market's response, a recent analysis examining the vacancy tax implemented in Vancouver in 2017 reveals that although the tax decreased the number of unoccupied residences, it had no significant impact on rental prices or the construction of new housing units (Caracciolo and Miglino, 2024_[51]).

2.3.6. Mortgage support for homebuyers should be avoided

Demand-side measures in the housing market, such as tax reliefs, subsidies and mortgage support for homebuyers, positively impact the purchasing power of potential buyers. However, these measures have been shown to drive-up house prices (Andrews, Caldera Sánchez and Johansson, $2011_{[27]}$). They also often support middle-income households, advantage homeowners over renters, impede mobility and can crowd out other types of housing support (OECD, $2020_{[52]}$). Even though the recent Canadian support measures for homebuyers target only first-time buyers to address intergenerational equity, demand-side measures should be ideally avoided. Similarly, measures that increase mortgage lending, such as extending the amortisation period of mortgage loans and raising financing limits, should be carefully evaluated under financial stability considerations (see Chapter 1).

2.3.7. Housing policies should be better aligned with other policy areas

Addressing labour shortages in the construction sector is essential for boosting housing supply and limiting residential construction price increases. According to a 2024 report by the construction sector body, the residential construction industry could face a shortage of up to 41 000 workers by 2033 (BuildForce Canada, 2024_[53]). This is due to the retirement of approximately 22% of the 2023 labour force by 2033, which will not be offset by an adequate number of new entrants. Expanding the workforce in skilled trades in the construction sector through training programmes and apprenticeships should be encouraged. Further efforts could also be undertaken to recognise foreign credentials of immigrants for skilled trades in the construction sector. To increase the number of immigrants with respective skills and meet the targets of the Federal Skilled Trades Program (Government of Canada, 2024_[54]), the requirements for having a job offer in Canada or a Canadian trade qualification could be relaxed and approval processes under the programme expedited.

Housing supply should keep pace with immigration targets. This includes securing sufficient student residences for international students, who typically seek budget housing and thus add strain to affordable housing options. Currently, student accommodation houses only about 12% of the total student population in Canada, compared to 30% in the US and the UK (Jean, Bartlett and Norman, 2023_[18]). Post-secondary institutions should be encouraged to provide more on-campus student housing facilities to reduce the strain on off-campus housing. The federal government should also ensure that their engagement in housing policies and the allocation of available funds reflects immigration objectives.

Housing challenges are inherently linked to infrastructure challenges. Increasing housing supply necessitates substantial investment in public infrastructure. The federal government has made advances in this area by initiating the National Infrastructure Assessment (NIA). This assessment aims to identify infrastructure gaps and future needs, improve coordination among infrastructure owners and funders, and determine optimal financing methods (Government of Canada, 2021_[55]). The work on the NIA should continue and include a dedicated chapter on infrastructure requirements for housing development. Infrastructure planning can also address environmental sustainability and climate resilience of housing related infrastructure (see Chapter 3). Budget 2024 includes CAD 6 billion for urgent and longtime infrastructure needs through a new *Canada Housing Infrastructure Fund*. The *Canada Community-Building Fund* of CAD 2.4 billion per year provides more general infrastructure funding for communities. Ontario also announced a new CAD 1 billion *Municipal Housing Infrastructure Fund*, which comes on top of several other available funds (Government of Ontario, 2024_[56]). Partnering with the private sector through public-private partnerships (PPPs) and other innovative financing approaches, such as infrastructure funds or green bonds, can also ensure more funding. These collaborations leverage private capital and expertise to complement public investment in critical infrastructure.

Housing and environmental policies should be closely tied. Increased housing activity should not come at the expense of environmental goals. The residential sector accounts for a significant share of CO₂ emissions, and per capita emission levels in Canada are relatively high compared to other countries with similarly cold climates (Figure 2.11). This is due to the high share of natural gas used for heating, as well as the overall low energy efficiency of buildings and high unit sizes (OECD, 2023_[57]). The removal of the federal fuel charge, the consumer-facing carbon price (see Chapter 1), could slow down progress towards emission reductions in the residential sector where heating and energy use are significant contributors to CO₂ emissions. Canada should reapply the fuel charge or replace it with an alternative mechanism to curb high emissions in the residential sector. Also, the reliance on energy efficiency certification and standards could be strengthened. Energy performance certification, which has been voluntary so far, should be made mandatory for both new buildings and existing buildings, at least at the time of resale or new rental. Federal building codes, which set increasingly stringent energy-efficiency requirements, should also be adopted more quickly into provincial regulations (OECD, 2023_[57]). There is also space to improve the reliance on cleaner and recovered (cheaper) building materials, which could also have positive side-effects on construction prices (OECD, 2023_[57]). The federal government should also continue its efforts to enhance innovation in the residential construction sector by developing an industrial strategy for homebuilding.

Figure 2.11. The carbon intensity of the residential sector is comparatively high, also compared to other countries with cold winter temperatures



Total CO2 emissions and energy use of the residential sector, 2020

Note: The breakdown between direct and indirect emissions is based on the proportion of final residential energy used from electricity and district heating. Indirect emissions are calculated in the following way: Energy_use *(p_e+p_dh)*EF, where p_e=proportion of energy generated by electricity, p_dh=proportion of energy generated by district heating, and EF is the emission factor for electricity and district heating. Source: OECD (2023), Brick by Brick (Volume 2): Better Housing Policies in the Post-COVID-19 Era, https://doi.org/10.1787/e91cb19d-en.

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Table 2.1. Main findings and recommendations on housing affordability

MAIN FINDINGS	RECOMMENDATIONS (key ones in bold)
Reducing regulatory barriers to	facilitate housing construction
Residential zoning was until recently tilted towards single-detached housing, even in metropolitan areas. Government charges are often levied per dwelling unit, representing a fiscal advantage for single-detached housing, compared to more dense housing types.	Ensure that municipalities continue to reform zoning laws, eliminating single-unit zoning and enable medium-density housing in urban areas. Reduce government fees for the development of rental housing and high-density dwellings and increase fees for single-detached housing.
Transition to high density housing often faces resistance from existing residents despite positive effects on access to jobs, lower traffic-generated pollution, improved services access, lower energy consumption, etc.	Put into place outreach programmes to highlight the advantages of higher density in terms of housing affordability, public services, and shorter commuting times.
Approval times for new housing projects can be long and the permitting process cumbersome in some municipalities.	Expedite the permitting process by developing electronic and one-stop systems and improving the tracking of approvals. Assure adequate staffing of municipalities' planning departments. Provide financial incentives and best practices to improve the approval process.
Providing more non-mark	et and affordable housing
Low housing affordability particularly affects low-income households, who often face difficulties to access the private rental sector. Canada's social housing sector is small. Financial incentives are found to be more effective than minimum shares to support the construction of offerdable and accid housing units.	Establish a comprehensive social and affordable housing plan, as a joint federal-provincial initiative, to better manage existing funds for social housing providers. Reduce or waive government charges and provide affordability bonuses, or the estamants for the construction of accile and affordable boursing.
The social and affordable housing stock is relatively old and decreasing.	Preserve and protect affordable rental housing, by putting in place acquisition strategies and dedicated acquisition funds, such as the announced Canada Rental Protection Fund. Provide cheap loans or grants for the renovation of affordable housing. Provide additional financial assistance to not-for-profit housing providers, such as housing co-operatives.
The federal government recently introduced a temporary 100% rebate on the Goods and Services Tax and the federal components of the Harmonised Sales Tax rebate for new purpose-built rental housing (PBRH) and student residences.	Complement the GST/HST rebate by an affordability condition that mandates a certain percentage of units to be affordable for low- and middle-income household. Monitor that the rebate is effectively passed on to rental prices.
Improving the tax ef	fficiency on housing
Some municipalities levy higher property taxes on multi-purpose rental properties than on single-detached dwellings.	Harmonise property taxes across different dwelling types and avoid disadvantaging rental housing. Consider setting minimum standards at the federal level for property taxation.
Limiting policies to su	ipport homeownership
Tax reliefs for first-time homebuyers have been increased.	Consider removing tax reliefs for homebuyers and restrain from implementing new demand-support policies.
Aligning housing policie	s with other policy areas
The construction sector faces significant labour shortages.	Expand the construction sector workforce through higher intakes in dedicated training programmes and apprenticeships. Undertake efforts to better recognise foreign credentials of immigrants for skilled trades in construction. Consider reforming stringency requirements of the 'Federal Skilled Trades Program'.
Recent high immigration, especially of non-permanent residents (students and non-permanent workers), put a strain on the housing market. Increasing housing supply necessitates substantial investment in public infrastructure.	Align policy support for housing with immigration targets. Provide sufficient housing solutions for student populations on-campus. Continue the work on the National Infrastructure Assessment (NIA). Include a dedicated chapter on infrastructure needs for housing development
The residential sector accounts for a significant share of Canada's CO2 emissions, and per capita emissions related to the residential sector are relatively high compared to other countries with similarly cold climates.	Reapply the federal fuel charge. Strengthen energy performance certification and make it mandatory for new buildings and also for existing buildings, at the time of resale or rental. Speed up transposition of national building codes into provincial codes.

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3 Adapting to climate change challenges

Gilles Thirion

Canada faces mounting adaptation challenges as climate risks, particularly floods and wildfires, increasingly impact people, homes, and infrastructures. Many Canadians lack awareness of the climate-related risks they are exposed to. Meanwhile, development continues in hazard-prone areas. Climate risks pose key challenges to critical infrastructures, whose failure can generate cascading service disruptions with broad-based implications. Although Canada launched its first National Adaptation Strategy in 2023, achieving its targets will require substantial acceleration of adaptation efforts, starting with raising awareness through better mapping of hazard risk and improved risk disclosure. Strong collaboration across government levels is necessary. Faster progress in integrating climate risks into land-use planning is needed to restrict development in hazard-prone areas. Access to affordable flood insurance should be expanded in combination with strong incentives for risk reduction. In high-risk areas, relocation should be considered. Stepping up existing programmes and ensuring sufficient funding availability is critical to support investment in resilient infrastructure.

3.1. Mitigation and adaptation challenges in Canada are substantial

3.1.1. Transitioning to net zero requires sustained policy commitments

As a major producer of heavy crude oil and natural gas, Canada's per capita greenhouse gas (GHG) emissions rank among the highest in the OECD. Geographic and climatic factors further contribute to high energy intensity, particularly for heating and transportation. Therefore, major efforts to mitigate climate change are needed, as discussed in depth in the 2023 Economic Survey of Canada (OECD, 2023_[1]). Over the past two decades Canada has already made progress on decoupling greenhouse gas emissions from economic growth. A shift from coal-fired power to natural gas and renewable energy helped reduce the emission-intensity of electricity production, which overall, is comparatively clean due to strong reliance on non-emitting sources (about 80%) such as hydroelectricity and nuclear energy. The energy-intensity of economic activity also declined, reflecting energy-efficiency improvements in homes and some heavy industries. However, these gains have been offset by increased emissions from growth in Canada's resource and energy-intensive economy (OECD, 2023_[1]).

Canada needs to achieve significant emissions reductions to meet its international climate commitments. A new climate plan with a revised 2030 target is in place to accelerate Canada's transition to net zero by 2050, with a target of reducing emissions by 45-50% below 2005 levels by 2035, in line with the Paris Agreement. Achieving the targeted emission cuts will require major energy savings and a broader shift from fossil fuels to clean energy. Residual emissions will need to be captured, stored, or offset through sequestration. Alongside, policies should ensure these changes minimise negative impacts on economic activity and living standards.

Carbon pricing plays a central role in Canada's emissions reduction strategy. However, the carbon pricing system was weakened in spring 2025, when the government passed regulations that ceased the application of the federal fuel charge, setting it to zero as of April 2025. This followed the implementation in 2023 of a temporary three-year suspension of the federal fuel charge on deliveries of heating oil. The other key component of the carbon pricing system, the Output-Based Pricing System (OBPS) remains in place (see also Chapter 1). The removal of the federal fuel charge reduces the direct price signal to consumers and weakens the system's effectiveness in supporting Canada with its GHG emission reduction targets for 2030. Canada should reapply the fuel charge to safeguard its comprehensive carbon pricing system while maintaining efforts to address distributional concerns through the Canada Carbon Rebate.

Although hydropower, a low-carbon source of energy generation, makes up for much of Canada's electricity generation, additional efforts are needed to decarbonise electricity production. Provinces still need to ramp green energy generation to replace carbon-intensive electricity sources while addressing new demands from the electrification of industry, transport and buildings. Reforms to pool power and transition to market-based pricing could lower the cost of the green energy transition. Additional investment is needed to upgrade and adapt grids to greater electricity demand and increasing reliance on intermittent energy sources.

Oil and gas extraction contributes about 26% of Canada's greenhouse gas emissions. Oil sands extraction and processing alone accounts for 12% of total emissions, according to the National Inventory Report (2024_[2]). To encourage the sector's decarbonisation, efforts should accelerate to strengthen the price signals of oil and gas extraction. The recently proposed cap-and-trade system would be a step in that direction. By combining market-based incentives with regulations governments can provide strong incentives for investment in decarbonisation while avoiding relocation of oil and gas operations to jurisdictions with weaker climate policies.

Road transport remains a major source of emissions, with passenger vehicles being responsible for about 65% of road transport emissions, according to the National Inventory Report (2024_[2]). This notably reflects high car ownership rates and generally less fuel-efficient vehicles than in other countries. Canada's Zero-Emission Vehicles (ZEV) Sales Mandate, adopted in December 2022, is a welcome effort that requires all sales of new passenger cars and light trucks be ZEVs by 2035, with interim targets of at least 20% by 2026, and at least 60% by 2030. Further incentives for zero-emission vehicles take-up must be combined with efforts to reduce emissions from conventional vehicles and a wider policy focus on reducing car dependency. There is scope to boost the appeal and accessibility

of public transport through road user charging and fewer barriers to housing supply in cities. The proposed highspeed rail project between Quebec City and Toronto is a key initiative for decarbonizing transportation in Canada, as it could reduce emissions by shifting passenger traffic from cars and planes to cleaner rail travel.

Canada uses large amounts of energy to heat buildings, including from burning natural gas and oil. Total emissions from homes have been broadly stable since 1990, as the expansion in the housing stock has been offset by energy-efficiency improvements and declining use of fuel oils for heating (OECD, $2023_{[1]}$). However, emissions from commercial and public buildings have risen. Further market-based incentives, along with better public information on building energy performance, are needed to accelerate upgrades of energy-intensive homes and other buildings in view of attaining emission reduction targets.

Recommendations	Actions taken since the previous Survey
Ensuring an efficient trans	ition to net zero emissions
Follow through with planned carbon price increases and annual tightening of emissions benchmarks in federal and provincial baseline- and-credit schemes. Expand emissions pricing to cover additional industries and types of greenhouse gases.	In 2023 and 2024, Canada increased its carbon pricing, progressively tightened emissions benchmarks, and expanded emissions pricing to cover additional industries and greenhouse gases. However, the carbon pricing system was weakened in spring 2025, when the government passed regulations that ceased the application of the federal fuel charge, setting it to zero as of April 2025. This reduces the price signal to consumers and weakens the system's effectiveness in supporting Canada with its GHG emission reduction targets.
Plan for long-run transitions to market-based electricity pricing at the provincial level, aided by pooling production with other provinces and federal infrastructure investment to support intertie development. Introduce time-of-use electricity pricing as a default option for residential customers, supported by smart meters.	In 2023-2024, Canada made some advancements towards market- based electricity pricing through federal investments in interprovincial grid infrastructure and expanded time-of-use pricing models, particularly in Ontario, with the deployment of smart meters, to promote market- based electricity pricing and energy efficiency.
Focus on strengthening price signals for decarbonisation of oil and gas extraction using existing federal and provincial carbon pricing systems. Continue support for carbon capture and storage investments while consolidating subsidies when technology improvements permit.	In 2024 the federal government published draft Oil and Gas Sector Greenhouse Gas Emissions Cap Regulations for public consultation. This framework aims to cap emissions while maintaining economic competitiveness and encouraging investments in lower-emission production technologies. The draft regulations were released in November 2024.
Provinces should increase use of road user charging and pare back constraints on new supply of housing in urban areas to improve the viability of efficient and accessible public transport.	In 2023 the federal government launched the Housing Accelerator Fund to encourage municipalities to reform zoning law to allow for higher density housing.
Encourage fast provincial adoption of the latest energy code with federal support for capacity building.	To facilitate adoption Canada launched a CAD 100 million Codes Acceleration Fund in 2023 to help provinces, municipalities, and other stakeholders implement the updated energy codes.

Table 3.1. Past OECD recommendations on climate change mitigation and actions taken

3.1.2. Climate change has a significant but unequal impact across Canada's regions

The effects of widespread warming are already apparent in many parts of Canada and are projected to intensify in the future (Bush and Lemmen, 2019_[3]). Average temperature in Canada has increased by 2.2 degrees Celsius (°C) in 2023 since 1981-2010 (Figure 3.1). This is significant when compared to other parts of the world. A warmer climate is projected to intensify extreme weather events. This poses substantial economic, social, and environmental challenges.

Canada, with its vast and diverse geography, faces a range of climate risks that vary significantly across regions and municipalities. The warming has been most pronounced in northern Canada (Bush and Lemmen, 2019_[3]). This is causing thawing permafrost and ice melt in the Arctic. The costs of adapting are expected to fall heavily on provinces and territories most exposed to fires and floods, such as Alberta and British Columbia. This means that some provinces and municipalities, which are responsible for key infrastructures, will face higher potential costs associated with climate risks. More frequent and intense rainfall events increasingly threaten urban centres, where impacts are magnified by high human and infrastructure density. Canada's coastal areas are experiencing sea-level rise and rising risk of storms (Canadian Climate Institute, 2022_[4]).

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Figure 3.1. Annual surface temperatures are rising rapidly in Canada



Annual surface temperature change in 2023 compared to average 1981-2010

Note: Countries' average temperature increases; different regions within countries might be affected differently. OECD and EU data are unweighted averages.

Source: Maes, M. J. A., et al. (2022), "Monitoring exposure to climate-related hazards: Indicator methodology and key results," OECD Environment Working Papers, No. 201, OECD Publishing, Paris.

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Some socio-economic groups in Canada are more vulnerable to the physical impacts of climate change. Low-income communities are generally more exposed to climate hazards, for instance because they are more likely to live in flood plains or in urban areas where the "heat island effect" is most intense (Canadian Climate Institute, 2022_[4]). Women are also more vulnerable to climate related risks due to lower income and gendered caregiving roles. For example, 2005 Hurricane Katrina in the United States resulted in a higher death toll among women than men (David and Enarson, 2012_[5]). Indigenous communities, many of whom reside in remote or coastal areas, face increased threats from rising sea levels, extreme weather events, and ecosystem changes. Melting permafrost and shifts in wildlife patterns threaten food security, housing and transport infrastructure, and have cultural impacts in Northern Indigenous communities.

Climate change is directly impacting key sectors of Canada's economy, especially mining and resource extraction and food production. In forestry, higher temperatures and drier conditions increase the frequency and severity of wildfires and droughts, threatening timber resources and ecosystem health (Bush and Lemmen, 2019_[3]) which can take decades to regrow. Coastal industries, especially fisheries, are at risk from rising sea levels and ocean temperature changes. By affecting marine habitats, they change the distribution and abundance of various fish species, impacting local economies. Agriculture faces disruptions from changing weather patterns, which affect crop yields and food supply. Additionally, the insurance sector is seeing rising costs as claims related to climate impacts increase, pushing up premiums and straining financial resilience in high-risk areas. At the same time, sectors that are key to the green transition, such as clean technologies, stand to benefit. Some Canadian producers could benefit from changes in climate, notably through longer growing seasons.

3.1.3. The costs from climate-related events are increasing

The cost of damage to properties and infrastructure from climate change and extreme weather events is growing, and this trend is expected to accelerate. Absent more resilient infrastructure, repair costs are likely to soar. Spending from the Disaster Financial Assistance Arrangements (see Figure 3.4) and insurance costs from natural disasters (Figure 3.2) have increased considerably over the past decade, although higher insurance costs also reflect increasing coverage following the introduction of flood insurance in 2015. According to the Insurance Bureau of

Canada, from 2011 to 2020, insured losses from climate-related events were CAD 2.3 billion (or about 0.08% of GDP in 2023) per year on average, more than five times the average annual losses of CAD 440 million between 1983 and 2000 (Insurance Bureau of Canada, 2023_[6]). Damage to electrical transmission and distribution infrastructure could than double by mid-century and triple by end of century according to recent estimates (Canadian Climate Institute, 2021_[7]), costing up to CAD 4.1 billion annually (or about 0.15% of GDP). It is estimated that CAD 5.3 billion investment (or about 0.2% of GDP) per year will be needed over the next 50 years to reduce climate risks to municipal infrastructure in Canada, including roads, facilities, sewer systems and buildings (Canada's Task Force on Flood Insurance and Relocation, 2022_[8]).

The impact of climate-related hazards extends well beyond the direct costs of suspending local economic activity and rebuilding and repair expenses. It often reaches macroeconomic significance due to the cascading effects of infrastructure failures and business disruptions. It can also have repercussions on the financial system and put public finances under pressure in case of large events. A recent projection (Canadian Climate Institute, 2022_[4]) shows that temperature rise could cause a loss of 2% of GDP by 2050.

Figure 3.2. Insurance costs from natural disasters have rapidly increased



Annual amount of catastrophic losses in Canada

Note: The chart shows the economic losses insured based on the midpoint of two estimates: the total losses that were insured, and the average of the insured losses across each individual event. Presenting the midpoint of the two estimates mitigates bias in the data from events with large total losses and low reported insured losses.

Source: Insurance Bureau Canada calculations based on estimates from Catastrophe Indices and Quantification Inc. (CatIQ), as of August 2024. StatLink 新調理 https://stat.link/i2pg94

3.1.4. Climate risks put Canada's critical infrastructure under stress

Canada's changing climate is affecting critical infrastructure in multiple and complex ways. Increasingly frequent and intense floods, hurricanes, wildfires, and storms are wearing down key physical infrastructure that had not been designed to withstand such conditions. This causes certain infrastructures to age prematurely and increases risk of catastrophic failure. Given the interdependence between different infrastructure systems, damage from climate change and extreme weather events can produce cascading impacts. For instance, flooding can cause more damage due to dry and unstable soil conditions from earlier wildfire events. Disruptions can also cause supply chain problems that extend well beyond the immediate disaster area. For instance, transportation disruptions can shut down trade routes, ports, and prevent people from getting to work or accessing healthcare. Damaged infrastructure also affects the delivery of critical services such as electricity or internet access, which can impact people and affect businesses in areas not directly impacted by the climate hazard. The 2021 floods in British Columbia illustrated how climate hazards can trigger cascading failures across critical infrastructure systems and cause widespread disruption in economic activity. The floods ravaged farms, destroying equipment, infrastructure, and causing significant livestock losses. In the towns of Merritt and Princeton it nearly suspended all economic activity. Utility services were disrupted for weeks, and the City of Merritt's wastewater treatment plant failed, forcing the evacuation of the entire population (Lee and Parfitt, 2022_[9]). The floods caused severe transportation infrastructure damage, destroying several highway segments and rail lines connecting Vancouver and South Western British Columbia. This restricted access to the Port of Vancouver, affecting trade. Costs were exacerbated by failures of the dike system and due to previous wildfire events, that left the soil more unstable and vulnerable. Overall, the cumulative costs from the 2021 climate disasters in British Columbia are estimated between CAD 10.6 and CAD 17.1 billion (Lee and Parfitt, 2022_[9]), equivalent to between 3% and 5 % of provincial GDP, most of which are uninsured damages falling on households and businesses.

3.1.5. Floods, coastal risks and wildland fires present the biggest natural disaster risks

Flooding is Canada's most common and costly natural disaster on average. Canada's exposure to river flooding in percentage of built-up area is above the OECD average (Figure 3.3, panel A). Costs associated with all types of flooding events are expected to keep rising due to higher frequency and severity of weather-related events, such as changing storm and precipitation patterns and rising sea levels (Public Safety Canada, 2023_[10]). About 80% of Canadian cities are partly built on flood plains (Canada's Task Force on Flood Insurance and Relocation, 2022_[8]). The impacts can be particularly acute around large urban centres like Montreal, Toronto, and Vancouver, where the density of population, infrastructures, and businesses amplifies the risks. Beyond causing massive repair and recovery costs, economic consequences can be considerable due to impacts from business interruptions and damages to critical network infrastructures, including transport, telecommunications, electricity grids, and water management.



Figure 3.3. Canada is exposed to floods and wildfires

Source: OECD Environment Statistics (database).

The rise in severe weather events comes as some of Canada's infrastructure is aging while others were not designed to cope with increasing population density and current climate risks. A Statistics Canada survey in 2022 suggests that over a tenth of Canada's water systems are in "poor" or "very poor" condition (Statistics Canada, 2024_[11]). Water management infrastructure failures in Montreal during summer 2024 underscored overdue investment in upgrading ageing sewer infrastructure and stormwater management systems. Major storms that caused massive floods in the streets of Toronto during summer 2024 also point to infrastructure vulnerability in the wake of increasingly heavy rainfall events.

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Coastal communities in Canada, where over 6.5 million people live, are increasingly vulnerable to sea-level rise and storm surges due to climate change. National projections estimate that regional sea levels could rise by up to 100 cm by 2100 (Bush and Lemmen, 2019_[3]). Gradual sea-level rise heightens the risk of inundation in coastal areas. However, flooding triggered by storm surges, possibly in combination with a high tide, is likely to remain an immediate concern (The Council of Canadian Academies, 2019_[12]). Risks are severe in urban centres and economically vital areas like British Columbia's Fraser River delta. Key trade hubs, such as the ports of Vancouver and Halifax, have critical infrastructure that are highly exposed. By mid-century, sea-level rise and storm surges are expected to impose over CAD 50 billion (or about 2% of GDP) in present-value costs (Withey, Lantz and Ochuodho, 2016_[13]). Most of these projected costs would be incurred in British Columbia due to the higher concentration of population, infrastructure and housing assets along the coast. Additionally, coastal wetlands, which provide ecosystem properties such as carbon sequestration and flood protection, are at risk of being lost to sea-level rise.

Hotter and windier summers combined with more erratic rainfalls have contributed to longer wildfire seasons. Exposure to wildfire in terms of exposed surface is high in Canada (Figure 3.3, panel B). Since 1959, the annual average area burned by wildfires has tripled in Canada (Bowman et al., 2020). British Columbia, Alberta, and the Northwest Territories have experienced some of their most severe wildfire seasons in recent years. The frequency and intensity of wildfires are set to escalate as the climate warms, threatening habitat and biodiversity, along with ecosystem services such as carbon storage (Bush and Lemmen, 2019_[3]). The 2016 Fort McMurray wildfire in Alberta, Canada's costliest natural disaster, resulted in approximately CAD 10 billion in total losses (or about 0.4% of GDP), destroying more than 2 400 structures, displacing 85 000 people, and disrupting the production and export of oil (The Council of Canadian Academies, 2019_[12]). In 2023 Canada experienced its most destructive wildfire season in terms of burnt area (Natural Resources Canada, 2024_[14]).

Wildfires often impact forestry and the extraction industries. In 2023, in response to spreading wildfires several Canadian forestry, and oil and gas producers suspended operations, causing significant losses of output. Wildfires can compromise critical infrastructures which can disrupt trade, as seen in 2023 in British Columbia with the shutdown of rail transportation at Fraser Canyon blocking thousands of rail cars. Toxic smoke emanating from wildfires can propagate far away, impacting tourism and causing serious air pollution in nearby populations. A week of wildfire smoke in June 2023 was estimated to have cost Ontario over CAD 1.2 billion in health impacts (Sawyer, Stiebert and Welburn, 2023_[15]).

3.2. Policies to adapt to climate risks

3.2.1. Risk reduction and investment in resilient infrastructure are cost effective adaptation strategies

As in other OECD countries, Canada's policy framework to deal with temperature rise and increased severe weather events includes a strong focus on emergency response and disaster recovery. The Disaster Financial Assistance Arrangements (DFAA) has been the major form of federal support, providing provinces and territories financial assistance for specific costs (emergency shelters, public infrastructure repairs, and rebuilding of businesses or homes) in the event of a large-scale natural disaster. It should be noted that provincial and territorial as well as municipal governments also bear a large part of disaster costs. With the number of disasters increasing, spending through the DFAA has increased rapidly over the past 15 years (Figure 3.4, panel A). Of the CAD 9.3 billion paid by the DFAA between 1970 and September 2024, over 60% was disbursed in the past 10 years (Figure 3.4, panel A). Historically most disaster financial assistance has been disbursed in response to floods (Figure 3.4, panel B). The 2021 wildfires and flooding in British Columbia alone required CAD 1.5 billion in DFAA payments (Exell and Parry, 2023_[16]).



Figure 3.4. Federal contributions under the Disaster Financial Assistance Arrangements (DFAA) have increased considerably over the past 15 years

Source: Disaster Financial Assistance Arrangements (DFAA), Department of Public Safety and Emergency Preparedness.

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Future disaster costs can be reduced through well-designed adaptation and risk prevention policies. Research has highlighted that climate-resilient infrastructure can be more cost-effective compared to constantly repairing outdated infrastructure (OECD, 2024_[17]). According to the Canadian Climate Institute (2022_[4]), every dollar spent on adaptation measures today provides CAD 13-15 in future direct and indirect benefits and savings. Since 2018, the federal government has committed a total of CAD 3.8 billion (or slightly over 0.1% of GDP in 2023) through the Disaster Mitigation and Adaptation Fund (DMAF) until 2033 to finance infrastructure projects designed to reduce long-term risks from climate hazards. Additionally, the federal government runs several infrastructure programs in which climate resiliency is one of the criteria, including the Canada Community Building Fund, and the Green Municipal Fund. The new Canada Housing Infrastructure Fund also provides support for stormwater systems.

Box 3.1. Canada has finalised its first National Adaptation Strategy

Canada's first National Adaptation Strategy (NAS) was finalised in 2023, following two years of engagement by the federal government with provincial, territorial and municipal governments, and First Nations, Inuit and Métis representatives, key experts and stakeholders. The Strategy sets out near-term, medium-term and long-term adaptation targets and objectives, including increasing disaster resilience, improving health, increasing resilience of infrastructure, protecting and restoring nature, and supporting the economy. Progress on adapting to climate-related risks will be tracked with performance indicators to ensure accountability. To outline its role in implementing the NAS, the federal government released in 2022 the Government of Canada Adaptation Action Plan (GOCAAP) with over 70 federal climate change adaptation actions. The Action Plan outlines the federal role in meeting adaptation goals, objectives and targets, and it sets out measures to address priorities over the next five years. The Action Plan targets the main focus areas of the National Adaptation Strategy: disaster resilience, health, biodiversity, infrastructure, and economy and workers. Key federal investments in climate change adaptation include:

- The Disaster Mitigation and Adaptation Fund: investing CAD 3.8 billion since 2018 in projects that help communities better prepare for, and withstand, the potential impacts of natural disasters, prevent infrastructure failures, and help keep Canadians safe.
- Local Leadership for Climate Adaptation Initiative: providing CAD 530 million for community-based adaptation projects as part of the Federation of Canadian Municipalities' Green Municipal Fund.
- The Wildfire Resilient Futures Initiative: CAD 285 million to improve wildfire management.

- Flood hazard maps: ensuring that Canadians have access to up-to-date and high-quality flood hazard maps by investing up to CAD 164 million over five years and working with provinces and territories to increase resilience by expanding the Flood Hazard Identification Mapping Program.
- Working with First Nations to develop greater climate resilience: Providing CAD 145.2 million over five years, starting in 2024-25, to work with First Nations, including by deploying structural mitigation strategies to protect communities, homes, and essential infrastructure from climate disasters.

Set to be updated every five years, the National Adaptation Strategy is accompanied by bilateral "action plans" for federal-provincial/territorial cooperation. This will support regional implementation of the Strategy and reflect the different risks and adaptation advancement in each province and territory. Together with the federal government, Canada's provincial and territorial governments have important roles to play on adaptation in their jurisdictions, particularly where land-use planning laws, building regulations, natural resource management, health care policy and public infrastructure decisions play a key role in advancing and streamlining climate change adaptation.

There is still room for accelerating the policy push on adaptation investment. Further consideration should be given to increasing funding for climate resilient infrastructure (e.g., through DMAF or another mechanism) and making programmes more attractive. Easing application constraints for municipalities and provinces lacking resources can make it more attractive for many governments. In parallel to federal support, it is essential that provincial and municipal governments, which are responsible for a large share of key infrastructure, ensure that sufficient resources are allocated to investment in adaptation.

The private sector plays a pivotal role in adapting buildings and infrastructures to withstand climate impacts. However, government intervention is often necessary to address key barriers to private risk-based adaptation actions, such as information and data gaps, financial constraints, coordination failure, and myopic behaviour. (OECD, 2024_[17]). Regulations and standards, such as building and land use codes, should also be used to mandate the use of future climate change projection data and the adoption of adaptation measures to reduce risks. Additionally, economic instruments de-risking and subsidising adaptation investments need to support private actors, notably where financing constraints are the main barrier. For instance, public-private partnerships can be effective to de-risk private investment in resilient infrastructure, either through public guarantees or co-investment (OECD, forthcoming). However, the direct provision of climate resilient public goods may be necessary in specific circumstances such as a flood barrier, due to large positive externalities and high investment costs.

3.2.2. Reducing exposure and vulnerability to flood

Better mapping and public awareness on flood risks is needed to reduce exposure and vulnerability to floods. Improving public awareness of climate-related risks can reduce the impacts of future floods by informing risk-based purchasing, investment, and adaptation decisions. A 2020 national survey suggests that 94% of Canadians living in high-risk areas are unaware of the high flood risk they face (Canada's Task Force on Flood Insurance and Relocation, 2022_[8]). In Canada, existing flood risk maps are not available or readily accessible. Many are outdated and designed for planning and engineering rather than providing relevant risk-based information for the public (The Council of Canadian Academies, 2019_[12]). Furthermore, existing flood maps do not always incorporate future climate change risks. The federal government and several provinces have been working to address gaps in flood risk mapping, including to foster standardisation of approaches, improve methodologies, and expand coverage. The Flood Hazard Identification and Mapping Program (FHIMP) which started in 2021, provides funding to advance the production of flood hazard data and maps for higher risk areas.

Flood risks should also, as a rule, be disclosed to buyers of residential or commercial properties (OECD, 2023_[1]). However, the disclosure of flood risk is not compulsory in Canada (Canada's Task Force on Flood Insurance and Relocation, 2022_[8]). Additionally, there are no requirements in Canada for landlords to disclose known risks (including those related to flooding) associated with property rentals, which increases exposure of vulnerable socio-economic groups. Flood risk disclosure would facilitate flood risk pricing, and it can encourage property-level flood protection.

More effective multilevel governance on land use planning and development is needed to reduce exposure to floods. Development in high-risk flood zones in Canada increased by over 60% between 1985 and 2015 (Rentschler et al., 2023_[18]). Incentivising or mandating the relocation of property in flood-prone areas should in some cases be considered. Such strategy can be cost-effective to reduce economic and human losses in high risks zones. Additionally, concrete efforts are needed to effectively ban new buildings in flood prone areas and to integrate adaptation into land use planning. Provinces are increasingly using land use regulations to restrict development in high-risk areas, but enforcement remains a challenge.

Zoning laws governing land use in high-risk flood areas tend to be inconsistent across provinces or insufficiently enforced (The Council of Canadian Academies, $2019_{[12]}$). Municipalities, the main enforcers of zoning laws, lack incentives to strictly implement them because restrictions on development in high-risk areas limit economic activity and revenue collected through property taxes. Additionally, the availability of large-scale government disaster assistance may reduce the perceived urgency of strict land use enforcement among municipalities.

An independent body in charge of providing guidance on flood risk management can prevent placing more infrastructures and homes in areas with high flood risk. Such a body could be relevant at the local level, too. Municipalities could consider implementing a watershed-based approach to flood risk management. This can help align incentives across different levels of government. For instance, following devastating floods in the mid-90s, the Province of Ontario delegated the authority over development in high-risk areas to an apolitical watershed-based conservation authority. The latter provides a layer of regional oversight with the authority to disallow development in flood-prone areas that might otherwise be permitted by a local government.

Adaptation challenges are significant around Canada's urban centres due to high population and infrastructure density. Upgrading stormwater and drainage systems can play a large role in reducing urban flood risks. The recent CAD 6 billion Canada Housing Infrastructure Fund, which includes stormwater infrastructure under its list of eligible areas for investment, provides welcome support. This said, these major investment needs necessitate additional resources. One option to generate revenues to finance stormwater management infrastructure is to implement stormwater charges, a fee added to the monthly water bill of properties based on their impervious surface area. Such charges need to be carefully assessed against housing affordability challenges (see Chapter 2). Green infrastructures, such as permeable pavements, rain gardens and green roofs, can be effective to reduce peak stormwater flows and to limit the financial risks (OECD, 2024_[17]).

Improved resilience of private infrastructures requires mainstreaming climate resilience into infrastructure financing and physical investment standards (OECD, 2024_[17]). Setting infrastructure resilience standards, labels and taxonomies can play a role in encouraging resilient infrastructure investment. The case for imposing regulations and standards is particularly strong when it comes to critical infrastructures, which can cause large economic disruptions such as telecommunications, transportation and energy utilities. In this regard, several welcome initiatives are underway, including the Climate Resilient Built Environment initiative and the Standards to Support Resilience in Infrastructure Program produce research, guidelines, standards and code change recommendations to factor climate risks into infrastructure design and builds. Canada's National Adaptation Strategy aims to factor in climate resilience considerations in new federal infrastructure investments.

Similarly, encouraging finance flows for climate resilient infrastructure can help address growing impacts of climate change. In this regard the Disaster Mitigation and Adaptation Fund can provide valuable support. For instance, it provided funding for the Toronto Port Lands Flood Protection project, a large-scale infrastructure initiative to protect parts of downtown Toronto from flooding by naturalizing the mouth of the Don River. Investment in flood protection is ramping in Ontario in response to increasing flood risks. Over the period 2018-2021, Ontario spent over CAD 2.5 billion in flood protection, about 40% of Canada's total (Statistics Canada, 2023[19]).

Concrete efforts are needed to integrate adaptation into building codes and to incentivise private property level flood protection. Governments should consider providing credit-constrained individuals and businesses targeted support for adaptation investment, including through tax incentives, grants, and low interest loans. This is important for businesses and households exposed to hazards to reduce their risk of harm. In moderate-risk zones, flood-

proofing new developments can minimise water damage. The federal government is allocating CAD 60 million over five years to accelerate use of "climate-informed codes" and standards for resilient infrastructure. Focus on property level flood protection measures is increasing in Canada, particularly as a form of prevention against stormwater and urban overland flooding. Some municipalities use subsidies and credits to incentivise property level flood protection. For example, Ontario's building code now requires backwater valves in new homes to prevent sewer backups. The Eco-Roof programme in Toronto has subsidised the installation of green and cool roofs since 2009. Provinces that have not yet updated their building codes to challenges emerging from climate risks need to consider including flood protection requirements.

3.2.3. Adapting to sea level rise and coastal risk

The systematic integration of sea-level rise into land use decisions and building codes can be an effective adaptation strategy. To better integrate climate change projections into coastal flood risk assessments and infrastructure planning, gaps in flood mapping coverage need to be addressed. In some cases, managed retreat or buyout and the establishment of setback zones should be considered. Provincial governments in Nova Scotia and British Columbia have started to integrate sea-level rise into their coastal planning. Examples of climate adaptation planning include especially vulnerable places, such as Les Îles-de-la Madeleine in the Gulf of St. Lawrence, which has no alternative but to engage in coastal retreat.

Reinforcing coastal infrastructure can protect ports and transportation routes from rising sea levels and storm surges, ensuring the uninterrupted flow of goods and services. Canadian provinces have adopted different types of structural coastal adaptation measures. In cities situated in the coastlines (and rivers), where the risk exposure of critical infrastructure and properties is the highest, governments have long invested in structural flood protection such as dikes and seawalls. Work on upgrades of flood defence infrastructure are underway in the Halifax Harbour Area in Nova Scotia, as part of a multi-phase adaptation strategy to protect Halifax from coastal flooding and preserve its port infrastructure. The dike system in Richmond, British Columbia, which protects low-lying areas from the Fraser River and coastal storm surges, is regularly upgraded to meet rising sea-level projections. Nature based solutions can be cost efficient to complement physical infrastructures and provide climate mitigation benefits (OECD, 2024_[17]). Similarly, well preserved wetlands, combined with urban green space expansions, including parks and green roofs can be highly effective in absorbing excess water, and thereby reduce the risk of urban flooding while contributing to lower greenhouse gas emissions.

Early warning systems are an essential component of a policy response to reduce the loss of life and limit infrastructure damages from flooding. By providing timely information about hazards, early warning systems can help vulnerable regions prepare for extreme weather events, facilitating timely evacuations and mobilisation (OECD, 2019_[20]). In May 2024, the federal government has expanded its early warning systems. The new Coastal Flooding Prediction and Alerting Program will allow meteorologists to issue coastal flooding alerts and forecasts across most of the country, giving early warning to emergency management organizations and Canadians about the risk of coastal flooding.

3.2.4. Addressing gaps in flood insurance

In Canada flood insurance is not mandatory and was only introduced by the insurance industry in 2015. By 2023, many homes (about 10 million out of 15 million) had overland flood insurance protection (Institute for Catastrophic Loss Reduction, 2024_[21]). However, very few homes at high risk of flooding are presently covered by flood insurance. The federal Task Force on Flood Insurance and Relocation (2022_[8]) estimates that about 90% of Canada's CAD 2.9 billion average annual flood damage is concentrated in the 10% of Canadian homes (about 1.5 million) located in high-risk flood zone. Refrained by the high cost of payouts for frequent and severe flooding, insurance companies often abstain from offering flood coverage in these areas and when they do, the cost of insuring buildings in flood-prone areas tends to be prohibitive (OECD, 2023_[1]). The high concentration of risks among uninsured properties contribute to a relatively low share of insured flood losses in Canada (Figure 3.5, panel A)

As most high-risk households are left uninsured, homeowners either pay out of pocket or may receive disaster assistance when catastrophic events occur. Payments under Canada's Disaster Financial Assistance Arrangements (DFAA) have increased, with floods accounting for the bulk of federal disaster assistance funding. In effect a form of insurance subsidised by taxpayers, public disaster relief can indirectly encourage ongoing risky land use as there is limited incentive for homeowners to reduce their risk. This can also lead to continued building on floodplains because local governments and developers reap property taxes and profits, while assuming that others will bear the costs of repair. The degree of assistance provided by the DFAA to provincial governments could be adjusted based on land-use objectives.

The federal government announced in Budget 2023 and Budget 2024 the intent to establish a subsidiary to deliver flood reinsurance to households at high-risk of flood. In partnership with property and casualty insurers, it aims to ensure the availability of affordable insurance in high-risk areas, while offering a financial safety net in case of catastrophic flooding. The details of the scheme are still under discussion. In supporting access to affordable disaster insurance, government could maintain affordable premiums while excluding coverage for new developments and banning new builds in high-risk floodplains. The insurance premium could be adjusted progressively over time (i.e. the subsidy should be reduced) to reflect flood risk and encourage homeowners to reduce their risks, while providing support to low-income households. The programme could also offer reduced risk premia (or a subsidy) to homeowners adopting flood resilience measures to incentivise risk reduction through the premium's price signal.

Figure 3.5. The share of insured flood losses is low in Canada, as in many other OECD countries

Share of economic losses insured by type of risk, 2000-19 B. Wildfires A. Flood % % 90 90 80 80 70 70 60 60 50 50 40 40 30 30 20 20 10 10 0 0 GRC PRT USA CAN AUS ESP FRA GBR DNK BEL ISR GRC PRT CHI FSP SWE AUS CAN USA

Note: The chart shows the share of economic losses insured based on the midpoint of two estimates: the share of total losses that were insured, and the average of the share of insured losses across each individual event. Presenting the midpoint of the two estimates mitigates bias in the data from events with large total losses and low reported insured losses.

Source: OECD (2021[22]). The graph shows OECD calculations based on data provided by Swiss Re sigma and PCS. Reported economic losses are included only for events for which an insured loss estimate is also available.

StatLink ms https://stat.link/2l3cjm

Government interventions directed at increasing coverage and affordable premiums need to be combined with strong incentive for risk reduction through adaptation. Risk reduction is critical to strengthen the insurance sector resilience while safeguarding insurance policies' affordability (OECD, 2023[23]). Policies to improve public awareness of flood risks and prevent new constructions in high-risks areas are necessary for a well-functioning insurance market due to their key role in facilitating effective risk reduction. There is room for improving flood risk transparency, including through compulsory disclosure of flood risks in property transactions. Land-use policy should ensure that development in risky areas is banned. In high-risk floodplains and coastal areas exposed to rising sea levels, relocation must be considered. After repeated floods in the city of Lismore, for example, the Australian and New South Wales governments developed a programme to support managed retreat (OECD, 2024[17]).



Efforts to extend coverage of flood insurance should go hand in hand with a more effective risk sharing between private and public actors. Many countries have faced similar challenges in switching from a private insurance system with public ex-post compensation toward a more mixed public-private insurance mechanism. Hence Canada can learn from solutions developed elsewhere (see Box 3.2). For instance, in France the inclusion of mandatory flood insurance in home insurance contracts has improved distribution of risk while also facilitating the role of the private sector in risk insurance. Compulsory flood risk insurance for all properties allows to pool risks more effectively. A well-designed arrangement can also significantly reduce the fiscal burden and the volatility of payments in addition to providing significantly broader coverage. The scope of public reinsurance should be well defined. It could also be adjusted based on land-use objectives. For example, the United Kingdom limits reinsurance coverage for developments constructed after 2009, while in the United States coverage by the National Flood Insurance Program is only provided to communities which have set flood management conditions such as building and floodplain management standards.

Box 3.2. International experience provides insights on the design of flood insurance

Private insurance plays a large role in supporting losses related to floods in the United Kingdom and France (Figure 3.4). Both countries have taken key measures to encourage take up of disaster insurance. For instance, in France private insurers must include insurance against flood risk in property insurance policies. Coverage is funded from a fixed share of all premiums (regardless of degree of flood risk exposure). Insurers in turn benefit from government-backed reinsurance up to a certain threshold. The "Catnat" system, a state guarantee, ensures that damages from extreme events can be covered. A key advantage of the French system is that it combines large coverage and affordable premiums. By sharing risks with private insurers, the system also presents important benefits in terms of cost effectiveness.

In the United Kingdom, property insurance policies include coverage for flood risks. Insurers are required to contribute to a reinsurance scheme called Flood Re through a levy on all residential property insurance policies. The reinsurer uses funds raised through the levy, and premiums collected for reinsurance coverage, to provide more affordable insurance for high-risk properties. Under the scheme, the cost of subsidising insurance premiums for high flood-risk properties falls partially on homeowners in lower-risk areas. If insurers pass on some of the cost of the Flood Re levy, overall costs of insurance for lower flood-risk properties are slightly more expensive than they otherwise would be. Coverage is available only for homes built before 2009, discouraging new development in high-risk areas. Flood Re aims to eventually exit the market (by 2039) by reducing risk among high-risk properties to levels where risk-based premiums for those properties would be affordable.

Source: OECD (2023_[1]), OECD (2024_[24]), Canada's Task Force on Flood Insurance and Relocation (2022_[8]).

3.2.5. Reinforcing risk prevention to reduce impacts from wildfires

The annual costs of wildfire management agencies have increased by CAD 150 million per decade since the 1970s, reaching between CAD 800 million to CAD 1.4 billion annually over the last 10 years (Natural Resources Canada, 2024_[25]). It is estimated that wildfire suppression spending in the provinces of Alberta, British Columbia, and Ontario would need to double in the second half of this century to maintain the current levels of fire response success (Hope et al., 2016_[26]). Fire suppression operations have been aided by advances in wildland fire research and the development of key operational tools. The Canadian Forest Fire Danger Rating System, which relies on meteorological data, is widely used to assess fire risks and predict fire behaviour, informing strategic decisions in wildfire management. Artificial Intelligence (AI) is starting to be used in wildfire management, though still in relatively early stage. For instance, in 2022, Alberta Wildfire started using an AI-powered tool to better predict initial wildfire behaviour.

Re-balancing policy efforts from emergency response toward long term investment in proactive adaptation strategies can be a cost-effective strategy for enhanced wildfire resilience. The need for additional efforts is

increasingly recognised by the authorities including in the 2024 Canadian Wildland Fire Prevention and Mitigation Strategy. Initiatives such as FireSmart Canada focus on enhancing community resilience by promoting practices that reduce risks and improve public safety, notably through the creation of defensible spaces around structures and implementation of fire-resistant landscaping. However, current industrial, land and infrastructure planning processes often do not take wildland fire risks into consideration. In forested regions a better integration of critical infrastructure—such as power grids, transportation networks, and communication systems— can enhance resilience to wildfires. For example, ensuring that critical infrastructure has adequate firebreaks could significantly reduce the risk of damage. This would help safeguard essential services during wildfire events and contribute to overall disaster resilience.

Development in fire-prone areas, especially in wildland-urban interfaces, must be limited to reduce future risks and firefighting costs. Stringent land-use planning regulations for new developments need to be complemented by fire-resistant building codes in lower risk zones. Insurance coverage against wildland fires is higher than for floods as it is widely included in home insurance policies (see Figure 3.3). However, rising damages from wildfires are increasingly impacting the property insurance market, especially in high-risk areas. Insurers are increasingly reluctant to cover properties in regions prone to wildfires, resulting in higher premiums or the complete withdrawal of coverage in some areas. For example, in Alberta, wildfire-prone communities are facing soaring insurance costs, mirroring challenges seen globally in high-risk fire zones like California and Australia. The governments should consider incentivising private insurers to remain in the market by funding adaptation measures that reduce risks, such as retrofitting homes, mandating space standards around properties, or through relocation.

Enhanced landscape management can reduce the availability of fire-prone vegetation (OECD, 2023_[27]). These measures reduce the risk and intensity of wildfires, helping protect communities, infrastructure, and natural resources. Additionally, incorporating Indigenous knowledge and traditional land management practices, which have long included fire management techniques, can strengthen current wildfire prevention efforts and provide a more holistic, sustainable approach to managing wildfire risks.

MAIN FINDINGS	RECOMMENDATIONS (key ones in bold)	
Policies to adapt to climate risks		
A lack of sufficient climate-related risk awareness prevents individuals and businesses from adapting more effectively. Most people in high flood risks areas are unaware of the risks they face.	Step up efforts to enhance flood maps and ensure public availability. Mandate disclosure of climate-related risks in the sale of residential and commercial properties. Require companies to disclose climate risks and adaptation plans in financial reporting.	
An increasing number of properties and infrastructures are exposed to climate hazards. Land-use planning currently does not sufficiently account for climate-related risks.	Include climate-related risks in land-use planning in municipalities, provinces and territories. Create independent bodies to advise on flood risk management, suggest urban development limits, and require authorities to 'comply or explain'.	
In high-risk zones, relocation is a cost-effective solution to avoid human losses and material damages.	Ban new constructions in high-risk areas and consider setting up a relocation mechanism with funding to facilitate retreat from high-risk floodplains, coastal areas exposed to rising sea levels as well as wildfire prone areas.	
A large share of high-risk properties is uninsured due to lack of affordable insurance option.	Improve the availability and the risk-sharing of flood insurance through an increase in the overall coverage and a more effective re-insurance programme between private and public actors. Encourage adaptation actions to reduce private-sector risks, including by tying premium reductions to adaptation efforts.	
Public and private investment in adaptation can significantly reduce climate-hazard risks and dimmish costs.	Step up support for investment in climate resilient infrastructure through existing federal programmes and by ensuring sufficient funding at municipal and provincial levels. Provide credit-constrained individuals and businesses targeted support for adaptation investment, including through tax incentives, grants, and low interest loans.	
Mainstreaming climate resilience into infrastructure standards is needed to improve resilience of private infrastructures.	Accelerate on-going efforts to develop infrastructure standards, and make sure findings are transposed into operational infrastructure resilience standards, labels and taxonomies.	

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4 Raising business sector productivity

Gilles Thirion

The level of Canada's labour productivity lags its peers and the current trade tensions with the United States is likely to compound it. Revamping the country's productivity growth requires a combination of policy actions. Canada's natural disadvantage in having dispersed and relatively small markets has to be countered by making sure regulatory barriers are as low as possible, including those restricting domestic trade and labour mobility. Fostering a more competitive environment, including in digital markets, is necessary to induce productivity enhancing investment and fully tap Canada's innovation potential. The latter could also be better exploited through well targeted R&D support, stronger emphasis on commercialisation of innovation, and by promoting better management skills. Meanwhile policy attention should also focus on addressing the specific needs of high potential SMEs and on strengthening labour market efficiency, particularly by ensuring that immigrant's and women's skills are fully utilised. Canada's productivity has been lagging its peers for many years. Reviving Canada's productivity has become even more critical because Canada's productivity gap might become compounded with ongoing transformations brought about by population ageing, the green transition, shifts in global trade, and the advancement of new digital technologies, notably AI. These transformations are reshaping industries and labour markets and are presenting new policy challenges, but also opportunities to raise productivity.

This chapter starts by presenting a review of the main factors driving Canada's labour productivity performance. The remainder of the chapter considers options i) for enhancing business-sector innovation and the adoption of new technologies; ii) strengthening innovation activities of SMEs specifically; iii) policies to increase competitive pressures on the business sector and iv) policies to enhance labour market efficiency.

4.1. Canada's productivity is lagging its peers

While Canada's labour productivity level is only slightly below the OECD average, it is trailing behind several comparable high-income countries (Figure 4.1). Specifically, Canada's low labour productivity compared to the United States – despite strong economic ties and geographical proximity – has been a long-lasting concern. As of 2023, Canada's workforce generated the equivalent of USD 74.7 in goods and services per hour worked (purchasing power parity corrected), far from the USD 97.0 generated in the United States, and the USD 89.3 in France (Figure 4.1).

Figure 4.1. Canada's level of labour productivity lags most other advanced economies



GDP per hour worked, current prices and current PPPs, 2023

Source: OECD Productivity Statistics database.

StatLink and https://stat.link/vaxn9r

Canada's low productivity level stems from a history of comparatively weak productivity growth. While the longrun average growth rate over the 2000-2023 period was close to several other G7 countries, such as Germany, the UK and France, Canada lagged behind the OECD average and top performing advanced economies (Figure 4.2, panel B), notably, the United States. Like many advanced economies, Canada has experienced a decline in productivity growth since the turn of the century. This decline, albeit significant, has been lower compared to most other countries, which reflects the fact that, between 1973 and 2000, Canada's labour productivity growth was already one of the lowest in advanced economies, at 1.3% (Haun and Sargent, 2023_[1]). This was far below other G7 countries such as Japan (3.2%), France (2.6%) and Germany (2.5%), although the US had a closer growth in productivity (1.5%). However, unlike the US, where productivity continued to grow at around its pre-2000 rate, Canada's productivity growth declined between 2000 and 2023, averaging 0.8% (Figure 4.2, Panel B).

Figure 4.2. Labour productivity growth was weak over the past two decades

GDP per hour worked, average annual growth



B. Average annual growth over 2000-23



Note: In panel B. OECD is an unweighted average.

Source: OECD calculations based on OECD Productivity Statistics database.

StatLink and https://stat.link/r9hg0o

Figure 4.3. Labour productivity growth was particularly far from the United States



GDP per hour worked, constant prices and PPPs, index 2000 = 100

Since 2000 Canada's productivity growth diverged markedly from the United States (Figure 4.3). However, it evolved in line with Euro Area economies during that period. Between 2000 and 2008, annual productivity growth in Canada averaged 1%, against 2% in the United States (Figure 4.2, Panel A). During the same period, Canada's performance was marginally above that of the euro area, but well below the United Kingdom and Australia. Between 2008 and 2019, while Canadian productivity growth somewhat slowed, it was higher than the United Kingdom and just above that of the euro area, but slightly below that of the US and Australia. A marked growth gap with the US re-appeared from 2019 onwards, with very low average labour productivity growth rates in Canada (0.5%) in the period 2019-2023.

Source: OECD Productivity Statistics database.

StatLink mg https://stat.link/9y1ogh

Canada's labour productivity performance since 2000 has comprised both weakening multi-factor productivity (MFP) growth (Box 4.1) and a declining investment intensity, especially after 2014 (Figure 4.4). Between 2000 and 2014, the declining trend MFP growth was partly offset by higher trend capital intensity. The latter has been the largest source of labour productivity growth post 2000. However, trend capital deepening fell after the collapse of commodity prices beginning in 2014.

Box 4.1. Labour productivity, multi-factor productivity and capital intensity

Labour productivity measures the output per unit of labour input, typically expressed as output per hour worked. It can be decomposed into capital intensity and multifactor productivity (MFP). Capital intensity refers to the amount of capital (e.g., machinery, equipment, and infrastructure) used per unit of labour. When capital intensity increases, workers have more or better tools to work with, which can enhance their productivity. Multifactor productivity (MFP), also known as total factor productivity (TFP), which in OECD statistics captures improvements in the composition of labour, captures the efficiency with which labour and capital inputs are used and reflects factors such as technological advancements, organizational improvements, and economies of scale.

From a structural perspective, trend developments in these measures are the most important (Figure 4.4, panel A). Labour productivity, capital intensity and MFP fluctuate over the cycle, for instance because businesses retain staff during a downturn. Similarly, capital equipment is often retained. Incentives for technological advance may be muted and vice versa when there is upturn. These cyclical developments are not of primary interest in assessing the structural productivity of an economy.



A. Contributions to trend labour productivity

Figure 4.4. Both capital intensity and multi-factor productivity have weakened in recent years



B. Contributions to capital input growth

Note: In Panel A, annual change of potential real GDP per potential person employed split into the contribution of trend capital per worker growth and trend MFP growth. In Panel B, growth of capital is measured as growth in the volume of capital services (obtained by aggregating different ICT and non-ICT assets). The contribution of (non-)ICT capital growth to total capital growth is hence measured in percentage points. Source: OECD (2024), OECD Compendium of Productivity Indicators 2024, OECD Publishing, Paris, <u>https://doi.org/10.1787/b96cd88a-en</u>.

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Total real investment growth per worker in Canada had been relatively robust until 2014, except for the temporary slump that followed the financial crisis (Figure 4.5, Panel A). However, business investment has been generally weak overall. The extraction sector played a major role in driving business investment growth between 2000 and 2014. The size of the sector's real investment tripled between 1999 and 2014, sharply contrasting with the weak performance of the rest of the business sector, which flatlined between the early 2000s and 2014. The end of the commodity supercycle in 2014 resulted in a sharp fall in business investment in the extractive industry. As of 2023 investment per worker in Canada was only 85% of that in 2014 (Figure 4.5, Panel B). By comparison, investment per worker increased by 21% in the US, by 13% in the euro area and by 11% in the OECD over the same period.

Figure 4.5. Business investment dynamics have been weak, and total investment has fallen since 2014, driven by a decline in the extraction industry



Note: In panel B, Euro area 17 covers OECD countries which are also in the Euro area. Business investment is defined as total investment minus investment by general government and by households and non-profit institutions serving households (NPISH). Workers are defined as total employment.

Source: Statistics Canada; and OECD Economic Outlook database.

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Canada's non-residential investment lags its peers (Figure 4.6, Panel A) due to weak investment intensity in assets that are key channels for introducing and spreading new technologies. Investment intensity in intellectual property is comparatively low (Figure 4.6, panel B). Research suggests that this may partly be due to a reliance on foreign-owned intellectual property services (Robson and Bafale, 2022_[2]). In turn, this potentially reflects lack of competitiveness in commercialising intellectual property owned by Canadian firms. Investment intensity in machinery and equipment trends is also low compared with other G7 economies (Figure 4.6, Panel D). The share of investment in machinery and equipment halved over the past two decades. This is another sign of weak productivity enhancing investment. Canada has relatively high investment in economic structures (Figure 4.6, Panel C). This partly reflects large-scale plants constructed in the resource extraction sector.

Figure 4.6. Canada's total investment intensity is on par with other advanced economies, but low investment in key innovative assets hampers Canada's productive capacity



Investment intensity, 2023 or latest available, 5-year average



B. Intellectual property products









Note: Investment intensity is measured as the gross fixed capital formation as a percentage of gross value added, in nominal terms. Non-residential investment is defined as total investment minus investment in dwellings.

Source: Calculations based on OECD National Accounts database and OECD Economic Outlook database.

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4.2. Factors contributing to Canada's productivity performance

4.2.1. Industry composition only explains a minor share of Canada's weak productivity

Evidence suggests that reallocation of activity between sectors plays only a small role in Canada's low productivity growth (Haun and Sargent, 2023[1]). The re-allocation effects are estimated to have contributed 0.1 percentage point to Canadian business sector labour productivity growth between 2000 and 2022 while within sector productivity growth contributed the remaining 0.9 percentage point. The mining and oil and gas extraction industry was responsible for much of this small re-allocation effects due to large swings in employment in this sector.

Similarly, the sectoral composition of Canada's economy does not appear to explain much of the gap in the level of productivity with the United States. The Canada-US levels gap in labour productivity and MFP appears to be spread widely across sectors. Tang (2017_[3]) analysed the Canada–US business sector labour productivity level gap and found that the industry composition effect was weak. Overall, changing Canada's sector composition to match the United States would only reduce a minor part of the gap in productivity growth.

Also, the sectoral composition does not explain the difference in Canada's business investment intensity in key innovation assets compared to other advanced OECD countries (Rosell, Dowsett and Paterson, 2023[4]). While Canada's industry composition tends to slightly favour higher investment intensity in machinery and equipment compared to the United States, it is somewhat less supportive to intellectual property investment. Canada's low capital intensity is also widespread across the economy. This is echoed in the productivity performance of the ICT and manufacturing sectors, where low investment has contributed to the recent productivity slow down (Mollins and Saint-Amand, 2019_[5]) and the growing gap with the United States over recent decades.

4.2.2. The productivity gap vis-à-vis the US is largely driven by a few industries

Weaker productivity growth in the Information and Communication Technology (ICT) industry itself and in ICTintensive industries relative to the United States have played a major role in driving the productivity-growth gap (Figure 4.7). Lower productivity growth in the Information and Communication industries sector (including activities such as software development) contributed, on average, about 0.3 percentage point per year out of the 0.92 percentage point difference in average business productivity growth between Canada and the US in 2001-2019 (Gu and Willox, 2023_[6]). Similarly, the same authors find that computer and electronic product manufacturing have contributed, on average, 0.2 percentage point per year of the difference in the aggregate productivity growth gap with the US in 2001-2019 (Figure 4.7).

Figure 4.7. Weaker productivity in the ICT sector has contributed most to the US-Canada productivity gap over the last two decades



Average annual contribution to the United States-Canada labour productivity gap between 2001 and 2019

Note: The underlying data measuring business productivity comes from Statistics Canada and may slightly differ from the business sector definition in OECD national accounts. Source: (Gu and Willox, 2023₍₆₎).

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Canada's resource sector has at times strongly influenced its productivity dynamics. In particular, the exploitation of oil sands in the early 2000s lowered the oil sector's productivity (oil-sands production being more input intensive). However, overall, the contribution to business productivity of the mining, oil and gas sector only explains a small part of the post 2000 period gap (about 0.06 percentage point annually) with the US (Gu and Willox, 2023_[6]). In the future, the Trans Mountain Expansion pipeline might result in higher oil production in Canada, with implications for aggregate labour productivity.

The weak productivity performance of the construction sector, while not identified as a specific driver of the productivity gap with the US, is another source of concern for Canada's productivity. The construction sector, which plays an important role in the Canadian economy, has showed weak productivity performance over the past two decades.

4.2.3. Canada has a relatively large and less productive SME sector compared to the United States

Canada has a relatively high share of employment in SMEs compared to the United States but smaller compared to the OECD average (OECD, 2017_[7]). According to Statistics Canada data, as of 2022 private businesses with fewer than 100 employees accounted for 47% of employment, compared to 35% for the United States (Figure 4.8). Studies have found Canada SME sector itself is less productive than that in the United States (Tang, 2017_[3]). One explanation is that Canada's SME employment is relatively more concentrated in very small (and low productivity) firms. Some research has concluded that the prevalence of smaller firms in Canada and their lower productivity explains a substantial share of the aggregate productivity-level gap between Canada and the United States (Tang, 2017_[3]).

Canada's SMEs often have rapid initial growth but struggle to scale up. The average post-entry growth in the first three years is above average (Calvino, Criscuolo and Verlhac, 2020_[8]). This may reflect the ease of establishing a new business in Canada. Also, the survival rates of new firms are higher than in other countries, both in the service and manufacturing sectors. However, Canadian growth-oriented SMEs lag those in other OECD economies when it comes to scaling up. Only 2% of midsized firms grow into larger companies (Remillard and Scholz, 2020_[9]), and Canada lags best performers in terms of high-growth SMEs (OECD, 2017_[10]).

Figure 4.8. Canada's private employment share in large companies is lower than the United States



Distribution of private employment by firm size, 2022

Source: Statistics Canada and U.S. Bureau of Labor Statistics.

A significant number of small and medium-sized businesses in Canada may not be under pressure to invest in innovation. According to the Survey on Financing and Growth of Small and Medium enterprises (ISED, 2024_[11]), many firms report a lack of incentive to invest in new technologies, either because investment is "not necessary for continued operations" or because they were "not convinced of the economic benefit" of advanced technologies (Figure 4.9). This makes factors related to low incentives the second most cited reason for not adopting advanced technologies, above the high cost of said technologies (Figure 4.9). This could be indicative of weak competitive pressures, including low exposure of many SMEs to international competition. Firms that report facing some increased degree of competition are also more likely to introduce new technologies (ISED, 2024_[11]). This suggests that there is room for increasing the efficiency of business dynamics by promoting a more competitive environment.

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As a corollary to having a relatively large SME sector (at least compared with the United States), Canada has relatively fewer large firms, and furthermore their productivity is comparatively low. Large employers, defined as those with more than 500 employees, account around 35% of employment in Canada, compared with nearly 50% in the United States (Figure 4.8). According to some research the relatively weak performance of Canadian large manufacturing firms has been a significant driver of the Canada–US business sector productivity gap in the manufacturing industry (Tang, 2017_[3]).

Figure 4.9. Cost, lack of perceived benefit or need, and skills dissuade some SMEs from adopting advanced technologies

Reasons for not adopting advanced technologies, 2020, % of SMEs surveyed



Source: Innovation, Science and Economic Development Canada (2024), SME Profile: Innovative enterprises in Canada. StatLink 新調P https://stat.link/vbfxc0

4.2.4. Business dynamism has been weakening while market concentration has risen

Firms' entry rates have been trending down from the early 2000s until 2019 (Figure 4.10) while exit rates only declined marginally over the same period. Firm entry and exit rates, often associated with dynamic and innovative environments, were close to a benchmark average of OECD countries in 2000-2015 (Calvino, Criscuolo and Verlhac, 2020_[8]). The net implications on productivity of these trends depend on complex factors, including the types of businesses that persist and those that exit, and on the competitive environment. These trends perhaps reflect a perception of reduced opportunities for new companies to enter and expand, or new barriers to entry and competition, such as in the digital sector.

Research also points to signs of weaker competition. In a large-scale study, the Competition Bureau (2023_[12]) documented an overall decline in competition intensity between 2000 and 2020. This was illustrated by rising market concentration, growing stability in which firms rank as best performers, and higher profits and markups among already successful firms. The increase in concentration in Canada has, however, been milder than in the United States (Gutiérrez and Philippon, 2017_[13]; Gu, 2024_[14]).

There are multiple factors related to these trends, including structural transitions, such as digitalisation, the increasing importance of intangibles and globalisation, as well as an increase in mergers and acquisitions by leading firms (Bajgar, Criscuolo and Timmis, 2021_[13]). The implications on investment and productivity of higher market concentration tend to depend on specific domestic industry conditions. Rising concentration can be related to investment in intangible capital, especially innovative assets, and particularly in globalised and digital-intensive industries (Bajgar, Criscuolo and Timmis, 2021_[13]). Higher market concentration can also point to growing market power, increases in barriers to entry, and a less dynamic business environment (Calvino et., al., 2020_[8]).

Figure 4.10. Developments in average entry and exit rates point to weakening business dynamism



Average entry and exit rates in Canadian industries, 2000-21

 $^{\prime}$ 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 Note: The entry and exit rates are the weighted averages across North American Industry Classification System four-digit industries using employment as weights. Source: (Gu, 2024_[14]).

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Some studies have concluded that Canada's weak firm dynamics and increased concentration are indeed having a negative impact on productivity. Gu (2019_[15]) suggests the decline in aggregate labour productivity growth after 2000 was partly due to lower re-allocation of labour to firms with relatively higher labour productivity levels (i.e. lower creative destruction). Recent research by Statistics Canada (Gu, 2024_[14]) concludes that an increase in industry concentration and a decline in firm entry rates have had a negative effect on firm investment since 2006, with larger effects among small firms. These findings appear consistent with the latest Survey of Innovation and Business Strategy (Statistics Canada, 2024_[16]), which showed that Canadian businesses are reactive to changes in competition intensity. Those facing increased competition between 2020 and 2022 were reported to be significantly more likely to introduce innovations than those with fewer competitors. This suggests that the slowdown in competitive intensity may hamper innovation and affect productivity. In some of Canada's tightly regulated sectors, such as the broadcasting and telecommunications, higher market concentration and limited competition have been associated with slower productivity growth (Gu and Lafrance, 2012_[18]; Gu 2024_[14]).

4.2.5. Productivity growth among Canada's best performing firms has been slowing

Studies by Statistics Canada have attributed part of the productivity slowdown after 2000 to slower rates of innovation at Canada's top firms. The pace of innovation among national frontier firms - defined as the top 10% of the most productive firms - has declined from a 3.4 % average annual growth between 1991-2000 to 1% between 2000 and 2015 (Gu, 2019_[15]). Given that top firms represented a large share of gross output (about 30%), this contributed directly to aggregate productivity slowdown (Gu, 2019_[15]).

Large and medium-sized firms accounted for nearly the entire decrease in investment per worker between 2006 and 2022, even when excluding the extraction sector. The drop in capital intensity was relatively more pronounced among foreign-controlled firms, which made up 20% of investment in 2021, but contributed to 30% of the decline (Gu, 2024_[14]). While difficult to attribute to a single cause, research from Statistics Canada (Gu, 2024_[14]) suggests that the decline in productivity and investment is partly due to increasing industry concentration and declining firm entry rates.

As in many OECD countries, Canada's productivity growth slowdown since the early 2000s has been accompanied by a widening gap between high-productivity "frontier" firms and low-productivity "laggard" ones. The productivity of "frontier" firms in the manufacturing and service sectors increased by respectively 37% and 20% from 2000 to 2018 against 26% and 13% for so-called "laggards". This divergence – albeit moderate by international comparison - can be indicative of a decline in innovation diffusion from national frontier to non-frontier firms after 2000 (Gu, 2019_[15]). The latter may be due to weaker network effects and reduced benefits from foreign technology spillovers. A lack of strong domestic technology anchor firms can have played a role too, particularly following the collapse or decline of Nortel and Research in Motion—two companies that used to drive the diffusion of innovation in the digital and communications sectors in Canada.





Source: Statistics Canada; and OECD calculations.

Foreign and Canadian multinational companies, which are larger than average, foster innovation by bringing new technologies and services and by investing in R&D. They contribute to the bulk of business investment and have higher investment per worker than other firms. Multinationals accounted for about 37% of Canada's private-sector employment in 2023, but they made up 65% of all business investment (Figure 4.11, panel A). Canadian multinationals tend to have higher investment intensity per worker compared to foreign ones, largely due to greater spending on non-residential construction (Figure 4.11, Panel B). However, this may be largely related to their role

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in the extraction industry. Foreign multinationals accounted for over 40% of R&D spending by businesses in 2022, 30% of all corporate intellectual property (IP) expenditures in 2023, and more than 75% of technological services trade (Figure 4.11, panel C). They were also responsible for 30% of machinery and equipment investment in 2023.

The importance of foreign direct investment (FDI) to Canada, measured by the stock of FDI relative to gross domestic product (GDP), at about 69% of GDP as of 2022, is significantly higher than the OECD average (about 50%). It exceeds that of economies like the United States (42%) and Germany (29%). FDI is predominantly concentrated in manufacturing, and in energy and mining. Studies of the impact of FDI in Canada have found the presence of foreign controlled firms has contributed directly and indirectly to higher productivity in Canada. Foreign firms are generally more productive than domestic ones, and their presence creates spillovers to domestic companies through competition, the adoption of new technologies, and skill development (Tang and Wang, 2020_[17]). Most jobs are in manufacturing, wholesale and retail trade, and services related to IT and R&D. Many are created in high-tech and knowledge-intensive activities – 25% of jobs created by greenfield FDI in the past 20 years were in software and IT (OECD, 2024_[18]). Inward FDI has also supported Canada's export growth and led to inter-industry productivity gains in manufacturing, via both upstream and downstream production linkages (Tang and Wang, 2020_[17]).

4.3. Boosting innovative capacity and technology adoption

Weak business investment, particularly in critical assets for new technologies (see discussion further below), highlights the need for policies that create an environment favourable to business innovation and to the adoption of new technologies. This section explores policy options to strengthen business-sector innovation creation and adoption. It focuses on i) improving the efficiency of public support for R&D from basic research to commercialisation; and ii) ensuring conditions for the adoption and diffusion of clean and digital technologies while maintaining a level playing field.

4.3.1. Making R&D support more effective

Canada's R&D investment intensity, a key driver of a country's innovation capacity and therefore multifactor productivity growth, remains weak in aggregate terms. As of 2023, Canada's gross domestic expenditure on R&D as a percentage of GDP was approximatively 1.8%, far below the OECD average (2.7% of GDP) and leaders such as the US (3.3%) and Korea (4.9%) (Figure 4.12). R&D investment intensity has stagnated in Canada since 2010, while it has increased in most OECD countries (by 0.3 % of GDP on average). Canada's share of business R&D investment is particularly low. Most of Canada's growth in industrial R&D spending in recent years reflected higher outlays by the firms that were already the best R&D performers (Statistics Canada, 2024_[19]), suggesting that R&D investment has remained concentrated, possibly also due to weaker business dynamism. A relatively high share of Canada's R&D spending is performed by higher education institutions. This suggests a greater emphasis on basic research. Canada tends to perform very well in basic research, as illustrated by its strong research impact, which plays a key role in driving breakthrough innovations with broad industrial potential (Gallini and Hollis, 2019_[20]).

Low business R&D activity points to challenges in translating basic research into large scale commercial applications. This might reflect difficulties to bridge university research with business needs and to ramp up commercialisation. Canada's promising start-ups are often acquired and developed abroad and the same goes for intellectual property products (Council of Canadian Academies, 2018_[21]). Canada's production of patents has grown considerably over the past 30 years. However, some research concludes that this growth has had only a weak impact on total factor productivity gains due to inventors' migration and foreign ownership of patents (Cockburn, MacGarvie and McKeon, 2023_[22]), reflecting a propensity to assign Canadian-invented intellectual property to foreign firms rather than retain it for further development (Gallini and Hollis, 2019_[20]).

Figure 4.12. Canada's R&D spending is well below that of top-ranking countries

% of GDP 6 Business enterprise Government Higher education △ Gross domestic expenditure on R&D. 2010 5 4 Δ 3 Λ 2 1 DECD CAN NOR DNK 뿡 Ы NLD GBR DEU Π AUT Ч ISR 묍 R FRA USA Ŕ

Gross domestic expenditure on R&D, 2023 or latest available

Source: OECD Main Science and Technology Indicators database.

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In Canada overall government support for R&D is skewed toward indirect support and tends to favour small firms over larger ones. Canada's largest program to support R&D activities is the Scientific Research and Experimental Development (SR&ED) program. Specifically, it provides an enhanced and refundable tax credit of 35% of current expenditures to small- and medium-sized Canadian-controlled private corporations, compared to a non-refundable tax credit of 15% for larger businesses. Nearly all provincial governments offer tax credits for R&D performed within their province. On average the combined federal-provincial investment tax credit rate on R&D performed in Canada is approximately 20% for large and non-domestically controlled firms compared to 43% for Canadian-controlled SMEs (Lester, 2022_[23]). Since a key rationale for government support is that private firms do not consider the positive externalities of knowledge and technological progress in deciding on R&D spending, different tax credit rates would be justified if spillovers from small firms were greater than those from larger firms. Some research (Kim and Lester, 2019_[24]) suggests that in Canada R&D spending by large firms generate significantly higher private and social rates of return than small firms. The presence of market failures, which could affect the ability of small firms to obtain financing could be a valid reason for providing support to smaller businesses. However, as discussed below, these can generally be better addressed through specific measures facilitating access to credit and risk capital.

R&D incentives should be harmonised across small and larger firms. Providing greater support to domestically controlled small business leads to distortions and is unlikely to address the specific needs of SMEs nor to be budgetary efficient. Although special benefits for smaller firms may not be a significant factor behind companies staying small, the harmonisation can still help reduce distortions and make the programmes more effective. At the same time policymakers needs to take into account that indirect public support for R&D activities performed by large firms might also subsidise investment that would have been made regardless. Another form of distortion stems from the exclusion of capital expenditures from the base for the credit. In consequence, the scheme favours labour intensive R&D over capital intensive R&D. Capital expenditure should be re-introduced in the base for the credit.

The government recently undertook consultations on a modernisation of the Scientific Research and Experimental Development (SR&ED) tax incentives. The Fall Economic Statement 2024 proposed increasing the annual expenditure limit and capital phase-out thresholds of the SR&ED programme's enhanced credit available to smalland medium-sized Canadian-controlled private corporations, extending access to the enhanced credit to Canadian public corporations, and restoring the eligibility of capital expenditures. Canada should harmonise R&D tax credit rates, reintroduce capital expenditure in the tax credit base, simplify the application process, and use potential savings to finance better targeted innovation support. To instil business confidence and boost long term innovation and investment plans in Canada, the government should provide predictable conditions with clear orientations.

There is room to re-direct government R&D funding towards direct support instruments. Support in areas prone to market failures, such as green technology, should be pursued selectively while keeping a level playing field. In 2023, the government tabled a blueprint for a new Canadian Innovation Corporation (CIC), a new national-scale platform of business R&D support, which is planned to include the incorporation of Canada' successful Industrial Research Assistance Program (NRC IRAP), currently managed by the National Research Council. The latter is specifically designed to help small businesses scale up their R&D efforts, and to bring new products to market. Evaluations of the program suggest that IRAP has been successful at reaching an increasing number of innovative and high-potential SME clients, notably due to highly effective frontline agents ("Industrial Technology Advisors") able to maximise the impact of the funding. Further expansion of funding to the forthcoming CIC should be considered. The Strategic Innovation Fund (SIF), created in 2017, is another relevant initiative. It supports large-scale, transformative and aerospace industry, to biotechnology, advanced manufacturing, robotics, and clean technology. The SIF has also provided support for AI and quantum firms. As with all such targeted measures, regular appraisal can help ensure the menu of support is effective and efficient (from a fiscal spending perspective) while maintaining a level playing field.

4.3.2. Encouraging investment in clean technology while keeping a level playing field

The environmental and clean technology sector in Canada is estimated at 2.9% of GDP (Jiang, 2023_[25]). It has experienced somewhat faster than average productivity growth between 2012 and 2021. Jobs in that sector have higher annual average compensation compared to the national average. The sector is defined as 'activities related to environmental protection, the optimal allocation of natural resources and the use of goods that require less energy or resources than the industry standard' (Jiang, 2023_[25]). As such it comprises a wide range of activities, such as the production of clean energy, waste management, and electric-vehicle development and manufacture.

Figure 4.13. Canadian businesses have started to invest in clean technologies

Share of capital expenditures spent on advanced technology by type of technology, 2020 to 2022



Source: Statistics Canada.

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The shift to a green economy does not only imply the development of new clean technologies, but also its adoption. Between 2020 and 2022, the share of capital expenditures on clean technologies was about 12% (Figure 4.13). According to the Survey on Advanced Technologies, low financial returns and difficulties in accessing financial support were the main obstacles to the adoption of clean technology (Statistics Canada, 2024_[26]). Targeted intervention to address financing gaps should be coupled with continued efforts to strengthen the price signal of low carbon technologies, including through taxation. Furthermore, policies need to address risks of skill shortages in emerging green sectors, including skilled trades (see discussion below).

Canadian governments have introduced various supports for the development and adoption of clean technologies, in addition to technology-neutral incentives. These include the 2023 budget's green transition blueprint, significant investments in clean electricity, an interim sustainable jobs plan, and the CAD 3.8 billion critical minerals strategy, which focuses on minerals essential for electric vehicles and clean technologies. The Strategic Innovation Fund's net zero accelerator initiative was expanded in 2021, with an additional CAD 5 billion provided to support investments aiming to reduce greenhouse gas emissions across the Canadian economy.

Strategic industrial initiatives should avoid distorting international competition and remain as technology-neutral as possible. Furthermore, maintaining a level playing field for all companies is essential to maintain open markets. As such, subsidies should be carefully targeted to correct specific market failures, have clear time limits, be cost-effective, transparent, and aligned with WTO regulations to foster long-term sustainability and global trade consistency (IMF, 2024_[27]). The United States and the European Union have recently adopted large-scale climate policies that have profound implications for the global clean energy transition. Canada responded with a wide array of measures intending to promote adoption of low emission technologies, support domestic industries, and secure strategic investment, including for electric vehicle battery plants. These are discussed in greater details in the first chapter. Most of the support to businesses concerns new and expanded tax incentives, including refundable investment tax credits. However, such intervention should be based on clear cost-benefit-analyses, include frequent programme evaluation and should avoid a 'race to the bottom' with automakers that could cause global market fragmentation.

4.3.3. Reaping the productivity gains of new digital technologies

The digital intensity of Canada's industry structure has remained below that of G7 peers, pointing to scope for deeper adoption of digital technologies. Compared to other G7 countries, Canada has the highest share of business activities with low digital intensity and the lowest share with high digital intensity (Liu, 2021_[28]). Other indicators point to strengths and weaknesses. The share of Canadians with at least some basic digital skills is among the highest in the OECD. Canadian SMEs lag their OECD peers when it comes to broadband usage and cloud computing, but compare favourably regarding consumer facing digital adoption, including rates of social media presence and share of firms with a website.

Digitally intensive sectors experienced much stronger productivity growth in 2002-2019 than the rest of the economy (Figure 4.14). Similarly, the Information Communication Technology (ICT) sector has registered strong productivity growth over the past decades, and its employment has grown rapidly following the pandemic. Its size relative to Canada's GDP increased from 3.2 % in 2000 to 5.4 % in 2022 (Barr, Foltin and Tang, 2023_[29]). As of 2024 there was no sign of widespread labour shortages in the ICT sector due to the availability of a well-educated workforce, including a healthy supply of STEM graduates. Despite this growth, the sector remains relatively small, and has not contributed to aggregate productivity growth to the same degree as seen in countries such as the United States (Gu and Willox, 2023_[6]).

Policies to foster adoption of digital technologies and the development of the digital industry should follow a holistic approach. Recent literature (Gal et al., 2019_[30]) has highlighted the key role of complementarities of digital adoption with technical and managerial skills, strong digital infrastructures, and competitive policies.

Figure 4.14. Labour productivity growth has been considerably higher in digitally intensive sectors



Labour productivity growth in the digitally intensive and non-digitally intensive sectors

4.3.4. Artificial Intelligence has potential to boost productivity, but requires new investments and skills

Artificial Intelligence (AI) can help optimise supply chains and develop predictive analytics, potentially benefiting many industries. As elsewhere AI use is becoming increasingly common in Canada. A recent survey (Statistics Canada, 2024_[31]) showed that as of the third quarter of 2024 over 10% of businesses made use of AI in producing goods and delivering services, with 30% in information and communication industries (Figure 4.15, panel A). Much debate around AI focuses on the risk to jobs (see Box 4.2). A corollary to this is the impact on productivity. Recent research suggests potentially large labour productivity gains, including through enhanced task efficiency and freed time allowing workers to shift to higher labour productivity occupations. These gains might be further supported by industry-specific enhancements in healthcare, government, and financial services. A study by Accenture (2024_[32]) estimates that AI could enhance Canada's labour productivity by an order of 8% by 2030. However, these estimates are surrounded by high uncertainty, notably around the share of tasks that can be effectively automated by AI. As for previous disruptive technologies, it may take longer for AI to diffuse through the economy.

High costs are seen as a constraint to AI expansion in Canada. The OECD AI survey of employers (2023_[33]) shows that a lack of skills is currently the second biggest barrier to AI adoption after cost, significantly bigger than government regulation or a general reluctance to the technology (Figure 4.16). A recent OECD study (Green, 2024_[34]) finds that the most demanded skills in occupations with high AI exposure are management, communication, and digital skills. Between 2012 and 2022, the demand for skills in occupations highly exposed to AI increased the most for language and social skills. To fully leverage AI's productivity potential, it is essential to develop strategies fostering a workforce that is prepared for the demands of the digital age. Collaboration between industry stakeholders, educational institutions, and government agencies should ensure an effective balance between on-the job training and the availability of appropriate education opportunities.

Key government initiatives have been put forward to advance the development and deployment of AI in Canada. These include the Pan-Canadian Artificial Intelligence Strategy, launched in 2017, and aimed at advancing AI research and talent development, which was renewed in Budget 2021 and expanded to also include support for AI commercialization and standards. In addition, the government is providing funding for key infrastructures needed

for the diffusion of AI technologies. Budget 2024 announced a CAD 2.4 billion package of measures including CAD 2 billion for investment in computing capabilities and technological infrastructure for AI researchers and businesses, CAD 200 million to boost AI startups and accelerate AI adoption in critical sectors, CAD 100 million for the AI Assist Program to help small and medium-sized businesses scale up using AI, and CAD 50 million to create a new Canadian AI Safety Institute. The Artificial Intelligence and Data Act (AIDA) proposed in 2022, which seeks to regulate high-impact AI systems and prevent biased or harmful AI applications, is still pending legislative approval. Overall, the effectiveness of these policies will depend on their implementation and the ability to develop, attract, and retain AI talent, and to durably scale-up innovative AI businesses.



Figure 4.15. AI has started to change some of the tasks performed by employees

Source: Statistics Canada; and (Statistics Canada, 2024[31]).

Barriers to AI adoption, 2022

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Figure 4.16. Cost is the most frequent barrier to AI adoption, government regulation the lowest



Notes: All employers were asked: "I'm going to list a few potential barriers to the adoption of artificial intelligence. In each case, please tell me whether it has ever been a barrier to adopting artificial intelligence in your company: High costs/Lack of skills to adopt artificial intelligence/Government regulation/Not convinced by the technology/Any other barriers not previously mentioned". Source: Lane, M., M. Williams and S. Broecke (2023), "The impact of Al on the workplace: Main findings from the OECD Al surveys of employers and

Source: Lane, M., M. Williams and S. Broecke (2023), "The impact of Al on the workplace: Main findings from the OECD Al surveys of employers and workers", OECD Social, Employment and Migration Working Papers, No. 288, OECD Publishing, https://doi.org/10.1787/ea0a0fe1-en.

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Box 4.2. Risks to jobs from the spread of AI applications

So far, there is little evidence of decreased labour demand due to AI. Large employment effects may take time to materialise (OECD, $2023_{[35]}$), but there is evidence that AI is already changing how Canadian workers perform their jobs and what skills they require. Of the businesses who reported using AI in 2023, barely 6% reported decreases in total employment. Evidence points to some changes in the tasks performed among businesses using AI, with nearly 40% reporting some moderate or large changes (Figure 4.15, panel B).

Future implications for the labour market could be considerable because advances in Artificial Intelligence have broadened the set of skills and abilities that can be replicated by automation technologies. Therefore, AI can have broader effects for the labour force than for instance robotics, which affects typically low-skilled routine and non-cognitive jobs. Recent work from Statistics Canada (Mehdi and Morissette, 2024_[36]) suggests that about 60% of employees in Canada could be exposed to AI-related job transformation, of which half concerns jobs that may be highly complementary with AI. The jobs of highly educated employees are more exposed overall. However, highly educated employees are also more likely to hold jobs that are highly complementary with AI technologies. Exposure to AI-related job transformation is higher for employees in professional, scientific and technical services, finance and insurance, and information and communication industries. However, jobs in education and health care professionals are more likely to be highly complementary with AI.

4.4. Ensuring good business conditions for SMEs

SMEs and entrepreneurs make up a sizeable proportion of Canadian economic activity and are more prevalent in Canada than in the United States. This section discusses options to improve the business environment for SMEs by improving financing conditions, better targeting SME support, and by encouraging the adoption of new technologies. It should be noted that addressing structural impediments identified elsewhere in this chapter, such as weaknesses in innovation capacity and adoption and barriers to competition is also key to raise SME's productivity performance.

4.4.1. Reviewing the preferential small business corporate tax rate

As underscored in previous *Surveys*, Canada's preferential corporate tax rate for SMEs should be discontinued. The small business tax rate aims to give incorporated, privately owned small businesses additional after-tax income for reinvestment and expansion. In practice, however, it functions like a general tax refund; there is no requirement or specific incentive for businesses to reinvest the additional income in growing their business. The programme has significant budget costs, at about 0.2% of GDP in 2021, according to the report on Federal Tax Expenditures (2024_[37]). In comparison, the cost is about 50% higher than that of government spending on R&D tax credits under the SR&ED programme. However, there is little evidence that the preferential rate in Canada has an appreciable impact on the specific financing and information gaps faced by high-growth and innovative firms (IMF, 2018_[38]). Furthermore, such preferences can also generate adverse incentives. Preferential small business tax schemes can act as a lid on firm size at the threshold between the preferential rate and regular rate of taxation and tend to largely benefit small mature existing firms rather than start-ups and entrepreneurship.

4.4.2. Focusing SME financing support programmes

While small business lending conditions appear generally less favourable in Canada than in other G7 economies few firms report facing difficulties to obtain credit. In addition, the percentage of collateralised is also above its peers (OECD, 2024_[39]). Collateralised loans reduce riskiness for the financial sector but may also lead to potential obstacles in access to finance for smaller SMEs lacking strong tangible assets. This is particularly likely to be the case for young and innovative businesses. Overall, there is scope for better targeting SME financing programmes at young and innovative firms lacking financial track records or tangible assets.

In Canada, various programmes provide support for SME financing either indirectly through guarantees or directly through the government-owned Business Development Bank of Canada (BDC), but take-up is relatively modest (OECD, 2017_[10]). Given the weaker incentives to maximise profits, the effectiveness of BDC's financing programmes should be assessed as part of frequent reviews to assess the programme's effectiveness. The Canada Small Business Financing Program (CSBFP) is a statutory loan-guarantee programme that aims to facilitate lending to small businesses. Over the period 2021-2023 the CSBFP has averaged CAD 1.3 billion per year in indirect financing. Recent legislative and regulatory changes to the CSBFP in 2022 expanded loan-class eligibility to include the financing of intangible assets (e.g. intellectual property) and working capital and raised loan amounts. This is expected to increase annual commitments by CAD 560 million (OECD, 2024_[40]). However, there might be scope to expand take-up of the CSBFP by providing more affordable financing conditions, lowering fees, further simplifying application processes, and better communicating about availability of funding. In complement to this, the following policy could contribute to improving access to finance:

- Tighter targeting on young and innovative firms that lack financial track records or tangible assets.
- Subsidised loans to promote the adoption of clean technologies.
- Greater competition in the financial industry. In this regard, the Federal government's recent Banking Act establishes the legal framework for open banking will potentially boost competition by reducing barriers to entry to fintech companies and smaller banks.
- Expanding credit registries and encouraging innovative approaches to assessing creditor's borrowing capacity. For instance, alternative data and AI-driven solutions could help banks overcome biases and make better risk-adjusted lending decisions.

Box 4.3. Government measures to support the SME sector

The Business Development Bank of Canada (BDC) plays a key role in financing SMEs

The BDC, a crown corporation, has a mandate to support Canadian entrepreneurship, with a particular focus on SMEs. It offers direct lending, growth and venture capital (VC), and advisory services:

Financing Programmes: The Small Business Programme, BDC's largest credit financing scheme, provides loans up to CAD 100 000 to SMEs with a higher average risk profile than offered by commercial banks. It. BDC's Working Capital and BDC Xpansion Loan programmes loan up to CAD 2 million, focusing on cash flow and business expansion support, respectively.

Advisory services: BDC offers various consulting and advisory services to SMEs to improve their management skills, operational efficiency, digital transformation, and growth strategies.

Venture Capital: BDC plays a key role in supporting the growth of venture capital, investing both directly and indirectly through external venture funds (OECD, 2024_[40]). The Government of Canada promoted Canada's VC ecosystem by convening public, private, and institutional financing through multiple rounds of the Venture Capital Catalyst Initiative.

Programmes supporting under-represented groups

The Government pledged about CAD 7 billion to the Women Entrepreneurship Strategy; CAD 265 million for the Black Entrepreneurship Program (BEP); and CAD 150 million to the Indigenous Growth Fund launched together with the National Aboriginal Capital Corporations Association (OECD, 2024_[40]).

Promotion of export diversification

Canada's Export Diversification Strategy supports CAD 1.1 billion investment over six years to help SMEs access new markets and increase Canada's overseas exports by 50% by 2025.

4.4.3. Securing long term benefits from Canada's large venture capital market

Financing via venture capital (equity financing of startup and small companies, with high growth potential) is relatively substantial in Canada. As of 2022, Canada ranked third among OECD countries in terms of volume of venture capital as a percentage of GDP (OECD, 2024_[39]), behind Estonia and the United States. The Business Development Bank of Canada (BDC) plays an active role in the venture capital market, supporting the provision of risk capital to Canadian businesses through direct and indirect investments. The information and communication technology (ICT) sector has accounted for the bulk of venture capital investments. Financing deals are growing in life sciences, energy and clean technology. Recent government support measures may continue to support the cleantech sector in 2024.

Although Canada's venture capital market is generally in good health (OECD, n.d._[41]), some studies point to potential shortages of early-stage financing, between the point where business angel finance (initial seed financing money for start-ups) dries up and venture capital deals tend to kick in (Remillard and Scholz, 2020_[9]). One policy option is a national co-investment fund that would invest alongside angels to leverage their investment and expertise (Nitani and Nusrat, 2023_[42]). This could be achieved by expanding existing programmes, such as the Venture Capital Catalyst Initiative and by ramping up business advisory services provided by the BDC. The BDC assists the venture capital industry through networks of business angels, incubators and accelerators. Overall, an assessment of the impact of these BDC support measures would be beneficial. BDC should consider making available the data collected on firm-level support through the Business Innovation and Growth Support initiative.

Continued support to businesses to mature beyond the venture capital stage might be beneficial. It is frequently observed that Canadian startups struggle to access the scale of funding needed to reach global competitiveness (Nitani and Nusrat, 2023_[42]). They also appear to lack domestic exit opportunities, such as IPOs or acquisitions. Canadian VC funds are generally smaller, limiting the ability of firms to secure large amounts during late growth stages (Plant, 2023_[43]). There is increasing but still relatively limited, involvement in the industry from large Canadian institutional investors such as pension funds, insurance companies, corporations and banks. Additional efforts to remove barriers for Canadian funds to diversify their portfolios in innovation activities is one potential way to increase the financing pool (notably from Canada's large pensions funds) to finance late-stage firms.



Figure 4.17. Size of venture capital market has increased over the past decade

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4.4.4. Strengthening SME management skills

Evidence shows that the quality of management can play an important role in explaining productivity across different firms (Bloom et al., 2017_[44]) and in the ability of firms to adopt technologies and benefit from digitalization (Gal et al., 2019_[30]). Meanwhile poor management tends to mean less development of business models, organisational structures and working methods. The World Management Survey (Management Survey data from Scur et al 2021), suggests that quality of management of Canada's manufacturing firms is above the OECD average, but well behind the United States. Interestingly, this survey also indicates that managers in Canada tend to have comparatively lower levels of formal education than in other countries, which may mean shortfalls in competencies, such as strategic planning, financial management, and human resources management.

Additional policy attention needs to be placed on measures that can help raise managerial skills and address the needs of young and innovative businesses, such as access to risk capital. Difficulties to scale up firms may also point to a lack of management expertise in that specific domain. Other assessments also flag scope to strengthen management skills. An OECD report on SME and Entrepreneurship in Canada suggests that while Canada has a strong pool of technology talent, persisting shortages of experienced management talent reflects a lack of key management competencies in sales, marketing, organisational design, and product management (OECD, 2017_[10]). Evidence shows that, compared to the United States, the education gap is seen across nearly all industries, ranging from technology-driven sectors like information and communication industries to retail (Rosell, Dowsett and Paterson, 2023_[4]). The following policy measures are complementary solutions to address gaps in management skills across Canadian SMEs:

- Support the provision of management training programs (e.g. through subsidies to course fees) that cover essential skills such as financial management, strategic planning, and leadership, as well as digital competencies like data analytics and cybersecurity.
- Introducing a system of national certification for management excellence.
- Widening channels for firm-sponsored immigration of managerial talent.
- Encouraging education providers to include management courses in STEM programmes.
- Encouraging management leadership ecosystems, including through mentor networks for CEOs
- Facilitate the access of women to management positions (see discussion further below)

4.5. Strengthening competition

As discussed above, much of the evidence on what drives Canada's shortfalls in productivity growth points to a need for greater competition and business dynamism. Canada's natural disadvantage in having dispersed and relatively small markets has to be countered by making sure regulatory barriers are as low as possible. This section considers three key issues: i) regulatory barriers to both internal and external trade; ii) ensuring telecommunications markets are competitive and thus providing the quality digital access that is essential to smooth business operations and iii) competition in the digital sector, due to the importance of providing a check against this important sector's tendency towards monopoly.



Figure 4.18. There is room to improve Canada's regulatory environment

Overall economy-wide PMR

Note: Indicator value increase in the stringency of the regulatory environment. Source: OECD Product Market Regulation database.

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4.5.1. Lowering regulatory barriers

Natural barriers to competition linked to Canada's geography limit the exposure of businesses to competitive forces. Distances between centres of economic activity are often large resulting in regional markets that are often more isolated compared to the United States or the European Union. This places some natural limits on market size for products and for labour. It also implies that positive externalities from agglomeration for productivity and innovation (cluster effects) may be more limited (OECD, 2017_[10]). However, Canada is also close to the one of the largest markets in the world, the United States, and economic centres are often close to the border, exposing it to competitive forces.

The current environment of acute trade tensions with the United States could lead to persistent negative effects on labour productivity for Canada (Bank of Canada, 2025_[45]). In the short run, high trade policy uncertainty generally discourages firms from investing (Caldara et al., 2020_[46]), weighing on current and future labour productivity performance by dampening the stock of investment (all else being equal). In the longer run, trade barriers are also likely to have negative implications due to distortions leading to misallocation of resources. Recent empirical research found that higher tariffs are associated with lower labour productivity (Furceri et al., 2021_[47]), as it hampers trade and limits competition, and affects the pace of innovation and the opportunities to benefit from economies of scale (Dellmo, 2025_[48]). These trade tensions should therefore be seen as a further incentive to strengthen the functioning of internal markets and to reduce internal trade and labour mobility obstacles.

As previous *Surveys* have underscored, Canada has numerous policy and regulatory barriers to competition. Regulations that, in effect, reduce the exposure of some domestic sectors to competition have long been signalled as detracting from Canada's productivity performance. Compared to 2018, Canada's overall score in the 2023/2024 OECD's Product Market Regulation has remained nearly unchanged. It remains below the OECD average, due to issues that have been flagged in *Surveys*. Canada's rank has deteriorated somewhat since the 2018 Product Market Regulation publication, as improvements on the regulatory front have been more muted than in many OECD countries. Canada is ranked among the bottom five countries as regards barriers to foreign investment and barriers to entry in service and network sectors are significant. Entry in professional services is still tightly regulated for many professions (see discussion further below).

Addressing longstanding barriers to internal trade

Canada's interprovincial trade barriers have been widely reported as compromising the efficiency of resource allocation across the country, while also reducing Canada's effective internal market size. As previous *Surveys* have underscored, differences in product and labour regulations and technical standards across subnational jurisdictions have long impeded interprovincial trade and labour mobility (see section on skills for a more detailed discussion on restrictions on licensed professions). The barriers also limit the scale of production, thereby potentially limiting productivity. Interprovincial regulatory differences can reinforce the challenges related to the market fragmentation arising from the often large distances between centres of economic activity. This also has general implications for Canada's international trade competitiveness. Certain trade barriers permeate throughout nearly all economic sectors. For trade in goods, different trucking regulations across provinces increase transport costs, for instance. Non-trade barriers extend across many economic sectors, from the dairy sector to legal and accounting services.

Policy initiatives to reduce non-tariff barriers include the signing of the Canadian Free Trade Agreement (CFTA) in 2017 plus some additional agreements between subsets of provinces and territories. The CFTA builds on a previous agreement (the Agreement on Internal Trade) and includes a mechanism for reconciling regulations across provinces and territories (the Regulatory Reconciliation and Cooperation Table). Recent initiatives by the federal government include the opening of an online stakeholder portal in 2023 (to share insights on obstacles and innovations to internal trade), and the creation of the Canadian internal trade data and information Hub in 2024, which features novel data and analysis on drivers and patterns of internal trade. The main findings are discussed in Box 4.4.

Building on recommendations from previous Surveys, steps forward in removing the interprovincial barriers include:

- Greater use of mutual recognition agreements between sub-sets of provinces to reconcile remaining
 regulatory differences, including on the recognition of (foreign) qualifications. In this regard, some welcome
 efforts are underway in Atlantic provinces, which entered the Atlantic Technical Safety Agreement in 2023.
 A pilot has been launched in September 2024 among various provinces to improve mutual recognition of
 regulatory requirements in the trucking sector.
- Extended scope for the CFTA, notably to address agricultural supply management regimes. The CFTA should
 be taken further by prohibiting agricultural supply management regimes, reconciling remaining regulatory
 differences (possibly via mutual recognition) and expediting dispute resolution, and raising penalties for
 non-compliance. In July 2024, the Government of Canada announced the removal or narrowing of 17 of its
 CFTA exceptions. This was followed in February 2025 by the removal of an additional 20 federal exceptions
 in the CFTA, the majority of which were related to government procurement. These decisions reduced the
 number of federal exceptions to 19.
- Additional resources for the CFTA and the Regulatory Reconciliation and Cooperation Table. Faster dispute
 resolution and higher penalties for non-compliance are important. The 2023 Survey suggested
 strengthening the Agreement's dispute resolution mechanism. Progress in reconciliation agreements by
 the Regulatory Reconciliation and Cooperation Table need to accelerate. In this regard it is telling that the
 Table has not struck a new agreement since 2021.
- Maintaining efforts to raise awareness through an easily accessible public database documenting internal trade barriers. Again, there has been some welcome progress in this direction, including the launch of the Canadian Internal Trade Data and Information Hub in 2024 which aims to help identify barriers. Budget 2024 announced the launch of the first ever Canadian survey on Interprovincial Trade in June 2024. This will provide further information on the obstacles faced by businesses.

Box 4.4. Recent insights on patterns and obstacles to internal trade and labour mobility

The 2023 Canadian Survey on Business Conditions (Statistics Canada, 2023^[49]) collected new data on internal trade and labour mobility, including information on the obstacles to interprovincial trade. The key findings are summarised as follows:

Transportation cost and availability are the most commonly cited obstacle to interprovincial trade

• Over half (52.1%) of businesses that conducted interprovincial reported some obstacles. Transportation cost and availability is the most common obstacle encountered (41.3%), followed by the distance between point of origin and destination reported by 10.9% of businesses.

Large businesses are more likely to engage in interprovincial trade

- Most businesses (about 65%) do not engage in interprovincial trade, essentially due to the local nature of the business.
- The likelihood of conducting interprovincial trade varies by sector. Businesses in wholesale trade (62.2%) are the most likely, followed by manufacturing (51.0%) and retail trade (42.0%).
- The larger the business, the more likely it was to conduct interprovincial trade. Nearly half (47.5%) of businesses with 100 or more employees engaged in interprovincial trade, compared to under one in five (17.8%) businesses with 1 to 4 employees.

Waiting times and costs involved in the certification or licensing are reported to be the main obstacles to hiring individuals from other provinces

• Large businesses and businesses in the territories are most likely to hire individuals from other provinces or territory. The most frequently reported obstacle was the waiting time for candidates to be certified or licensed, followed by costs, and by the level of effort required to verify a person's certification or license with the relevant regulatory body.

Lowering foreign entry restrictions

Canada, in general, has a welcoming foreign investment environment, reflected in a relatively high stock of foreign direct investment, higher than the OECD average (the stock of FDI was about 69% of GDP in 2022 compared to the OECD average of around 51%). The sectoral ownership restrictions detract from Canada's score in the OECD Product Market Regulation index and the FDI restrictiveness index. Canada's poor performance in the FDI restrictiveness index reflects restrictions on foreign equity and the screening and approval processes (due to the required automatic policy review for investments above the threshold value under the Canada Investment Act). Some research (Mistura and Roulet, 2019[50]) shows that the negative impact on FDI is driven by equity restrictions, while foreign investment screening policies impact FDI to a much lesser extent.

Canada maintains strict foreign investment ownership restrictions in some key network sectors, including telecommunication and broadcasting, airline, and banking. While some of these are related to certain national security concerns, restrictions potentially limit competition in these sectors. Ownership and corporate board restrictions prevent significant foreign telecommunication, broadcasting, and aviation investment, and there are deposit acceptance limitations for foreign banks. In telecommunications, foreign interests with market share exceeding 10% are generally allowed to hold no more than 46.7% of voting equity in any facilities-based telecommunications carrier or a broadcast distribution undertaking. International evidence (Rouzet and Spinelli, 2016[51]) confirms a connection in the telecoms sector between ownership restrictions and companies' price-cost margins, suggesting derestriction in Canada could bring consumer benefits (see discussion further below).

In March 2024, the government introduced a modernisation of the Investment Canada Act (ICA). The latter notably increases scrutiny of foreign investments from state-owned enterprises (SOEs) or entities influenced by foreign

states in the Interactive Digital Media (IDM) sector. Operationally, the authorities will rely on strengthened Net Benefit Reviews under the Investment Canada Act, as well as tighter national security reviews. In implementing more stringent scrutiny, the authorities should contain risks of adverse consequence to Canada's foreign investment climate. For instance, it should avoid systematically prolonging the investment approval process which could create uncertainty for foreign investors.



Figure 4.19. Restrictions to services trade remain high in service and network sectors

OECD Top 5: average of 5 best performing OECD economies 2023; OECD Bottom 5: 5 worst performing OECD economies.
 Note: In panel B, indicator value increase in the stringency of the regulatory environment.
 Source: OECD Services Trade Restrictiveness Index by services sector; Statistics Canada; OECD Analytical database; and OECD Product Market Regulation database.

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Strategic or security concerns around foreign ownership in these sectors need to be weighed against the potential for less economically efficient or advanced incumbent businesses processes. The sector-specific restrictions imply a limit to competition by restricting market entry from foreign based firms, thereby potentially limiting foreign investment, and preventing the entry of firms operating at the global productivity frontier. Constraining entry from foreign-based competitors can also reduce investment incentives for incumbents, and potentially prevent gains from innovation spillovers from firms operating at the global productivity frontier. The gains from lifting such restrictions may be substantial. For instance, research estimates that a levelling down of Canadian FDI restrictions to average OECD levels would raise Canadian labour productivity by around 0.8% (Hejazi and Trefler, 2019_[52]).

The need for restrictions on the telecom sector should be evaluated as part of the ongoing review of the sector (discussed below) and rules applying to the aviation and broadcasting sectors should also be reconsidered. The Competition Bureau has launched in July 2024 a market study to examine the airline industry which is dominated by only two companies and features comparatively high domestic airfares. These issues have been underscored in previous *Surveys*, but no action has been taken since 2018.

4.5.2. Ensuring access to low cost telecommunications

High quality telecommunications infrastructure is key for the adoption of digital technologies by businesses and as a platform for competition between providers. Broadband access in rural and remote communities, is below 70% (ISED, 2024_[53]). This partly reflects challenges associated with increasing rural coverage in certain areas, including because of high costs. While policy efforts on this front have intensified in recent years, as of December 2023 93.5%

of all households had access to high-speed broadband (50/10/unlimited), still short of the target of 98% by 2026 (ISED, 2024_[53]). As of September 2024, the Canada Infrastructure Bank (CIB) has invested CAD 2 billion through its Broadband Initiative. The CIB collaborates with Canadian internet service providers to expand high-speed internet access in underserved communities, targeting Indigenous, rural, and remote regions where the high cost per household makes commercial viability challenging.

Continuing efforts to lower barriers to entry in telecoms could lower prices and increase access to fast, high-quality networks, broadly facilitating business productivity (and increasing household welfare). The authorities have been endeavouring to lower entry barriers in recent years. In 2019, the Canadian Radio and Telecommunications Commission (CRTC), the sector's regulator, reduced the rates that the major telecoms companies can charge third-party operators. This has helped lower internet prices. In August 2024, the CRTC announced provisions that allow smaller internet competitors to use the fibre networks of large telephone companies nationwide. Implementation, expected in February 2025, is expected to lower prices and widen consumer choice. Budget 2024 includes proposals for amending the *Telecommunications Act, to* facilitate renewal or switch between home Internet, home phone and cell phone plans. At the same time, policies fostering competition should also consider that Canada's high costs of infrastructure development – notably due its large territory - require large investment. As such, efforts to increase market entry (e.g. for third party operators) should be balanced against the need to ensure sufficient investment incentives for incumbent operators.

4.5.3. Ensuring sound competition policy in digital markets

Ensuring sound competition policy for big tech companies can help raise investment and ensure pressure to innovate in the sector. Digital markets can teeter toward quasi-monopolies due to barriers to entry linked to data access, abusive and exclusionary practices, and lock-in of consumers and businesses to service providers (Nicoletti, Vitale and Abate, 2023_[54]). These dynamics can thwart the emergence of new entrants and their ability to challenge incumbents. OECD evidence shows that competition and easier market entry boost adoptions and leads to higher productivity spillovers (Costa et al., 2021_[55]). This means that to reap the benefits of digital innovation, it is key to create market conditions that provide incentives for the adoption of digital technologies by incumbents, as well as to facilitate entry and level the playing field.

The PMR indicator on Digital Markets captures the extent to which countries have assessed commissioned market studies to assess competition in digital markets, updated their merger regime for the digital age, subjected online platforms to fair trade and contestability measures, and implemented a range of competitive measures pertaining to data use and access (Nicoletti, Vitale and Abate, 2023_[54]). This indicator shows that Canada ranks below some other OECD countries, particularly those that have started policy work on measures to reduce the risk of anticompetitive behaviour arising in relation to large digital platforms (ex-ante regulation). For instance, the European Union adopted the Digital Markets Act in 2022. Updates of regulatory frameworks are still being discussed in the United States and the United Kingdom.

Canada's review of its competition legislation has resulted in measures to increase competition, focusing on some of the key issues emerging in digital and data driven markets. The review led to significant changes aimed at modernising the Competition Act by strengthening its enforcement (see Box 4.5). Canada has also expanded its privacy laws to include consumer rights to data portability and deletion, and to increase oversight in the collection of private information. The focus of recent policy measures has mostly concentrated on improving the handling of anti-competitive behaviours (ex post regulation). There is room to consider additional emphasis on "ex ante" regulation around digital platforms. Because the specific features of digital markets favour the entrenchment of market power, ex-post interventions may not be sufficient to eliminate the advantage gained by dominant firms in the meantime. Proactive ex-ante regulations can therefore complement ex-post antitrust enforcement, preventing anti-competitive mergers, curbing entrenched dominance, and fostering an environment conducive to innovation (Nicoletti, Vitale and Abate, 2023_[54]). For instance, gatekeeper regulations could mandate platforms to ensure easy data portability and interoperability requirements. Compatibility with frameworks introduced elsewhere will be important given digital markets are usually transnational.

Figure 4.20. Canada stands below best ranked OECD countries in digital market regulations



Digital markets 2024 PMR in selected countries

Note: Indicator value increase in the stringency of the regulatory environment. Whisker for the OECD bar shows the range between the averages of the 5 best (the lower scores) and 5 worst (the higher scores) performing OECD economies. Source: OECD Product Market Regulation database.

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Box 4.5. Recent advancements in competition legislation have sought to address some of the emerging issues related to digital markets

Revised competition legislations have granted more power to the Competition Bureau

There has been some welcome progress in policy measures on what past Surveys have identified as levers for strengthening Canada's competition environment. Canada has implemented significant changes to its competition regime following a review of the Competition Act, which was finalised through amendments in Bills C-56 (2023) and C-59 (2024). These will potentially bring improvement in key areas of the competition framework, including the scope of the Act; enforcement methods and corrective measures; and the improvement of competition policy in increasingly digital and data-driven markets. The reforms have increased the Bureau's ability to review and challenge mergers by introducing a presumption that mergers increasing market concentration significantly are anti-competitive unless proven otherwise by the merging parties, thereby shifting the burden of proof to businesses rather than the Competition Bureau. The reforms strengthened the authority of the Competition Bureau to launch and conduct formal market studies. Revisions have broadened the scope of what constitutes anti-competitive practices by dominant firms, especially in the context of digital platforms and e-commerce. Conducts intended to "have a selective or discriminatory response to an actual or potential competitor", including nascent competitors are now included. Additionally, the amendment explicitly allows the Bureau to consider conducts affecting non-price variables, such as the effect on barriers to entry (including network effects), key aspects of data privacy affecting service quality, choice and consumer privacy (OECD, 2023[56]).

New regulations of online data rights can improve portability and interoperability

Canada continues to advance on issues of data rights and regulation of digital platforms. Individuals' rights as regards online data, including portability can strengthen competition. Policies need to ensure that it is both legally and technically easy for individuals to transfer their personal data between digital products and services. A digital charter has been in place since 2019, followed by the Digital Charter Implementation act in June 2022, which aims to improve data portability and regulate the ethical use of data, including significant fines for non-compliance and standards for AI-enabled systems. The Consumer Privacy Protection Act (2022), a major change of Canada's private sector privacy law, is now in effect. It includes provisions on data portability and rights over personal data. These could help reduce barriers to entry. Recently, the Canadian Federal Government introduced legislation to address a range of other policy issues emerging in the digital economy, including the Online Streaming Act, Online News Act, and Digital Charter Implementation Act.

4.5.4. Adressing corruption and money laundering risks

Lower levels of corruption are generally found to have positive effects on productivity performance (OECD, 2018[57]). Corruption tends to reduce productivity through its adverse effects on innovation and the diffusion of new technologies and by altering resource allocation. Canada ranks well in measures of perceived corruption, it ranked 12 out of 180 countries worldwide in 2023 (Figure 4.21, Panels A and B). However, perceived corruption in Canada has shown a deteriorating trend since the mid-2010s, although there has been a slight improvement recently (Figure 4.21, Panel C). Conflicts of interest, political finance, legislative influence, and weak enforcement of antibribery measures remain significant challenges (Figure 4.21, Panel D). In contrast, the level of trust in public institutions in Canada is comparable to that of the best-performing OECD countries. Canada could strengthen regulatory safeguards by enhancing internal controls and audits, improving public disclosure and transparency, and bolstering risk management practices. Canada has also undertaken important legislative reforms to enhance its foreign bribery framework, including the Remediation Agreement (RA), a non-trial resolution mechanism introduced in 2018. Despite these efforts, Canada's enforcement of the foreign bribery offence remains low (OECD, 2023[58]). Canada should enhance its capacity to detect foreign bribery by introducing effective whistleblower protection and clarifying policies surrounding self-reporting by companies. Canadian agencies and law enforcement should also collect comprehensive data on foreign bribery, to help assess the impact of its enforcement policies and priorities. (Figure 4.22, Panel B). In recent years, Canada has introduced a series of measures and investments to combat financial crime and safeguard the integrity of Canada's financial system. Since 2019, the Government has made investments of close to CAD 379 million to strengthen compliance, data, financial intelligence, information sharing and investigative capacity to support money laundering investigations.

A major issue was until recently that Canada lacked information about the true (or "beneficial") owners of companies. This facilitated the creation of anonymous corporate entities to obscure the origins of illicit funds ("snow washing"). To address this issue, the federal government enacted Bill C-42 in 2023, aligning Canada with international standards set by the Financial Action Task Force (FATF). This bill mandates that federally incorporated companies disclose the identities of their true owners (or "beneficial owners") in an online registry, enhancing transparency and accountability. This is expected to facilitate information sharing among law enforcement, tax authorities, and other regulatory bodies.



Figure 4.21. Perceived corruption is relatively low in Canada

Note: Panel B shows the point estimate and the margin of error. Panel D shows sector-based subcomponents of the "Control of Corruption" indicator by the Varieties of Democracy Project. Source: Panel A: Transparency International; Panels B & C: World Bank, Worldwide Governance Indicators; Panel D: Varieties of Democracy Project, V-Dem Dataset v12.

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At the provincial level, money laundering through real estate transactions and other vehicles remains an issue. In 2020, British Columbia became the first province to establish a public registry for land-owning companies. Despite these advancements, ongoing efforts are required to address the complexities of money laundering across Canada (OECD, 2023_[59]). Vulnerabilities also exist within the banking system. In 2024, Toronto-Dominion Bank faced a fine of CAD 9.2 million from Canada's Financial Transactions and Reports Analysis Centre (FINTRAC) and USD 3 billion from U.S. regulators, as well as restrictions on its expansion in the U.S. market, due to severe shortcomings in antimoney laundering practices. FINTRAC recently published a note of concern regarding the role of legal professionals in facilitating money laundering. Legal professionals, apart from British Columbia notaries, are not required to report under Canada's Anti-Money Laundering and Anti-Terrorist Financing Regime (FINTRAC, 2024_[60]).

Figure 4.22. There is room for further improvement to tackle money laundering challenges



Note: Panel A summarises the overall assessment on the exchange of information in practice from peer reviews by the Global Forum on Transparency and Exchange of Information for Tax Purposes. The figure shows results from the ongoing second round when available, otherwise first round results are displayed. Panel B shows ratings from the FATF peer reviews of each member (conducted at different times, Canada's ratings are based on its 2016 assessment) to assess levels of implementation of the FATF Recommendations. "Investigation and prosecution¹" refers to money laundering. "Investigation and prosecution²" refers to terrorist financing.

Source: OECD Secretariat's own calculation based on the materials from the Global Forum on Transparency and Exchange of Information for Tax Purposes; and OECD, Financial Action Task Force (FATF).

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4.6. Ensuring an efficient allocation of labour resources

Efficient labour allocation is a key element for a productivity-friendly business environment. If the labour market does not respond to changing circumstances, such as the impact of AI (see discussion above), then shifts to new more productive activities are hampered and labour resources are stuck in sub-optimal economic activities. Furthermore, weak capacity to adjust elevates the risks of structural unemployment.

4.6.1. Canada's increasingly educated workforce contrasts with high vacancies in low to medium skilled occupations

Canada's labour market generally performs well, as evidenced by high trend employment rates and relatively low trend unemployment rates. Canada's workforce is highly educated: it has the highest proportion of tertiary-educated workers in the OECD and has one of the highest shares of the population having at least some basic digital skills. Canada's increases in skill levels of workers have contributed to labour productivity growth. This trend has also been reflected in significant growth in mid- and high-wage employment (Willcox and Feor, 2023_[61]).



Figure 4.23. Labour shortages are concentrated in low to medium skill occupations



B. Evolution of Canada's population educational

attainment, 2015-23

Note: in Panel A, number of job vacancies are averaged over 1-year. Source: OECD calculations based on data from Statistics Canada.

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Figure 4.24. Qualification mismatch is high in Canada

% 50 Over-qualified Under-qualified 45 40 35 30 25 20 15 10 5 0 Щ NOR CZE Π DNK HUN ESP FRA СН DECD ITA NLD LVA USA KOR AUT CAN NG SVK PRT LTU EST SWE ISR Ш. DEU Ч Z ^{*}BR ğ

Employed adults aged 25-65 who are not self-employed

Note: * Flemish Region only for Belgium; and England only for United Kingdom. Does not include adults who were only administered the doorstep interview due to a language barrier. A worker is classified as over-qualified (/under-qualified) when the level of their highest qualification is above (/below) the qualification level required for their job. The required qualification level is based on respondents' answers to the question "If applying today, what would be the usual qualification, if any, that someone would need to get this type of job?". Source: OECD (2024), Survey of Adult Skills – Reader's Companion, OECD Skills Studies, OECD Publishing, Paris, <u>https://doi.org/10.1787/3639d1e2-en</u>.

StatLink and https://stat.link/5ymlxq

There is scope for a more efficient use and allocation of labour resources. There is evidence of labour qualification mismatch (Figure 4.24), particularly among immigrants, while the talents and skills of women have remained underused. There is a contrast between an increasing supply of high-skill workers (Figure 4.23, panel B) and a concentration of vacancies in lower skilled occupations (Figure 4.23, panel A), including in retail trade, hospitality and food services, and transportation. Shortages in low skill occupations have for long accounted for the bulk of unfilled vacancies. At the same time, labour force and business surveys have highlighted persisting shortages in higher skilled occupations such as skilled trades, health care and social assistance. Employment projections by the Employment and Social Development Canada (ESDC, 2022_[62]) expect these trends to persist over the next decade.

4.6.2. Lowering internal barriers to labour market mobility in the skilled trades and licensed professions

Differences in provincial certification requirements for regulated professions continue to prevent their mutual recognition, creating barriers to the interprovincial mobility of workers in these occupations. The non-recognition of qualifications concerns certain critical sectors where persistent labour shortages have been reported, as the healthcare sector, and compulsory skilled trades (those where only those with the relevant official qualifications or apprentices can legally be employed, such as electricians, plumbers and crane operators). As shown in the Product Market Regulation (PMR) indicator, professions like architects, civil engineers, and real estate agents are also highly regulated professions. Over the past decades, various policy initiatives sought to streamline mutual recognition of certain personal services and skilled trades, such as the Red Seal Program Support, while more recently the commitment to mutual recognition was reaffirmed by the Canadian Free Trade Agreement in 2017.

Policies need to enhance mutual recognition across provinces and ease access to regulated professions in general to make full use of the skill potential. Overall, there is also a generally large number of regulated professions. OECD work (2020_[63]) has highlighted that regulatory approaches vary greatly across Canadian provinces. One key issue under the CFTA is that provinces maintain the right to request additional certification requirements, e.g. based on public security, safety concerns, or consumer protection grounds. Regulation of occupational entry are higher in Canada than in the US and Europe according to the latest PMR. This is generally due to the obligation to join a professional associate and to accumulate work experience before obtaining the permission to work (von Rueden and Bambalaite, 2020_[63]), including for some skilled trades, lawyers, engineers. Finally, further enhancing the recognition of qualifications of foreign trained immigrants would facilitate their professional integration.

4.6.3. Reducing structural imbalance in labour supply through immigration

Better leveraging the talents of Canada's immigrant workforce can help resolve the labour supply imbalances, and more generally improve productivity potential. Immigrants often face challenges in finding jobs that fully utilise their skills and prior experiences. In 2021, the rate of severe overqualification among those holding foreign degrees was over 25%, according to the latest census data—more than 2.5 times higher than that of native-born Canadians and twice as high as that of immigrants with Canadian degrees (Statistics Canada, 2022_[64]).

Recognition of non-Canadian qualifications and credentials is a key issue. Even immigrants with foreign degrees in high-demand areas such as registered nursing or medicine faced high rates of job mismatch. For instance, according to the 2021 census, barely 36% of immigrants with a foreign bachelor's degree in nursing worked in closely related occupations, while about 41% of those with a foreign medical degree worked as doctors (Statistics Canada, 2022_[64]). Actions to further streamline and accelerate the recognition of international credentials could include: continued work by the federal government and profession licensing and regulatory bodies to unify policies and regulations; the establishment of mutual qualification recognition agreements with key source countries; and better integration of foreign credential assessment and recognition into immigration application process to reduce the risk of non-recognition upon arrival. Additionally, the government should consider building on Canadian Work Experience Pilot and Foreign Credential Recognition Loans Projects, which have received positive evaluations where data was

available (ESDC, 2020_[65]), to better support internationally trained individuals. The authorities should also consider addressing the lack of data on the labour market outcomes of internationally trained individuals in Canada.

The Federal Skilled Trades Program, an immigration programme established in 2013 to address shortages in skilled trades, has fallen short of its objective due to strong restrictions, such as the need to have a job offer in Canada or to hold a Canadian skilled trade qualification before entry, and long application processing times (63 months in 2022). Such programme, which is part of the express entry system, should be given more prominence, and could deliver better results by simplifying the recognition of foreign certifications, reducing access conditions, and by speeding up the application process.

Governments should continue placing emphasis on skilled Canadian work experience and official language proficiency in immigration selection procedures (OECD, 2023_[59]). Insufficient English and French language skills significantly impact labour market outcomes (Xu and Hou, 2023_[66]). One option to strengthen language proficiency is to increase the weight given to it in the points-based evaluation for permanent residency under economic immigration programmes. Alternatively, as noted by (Finlayson and Globerman, 2023_[67]), a more advanced level of proficiency in one official language could be required for entry as a skilled worker, regardless of other criteria in the points system. Research shows that immigrants with pre-landing Canadian work experience have better postmigration labour market outcomes compared to those selected directly from abroad (Xu and Hou, 2023_[66]). The "two-step" immigration selection procedures in Canada allows the selection of immigrants from the pool of temporary foreign workers. The latter is considered to have helped reduce overqualification (Finlayson and Globerman, 2023_[67]). This said, the two-step immigration system may carry some downsides too, such as risks of worker exploitation.

Strengthening settlement and employment services can also ensure immigrant skills are better used. For instance, expanding access to micro-credential programmes can also help immigrants quickly acquire specific skills or certifications relevant to the Canadian job market. Mentorship programmes and the provision of comprehensive labour market information can also help.

Adjusting the parameters of immigrant selection could help resolve labour market imbalances. In 2022, Immigration, Refugees and Citizenship Canada introduced new category-based selection rules to admit more permanent immigrants with specific qualifications to help address skill shortages (see also Box 1 in Chapter 1). This policy shift involves moving partly away from a purely points-based system for economic immigrants to giving higher priority to applicants with experience in specific fields such as healthcare and technology, as well as demonstrated competence in French. Including a broader range of skills, beyond just educational achievements, appears to be a promising approach to expanding the pool of available talents. However, while these new programmes can address labour shortages and help reduce the rate of overqualification among new immigrants, they also carry risks as labour market needs and demands are inherently difficult to forecast and may move quickly.

4.6.4. Better exploiting the vocational education system to address labour shortages in skilled trades

Boosting participation in vocational education and apprenticeships is key for resolving Canada's labour market imbalances and to help strengthening productivity potential. Addressing shortages in skilled trades is also relevant for Canada's housing supply problems and in the green transition. Between 2016 and 2021, the number of working-age apprenticeship certificate holders has stagnated or fallen in several major trades' fields. At the same time, the unmet demand for skilled trades workers increased (Statistics Canada, 2022_[64]). According to employment projections (ESDC, 2022_[62]), over 1.2 million job openings are projected in skilled trades over the next decade, about 15% of the total 7.4 million expected openings.

Standardising certification and recognition of vocational training skills across provinces would enhance consistency, increase attractiveness, and facilitate labour mobility in Canada. Post-secondary vocational education, primarily through apprenticeships and college programs, is managed by provinces and territories, leading to potential issues with consistency, quality, and recognition nationwide. The federal government's support for the Red Seal Program,

which provides interprovincial certification in skilled trades, has been effective in promoting labour mobility and skill recognition. The federal government, in collaboration with provinces and territories, should work to expand standardised certification programs like the Red Seal to cover a broader range of occupations.

Figure 4.25. Labour market outcomes are above average among 25–34-year-old Canadians with vocational education qualifications



Source: OECD Education at a Glance database.

Policies should do more to address the stigma that discourages students from pursuing vocational pathways. Public information campaigns could help by highlighting the above-average labour market outcomes and relevance of vocational qualifications. In Canada, holding a vocational upper secondary qualification is associated with higher employment rates than a general qualification at the same level among 25-34 year-old (Figure 4.25, Panel A). Young adults with vocational secondary or post-secondary non-tertiary education earn about 25% more than their peers with a general education at the same level (Figure 4.25, panel B). Moreover, apprenticeships, being paid positions, allow young tradespeople to start their careers without student debt. Changing outdated perceptions of the trades requires a comprehensive strategy to reshape the views of students and their families and adapt the education system to encourage more people to train for a career in skilled trades.

Efforts to encourage the participation of women and immigrants in skilled trades need to be accelerated. The workforce in skilled trades remains limited by the underrepresentation of women and immigrants. In 2021, only 2.4% of working-age individuals holding apprenticeship certificates in these fields were women, while immigrants, who made up 28% of the working-age population, represented just 10% of apprenticeship certificate holders in these trades (Statistics Canada, 2022_[64]). See below for further discussion on women and skilled trades.

4.6.5. Strengthening lifelong learning

Building a resilient and adaptable workforce that can enhance productivity growth starts with strong basic skills. While young Canadians generally perform well in science, literacy, and numeracy, about 1 in 6 Canadians aged 16-24 have skills at or below the lowest threshold according to the result from the OECD Programme for the International Assessment of Adult Competencies (PIAAC). This is comparable to the OECD average but well behind leading OECD countries, suggesting some room for improvement.

Alongside improving skills development in schooling and higher education, governments can further promote skills via lifelong learning. While Canada performs above the OECD average in terms of alignment of training with labour market needs and coverage, there is room for improving inclusiveness in adult learning in Canada. (OECD, 2020_[68])

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Despite having a great need for upskilling, low-skilled workers receive less training than high-skilled workers. The gap in participation rates in lifelong learning activities between high and medium-skilled workers and low-skilled workers is 28 percentage points, among the highest across the OECD (OECD, 2020_[68]). To address this gap, governments need to further encourage initiatives that combine targeted co-financing of adult education with innovative and flexible delivery methods, such as online learning. Encouraging cost-sharing among industry, workers, and government could incentivise reskilling and upskilling. Also, public information campaigns to promote adult learning can be used. Increasing outreach, particularly among low-skilled adults and in regions affected by automation (OECD, 2020_[68]) and labour market information sharing could incentivise in-take of lifelong learning courses by providing timely information on the specific skills and knowledge needed in the job market.

Take up of adult learning programmes among low-income workers can be increased through well designed financial assistance programmes. In Canada there might be room to reduce the economic barriers to participation for low-income individuals (OECD, 2020_[68]), including by putting more emphasis on means tested direct subsidies. The Canada Training Benefit offers a refundable tax credit for a lifetime amount of up to CAD 5 000 to offset tuition costs and related fees. Such tax credit can generate a large deadweight loss and be less appealing to credit constrained workers. Since individuals must generally wait until after the end of the tax year to claim compensation, tax incentives fail to reduce liquidity constraints which may prevent access by lower-income individuals and smaller firms. Research showed that in the Netherlands the tax deduction (*aftrekpost scholingsuitgaven*) was used primarily by highly skilled individuals and had a high deadweight cost. (OECD, 2017_[69]).

Greater emphasis should be placed on promoting adapted lifelong learning opportunities for older workers (OECD, 2020_[68]). Canadians aged 55 to 64 have relatively high literacy, numeracy, and digital skills but these skills are still much stronger among younger people. Recent research has highlighted that redesigning training to fit the needs of older workers can help increase participation in adult learning among older workers in Canada (Fang, Gunderson and Lee, 2021_[70]).

4.6.6. Ensuring women's workforce skills and talent are fully realised

Additional effort is needed to accelerate progress in bringing women into underrepresented and highly productive (so better-paid) professions. Women remain under-represented in some fields that matter for the productivity of the economy, such as science, ICT and engineering, as well as in entrepreneurship. Women are particularly underrepresented in math-intensive and typically well-paying STEM fields, such as engineering and computer science (Chan, Handler and Frenette, 2021_[71]). This highlights still persistent stigmas with employing women in some occupations. The government should consider expanding programmes aiming to promote early exposure of girls to such STEM fields. Additionally, more mentorships and role model opportunities need to be offered. Various initiatives exist to encourage higher participation in STEM fields, but they have remained insufficient. These programmes should be reinforced. For example, Canada's Promoting Women in STEM Program, which is part of the federal government's Women Entrepreneurship Strategy, provides funding to encourage women to pursue education and careers in STEM fields. The programme aims to reduce gender disparities in high-paying and high-demand field through grants, scholarships, and support for organisations that offer mentorship and training.

Welcome initiatives are underway to increase the number of women in the trades. The Women in the Skilled Trades Initiative funds projects that create partnerships to recruit women, organise women-led events to attract women to the skilled trades, offer mentorship by female role models; and create a welcoming space for women training and work sites. Despite these efforts the share of women in skilled trades has remained low (about 5%). Furthermore, women in male-dominated trades tend to earn less than their male counterparts in the same trades (Frank and Frenette, 2019_[72]). The government should consider expanding funding opportunities for such initiatives, while placing additional attention on developing skilled women networks and addressing stigma and workplace culture and pay discrimination issues.

Research has shown that increases in female labour force participation in Canada between 1990 and 2015 were associated with higher productivity growth. Hence, a holistic policy approach is needed to better utilise women's skills and talents. The "child penalty" is high in Canada, estimated at 34% 10 years after giving birth (Connolly,

Fontaine and Haeck, 2023_[73]). Insofar as wages and productivity are correlated, this partly indicates a shift to less productive activities after giving birth. Affordable childcare facilitates an earlier return to work and can reduce the "child penalty" (André et al., 2023_[74]). Hence the roll out of the reform to expand access to affordable childcare is critical. Promoting work-life balance and reducing inequalities in the sharing of caretaking duties can also help ensure women's skills are utilised to their potential upon giving birth. There is still room for making parental leaves better shared, including by increasing replacement rates. While fathers have access to parental leave, uptake remains low (OECD, 2022_[75]).

There is also further scope to increase representation of women in leadership positions. The share of women in management positions is lower than in best-performing countries (Figure 4.26, Panel A). Only about one-fifth (20.5%) of director positions and one-third (31.4%) of officer positions were occupied by women in 2020 (Statistics Canada, 2023_[76]). Evidence suggests that companies with gender-diverse leadership teams tend to perform better, are more innovative and have higher employee engagement (Han and Noland, 2020_[77]; Folkman and Zenger, 2019_[78]; McKinsey & Company, 2008_[79]). Canada does not have mandatory quotas or targets for female participation in boards but has some reporting requirements for listed corporations. Some countries, such as Australia and New Zealand, have achieved substantial progress with gender-diverse leadership without quotas or targets, through awareness-raising programmes, private advocacy initiatives, government-led programmes, and relevant listing rules (Denis, 2022_[80]).

Canada is also characterised by a relatively high gender wage gap compared to the OECD average. The government has taken initiatives to foster pay equity and transparency, such as the 2021 *Equity Pay Act* and the *Employment Equity Act*. As of 2022, full-time working women earn, on average, only 83 cents to every dollar earned by full-time working men, compared to 89 cents on OECD average (Figure 4.26, Panel B). Gender pay gaps reflect in part differences in human capital, occupation and industry between genders. Moreover, women are more often employed in low-wage firms compared to high-wage firms within the same industry or occupation (OECD, 2021_[81]). But even when controlling for these factors, an important part of the gender wage gap between similarly skilled women and men is related to pay differences within firms due to differences in tasks and responsibilities and pay differences for equal work. In Canada, within-firm wage inequality for men and women with similar skills accounts for about 60% of overall wage inequality (OECD, 2021_[81]). Consequently, tackling the gender wage gap requires promoting access of women to well-paying firms and well-paying jobs within firms.



Figure 4.26. The gender gap in leadership positions and wages remains important

Note: In panel B, the gender wage gap is the difference between the median earnings of men and of women relative to the median earnings of men. Estimates of earnings used in the calculations generally refer to unadjusted gross earnings of full-time wage and salary workers. Source: OECD Gender, Institutions and Development database; and OECD Earnings: Gender Wage Gap database.

StatLink and https://stat.link/sp5el6

Table 4.1. Main findings and recommendations

MAIN FINDINGS	RECOMMENDATIONS (key ones in bold)	
Building stronger innovative capacity		
Despite generous SR&ED tax credit breaks, Canada's R&D investment intensity is weak. The larger credit for small firms leads to distortions and favours Canadian controlled businesses.	Harmonise the SR&ED tax credit for R&D activities across small and larger firms, and consider reinstating capital costs in the credit base.	
The focus on indirect tax-based support for R&D means there is too much weight on general subsidy for research.	Make more use of direct grants to support R&D, including to support digital technologies such as artificial intelligence. Gradually expand funding to the forthcoming Canada Innovation Corporation, including the Industrial Research Assistance Program.	
There is scope for greater digital intensity in Canada's businesses, not least considering the supply of STEM graduates and the population's strong digital skills. The Al industry itself is a potential source of high-productivity employment.	Foster adoption of digital technologies through support for technical and managerial skills. Continue to support the digital industry through STEM programmes and promote R&D in areas with high social returns.	
Ensuring good business o	conditions for innovative SMEs	
Access to affordable financing for Canada's small and medium-sized enterprises (SMEs) still needs improvement.	Target SME financing programmes at young and innovative firms lacking financial track records or tangible assets.	
Evidence shows that the quality of SME management plays an important role in explaining differences in productivity across firms.	Improve management of SMEs through continued availability of advisory services, support training for managers, and mentor networks of CEOs.	
Strengthen	ing competition	
Internal barriers to trade have large economic costs and limit the efficiency and scope of labour markets.	Accelerate reduction in internal trade barriers, including by widening the scope and powers of the Canadian Free Trade Agreement.	
In some sectors exposure of Canadian business to foreign competition is hampered by barriers to entry, including limits on foreign ownership and board membership.	Evaluate, with a view of reducing foreign ownership restrictions in network sectors, notably telecommunications, aviation, and broadcasting.	
Access to quality and competitively priced telecommunications is key to efficient business operations in many sectors of the economy (and is also important for households).	Remove barriers to entry in telecommunications, including by continuing to expand market access to mobile virtual network operators. Lower costs and enhance the quality of telecommunications services by expanding digital infrastructure in rural and remote areas.	
Canada has lagged in adjusting competition laws the emergence of global technology companies with substantial market share in consumer digital services.	Address barriers to business competition from anti-competitive behaviour around the large digital firms, including by strengthening instruments in competition law and regulation (ex-ante regulations).	
Canada's enforcement of the foreign bribery offence is low.	Enhance the capacity to detect foreign bribery, by introducing more effective whistleblower protection and clarifying policies of self-reporting. Collect comprehensive data on foreign bribery.	
Ensuring an efficient allocation of labour	resources: skill imbalances in the labour force	
Differences in provincial certification requirements for the regulated professions create barriers interprovincial mobility of workers.	Further facilitate the mutual recognition of qualifications in the skilled trades and licenced professions across provinces.	
High rates of overqualification among immigrant employees point to underutilisation of skills. There is evidence that strong language skills in French and English and prior Canadian work experience are	Better harmonise the recognition of foreign immigrant skills across provinces.	
associated with stronger labour market outcomes of immigrants.	proficiency in permanent immigration selection.	
Labour shortages in skilled trades will intensify due to retirement, declining participation in vocational education, and rising demand related to housing and the green transition.	Facilitate pathways toward vocational education and apprenticeships while addressing stigma through information and promotional campaign. Strengthen support for lifelong learning through targeted co-financing of adult education and flexible formats, such as online learning.	
Ensuring an efficient allocation of labour resources: ens	uring women's workforce skills and talents are fully realised	
I he gender gap on participation rates and wages remains significant. Women are also underrepresented in leadership positions.	Continue to implement the roll-out of access to affordable childcare as planned. Encourage take-up of parental leave by fathers. Increase the representation of women in leadership positions by strengthening awareness raising programmes. Encourage pay transparency and equity.	
Low female representation in innovative sectors is partly because the share of girls studying STEM subjects at school and university remains relatively low, particularly in high-pay math intensive fields such as computer science and engineering	Increase women's participation in underrepresented STEM occupations by promoting exposure to STEM subjects, mentorship, and training opportunities.	

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Canada's macroeconomic framework is robust, supported by strong public finances and a well-capitalised banking sector. However, the economy faces significant headwinds from tariffs with the United States. High household mortgage debt remains another vulnerability, and high debt service costs weigh on household finances. There is also room to improve the efficiency of the tax structure. Housing affordability has been declining over recent years. Policies to boost housing supply, such as allowing higher density housing and expediting the permitting process, should be strengthened. Additional support should focus on social and affordable housing. While Canada has a comprehensive carbon pricing system that should be preserved, including the fuel charge for consumers, additional policies are needed to adapt to climate risks.

These include improving risk disclosure, preventing land development in risk-prone areas, enhancing infrastructure resilience, and strengthening insurance coverage. Canada's labour productivity performance lags its peers. Boosting productivity requires a combination of policies, including rebalancing R&D support, reducing regulatory barriers in internal markets, enhancing competition and digitalisation of the economy, and fully utilising women's skills.

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