



THE PRODUCTIVITY PUZZLE

Understanding Challenges and Seeking Solutions

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Prologue:

Introducing the Productivity Puzzle.

Although perhaps not well understood, productivity is critical to our standard of living. While Nova Scotia is a wonderful place to live, work and raise a family, our poor performance on productivity metrics is worrisome. A recent report ranking GDP per capita across the ten Canadian provinces and fifty American states puts Nova Scotia dead last at #60!

Not only are we slipping rapidly in rankings with peers, but the gaps with these peers on productivity and standard of living measures are widening substantially.

Without productivity growth, everyone's slice of the economic pie keeps getting smaller and smaller.

Poor productivity goes hand in hand with uncompetitive businesses that are at risk of being overtaken by better-performing firms elsewhere. It also brings flat wage growth that fails to keep up with the rising cost of living. Without productivity growth, everyone's slice of the economic pie keeps getting smaller and smaller.

Even more troubling is that we face these challenges while continuing to grapple with an aging population over the long term and with the imposition of massive tariffs by the Trump administration. The recent surge in population figures without a corresponding increase in economic output has amplified the problem.

Beyond the near-term risks to our material standard of living and well-being, the perception of decline and the expectation that the next generation will live less well than their parents is corrosive to society as envy, resentment, and the impulse to assign blame grows. Evidence of such division is obvious elsewhere and indicators of these sentiments are emerging in Canada.



Just as the Ivany Report¹ in 2014 called for new thinking and big changes to address a projected demographic calamity in Nova Scotia, it is time for bold actions to change course on our stagnant productivity performance and the growing gap between Nova Scotia and its peers.

For such a transformation to be successful, broad discussions will be required to inform, educate, and learn from one another. Consensus towards action can be developed through debate and dialogue, leading to a deeper common understanding of the issues and challenges before us.

Halifax Partnership will tackle Nova Scotia's productivity puzzle, bringing public, private and post-secondary leaders together to work toward solutions that will accelerate our productivity and ensure the next generation of Nova Scotians lives in a sustainable and successful province.

Over the course of the next year, we will publish research and convene a series of events and discussions designed to highlight and spark a broader conversation around the significance of productivity, why it matters for Nova Scotians, and how improving it strengthens our economy. On April 3rd, we will host a kickoff event featuring Andrew Coyne of the Globe & Mail as our keynote speaker.

You can stay abreast of this initiative by visiting our website (nsproductivitypuzzle.ca). We look forward to partnering with Nova Scotians on this important initiative.

Population and productivity: a parallel

In 1996, *Boom, Bust & Echo: How to Profit from the Coming Demographic Shift*, written by economics professor David Foot and journalist Daniel Stoffman, began a multi-year stint on the Canadian bestseller list. The book brought the impact of demographic trends on employment, health care, commerce, and public policy into mainstream Canadian conversations.

During the first decade of the new millennium, here in Nova Scotia a small number of voices picked up on the importance of demographics and sounded the alarm that we appeared to be headed towards the “bust” category as we faced long-term economic decay due to population aging and stagnation, if not outright shrinkage. This conversation gained momentum and by 2014 impending-demographic-decline-and-what-to-do-about-it was the central theme of *Now or Never: An Urgent Call to Action for Nova Scotians* (colloquially, the Ivany Report).

The release of the Ivany Report marked a unique occasion as business, labour, non-profit organizations, community groups, and others rallied around its calls for action on improving our attraction and retention of immigrants and reversing the outflow of our youth to central and western Canada, among other things. Perhaps the most noteworthy and welcome aspect of this moment was that all three political parties in Nova Scotia put partisanship aside and linked arms in support of the Ivany Report's aims.

In the following years, many across Nova Scotian society undertook initiatives, both large and small, to bend the curve of our demographic forecasts. By 2016, our population growth rate had jumped markedly and a series of record-setting years for population growth ensued, aside from a blip in 2021 as COVID-19 closed our borders. As we emerged from the pandemic, it appeared that we may have been too successful, too quickly, as the pace of population growth outstripped the capacity of our housing stock, transportation networks, and health care system – serious challenges that we are now collectively addressing.

Demographic challenges remain, but we have made real progress on the issue. More fundamentally, we have demonstrated that we can diagnose a problem, garner broad support for solutions, pursue diverse but complementary actions, and, to use a proper Nova Scotian metaphor, alter the course of our ship away from the looming rocks.

Now or Never: An Urgent Call to Action for Nova Scotians, One Nova Scotia, February 2014,
<https://www.onens.ca/sites/default/files/editor-uploads/now-or-never.pdf>

And this brings us, at the outset of 2025, to another major challenge calling for a major response: our lacklustre productivity performance. Plenty of research and commentary on productivity can be found in economic journals and conference proceedings, but the topic is gaining prominence and traction in Canadian public discourse as economists – Professor Trevor Tombe at the University of Calgary is one example – work to demystify the issue for mainstream audiences and as journalists and commentators such as Andrew Coyne of the *Globe & Mail*, who will be in Halifax to speak at our Productivity Puzzle kickoff on April 3rd, drive home the message of why this topic should be among our top public policy priorities. The issue was amplified in March 2024 at a Halifax Partnership event where Bank of Canada Senior Deputy Governor Carolyn Rogers grabbed national headlines for declaring that it was “time to break the glass” in response to our productivity emergency.²

Just as demographics seized our attention a decade ago, it is now time to focus on productivity as our paramount economic challenge.

What is productivity and why does it matter?

To ensure the competitiveness of our businesses, drive real wage growth, and improve our standard of living, the productivity of our economy needs to improve. Before assessing our productivity performance in detail or considering how we might improve it, clarity is helpful on what the term does and does not mean.

Technically, productivity is a ratio of outputs to inputs. Gross domestic product (GDP) is a measure of the total value of goods and services that are produced in an economy over a period of time (e.g., a year); this is a measure of economic output. The total number of hours that workers work in that period is a measure of labour input. Labour productivity for an economy is thus expressed as GDP (output) per hour worked (input).

² “Time to Break the Glass: Fixing Canada’s Productivity Problem,” *Bank of Canada*, March 2024, <https://www.bankofcanada.ca/2024/03/time-to-break-the-glass-fixing-canadas-productivity-problem/>.

Productivity is inextricably linked to living standards.

There are other ways to think about the importance of productivity. When businesses become more efficient, productive, and competitive, these gains translate to increased profits for business owners and shareholders and opportunities for investment, growth, and increased wages for workers. Conversely, when a business or a jurisdiction is less productive and less competitive, the result is negative impacts on sales, market share, exports, profits, and wages. These are the circumstances under which, to use the vernacular, someone else eats your lunch.

Productivity is inextricably linked to living standards. If an economy’s workers put in the same number of hours from one year to the next, the only way to increase output – and the income generated by producing and selling that output – is to produce more value per hour, that is, to improve productivity.

To recast the scenario slightly, if an economy’s workers produce more this year than they did last year, then that increased production means that more is available to be consumed and enjoyed – the standard of living has improved. A common metric for the standard of living is GDP per capita. It should be noted that GDP per capita does not capture other important aspects of our quality of life like the safety of our communities or the state of our environment, for example. Nor does GDP per capita speak to the equity of the distribution of benefits across a society’s members. GDP per capita certainly is not *the* indicator for our quality of life but it is an important indicator.

As 2008 Nobel Prize-winning economist Paul Krugman put it, “... productivity isn’t everything, but, in the long run, it is almost everything. ... a country’s ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker.”³

³ Krugman, Paul, *The Age of Diminished Expectations: U.S. Economic Policy in the 1990s*, The MIT Press, 1990.

available, Canada ranked #24 in terms of the growth in its labour productivity over the past 25 years.

- The US advantage over Canada in labour productivity 25 years ago was only 23%, versus 47% in 2023.
- Recalling the link between productivity and our material standard of living, among 38 OECD countries, Canada ranked #15 in GDP per capita in 2023. Leaders Luxembourg and Ireland had values twice that of Canada's, while the US outpaced us by 32%. Looking back 25 years, Canada ranked #7 in GDP per capita, with the Canada-US spread at 24%.

How are we doing in Nova Scotia?⁵

- In 2023 Nova Scotia ranked #8 among the ten provinces in terms of labour productivity, with a value equal to 80% of the national figure. Narrowing the focus to business sector industries, Nova Scotia falls to #9 (73% of the Canada-wide figure).
- It should be noted, though, that provinces with valuable natural resource endowments (e.g., oil and gas in Alberta, Saskatchewan, and Newfoundland and Labrador) will have higher productivity figures simply as a function of the wealth that happens to lie beneath their feet.
- One means of getting closer to an apples-to-apples comparison is to look only at figures for the service-producing business sector across Canada. On this metric Nova Scotia still ranked near the bottom at #9 in 2023 at 77% of the national figure.
- All the aforementioned rankings have been quite similar over the past decade. Comparing 2023 to 2019 (i.e., prior to the pandemic), Nova Scotia's growth in these labour productivity metrics has been middling.
- Returning to the productivity standard of living linkage, a related and eye-catching statistic comes from a June 2023

commentary by Trevor Tombe on The Hub.⁶ Using 2022 data (adjusted for purchasing power), he ranks the ten Canadian provinces and fifty American states in terms of GDP per capita. Nova Scotia finishes dead last (#60) at US\$44,000, below Mississippi, West Virginia, and Arkansas, and well behind leader New York (US\$104,000) and top province Alberta (US\$80,000).

If we make the right choices on several fronts, advances can be made on a variety of metrics, and small, incremental improvements that compound over time can indeed make a big difference in the longer term.

What Drives Productivity?

There is no one silver bullet that will improve our productivity performance. The good news, though, is that if we make the right choices on several fronts, advances can be made on a variety of metrics, and small, incremental improvements that compound over time can indeed make a big difference in the longer term.

Equipping workers with more and better tools and machinery – think snowplows rather than shovels – is one means to drive improvement, as is improving the skills and knowledge of those workers.

Ensuring that our transportation, communication, and energy infrastructure is robust and efficient also helps businesses to compete and thrive.

The incentives created and constraints imposed by tax, regulatory, trade, and competition policies are critical to business decision-making about

⁵ Statistics Canada figures:
<https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=3610048001>.

⁶ Trevor Tombe, "Most Provincial Economies Struggle to Match the U.S.," *The Hub*, June 15, 2023,
<https://thehub.ca/2023/06/15/trevor-tombe-most-provincial-economies-struggle-to-match-the-u-s/>.

investment, innovation, hiring, exports, and expansion.

All these elements are interrelated, of course. Business decisions to purchase new machinery are affected by tax rates governments impose. The competitiveness and efficiency of infrastructure providers are impacted by trade policy. The innovativeness of tomorrow's economy depends on how well children today are learning to read, write, and do arithmetic.

Why haven't we fixed this already?

As noted at the beginning of this commentary, the importance of productivity and how to improve it are not new topics in the world of economists.

With the recent heightened interest in productivity in the general population, many financial institutions, policy think tanks, and business columnists have presented research and recommendations on the topic over the past year or two. Government departments and agencies, including the Bank of Canada, the Competition Bureau, the Department of Finance, and Statistics Canada, have weighed in as well. The Business Development Bank of Canada (BDC) also published a report recently with sector-by-sector advice for individual firms on how they could enhance their own efficiency and productivity.

Going back further, we have numerous reports that speak to our productivity challenges from expert panels and commissions such as: Michael Porter's *Canada at the Crossroads* report⁷ from 1991; *Compete to Win*⁸ from the Competition Policy

Review Panel in 2008; *Innovation and Business Strategy: Why Canada Falls Short*⁹ from the Expert Panel on Business Innovation of the Council of

Canadian Academies in 2009; the previously noted *Now or Never* (Ivany) report and its successor *We Choose Now*¹⁰ in 2014 and 2015, respectively; and the reports of the Advisory Council on Economic Growth¹¹ in 2016 and 2017.

Consistent recommendations in these reports include maximizing the level of competition in markets for goods and services, reducing barriers to trade among Canadian provinces and territories, improving the skill level of our labour force, embracing policies that encourage capital investment, reforming our taxation system to better align with the goal of improving productivity, and removing barriers and perverse incentives that encourage small businesses to remain small.

If one were to conduct a public opinion survey on these matters, it is hard to imagine that solid majorities would not be in favour of increased competition for the benefit of consumers, frictionless trade among Canadians, enhanced worker skills, and the other benefits that would come from addressing the recommendations above. Equally, it is hard to imagine that any political party could not enjoy some degree of success from embracing these positions.

Why, then, after years of similar recommendations that could be broadly embraced, has progress been underwhelming at best?

One possible explanation is that these reports and recommendations tend to be broad – covering investment, labour, taxation, trade, etc. – and not terribly detailed. It is easy to get agreement on the concept that “our taxation system should be better, and someone should do something about it.” In too many cases perhaps the conversation stopped at this point with little meaningful follow-through.

An additional explanation that may speak to the lack of follow-through is that once the discussion moves

⁷ Michael E. Porter, *Canada at the Crossroads: The Reality of a New Competitive Environment*, Harvard Business School, <https://www.hbs.edu/faculty/Pages/item.aspx?num=186>.

⁸ *Compete to Win: Final Report – Competition Policy Review Panel*, Government of Canada, 2008, https://publications.gc.ca/collections/collection_2008/ic/lu173-1-2008-1E.pdf.

⁹ *Innovation and Business Strategy: Why Canada Falls Short*, Council of Canadian Academies, 2009, <https://cca-reports.ca/wp-content/uploads/2018/10/2009-06-11-innovation-report-1.pdf>.

¹⁰ *We Choose Now*, One Nova Scotia, <https://www.wechoosenow.ca/>.

¹¹ *Advisory Council on Economic Growth*, Government of Canada, <https://www.budget.canada.ca/aceg-ccce/home-accueil-en.html>.



below the level of broad agreement on a fairly general statement, the details get messy.

We all may want more competition to generate lower prices for eggs, potatoes, and shampoo at the grocery store, but if you are the owner of, or a worker in, a business that benefits from regulatory protection, you may be just fine with competition that is less than robust. Some people may equate enhancing the skill level of the labour force with the entry of more immigrants whom they perceive to worsen problems in overheated housing markets and stressed health care systems. It is hard politically to sell a change of increasing tax X while decreasing tax Y, because focused opposition to any specific tax increase will tend to drown out discussion of the benefits of the broader systemic change.

How do we put the pieces together?

While we may not be able to “solve” the Productivity Puzzle once and for all, this initiative is intended to start putting the pieces together by moving us to that next level of discussion, moving beyond agreement on the high-level principles and confronting the devils that lurk in the details.

Drawing on the knowledge of subject-matter experts and the wisdom and experience of local leaders from business, government, academia, and elsewhere, the intention is to identify and address key unknowns, generate and disseminate information so that we all can learn more about these issues, dispel myths and misinformation, and clarify and rationally consider trade-offs. Out of this, we hope, will come consensus on actions and policy directions that can be presented to leaders and decision-makers for consideration and implementation.

Courage: It couldn't come at a ... better ... time

It can be daunting to recognize both the seriousness of our productivity position and, despite the long-term existence of a reasonable roadmap to a better

place, the lack of progress to date and the barriers that would seem to thwart us from reaching that destination in the future.

Fortunately, we can take inspiration and guidance from past examples of courage.

Following many years in the 1970s and early 1980s of crippling inflation and persistently high unemployment, a combination that was dubbed “stagflation”, the government at that time made the politically risky decisions to negotiate the Free Trade Agreement with the United States and to replace the Manufacturer’s Sales Tax with the Goods and Services Tax (GST). Both initiatives generated enormous amounts of resistance, but in hindsight are now broadly viewed as very sound moves that produced significant benefits for Canadians. The courage to take bold action and withstand short-term opposition has been vindicated by the facts.

In the mid-1990s, our deficit and debt figures had reached crisis levels, and a January 1995 Wall Street Journal editorial described Canada as an “honorary member of the Third World” and referred to our dollar as “the northern peso.” Across the country the realization sank in that significant change was required. The government of the day took the courageous act of introducing a budget two months later that got the fiscal house back in order and set the stage for a long run of debt reduction, interest rate declines, and growing prosperity.

Speaking the bleak truth about our demographic forecasts at the time and advising Nova Scotians that big changes were necessary to our traditional way of doing things was not an easy thing to do, but through *Now or Never* and *We Choose Now* we found our way to understand and confront a looming population decline and engineer a turn-around far beyond what many would have thought possible.

Sometimes it is necessary to do big things, and history shows that, with courage and cooperation, it is indeed possible to make change. We look forward to advancing these conversations with you and ultimately improving the quality of life in Nova Scotia, together.