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Canada's Investment Crisis: Shrinking Capital Undermines Competitiveness and Wages

Business investment in Canada is so weak that capital per worker is declining, eroding productivity, competitiveness and living standards. More investment-friendly regulation and taxation are critical if Canadian workers are to get the tools they need.

William B.P. Robson and Mawakina Bafale

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CANADA'S INVESTMENT CRISIS: SHRINKING CAPITAL UNDERMINES COMPETITIVENESS AND WAGES

by William B.P. Robson and Mawakina Bafale

- Business investment in Canada has been so weak since 2015 that capital per member of the workforce is falling, undermining growth in labour productivity and compensation.
- The longstanding gap between investment per available worker in Canada and other OECD countries narrowed from the late 1990s through the early 2010s, but has since widened, especially relative to the United States. In 2025, Canadian workers will likely receive only 70 cents of new capital for every dollar received by their counterparts in the OECD as a whole and 55 cents for every dollar received by US workers.
- Labour productivity and business investment go together. Rising productivity creates opportunities and competitive pressures that spur businesses to invest. Investment increases productivity by equipping workers with better tools. Low investment per worker signals that businesses see fewer opportunities in Canada and prefigures lagging growth in earnings and living standards.
- Regulatory and fiscal policy changes, particularly those affecting natural resources and investment-related taxes, can prevent Canadian workers from being relegated to lower value-added activities compared to their counterparts in the United States and other advanced economies.

INTRODUCTION AND OVERVIEW

Slow growth in Canadian productivity and living standards has become a top-of-mind concern for Canadian economy watchers and, increasingly, for Canadians themselves. Recent publications highlight Canada's declining real gross domestic product (GDP) per person and its ominous implications for future living standards (Porter 2024, Marion and Ducharme 2024, McCormack and Wang 2024). Escalating trade tensions between the United States and Canada have led many firms to delay investment decisions (Bank of Canada 2025). Sluggish productivity growth has been a key factor behind Canada's stagnant living standards, as the Organisation for Economic Co-operation and Development (OECD) recently highlighted in its Economic Survey of Canada (OECD 2025a).

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Policy Areas: Innovation and Business Growth.

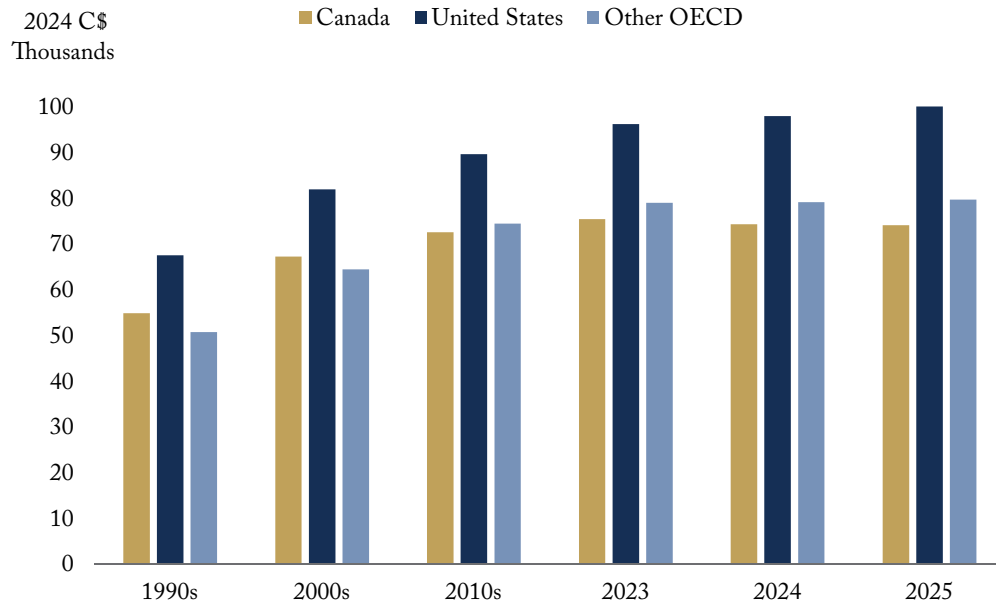
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Figure 1: Real GDP per Person in Canada, the United States and Other OECD Countries



Note: National currencies converted to Canadian dollars at purchasing power parity, divided by GDP deflator.

Source: OECD Economic Outlook No.117.

The OECD predicts that the real GDP per capita in Canada will fall for the third consecutive year in 2025. This slide is a troubling break from Canada's historical pattern of rising living standards. It contrasts with what is happening in other OECD countries, which have overtaken Canada, and contrasts especially strongly with the United States (Figure 1). Declining output per person implies that Canada is becoming a less attractive place for talented people to live and work.

Many influences on GDP per person may not be easily or desirably influenced by policy. More people participating in the workforce and/or working longer hours will raise output per person, but more work per person has obvious costs. Higher human capital – enhanced skills and more education – and improved technology can raise output per

person, but building human capital takes time, and improved technology is not, on its own, something policymakers can directly engineer. Increasing the amount of capital per worker, by contrast, is relatively straightforward to achieve and has positive results that are relatively likely to occur.

High or low levels of business capital, such as non-residential structures, machinery and equipment, and intellectual property products, are strongly associated with higher or lower output per worker. Productivity gains spur investment, and investment in turn boosts productivity. Higher productivity creates opportunities and competitive threats that promote business investment. In turn, higher business investment gives workers newer and better tools, embodies new technologies and gives managers and workers new opportunities to

“learn by doing” – all of which raise each worker’s productivity.¹

These links between investment and labour productivity make recent figures on Canada’s capital stock and new investment worrying. Canada’s capital stock in the business sector has grown so little since 2015 that capital per member of Canada’s labour force has been falling. Clearly, the recent extraordinary growth in Canada’s labour force, driven by permanent and temporary immigration, has not prompted businesses to provide tools to augment the productivity of the newly available brains and hands.

The spectacle of falling capital per worker forces attention to the fact that capital and labour are not only complementary factors of production – they are also substitutes. Industries and production methods vary in how intensively they use capital relative to labour. In international trade, countries with higher capital per worker tend to specialize in capital-intensive goods and services, while countries with lower capital per worker gravitate toward labour-intensive ones. Since living standards are higher in capital-intensive countries, Canada must confront the risk that low business investment and fast workforce growth are leading Canada down a labour-intensive path.

The United States and other OECD countries are investing at higher rates. Business investment per available Canadian worker was closing in on US and OECD levels from the early 2000s to the middle of the last decade, but the convergence

stopped around 2015. Canada’s relative performance then plummeted during the COVID pandemic and has lagged badly since.

Canada’s workers need better tools to thrive and compete. Governments must change policies that are taking Canada’s economy down a more labour-intensive, lower-wage path.

THE NUMBERS

Many types of capital enhance productivity and living standards. Our focus in this report is on “reproducible” or “built” capital in the business sector. Human capital and natural capital, such as skills, land and water matter, but they cannot be reliably measured or compared internationally. Capital created and owned by governments also matters, but the services it yields are harder to relate to production and income.

Measures of built capital are relatively robust and easier to compare internationally. Non-residential buildings include offices, warehouses and industrial facilities, as well as engineering structures such as transportation infrastructure. Machinery and equipment (M&E) includes motor vehicles, tools and electronic equipment. Intellectual property (IP) products have three major sub-components (see Box 1). These types of built capital complement other types of capital – human, natural and government – in producing goods and services, generating incomes and helping workers compete internationally.

1 The idea that capital accumulation drives economic growth goes back centuries. Solow (1956) developed a key formal model of how a rising stock of capital expands output and output per worker. Other models have explored possible reinforcing effects of investment on multifactor productivity and vice versa. Sala-i-Martin (1997) and Caselli and Feyrer (2007) provide key investigations of the correlation between growth and investment at the national level. Recent work at Statistics Canada (Gu 2024) highlights the importance of investment for Canadian productivity growth and living standards. Sharpe and Sargent (2023) estimate that capital deepening accounted for about 90 percent of the growth in labour productivity in Canada from 2000 to 2019.

Labour force measures are also relatively robust and normally easy to compare internationally.² However, the surge in temporary residents in Canada in recent years has coincided with a growing discrepancy between the number of temporary foreign workers reported by Immigration, Refugees and Citizenship Canada (IRCC) and the number of temporary residents reported in Statistics Canada's Labour Force Survey (LFS), the most widely used source of data on the workforce and the one relied on by the OECD. Skuterud (2025) shows that IRCC's count exceeded the LFS figure by 1.3 million in 2024. In translating Statistics Canada's labour-force count to our measure of available workers, we multiply the labour-force figures since the first quarter of 2022 by the ratio of the populations in Statistics Canada tables 17-10-0009-01 and 14-10-0287-01. This adjustment adds 272,000 more available workers on average to the LFS numbers since the first quarter of 2022.

Notwithstanding variations in the efficiency with which various countries combine labour and business capital to produce output – variations arising from other inputs and influences such as organization of firms, often grouped under the term “multifactor productivity” – countries with high capital stocks tend to enjoy high output.

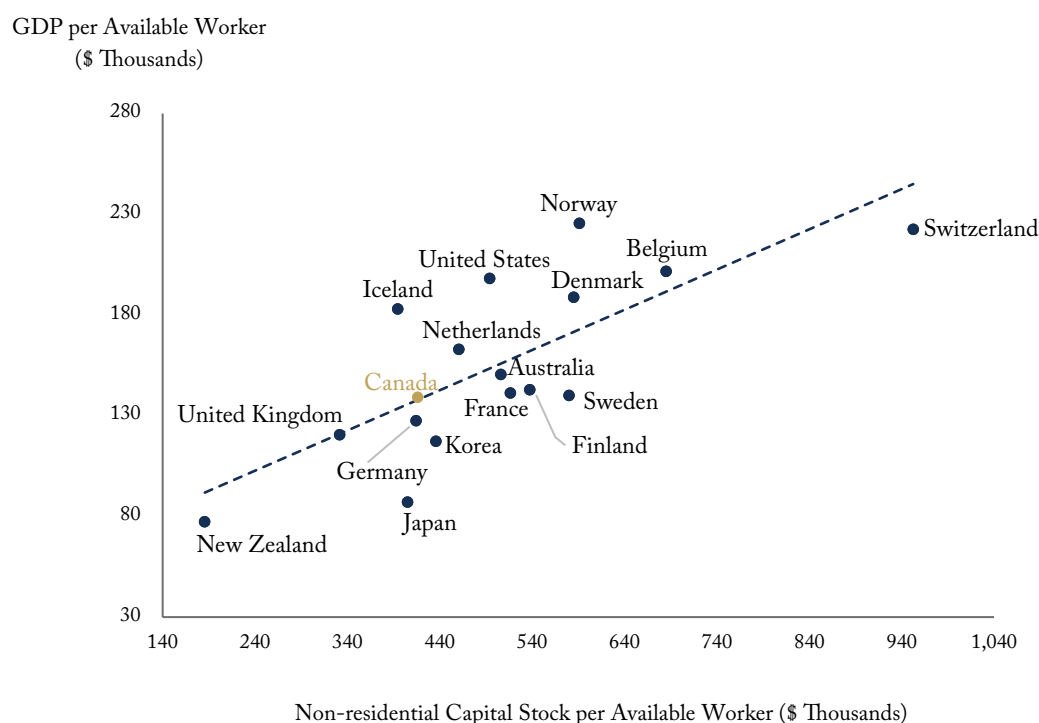
Labour productivity growth and investment interact. Anticipated higher productivity creates opportunities for growth and profit for businesses, as well as threats from innovative competitors and losses. Those opportunities and threats incent investment, which increases the quantity and quality of the capital stock. A larger, newer capital stock raises productivity and workers' incomes. The correlation between capital stock per member of the labour force (adjusted for undercount in Canada's case) – for which we use the term “available worker” – and output per available worker across countries is clear (Figure 2).³

The fact that capital formation is both a result of productivity growth and a driver of it makes recent trends in Canada's capital stock troubling. Figure 3 shows real stocks of each type of capital per available worker.

Total non-residential capital per available worker in Canada peaked in the last quarter of 2015.⁴ By the third quarter of 2025, per-worker levels of all types of capital were well below the late 2015 benchmark. IP products per available worker were down 4 percent. Engineering construction was down 6 percent. Non-residential buildings were down 12 percent. M&E was down a dramatic 20 percent. The dismal summary: the latest figures

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- 2 OECD labour-force data use a harmonized 15-and-over definition, consistent with Canada's practice. In the Canada-US comparisons presented later, we use national definitions, and the United States counts individuals aged 16 and over. Because 15-year-olds have very low participation rates and represent less than 1 percent of Canada's labour force, this difference has little effect on Canada-US comparisons at a point in time or over time.
 - 3 OECD and Statistics Canada capital stock measures differ because the OECD uses an age-efficiency calculation to estimate the lower productive capacity of older assets (OECD 2009), while Statistics Canada uses a more traditional depreciation formula. We use the OECD measures for every country when making international comparisons. We stress the amount of capital stock per member of the labour force to highlight the links among capital, productivity and incomes for individual workers. Capital per potential worker is a more attractive measure for comparisons over time and across countries than capital per person of labour-force age or capital per employed person because labour-force participation, like business investment, varies with the economic cycle but less so than employment. We use the total labour force because capital invested by business generates the incomes that support both private-sector and public-sector workers and because total labour-force figures are likelier to be comparable across jurisdictions that classify private- and public-sector workers differently.
 - 4 The analysis is robust to the use of alternative reference years and remains unchanged when the labour-force measure is replaced with employment. Accordingly, the choice of 2015 as the reference point does not affect the substantive observations.

Figure 2: Estimated GDP and Non-residential Capital Stock per Available Worker, Various Countries in 2025



Note: The line is a fitted linear trend. We convert GDP and capital stocks from their national currencies to Canadian dollars using the OECD Purchasing Power Parity for GDP and gross fixed capital formation, respectively. We adjust Canada's labour force for undercount of temporary residents as described in the text.

Source: Authors' calculations based on OECD Economic Outlook Database No.117.

show the average member of Canada's labour force had 9 percent less capital to work with than in 2015.

Because we do not have comparable time-series of capital stocks for many other countries, we turn to a closely related flow measure – gross business non-residential investment – to set up an international comparison over time. Figure 4 shows the Canadian numbers for the three types of business investment – non-residential structures (buildings and engineering), M&E and IP products – per available worker since 1990.

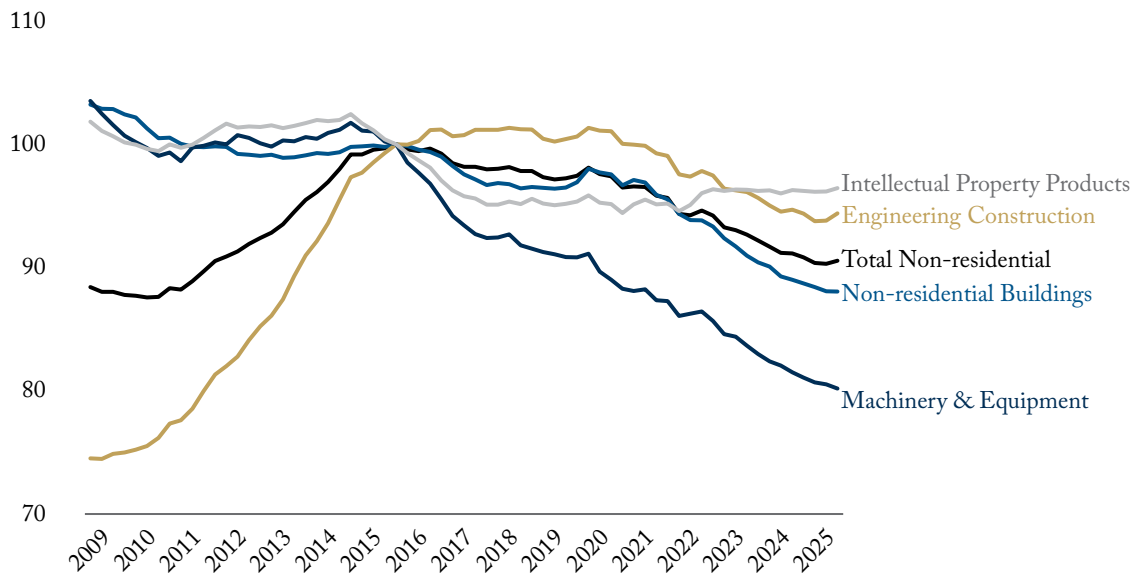
Absent major changes in estimated depreciation and write-offs, changes in gross investment should

closely track changes in net capital stock. From 1990 to 2014, notwithstanding setbacks during the slump of the early 1990s and the 2008–2009 financial crisis and recession, the trend in investment per worker was up. But during the second half of the 2010s, investment in structures and M&E per member of the workforce declined, and investment in IP products flatlined. The economic shutdowns and uncertainty around the COVID-19 pandemic hurt business investment in everything except IP products.

Since then, performance in all three categories has been lacklustre. Adjusted per-available-worker

Figure 3: Non-residential Capital Stock per Available Worker by Type

Index: 2015Q4=100



Note: Real, inflation-adjusted value of the capital stock per available worker. We adjust Statistics Canada's 2017 figures to 2024 using price indexes calculated from nominal and constant-dollar values. We index each series to the fourth quarter of 2015. "Available workers" include an adjustment in the second quarter of 2020 to reduce the distortion of the COVID crisis and the adjustment for the undercount of temporary residents after 2022 described in the text.

Sources: Authors' calculations based on Statistics Canada, Table 34-10-0163-01, "Flows and stocks of fixed non-residential and residential capital, by sector and asset" and Statistics Canada, Table 14-10-0287-01, "Labour force characteristics, monthly, seasonally adjusted and trend-cycle."

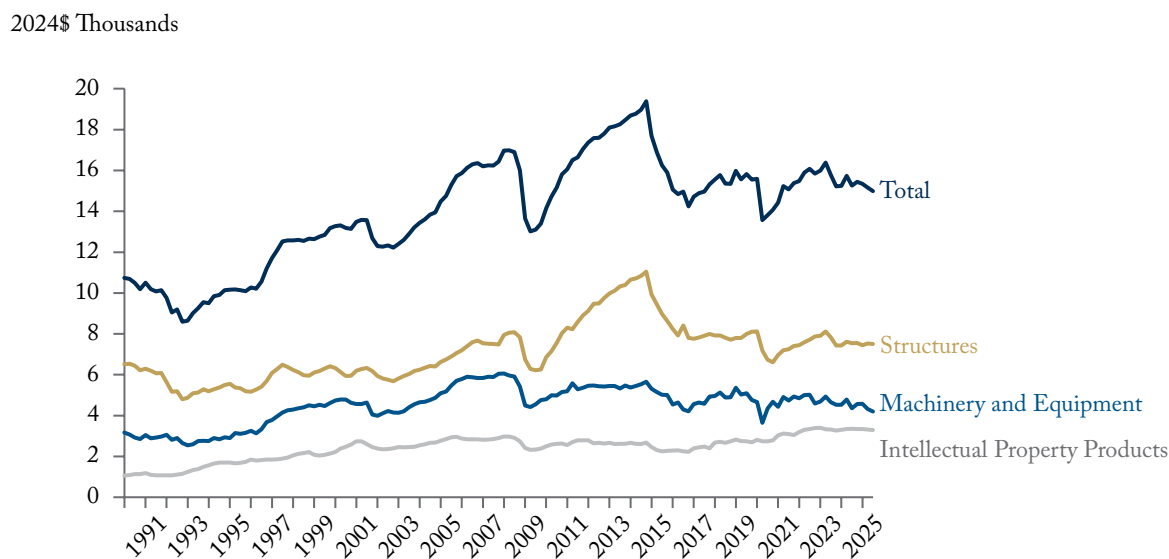
investment in the third quarter of 2025 was only about \$15,000 in 2024 dollars – down almost one quarter from its 2014 peak of \$19,400.

Predictably, low levels of new investment have coincided with ageing of the capital stock and a decrease in the average remaining productive lives of assets.⁵ When new investment exceeds depreciation and scrapping, the remaining useful

life of assets tends to rise, as it did in most categories before 2015. When new investment falls short of depreciation and scrapping, the remaining useful life of assets declines, as it has since then. In 2024, the remaining useful life ratio of non-residential buildings was 1 percent below its 2015 peak, whereas the ratios for IP and engineering construction were 13 and 7 percent

5 The remaining useful life of an asset represents an estimate of the expected realization of its economic value. For instance, if an asset has a projected useful life of 10 years and 7 years are left, then 70 percent of its useful life remains (Statistics Canada 2024).

Figure 4: Real Business Investment per Available Worker by Type



Sources: Authors' calculations based on Statistics Canada, Table 36-10-0104-01, "Gross domestic product, expenditure-based, Canada, quarterly," and Statistics Canada, Table 14-10-0287-01, "Labour force characteristics, monthly, seasonally adjusted and trend-cycle."

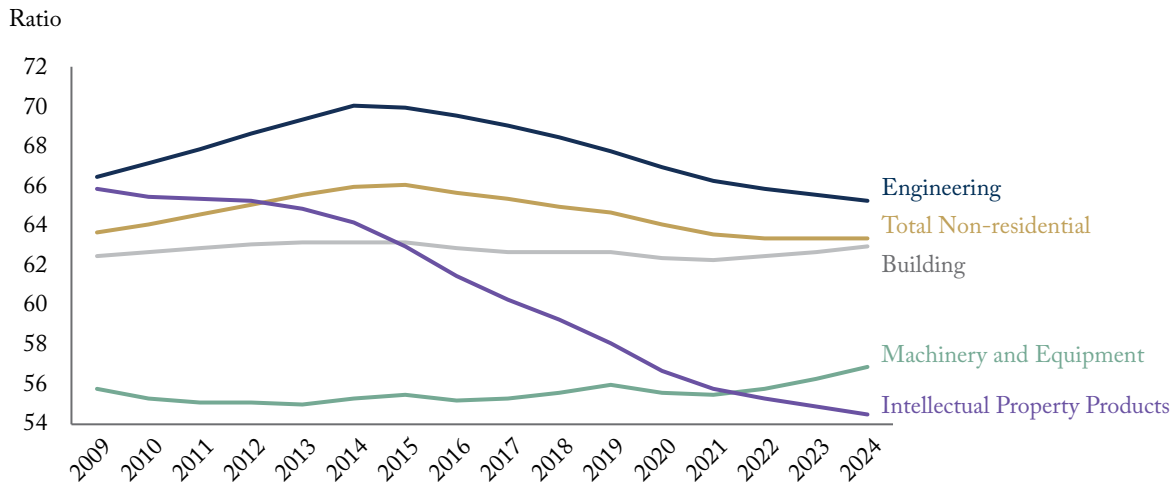
lower than their 2015 benchmarks, respectively. An exception is machinery and equipment, where a shift in spending toward longer-lived assets such as transportation equipment has offset weak gross spending. Overall, the remaining useful life ratio of non-residential capital in 2024 was 4 percent below its 2015 peak. This trend highlights the need for increased investment to maintain Canada's productive capacity as its capital stock ages and becomes obsolete.

CANADA'S INVESTMENT PERFORMANCE IN INTERNATIONAL PERSPECTIVE

Many factors that affect business investment in Canada also affect other developed countries.

Over the long term, the growing importance of intangible assets beyond those measured in IP products, such as organizational efficiency, and services that escape traditional measures of value-added, such as internet search engines, may make lower levels of traditional business investment consistent with rising living standards everywhere. Short-term influences such as the pandemic and trade uncertainty also affect many countries. We can check Canada's experience against that of the United States and other OECD countries with comparable data (the same countries that appear in Figure 2). Is Canada's apparent path toward lower capital intensity part of a broader and possibly benign global pattern, or is Canada on a unique path that raises unique concerns?

Figure 5: Remaining Useful Service Life of Non-residential Capital



Source: Statistics Canada, Table 34-10-0166-01, “Average age measures of non-residential capital stock by industry, by asset, annual.”

Canada versus the United States

Canada and the United States collect similar capital investment data, and Statistics Canada takes particular care to compare Canadian to US prices. We can therefore measure investment per available worker in the two countries with some confidence that we are getting meaningful comparisons.

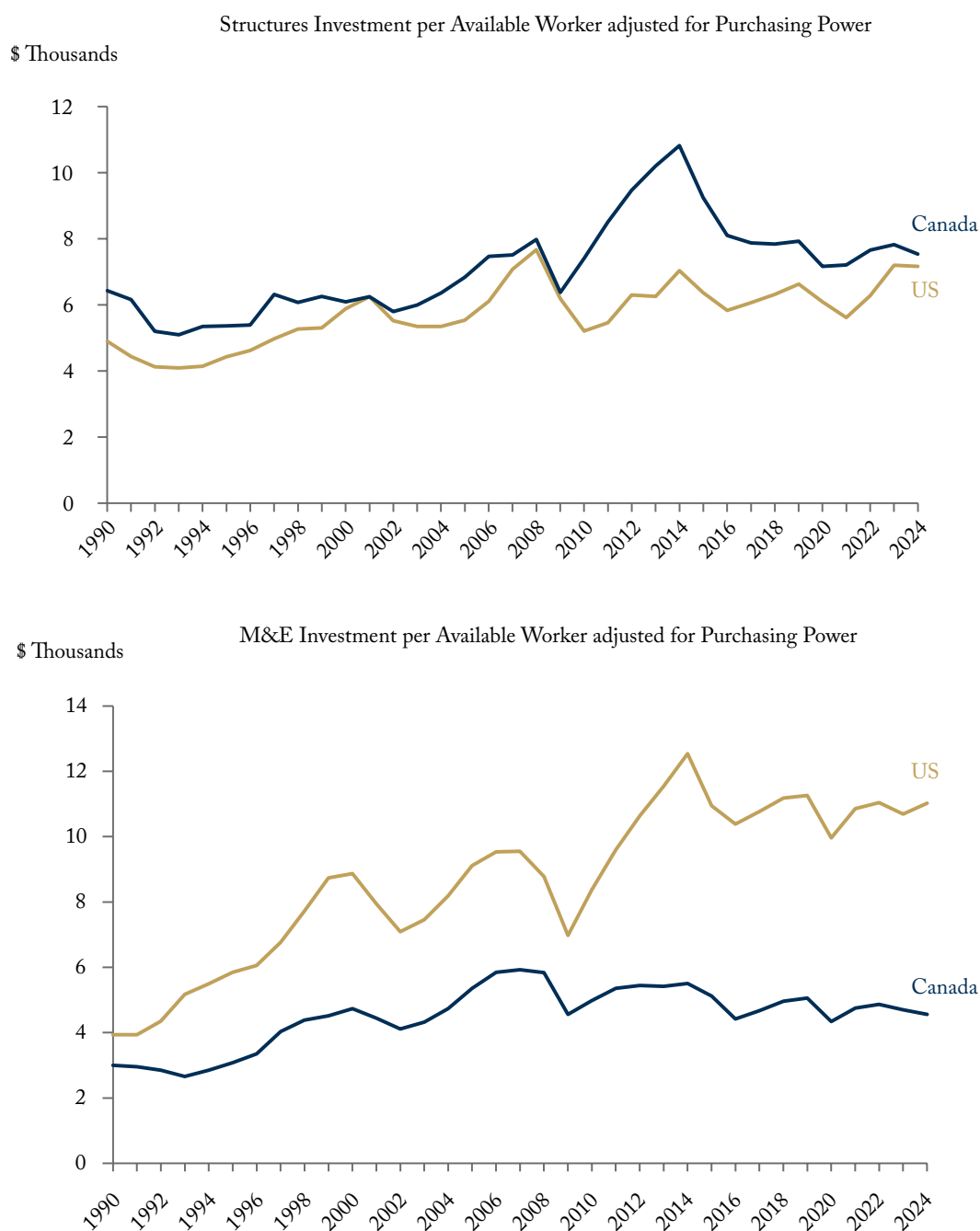
We convert the different types of capital investment into Canadian dollars using Statistics Canada’s measures of relative capital-equipment price levels to adjust for purchasing power differences.⁶ This approach gives a clearer sense of the “bang per buck” spent on structures, M&E or IP products on either side of the border. The results of these calculations appear in Figure 6, panels A through D.

Canada has a longstanding edge in investment in structures (panel A), reflecting the importance of non-residential buildings and engineering structures in natural resource industries. This gap was particularly wide in 2014, at almost \$4,000 per worker, when Canadian investment in natural resources, notably oil and gas production and transmission, was booming. Since then, it has shrunk – to less than \$500 in 2024.

The picture for M&E investment (panel B) is markedly different. The United States has always invested more heavily in M&E, and that advantage has grown over the past 15 years. Recently, US M&E investment per available worker has been almost three times higher than in Canada – about \$11,000 annually in the US compared to \$4,600 in

6 Investment goods and services tend to be less expensive in the United States than in Canada. For that reason, using the market exchange rate to convert US capital expenditures to Canadian dollars would understate the relative bang US companies get per investment buck. Statistics Canada used the triennial OECD benchmark estimates to extrapolate the purchasing power of investment spending between Canada and the United States. Since these series end in 2019, we extend them using the growth rate of the OECD’s purchasing power parity (PPP) for gross fixed capital formation.

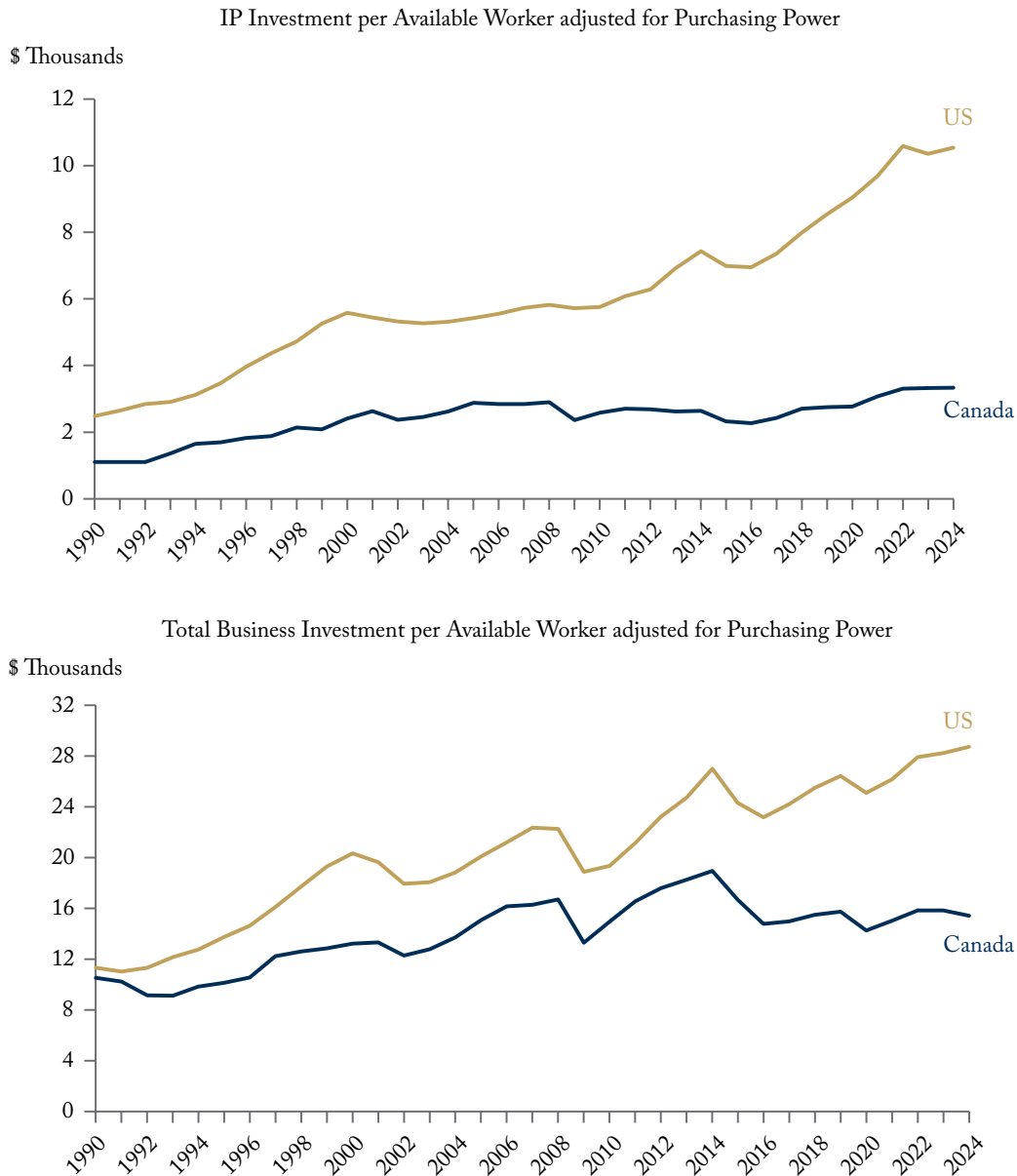
Figure 6: Real Investment per Available Worker, Canada versus the United States



Note: Before dividing by the number of available workers, we adjust US investment numbers from US dollars to Canadian dollars using purchasing power adjustments for each category from Statistics Canada Table 36-10-0367-01. The latest purchasing power data are for 2019. We extrapolate them using the OECD's purchasing power parity data. We convert the nominal data to real dollars using a gross fixed capital formation deflator.

Sources: Authors' calculations based on Statistics Canada, Table 36-10-0104-01, "Gross domestic product, expenditure-based, Canada, quarterly"; Statistics Canada, Table 14-10-0287-01, "Labour force characteristics, monthly, seasonally adjusted and trend-cycle"; and Statistics Canada, Table 36-10-0367-01, "Ratio of real consumption per capita in the United States compared with Canada, by expenditure category, on an International Comparison Program Classification basis"; OECD Economic Outlook 117.

Figure 6: Continued



Note: Before dividing by the number of available workers, we adjust US investment numbers from US dollars to Canadian dollars using purchasing power adjustments for each category from Statistics Canada Table 36-10-0367-01. The latest purchasing power data are for 2019. We extrapolate them using the OECD's purchasing power parity data. We convert the nominal data to real dollars using a gross fixed capital formation deflator.

Sources: Authors' calculations based on Statistics Canada, Table 36-10-0104-01, "Gross domestic product, expenditure-based, Canada, quarterly;" Statistics Canada, Table 14-10-0287-01, "Labour force characteristics, monthly, seasonally adjusted and trend-cycle"; and Statistics Canada, Table 36-10-0367-01, "Ratio of real consumption per capita in the United States compared with Canada, by expenditure category, on an International Comparison Program Classification basis"; OECD Economic Outlook 117.

Canada. Given the potentially outsized importance of M&E investment for productivity growth (Sala-i-Martin 2001, Rao et al. 2003, Stewart and Atkinson 2013), this gap bodes poorly for the competitiveness of Canadian workers and for Canada's attractiveness as a place to live and work.

The IP products gap (panel C) is worse yet. In 2024, the Canadian figure stood at about \$3,300, up from about \$2,600 in 2014, while the US figure stood at \$10,600, up from \$7,000 in 2014. Part of this gap reflects slumping exploration expenditures and their associated IP by Canada's struggling resource sector. In general, Canadian firms tend to use IP products owned abroad more than US firms do, which reflects in part Canada's relative lack of success in commercializing domestic intellectual property.

Looking at all three categories combined (panel D), the United States has outpaced Canada since the 1990s. The gap narrowed in the 2000s but widened markedly after the mid-2010s and expanded further after the pandemic, reaching \$13,300 per potential worker in 2024. That is a chasm. Differences in investment per worker on that scale could represent a significant shortening of the replacement and upgrade cycle for equipment such as trucks, excavators, machine tools, workplace equipment, and the potential replacement of entire information and communications technology systems – meaning US workers benefit from more modern tools and higher productivity.

One way to summarize these differences is to ask how many cents of new investment per available Canadian worker occur for every dollar of new investment per available US worker. Figure 7 presents our measure of investment in Canada per dollar of its US equivalent in total and in each investment category.

Canada's relatively robust rate of structures investment stands out in Figure 7. The surge in the early 2010s is striking: in 2013, each available Canadian worker was getting \$1.63 for every dollar received by a US worker. The subsequent decline is just as striking. By 2024, the average member of the Canadian workforce received \$1.05 of new non-residential structures for every dollar received by the average member of the US workforce.

As the comparison in Figure 6 suggests, the contrast is worse for M&E. After improving from just 50 cents around the turn of the century to nearly 70 cents around the time of the 2008–2009 financial crisis and slump, Canada's relative performance has deteriorated. In 2015, M&E investment for every available Canadian worker per dollar enjoyed by a US worker stood at 47 cents for every US dollar. By 2024, it had dropped to a dismal 41 cents – a number that has fallen further since (Robson and Bafale 2025).

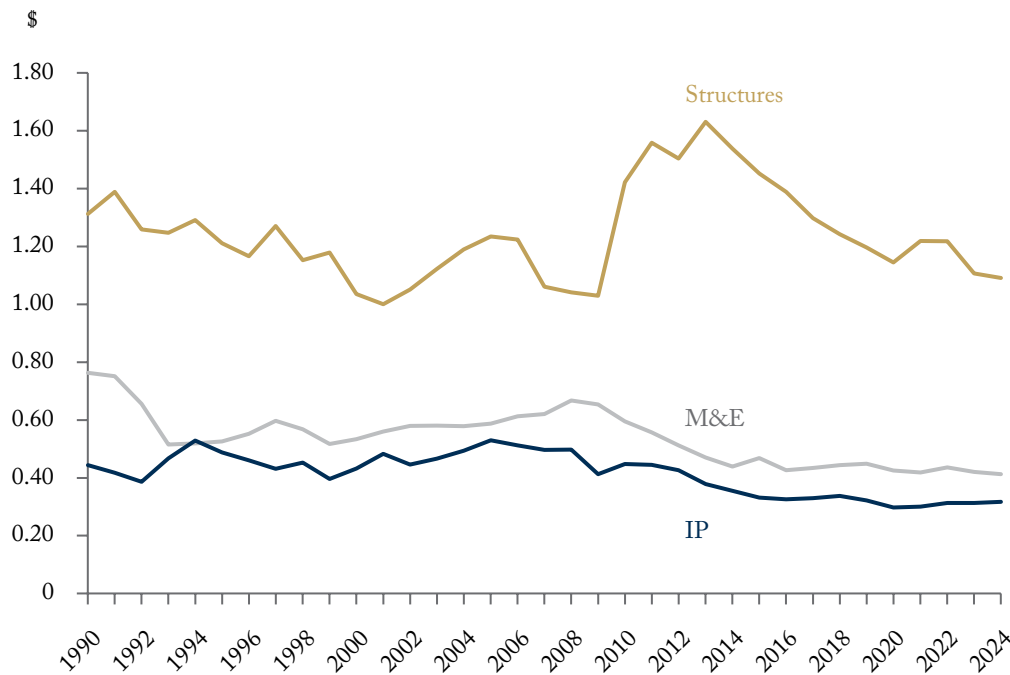
The situation with IP products is worse yet. A declining trend since the mid-2000s has led to the point where the average member of the Canadian workforce in 2024 enjoyed only 32 cents of new investment in IP products for every dollar enjoyed by their US counterpart. The measurement of IP products in the two countries is not identical (Box 1), but focusing on the comparable categories reveals that US investment per worker in software is about double Canadian investment per worker, and that US investment in R&D is about four times Canadian investment.

Canada versus the OECD

Widening the international comparison to other OECD countries offers more perspective on Canada's situation.⁷ This broader and more forward-

7 Our measure of business investment per available worker for the OECD is the ratio of aggregate business investment – the sum of business investment in each OECD country in Canadian dollars adjusted for purchasing power – to the aggregate labour force. The measures for other OECD countries are the aggregate measures minus Canada and the United States.

Figure 7: Real Investment per Available Worker in Canada for Every Dollar of Investment in the United States by Type



Source: Authors' calculations based on sources for Figure 6.

Box 1: Comparing Investment in IP Products in Canada and the United States

IP investment per available worker is now almost four times higher in the United States than in Canada – an alarming signal for Canada's future performance in an economy where intangible capital is increasingly important (Marple 2021, Bafale and Robson 2022). Recent work by Statistics Canada (Allen, Gu and Macdonald 2025) provides estimates of Canadian artistic originals that allow a more direct comparison of Canadian and US IP assets. They find that Canada's lower stock of intangible assets helps explain slower growth in labour productivity. But this is a relatively new area of national income accounting, and even Canada and the US, alike in so many of their conventions, do not approach this area identically.

Statistics Canada breaks down IP products into three subcomponents: mineral exploration and evaluation (about 8 percent), research and development (about 27 percent) and software (about 65 percent). The US Bureau of Economic Analysis (BEA) also has three IP products subcomponents: research and development (half of IP products) and software (about 43 percent) are two of them. However, instead of mineral exploration, the third US subcomponent is entertainment, literary or artistic originals (about 7 percent).

Box 1: Continued

The dominance of the natural resource sector in the Canadian economy warrants close monitoring of mineral-exploration investment. The closest measure of mineral exploration in the US is mining exploration, shafts and wells under the non-residential structures category. However, the BEA does not report mining exploration investment separately due to data source limitations. For its part, Statistics Canada excludes entertainment, literary or artistic originals, also due to data limitations. Some countries include databases, but Canada excludes them because they are very small (Statistics Canada 2016).

However, we can still compare Canada and the US when it comes to investment in R&D and software. The fact that Canadian businesses invest less in R&D than US businesses is well known, but the size of the current gap is still surprising. The average Canadian worker has recently been receiving about 30 cents of such new capital for every dollar received by the average US worker. Canada fares somewhat better in the comparison of software investment. Nevertheless, the average Canadian worker has recently been receiving less than 60 cents of new investment in software for every dollar received by the average US worker.

Adding the two types of capital together reveals that new investment per available Canadian worker in 2024, adjusted for purchasing power, was only 51 cents for every investment dollar per US worker in these categories – not a gap to inspire optimism about the relative growth of incomes of Canadians working with these types of capital.

Figure B1: Real Investment per Available Worker in Canada for Every Dollar of Investment in the US by type of IPP

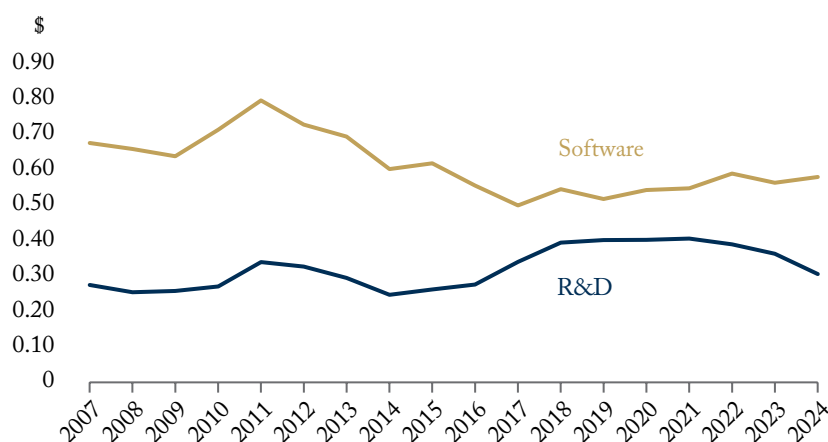
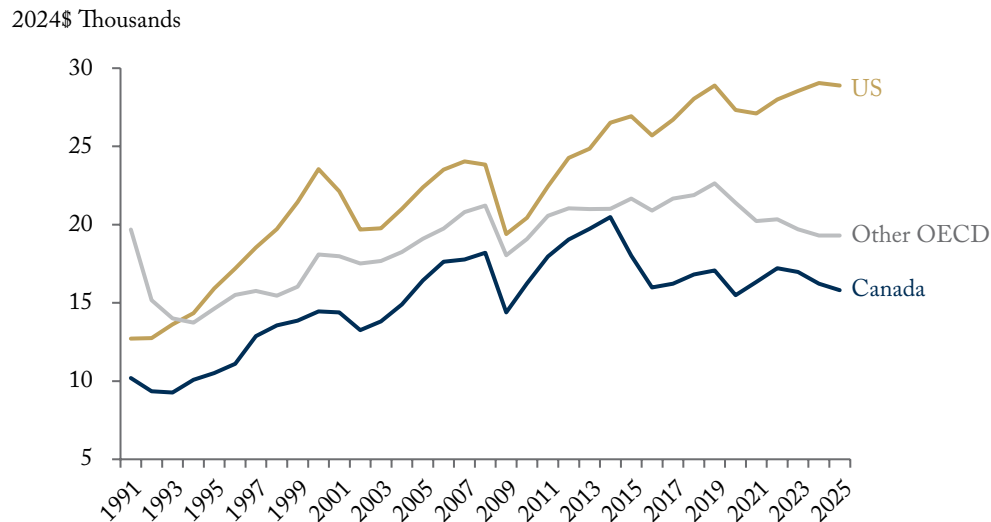


Figure 8: Real Investment per Available Worker, Canada versus the OECD



Source: Authors' calculations based on data from the OECD Economic Outlook 117.

looking view comes with caveats. Not all OECD countries break down business investment by type the same way Canada and the United States do, and some measures, notably IP products, differ across countries. Therefore, we use aggregate investment with less confidence that we are comparing like with like. We also do not have current measures of relative prices for different types of investment. We resort to a less precise “bang-per-buck” adjustment: purchasing-power-adjusted exchange rates benchmarked to relative prices of capital investment goods and services in 2017.

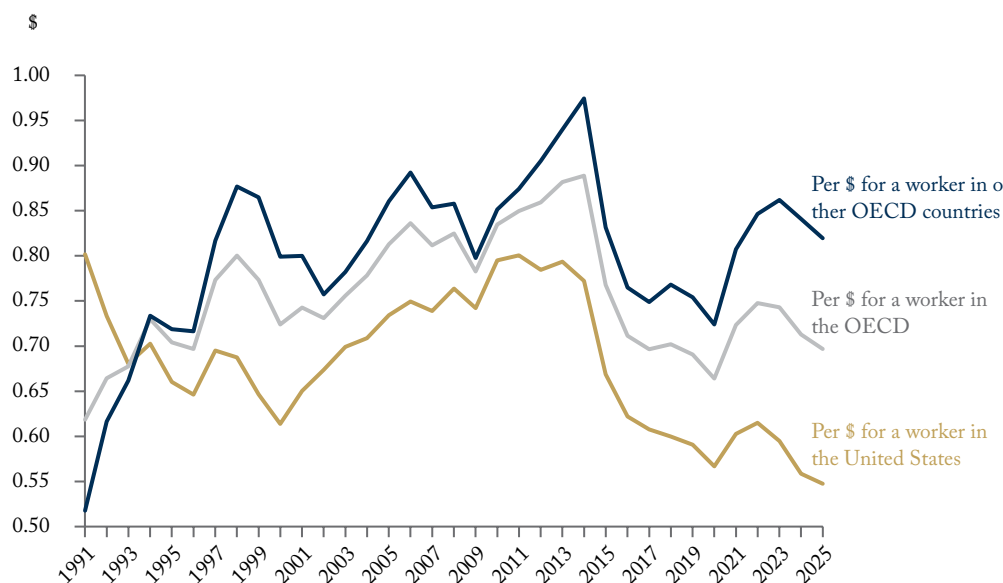
For consistency, we use the same OECD measures for the United States as well, which means that the per-available-worker numbers in Canadian dollars are not identical to those in our Canada-

US comparison. But the big picture – notably, the story of Canadian underperformance – is consistent (Figure 8).⁸

Investment per available worker in the other OECD countries with comparable data has typically been less robust than in the United States but more robust than in Canada. This tendency was less pronounced in the early 2010s, when Canada's resources sector was booming and many other advanced economies were suffering the lingering effects of the 2008-2009 financial crisis and slump. At that point, the gap between investment per Canadian labour-force member and those in other OECD countries (excluding the United States) narrowed, and the two measures were almost equal in 2014.

8 We use the OECD purchasing power data, the most recent being for 2022, when the purchasing power of a US dollar with respect to investment goods and services was C\$1.14 – that is, US\$100 of investment goods and services would cost US\$114 in Canada.

Figure 9: Canadian Investment per Worker for Every Dollar of Investment in the United States and Other OECD Countries



Source: Authors' calculations based on data from the OECD Economic Outlook 117.

Since then, the gap has widened again. The OECD's projections for 2025 yield a figure of about \$19,300 of new capital per available worker this year for the other OECD countries, compared with just \$15,800 for Canada. In other words, the OECD's projections for countries other than Canada and the United States indicate that gross new capital per available worker in Canada will be about 20 percent less than in those countries this year.

Figure 9 highlights this relative performance by showing Canadian investment per worker for each dollar invested elsewhere. The figure shows how much new capital each available worker in Canada enjoyed per dollar of new capital per available worker in the United States, the OECD as a whole and in the other OECD countries since 1991, along with the figures calculated from the OECD's 2025 projections.

For every dollar of investment received by the average worker across the OECD as a whole, the average Canadian worker enjoyed about 75 cents in the early 2000s. Excluding the United States, Canadian workers enjoyed 79 cents. By 2014, this gap had narrowed: the average Canadian worker was enjoying some 89 cents of new investment for every dollar invested per worker in the OECD overall, and 97 cents relative to workers in other OECD countries. By 2025, however, Canadian workers will likely enjoy only about 70 cents of new capital for every dollar enjoyed by their OECD counterparts. The figure compared to workers in OECD countries other than the US is 82 cents. The figure compared to US workers is a dismal 55 cents.

CANADA'S PRODUCTIVITY PERFORMANCE IN INTERNATIONAL PERSPECTIVE

Higher investment is not a goal in itself. Subsidies and regulations that spur investment in uneconomic assets could raise capital spending but lower productivity and future incomes.⁹ Our concern about these numbers is their implication that Canadian businesses either do not see opportunities and competitive threats that would prompt them to undertake productivity-improving capital projects, or that when they see such opportunities and threats they respond slowly or incompletely. To that extent, these numbers presage trouble for Canadian workers.

As the relationship in Figure 2 illustrates, and as previous research such as Rao et al. (2003) has noted, countries with higher capital intensity tend to have higher productivity and higher wages. Likewise, countries with lower capital intensity tend to lag on both fronts. Unless human capital per worker is rising and/or multifactor productivity is rising fast enough to offset it, falling built-capital per worker means less output generated per hour worked.

In the 1990s, the US economy produced \$27,000 more per available worker than Canada, and the gap has widened since. In the 2000s and 2010s, Canadian output per available worker averaged \$128,000 and \$136,000, respectively, compared with \$164,000 and \$184,000 in the United States. By 2024, Canada generated \$143,000 per available worker, compared to almost \$200,000 in the United States (Figure 10).

Canada generated more output per worker than in other OECD countries in the 1990s, but

that advantage has disappeared. Specifically, in the 1990s, Canadian workers produced \$3,000 more per worker than their counterparts in other OECD countries. By 2024, notwithstanding a productivity decline post-COVID, workers in other OECD countries were generating \$10,000 more per worker than those in Canada.

As with investment per available worker, we can highlight Canada's relative performance by showing Canadian output per available worker for each dollar of output generated per available worker elsewhere (Figure 11).

In the 1990s, Canadian workers produced 80 cents for every dollar of output generated by US workers. By the 2010s, the ratio was around 74 cents, and by 2024, it had fallen further to 72 cents. In the 1990s, Canada generated \$1.03 per worker for every dollar generated per worker in other OECD countries. By 2024, this figure had dropped to 93 cents.

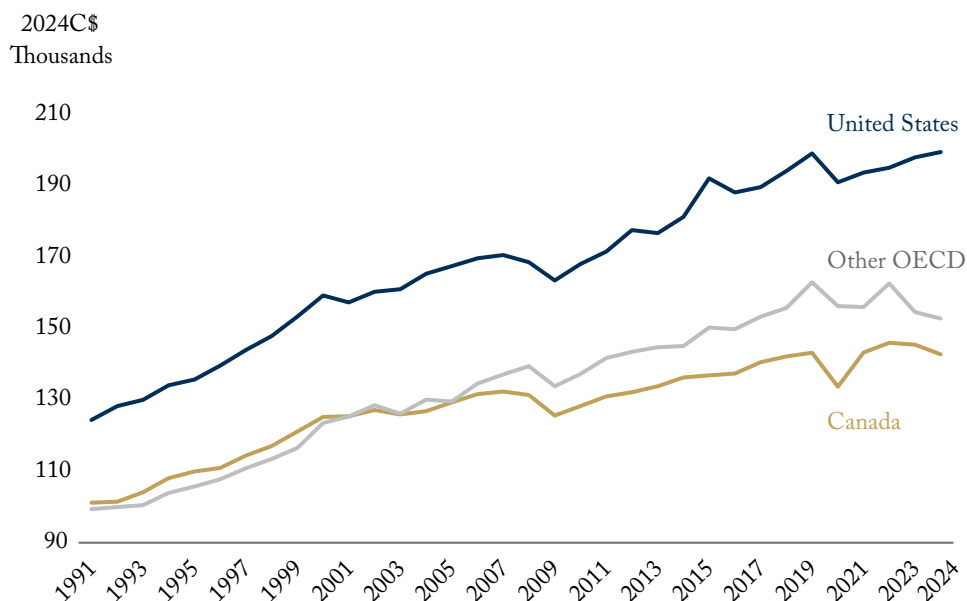
DIAGNOSES AND POSSIBLE RESPONSES

What lies behind these ominous numbers and how might Canadian governments respond? Causation flows both ways between labour productivity and investment, but an investigation can usefully start by asking why Canadian businesses may not respond to opportunities and threats as much as they did previously or compared to businesses in other countries. We explore that question in the next subsection, and then ask why Canadian businesses might see fewer opportunities and threats than before and fewer than those in other developed countries.¹⁰

9 Lester (2024) concludes that about 80 percent of federal business subsidies harm rather than help Canada's economic performance. Among currently relevant examples of actual or potential investments that lower living standards are support for intermittent electricity generation that lacks suitable storage or transmission (Trebilcock 2017), dairy farms that require prohibitive tariffs to survive (Schwanen 2018), an inefficient new public agency to pursue vaccine self-sufficiency (Grootendorst et al. 2022) or subsidizing the manufacture of batteries for electric vehicles that may not sell (Raymont 2023, Parliamentary Budget Office 2023).

10 This section draws heavily on Robson (2024).

Figure 10: GDP per Available Worker in Canada, the United States and Other OECD Countries



Note: We divided nominal GDP in national currency by hours worked, then converted to C\$ with purchasing power parity and used the 2024 GDP deflator to get labour productivity in 2024.

Source: Authors' calculations based on OECD, Productivity Level (Accessed August 1, 2024); OECD Economic Outlook No.117.

Why Might Canadian Businesses Respond Less to Opportunities and Threats?

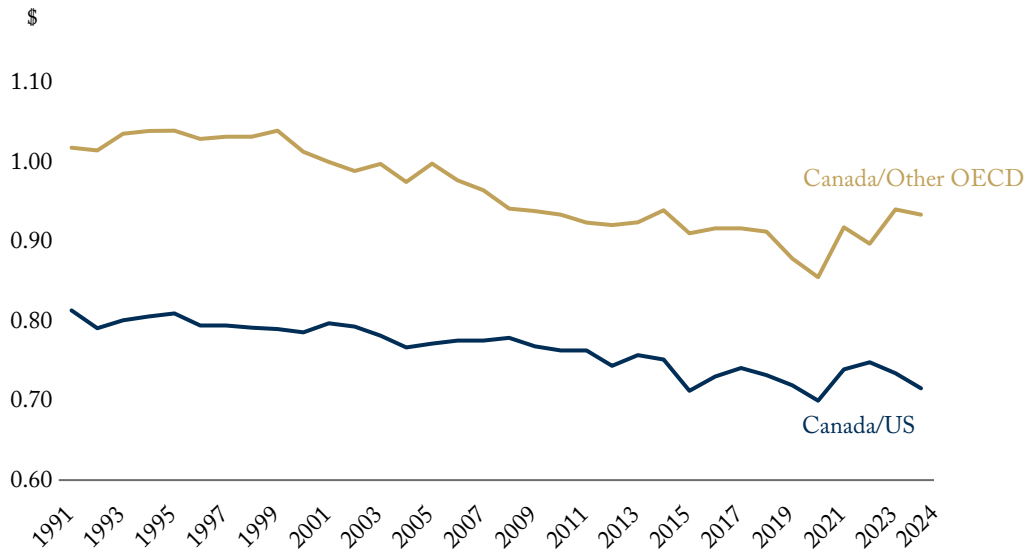
Do Canadian businesses have some structural predisposition against innovation, entrepreneurship, investment and productivity growth? Porter (2023) provides a list of commonly blamed factors, including low population density, a cold climate, reliance on resource-sector revenues, weak private-sector research and development efforts and interprovincial barriers. As Porter points out, however, other countries with similar characteristics are outperforming Canada. Moreover, factors that have remained unchanged for decades cannot fully

explain Canada's poor performance since the mid-2010s, unless their impact has intensified. What, then, might have changed?

One possible factor is Canada's bias toward residential construction.¹¹ The federal government backs mortgage lending through Canada Mortgage and Housing Corporation (CMHC) insurance, likely leading lenders to favour residential over non-residential investments (Omran and Kronick 2019). Although mortgage lending has exceeded business lending in Canada since the mid-1980s, a tougher environment for non-residential investment and higher immigration since the mid-2010s may have made residential investment even more attractive.

11 The share of residential construction in gross fixed capital formation was 38 percent in 2015 and 37 percent in 2024, while that of nonresidential construction fell from 34 percent in 2015 to 31 percent in 2024 (Statistics Canada Table 36-10-0108-01).

Figure 11: Output per Available Worker in Canada Relative to the United States and Other OECD Countries



Source: Authors' calculations based on data in Figure 10.

While imports can augment the resources available for capital investment in a given year, domestic output over time limits the total amounts available for consumption and investment of all kinds. As a result, a growing share of residential investment in GDP could limit the responsiveness of non-residential investment to opportunities and threats.

Another clearly negative influence has been the hostile regulatory environment for Canada's fossil fuel industry since 2015.¹² While global investment in oil and natural gas dropped when prices weakened in 2014, the subsequent recovery spurred a much stronger response in the United States than in Canada. Oil and gas investment per worker in Canada has fallen relative to the US, indicating a muted response to strong demand and

high prices on the Canadian side of the border. A hint about the importance of the regulatory environment in the Canadian data is the relatively robust performance of investment in conventional oil production in Canada, which has followed a path more similar to that of the US industry. In contrast, investment in oil sands projects, which involve larger commitments of capital for longer periods, has been more subdued.

Porter's list of suspects also includes the small scale of many Canadian businesses. The widening gaps between the effective tax rate on small businesses and both the general corporate income tax rate and personal income tax rates, combined with generally low interest rates, might have dulled business response to incentives that could

12 Cross and Mintz (2024) document the combined impact of taxation and regulatory delays on natural resource projects in Canada, and note that, since the passage of the federal *Impact Assessment Act* in 2019, only one natural resource project has been approved under the new regime.

have otherwise spurred investment and growth. The wider the gap between the small business tax rate and other rates, the stronger the incentive to keep earnings and assets below the thresholds at which the small business rate phases out, increasing marginal tax rates over that range. This creates distortions (OECD 2025a) and a “lock-in” effect, where businesses are incentivized to reinvest earnings within even mediocre firms rather than taking them as personal income. This incentive varies with the return on assets: the lower the rate of return, the larger the marginal effective rate on earnings in the clawback zone.

Dachis and Lester (2015) argue that providing preferential tax treatment to small businesses steers capital from larger, more productive firms to smaller, less productive ones. Since 2009, the gap between effective small business tax rates and ordinary corporate and higher-income personal tax rates has widened, and is wider in Canada than in other G7 countries. Against a backdrop of generally lower returns on assets, this widening gap might help explain relatively lower business investment in Canada in recent years.

The US tax reforms of 2017 likely lowered investment in Canada and certainly did so relative to the United States. Prior to 2017, Canada had improved its tax treatment of investment relative to the United States, with reforms from the late 1980s to the early 2010s reducing the federal general corporate income tax rate from nearly 38 percent to 15 percent and reducing the aggregate marginal effective tax rate on investment in Canada (Chen and Mintz 2015, Bazel and Mintz 2021). These steps strengthened Canada’s investment performance and capital stock (Wen and Yilmaz 2020). As noted already, Canada’s investment performance relative to the US and other OECD countries did improve from the early 1990s until 2014, when the slump documented in this report began.

Those 2017 US reforms, notably the reduction of the federal corporate income tax rate from 35 to 21 percent and faster write-offs for M&E, undid

Canada’s business tax advantage (Bazel and Mintz 2021, McKenzie and Smart 2019). As intended, the US reforms lowered the marginal effective tax rate on business investment. Bazel and Mintz (2021) calculate the average US federal and state effective marginal rate at less than 26 percent in 2019, down from nearly 40 percent in 2000. By contrast, the average Canadian federal and provincial/territorial rate was above 26 percent, down much less from nearly 30 percent in 2000.

Chodorow-Reich et al. (2023) compare investment by US-based companies to investment by similar companies abroad, including those in Canada, around the time of the reforms and find a stronger investment performance among the US group, post-reforms. Crawford and Markarian (2024) similarly show that the reforms reversed Canada’s previous tax advantage. They find that US companies significantly increased their capital spending compared to Canadian firms after the reforms.

The US tax reforms also aimed to encourage US-based multinationals to repatriate profits held abroad. Although success in that respect would likely depress capital formation in Canada (Mathur and Kallen 2017, McKenzie and Smart 2019), that result is not guaranteed. Foreign investments can complement domestic investments, and the immediate post-reform US global intangible low-tax income (GILTI) regime applied only to foreign income above 10 percent of foreign tangible capital, which created an offsetting incentive for businesses to invest abroad. However, matched-firm analyses by Chodorow-Reich et al. (2023) found weaker investment among Canadian firms than among US firms following the reforms, and Crawford and Markarian (2024) conclude that the surge in US investment was driven primarily by domestic activity.

A notable trend since 2017 is the decline in Canadian M&E investment per worker relative to the United States, despite Canada responding to the US reforms by introducing accelerated depreciation on almost all capital assets in 2018. This suggests that some of the robust US domestic investment

might have come at Canada's expense or that other factors made Canadian companies' investment weaker than that of their US counterparts.

The GILTI regime also addressed previous incentives for US multinationals to hold and commercialize IP products abroad (Singh and Mathur 2019). Since the 2017 reforms, Canada's performance in IP investment relative to the US has been worse than its performance in other asset types. The GILTI rules imposed such a significant tax burden that many IP investments yielded higher after-tax returns in the US than overseas. This reduced the tax advantage of locating intangible assets outside the US. While this does not prove causation, it strongly suggests that the US reforms have played a significant role.¹³

Why Might Canadian Businesses See Fewer Opportunities and Threats?

A regular critique of Canadian business, also noted by Porter (2023), is a lack of entrepreneurial drive and risk tolerance. These traits may have become more problematic with the rise of information and communication technology, which rewards countries with stronger human capital in these areas. This could explain Canada's recent poorer showing against the United States.

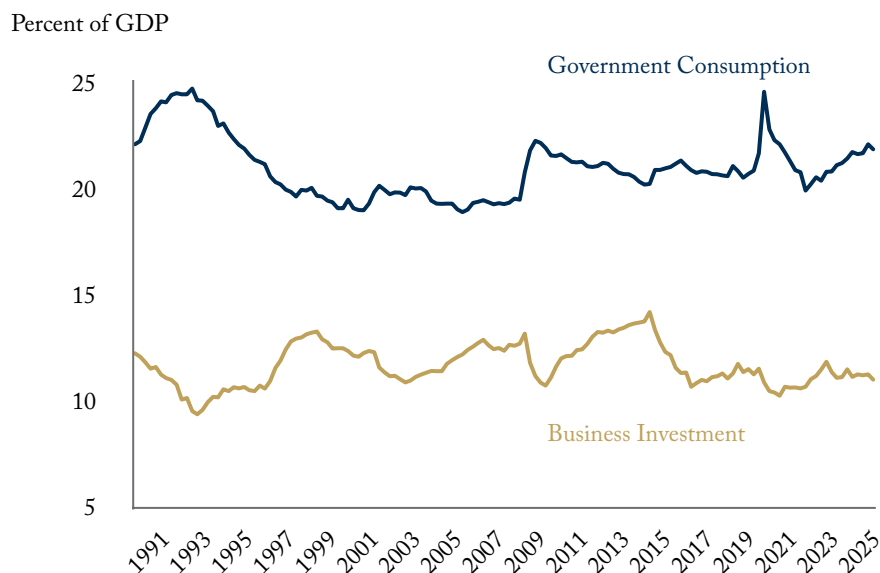
Another reason for Canadian businesses revising their investment-spurring expectations down, at least relative to US firms, is increased population growth since the mid-2010s.¹⁴ This surge reflects higher immigration, shifted toward students and

temporary foreign workers, and lower economic stream thresholds. This may have led businesses to favour labour substitution over capital investment (Doyle et al. 2024).

The rising share of government consumption may also mean fewer opportunities for Canadian businesses.¹⁵ Government consumption – spending on public employees and other resources – draws directly on the same resources as the private sector. It is expected to rise during downturns, such as the early 1990s, the 2008 financial crisis, the 2014 oil-price collapse, and the pandemic, while business investment – which is strongly affected by economic cycles – falls. But if government consumption remains elevated as the economy strengthens, it can crowd out private spending, including business investment. Canada's post-pandemic experience is concerning because government consumption has continued to rise while business investment has struggled (Figure 12). Although recent slack in the Canadian economy might appear to reduce the potential for government consumption to crowd out other uses of resources, the sluggish growth in productive capacity prefigured by current feeble investment suggests that competition for resources by government will remain a problem if governments do not reduce their claims on the economy.

Another factor behind Canada's lower investment rates is US protectionism. Donald Trump's recent trade policies are exacerbating a problem with many roots. Secure access to the US market has long been a goal of Canadian trade policy, ensuring that Canada remains an attractive

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- 13 The *One Big Beautiful Bill Act* in July 2025 replaced the GILTI regime with a broader Net CFC Tested Income (NCTI) regime directed at foreign-controlled corporations more generally. The new regime, most of which will apply as of 2026, has a wider focus than intangible income and is expected to reinforce earlier incentives to locate investment inside the United States.
- 14 Over the two decades to the fourth quarter of 2014, Canada's population growth rate averaged 1 percent annually. It rose to 1.5 percent by the beginning of 2020 and, after a COVID-induced dip in 2020–2021, rose to 3 percent by 2024 (Statistics Canada Table 17-10-0009-01).
- 15 Government consumption and business investment as shares of GDP show a modest negative relationship over the period, with a correlation coefficient of - 0.15. Over 2019–2025, the government-consumption share of GDP rose by 6 percent, while the business-investment share declined by 2 percent.

Figure 12: Government Consumption and Business Investment as Share of GDP (1990Q1-2025Q3)

Source: Authors' calculation based on C.D. Howe Institute Graphic Intelligence. <https://cdhowe.org/publication/crowding-out-growth-why-government-spending-must-make-room-for-investment/>.

production base. Even before Donald Trump's 2017 inauguration, the 2016 campaign featured anti-NAFTA rhetoric from both parties, potentially discouraging Canadian investment. The 2024 campaign prefigured more protectionism, which hammered Canada's exports of goods to the United States after his inauguration, down 22 percent between January and August 2025.

Domestic policy uncertainty may also have reduced business dynamism, slowing productivity growth and blunting competition that spurs investment. Key sectors – such as energy, plastics, financial services and telecommunications – have faced restrictive regulations, reducing innovation, competition and investment across the economy. Cetté et al. (2025) provide evidence that phasing out restrictive regulations in these key upstream

sectors could significantly boost productivity and investment.

The OECD's Product Market Regulation (PRM) project quantifies regulatory burdens by comparing national regulations to international best practices (OECD 2024). The latest PRM data compare 2023 to 2018. In 2018, Canada scored 1.43, slightly better than the OECD average of 1.46 (lower scores indicate less distortion), but worse than the 0.8 average of top performers. By 2023, Canada improved to 1.38, yet lagged behind the OECD average (1.30) and top performers (0.67). Problem areas include licensing, foreign direct investment barriers, public procurement, and governance of state-owned enterprises (OECD 2024).

Furthermore, indexes of policy uncertainty rose far more in Canada after 2014 than in the United States,

Europe and even globally (Figure 13).¹⁶ While trade tensions have boosted the Canadian index, other policies that undermine business confidence are more directly under the control of Canadian policymakers. Eliminating internal trade barriers and phasing out supply management in dairy, eggs and poultry would reduce these distortions, lowering prices for consumers and costs for businesses that use the affected products as inputs.

What tax-related influences might account for slower productivity growth in Canada and the reduced perception by Canadian businesses of investment opportunities and threats?

One influence is the increased distortion from varying marginal effective tax rates across industries and capital types. Bazel and Mintz (2021) find inter-industry and inter-asset dispersion in marginal effective tax rates more than doubled from 2016 to 2020. Manufacturing investments faced a 13.7 percent average rate – negative in Atlantic Canada due to tax credits – while communications investments faced an average rate of 22.1. Such disparities reduce overall capital productivity.

Labour mobility and personal income tax salience have grown. Post-pandemic remote work enabled more Canadians to work abroad, and emigration data – though incomplete and affected by a methodology change¹⁷ – show increased churn

since 2015.¹⁸ Remote work may have increased opportunities for higher-earning Canadians to work abroad.¹⁹ The associated loss of high-skilled workers may reduce incentives for domestic capital investment.

Populist tax policies further undermine investment confidence. The “Canada Recovery Dividend,” imposed on the largest banks and insurers post-COVID, and higher corporate tax rates on large financial institutions introduced in the 2022 budget, lacked economic rationale (Kronick and Robson 2023). The 2021 luxury tax was based on a similar logic (Halpern-Shavin and Balkos 2023). The abortive move to increase capital gains tax rates in 2024 badly shook entrepreneurial confidence. Like policy uncertainty, perceptions of capricious tax policy reduce the dynamism that could otherwise spur consumer-friendly investment.

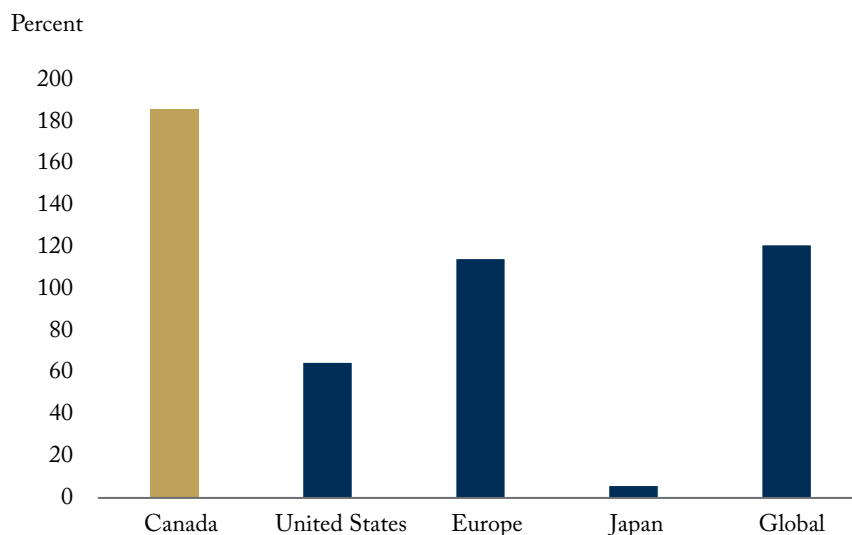
Potential Responses

The list of likely negative influences on investment in Canada that may have worsened since 2014 is long, and the list of potential policy responses is nearly as long. Some issues are easier to address in the short run than others.²⁰

The bias toward residential construction is difficult to tackle. Slowing the inflow of permanent and temporary immigrants, whose rapid growth has

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- 16 The index by Baker et al. (2016) is constructed using the prevalence of terms associated with economic uncertainty as used in Canadian newspapers. For example, “uncertainty,” “economy,” “policy” and “regulation” are identified in each newspaper. The monthly series specific to each newspaper is then standardized and added together. The resulting series is normalized to mean 100 before 2011.
- 17 Until June 2016, Statistics Canada included an estimate of net temporary emigration in its net emigration numbers. Since then, it has reported gross emigration and returning emigrants. See Statistics Canada Table 17-10-0040-01 (formerly CANSIM table 051-0037), “Estimates of the Components of International Migration, Quarterly.”
- 18 Gross emigration has recently been running at an annual rate of 0.24 percent of the population, up from 0.19 percent before 2015. Emigrants recently have been returning at an annual rate of 0.15 percent of the population, up from 0.10 percent before 2015. (Calculated from Statistics Canada table 17-10-0040-01, *supra* note 29; and Statistics Canada table 17-10-0009-01 “Population Estimates, Quarterly.”)
- 19 Remote work increases opportunities to take advantage of special tax, residency or citizenship provisions that countries use to attract people with financial wealth, high incomes and special skills. Casi, Mardan and Stage (2023) document the post pandemic spread of “digital nomad” visas, notably in countries traditionally considered to be tax havens.
- 20 This section draws heavily on Lester (2025).

Figure 13: Increase in Policy Uncertainty between 1997-2014 and 2015-2025



Source: Authors' calculations from data at www.PolicyUncertainty.com (see Baker et al. 2016).

intensified housing market pressure, would reduce the draw of residential investment on resources otherwise available for non-residential capital investment and lessen any disincentive created by abundant low-skilled labour (Doyle et al. 2024). But the government's announcements have so far not moved the actual numbers much (C.D. Howe Institute 2025).

Current plans to cut business immigration and shift away from human-capital-based selection toward filling in-demand occupations risk undermining Canada's ability to attract high-skill workers (Mahboubi 2025). Prioritizing lower-skill positions does little to encourage the high-skilled labour that complements business investment.

By contrast, the hostile regulatory environment for Canada's fossil fuel industry is easier to fix. The case for Canada to suppress its fossil fuel production to lead global emissions reduction has never been convincing. Global energy demand continues rising,

fossil fuels supply most of the world's energy, and Canadian fossil fuels are economically, strategically and environmentally preferable to most others. The federal government's recent announcements about easing impediments to expanded production and exports are promising; if followed by action, they could boost capital investment measurably in the years to come.

The materialization of US protectionism demands a proactive and strategic defence of Canada's trade interests, mirroring the diplomatic intensity seen during the 1988 Canada-US Free Trade Agreement and the evolution of NAFTA into the Canada-US-Mexico Agreement (CUSMA). As the 2026 CUSMA review approaches, Ottawa must calibrate trade concessions and complementary initiatives – such as boosting Canadian defence capabilities – and reinforce the mutual benefits of North American economic integration to US businesses, consumers

and policymakers. Canada must also reduce its trade exposure to the US by diversifying trade via agreements with the UK and the Association of Southeast Asian Nations (ASEAN), accelerating high-impact energy and mineral projects, investing in trade infrastructure, and working with provinces to lower internal trade and labour mobility barriers.

Reducing policy uncertainty requires clearer processes and criteria. Businesses need stable rules and predictable outcomes. The federal government needs more rigorous ex post evaluations of regulations (OECD 2025b). At present, it often misses critical insights from the real-world evidence on whether rules work as intended. The federal government's recent initiatives to accelerate approvals for major projects may help, and a national infrastructure plan sounds good, but specific initiatives such as privatizing federal airports are too few and far off to make a difference.

Addressing the bevy of negative tax-related distortions is required. These include the gap between effective tax rates on small and large businesses; the lower effective tax rate on investment in the post-2017 United States; uneven tax rates across regions, sectors and assets (exacerbated by the November 2025 budget's faster write-offs for selected machinery and processing equipment only); and Canada's high personal income tax rates all point to the need for comprehensive, long-overdue tax reform. Options include adopting an allowance for corporate equity (Milligan 2014; Boadway and Tremblay 2016), shifting to a cash-flow tax base (McKenzie and Smart 2019) or taxing only distributed profits (Mintz 2022) could foster more investment and higher productivity. To stimulate innovation,

Scientific Research and Experimental Development (SR&ED) incentives should better support large firms, link post-secondary research funding to commercialization plans and reorient the Industrial Research Assistance Program (IRAP) toward commercialization (Lester 2025). Eliminating capital gains tax on Canadian small and medium-sized enterprise (SME) shares would incentivize domestic scale-up. A review of small business supports is also needed to ensure they do not entrench low-productivity firms.

Near-term reforms may need to be less ambitious. Consensus on Canada's tax system flaws and solutions is weaker than in the United States before its 2017 reforms.²¹ Major tax reforms are easier when they reduce revenue, but most senior governments in Canada are wary of forgoing revenue at that scale. The most promising near-term responses may be simple reductions in the most distorting tax rates – a lower general corporate income tax rate and lower top personal rates.

Though politically challenging, such cuts are easy to legislate, and evidence suggests the relevant tax bases are elastic enough to limit revenue loss.²² Lower top rates do not fix all tax system flaws that blunt business responses to opportunities, but they are uniquely broad in reducing distortions that suppress investment and productivity.

Another near-term option to jolt Canada out of a low-investment, low-productivity trap is a temporary general investment tax credit. Though more complex to legislate and administer than a tax rate cut, a general investment tax credit (ITC) is a familiar tool with predictable effects. Ideally, it would replace the Atlantic Investment Tax Credit and pre-empt other

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- 21 Some impending tax changes, notably proposed new limits on the deductibility of interest and financing expenses, would increase marginal tax rates on investment (Mintz and Venkatachalam 2020) and exacerbate the distortions favouring shorter-lived over longer-lived assets (Bazel and Mintz 2021).
- 22 Robson et al. (2023) estimate that a 2-percentage-point cut in the general corporate income tax rate would have a static revenue cost of about \$5 billion. Laurin (2018) estimates that the revenue yield of the federal government's 2016 increase in the top personal tax rate was only about one-third of what it would have been without behavioural responses, not including one-time shifts in recognition of income.

sector-specific ITCs like the Clean Technology Manufacturing Investment Tax Credit. However, a meaningful general credit – say 5 percent – would entail major short-run revenue costs.

Applying a lower tax rate to business income from IP products would directly address Canada's lagging performance in this sector. The term "patent boxes" is too narrow: applying the lower rate to income from IP embedded in other goods and services would better incentivize broader IP investment and align with emerging international norms than a lower rate on income from patents alone. The federal government could offset near-term revenue costs by reducing R&D subsidies for small firms, which likely promote too much low-quality, non-commercializable work (Lester 2022).

Beyond changing the tone of tax policy, the federal government must change its fiscal stance. It should rein in regular program spending and subsidies delivered through the tax system, which are disguised spending that raise borrowing costs and interest payments. Even after pandemic-related measures wound down, projections in successive fall economic statements and the November 2025 budget have shown projected federal spending rising sharply (Robson 2025).

CALL TO ACTION

Ongoing economic uncertainty continues to plague Canadian firms, which, according to the Bank of Canada's latest Business Outlook Survey, report weak investment intentions and limited expansion plans (Bank of Canada 2025). This backdrop increases the urgency for policy changes that can reverse Canada's unprecedented, prolonged decline in capital per worker.

The risk that Canadian workers will become increasingly concentrated in lower-value activities relative to their US and international peers should prompt Canadian policymakers to take action. Canada's persistently weak business investment, relative to its historical performance and that of OECD economies, threatens long-term prosperity and competitiveness.

It is encouraging that Canada's low productivity and chronic underinvestment have recently gained more prominence in public discourse. Awareness is a critical first step. Addressing the challenge requires decisive action, however: more effective tax and regulatory policies, and a fundamental reorientation of economic policy toward sustained, long-term growth.

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