

TRANSITIONING FROM THE PANDEMIC: Towards a More Balanced Fiscal Policy

AUGUST 2021

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INTRODUCTION: OVERVIEW AND KEY THEMES

As Canada's COVID-19 vaccination rates achieve critical thresholds in mid 2021, fundamental changes in fiscal policy are recommended to boost the Canadian economy's supply side and make governments' demand-side support more effective. A more balanced fiscal policy would help achieve greater economic resilience and robustness, and foster more broadly-based growth and sustainable prosperity. A fiscal pivot is also timely given the economic risks and health uncertainties of the Delta variant in H2, 2021.

This paper builds upon the methodology and frameworks of Stewart & O'Reilly's 2020¹ and our 2021² *Long-Term Thinking in Extraordinary Times* GRI articles. It assesses fiscal policy-making needs with a **three-phase lens** reflecting successes, challenges and risks from the pandemic, while focusing upon the needs and requirements for the transition and sustainability phases. Effective fiscal policy requires consideration of the potential impacts of key **known unknowns**, and preservation of the flexibility to respond to **unknown unknowns** in 2021 and 2022.

The pandemic-driven surge in Canada's government deficits and debt makes greater supply-side support and better-targeted, consumption-related expenditures crucial in the near term to minimize the risk of major tax hikes and spending restraint over the medium to long term. More inclusive growth will decrease future deficits, improve policy options and reduce social inequities given the "Great Divide"³ between the pandemic-driven income/job losses of many workers in the traditional economy and the success of financial markets and technology sectors.

Effective risk management of Canada's fiscal policy requires boosting investment, innovation, productivity and wages. **Improving Canada's supply side is important** to reduce the economic risks of lower growth, higher inflation and increased interest rates for government deficits and debt. Building resiliency and robustness will help address the major structural needs of funding climate change mitigation and adaptation as well as healthcare. Enhancing resiliency and robustness will also increase the policy room needed to address unanticipated fiscal requirements including those arising from future crises with their serious fiscal risks and economic repercussions.

For Canada's fiscal policy in H2, 2021, hindsight offers lessons from policy errors during and after the Great Financial Crisis (GFC) of 2007-09 while adapting to the unique features of COVID-19. Canada's massive fiscal (and monetary) demand-side support was crucial during the early pandemic stage to address the economy-wide need for cash flow, income and confidence. Huge fiscal support was key for firms and workers in the close/high contact industries hit hard by lockdowns and other activity restrictions from the pandemic's onset through mid 2021.

Yet, Canada's fiscal approach to the pandemic should adjust to core differences in H2, 2021, versus after the GFC. They include the more durable economic rebound from the fall 2020 onward, the surge in household and business incomes from fiscal stimulus, and the geometric increase in technology adoption and usage. In our view, fiscal policy should have shifted by the fall 2020 and especially by mid 2021 to a supply-side emphasis and better-targeted demand stimulus.

1. ASSESSING FISCAL POLICY DURING THE PANDEMIC

Using A Three-Phase Lens, Identifying Unknowns And Addressing The Great Divide

The unprecedented health impacts, lockdowns, risks and uncertainties of COVID-19 were fundamentally different in scale and type than any post-WWII financial and/or economic crisis. The extraordinary size and scope of the immediate policy and regulatory action needed made it especially difficult to consider the impacts of policy beyond the pandemic's crisis management for both the transition to crisis resolution and the sustainable (future crisis prevention) phases.

Accordingly, it is important to distinguish the fiscal policy response when conditions were most dire and economic uncertainty was at its peak. Focusing the bulk of fiscal support on the demand side was crucial during this emergency phase of COVID-19's first wave, especially given the severe economic restrictions from lockdowns. Yet, it was equally critical to reassess fiscal policy after COVID-19's initial crisis when the economy's path, and the impacts of extraordinary fiscal and monetary support, became much clearer. More changes to policy design and implementation should have occurred after errors were exposed, and much greater consideration of program risks was needed when the severe economic contraction subsided. By the fall 2020, fiscal policy should have reflected whether program magnitudes were sufficient or excessive, and considered more rapidly how and when to adjust emergency demand support measures given the enormous deficit and debt increases incurred during the pandemic.

To help assess and improve policy from mid 2021 onward, we use the three-phase approach from the first *Long-Term Thinking* article. This approach offers a framework and lens to:

1. Understand **Pandemic** phase lessons where urgency, magnitude and coordination pressures made short-term needs the priority, and demand stimulus dominated decision-making.
2. Focus upon **Transition** phase needs in developing an exit strategy to ease back/wind down emergency initiatives with a prudent, viable approach to facilitate post-crisis success.
3. Address **Sustainable Path** phase requirements with policies focused upon (i) longer-term issues and opportunities existing before the pandemic that were temporarily de-emphasized (e.g., climate change), and (ii) transformative trends resulting from COVID-19.

Effectively using this three-phase lens in policy begins with recognizing that economies are complex, adaptive systems with uncertain paths, especially during and after huge disruptions. The responses of economies overall, and of key sectors, to unprecedented external shocks and large-scale policy interventions are susceptible to rapid and substantial change. As a result, expected and actual results from disruptions and from major policy changes can radically diverge. Fortunately, the basis for more informed policy has improved markedly with the wide-ranging, high-frequency data available in recent years much closer to real time, in addition to Statistics Canada's broad-ranging, in-depth reports. Good public policy requires identifying and assessing known unknowns, such as how soon and to what extent households and businesses will adjust their behaviour to emergency income and lending support. It is also essential to adjust for unknown unknowns as they manifest. For example, the geometric increase in technology adoption and usage was an unexpected and crucial aid to Canada's growth rebound since mid-2020, as was the rapid international development of vaccines by late 2020, and their widespread distribution in North America, Europe and the UK by mid 2021.

In addition, fiscal policy should address more of the structural problems that COVID-19 highlighted and exacerbated, including the Great Divide between many workers in routine jobs/the traditional economy and those in financial markets and technology sectors. The former had already experienced a difficult post-GFC decade. The pandemic hugely disrupted traditional work in high/close contact industries, inflicting disproportionate losses in jobs and income, especially for lower-wage workers. Addressing these and other at-risk workers' income needs after the pandemic, especially in facilitating better and

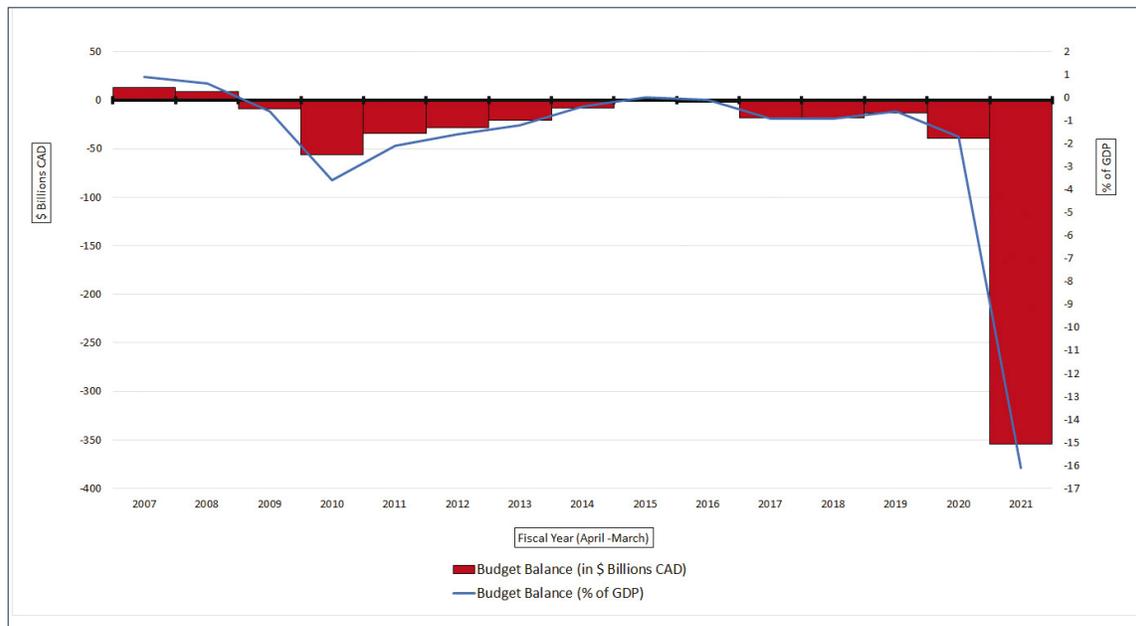
more reskilling and/or retraining for the transition and sustainable path phases, should be a policy priority.

Pandemic fiscal policy successes prior to the April 2021 budget

Massive macroeconomic support during the initial emergency months of COVID-19 was decisive in containing Canada’s most severe economic contraction since WWII

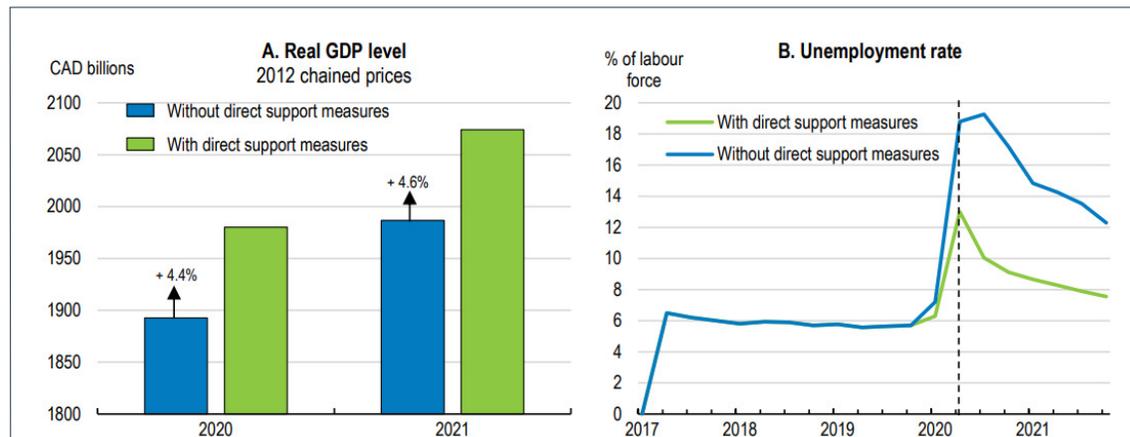
and in supporting the subsequent rebound.⁴ Recognizing the need “to overwhelm a crisis”, enormous and rapid fiscal and monetary stimulus beginning in March 2020, coordinated with major financial regulation relief, was timely and unprecedented in scale and scope. It was geometrically larger than what occurred during the GFC (Chart 1), with fiscal measures being particularly important for their direct support in boosting growth and employment (Chart 2).

Chart 1: Federal Budget Balances, FY 2007-2021 (\$ Billions and as % of GDP).



Data Sources: For fiscal years 2007-2020 “Fiscal Reference Tables November 2020,” Government of Canada; and for fiscal year 2021 (projected), “Budget 2021: A Recovery Plan for Jobs, Growth, and Resilience,” Government of Canada.

Chart 2: Fiscal support measures prevented an even deeper downturn.



Source: “OECD Economic Surveys: Canada – Overview,” *OECD*, March 2021.

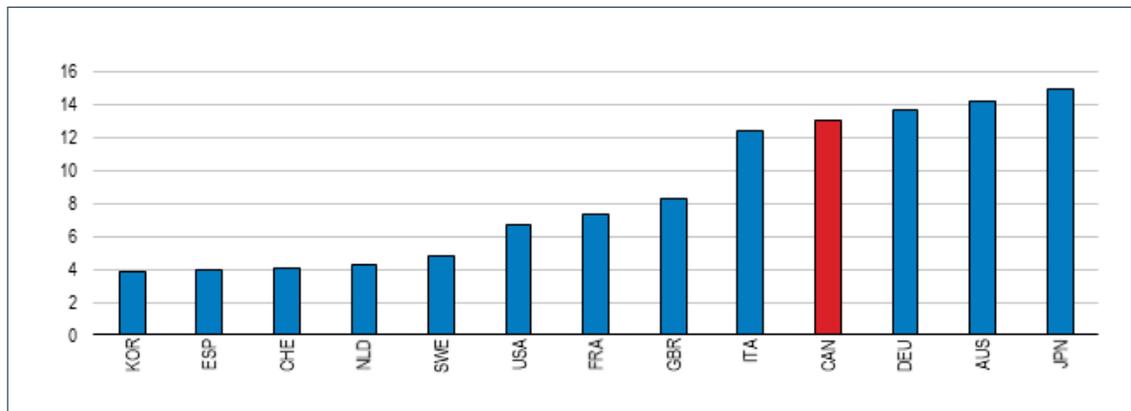
One of the foremost policy considerations was whether to support workers directly with income transfers (US approach) or by transfers to firms to keep workers employed while furloughed (European approach). Canada did both on a huge scale, and added debt relief and other measures to boost spending. Direct income support programs swamped the historic plunge in employment income in Q2, 2020,⁵ while wage subsidies reduced job and work income losses. Well-coordinated initiatives of Finance, the Bank of Canada (BoC) and the Office of the Superintendent of Financial Institutions boosted business and household cash flows and incomes at a critical time. The confidence of businesses, consumers and financial markets was bolstered during the maximum economic stress of March-April 2020.

Beyond containing the sharp recession in Q2, 2020, extraordinary fiscal aid was essential in helping create the pre-conditions for growth to support the recovery. It significantly increased Canada’s economic resilience during

late 2020 and early 2021 when COVID-19’s resurgence and renewed lockdowns did not result in another widespread, major economic contraction. Federal and provincial programs kept the “K-shaped” recovery from being even more lop-sided with their support for hard-hit workers and firms in the close contact, in-person service sectors.

Canada’s macroeconomic response was also much more balanced between fiscal and monetary policy relative to the GFC. Enormous fiscal support was combined with near-zero interest rates and massive quantitative easing (QE). This macroeconomic approach resulted in the largest deficits and debt increases since WWII. Soaring government spending, tax relief and other fiscal support led to the surge in Canada’s deficit from \$28.1 billion, prior to the pandemic, to \$354 billion for fiscal 2020-21 (Chart 1). The scale of Canada’s deficit increase was among the largest of any advanced economy in 2020 in terms of direct support (Chart 3),

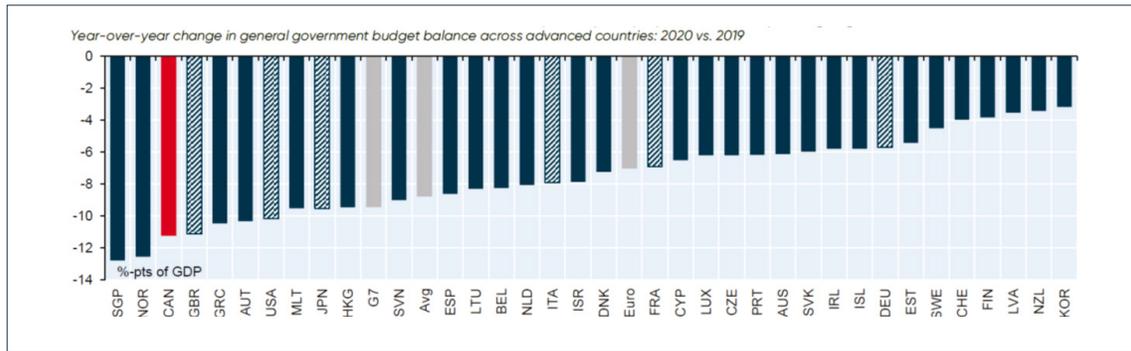
Chart 3: Canada’s Direct Fiscal Support as % of GDP in Comparison to Other Advanced Economies.



Source: “OECD Economic Surveys: Canada – Overview,” *OECD*, March 2021.

and its total fiscal measures dwarfed the GFC dimensions of support as the fiscal 2020-21 deficit-to-GDP reached 16.1%. Together with provincial deficit spending, Canada’s total fiscal support exceeded any other G-7 country and was among the highest of all advanced economies (Chart 4).

Chart 4: Canada’s Fiscal Deficit in 2020 was Among Largest of all Advanced Economies.



Source: National Bank of Canada Financial Markets, IMF | **Note:** Canada shaded red; other G7 nations shown with patterned fill; grey shading refers to multi-country averages; 'Avg' refers to all advanced countries.

April 2021 budget continues unprecedented fiscal support

Canada’s Budget in April 2021 projected a massive, albeit somewhat smaller, fiscal 2020-21 deficit relative to the Fall 2020 Economic Statement given the economy’s stronger rebound. The Budget added more stimulus with over \$100 billion of new measures during the next three fiscal years. This stimulus is front-end loaded with 48% (\$49 billion) of “short-term support” as “life rafts” slated for fiscal 2021-22, with a shift toward more productivity-focused measures with “escalators” to promote structural adjustments in the next two fiscal years.⁶ “Temporary” extension of various emergency income and business relief programs occurs with their end linked to better control of the pandemic. The Budget’s major new initiative is the child-care and early learning program with \$27 billion to be spent over five years. Post-Budget fiscal measures in mid 2021 include over \$10 billion of support for major infrastructure projects in the Greater Toronto and Hamilton Area (GTHA) and Calgary, and further extending the duration of several major pandemic income and wage support programs into October 2021.

The 2021 Budget maintained Canada’s general fiscal approach, since March 2020, of providing overwhelming demand stimulus during the COVID-19 crisis. Fiscal policy continues to be shaped by the GFC and post-GFC experience

as hindsight showed that many advanced economies’ fiscal response was inadequate. The Budget’s new spending and ongoing large-scale deficits demonstrate Ottawa’s desire to avoid the policy mistakes of the post-GFC decade when fiscal retrenchment occurred too quickly in Canada, the US and Europe. Canada’s ongoing large-scale demand support is intended to foster a “high-pressure economy” to help the recovery become a healthy expansion led first by strong consumer demand and spending and then, especially, by business investment to sustain growth and increase innovation and productivity.⁷

In contrast to 2020, Canada’s fiscal stimulus is much smaller than the major US fiscal boosts in 2021. The Budget’s continuation of various income programs for individuals into mid 2021, as well as wage and rent subsidies for businesses, avoided the so-called “fiscal cliff” risks of ending these fiscal measures prior to Canada achieving key vaccine thresholds, low COVID-19 hospitalizations and case numbers, and the lifting of lockdowns and other restrictions on activity. The size of the new child-care and early learning program, and its design reflecting Québec’s longstanding model, are noteworthy. Further, terming out government borrowing to extend Canada’s debt duration is commendable, continuing the 2020 policy of taking greater advantage of current ultra-low interest rates and reducing future refunding risk.

Design flaws, slow policy adjustments and excessive magnitudes

Canada’s speed in rolling out many fiscal emergency programs merits highlighting, as did the federal-provincial cooperation and effective use of multiple delivery channels (such as Canada’s banks). Yet, time pressures and other factors resulted in design flaws in key programs with inadequate adjustments to fix these problems. Cumbersome criteria, eligibility and other challenges led to various programs having minimal, delayed or partial take-up.⁸ One-time payments such as those to seniors in 2020, and the Budget’s increase in Old Age Security payments, failed to distinguish those in need versus others with higher incomes. As a result, these benefits were received by many seniors who did not need additional support.

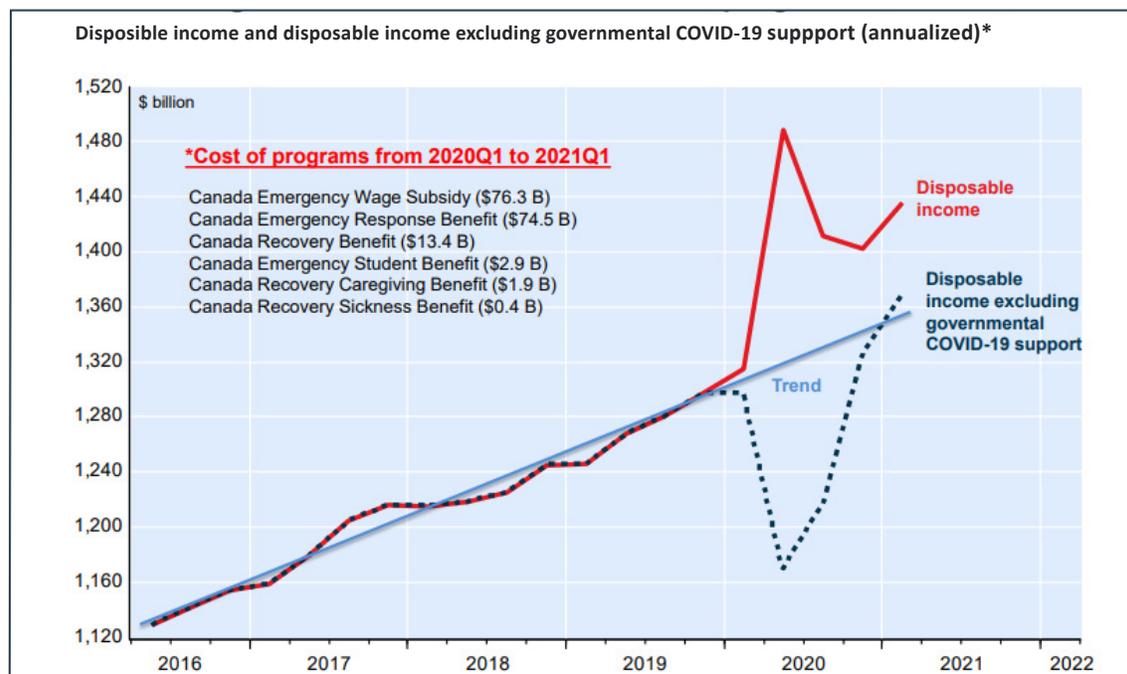
The largest pandemic program, the Canada Emergency Wage Subsidy (CEWS), was effective in helping many workers in need, but was also inefficient as it suffered from major design flaws and overdue adjustments.⁹ In-depth analyses show that while CEWS provided crucial assistance to numerous small companies, its access by a range of larger firms was highly problematic as no needs test was applied, and there was too little scrutiny of individual recipients. These and other flaws led to administrative errors, such as bankrupt companies, hedge funds and money managers

accessing CEWS. Various large public firms continued to draw from the program after returning to profitability. At least as important, no limits were placed on the use of CEWS funds.

There were also problems with the magnitudes of several core initiatives, especially aggregate support for consumption. Critics viewed total emergency income support as too large at the outset and continuing for much longer than necessary.¹⁰ Government transfers swamped initial declines in total employment income, and continued on a broad-based, very large-scale, rather than shifting to a more targeted approach. This occurred despite much better-than-expected data for many key economic indicators from fall 2020 onwards. Disposable income growth, excluding government COVID-19 programs, had already rebounded above pre-COVID-19 levels by late 2020 and returned to its long-term trend growth rate in Q1, 2021 (Chart 5).

High-frequency data showed a broadening of consumer spending to include services and durables, rather than a rotation from goods purchases to services in mid 2021. A wide range of sectors have faced serious difficulties hiring staff in mid 2021, post lockdowns. This made the extension of emergency income and wage support programs questionable. Extending these programs also

Chart 5: Canada: Is growth at risk when the COVID-19 programs end?



Source: National Bank of Canada Financial Markets; data from Statistics Canada.

increased federal deficits and debt unnecessarily, while creating constituencies favouring this consumption assistance on an ongoing basis rather than adjusting to new opportunities after the lockdowns.

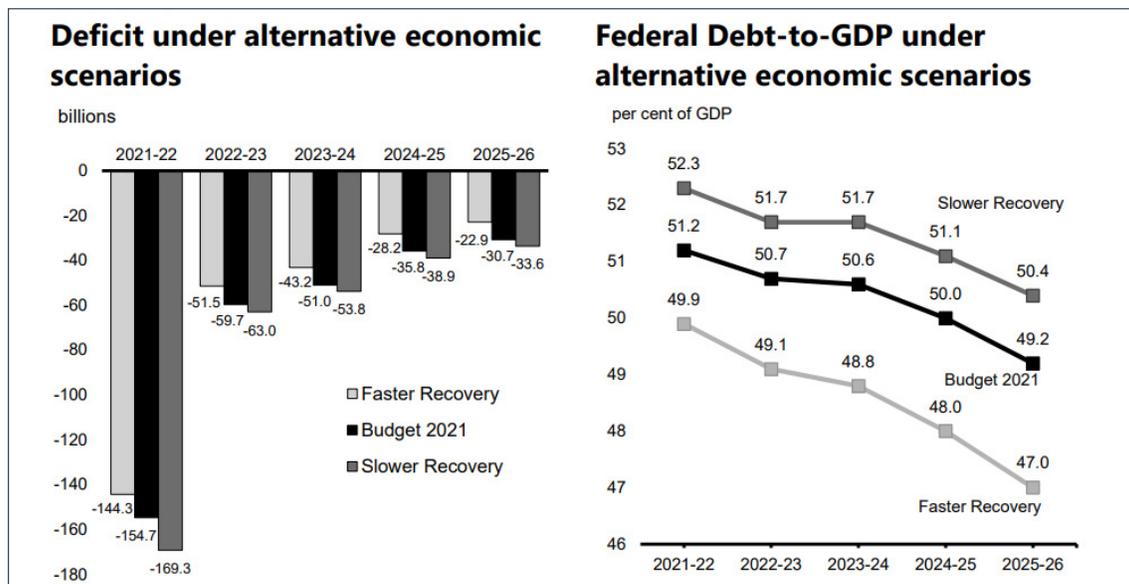
Of significant concern, the Budget’s comments on fiscal anchors were general, lacking specific commitments and clear precision. Guardrails for monitoring fiscal progress are only modest efforts with uneven metrics. This concern reflects the fiscal costs of the COVID-19 crisis given the rise in Canada’s net debt-to-GDP from the 30% area to the

50% range (Chart 6). As leading experts have explained,¹¹ committing to medium and long-term fiscal anchors and setting out clear quantitative parameters to monitor and gauge Canada’s fiscal progress are critical as we will further explore in section 2.

Structural challenges and risks in mid 2021 and beyond

Beyond issues with the design, implementation and magnitude of various programs, there are fundamental concerns about the economic paradigm shaping fiscal

Chart 6: Projected Federal Fiscal Deficits under Alternative Economic Scenarios.



Source: "Budget 2021", Government of Canada.

policy and the unintended risks it creates. These risks begin with Canada’s unbalanced focus on “high pressure” stimulus, primarily intended to generate conditions for sustainable growth. Extensive international research shows that supply-side policies are at least as important as demand stimulus in boosting growth over the long-term.¹² Productivity-enhancing policies include specific measures to increase investment, promote trade and enhance competition. Canada’s inadequate focus upon, and insufficient policy support for, business investment in digital, machinery and equipment, and plant outlays (plus key intangibles such as software), is problematic. Support for significant worker reskilling and retraining is also inadequate. The Budget is estimated to have at least

three times the spending on consumption measures (\$75 billion-plus) relative to investment support (\$25 billion), even using generous assumptions.¹³

Other policy risk management issues arise from Canada’s fiscal dependence upon favourable growth and low interest rates. The Budget’s medium and long-term assumptions about the rebound of productivity, growth at levels higher than in recent decades, and ongoing ultra-low interest rates pose distinct risks. They create significant susceptibility in federal deficits, debt and policy room to any of these key variables diverging from forecasted trends. Canada’s deficit and debt outlook rely heavily upon (i) economic growth led primarily by productivity improvements rebounding

to match the multi-decade highs of the 1950s and 1960s, and (ii) global interest rates remaining low for decades.¹⁴ This fiscal vulnerability warrants emphasis given Canada’s need for future large-scale expenditures on (i) health care to address its aging population and future pandemic risks, and (ii) climate change mitigation and adaptation.

The adverse incentive effects of insufficiently-targeted fiscal support, as well as the undue costs of its excessive magnitudes, create political risk as program extensions have already shown. The political economy of government spending has not changed. Constituencies arise to defend new and existing programs even when emergency conditions subside, and the impacts of these initiatives grow increasingly counter-productive. It is important to distinguish this risk from government’s vital role in supporting workers who lost income/jobs during the pandemic, assisting low-income households and marginalized communities, and helping vulnerable workers transition from at-risk employment. In contrast, the concern here is to avoid encouraging worker and business behaviours seeking undue government protection from competition and other forms of disruption.¹⁵ Critics point to Canada’s failure to achieve a balanced budget or surplus despite a decade of growth prior to COVID-19. They cite this as a telling indicator of the political challenges to fiscal prudence. The difficulties of unwinding emergency programs will only increase the longer the delay in Canada’s fiscal pivot to boosting productivity over consumption, especially if additional waves of COVID-19 or new shocks occur.

2. ACHIEVING SUCCESS IN THE TRANSITION AND SUSTAINABILITY PHASES

As Canada transitions from the pandemic phase, it is important for fiscal policy to foster and support a more robust and resilient¹⁶ economy that results in stronger growth and more broadly-based prosperity. Robustness requires addressing structural supply-side issues to achieve greater actual and potential growth in good, bad and neutral economic conditions. Resiliency requires a more balanced fiscal approach to help ensure flexibility to assist workers’ adjustment to disruption and to boost capability to deal more effectively with future crises.

Turning first to the transition phase, the challenges begin with developing an effective exit strategy from emergency programs and implementing more targeted demand support. Better fiscal balance involves addressing a broad range of supply-side policy areas. Each of these policy areas is important on its own as we will explore. These are interdependent in their impacts and thus crucial to focus upon in the transition phase, and to achieve a durable expansion in the sustainable path phase.

Increasing the Supply of Skilled Labour

Near-term labour shortages in the transition phase

With the lifting of lockdowns and a range of other activity restrictions in mid 2021, Canada is facing major challenges with the return to work in many sectors. Restaurants, hotels and other in-person retail services are facing serious difficulties in trying to rehire staff laid off during the pandemic. The causes began with known unknowns such as how emergency support programs would affect workers’ behaviour during the transition from the pandemic. Income assistance for close/high contact sectors was vital during the pandemic but has distorted return-to-work incentives for a significant number of lower-wage workers. Other sectors are also facing labour supply issues. Many professional service firms are experiencing problems in staff retention as they begin the process of returning to office environments as well as identify and implement viable office/remote work models. Unknown unknowns for professional service companies in mid 2021 include the surprisingly large number of workers looking to switch employers and/or occupations after their remote working experience during COVID-19. Few anticipated that income support for lower-wage service workers and remote work for professional service employees would prompt so many to re-evaluate their chosen occupation, employer and/or location for work going forward.

For fiscal policy in the transition phase, there are numerous implications for income support and labour adjustment policies. Unprecedented shocks, such as COVID-19, are not amenable to traditional approaches.¹⁷ Canada’s pandemic approach recognised this reality, combining (i) broad-based wage subsidy support through

CEWS to preserve jobs and (ii) income support for lost work/incomes through: the Canada Emergency Response Benefit (CERB); its successor, the Canada Recovery Benefit (CRB); and expanded Employment Insurance (EI) benefits. CEWS had clear successes and significant problems as explored in section 1. The CERB, CRB and increased EI provided vital cash flow and income to workers hit hard by layoffs/sharply reduced work, but the known unknown was their impact on future return-to-work incentives. While the labour demand–supply imbalance in close/high contact services is expected to be transitory, how quickly and in what way this inadequate supply of workers eases is uncertain as the CRB winds down in late 2021. Recent research into problems with the EI system, and leading analyst views, suggest that the broader reach of the CRB, its better incentives for part-time/casual work, and other superior design features, should be assessed as part of a broader review and overhaul.¹⁸

**Structural labour demand-supply mismatches:
inadequate education, reskilling and retraining**

Other structural problems in Canada’s fiscal and labour adjustment policies require different solutions. These begin with the number of employees in the traditional economy, gig and other contract workers engaged in routine work. These workers were vulnerable to disruption even before the sharp acceleration of technology adoption and disruption during the pandemic worsened secular pressures on their incomes and jobs. Non-routine employment, relative to routine jobs, increased substantially over the three decades prior to the pandemic. Virtually all routine work job losses occurred in bursts during three recessions.¹⁹ The routine work losses, and gains in non-routine work, reflect automation within firms and re-allocation of employment across firms. Unskilled/routine work losses from the pandemic are expected to exceed those of earlier recessions given the increased (i) incentives for technology adoption and labour substitution via automation to address transmission prevention needs²⁰ with safer workplaces, hospitality and retail spaces, airports *etc.*, and (ii) challenges in rehiring/retaining workers.

Various studies have highlighted the pandemic’s disproportionate impacts on demographic segments of the workforce, especially its repercussions for women,

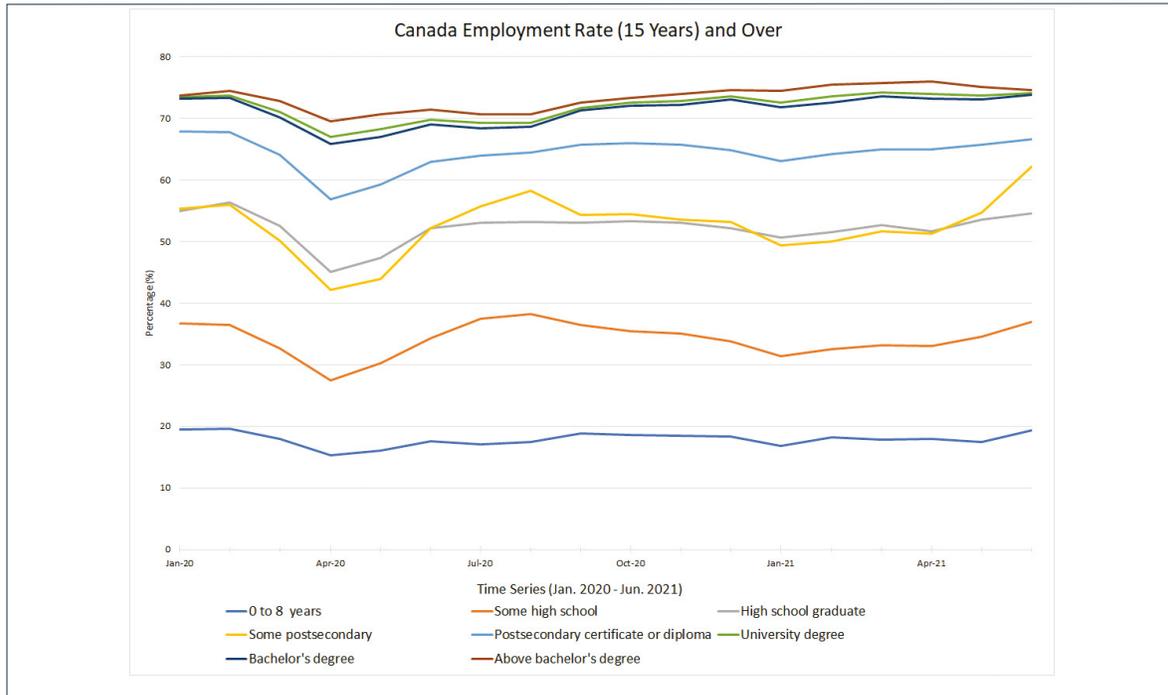
young adults and lower-income individuals. Less well recognized is that the hardest-hit segments consisted of workers with the least education and job market-relevant skills, low-wage workers and those who have been added to the long-term jobless because of the pandemic²¹ (Chart 7).

Much-needed fiscal and labour adjustment policy changes should begin with improved transitional income support that reflects the lessons learned from the CRB, enhanced EI program and other analyses. This is a necessary step, but required changes go far beyond this support to include wide-ranging initiatives to enhance and fund more effective education and skills training for non-routine work. These changes require extensive federal-provincial cooperation given Ottawa’s greater fiscal capacity and provincial responsibility for education, training and other key areas.

Despite recent provincial policy improvements, there is an urgent need to upgrade education and training, from primary school through college and university.²² The long-term inadequate supply of skilled labour in professional services, manufacturing, construction, healthcare and technology sectors was a structural challenge before the pandemic.²³ The importance of education and training — already high — has soared with COVID-19’s accelerated tech disruption and much increased demand for workers with digital, literacy and/or numeracy skills. Notable labour supply shortages now range from the STEM sector to an array of skilled trades.²⁴

Part of this critical shortage of skilled workers, ranging from STEM backgrounds to a broad range of skilled construction trades, will be addressed by the rebound in immigration as border restrictions and other travel impediments ease with the end to lockdowns. Yet, it is essential to avoid complacency in assuming that Canada’s attractiveness for skilled foreign workers is a given. Canada’s recent advantage as a more open destination for immigration than the US changed dramatically with the Biden administration versus its predecessor. A host of other policies also affect international workers’ decisions. They include Canada’s personal tax rates, quality of education and healthcare, and/or research, development and commercialization environments.

Chart 7: Canada employment rates by extent of education.



Data Source: Statistics Canada, Labour force characteristics by educational attainment, unadjusted.

Domestically, as the OECD has found, Canada like other advanced economies has major disparities in who gets reskilled. Adults with less education are much less likely to get training than those who have completed college or university.²⁵ Improved policy includes better and more learning and training in adult education and skills development. Key components include formal learning in schools and training centres, non-formal training (on the job training typically from employers), and informal training (learning from others). Addressing major gaps in career coaching and guidance, job search assistance and the information available about occupational demand and job opportunities will significantly improve reskilling and retraining.²⁶

Increasing Business and Infrastructure Investment

Addressing business investment barriers

Robust business capital spending is vital to the strength and durability of the Canadian economy’s cyclical transition

to expansion from its recovery being led by government, housing and consumer spending during mid 2020 to mid 2021. Much-increased business investment is important to sustaining higher economic growth, more innovation, increased productivity, and lesser inflation pressures over the medium and long term. The Budget’s investment initiatives encompassed a series of programs supporting artificial intelligence, intellectual property (IP), innovation, life sciences, quantum computing and venture capital *etc.* Yet, while the Budget set out goals for these initiatives, its funding commitments and details were very limited.

Instead, national and provincial fiscal strategy should also focus upon a better taxation, competitive and infrastructure environment for investment. A pivot in Canada’s fiscal approach could spur and sustain greater business capital spending on digital and other intangibles, machinery and equipment, and plant construction. A strong commitment to achieve sustained growth in capital per worker should be a centerpiece of fiscal policy. This is key given its importance for productivity, rising wages and standards of living,²⁷ and for repaying pandemic-related debt at the personal, government and corporate levels. It is essential to address

Canada’s inadequate capital investment per worker since the GFC, especially to reverse the decline since 2015,²⁸ and particularly weak trends in machinery and equipment and IP spending (Charts 8 and 9). It is also important to bolster global competitiveness, as Canadian business investment has underperformed significantly relative to the OECD average. Separately, untangling the impacts of tax and other incentives for stock buybacks vs. machinery, equipment and IP investment merits further research. The large jump in major Canadian firms’ common and preferred share purchases during 2016-2019²⁹ coincided with very modest physical and IP investment increases.

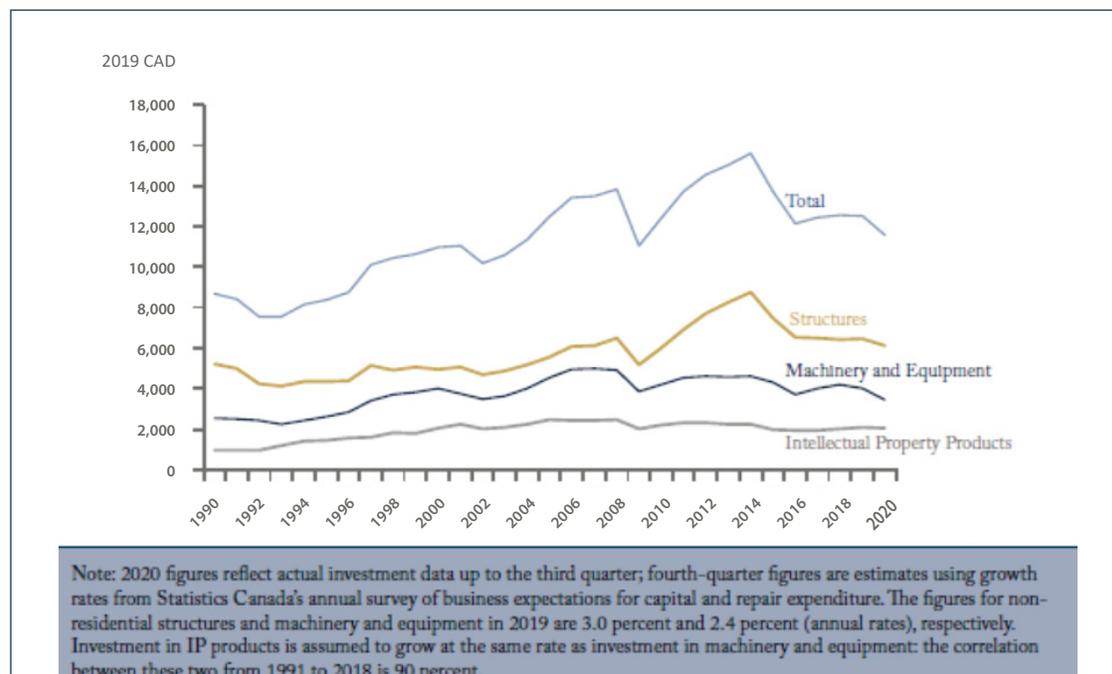
We contend that a broad-based review and reconsideration of tax, spending and other fiscal policies to boost business investment should be a core part of Canada’s approach to boost the supply side. Ottawa’s “high-pressure” demand stimulus focuses on cyclical needs, not the structural requirements to increase capital spending per worker. Structural policy reforms are important to increase competitive pressures by reducing interprovincial trade barriers, pursuing more international trade where market access is less susceptible to protectionism, and reducing excessive market power concentrations. Ottawa and the provinces should re-assess Canada’s overall tax environment

and its unintended effects, such as depreciation allowances and other tax incentives, that favour manufacturing and resource industries over services.

Improved policy to foster business investment also needs to encourage outlays on intangibles. Firms’ spending on proprietary software, patents, brand value, licensing agreements and other IP has increased as a share of business investment per worker. IP products dominate the corporate balance sheets in so-called “capital-light” sectors. Led by platform companies and other technology firms, these investments have also become critical for traditional sectors. The latter’s increasing outlays on intangibles reflect the need to deal effectively with the surge in online shopping for retail firms, increasing business-to-business commerce prior to and especially during the pandemic, and disruption in many sectors.

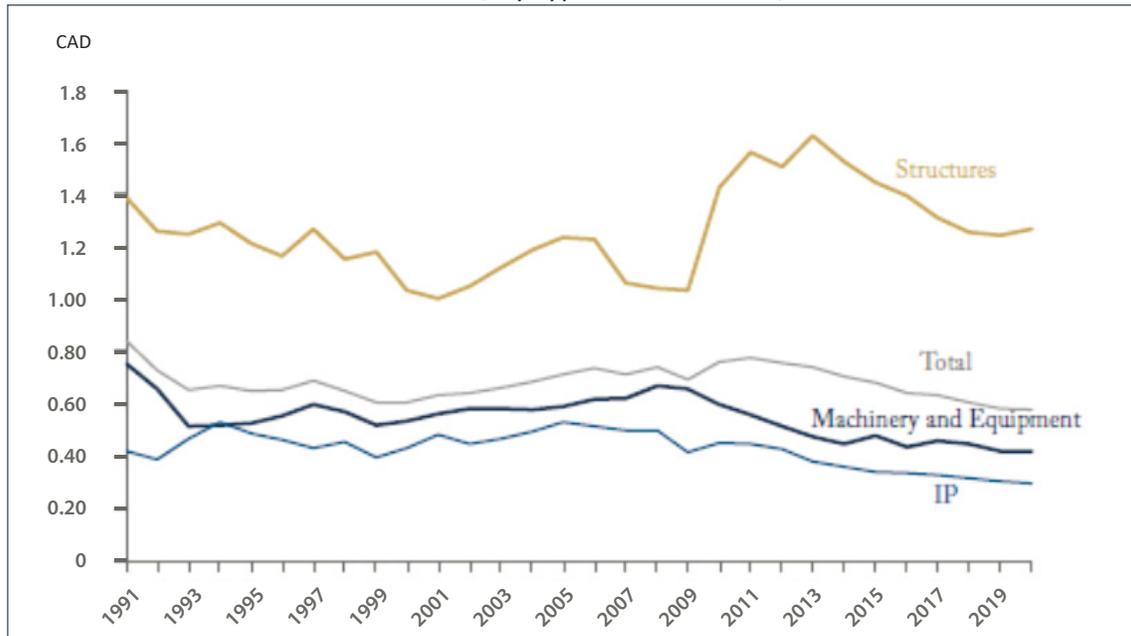
Given the growing importance of intangibles, fiscal policy should aim to foster more IP commercialization, ownership and retention.³⁰ Better policy also includes enhanced support for scientific research and development of Canadian firms and innovators, especially given the 2021 US Innovation and Competition Act, with its US\$250 billion of funding over five years for US scientific research

Chart 8: Gross business investment per available worker, by type, Canada, 1990-2020.



Source: William Robson & Miles Wu, "From Chronic to Acute: Canada's Investment Crisis", C.D. Howe Institute.

Chart 9: Investment per available worker in Canada, for every dollar of investment per available worker in the United States, by type of investment, 1991-2020.



Source: Robson & Wu, "From Chronic to Acute: Canada's Investment Crisis", C.D. Howe Institute.

in an array of areas. High research and development, high-STEM advanced industries are cornerstones of Canada’s higher-value added growth, with workers in these sectors earning wages almost 50 percent more than the average Canadian worker.³¹

Increased and more effective infrastructure investment

Larger and better infrastructure investment has very significant direct, indirect, induced and (often unrecognized) systemic benefits for business competitiveness and worker productivity.³² Much-increased infrastructure investment can help ease housing affordability issues in major Canadian cities and regions. It improves the ability of skilled workers to choose their preferred location while reducing commuting time and expense, and other costs of living. Climate change mitigation and adaptation, and other environmental benefits of transit also merit emphasis.

Prior to the pandemic, provinces and cities were increasing their already substantial transit, road and other transportation investments as well as capital spending on water and sewers. Ottawa’s mid 2021 announcements

of over \$10 billion in new transit initiatives in southern Ontario and Calgary are also notable. Yet, the maintenance of existing infrastructure and the need for new capacity continue to be much larger than expected. Ongoing population growth, climate change impacts, congestion and/or aging infrastructure in urban areas, especially in major regions and cities such as the GTHA, Greater Vancouver and Montreal make improved transportation networks and public utility systems vital. Better design and increased funding of infrastructure, however, should also reflect the increased capacity and preference to work from home given the evolving hybrid office/remote work models in a range of industries.

The benefits of increased infrastructure investment are contingent upon these outlays being well designed, implemented and managed. Weaknesses in conception, execution and/or oversight of infrastructure outlays can incur costs rather than achieve benefits, especially when they delay new and/or improved infrastructure.³³ Leading analysts have pointed to governance weaknesses in the overlapping federal-provincial-municipal jurisdictions for infrastructure. Political, legal, and other barriers too often

slow progress in maintaining and improving transportation infrastructure. Lags in bringing infrastructure on stream make it crucial to consider how to achieve increased and more effective project spending as soon as feasible.

Digital infrastructure & data policy

One of the most striking unknown unknowns during the pandemic was the degree to which tech adoption and usage would enable and spur remote work, e-commerce and digital payments. The geometric acceleration of these pre-COVID-19 secular trends led to digital infrastructure and data capabilities being an essential component of Canada's favourable economic performance during the pandemic. These capabilities supported the surge in growth of leading Canadian technology firms (e.g., Shopify, Lightspeed) and numerous tech start-ups in 2020 and 2021 in a wide array of Canadian industries. They are also critical to the future competitiveness, innovation and productivity of many traditional industries and the financial sector. Robust digital infrastructure and effective data policy will be at least as important as increased physical infrastructure investments in the transition and sustainable path phases.

New and better approaches to digital infrastructure begin with addressing the availability and capacity of broadband networks, their distribution, and other aspects of the digital divide. The inclusiveness risk is both geographic (major differences in sophisticated urban/suburban area communication networks versus the older and lesser capacity in rural/remote areas) and income-related (tech companies focus on customers with greater spending capacity, incomes and data needs). Government has a clear role to play in funding network extensions to less populated areas and supporting access for lower income and/or less educated Canadians.

Attractive new revenue opportunities in data for municipal and provincial governments as well as innovation and privacy risks should have much greater fiscal and other policy focus. Canada needs to become much more active in managing and monetizing the data collected by public utility systems, buildings *etc.* as urban areas shift toward becoming "smart" cities. The data that is and will be

generated from municipal hydro and telephone poles, cameras and sensors inside and outside of buildings, etc., has great value in numerous ways. The growing array of data uses includes improving energy use and enhanced prevention of disease transmission and attracting retail dollars from customized communications to generate store traffic from passers-by. Canadian municipalities and, to a lesser extent, provinces can achieve substantial new revenues to fund physical and social infrastructure needs by better municipal planning, data access and facilitating innovation. Better approaches to realize these revenue opportunities, encompass more open and secure access to data, different revenue models and greater privacy protection. Vital initiatives include developing (i) data trust(s) to achieve broader data access within stronger security parameters to protect individual privacy, and capture more revenues, and (ii) digital marketplaces to enhance Canadian innovators' access to these business opportunities.

Fiscal Anchors and Guardrails

The Budget's heavy reliance on optimistic growth and interest rate projections in its long-term deficit and debt forecasts risks inadequate fiscal progress in reducing Canada's debt-to-GDP if productivity and real growth do not rebound from levels in recent decades. Notably, the expected rebound in immigration in the second half of fiscal 2021-22 and beyond will help Canada's actual and potential growth. Yet, Canada's current fiscal course risks a combination of much higher taxes and less spending in the future and creates an inequitable fiscal burden as more of the medium and long-term costs fall upon middle aged and young adults. It creates too little fiscal resiliency for the next crisis if it is not addressed with (i) a firm commitment to a fiscal anchor and (ii) setting out clear guideposts for monitoring and assessing fiscal progress.

The need for a meaningful fiscal anchor and guardrails over the medium and long term does not mean that fiscal policy should become restrictive in the transition phase. Canada needs to avoid the post-GFC policy mistake of tightening too soon as well as Japan's economic struggles each time it has tried major tax increases since the 1990s. Yet, caution is recommended to avoid (i) relying excessively

on demand stimulus and (ii) not incorporating buffers and other precautionary aspects to deal with known unknowns and unknown unknowns. Prudent policy risk management includes humility³⁴ about the risks and uncertainties in managing the exit from emergency programs and in dealing with structural supply-side problems that predate the pandemic. It also means not being dependent upon optimistic forecasts.

There is a clear and legitimate case that the combined fiscal and monetary stimulus is excessive in mid 2021, and has been since potentially late 2020.³⁵ Employment data in June and July 2021 and upgraded BoC, Federal Budget and private sector forecasts attest to a faster and stronger economic rebound than anticipated in 2020, with the BoC projecting that Canada's real GDP will reach pre-COVID levels over the course of 2021. Yet, there is no firm plan in place to decrease deficits in future, only the notional brief Budget commitment to reduce the federal debt-to-GDP over the medium term. No strong commitment to a fiscal anchor is stated, nor is a comprehensive set of economic indicators set out as guardrails to guide fiscal policy changes (modest guardrails were consigned to a brief side-bar box in the Budget). This absence is all the more striking for several reasons.³⁶ Canada has not run a sustained budget surplus since before the GFC and racked up more debt last fiscal year than the total of the previous 30 years. The stark reality is that the pandemic's fiscal support has been paid for with a one-time step-up in debt-to-GDP from the 30% area to the 50%-plus area, or 20-plus percentage points of GDP.

Over the past five decades, unknown unknowns from external shocks (e.g., oil price surges and plunges, the GFC) have had jarring and lengthy impacts on Canada's economy, and government debt and deficits. Major domestic shocks have occurred such as Canada's debt crisis in the mid 1990s after decades of a structural mismatch in government spending versus revenues, and far weaker real growth and productivity increases than projected. Most recently, COVID-19 and climate change events (e.g., the extreme temperatures in western Canada in mid 2021) have had devastating effects where fiscal support has been and will continue to be vital.

Inflation, inflation expectations and interest rates

With the economy, deficit and debt highly dependent upon the levels and paths of inflation and interest rates, these known unknowns will have decisive impacts and merit a much closer look. As previously noted, modestly higher inflation will help Canada's deficit and debt levels and help increase jobs and wages. The strategic issue for Canada's transition and sustainable path phases, however, is whether the mid-2021 rise in inflation above 2% will be a temporary development or the beginning of a medium-to-longer term trend of 3%-plus.

For fiscal policy, inflation expectations in financial and labour markets are critical. After four decades of falling or minimal inflation, the BoC, US Federal Reserve Board (Fed) and other central banks have robust credibility with investors. Importantly, through mid 2021, nominal interest rates have not risen despite significant negative real yields because (i) most investors' inflation expectations remain well anchored and (ii) the massive QE by the BoC, Fed and European Central Bank has absorbed enormous new issue volumes of government debt. For their part, workers' wage demands overall have been well contained to date despite significant imbalances from the excess demand for skilled and unskilled labour in mid 2021. Whether financial markets and workers' inflation expectations will stay subdued is the fundamental question. Not surprisingly, the jump in reported inflation this spring provoked intense debate about inflation and inflation expectations, as did the substantial rise in yields during early 2021.

Advocates of a transitory increase in inflation contend that the price indices' base effects will reverse by year-end or early 2022. Reported inflation numbers in mid 2021 vs. one year ago overstate price pressures given the depressed spring and summer 2020 base levels for year-over-year changes. Sustained low-inflation proponents stress that large-size, supply-demand imbalances in 2020 through mid 2021 are inevitable but temporary, as demand changes occur so much faster than supply. These imbalances have been magnified by COVID-19's global and domestic supply chain disruptions, excess current demand for goods from huge macroeconomic stimulus and, more recently, pent-up demand for services. They note that commodities such as

copper and lumber, which soared in 2020 and early 2021, plunged in mid 2021, and interest rates mid-year have retraced most of their increases earlier in 2021. They stress technology's ongoing downward pressure on inflation and continuing ascendancy of capital-light industries with their much lower machinery and equipment and plant needs as being secular trends. COVID-19's acceleration of technology use and adoption further reinforce the ongoing market power of "Big Tech" and of disruption in keeping a lid on wages and prices.

Critics of the transitory view of inflation warn of central bank and government complacency. They point to significantly higher three-month price trends in mid 2021 that are not subject to year-over-year base effect distortions that are flashing warning signals (Chart 10). These proponents look at key supply chain component and transportation bottlenecks such as semi-conductors, port capacity and shipping containers that affect a broad range of industries, and where high costs and/or inadequate supply are expected at minimum until well into 2022. Macroeconomic policy is also fundamentally different. Massive Canadian and global fiscal and monetary support has been far greater during COVID-19 than during, and especially after, the GFC. Post-GFC inflation was also severely constrained by involuntary deleveraging in the US and much of Europe from huge debt excesses incurred prior to 2007. That pervasive, multi-year debt headwind, post-GFC, is being significantly muted in the transition phase by continuing huge fiscal and monetary support. (This near-term containment likely increases the medium and long-

term risks of this even larger than post-GFC corporate and household debt overhang.) Higher inflation proponents focus upon intensifying labour market pressures given the excess bid for highly-skilled workers relative to their supply in the technology, finance and skilled trades sectors. These pressures reflect a demand-supply mismatch that predates COVID-19, but has worsened with the pandemic (although the resumption of significant immigration will relieve some of these pressures from 2022 onward).

Other supporters of the higher future inflation view point to sweeping changes in the world economy. They forecast (i) the structural reversal of the excess global labour supply, (ii) lesser globalization of production, and (iii) a pending end to the oversupply of global savings that characterized the 1980s through 2010s.³⁷ Climate change will raise prices this decade due to negative supply shocks (e.g., extreme heat and cold waves) and because of mitigation and adaptation investments (e.g., fighting forest fires, and improving power grid resilience). These trends' inflation-boosting impacts will unfold during the transition and sustainable path phases, creating a higher base of inflation in sharp contrast to the disinflation of the past four decades.

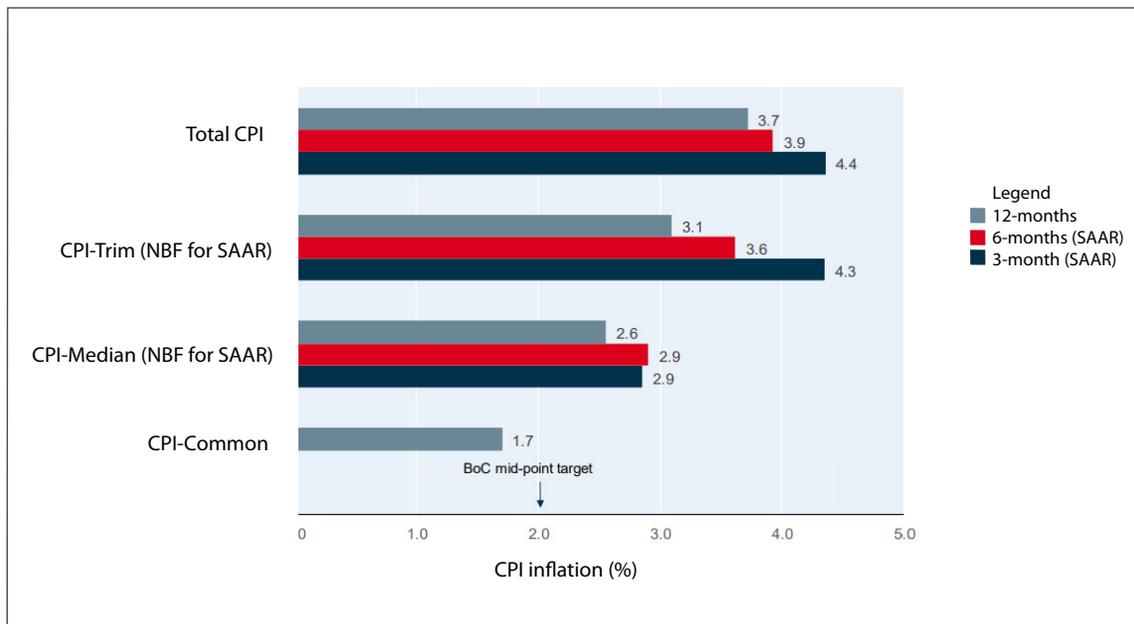
The known unknown of monetary policy's path in unwinding the enormous QE and credit easing (CE), and normalizing interest rates from near-zero levels, remains a critical risk. The BoC has ended or significantly curtailed its CE programs, and, at a slower pace, reduced its QE purchases of Canada bonds from \$5 billion weekly a year

ago to \$2 billion in mid 2021. For its part, the Fed has begun discussing when and how to “taper” its CE and QE. Both the BoC and the Fed have accelerated their forecast timing of future policy interest rate increases despite maintaining their strong, clearly stated views that inflation’s mid-2021 rise will be transitory.

Fiscal policy prudence involves recognizing that the BoC and the Fed have a narrow and difficult path to navigate as they wind down QE and CE and, later on, move policy interest rates upward. Monetary policy’s strategic and tactical

challenges include communication and implementation issues as they reverse their easing and/or tighten (or give credible warnings of doing so). The BoC and Fed have to keep allaying fears about inflation, and avoid a market-driven rise in longer-term government bond yields and downward currency pressures. Yet, implementing this policy approach must not be so disruptive as to cause currently very low credit spreads to rise significantly and to create distress in the indebted household and corporate sectors.

Chart 10: Canada: Core inflation indices (3, 6 and 12-month trends as of July 2021).



Source: National Bank of Canada Financial Markets; data from Statistics Canada.

In sum, the key known unknowns of inflation, inflation expectations and interest rates raise a fundamental question of prudence for fiscal policymakers: Why leave Canada so exposed to inflation and interest rate risks? In the past, Canadian interest rates have often been higher than Canada’s nominal GDP growth. Indeed, the roots of Canada’s debt crisis in the 1990s began with large federal deficits in the 1970s when federal bond yields were lower than GDP growth for a number of years.³⁸

Canada’s policy risk management should reflect the uncertainty and risks of these critical known unknowns as well as the large fiscal role and significant challenges facing provincial governments. Canada’s fiscal reality is that the combined federal and provincial debt in mid-2021 is in the range of 100-110% of GDP, with national fiscal policy having more future scope for deficit and debt reduction than that of the provinces. Robustness and resiliency include meaningful fiscal guideposts and a firm medium-term anchor for Canada at the national level far below the

current 50% debt-to-GDP area in both the transition and sustainable path phases. In considering Canada's fiscal approach in mid 2021 and beyond, it is worth remembering that Canada's policy room to provide huge fiscal support during the pandemic was a function of its debt-to-GDP levels being in the 30% range prior to COVID-19.

Towards a Genuinely Sustainable Path

Looking ahead, Canada will neither achieve a sustainable fiscal path nor transition to much better growth and more inclusive prosperity without structural improvements in healthcare and far-reaching climate change mitigation and adaptation. While a comprehensive, in-depth review of these multi-faceted policy challenges is beyond this paper, several cornerstone elements merit comment starting with the risks to government credit ratings in Canada and higher future borrowing costs from both an aging population and climate change impacts.³⁹

Health care

Canada entered the pandemic with severe healthcare system pressures from the increasing intensity of healthcare use, growing needs of an aging population and major capacity shortfalls. COVID-19 created immense new strains on front-line workers, hospitals, and supply chains, and slammed the system's capacity to deal with non-coronavirus medical needs. Addressing the longstanding healthcare problems that the pandemic exacerbated and new issues that COVID-19 caused and revealed is paramount for health, social and fiscal policy. Healthcare spending comprises roughly 40% of provincial budgets, healthcare costs consistently exceed CPI inflation, and federal-provincial healthcare transfers have not kept pace with spending needs.⁴⁰ The fiscal urgency to address these healthcare issues is increasing given the higher future medical spending necessary to deal with far more severe heat waves and other major climate events.⁴¹

Fundamental policy changes start with reimagining and redesigning healthcare through much greater digitization and adoption of other tech applications that proved so valuable during the pandemic. These and other initiatives (e.g., better supply chain management) are pre-requisites to contain upward secular pressures on healthcare spending

while improving patient care. Reduced vulnerability to new COVID-19 strains and future pandemics is also critical to fiscal policy specifically and the economy, healthcare and social equity generally. Achieving this resilience starts with planning and implementing measures to contain the spread of the Delta variant, better manage future outbreaks from new COVID-19 variants, and prepare for other future global viruses.⁴² It starts with far better testing and tracing capabilities as well as improved communications. It includes increased surge capacities in healthcare to deal with outbreaks, more rapid prototype treatments and domestic vaccine manufacturing capacity.

Climate change mitigation and adaptation

Canada has witnessed unprecedented heat events in mid 2021, continuing an escalating pattern of the past decade of weather extremes due to climate change that also included unprecedented flooding, storms and wind events. The scale of the climate change challenges and existential economic, health and social equity threats they pose make fiscal policy central to Canada's policy design and implementation of climate change mitigation and adaptation.

The scale and scope of expenditures by governments to accelerate the economy's adaptation to climate change and to mitigate domestic causes propelling increased climate problems warrant highlighting. Beyond the enormous spending required to achieve a sustainable climate change mitigation path, regulatory frameworks and tax incentives will decisively shape the adaptation of transit, power grids and hospitals, and help support greener private sector activities. Success will depend upon meaningful coordination across all three government levels to maximize the effectiveness of energy use changes, minimize the transition costs of stranded assets, promote climate-friendly new investments, and assist low-income households' shift toward climate-friendly energy consumption. There is also the risk of potential inflation pressures as carbon taxes and other initiatives are implemented. Absent effective government coordination, design and implementation, much less climate change mitigation and adaptation will occur, and unnecessary economic costs could generate far greater fiscal pressures and policy constraints.

CONCLUSION

As Canada begins its transition from the pandemic, albeit with the timing and pace subject to the risks and uncertainties of the Delta variant, greater balance in fiscal policy mid 2021 onward is strongly recommended. Much greater support for the supply side is vital given the dominance of demand stimulus in fiscal policy during the pandemic. Improved policies and more support for business investment, infrastructure, reskilling and retraining should be core fiscal priorities. They are crucial to increased resilience and robustness via more durable growth to meet fiscal targets, help address social inclusiveness, and create greater capacity to absorb and manage the next shock.

Improved fiscal policy should include a strong commitment to a medium and long-term fiscal anchor. Economies are complex, adaptive systems, and prudent fiscal policy management includes reflecting the limits to forecasting accuracy. A more balanced fiscal policy for Canada will include flexibility and buffers given the potential risks of known unknowns (inflation and interest rates) and inevitable occurrence of unknown unknowns.

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ENDNOTES

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