

## THREE POLICY PATHWAYS FOR FEDERAL HEALTH-CARE FUNDING IN CANADA

Daniel Béland and Trevor Tombe<sup>†</sup>

### SUMMARY

The strains that the COVID-19 pandemic has placed on Canada's health-care system, coupled with the premiers' resultant calls for a massive expansion of the Canada Health Transfer (CHT), require improvements to health-care funding. This paper examines three potential pathways federal policy-makers could consider in drafting proposals for funding improvements.

One option is to keep the status quo and preserve the CHT as it is. A second option involves incremental demographic adjustments to boost the CHT as populations age. Third, a joint federal-provincial-territorial taxation regime could be created which would transform the funding system, but could pose challenges to implement. These options offer policy-makers a means to take into consideration both citizens' concerns about the health-care system and the demands of provincial and territorial governments.

None of these pathways is mutually exclusive; they can be combined in various ways as well. Nor does any new policy need to focus solely on the CHT. Decision-makers should always be open to alternative policy designs. They also need to consider that the status quo is acceptable too, as provincial and territorial governments have the necessary taxation powers and fiscal ability to cover additional health-care costs, even with a projected increase in spending from 7.5 per cent of GDP in 2019 to 9.5 per cent by 2050.

While large transfers of funds from the federal government to the provinces and territories are disconnected from health program costs, they address the

<sup>†</sup> The authors thank Pierre-Gerlier Forest, Tom McIntosh and the anonymous reviewers for their comments and suggestions.

spillover costs between provinces created by factors such as retirees disproportionately moving to British Columbia or the Atlantic Provinces. The decade of 2009 to 2019 saw 171,000 Canadians aged 65 and over move to a different province, with one-quarter of those going to British Columbia. With average annual health-care costs of that demographic pegged at \$12,000 per person, these moves created a net fiscal cost of almost \$150 million annually for B.C. This could be dealt with by increasing the CHT so that it is indexed to an aging population. Making this indexing province-specific is a further option, which would mean that provinces with more rapidly aging populations, such as Newfoundland and Labrador, would see faster CHT growth.

The final option, a jointly governed regime could possibly eliminate the CHT and use, for example, the 15 per cent federal corporate tax for health-care funding, distributing the revenues through an agreed-upon allocation arrangement.

Apart from the status-quo option, the other two potential policies face challenges in implementation, but these challenges can be resolved through dialogue between the federal government and the provinces and territories. The premiers whose provincial health-care systems suffered the most during the COVID-19 surges want more money to shore up those systems, not only because of the demands the pandemic placed on health care, but also because of the rising costs created by the baby boomers moving into their senior years and requiring more health care.

Policy-makers need to carefully consider these three options to find the best funding model which will enable governments to not only deal with the boomers' demographic bulge, but also be prepared for the next pandemic.

# TROIS VOIES POLITIQUES POUR LE FINANCEMENT FÉDÉRAL DES SOINS DE SANTÉ AU CANADA

Daniel Béland et Trevor Tombe<sup>†</sup>

## RÉSUMÉ

Les pressions que la pandémie de COVID-19 a imposées au système de santé du Canada, jumelées aux appels des premiers ministres pour une expansion massive du Transfert canadien en matière de santé (TCS), ont fait voir le besoin d'améliorer le financement des soins de santé. Le présent document examine trois voies que les décideurs fédéraux pourraient envisager au moment de formuler des propositions d'amélioration pour le financement.

Une des options consiste à maintenir le statu quo et à préserver le TCS tel quel. Une deuxième option met en jeu des ajustements démographiques progressifs pour augmenter le TCS à mesure que les populations vieillissent. En troisième lieu, un régime fiscal conjoint fédéral-provincial-territorial pourrait être créé, ce qui transformerait le système de financement, mais poserait défi quant à la mise en œuvre. Ces options permettent aux décideurs de tenir compte à la fois des préoccupations des citoyens concernant le système de santé et des demandes des gouvernements provinciaux et territoriaux.

Ces trois voies ne sont pas incompatibles; elles peuvent d'ailleurs se combiner de diverses manières. Aucune nouvelle politique ne devrait non plus se concentrer uniquement sur le TCS. Les décideurs doivent toujours se montrer ouverts à de nouvelles idées. Ils doivent aussi tenir compte du fait que le statu quo est acceptable, car les gouvernements provinciaux et territoriaux ont les pouvoirs de taxation et la capacité fiscale nécessaires pour couvrir les coûts supplémentaires des soins de santé, et ce, même avec une augmentation prévue des dépenses de 7,5 % du PIB en 2019 à 9,5 % d'ici 2050.

Alors que les importants transferts de fonds du gouvernement fédéral aux provinces et aux territoires sont déconnectés des coûts des programmes de santé, ils tiennent compte des coûts de débordement entre les provinces créés par des facteurs tels que le déplacement disproportionné de retraités vers la Colombie-Britannique ou les provinces de l'Atlantique. Ainsi, de 2009 à 2019, 171 000 Canadiens âgés de 65 ans et plus ont déménagé dans une autre province, dont le quart en Colombie-Britannique. Avec un coût annuel moyen de soins de santé fixé à 12 000 \$ par personne pour ce groupe démographique, les déménagements ont entraîné un coût fiscal net de près

de 150 millions de dollars par an pour la Colombie-Britannique. On pourrait y remédier en augmentant le TCS afin qu'il soit indexé à une population vieillissante. Rendre cette indexation propre à chaque province est une autre possibilité. Ainsi, les provinces dont la population vieillit plus rapidement, comme Terre-Neuve-et-Labrador, connaîtraient une croissance plus rapide du TCS.

La dernière option - un régime administré conjointement - pourrait éventuellement permettre d'éliminer le TCS et d'employer, par exemple, l'impôt fédéral sur les sociétés de 15 % pour financer des soins de santé, en distribuant le revenu selon un accord de répartition convenu.

L'option du statu quo mise à part, les deux autres voies politiques font face au défi de la mise en œuvre, mais on peut y remédier grâce au dialogue entre le gouvernement fédéral, les provinces et les territoires. Les premiers ministres provinciaux dont les systèmes de santé ont le plus souffert des vagues successives de COVID-19 veulent plus d'argent pour consolider les systèmes, non seulement en raison des exigences que la pandémie a imposées aux soins de santé, mais aussi en raison de la hausse des coûts entraînée par le vieillissement des baby-boomers qui nécessitent plus de services de santé.

Les décideurs politiques doivent examiner attentivement ces trois options afin de trouver le meilleur modèle de financement qui permettra aux gouvernements non seulement de faire face à l'explosion démographique des baby-boomers, mais aussi de se préparer à la prochaine pandémie.

---

† Les auteurs remercient Pierre-Gerlier Forest, Tom McIntosh et les examinateurs anonymes pour leurs commentaires et suggestions.

## **GENERAL INTRODUCTION**

In 2017, the federal government took a new approach to that taken in the early 2000s to move forward on health system priorities. The government worked with the provinces and territories (PTs) to identify shared health priorities for federal investments, develop common areas of action within these priorities through an FPT framework, and then negotiated bilateral agreements with each PT. COVID-19 has highlighted the need for resilient health care systems that will continue meet the needs of Canadians today and in the future.

It is in this context that in April 2021, the School of Public Policy convened a group of health policy experts to develop research papers on various aspects of the evolution of health care in consultation with Health Canada. These experts have a diverse range of perspectives on issues related to Canadian health systems. Health Canada was consulted on the list of topics, but the orientation of each paper, the methodology, as well as the substance of the recommendations were left entirely to the discretion of the authors.

We are proud to share the result of this process. Each paper in this series of eight was subject to the intense scrutiny, and discussed extensively following detailed roundtable presentations. Two eminent health policy experts were also asked to conduct a careful double-blind review of the papers, with a special focus on rigor, readability, and relevance. We believe these policy briefs offer a rare combination of original thinking, deep subject expertise, and technical feasibility: a perfect balance between the very practical needs of the end users of the research and the independent and innovative spirit that pervades all the work originating from the School of Public Policy.

## INTRODUCTION

Canadians have long considered health care as one of the most central policy issues facing the country, something that remains true in the aftermath of the COVID-19 pandemic (Angus Reid Institute 2021). Simultaneously, accelerating population aging and increasing health-care costs are exacerbating fiscal pressures on provincial and territorial governments. In this context, premiers have long asked the federal government to increase health-related transfers to the provinces and territories (McIntosh 2021).

As we suggest in this paper, although the provinces and territories are in charge of health-care delivery, the fiscal role of the federal government in health care has proved essential since the 1950s and 1960s, when what we know today as medicare emerged. While federal funding has shaped the development of provincial and territorial medicare since the beginning, today it remains a crucial aspect of Canada's health systems.

In this paper, after briefly reviewing the evolution of federal health-care funding in Canada since the 1950s, we formulate three potential pathways that federal policy-makers could consider. These pathways should allow policy-makers to consider how to adapt to changing circumstances while addressing citizens' concerns and the demands of provincial/territorial governments. We do not support one or another of these policy pathways; instead, we explain what they are and what impact they could have, leaving the reader to decide what option they prefer.

The first pathway is the status quo, which simply preserves the Canada Health Transfer (CHT) as is. Explaining what the status quo entails is important to gauge the potential impact of the two other pathways we formulate, which depart from the status quo in a significant manner: first, the implementation of demographic adjustments that add to CHT as populations age and second, the creation of a joint federal-provincial-territorial taxation regime. While the second option would constitute a form of incremental change, the third option would be transformative and therefore more challenging to implement. However, that is not a reason to exclude it for consideration, especially if we take a longer term view of potential policy change in fiscal federalism.

We focus on only three potential pathways because we wanted to compare policy designs instead of discussing more technical issues such as alternative rates of yearly increases for CHT payments. This attention to the big picture and broad policy instruments (i.e., programs) also justifies the fact that this paper does not understand federal health care transfers separately from other fiscal issues ranging from equalization to taxation. In the end, what is at stake here is how to help provinces and territories operate and improve Canada's health-care arrangements in ways that will meet the demands of citizens, who truly care about health care. Instead of being fixated on the CHT, we explore potential alternatives, but we also understand and depict it in the broader context of both federalism and fiscal policy in Canada.

## HISTORICAL CONTEXT

Federal transfers in support of health systems in Canada have a long history. There were several early federal programs supporting hospital construction, professional training, mental health, tuberculosis control, public health and so on, through the 1948 National Health Grants. But ongoing and open-ended federal government health financing began in 1957 with the advent of the *Hospital Insurance and Diagnostic Services Act* (HIDSA), “which offered to reimburse, or cost share, one-half of provincial and territorial costs for specified hospital and diagnostic services. This Act provided for publicly administered universal coverage for a specific set of services under uniform terms and conditions” (Government of Canada 2019). This federal fiscal commitment provided an incentive for the territories and most provinces that had yet to implement a hospital insurance system in their jurisdiction to do so. Thanks in large part to HIDSA’s existence, by the early 1960s, all the provinces and territories operated such a system.

The success of this approach and a favourable political context during the Lester B. Pearson minority government led to the enactment in 1966 of the *Medical Care Act* (MCA). The act extended the federal reimbursement of one-half of provincial and territorial costs to the area of doctors’ services only four years after Saskatchewan became the first province to offer universal coverage under what became known as medicare (Maioni 1998). By the early 1970s, once again largely because of the advent of federal matching funding tied to national standards, all the provinces and territories had created their own medicare programs, which made medical coverage universal from coast to coast to coast (Canada 2019). The adoption of HIDSA and the MCA, and the fact that both initiatives helped convince many provinces and territories to adopt hospital insurance and medical insurance, suggest that the federal government’s financial involvement is constitutive of medicare. This is the case because, early on, federal funding shaped the development of these systems (Béland, Lecours, Marchildon, Mou and Olfert 2017).

In terms of policy design, what was specific about federal health-care financing as it emerged after the adoption of both HIDSA and MCA, is a logic of match funding according to which Ottawa agreed to cover half of provincial and territorial costs of specific hospital and medical services. Yet, in 1977, barely a decade after the MCA’s enactment, the *Established Programs Financing Act*<sup>1</sup> (EPF) crucially shifted federal health-care financing from match funding to block funding. While match funding means that the federal government covers a certain portion (usually 50 per cent) of actual provincial and territorial spending in an area, block funding means that a predetermined sum of federal money is allocated each year to the provinces and territories for a specific purpose, independently from how much these jurisdictions spend (Canada 2019). For the federal government, block funding has a clear budgetary advantage, as it makes fiscal federalism a more predictable arena in which Ottawa can cap yearly spending and control annual increases. In a match funding system, by contrast, provinces and territories implicitly set the level of federal spending.

---

<sup>1</sup> *Federal-Provincial Fiscal Arrangements and Established Programs Financing Act, 1977. S.C. 1976-77, c. 10, s. 27(8).*

While it is well known that EPF's adoption in 1977 led to a dramatic reduction of the share of direct federal funding in health care, one should note that beyond the shift to block funding, EPF came with an important transfer of tax points from Ottawa to the provinces and territories. Such a transfer involves Ottawa lowering its tax rates while the provinces and territories increase theirs. With EPF specifically, it "was made up of roughly equal parts cash [block funding] and tax point transfer. The tax point transfers were 13.5% of federal personal income tax and 1% of federal corporate income tax" (Mou 2021, 2). Meant to increase provincial and territorial fiscal autonomy, this large transfer of tax points increased substantially the fiscal capacity of the provinces and territories, something that is sometimes lost in today's political rhetoric about the decline of direct federal health-care funding post-1977. Indeed, roughly half of the total transfer to provinces under this program was in the form of tax points at the time (Canada 1979, 34-12). Over time, the value of cash transfers increased relative to tax points. Today, they would be valued at approximately 13 per cent of total provincial health expenditures (Naylor et al. 2020), which would put the cash plus tax point value of federal transfers today at over one-third.

If the advent of EPF increased provincial and territorial fiscal autonomy, it would end up complicating the enforcement of federal standards in health care. This is the case because, after 1977, "some provincial governments permitted some hospitals and physicians to increase existing fees or impose new direct charges to patients, thereby creating barriers to access" (Béland, Lecours, Marchildon, Mou and Olfert 2017, 94-95). This situation, and the political debate surrounding it, led to the enactment of the *Canada Health Act* (CHA) in 1984. Although this legislation did not alter the block funding approach adopted as part of EPF, the CHA enumerated five broad principles (universality, comprehensiveness, accessibility, portability and public administration) under which the provinces and territories can access federal health-care transfers while ensuring "that all eligible residents of Canada have reasonable access to insured health services on a prepaid basis, without direct charges at the point of service for such services" (Canada 2020).

In 1995, in the context of a push to balance the federal budget, the federal government replaced both EPF and the Canada Assistance Plan with the Canada Health and Social Transfer (CHST), which, like EPF, featured a mix of tax point transfer and block grant transfer that led to a major reduction in direct federal support for provincial and territorial health-care financing (Béland, Lecours, Marchildon, Mou and Olfert 2017, 95). The provinces and territories resented this unilateral shift in federal health-care financing and, as large federal budget surpluses started to materialize, the political pressures on Ottawa to increase its direct fiscal support for principal and territorial health care increased. This became obvious in the 2002 report of the Royal Commission on the Future of Health Care in Canada, headed by former Saskatchewan premier Roy Romanow. In 2003, the Canada Health and Social Transfer (CHST) was divided into the Canada Health Transfer (CHT) and the Canada Social Transfer (CST) and, the following year, the 10-Year Plan to Strengthen Health Care, shepherded by then-prime minister Paul Martin increased federal funding for health care through a six per cent yearly escalator while making block grant payments to the provinces and territories more predictable than before (Béland, Lecours, Marchildon, Mou and Olfert 2017, 95).



Over the last decade, several changes in federal health-care financing took place. First, in late 2011, “Prime Minister Harper announced that starting in 2017-18 the cash portion of the total CHT would grow in line with a three-year moving average of nominal GDP, with a floor of 3% per year” (Mou 2021, 2). This meant the end of the more generous automatic six per cent escalator adopted back in 2004. The Harper government also revised the way in which per capita CHT provincial and territorial payments are calculated, moving it to an equal per capita transfer that advantaged Alberta and Ontario. Second, under the subsequent Trudeau government (2015–2016), after intergovernmental negotiations failed to generate a general health-care accord, Ottawa decided to keep the yearly escalator adopted under the Harper government. Simultaneously, the Trudeau government struck bilateral agreements with the provinces and territories that “offered an additional \$11.5 billion in the 10 years starting from 2017-18 targeted to improve home and community care, mental health and addiction services” (Mou 2021, 3). This additional money did not prevent the provinces and the territories from requesting an unconditional expansion of the CHT, a push that became even stronger in the aftermath of the COVID-19 crisis. While asking for a permanent and unconditional \$28 billion increase in the CHT above and beyond the \$43 billion already allocated for 2021–2022, the premiers have not been clear about how they would spend all this extra money. This raises a number of legitimate policy and political questions about what observers such as Tom McIntosh (2021) call a “bargaining chip” on the part of these premiers, who seek to use the pandemic, which has already led Ottawa to provide temporary emergency health-care funding to the provinces and territories, to grant a permanent and massive expansion of CHT.

In addition to CHT, emergency funding and bilateral agreements, the provinces and territories can use other transfers to finance their health-care expenditures. In the case of receiving provinces, this is the federal equalization program, which has no strings attached, meaning that these provinces can use the money for any purpose, including health-care financing. The same remark applies to territorial formula financing (TFF), to which the three territories are entitled. Because provincial equalization, in contrast to TFF, only grants payments to poorer jurisdictions where fiscal capacity (i.e., their capacity to raise their own revenue in key taxation areas) falls below the national average, the program currently only transfers money to five provinces: Manitoba, Quebec, New Brunswick, Prince Edward Island and Nova Scotia. Yet, it is important to note that several other provinces might qualify for equalization payments again soon and that the overall size of equalization payments is less than half the size of CHT, which allocates per capita payments to all provinces and territories, regardless of their fiscal capacity.

## **CURRENT CHALLENGES**

The above historical narrative makes it clear that fiscal arrangements in Canada regularly adapt to changing economic, social and political circumstances. Health transfers are no different. Understanding the challenges health financing arrangements currently face and potential future developments is critical to evaluating whether potential reforms are needed and, if so, what form they take. Some of the main

challenges that Canada's system of intergovernmental health transfers will confront, but is potentially not yet fully prepared for, include an aging population, long-run sustainability of subnational government finances and the lasting impacts of COVID-19. To be sure, there are many opportunities and challenges facing health-care systems in Canada. The goal of this paper is not to provide a systematic review of individual health-care expenditure components, from hospital care to drug expenditures, but to focus on overall expenditures on health by provincial and territorial governments.

## AN AGING POPULATION

Canada's population is aging rapidly and this will continue for several decades. Approximately one in eight Canadians was over age 65 in 2000, compared to more than one in six today. And according to the latest population projections from Statistics Canada (2019), roughly one in four will be over age 65 by 2050. In addition, and potentially more significant for health-care systems, one in 10 may be aged 80 and over by 2050 — more than double the current population share accounted for by this group. This accelerated population aging may have important implications for health-care systems due to rising demands for services and indirect implications for health transfers due to slower rates of economic growth.

Consider first the direct effects. As average per capita health expenditures increase with age, an aging population may increase overall health spending. The latest data from the Canadian Institute for Health Information (CIHI) (2020) estimate provincial and territorial government public health spending approached \$12,000 per person for those aged 65 and over in 2018, compared to between \$2,000–\$3,000 per year on average for those aged 20 to 49. And for individuals over age 80, average annual expenditures exceed \$21,000 per year. To quantify the implications of this aging for overall health expenditures, consider the population-age-weighted average health expenditures  $\sum_c h^c p^c$ , where  $h^c$  is the average per person spending within age cohort  $c$  and  $p^c$  is the population share accounted for by that cohort. As populations age, the share accounted for by high-cost cohorts will increase and the share for lower cost cohorts will decrease. Combining CIHI's data with Statistics Canada projections suggests overall health-care cost increases of over 21 per cent by 2050 compared to 2021—equivalent to roughly \$1,000 per capita in today's dollars or nearly \$40 billion per year. Managing this potential increase will be a core challenge for Canada's system of health financing.

To be clear, it is not inevitable that population aging increases provincial health expenditures. In fact, Williams et al. (2019) find evidence that population aging is not an important driver of health expenditure growth and that it is unlikely to be. This conclusion does not suggest policy choices matter little, however, as such choices influence the extent to which aging affects health expenditures. Thus, ensuring provincial governments are incentivized to explore health-care innovations and adopt demographically robust health policies is an important consideration when designing fiscal transfers. Indexing to the national average expenditures by age cohort  $h^c$  would largely ensure this. In addition, to the extent that health spending rises less with aging than mechanically anticipated, it would be reflected in a flattening of the  $h^c$  curve and

therefore result in slower federal health transfer growth. An alternative interpretation of our projection of future health-care expenditures is that they reflect the magnitude of the demographic challenge in the absence of policy or system changes. Continual improvements and innovations may very well decouple population aging from expenditure growth, but the magnitude of necessary improvements will be larger in the coming decades than in recent history. A comprehensive examination of the implications of population aging on health spending is beyond the scope of this paper but is an important caveat to the analysis that follows.

Regardless of how the direct effects of aging materialize, indirect effects may also be significant. As discussed, Canada's CHT is currently indexed to a three-year moving average of national economic growth rates. A growth rate of approximately 3.7 to 3.8 per cent per year appears reasonable. Population aging means this rate is lower than it would otherwise have been due to a shrinking labour force participation rate among Canadians. Indeed, the Statistics Canada projection described earlier suggests the working-age share of Canada's population is set to decline by five percentage points over the next three decades. This represents an average drag on economic growth equivalent to 0.3 percentage points per year. By 2050, the cumulative effect of this will be an economy — and therefore health transfers — seven per cent smaller than if there were no population aging. In today's dollars, this is equivalent to approximately \$5 billion smaller health transfers to provincial and territorial governments. Slower transfer growth may therefore compound provincial fiscal pressures in Canada.

## **FISCAL SUSTAINABILITY AND REGIONAL INEQUALITY**

Aggregate challenges to manage and finance health care in Canada mask important differences across regions. This raises both equity and economic efficiency concerns. Highly indebted provinces with the lowest fiscal capacity also face the prospect of more rapidly aging populations. Building on the long-run analysis of Trevor Tombe (2020), we find that the five provinces with the lowest projected future health-care cost pressures are British Columbia, Alberta, Saskatchewan and Ontario. These four provinces are projected to have lower health expenditures equivalent to roughly three to four per cent of GDP less than the Atlantic Provinces, Quebec and Manitoba. This is a significant difference. In addition, these provinces, and Newfoundland and Labrador in particular, also have the highest current levels of public debt and higher than average current rates of taxation. Increasing public revenues to cover rising health expenditures will be difficult, potentially inequitable, and may further complicate these provinces' long-run economic prospects. To some extent, equalization will provide support to provinces with lower levels of fiscal capacity — but this program alone is insufficient, especially for Newfoundland and Labrador, which currently does not qualify for payments. To the extent that younger individuals move out of these regions to find work and then older individuals move back in after retirement, there may be scope for additional federal financial support or for a reformed approach to allocating and growing health transfers — a subject to which we will turn shortly.

## **COVID-19 AND THE CANADA HEALTH TRANSFER**

While COVID-19 has posed a challenge for many fiscal arrangements in Canada, one may be concerned that it also constitutes a challenge for the CHT. Yet, interestingly, the economic disruptions from the pandemic will permanently and automatically enlarge the size of the CHT and help improve provincial financial situations in the long run. The intuition for this is straightforward. The CHT annual growth increment is tied to a three-year moving average of Canada's national growth in its nominal gross domestic product, subject to a three per cent floor. With Canada's GDP contracting significantly in 2020, followed by a period of above-average recovery growth rates, the CHT growth floor will bind until the 2023/24 payments are determined. At this point, the large 2020 contraction will be excluded, and the large recovery growth rates will ensure the CHT growth well exceeds its three per cent floor. We estimate that by 2027/28 the total size of the CHT will be approximately five per cent (or \$2.5 billion) larger than it would have otherwise been that year. In 2019 dollars, this increase is equivalent to \$55 per person. This is not trivial. In effect, it represents an increase equivalent to over one per cent of provincial and territorial health-care spending. This single change alone will offset approximately one-quarter of the projected decline in CHT relative to health expenditures by 2050.

At the same time, it is crucial to acknowledge that the COVID-19 crisis has drawn attention to the shortcomings of provincial and territorial long-term care policies, which fall largely beyond the scope of the CHT. Pressures are strong for the provinces and the territories to improve these policies, which has led to calls for increased federal funding to support them post-COVID. Although the present paper does not focus on long-term care, it is important to keep this issue in mind when we talk about the future of health-care funding in Canada, especially considering the ongoing debate about whether additional federal money should come with strings attached, in the form of national standards for long-term care (Béland and Marier 2020).

## **REFORMING THE CANADA HEALTH TRANSFER**

Considering the challenges detailed in the previous section, especially population aging and differential effects across provinces, we explore three potential reform pathways and evaluate their strengths and weaknesses.

### **OPTION 1: STATUS QUO**

The Canada Health Transfer has evolved into a simple, transparent and predictable source of financial support for the provinces and territories. Keeping the current arrangements in place is a seemingly legitimate option for the federal government. While rising health costs from an aging population will pressure provincial and territorial governments, they (in principle) have sufficient taxation powers and fiscal capacity to cover these additional costs.

Our baseline analysis projects an increase in total provincial and territorial health spending from nearly 7.5 per cent of GDP in 2019 to 9.5 per cent by 2050.<sup>2</sup> This is a conservative estimate relative to some others, but still represents a significant increase in costs. Covering this projected fiscal challenge can feasibly involve effort both on the expenditure side and the revenue side. Consider efforts to restrain health expenditure growth to inflation, population growth, population aging and only a 0.5 per cent per year health-care-specific incremental cost increase over and above inflation (down from our baseline of one per cent). This restraint is substantial and alone would maintain overall health expenditures as a share of GDP around eight per cent by 2050 and gradually falling thereafter. Consider next the efforts on the revenue side. Increasing revenues by an amount equivalent to two per cent of GDP is equivalent to approximately 6.5 GST points. This is large, but manageable. Moreover, in terms of overall aggregate economic efficiency, there is only a modest difference between provincial governments levying such taxes and the federal government. In fact, to the extent that provinces opt for harmonized approaches to general sales tax levies, such efficiency differences are nil.

Therefore, one could consider that simply keeping the CHT's status quo is something the federal government could do, despite ongoing political pressures to strongly increase its effort in health-care financing. This is especially the case because, in the aftermath of the COVID-19 pandemic, the federal government has many pressing priorities that require large investments and such priorities might compete with the idea of a massive expansion of federal health-care funding for the provinces and territories.

## **OPTION 2: DEMOGRAPHIC ADJUSTMENTS TO THE CHT**

A fundamental challenge facing Canadian fiscal arrangements, as our historical discussion makes clear, is the exposure of one order of government to decisions made by another. While there are many examples of cost-sharing programs historically and a relatively small selection of them today, major transfers from the federal government to provincial and territorial governments are now almost entirely disconnected from program costs. This is deliberate. Yet, to the extent that cost pressures are due to exogenous developments, there may be a case to centralize some of that burden. Federal borrowing has a lower cost than provincial borrowing, for example, and federal revenues are more efficiently and equitably raised than provincial revenues. Disaster financial assistance, to take one example, or fiscal stabilization payments, to take another, centralize some portion of fiscal costs resulting from external developments. Population aging is certainly a distinct and slower moving challenge, but the resulting cost pressures are somewhat exogenous and unevenly distributed across regions. In addition, federal transfers help address spillover costs between provinces and the mobility of Canadians across regions.

Retirees disproportionately move into British Columbia or the Atlantic Provinces. From 2009 to 2019, Statistics Canada data record 171,000 interprovincial moves of

---

<sup>2</sup>

These increases are based on analysis from Tombe (2020) and are broadly consistent with the latest fiscal sustainability work of the Office of the Parliamentary Budget Officer (2021).

individuals aged 65 and over.<sup>3</sup> Over one-quarter moved into British Columbia. More strikingly, British Columbia and the Atlantic Provinces were the only regions to see positive net population inflows among this older age cohort while the Prairie Provinces and Quebec, meanwhile, saw the largest net outflows. This presents a challenge for fiscal federalism, as individuals during their working years will pay taxes to provinces where they reside. Upon retirement to another province, they will put pressure on the provincial government's health system while paying only moderate taxes. Today, with average health-care costs of approximately \$12,000 per individual aged 65 and over, British Columbia net inflow over this decade represents a net fiscal cost of nearly \$150 million per year; such pressures will only accumulate in the future.

Adjusting federal health transfers to centralize at least some demographic-related costs without exposing the federal government to a provincial government's expenditure choices is possible. There are multiple pathways. Tombe (2020) explores several that we will briefly describe here. Perhaps the simplest is to increase the pace of CHT growth by an amount indexed to population aging. Formally, if national average health spending per capita for population cohort  $c$  is  $h^c$ , and the national population of that cohort is  $pt^c$ , then CHT growth could be increased proportionally to changes in  $h^c pt^c$  over time. As we discussed earlier, the distribution of health expenditures across age cohorts may very well change over time. Occasional rebasing may therefore be necessary for  $h^c$  but by using national average health expenditures and population levels, a rough separation between provincial expenditure choices and federal fiscal exposure could be maintained. We estimate this would result in approximately 0.9 percentage points per year higher growth in CHT transferred to provincial and territorial governments. We report the implied per capita transfers (adjusting for inflation) in Table 1. To the extent that aging presents less of a challenge for provincial governments, the rebasing of  $h^c$  would automatically lessen the magnitude of future CHT growth under this option. This option therefore also offers provincial governments some degree of insurance against the possibility that health-care costs do escalate with population aging.

A richer departure from this basic adjustment could involve making the population weights province-specific. After all,  $pt^c$  evolves very differently from one region to another. National average health-care expenditures could still be used, and since the age composition of provincial populations is somewhat exogenous to government policy choices (though not strictly), this would still insulate the federal government from provincial health expenditure choices. We estimate such a province-specific indexing provision would result in significant additional growth in CHT to provinces with a more rapidly aging population. Newfoundland and Labrador, for example, would see CHT growth of over 35 per cent by 2040, compared to 10 per cent growth in Saskatchewan. Importantly, all provinces would see CHT growth, but rapidly aging provinces would see faster growth. We report this range across provinces in Table 1 and refer to this reform option as adding a demographic growth increment to the CHT.

---

<sup>3</sup>

Own calculations from Statistics Canada (2020).

**Table 1: Projection of Canada Health Transfers (2021 \$/Capita)**

Scenario	Real Dollars per Capita			
	2021	2030	2040	2050
Status Quo	1,121	1,242	1,360	1,500
Demographic Growth Increment	1,121	1,344	1,602	1,821
<i>If province specific, then a range of...</i>	<i>1,121</i>	<i>1,279 to 1,428</i>	<i>1,498 to 1,795</i>	<i>1,705 to 2,084</i>
Demographic Level Increment	1,121	1,573	1,945	2,077
<i>If province specific, then a range of...</i>	<i>1,121</i>	<i>1,368 to 1,849</i>	<i>1,698 to 2,416</i>	<i>1,872 to 2,554</i>

Note: Displays projected CHT payments per capita, adjusted for inflation, under various alternative reform pathways to reflect demographic-induced health-care expenditure growth.

Finally, fully centralizing demographic related health costs is achievable with an extension of the demographic indexing approach just described. Instead of increasing CHT growth rates at the same rate as demographics contributes to overall health-care spending, the transfer could increase the level of payments to reflect the actual dollar increase due to demographics. In effect, demographic costs could be centralized at a greater share than health-care costs generally. Nationally, total public health-care spending is approximately \$4,800 per capita. Population aging alone is projected to increase this to nearly \$5,800 per capita by 2040 (in 2021 dollars). Currently, the CHT is \$1,120 per capita this year and projected to reach \$1,360 per capita by 2040 (again, in 2021 dollars). This increase of \$240 per capita is approximately one-quarter of the total incremental costs from aging. The CHT could increase more quickly to centralize a larger share of demographic costs by tying incremental growth to national or province-specific aging. In the extreme, if CHT nationally grew by \$1,000 per capita between now and 2040, then the federal transfer would gradually increase to approximately 31 per cent of provincial health budgets and fully insulate subnational governments from the direct health expenditure effects of population aging. Such an increment could also reflect province-specific rates of population aging. We report the results of this reform in Table 1, referring to it as adding a demographic-level increment to the CHT.

### OPTION 3: SHARED FISCAL GOVERNANCE

While provinces can increase their own-source revenues to cover rising health-care expenditures, the long-term federal fiscal capacity exceeds its own projected needs. Despite recent budget deficits — made particularly large during COVID-19 — federal revenues are tied closely to aggregate nominal GDP growth while its expenditures grow more slowly. Long-term projections vary in their details, but most recently, the Parliamentary Budget Officer (2021) and Tombe (2020) demonstrate that long-term federal primary surpluses roughly offset long-term provincial deficits. As the aggregate long-term fiscal situation of Canada is sound, there may be a vertical fiscal imbalance between the two orders of government. Although the idea of vertical fiscal imbalance is contested, the difference in long-term federal and provincial/territorial fiscal capacities does create an opportunity to explore enhanced federal transfers, as we did

under Option 2, or for shifting tax room from the federal to provincial and territorial governments. As discussed above, these tax point transfers have a long history in Canada, though recent policy has tended to avoid them, for several reasons. There are political and economic considerations to keep in mind regarding the potential for new tax point transfers.

Those who place a high weight on provincial autonomy tend to look favourably at tax point transfers because, unlike cash transfers, the federal government cannot unilaterally change them. This autonomy, however, also means provinces do not have to move into tax room vacated by the federal government. For example, in 2006–2007, the gradual decrease in the rate of the federal Goods and Services Tax (GST) from seven to five per cent resulted in some provinces taking up that room while others did not.<sup>4</sup> A tax point transfer also weakens Canada's ability to have co-ordinated national approaches to addressing shared challenges, in addition to raising a host of equity concerns across regions.

To address these issues, we outline an alternative to a traditional transfer of tax points from the federal government to the provinces: the creation of a joint federal-provincial-territorial fiscal regime governed in a similar manner as the Canada Pension Plan. That is, a jointly governed fiscal institution that both levies revenue from a specific taxation source and allocates those revenues across provinces. It is distinct from a tax point transfer from the federal government to provincial governments as it is a transfer to a new joint entity. Consider a simple illustration. The federal government could eliminate the CHT, for example, and shift the entire 15 per cent federal corporate tax into this new jointly governed entity, which would then distribute the revenues on an equal per capita basis (or some other allocation arrangement as agreed between governments). This would be a net increase in provincial fiscal capacities of \$15.1 billion by 2025/26 — totalling \$66.8 billion that year, roughly equivalent to 30 per cent of projected health-care expenditures. Such an arrangement would not be a federal transfer, and therefore could not be unilaterally changed in the future. Provinces would also have access to these revenues, and the joint corporate tax rate could only change with broad agreement among provinces — as with the CPP, in which policy change requires the consent of at least two-thirds of the provinces comprising at least two-thirds of the Canadian population (Béland and Weaver 2019). This is a national approach to a difficult intergovernmental fiscal challenge, and one that both respects provincial autonomy and leverages the economic efficiency benefits of broad-based uniform taxation.

Though straightforward in principle, there are clear challenges to consider. There would be some technical challenges, for example, such as smoothing volatility over time in a manner similar to the current CHT. But this would be easily manageable. And to be clear, there is nothing about the corporate taxation field itself that implies it is most appropriate for this tax transfer scheme. Its total revenues are merely such that this would represent an increase in provincial fiscal capacities. Alternatives could involve shifting general sales tax room to provinces, again through a jointly

---

<sup>4</sup>

Newfoundland and Labrador, Nova Scotia, New Brunswick and Quebec increased their provincial general sales tax rates by two percentage points, though at different times and were not explicitly aligned with the federal change.



governed arrangement. Yet, this would necessitate top-up payments, as current total GST revenues are less than current total CHT revenues. Such a tax shift could also first involve increasing the GST rate back to seven per cent, even if this would be a politically risky move on the federal government's part. In any case, both the corporate tax transfer and the GST transfer at the higher rate would be of roughly similar magnitudes. Either way, this would increase provincial fiscal capacities to meet rising health costs and enhance provincial autonomy. Over time, however, a shift of tax room to provinces would not lead to faster growth relative to the current CHT. In fact, the three per cent floor in CHT growth means that it will, on average, grow at a slightly faster rate than the economy as a whole and therefore slightly faster than the value of tax points. This reform option is instead a mechanism to shift fiscal capacity from federal to provincial governments in a manner that insulates each from unilateral changes by the other.

Though likely infeasible (politically or administratively) in the short term, such tax point transfers to a jointly governed entity are not a new policy proposal. Indeed, throughout the 1960s the Alberta government strongly advocated an explicitly jointly governed system of personal and corporate income taxation to fund roughly equal per capita transfers to provincial governments through what it called the Federal-Provincial Basic Revenue Fund (Canada 1968, 91). It is also how other major federations approach fiscal transfers, notably Germany (Shah 2007). Expanding provincial fiscal capacity through tax point transfers could also be combined with the other reform pathways explored earlier. For instance, a demographic growth increment (Option 2) could be implemented through a joint FPT entity that levies a national tax rate on the desired base. By 2040, that reform option could be funded by an amount equivalent to either a one-point increase of the GST or a two-point increase of corporate income taxes. The full-level increment option would require more (three points and six points, respectively). These increases could be gradually phased in, much as the recent CPP expansion was. Moreover, also like the CPP expansion, jointly levying incremental taxes may insulate governments from certain short-term political challenges.

Though there may be practice challenges to set up and administer such an arrangement, it would present no specific obstacle beyond what federal, provincial and territorial governments achieve through other joint initiatives, such as the Canada Pension Plan. At its core, it would involve jointly deciding on a tax rate, which would then be administered no differently than current taxes through the Canada Revenue Agency. Yet, the resulting revenues would be allocated according to the binding intergovernmental agreement. A joint FPT entity to levy and manage selected taxes to offset demographic costs is a novel approach to pooling and centralizing a national fiscal challenge in a manner fully respectful of autonomous orders of government. The distinct advantage over Option 2 is to mitigate policy risk to provincial and territorial governments by insulating them from potential unilateral reductions in federal transfers.

## CONCLUSION

The pathways outlined above offer a contrast among three potential policy designs. Rather than discussing incremental changes to CHT, we have compared and contrasted the policy status quo with two major policy pathways that would alter the way in which fiscal policies surrounding health care in Canada are designed. Out of the two alternatives to the status quo we discussed, the last one is the most radical, as it would involve the creation of a new tax system featuring a collaborative governance system. As for the second option, it would move Canada beyond the existing status quo in a far more moderate manner, as it would keep the central role of the CHT within Canada's fiscal federalism. Simultaneously, some of the pathways we discussed could be combined so we should not necessarily see them as mutually exclusive.

In addition to these three policy pathways, it is crucial to stress the importance of three other points we have emphasized in this paper. First, the role of the federal government in health-care financing has helped shaped medicare since its inception. This remark stresses once again the crucial importance of federal funding in health care. Second, the above historical survey and formulation of the policy pathways suggest that a discussion about the future of federal health-care funding should not be centred exclusively on the CHT, which is less than two decades old. Although the status quo is always a default option, decision-makers should always keep their minds open to alternative policy designs. Finally, health-care financing should be understood in the broader context of fiscal federalism, including equalization policy, which is particularly important for receiving provinces, which can use some of this money for health care (Béland, Lecours, Marchildon, Mou and Olfert 2017). Policy-makers would be well advised to keep these three realities in mind as they explore potential pathways to set the course of federal health-care funding for the years and decades to come. Health care remains a major priority for Canadians and the federal government has the fiscal capacity and the political duty to help provinces and territories foster sustainable health-care arrangements, something that would benefit the entire country, beyond the territorial fragmentation of medicare within our highly decentralized federal system.

## REFERENCES

- Angus Reid Institute. 2021. "Federal politics: As Concern Over COVID-19 Dissipates, Other Policy Issues May Dominate Election Debates." <https://angusreid.org/federal-politics-june-2021/>.
- Béland, Daniel, André Lecours, Gregory P. Marchildon, Haizhen Mou, and Rose Olfert. 2017. *Fiscal Federalism and Equalization Policy in Canada: Political and Economic Dimensions*. Toronto: University of Toronto Press.
- Béland, Daniel, and Patrik Marier. 2020. "COVID-19 and Long-Term Care Policy for Older People in Canada." *Journal of Aging & Social Policy*, 32(4-5): 358-364.
- Béland, Daniel, and R. Kent Weaver. 2019. "Federalism and the Politics of the Canada and Quebec Pension Plans." *Journal of International and Comparative Social Policy*, 35(1): 25-40.
- Canada. 1968. Federal-Provincial Conference Ottawa. October 24-28, 1966. Ottawa: Privy Council Office.
- . 1979. Public Accounts of Canada. Ottawa: Receiver General for Canada.
- Canadian Institute for Health Information. 2020. National Health Expenditure Database, 2020. Table O.2. Accessed July 13, 2021. <https://www.cihi.ca/en/national-health-expenditure-trends>.
- Government of Canada. 2019. *Canada's Health Care System*. Ottawa. September 17. <https://www.canada.ca/en/health-canada/services/health-care-system/reports-publications/health-care-system/canada.html#a3>
- . 2020. *Canada Health Act*. Ottawa. February 24. <https://www.canada.ca/en/health-canada/services/health-care-system/canada-health-care-system-medicare/canada-health-act.html>.
- Maioni, Antonia. 1998. *Parting at the Crossroads: The Emergence of Health Insurance in the United States and Canada*. Princeton, NJ: Princeton University Press.
- McIntosh, Tom. 2021. "The Disingenuous Demands of Canada's Premiers for \$28 Billion in Health-Care Funding." *The Conversation*. March 28. <https://theconversation.com/the-disingenuous-demands-of-canadas-premiers-for-28-billion-in-health-care-funding-157024>.
- Mou, Haizhen. 2021. *Canada Health Transfer: Background and Future*. Calgary: Canada West Foundation and Intergovernmental Fiscal Relations Commission. May. [https://cwf.ca/wp-content/uploads/2021/05/CWF\\_IFRC\\_WhatNow\\_CanadaHealthTransfer.pdf](https://cwf.ca/wp-content/uploads/2021/05/CWF_IFRC_WhatNow_CanadaHealthTransfer.pdf).
- Naylor, David, Andrew Boozary, and Owen Adams. 2020. "Canada. 1994. Public Accounts of Canada. Ottawa: Receiver General for Canada." *Canadian Medical Association Journal* 192 (45): E1408-E1412.
- Office of the Parliamentary Budget Officer. 2021. *Fiscal Sustainability Report 2021*. Ottawa.

- Shah, Anwar. 2007. *The Practice of Fiscal Federalism*. Montreal, QC: McGill-Queen's University Press.
- Statistics Canada. 2019. *Population Projections for Canada, Provinces, and Territories*. Catalogue no. 91-520-x.
- . 2020. "Table 17-10-0015-01 Estimates of the Components of Interprovincial Migration, by Age and Sex, Annual." Accessed July 7, 2021. <https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1710001501>.
- Tombe, Trevor. 2020. "Provincial Debt Sustainability in Canada: Demographics, Federal Transfers, and COVID-19." *Canadian Tax Journal* 68 (4): 1083–1122.
- Williams, G. A., J. Cylus, T. Roubal, P. Ong, S. Barber, A. Sagan, C. Normand, J. Figueras, J. North, and C. White, eds. 2019. *Sustainable Health Financing with an Ageing Population: Will Population Ageing Lead to Uncontrolled Health Expenditure Growth?* European Observatory on Health Systems and Policies.

### **About the Authors**

**Daniel Béland** is Director of the McGill Institute for the Study of Canada and James McGill Professor in the Department of Political Science at McGill University (Montreal, Canada). A specialist of comparative fiscal, health, and social policy, he has published 20 books and more than 160 articles in peer-reviewed journals.

**Trevor Tombe** is Professor of Economics at the University of Calgary and Research Fellow at The School of Public Policy. He is also on the editorial board of the *Canadian Journal of Economics* and is Co-Director of *Finances of the Nation*. His research focuses on economic and fiscal integration, internal trade, and fiscal federalism.

## ABOUT THE SCHOOL OF PUBLIC POLICY

The School of Public Policy has become the flagship school of its kind in Canada by providing a practical, global and focused perspective on public policy analysis and practice in areas of energy and environmental policy, international policy and economic and social policy that is unique in Canada.

The mission of The School of Public Policy is to strengthen Canada's public service, institutions and economic performance for the betterment of our families, communities and country. We do this by:

- *Building capacity in Government* through the formal training of public servants in degree and non-degree programs, giving the people charged with making public policy work for Canada the hands-on expertise to represent our vital interests both here and abroad;
- *Improving Public Policy Discourse outside Government* through executive and strategic assessment programs, building a stronger understanding of what makes public policy work for those outside of the public sector and helps everyday Canadians make informed decisions on the politics that will shape their futures;
- *Providing a Global Perspective on Public Policy Research* through international collaborations, education, and community outreach programs, bringing global best practices to bear on Canadian public policy, resulting in decisions that benefit all people for the long term, not a few people for the short term.

The School of Public Policy relies on industry experts and practitioners, as well as academics, to conduct research in their areas of expertise. Using experts and practitioners is what makes our research especially relevant and applicable. Authors may produce research in an area which they have a personal or professional stake. That is why The School subjects all Research Papers to a double anonymous peer review. Then, once reviewers comments have been reflected, the work is reviewed again by one of our Scientific Directors to ensure the accuracy and validity of analysis and data.

### The School of Public Policy

University of Calgary, Downtown Campus  
906 8th Avenue S.W., 5th Floor  
Calgary, Alberta T2P 1H9  
Phone: 403 210 3802

---

#### DISTRIBUTION

Our publications are available online at [www.policyschool.ca](http://www.policyschool.ca).

#### DISCLAIMER

The opinions expressed in these publications are the authors' alone and therefore do not necessarily reflect the opinions of the supporters, staff, or boards of The School of Public Policy.

#### COPYRIGHT

Copyright © Béland and Tombe 2021. This is an open-access paper distributed under the terms of the Creative Commons license [CC BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/), which allows non-commercial sharing and redistribution so long as the original author and publisher are credited.

#### ISSN

ISSN 2560-8312 The School of Public Policy Publications (Print)  
ISSN 2560-8320 The School of Public Policy Publications (Online)

#### DATE OF ISSUE

December 2021

#### MEDIA INQUIRIES AND INFORMATION

For media inquiries, please contact Morten Paulsen at 403-220-2540. Our web site, [www.policyschool.ca](http://www.policyschool.ca), contains more information about The School's events, publications, and staff.

## RECENT PUBLICATIONS BY THE SCHOOL OF PUBLIC POLICY

INFRASTRUCTURE POLICY TRENDS: CRITICAL MINERAL MINING IN CANADA

<https://www.policyschool.ca/wp-content/uploads/2021/12/NC22-Infrastructure-Policy-Trends.pdf>  
Alaz Munzur | December 2021

GREENHOUSE GAS EMISSIONS FROM CANADIAN AGRICULTURE: ESTIMATES AND MEASUREMENTS

[https://www.policyschool.ca/wp-content/uploads/2021/11/JSC5\\_GHG-Emissions\\_Fouli-et-al.pdf](https://www.policyschool.ca/wp-content/uploads/2021/11/JSC5_GHG-Emissions_Fouli-et-al.pdf)  
Ymène Fouli, Margot Hurlbert and Roland Kröbel | November 2021

A PRIMER ON CARBON TAX RELIEF FOR FARMERS

[https://www.policyschool.ca/wp-content/uploads/2021/11/JSC13\\_Carbon-Tax-Relief\\_Dobson-2.pdf](https://www.policyschool.ca/wp-content/uploads/2021/11/JSC13_Carbon-Tax-Relief_Dobson-2.pdf)  
Sarah Dobson | November 2021

SOCIAL POLICY TRENDS: THE LABOUR FORCE PARTICIPATION RATE OF WOMEN WITH YOUNG CHILDREN

<https://www.policyschool.ca/wp-content/uploads/2021/11/Labour-Force-Participation-Update.pdf>  
Ron Kneebone | November 2021

MACKENZIE VALLEY GAS PIPELINE IN RETROSPECT

[https://www.policyschool.ca/wp-content/uploads/2021/11/NC27A\\_Mackenzie-Valley-Gas-Pipeline\\_Munzur.pdf](https://www.policyschool.ca/wp-content/uploads/2021/11/NC27A_Mackenzie-Valley-Gas-Pipeline_Munzur.pdf)  
Alaz Munzur | November 2021

A MULTIPLE ACCOUNT BENEFIT-COST ANALYSIS OF COAL MINING IN ALBERTA

[https://www.policyschool.ca/wp-content/uploads/2021/11/EFL53\\_Coal-Mining\\_Winter-et-al.pdf](https://www.policyschool.ca/wp-content/uploads/2021/11/EFL53_Coal-Mining_Winter-et-al.pdf)  
Jennifer Winter, Megan Bailey, Emily Galley, Chris Joseph and Blake Shaffer | November 2021

THE ROLE OF HYDROGEN IN DECARBONIZING ALBERTA'S ELECTRICITY SYSTEM

[https://www.policyschool.ca/wp-content/uploads/2021/11/EFL49A\\_AB-Electricity\\_Neff-et-al.pdf](https://www.policyschool.ca/wp-content/uploads/2021/11/EFL49A_AB-Electricity_Neff-et-al.pdf)  
Jordan Neff, Chris Bataille and Blake Shaffer | November 2021

THE ROLE OF HYDROGEN IN CANADA'S TRANSITION TO NET-ZERO EMISSIONS

[https://www.policyschool.ca/wp-content/uploads/2021/11/EFL49\\_Net-Zero-Emissions\\_Bataille-et-al.pdf](https://www.policyschool.ca/wp-content/uploads/2021/11/EFL49_Net-Zero-Emissions_Bataille-et-al.pdf)  
Chris Bataille, Jordan Neff and Blake Shaffer | November 2021

ALBERTA'S ECONOMIC AND FISCAL FUTURE

<https://www.policyschool.ca/wp-content/uploads/2021/11/Albertas-Economic-and-Fiscal-Future.pdf>  
November 2021

AN URBAN NATION: THE SHIFTING FORTUNES OF CANADIAN CITIES

[https://www.policyschool.ca/wp-content/uploads/2021/11/UP33\\_Urban-Nation\\_McQuillan-Laszlo.pdf](https://www.policyschool.ca/wp-content/uploads/2021/11/UP33_Urban-Nation_McQuillan-Laszlo.pdf)  
Kevin McQuillan and Michael Laszlo | November 2021

LOCAL CONDITIONS AND THE PREVALENCE OF HOMELESSNESS IN CANADA

[https://www.policyschool.ca/wp-content/uploads/2021/10/HSP90\\_Rates-of-Homelessness\\_Kneebone-Wilkins.pdf](https://www.policyschool.ca/wp-content/uploads/2021/10/HSP90_Rates-of-Homelessness_Kneebone-Wilkins.pdf)  
Ron Kneebone and Margarita Wilkins | October 2021

THE KEY ROLE OF NO-CARBON NATIONAL OIL COMPANIES IN GLOBAL CLIMATE ACTION: LEVERAGING THE G20 FORUM TO ACCELERATE ENERGY TRANSITION

<https://www.policyschool.ca/wp-content/uploads/2021/10/NoCarbon-Oct27.pdf>  
Leonardo Beltrán-Rodríguez and Juan Roberto Lozano-Maya | October 2021

WHY EXISTING REGULATORY FRAMEWORKS FAIL IN THE SHORT-TERM RENTAL MARKET: EXPLORING THE ROLE OF REGULATORY FRACTURES

[https://www.policyschool.ca/wp-content/uploads/2021/10/UP32\\_Short-Term-Rental-Market\\_Tedds-et-al.pdf](https://www.policyschool.ca/wp-content/uploads/2021/10/UP32_Short-Term-Rental-Market_Tedds-et-al.pdf)  
Lindsay Tedds, Anna Cameron, Mukesh Khanal and Daria Crisan | October 2021