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- Conducting research on critical issues
- Convening candid dialogues on research subjects
- Recognizing exceptional leaders

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ISBN: 978-1-77452-076-5

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ABOUT THE FELLOWSHIP

The PPF Scotiabank Fellow in Strategic Competitiveness is focused on producing and communicating policy research and ideas related to Canada's economic competitiveness. The ultimate goal, consistent with PPF's long-time prioritization of the social and economic determinants of growth, is to develop and popularize a policy agenda that will support higher rates of economic growth and productivity in Canada.

WITH THANKS TO OUR PARTNER



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ABOUT THE AUTHORS

SEAN SPEER

PPF Scotiabank Fellow in Strategic Competitiveness

Sean Speer is the PPF Scotiabank Fellow in Strategic Competitiveness. He is an assistant professor at the University of Toronto's Munk School of Global Affairs and Public Policy. Additionally Sean is Fellow in Residence and Prime Minister of Canada Fellow at the Public Policy Forum. He previously served as a senior economic adviser to former Prime Minister Stephen Harper.

NIKITA PEREVALOV

Director of Economic Forecasting, Scotiabank

Nikita Perevalov joined Scotiabank in August 2017 and is responsible for forecasting and analysis of the Canadian and global economies, as well as macroeconomic scenarios for enterprise-wide stress testing and IFRS 9-related work. Prior to joining Scotiabank, Nikita worked at the Bank of Canada, most recently as a Research Advisor in the International Economic Analysis department focusing on model development. Prior to that Nikita held senior positions in the projection teams focused on Canadian and global economies. Nikita holds a Master of Arts in economics and a Master of Science in mathematics from the University of Toronto.

Executive Summary

As the federal government finalizes its forthcoming budget, it ought to prioritize higher rates of economic growth and productivity as a seed investment into a long-term economic strategy for Canada. They are needed now more than ever.

The pandemic has imposed a devastating toll on Canada's economy. GDP fell by more than 17 percent between February 2020 and April 2020 and even with the injection of hundreds of billions of dollars in relief programs, the economy continues to operate below pre-pandemic levels. At the time of writing, there are still nearly 300,000 fewer Canadians working than prior to the pandemic and another 247,000 working fewer hours. ¹

Yet it is not enough to merely return to pre-pandemic growth. As PPF president Edward Greenspon has argued, we need to break out of the two percent trap that the country has found itself in for most of this century if we are to boost employment, wages, and living standards over the long-term.

Canada's pre-pandemic economic performance was already marked by slow growth, poor productivity, and a general malaise. The economy has been generally downshifting for decades. Annual GDP growth has actually averaged less than two percent for the past 20 years.

Slow growth reflects various factors including secular headwinds such as aging demographics, weak business investment and overhang from the financial crisis. This has led to debate about secular stagnation and the extent to which two percent growth or less represents a "new normal."

While it is manifestly true that certain structural factors (including demographic-induced declines in labour force participation) are acting as a brake on growth and productivity, it would be a mistake for Canadian policymakers to fall victim to fatalism. Secular stagnation is not destiny. There is, as former deputy governor of the Bank of Canada, Carolyn Wilkins, has put it: "a whole galaxy of ways to boost the trend line for growth." ²

A key message, then, is that public policy matters. Our policy choices, if only sometimes on the margins, influence the economy's overall trajectory – including achieving higher (or lower) rates of economic growth.

Just consider, for instance, that if we were to boost business investment as a share of GDP by just one percentage point, we could increase Canadian output by as much as 1.5 percent over five years. Or, if we could raise female labour participation by a percentage point, it would contribute close to another full percent to economic activity. These examples show that even small differences can ultimately add up.

¹ Statistics Canada. (2021). Labour Force Survey, April 2021. https://www150.statcan.gc.ca/n1/daily-guotidien/210409/dg210409a-eng.htm.

² Wilkins, C. (2020). Our economic destiny: Written in R-stars?. Remarks to the Economic Club of Canada, February 5, 2020. https://www.bankofcanada.ca/2020/02/our-economic-destiny-written-in-r-stars/#footnote-2

They are also a powerful reminder that we have more agency over the country's economic performance than we often realize. It is crucial therefore that we exercise this agency fully and wisely. As Canadian policymakers develop their post-pandemic recovery plans, they ought to recommit themselves to the imperatives of economic growth and productivity. That is ultimately the path out of the pandemic-induced downturn and the longstanding two percent trap.

Introduction

The coronavirus has imposed a devastating toll on Canada's economy. The country's Gross Domestic Product (GDP) fell by more than 17 percent between February 2020 and April 2020 (which represented the worst of the pandemic-induced economic fallout) and continues to operate below pre-pandemic levels nearly twelve months later (see Figure 1).

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FIGURE 1: Canadian GDP, all industries, (\$2012), January 2019 to January 2021

Source: Statistics Canada, 2021a. 3

It is understandable therefore that Canadian policymakers are focused on stimulating economic growth as part of post-pandemic recovery planning. The federal government, in particular, has committed to as much as \$100 billion in further stimulus spending, which represents 3 to 4 percent of GDP (nearly twice the level of stimulus spending in response to the 2008-09 global financial crisis), in order to "get our economy back on track." ⁴

Although the goal of restoring economic activity to pre-pandemic levels is laudable, it neglects the extent to which Canada's economic sluggishness actually predates the coronavirus. It is not merely enough to get the country back to pre-pandemic rates of economic growth. Our policymakers must reach higher.

³ Statistics Canada. (2021), Gross Domestic Product at basic prices, by industry, monthly (x 1,000,000). https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610043401

⁴ CBC. (2020) Trudeau touts 'historic \$100B stimulus plan, won't commit to boosting health transfers. https://www.cbc.ca/news/politics/trudeau-covid19-economic-statement-1.5823212

Economic growth is, of course, not an end in itself. But it is a crucial precondition for more employment, better wages, higher standards of living and ultimately a better quality of life for Canadians. It will also be essential for the long-term sustainability of government finances across the country, especially given pandemic-induced spikes in public debt. As we transition into a post-pandemic recovery, therefore, the case for prioritizing higher rates of growth has arguably not been stronger. As former Bank of Canada governor David Dodge has written: "Coaxing more growth out of the economy has gone from a major policy challenge to an absolute necessity." ⁵

But we will not achieve more economic growth through good intentions or wishful thinking. The economy is facing a set of secular headwinds – including aging demographics, weak business investment, and overhang from the financial crisis – that have been acting as a brake on growth and productivity. Overcoming these obstacles will require a greater degree of intentionality and purpose from policymakers.

A starting point is to recognize that higher rates of economic growth and productivity are hardly outside of the scope of public policy. Policy choices can, if only sometimes on the margins, affect the economy's overall trajectory – including achieving higher (or lower) rates of economic growth. The key takeaway is that, as Canadian policymakers develop their post-pandemic plans, they must recommit themselves to the imperatives of economic growth and productivity.

The purpose of this report is to help situate such a pro-growth policy agenda – what might one describe as a plan to break out of the two percent trap on a long-term, sustainable basis.

Section One provides a primer on Canada's pre-pandemic economic performance – including how its growth rates and sources of growth, as well as other economic metrics, compare with peer jurisdictions. Section Two draws on a considerable body of scholarship to understand the factors that have contributed to slower economic growth in Canada and other advanced economies. Section Three outlines how public policy can pushback against these trends, including how different measures might boost business investment and labour force participation and in turn contribute to higher rates of growth and productivity in the short- and long-term.

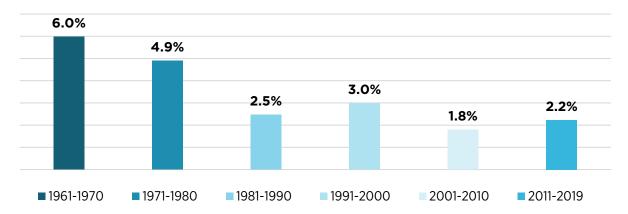
⁵ Dodge, D. (2020). Two Mountains to Climb: Canada's Twin Deficits and How to Scale Them. Public Policy Forum. https://ppforum.ca/publications/two-mountains-to-climb-canadas-twin-deficits-and-how-to-scale-them/

Canada's Pre-pandemic Economic Performance

The first step in developing a pro-growth policy agenda is to analyse the data and evidence with respect to Canada's recent economic performance. It is important to understand how the economy has performed in overall terms and in comparison to peer jurisdictions such as the United States.⁶

Canada's economic growth has been generally slowing for decades (see Figure 2). Real GDP growth by decade peaked at nearly 6 percent between 1961 and 1970. It fell to 1.8 percent between 2001 and 2010 and only ticked up slightly to 2.2 percent between 2011 and 2019.

FIGURE 2: Average Canadian real GDP growth by decade, (\$2012), 1961 to 2019



Source: Ontario 360, 2021.8

Annual growth has actually averaged less than 2 percent throughout this entire century. The national economy grew by 2 percent or less ten times over the past two decades. It was between 2 and 3 percent another five

⁶ The paper (including this section) draws on the following policy papers: Speer, S., Fagan, D. and Glozic, L. (2021), A Post-Pandemic Growth Strategy for Canada, Ontario 360 (Munk School of Global Affairs and Public Policy). https://on360.ca/policy-papers/a-post-pandemic-growth-strategy-for-canada/; and Speer, S., Fagan, D., and Glozic, L. (2020). Grow Ontario Stronger: A Framework for the Ontario Government's Post-Pandemic Recovery Plan, Ontario 360 (Munk School of Global Affairs and Public Policy). https://on360.ca/policy-papers/grow-ontario-stronger-a-framework-for-the-ontario-governments-post-pandemic-recovery-plan/.

⁷ Canada's real GDP growth was 1.5 percent between 2011 and 2020 due to the pandemic-induced contraction of 5.3 percent in 2020.

⁸ Speer, S., Fagan, D. and Glozic, L. (2021). A Post-Pandemic Growth Strategy for Canada. Ontario 360 (Munk School of Global Affairs and Public Policy). https://on360.ca/policy-papers/a-post-pandemic-growth-strategy-for-canada/

⁹ Statistics Canada. (2021) Gross Domestic Product (GDP) at basic prices, by industry, annual (x 1,000,000), (Table: 36-10-0434-03). https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=3610043403

times. There were two major contractions: -3.2 percent in 2009 and -5.3 percent in 2020 (see Figure 3).

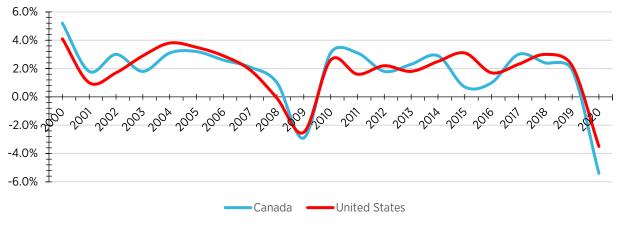
6.0%
4.0%
2.0%
0.0%
-2.0%
-2.0%
-4.0%
-6.0%

FIGURE 3: Annual Canadian real GDP growth, (\$2012), 2000 to 2020

Source: Statistics Canada, 2021b. 10

Canada's experience with slowing growth is not unique. It has been a common phenomenon across peer jurisdictions. The United States, for instance, has followed a highly similar growth track in the twenty-first century (see Figure 4). The American economy grew by 2 percent or less nine times over the past two decades. It was between 2 and 3 percent another eight times. There were three contractions: -0.1 percent in 2008, -2.5 percent in 2009 and -3.5 percent in 2020.

FIGURE 4: Annual real GDP growth, Canada and the United States, (expenditure approach), 2000 to 2020



Source: OECD, 2021a.11

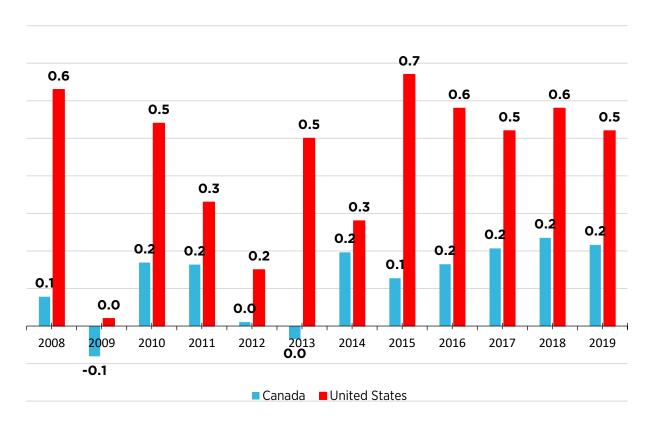
¹⁰ Statistics Canada. (2021) Gross Domestic Product (GDP) at basic prices, by industry, annual (x 1,000,000), (Table: 36-10-0434-03). https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=3610043403

¹¹ Organisation for Economic Cooperation and Development. (2021). Gross Domestic Product (GDP): GDP, volume - annual growth rates in percentages. https://stats.oecd.org/index.aspx?queryid=60703#

These high-level data, however, conceal some key differences between Canada and the United States. It is worth highlighting three.

The first are sector-based differences. The information and communications technology (ICT) sector in the United States, in particular, has consistently outperformed Canada's and, in so doing, boosted American overall growth in relative terms. Between 2008 and 2019, the ICT sector grew, on average, more than three times as fast in the United States than Canada. ¹² The result is that sector directly contributed an average of 0.3 percentage points to annual GDP growth more than in Canada over this period (see Figure 5).

FIGURE 5: Contribution to GDP growth from ICT industries, Canada and the United States, (percentage points), 2008 to 2019



Source: Statistics Canada, 2021b¹³, Bureau of Economic Analysis, 2021a¹⁴ and authors' calculations.

This difference is notable: it suggests that, all things being equal, if Canada could even partially close the growth gap in its ICT sector relative to the United States, it would lead to a material increase in overall GDP.

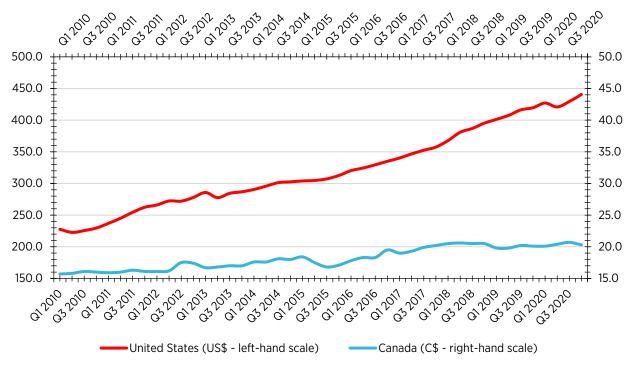
¹² Average annual growth in the American ICT sector was 7.1 percent versus only 2.8 percent in Canada over this period.

¹³ Statistics Canada. (2021) Gross Domestic Product (GDP) at basic prices, by industry, annual (x 1,000,000), (Table: 36-10-0434-03). https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=3610043403

¹⁴ Bureau of Economic Analysis. (2021). Gross Domestic Product (GDP) by industry. https://www.bea.gov/data/gdp/gdp-industry

One way to understand this growth gap in the ICT sector is to compare Canada-U.S. investment in software. It may not tell the full story of this sector-based growth gap, but it certainly points to Canada's slow progress on digitization and its poor relative performance in the intangibles economy. Given that software is an economic enabler, this would be reflected beyond direct growth in the ICT sector and in productivity gains in other parts of the economy as well. Between 2010 and 2020, real business investment in software increased four times faster in the U.S. than Canada (Figure 6).

FIGURE 6: Real business investment in software, Canada and the United States, (\$2012), Q1 2010 to Q4 2020



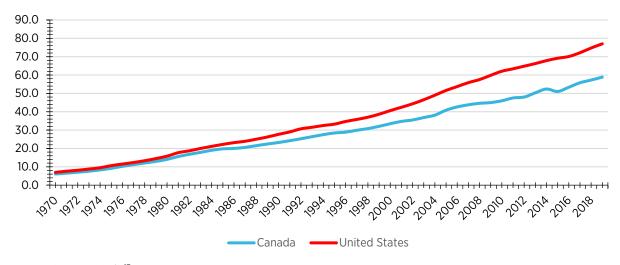
Source: Statistics Canada, 2021c15 and Bureau of Economic Analysis, 2021b.16

The second difference is our productivity rates. Canada-U.S. productivity was, by and large, the same in 1960. GDP per hour worked was barely \$1 less in output in Canada relative to the United States. By 2019, however, Canada's GDP per hour worked was \$18.10 less than the United States (Figure 7).

¹⁵ Statistics Canada. (2021). Gross Fixed Capital Formation, quarterly, Canada (x 1,000,000). (Table: 36-10-0108-01). https://www150.statcan.gc.ca/t1/tbl1/en/cy.action?pid=3610010801

¹⁶ U.S. Bureau of Economic Analysis. (2021). Private fixed investment: Non-residential: Intellectual property products: Software retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/B985RC1Q027SBEA

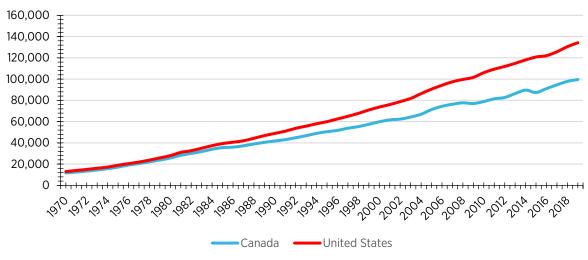
FIGURE 7: GDP per hour worked, Canada and the United States, (PPP \$USD current prices), 1970 to 2019



Source: OECD, 2020b.17

Another way to understand Canada's poor productivity record is to compare its GDP per person employed. This measure enables us to back out of the analysis those who are not in the workforce. The story is nevertheless the same. In 1970, Canada's GDP per person employed was \$1,276 less than in the United States. By 2019, Canada's GDP per person employed was \$34,631 less than in the United States (see Figure 8).

FIGURE 8: GDP per person employed, Canada and the United States (PPP \$USD constant prices, 2015 PPP), 1970 to 2019



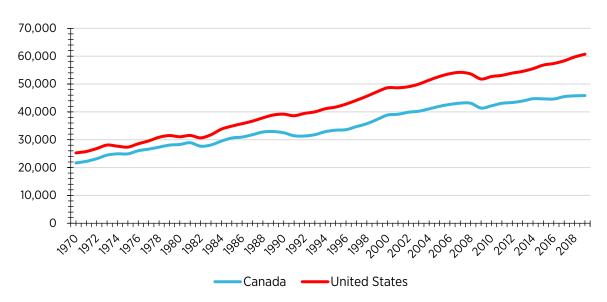
Source: OECD, 2020b. 18

¹⁷ Organisation for Economic Cooperation and Development. (2021). Level of GDP per capita and productivity: Labour productivity levels – most recent years. https://stats.oecd.org/lndex.aspx?DataSetCode=PDB_LV#

This brings us to the third crucial difference. Canada's poor ICT adoption and overall productivity record has translated into lower relative living standards. GDP per capita (output/population) enables us to compare Canada's relative living standards to other jurisdictions, by accounting for sizes of the economy and population and adjusting them to an apples-to-apples basis. It is, by no means, a foolproof method of comprehensively comparing jurisdictions. It does not account, for instance, for income and wealth distribution or life expectancy or other critical measures of economic and social well-being. But GDP per capita provides a useful basis for comparative analysis of overall wealth and productivity.

The story here is quite striking. In 1970, Canada had the second highest GDP per capita of any G-7 member. Its GDP per capita (\$21,656) was only \$3,601 less than the United States (\$25,248). As of 2019, it has fallen to a distant third (\$45,850) below Germany (\$50,004) and the United States (\$60,709). The Canada-U.S. gap is now \$14,859 (see Figure 9). In fact, Canada's GDP per capita has grown less since 1970 than all G-7 countries, except Italy. Germany, Japan, the U.S. and U.K. have all grown by about 12 to 24 percent faster, on average.

FIGURE 9: GDP per capita, Canada and the United States, (PPP \$USD 2015), 1970 to 2019



Source: OECD, 2020c. 19

It is worth emphasizing this point: Canada's GDP per capita went from 15 percent lower than the U.S. in 1970 to 25 percent lower in 2019. We are not just poorer, in other words, but we are getting poorer still over time.

Organisation for Economic Cooperation and Development. (2021). Level of GDP per capita and productivity: Labour productivity levels – most recent years. https://stats.oecd.org/Index.aspx?DataSetCode=PDB_LV#

¹⁹ Organisation for Economic Cooperation and Development. (2021). Level of GDP per capita and productivity. https://stats.oecd.org/Index.aspx?DataSetCode=PDB_LV

A gap of \$14,589 is significant when one considers that, according to Statistics Canada, this amount is higher than every Canadian household expenditure except for housing – it is, for instance, 40 percent more than the average household spends on food per year.²⁰

The upshot: Canada's economic growth and in turn its productivity levels and living standards have been slowing for some time in absolute and relative terms. This ought to be a major concern for policymakers as they plan for post-pandemic recovery. We need to make a concerted, all-of-government effort to break out of the two percent trap. How that might be done will be discussed later. But first we will look at sources of our economic sluggishness and the possible policy levers to get out of it.

²⁰ Statistics Canada. (2021). Household spending, Canada, regions and provinces. (Table 11-10-0222-01). https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=11100222201

The Causes of Canada's Slow Growth: Is Secular Stagnation the "New Normal"?

The previous section outlined Canada's recent record on economic growth and productivity. This section aims to place the country's performance in a broader context to better understand what factors are within the control of federal policymakers and which ones may be less responsive to government policy changes.

Canada's experience is far from unique. It has occurred against a backdrop of a broader debate about "secular stagnation" to describe the sustained period of slower economic growth in advanced economies that has followed the 2008-09 global recession.²¹

The idea of secular stagnation is most prominently associated with former U.S. Treasury Secretary Larry Summers. His basic argument is that slow growth in advanced economies is not a product of the typical business cycle but instead reflects deep, structural issues – namely a rise in overall savings and a corresponding drop in individual and business investment – that are immune to traditional macroeconomic responses. ²² The main idea is that the slowed economic growth reflects a structural drop in aggregate demand and that only a mix of demand-side policies such as infrastructure spending and tax reform will mitigate these secular challenges. ²³

Other economists such as Northwestern University's Robert Gordon agree with the diagnosis of protracted stagnation but may disagree on its causes. Gordon's work, for instance, points to supply-side challenges rooted in less innovation and productivity.²⁴ His basic argument is that modern society has hit a technological wall and future growth will be constrained by an inability to break out of this technological stagnation. His work is marked by a pessimism about the role of public policy to reverse the trends of secular stagnation.

The literature points to various other explanations including aging demographics, globalization and the rise of China, and a cyclical hangover from the global financial crisis, as possible causes for these trends.²⁵ Setting aside the relative role of these different factors, there is a broadly-held view in economic circles that, all things being

²¹ Davidson, J. (2016). This theory may explain why the U.S. economy may never get better. Time.com. https://time.com/4269733/secular-stagnation-larry-summers/.

²² Summers, L. H. (2016). The age of secular stagnation: What is it and what to do about it. Foreign Affairs. https://www.foreignaffairs.com/articles/united-states/2016-02-15/age-secular-stagnation

²³ See for instance Summers, L. H. (2020). Accepting the reality of secular stagnation. Finance & Development (International Monetary Fund) Vol. 57, No. 1. https://www.imf.org/external/pubs/ft/fandd/2020/03/larry-summers-on-secular-stagnation.htm

²⁴ Gordon, R. J. (2015). Secular stagnation: A supply-side view. American Economic Review, Vol. 105, No. 5,: 54–59. https://www.aeaweb.org/articles?id=10.1257/aer.p20151102 and Gordon, R. J. (2012). Is U.S. economic growth over? Faltering innovation confronts the six headwinds. National Bureau of Economic Research. https://www.nber.org/papers/w18315.pdf

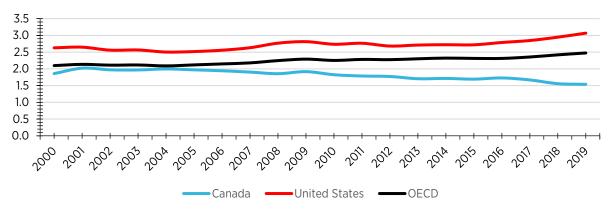
²⁵ See for instance Campbell, D. (2014). On the causes of secular stagnation: China, relative prices, and the collapse of manufacturing. VOX EU (Centre for Economic Policy Research). https://yoxeu.org/article/causes-secular-stagnation

equal, their cumulative effect is that advanced economies will experience slower-than-historic economic growth for the foreseeable future. These trends have been described as a "new normal" and even a "new mediocre." ²⁶

It is impossible not to see some of these secular forces in Canada. Take aging demographics for example. Baby boomers are retiring and so the proportion of the working age population is shrinking.²⁷ The ratio of workers per non-working seniors has gone from six in the 1980s to four in 2017 and is projected to fall to three to one by 2036.²⁸ The result is Canada's labour force participation rates could fall from 65.5 percent in February 2020 to possibly as low as 60 percent in 2036.²⁹ This will necessarily have downward effects on the country's growth rates and place upward pressures on taxation due to rising health-care costs, pension benefits, and other demographic-driven public expenditures.

Another visible trend in Canada is our relatively low public and private investment in research and development. Gross research and development spending (including by government, businesses, and higher education institutions) has been flat as a share of GDP for most of the century and, despite periodic attention to the matter, is now one percentage point lower than the OECD average and half of the U.S. rate (see Figure 10).

FIGURE 10: Gross expenditures on research and development, Canada, United States and OECD, (%GDP), 2000-2019



Source: OECD, 2021d, 30

²⁶ Cross, P. (2015). Is Slow Growth the New Normal for Canada? Fraser Institute. https://www.fraserinstitute.org/sites/default/files/is-slow-growth-the-new-normal-for-canada.pdf

²⁷ Fields, A., Sharanjit, U. and LaRochelle-Côté, S. (2017). The impact of aging on labour market participation rates. Insights on Canadian Society (Statistics Canada). https://www150.statcan.gc.ca/n1/en/pub/75-006-x/2017001/article/14826-eng.pdf?st=gBrUHgKh

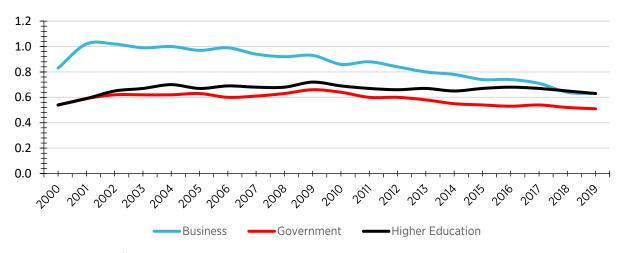
²⁸ Martel, L. (2019). The labour force in Canada and its regions: Projections to 2036, Insights on Canadian Society (Statistics Canada). https://www150.statcan.gc.ca/n1/pub/75-006-x/2019001/article/00004-eng.htm

²⁹ Ibid.

³⁰ Organisation for Economic Cooperation and Development. (2021). Gross domestic spending on R&D (indicator). research and development, Total, % of GDP, 2000 - 2019. https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm

Canada's poor performance on R&D investment spans across the business, governmental, and higher education sectors. Each has seen its R&D spending as a share of GDP fall or flatline over this period (see Figure 11). The business sector in particular, has seen its R&D investment fall from about 1 percent of GDP in 2000 to 0.6 percent in 2019. Business expenditures now comprise about 42 percent of total gross expenditures on R&D in Canada. The share in the U.S., by contrast, is 63 percent. This is decidedly not the formula for accelerating economic growth and productivity in an increasingly science and tech-enabled intangibles economy.

FIGURE 11: Gross expenditures on research and development by source of funds, Canada, (%GDP), 2000-2019



Source: OECD, 2020f.31

Canada's performance on R&D spending is notable because there is plenty of evidence that R&D intensity is a contributing factor for innovation, technology adoption, and ultimately higher productivity.³² It is a key input to the innovation and technological advancement that is fundamental to economic growth. A lack of public and private investment here is therefore a major impediment to breaking out of the two percent trap.

But it is also notable because underinvestment in R&D is firmly within the purview of public policy. It is something that policymakers can (and do) effect. Different policy choices – including direct government spending or new or augmented R&D-related tax preferences – could ostensibly contribute to higher rates of R&D investment and in turn lead to more growth and productivity gains.

This applies more generally across the various trends associated with secular stagnation. It is not to say that it is easy or that some of these challenges are more or less intractable than others. Demographic change, for

³¹ Organisation for Economic Cooperation and Development, (2021). Main Science and Technology Indicators. https://stats.oecd.org/Index.aspx?DataSetCode=MSTL_PUB#

³² Council of Canadian Academies. (2018). Competing in a Global Innovation Economy: The Current State of R&D in Canada. http://new-report.scienceadvice.ca/assets/report/Competing_in_a_Global_Innovation_Economy_FullReport_EN.pdf

instance, is more challenging for public policy to significantly effect, at least in the short term - although Canada is generally open and a large-scale immigration program is a demonstration of how policy choices can affect outcomes.

It is a reminder that we have agency here. There is scope for public policy to push back against these trends and in so doing contribute to higher rates of growth and productivity. Even if the impacts are on the margins, marginal differences matter over time. The laws of compounding apply to growth as much as anything else.

Public Policy Matters: "A Galaxy of Ways to Boost Growth"

Although Canadian policymakers ought to be cognizant of secular stagnation theories, they must avoid a sense of fatalism. Secular stagnation is not destiny. As former deputy governor of the Bank of Canada Carolyn Wilkins put it in a speech last year: "Japan-style stagnation is not written in our stars. There is a whole galaxy of ways to boost the trend line for growth." ³³

The key point here is that public policy matters. We can make good choices and bad choices. But either way, the choices that we make can, even if only sometimes on the margins, influence the economy's overall trajectory – including achieving higher (or lower) rates of economic growth. As Canadian policymakers develop their post-pandemic plans, they must recommit themselves to the imperatives of economic growth and productivity.

A focus on growth and productivity in tandem is crucial for raising GDP per capita and in turn improving living standards. There is also evidence that higher labour productivity leads to higher wages.³⁴ But the benefits of a faster-growing and more productive economy even extend beyond these conventional economic metrics. There is a wide body of research that finds that it contributes to overall well-being, including lower rates of poverty, greater life satisfaction, and reduced political polarization.³⁵

A big factor why is what U.S. economist Tyler Cowen refers to as the "magic of compounding growth." ³⁶ If real GDP per capita grows at 1 percent per year, it takes 70 years for Canadians to double their real per capita incomes. At 1.5 percent per year, it only takes 47 years; at 2 percent, 35 years; and at 2.5 percent, 28 years. These growth rates are, as discussed above, in the range of Canada historical performance, so one can see how small, even conservative increases in economic growth can lead to large differences in future wealth and living standards. Even tiny changes add up: the difference between 2.0 percent and 2.2 percent growth means the economy is 8 percent larger in 25 years.

The question, of course, is: what pro-growth policies should we be pursuing?

³³ Wilkins, C. (2020). Our economic destiny: Written in R-stars? Remarks to the Economic Club of Canada, February 5, 2020. https://www.bankofcanada.ca/2020/02/our-economic-destiny-written-in-r-stars/#footnote-2

³⁴ Ibid.

³⁵ Speer, S., Fagan, D. and Glozic, L. (2021). A Post-Pandemic Growth Strategy for Canada. Ontario 360 (Munk School of Global Affairs and Public Policy). https://on360.ca/policy-papers/a-post-pandemic-growth-strategy-for-canada/ and Speer, S., Fagan, D., and Glozic, L. (2020). Grow Ontario Stronger: A Framework for the Ontario Government's Post-Pandemic Recovery Plan, Ontario 360 (Munk School of Global Affairs and Public Policy). https://on360.ca/policy-papers/grow-ontario-stronger-a-framework-for-the-ontario-governments-post-pandemic-recovery-plan/.

³⁶ Cowen, T. (2018). Stubborn Attachments: A Vision for a Society of Free, Prosperous, and Responsible Individuals, (San Francisco: Stripe Books).

As part of the PPF Scotiabank Fellowship, we will be carrying out significant work in the coming months to address this critical matter. This work will cover a wide range of issues including (but not limited to): digital infrastructure, clean technology, immigration, and science and technology. The goal is to produce a comprehensive set of policy recommendations that can inform and shape an ambitious, pro-growth agenda for Canada.

In 1985, the Macdonald Commission report beseeched Canadians to take a leap of faith on free trade with the United States as part of more generally liberal trade and economic policies. What do today's leaps of faith look like?

A key, underlying idea for this work is that the right mix of pro-growth policies needs to adjust for the twenty-first century.³⁷ A series of factors including the unique characteristics of intangible capital, the rise of so-called "geoeconomics", and the need to pull underrepresented groups into the economy will require policymakers to incorporate a new set of policies into a pro-growth agenda.

Traditional policy levers for economic growth (such as taxation, regulation, or stable monetary policy) are not now obsolete but there is greater interest in new policy areas (such as child care, public transit, and housing affordability) to support higher rates of economic growth and productivity. One might think of this intellectual change in terms of augmenting the traditional policy levers for economic growth with a broader set of policy tools to reflect some of the factors cited above as well as political economy concerns about inclusion.

There are no silver bullets. It will take a wide range of policies to boost Canada's growth and productivity. But there is certainly reason to think that individual policies can make a difference on the margins – and that the margins add up. The point is to become more purposeful in our policy choices, to move from a hodge-podge of government programs to comprehensive industrial strategies. That is what winning nations are doing.

Take two policy proposals that Scotiabank economists, Jean-François Perrault and Rebekah Young, have put forward in the context of the pandemic.³⁸ The first is a child-care package that includes a new, \$5,000 per child cash transfer directly tied to child-care expenses as well as a significant increase of the limit under Child Care Expense Deduction. The purpose of these policies is to enable greater female participation in the labour force by lowering out-of-pocket child-care costs.

The second is a time-limited matching grant that would have the federal government provide some fraction (such as 25 percent) of specific capital investments in machinery, equipment and intellectual property. This

³⁷ Speer, S. and Asselin, R. (2020) A New North Star II Revisited: A Mission/Challenge-Driven Industrial Policy for Canada's Post-Pandemic Recovery, Public Policy Forum. https://ppforum.ca/publications/new-north-star-2-revisited/

³⁸ Perrault, J-F. and Young, R. (2020). Raising potential: Two simple but effective proposals to equitably raise Canadian prosperity. Scotiabank Economics. https://www.scotiabank.com/ca/en/about/economics/economics-publications/post.other-publications.fiscal-policy.fiscal-pulse.federal.federal-budget-analysis.federal-policy-priorities--september-14--2020-.html

would help to incentivize productivity-enhancing investments by Canadian firms and in so doing directly address the country's low business investment and poor productivity record.

These common-sense proposals would be straightforward to administer, have broad-based political support, and, most importantly, raise Canada's economic output by boosting investment and contributing to higher rates of labour participation.

As an illustration, simulations of the Scotiabank Global Macroeconomic Model show that raising Canada's business investment as a share of GDP by one percentage point (which would match the level in the United States) would boost potential output by more than 1.5 percent over five years. This would add an average of 0.3 percentage points to economic growth each year.³⁹ This impact on potential output could be achievable with a 25 - 50 percent matching time-limited grant tied to investment spending, provided the take-up of the program is sufficient. And even that may be conservative because it does not account for the potential productivity gains from increased capital investment.

Similarly, if we were able to sustain a one percentage point increase to the female participation rate (from 61.3 percent in 2019 to 62.3 percent going forward), it would lead to a direct 0.5 percent increase in potential output and another 0.2 percent increase within five years due to higher capital investment by firms to accommodate the expanding labour market.

These examples are notable in and of themselves and the federal government should indeed pursue them. But they are also indicative of our bigger point: we have more agency over Canada's economic performance than we often realize and that this agency must be exercised with policy coherence. Individual policy choices influence the economy's overall trajectory – including achieving higher (or lower) rates of economic growth. Strategic policy choices build enduring economic and industrial strength.

It is important therefore that we purposefully pursue policies that promise more growth and productivity – and all the attendant social benefits that flow from that. That is ultimately the path out of the pandemic-induced downturn and the two percent trap that was holding Canada back even prior to COVID-19.

³⁹ Outside of 2009, which saw the main brunt of the global financial crisis, non-residential business investment in Canada averaged 12 percent of overall GDP since 2000. The US share was 13 percent over the same period.

