Staff Analytical Paper/Document analytique du personnel—2026-19

Last updated: May 25, 2026

Potential output in Canada: 2026 assessment

Alex Chernoff
Canadian Economic Analysis Department
Bank of Canada
achernoff@bankofcanada.ca

Chris Hajzler
Canadian Economic Analysis Department
Bank of Canada
chajzler@bankofcanada.ca

Stéphanie Houle
Canadian Economic Analysis Department
Bank of Canada
shoule@bankofcanada.ca

Gabriella Ruggero
Canadian Economic Analysis Department
Bank of Canada
gruggero@bankofcanada.ca

Olena Senyuta
Canadian Economic Analysis Department
Bank of Canada
osenyuta@bankofcanada.ca

Karanbir Sohal
Canadian Economic Analysis Department
Bank of Canada
ksohal@bankofcanada.ca

Walter Steingress
Canadian Economic Analysis Department
Bank of Canada
wsteingress@bankofcanada.ca

Temel Taskin
Canadian Economic Analysis Department
Bank of Canada
ttaskin@bankofcanada.ca

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

DOI: https://doi.org/10.34989/sap-2026-19 | ISSN 3110-9195

© 2026 Bank of Canada

Acknowledgements

We acknowledge Edward Booth, Adrienne Gagnon, Gabriela Galassi, Anhelina Havrylyuk, Youngmin Park, Jacob Short and Mariel Yalcolca Maguina for their contributions to the analysis presented in this paper. We thank Marc-André Gosselin and Alexander Ueberfeldt for their comments and suggestions. We also thank Meredith Fraser-Ohman for her editorial assistance. Finally, we thank Maxime Beaudet, Philippe Audet-Cayer and Frédéric Bouchard for their help in translating this paper into French.

Abstract

Growth in potential output is expected to drop from 2.3% in 2025 to 1.2% in 2026 given slowing population growth, US tariffs and trade policy uncertainty. It is then estimated to pick up to an average of 1.5% over 2027–29 as strengthening business and government investment supports trend labour productivity (TLP). Gradual adoption of artificial intelligence is also expected to lift TLP growth over the projection horizon. Relative to Scenario 1 in the April 2025 assessment, growth is revised up in 2025 and revised down over 2026–29.

Research themes: Monetary policy - Real economy and forecasting; Structural challenges - Demographics and labour supply; Models and tools - Economic models
JEL codes: E2, E3, E4, E5

Résumé

La croissance de la production potentielle devrait passer de 2,3 % en 2025 à 1,2 % en 2026, étant donné le ralentissement de la croissance démographique, les droits de douane américains et l'incertitude liée aux politiques commerciales. Elle devrait par la suite se redresser pour atteindre en moyenne 1,5 % sur la période 2027-2029, à la faveur d'un raffermissement des investissements privés et publics soutenant la productivité tendancielle du travail (PTT). L'adoption progressive de l'intelligence artificielle devrait aussi faire augmenter la croissance de la PTT durant la période de projection. Par rapport au scénario 1 de l'évaluation d'avril 2025, la croissance a été revue à la hausse pour 2025 et revue à la baisse pour la période 2026-2029.

Thèmes de recherche : Politique monétaire – Économie réelle et prévisions; Défis structurels – Démographie et offre de main-d'œuvre; Modèles et outils – Modèles économiques
Codes JEL : E2, E3, E4, E5

Overview

In this paper, we present the Bank of Canada's 2026 staff assessment of potential output in Canada. Potential output growth is projected to average 1.4% per year over the 2026–29 period. Relative to Scenario 1 in the April 2025 assessment (Abraham et al. 2025), the level of potential output is revised up by 1.4% in 2025 (**Table 1**).[1] This change primarily reflects sizable upward revisions to both gross domestic product (GDP) and the capital stock in the 2025Q3 national accounts release.

In the near term, subdued trend labour input (TLI)—largely due to weak population growth—and ongoing US tariffs and trade policy uncertainty weigh on potential output growth. These forces more than offset the improvement in trend labour productivity (TLP) from recovering investment, leading to a slowdown through 2026. Potential output growth is then expected to pick up gradually, supported by productivity gains from artificial intelligence (AI). Investment growth is also supportive, reflecting the fading effects of US tariffs and trade policy uncertainty, past monetary policy easing, and fiscal measures aimed at stimulating private investment.

Table 1: Comparison of estimates of potential output relative to April 2025

Annual rates (%)

	Potential output		Revisions to the level of potential output
	Annual growth	Range for growth	
2025	2.3 (1.8)	-	1.4
2026	1.2 (1.3)	[0.8, 1.6]	1.3
2027	1.3 (1.4)	[0.8, 1.8]	1.2
2028	1.5 (1.7)	[1.0, 2.0]	1.0
2029	1.8	[1.3, 2.3]	-

Note: Estimates of annual growth rates of potential output from the April 2025 assessment appear in parentheses. The range for potential output growth represents the methodological range implied by the risk scenarios presented in **Table 3**.

[1] In this paper, comparisons with the previous year are based on Scenario 1 in the April 2025 *Monetary Policy Report*, which is treated as the control round. Scenario 1 incorporates the effects on investment from elevated trade policy uncertainty, tariff rates on steel and aluminum that are lower than the current rates, and counter-tariffs. In contrast, Scenario 2 assumes that broad-based tariffs lead to substantially larger impacts on trend total factor productivity. Scenario 1 is the more suitable control scenario because the broad-based tariffs assumed in Scenario 2 did not materialize. For more details on the 2025 assessment, see Abraham et al. (2025).

Revisions to potential output

Sizable upward revisions to Statistics Canada's data for GDP and capital stock contribute to positive revisions to potential output growth over the past three years (**Chart 1**, blue bars). Canadian GDP at the end of 2025 was 3.2% higher than anticipated in the 2025 assessment (see footnote 1). These revisions raised both investment and the level of trend total factor productivity (TFP), indicating greater productive capacity in the economy than previously estimated. As a result, they add about 0.4 percentage points (pps) to potential output growth over 2022–25.

The stronger-than-expected level of activity and capital accumulation over the past year implies greater underlying investment momentum than previously assumed. In the projection, this translates into higher anticipated business investment and capital deepening, supporting stronger potential output growth over the medium term. As a result, this contributes an average of 0.2 pps per year in upward revisions to potential output growth for 2026–29 (**Chart 1**, blue bars).

A weaker population outlook contributes negatively to potential output growth by an average of 0.2 pps per year through 2026–29 (**Chart 1**, red bars). Specifically, changes in the federal government's immigration policy inform the population outlook. Notably, a tightening of the cap on the number of study permits granted to international students (Immigration, Refugee and Citizenship Canada 2025) leads to a downward revision in the outlook for flows of non-permanent residents. Statistics Canada has also revised its population projection to reflect lower-for-longer immigration targets announced in November 2025 and a lower natural rate of population growth. Less immigration and fewer non-permanent residents imply an older age distribution profile over the projection horizon relative to the 2025 assessment. This older age distribution further reduces TLI beyond the effects of slower population growth; this is because older cohorts tend to exhibit lower trend employment rates and average hours worked.

Since the 2025 assessment, an additional year of data indicating a weak labour market has negatively impacted TLI estimates, weighing on potential output growth. Average hours worked makes up about half of the decline in TLI, while the other half is due to the employment rate. These updates reduce potential output growth by an average of 0.2 pps per year over 2026–29 (**Chart 1**, yellow bars).

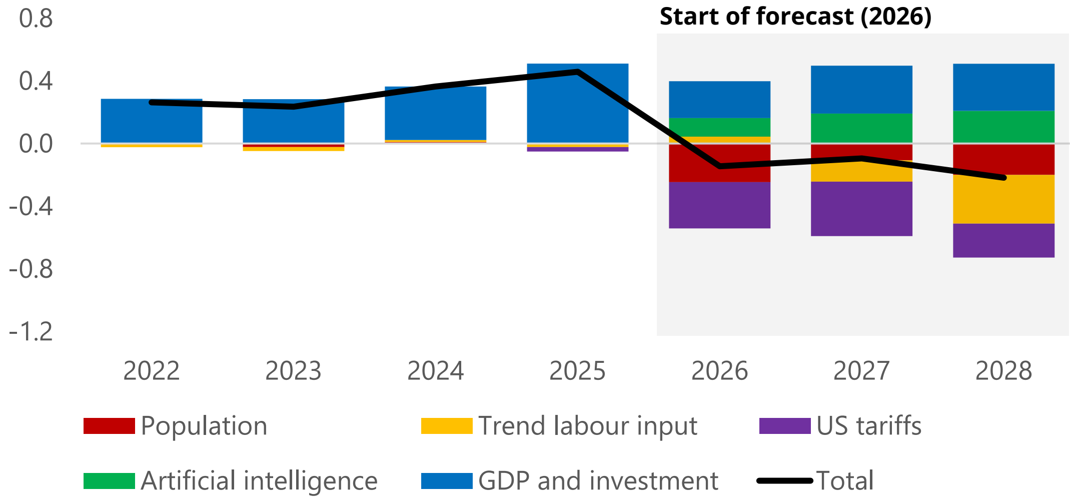
The adoption of AI is assumed to contribute positively to potential growth through TFP. In the 2025 assessment, the capacity for AI to raise aggregate labour productivity was identified as a key upside risk. This year, evidence that firms and workers are expanding their use of AI (Bryan, Sood and Johnston 2025; Chawla and Arnburg [forthcoming]) suggests this risk is starting to materialize. The transformative potential of this technology remains highly uncertain. Our analysis suggests that AI-related productivity gains of 0.2 pps on average per year are a conservative estimate compared with other recent estimates in the literature (**Box 1**). The assumed AI-related productivity gains, which also stimulate higher businesses investment, contribute positively to potential output growth over the projection horizon (**Chart 1**, green bars).

Finally, the additional impacts of tariffs relative to Scenario 1 in 2025 assessment (see footnote 1) are expected to weigh further on potential output over the projection horizon. The introduction of US tariffs in 2025 is expected to lower potential output growth by an average 0.2 pps annually between 2026–28. The main channels of tariff-induced declines in potential output growth are the liquidation of physical capital, the displacement of workers, and lower investment and capital deepening in sectors directly affected by tariffs.[2] Bank staff estimate that these losses will reduce trend TFP by around 0.4% at their peak impact before improving gradually toward the new long-term level (0.1% lower). Investment and capital deepening are also assumed to be weaker in response to tariffs, reducing TLP by an additional 0.6% at peak impact (**Box 2** and **Chart 1**, purple bars).

[2] For more details, see Box 1: Implications of a potential US trade war on potential output in the 2025 assessment (Abraham et al. 2025).

Chart 1: Potential output growth is revised down over 2026-29

Total revisions to annual growth relative to April 2025 (Scenario 1), percentage points



Sources: Statistics Canada and Bank of Canada estimates and projections
Last data plotted: 2028

Dynamics of potential output growth

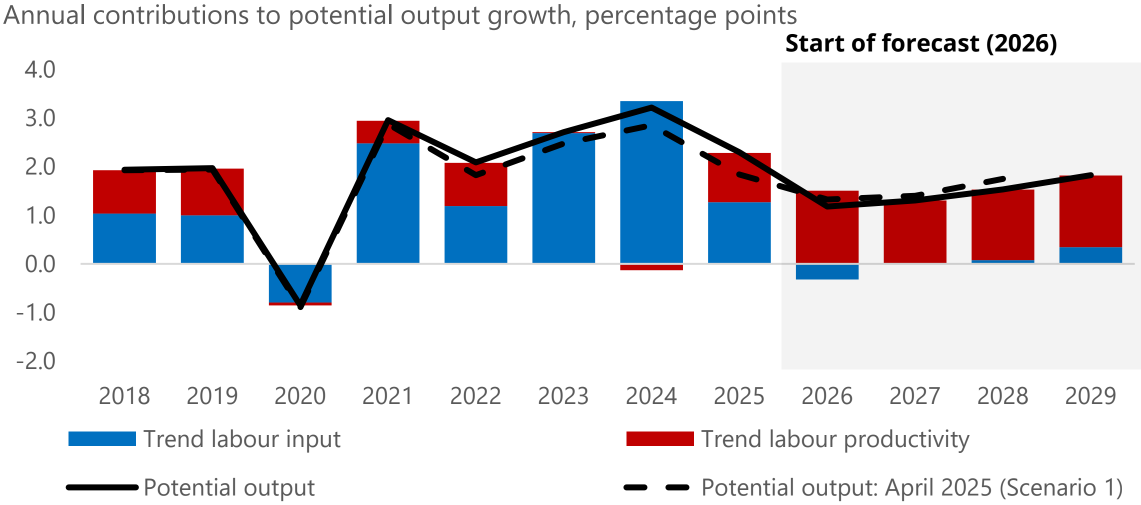
Potential output growth is expected to average 1.5% between 2026 and 2029. The slowdown that began in 2025 is expected to bottom out in 2026 and then recover gradually, broadly in line with last year's assessment. TLP growth is the main driver of the dynamics, while TLI is expected to be mostly flat following the 2026 decline, reflecting weak population growth (**Chart 2**).

TLP growth is driven primarily by capital deepening as weaker population growth boosts capital per worker (**Box 3**). A stronger investment profile, including government capital spending, also supports TLP growth.

Trend TFP growth provides modest support but remains weak compared with pre-pandemic averages. The impact of AI on TFP offsets some of the negative impacts from US tariffs.

Chart 2: Projected growth in potential output is mostly unchanged since the April 2025 assessment

Annual contributions to potential output growth, percentage points



Sources: Statistics Canada and Bank of Canada estimates and projections
Last data plotted: 2029

Trend labour productivity

TLP growth was near zero over 2023–24 as rapid population growth weighed on capital per hour worked (**Chart 2**, red bars). The rebound in 2025 reflects a reversal of this dynamic as population growth slows. A strong investment outlook, including government capital spending, further supports gains in capital per hour worked.

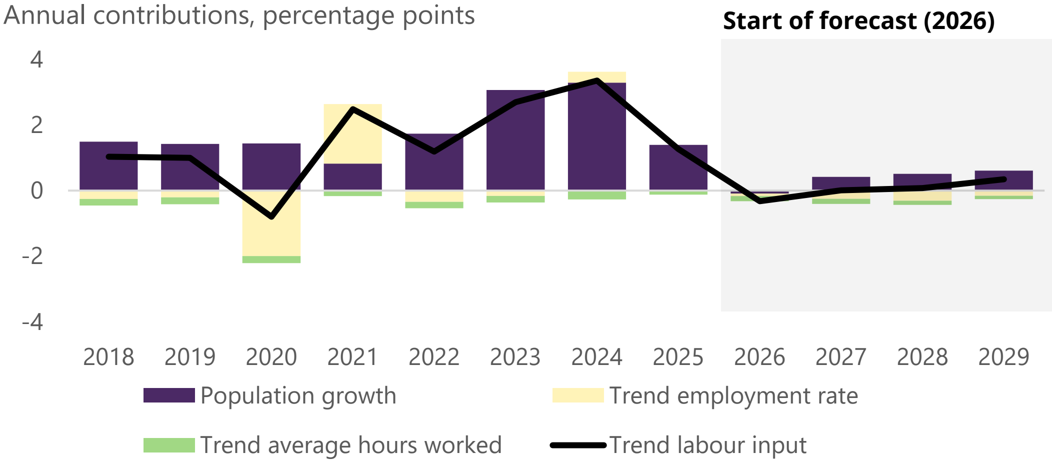
Trend TFP contributes modestly to growth over the projection horizon but remains subdued relative to pre-pandemic averages. Productivity gains associated with AI partly offset the adverse effects of US tariffs on TFP (**Box 1**). Overall, TLP is expected to contribute an average of 1.4 pps to annual potential output growth over 2026–29.

Trend labour input

After subdued growth of 1.3% in 2025, the contribution of TLI to potential output growth is projected to decline further, with almost no contribution over 2026–29. This mainly reflects the anticipated slowdown in inflows of newcomers, as discussed earlier. This slowdown is estimated to reduce growth in the working-age population from 1.4% in 2025 to average about 0.4% over 2026–29 (**Chart 3**). The contribution from population growth is expected to reach its lowest point in 2026 and then improve gradually, remaining the main source of TLI growth.

Chart 3: Large swings in population growth are affecting dynamics in trend labour input

Annual contributions, percentage points



Sources: Statistics Canada and Bank of Canada estimates and projections
Last data plotted: 2029

The trend employment rate and trend average hours worked make relatively small contributions to TLI growth. After modest gains in 2024, the contribution from the trend employment rate weakened in 2025, reflecting subdued job growth—particularly among younger workers and sectors affected by US tariffs. This contribution is expected to remain weak over the projection horizon, largely due to population aging, which has been the main driver of the gradual decline in the trend employment rate in recent years. These same demographic forces also underpin the negative contribution from trend average hours worked.

Uncertainty around the base-case scenario

The outlook presented in the previous section is subject to several important risks, and uncertainty surrounding estimates of potential output growth remains significant. This section outlines the key risks. Although different transmission channels imply varying magnitudes of risk, overall risks are assessed to be broadly balanced around the base-case scenario.[3]

[3] The impact of the ongoing war in the Middle East is assessed in the Bank's April 2026 Monetary Policy Report (see In Focus: The war in the Middle East—Transmission channels and risks to inflation). In an illustrative scenario with persistently higher energy prices, significant supply-side effects could emerge through shipping disruptions and shortages of intermediary inputs, and these could pass through to other goods and services sectors. However, even in this scenario, the net impact on aggregate economic activity is

Population growth

Recent population developments and the implementation of previously announced immigration policies introduce both upside and downside risks to the outlook for population growth. Our base-case scenario for population growth captures Bank staff's estimated effects of policy actions. Risks around this scenario are roughly balanced:

- On the downside, the number of newcomers arriving on temporary work and study permits may continue to undershoot the target range set out in the government's *2026–2028 Immigration Levels Plan*, as they have for 2025.[4]
- On the upside, non-permanent residents may leave Canada at a lower rate than currently assumed by applying for a permit extension or a new type of permit, including permanent resident status.

  We base other components of our risk scenarios (immigration, emigration and natural rate) on Statistics Canada's population projection (Statistics Canada 2026b) and centre them on our base-case projection. Relative to the base-case scenario, a scenario with high population growth raises potential output growth by about 0.2 pps over 2026–29, while a low-growth scenario reduces growth by 0.2 pps over the same period (**Table 2**).[5]

Adoption of artificial intelligence

Adoption of AI technology could be more rapid and could improve labour efficiency in many occupations by more than assumed in our base-case scenario. Generative AI distinguishes itself from other general-purpose technologies (GPTs) in its autonomous capability to create new content as well as its relative accessibility. Moreover, the technology's capabilities are still rapidly evolving. Our base-case estimate of TFP gains attributed to AI falls within the middle range for advanced economies (de Munnik et al. 2026).[6] We consider the following risks around our base-case scenario for AI:

- On the upside, AI could yield higher profitability than in the base case and cost savings toward the higher end of the range reported in Aghion and Bunel

assessed to be relatively small and transitory, reflecting Canada's position as a net energy exporter. This implies limited, if any, implications for potential output growth.

[4] See the temporary resident targets for 2025 set out in Immigration, Refugees and Citizenship Canada (2024).

[5] See **Box 3** for additional immigration-related risks to TLP.

[6] See **Box 1** for a full description of our approach to estimating the impact of AI on potential output.

(2024).[7] Relative to the base case, this higher productivity would imply higher potential output growth of 0.2 pps annually.

- On the downside, workers in occupations more exposed to AI may face a greater chance of being displaced from their jobs and struggle to find new ones, leading to potential labour scarring. Galassi, Brouillette and Dahlhaus (forthcoming) find that occupations more exposed to AI have a 1.2 pps higher unemployment risk. Given that approximately 29% of occupations in Canada are exposed to AI, we take the upper bound on trend unemployment rate to be 0.3 pps. Altogether, this impacts potential output growth by about -0.1 pps per year.

Tariff impacts

Considerable uncertainty surrounds the timing and magnitude of impacts from US tariffs on potential output growth. Bank staff have considered several scenarios that could result in more negative as well as more muted impacts than in the base case scenario.

- On the downside, if US demand is more sensitive to tariffs, the impacts on potential output growth could be larger. This, combined with diminished technology transfer from reduced imports into Canada, could weigh on trend TFP, lowering potential output growth by 0.2 pps over 2026–28.[8]
- On the upside, Canadian exports could become less responsive to US tariffs as a result of other countries facing even larger tariffs in the US market, partially supporting Canada's competitive advantage. In this upside scenario, potential output growth could be 0.1 pps stronger over 2026–28.

These risks are summarized in **Table 2**. An additional factor in trade-related uncertainty is the future of the Canada-United States-Mexico Agreement (CUSMA). The base-case scenario assumes that current US tariffs remain in place and have a persistent negative impact on potential output (see **Chart 1**). Given the large range of possible outcomes, we view the CUSMA renegotiation as a downside risk that amplifies the negative effects on potential output growth from current tariffs. Lastly, tariff impacts on productivity are also subject to broader adjustment and spillover risks, as discussed in the 2025 assessment.

---

[7] More specifically, in the equation presented in **Box 1**, we assume higher values for *share of tasks where AI is profitable* and *AI cost savings*. We set them at 0.6 and 0.4, respectively.

[8] See Abraham et al. (2025) for more details.

Table 2: The range for potential output growth is subject to additional risks

Change in annual rates (%)

Risk	Scenario	2026	2027	2028	2029	Level impact by 2030 (%)
Population growth	**Downside**	-0.1	-0.2	-0.2	-0.2	-0.7
	Upside	0.1	0.2	0.2	0.2	0.7
AI adoption	**Downside**	-0.1	-0.1	-0.1	-0.1	-0.4
	Upside	0.2	0.2	0.2	0.2	0.8
Tariff impacts	**Downside**	-0.2	-0.2	-0.2	-0.2	-0.8
	Upside	0.1	0.1	0.1	0.1	0.4
Overall uncertainty (additive)	**Downside**	-0.4	-0.5	-0.5	-0.5	-1.9
	Upside	0.4	0.5	0.5	0.5	1.9

Box 1: Artificial intelligence adoption and productivity in Canada

Firms are increasingly leveraging artificial intelligence (AI) to enhance workforce efficiency, with applications of the technology ranging from automating routine administrative tasks to using AI-powered tools for customer service chatbots and predictive analytics in supply chain management. To quantify the impact on total factor productivity (TFP), we adapt the framework of Acemoglu (2024), who shows that the average economy-wide gains from AI can be thought of as average AI-induced labour cost savings per task, weighted by the economy-wide fraction of tasks for which it is profitable to adopt AI.[9] This is calculated as:

TFP gains = *GDP share of AI-exposed tasks* (**0.29**) x *share of tasks with profitable AI adoption* (**0.45**) x *AI cost savings* (**0.27**) x *AI exposed labour share* (**0.57**) = **2 pps** over 10 years
= **0.2 pps** annually.

Under our baseline assumptions, AI raises TFP by 2 percentage points (pps) cumulatively over 10 years. This reflects:

- a 29% gross domestic product (GDP) share of AI-exposed tasks, based on internal estimates for Canada (Galassi, Brouillette and Dahlhaus, forthcoming)
- a 45% share of tasks where AI adoption is profitable, at the mid-range of the literature[10]
- labour cost savings of 27%, consistent with Acemoglu (2024)
- an AI-exposed labour income share in economy-wide production of 57%, drawing again on findings from Galassi, Brouillette and Dahlhaus (forthcoming)

We assume that the 10-year gains accrue evenly over the projection horizon, implying gains of 0.2 pps annually.

Overall, our estimates of TFP gains from AI are in the middle of the range for advanced economies (de Munnik et al. 2026). Our somewhat conservative estimate aligns with Canada's relatively weak productivity response during the information and communication technology (ICT) diffusion period in the early to mid-2000s, when labour productivity gains in Canada lagged significantly behind those of the United States (**Chart 1-A**).[11] Importantly, that gap likely reflects not only weaker TFP

[9] This is an update to the risk analysis in the 2025 assessment. See Abraham et al. (2025) for more details.

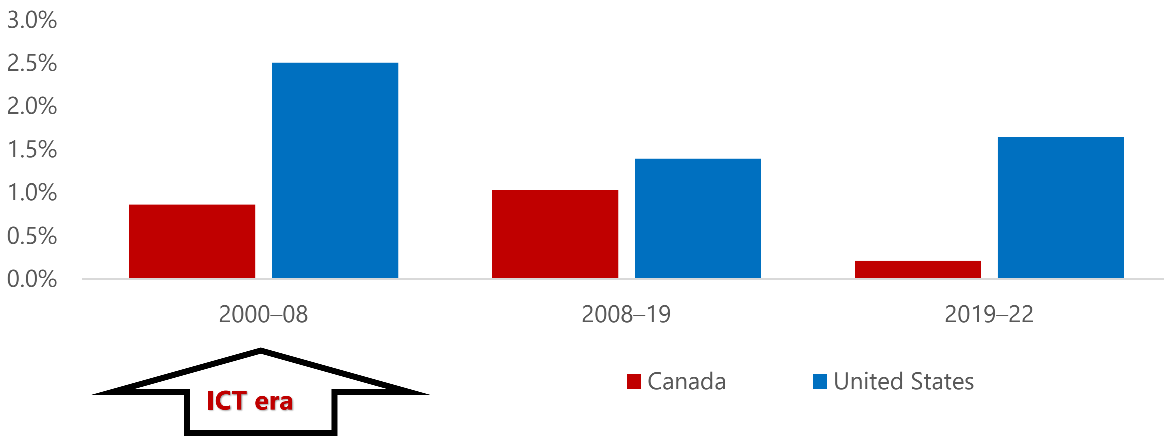
[10] Acemoglu (2024) uses 0.23 while Aghion and Bunel (2024) use 0.6.

[11] Our conservative outlook also aligns with recent work by Brault et al. (2026), who argue that, thus far, the aggregate productivity gains from AI in advanced economies have been subdued.

gains in Canada but also weaker ICT-related capital deepening and implementation in Canada. For AI, the mix of channels may differ by country because some complementary capital (e.g., large-scale computing and data centre infrastructure) can be located outside Canada while still supporting domestic technology adoption. Nonetheless, we assume that, as with ICT, AI adoption will translate into more muted productivity gains in Canada than in the United States.

Chart 1-A: Canada has had historically weaker total factor productivity growth than the United States

Business sector annual average productivity growth



Note: ICT is information and communication technology. Sharpe and Sargent (2023) refers to A. Sharpe and T. Sargent, "Finances of the Nation: The Canadian Productivity Landscape—An Overview," *Canadian Tax Journal* 71, no. 4 (2023): 1125-1147.
Source: Sharpe and Sargent (2023)
Last observation: 2022

It is important to note that these estimates are based on current AI capabilities and do not account for future advancements in AI technology. Jobs may also end up being more complementary to AI, boosting productivity, or less complementary to AI, leading to potential labour scarring.

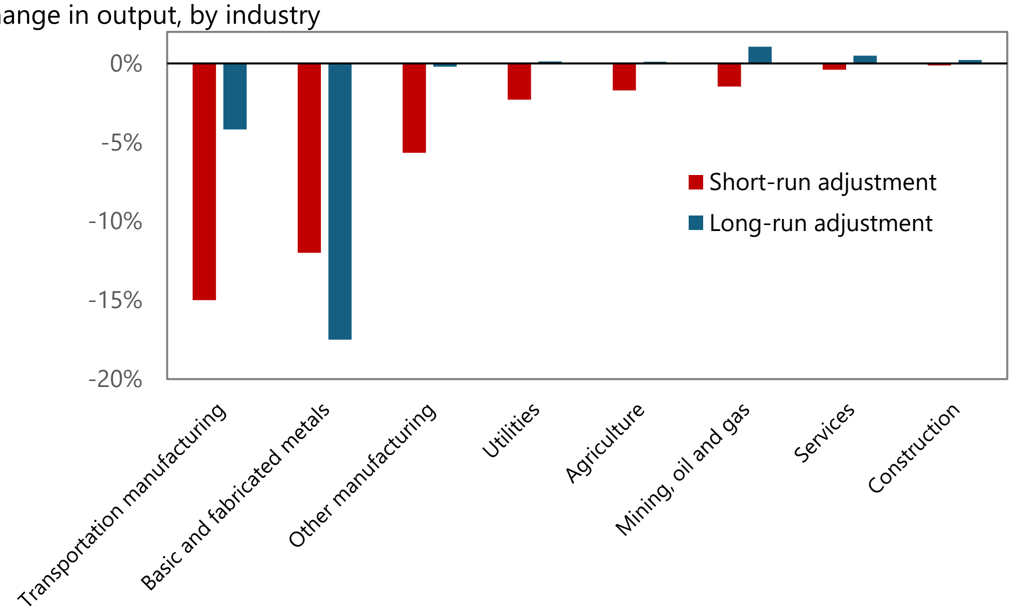
Box 2: Impacts of US tariffs on Canadian potential output growth

The increase in US tariffs in 2025 is expected to weigh on trend total factor productivity (TFP) and potential output growth. Our base-case scenario assumes that US tariffs impact Canadian potential output through efficiency losses associated with weaker investment and capital deepening and through a costly sectoral reallocation of factors of production.[12] In 2025, there was significant uncertainty around the expected tariff changes. However, this year's assessment is based on the tariffs in place or agreed on as of April 24, 2026 (as discussed in the Bank of Canada's April 2026 *Monetary Policy Report*).

Building on the work described in Abraham et al. (2025) in examining the adverse effects of a permanent increase in tariffs (Scenario 2), we refine our assumptions for the impacts on TFP. In the short run, tariffs lower demand for Canadian exports, which reduces production in tariff-affected industries. Supply chains spread this decline to related industries, lowering output in other sectors (**Chart 2-A**, red bars). Firms respond by gradually adjusting their production capacity to demand that is permanently lower. The associated liquidation of capital and dislocation of workers generates temporary but persistent efficiency costs (see Box 1 in Abraham et al. 2025 for details). In the long run, relative prices adjust and the reallocation of labour and capital is complete. Industries where capital and labour relocate grow by retraining workers and replacing old, depreciated capital with new investments. Trend TFP partially recovers as these efficiency gains offset some of the losses in the tariff-affected sectors (**Chart 2-A**, blue bars). The implied dynamic in efficiency losses that occur during the transition from the short to the long run is shown in **Chart 1** (purple bars).

[12] To simulate the impacts of tariffs on trade between countries, we use a version of the multi-sector, multi-country model developed by Baqaee and Farhi (2024).

Chart 2-A: US tariffs lead to short- and long-run sectoral reallocations
Change in output, by industry



Note: Transportation manufacturing includes motor vehicles and motor vehicle parts. Baqaee and Farhi (2024) refers to D.R. Baqaee and E. Farhi, "Networks, Barriers, and Trade," *Econometrica* 92, no. 2: 505-541.
Sources: Baqaee and Farhi (2024) and Bank of Canada calculations

Uncertainty around the timing and the impacts of these adjustments on potential output remains high. First, the responsiveness of US demand to higher tariffs is highly uncertain. Some empirical studies (e.g., Lashkaripour 2021) estimate relatively large trade elasticities for metals manufacturing, mining, oil and gas and forestry compared with our assumptions, which could imply a larger drag from US tariffs on potential output growth. Alternatively, the negative impacts on Canadian exports and production could be less severe. For certain export categories in which other countries face an even larger increase in US tariffs than Canada, a relative tariff "advantage" in the US market could imply a more muted response in demand for Canadian products than implied by historical trade elasticities. Many other factors also contribute to uncertainty around the pace and implications of structural adjustments in response to tariffs. Taken together, however, the net effects of these other factors on growth are ambiguous and difficult to quantify.[13]

Recent economic data, including survey evidence, indicate that Canadian firms are adjusting their production processes in response to US tariffs. Trade data show that supply chains have started to shift, and labour market data also show adjustments (see Macklem 2026 for more details). Statistics Canada's (2026a) reported that a significant share of surveyed Canadian firms in the

[13] Additional channels that could have lasting impacts (positive [+] and negative [-]) on productivity include the disproportionate attrition of the least productive firms (+), reduced competition and operational scale among exporting firms (-), reduced technological diffusion amid increased trade barriers (-), and reshoring and near-shoring efforts by Canadian and US firms (+/-).

manufacturing sector have felt the negative effects of US tariffs on their operations, sought alternative suppliers outside the United States and increased their domestic sourcing. These observations are consistent with Bank of Canada business survey evidence, which also indicates that firms’ sales to US markets have declined (Bank of Canada 2026).

Box 3: Population growth dynamics and productivity in Canada

By Edward Booth, Jacob Short and Mariel Yalcolca Maguina

Canada's unprecedented inflow of non-permanent residents (NPRs) since early 2022 led to sharp increases in the total population and labour force. This contributed to trend labour input (TLI) being roughly 5 percentage points (pps) higher by 2026 than it would have been if the NPR population had remained constant at its 2019 level (**Chart 3-A**). There are two key implications for aggregate labour productivity. First, if the labour force expands more rapidly than capital accumulation, then capital per unit of labour deteriorates. Second, NPRs are disproportionately younger, less attached to the labour market, and earn substantially less than Canadian-born workers (approximately 60% less, on average).[14] These characteristics point to a potential productivity differential for new NPR arrivals that has implications for aggregate productivity through the change in labour force composition.

To assess the implications for labour productivity, we isolate how gross domestic product (GDP) per trend hour worked would have evolved relative to trend under a counterfactual scenario where the stock of NPRs is the only changing factor over this period. By 2026Q1, actual labour productivity is estimated to have fallen 6 pps below its pre-pandemic trend (**Chart 3-B**, red dashed line). How much of this decline can be explained by the immigration surge? The reduction in capital per worker in isolation is consistent with a decline in labour productivity of 1.7% relative to the pre-pandemic trend by 2026Q1 (**Chart 3-B**, blue dashed line). This decline coincides with a 4.1% lower capital stock per trend hour worked relative to a counterfactual of a constant NPR stock.

Accounting for the labour composition effects of new NPRs implies an even sharper productivity decline. Assuming that new NPRs are only 40% as productive as the average worker—consistent with the data on differences in wages—GDP per trend hour would have been an additional 2.6% higher in 2026Q1 compared with actual (**Chart 3-B**, blue solid line). Together, the labour composition effects and weaker capital per trend hour worked can account for 70% of the observed decline in labour productivity over this period.

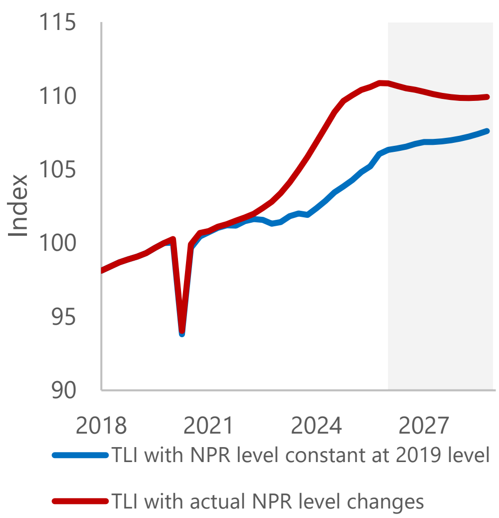
[14] In the 2021 Census, the average earnings of NPRs were approximately 40% relative to Canadian-born workers' earnings. This gap accounts for the lower employment rates and hours of NPRs and widens at higher education levels. For further analysis of this gap using Labour Force Survey data, see Champagne, Poulin-Moore and Long (2025).

Over the projection horizon, tighter immigration policies that have sharply reduced NPR inflows are likely to reverse these labour composition effects and lead to a catch-up in investment and capital per trend hour worked. The NPR population share is expected to decline by nearly 2 pps by the end of 2028, broadly in line with the government's immigration targets.

As a result, GDP per trend hour worked is expected to gradually recover, approaching the pre-pandemic trend. The gap between forecasted labour productivity at the end of 2028 and trend is partly explained by the fact that the NPR population is not expected to fully return to 2019 levels. However, another potential factor is the absence of an explicit labour market skills composition forecast in the staff projection. As a result, productivity growth could recover more quickly as the NPR population declines (closing the gap between the red dashed line and the solid blue line over the projection horizon in **Chart 3-B**). In the long run, any remaining gap relative to trend stemming from a permanently higher proportion of NPRs is expected to dissipate as those NPRs become more attached to the labour market and new investment restores capital per trend hour worked.

Chart 3-A: Trend labour input is higher with non-permanent resident flows

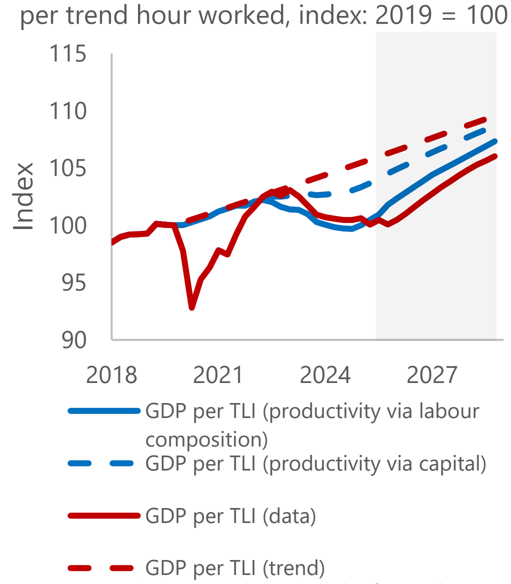
Trend labour input (TLI) in Canada, index: 2019 = 100



Sources: Statistics Canada and Bank of Canada estimates and projections
Last data plotted: 2028Q4

Chart 3-B: Productivity is impacted by labour composition and capital per TLI

Gross domestic product (GDP) in Canada per trend hour worked, index: 2019 = 100



Sources: Statistics Canada and Bank of Canada estimates and projections
Last data plotted: 2028Q4

Appendix

Table A-1: Comparison of Canadian potential output estimates relative to April 2025

Annual rates (%)

	Annual growth	Trend labour input growth	Trend labour productivity growth	Revisions to the level (%)
2025	2.3 (1.8)	1.3 (0.7)	1.0 (1.2)	1.4
2026	1.2 (1.3)	-0.3 (0.2)	1.5 (1.2)	1.3
2027	1.3 (1.4)	0.0 (0.2)	1.3 (1.2)	1.2
2028	1.5 (1.7)	0.1 (0.6)	1.5 (1.1)	1.0
2029	1.8	0.3	1.5	-

Note: Estimates of annual growth rates of potential output from the April 2025 assessment appear in parentheses.

References

Abraham, S., D. Brouillette, A. Chernoff, C. Hajzler, S. Houle, M. Kim and T. Taskin. 2025. “Potential Output in Canada: 2025 Assessment.” Bank of Canada Staff Analytical Note No. 2025-14.

Acemoglu, D. 2024. “The Simple Macroeconomics of AI.” National Bureau of Economic Research Working Paper No. 32487.

Aghion, P. and S. Bunel. 2024. “AI and Growth: Where Do We Stand?” Federal Reserve Bank of San Francisco Staff Note.

Bank of Canada. 2026. Business Outlook Survey—First Quarter of 2026.

Baqaee, D.R. and E. Farhi. 2024. “Networks, Barriers, and Trade.” *Econometrica* 92 (2): 505–541.

Brault, J., M. Haghighi and J. Yang. 2026. “AI Paradox: Promise vs. Reality—What It Means for Monetary Policy.” Bank of Canada Staff Analytical Paper No. 2026-4.

Bryan, V., S. Sood and C. Johnston. 2025. “Analysis on Artificial Intelligence Use by Businesses in Canada, Second Quarter of 2025.” *Analysis in Brief*, Statistics Canada catalogue no. 11-621-M.

Champagne, J., A. Poulin-Moore and M. Long. 2025. “The Shift in Canadian Immigration Composition and its Effect on Wages.” Bank of Canada Staff Discussion Paper No. 2025-8.

Chawla, C. and C. Arnburg. Forthcoming. “Survey Evidence on Firm AI Adoption and Its Implications.” Bank of Canada Staff Analytical Paper.

de Munnik, D., K. Hess, W. Muiruri, T. McCully, F. Noor, S. Obaid, A. Plummer, L. Poirier, A. Reza and J. Schwartz. 2026. “Assessing Global Potential Output Growth: April 2026.” Bank of Canada Staff Analytical Paper No. 20.

Galassi, G., D. Brouillette and T. Dahlhaus. Forthcoming. “Is AI a Threat to the Canadian Labour Market?” *Sparks at Bank*, Bank of Canada.

Immigration, Refugees and Citizenship Canada. 2024. *2024 Annual Report to Parliament on Immigration*.

Immigration, Refugees and Citizenship Canada. 2025. *2025 Annual Report to Parliament on Immigration*.

Lashkaripour, A. 2021. "The Cost of a Global Tariff War: A Sufficient Statistics Approach." *Journal of International Economics* 131 (July).

Macklem, T. 2026. "Structural Change—Canada at a Crossroads." Speech to the Empire Club of Canada, Toronto, Ontario, February 5.

Sharpe, A. and T. Sargent. 2023. "Finances of the Nation: The Canadian Productivity Landscape—An Overview." *Canadian Tax Journal* 71 (4): 1125–1147.

Statistics Canada. 2026a. *Canadian Survey on Business Conditions, First Quarter 2026*.

Statistics Canada. 2026b. Population Projections for Canada (2025 to 2075), Provinces and Territories (2025 to 2050): Technical Report on Methodology and Assumptions. Statistics Canada catalogue no. 17-20-003.