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COMMENTARY

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The High Price of Prudence – Benchmarking Canada’s Property and Casualty Industry (Second Edition)

Canadians pay higher premiums for property and casualty insurance than citizens in many, if not most, other developed nations. Ineffective government intervention – including state-run insurance providers, high accident benefits, excessively costly tort mechanisms and a failure to crack down on auto theft – are the largest drivers of this variance in automobile insurance. In property insurance, the causes are high prudential capital requirements coupled with an absence of effective public/private sharing of catastrophe risk.

Alister Campbell

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THE HIGH PRICE OF PRUDENCE – BENCHMARKING CANADA’S PROPERTY AND CASUALTY INDUSTRY (SECOND EDITION)

by Alister Campbell

- Canadians pay higher premiums for property and casualty insurance than citizens in many, if not most, other developed nations. This *Commentary* uses OECD data and private industry data to compare the national P&C insurance sector’s premiums as a percentage of Gross Domestic Product with its international peers and is an update of the findings of the author’s 2021 edition of this report.
- The *Commentary* focuses on liability, property and auto insurance to compare costs across nations. Then, it takes a deeper dive into the Canadian data to compare personal property and auto insurance among all provinces and territories.
- When it comes to costs for property insurance, the study finds Canada is in the top ranks, paying 1.23 percent of GDP in premiums, almost double the 0.66 percent average of other G7 peers and even higher than the 0.52 percent OECD average. For automobile insurance (which here includes both personal and commercial), Canadians appear to be paying, on average, the highest premiums in the world, relative to GDP.
- Within Canada, inter-provincial benchmarking for personal property insurance shows the higher average premiums paid in Canada – relative to the rest of the developed world – appear to be shared equally by most provinces. However, province-by-province comparisons of personal auto insurance show that there are substantial differences among provinces, with four jurisdictions producing higher-than-average results. Two of the four (Saskatchewan and Manitoba) are government-monopoly jurisdictions – in fact, these are the two highest in terms of costs. The two other outliers (Ontario and Alberta) are served by a competitive private sector, but Alberta has chosen until very recently to maintain a costly tort environment and Ontario mandates particularly generous accident benefits and has experienced a plague of auto theft.
- In the case of automobile insurance, just a handful of provinces need to think harder about how to improve car insurance premiums. But to reduce the cost of living for homeowners, the solutions required must be national in scope and include public/private partnerships to share the rapidly increasing risk-transfer price of natural catastrophe events.

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OVERVIEW

Canadian consumers and businesses pay more than \$80 billion a year in property & casualty insurance premiums¹ with an upward trend consistently in excess of our anemic GDP growth rate. The total cost is now more than 3 percent of GDP. This number represents the cost of risk transfer that Canadian consumers and businesses incur annually to ensure they are properly protected in adverse scenarios. But how does Canada benchmark relative to its global peers? Do we pay less? Do we pay more? Are there material differences within Canada? The purpose of this *Commentary* is to seek to answer these core questions. One way to do so is to compare Canadian premiums with those paid by citizens and businesses of other developed nations.

In 2021, the C.D. Howe Institute published a first-ever benchmarking study of the Canadian Property & Casualty (P&C) insurance sector (Campbell and Omran 2021). The benchmarked comparators were the other members of the OECD, and the paper used average results from the period between 2015 and 2018. The findings were noteworthy for several reasons. The Canadian P&C sector is highly competitive and returns on equity were, as expected in such a competitive environment, correspondingly low. However, the results also showed that Canadians pay higher risk-transfer premiums for property and automobile insurance than citizens in many, if not most, of the developed world. The paper posited a number of possible explanations for these unexpected findings and identified a conundrum – excessive government intervention was skewing automobile premiums upwards in certain major provincial jurisdictions, while inadequate government engagement in the appropriate sharing of tail risk with consumers was forcing Canadian consumers and businesses

to absorb the full costs of wildfire, flood and earthquake property risk themselves.

The world has changed a great deal since our first benchmarking study. The Canadian P&C industry has been forced to adapt to an extraordinary range of challenges in this period. The industry did see significant revenue growth, driven in part by a “hard” market for commercial lines (industry slang for a period when rates are rising faster than overall prices in the economy due to availability/capacity restraints). But, at the same time, the industry also had to absorb pandemic-fueled supply shocks and other inflationary pressures, with corresponding increases in replacement costs for key inputs (e.g., car parts). Canada also experienced several years of the greatest natural catastrophe-triggered losses in industry history. These catastrophe losses led to substantial increases in the costs for “reinsurance” – the protection all insurers purchase from reinsurers to mitigate particularly large loss events. All this as government intervention in several automobile insurance jurisdictions (including the, until recent, “freezing” of rates in Alberta) has put some insurers under particular pressure to maintain profitability. To top things off, dramatic movement in interest rates led to investment losses on the industry’s large, fixed-income securities portfolios and the first net investment loss for the industry as a whole in living memory.

But it is important to note that there was also an unprecedented positive factor in the midst of all these challenges. The industry saw significant, pandemic lockdown-induced reductions in claims activity and the resulting decline in loss ratios saw the industry achieve abnormally strong overall returns in these more recent years. Massive natural catastrophe events in mid-2024 serve to remind us all that the profits in good years are required to fund

1 This study focuses on property & casualty insurance premiums also referred to internationally as “non-life” insurance. As a result of this focus, the results do not encompass premiums paid by Canadians for life and/or health insurance.

losses in (very) bad years. Over the combined study period, the Canadian industry still generates sub-par returns relative to the benchmark comparators in other developed economies.

Given all these market dynamics in the years since the first study, it is timely to provide an update with data from more recent years. Canada is not the only jurisdiction facing all these challenges at once, but how did we fare relatively? Obvious questions need answering. Are Canadians still having to pay more than citizens in other developed economies for core risk-transfer products? Have things changed in different lines of business? Where do we stand now?

We have used data from OECD for the years 2020 to 2022 as the basis for our updated analysis. The work has been made more challenging by the inexplicable failure of Canada to submit our nation's own data to the OECD database for these years. We have been able to build an acceptable proxy with the assistance of the Insurance Bureau of Canada and have added to the private industry data with publicly available data for the provinces where provincial governments enforce a monopoly for car insurance.

Key findings of our new study include:

- Canadians still pay higher-than-average risk transfer premiums relative to the benchmark in comparable lines of business – in fact the highest. And they are even higher than in the previous study (as a percentage of GDP). This is true, in particular, for both property and auto lines of business. Our position as an outlier is not correlated with issues in a single category of insurance; rather it represents a broader issue across several types of coverage and deserves more systematic analysis.
- The highly competitive commercial insurance sector continues to drive pricing very much in line with G7 and other international peers.

Commercial Liability insurance rates are not a contributing factor to Canada's overall higher-than-average costs for risk transfer.

- Analysis by province reveals additional areas of focus and interest. For instance, the no-fault reforms introduced by the province of British Columbia in their government-monopoly automobile line have produced substantial early benefit (presumably directly correlated with reduced frictional costs for claims administration). However, other large provinces – including two other government monopolies (Manitoba and Saskatchewan) and one private market (Alberta) that still chooses to embrace a costly tort environment² – continue to see higher automobile premiums than average and contribute materially to the higher overall Canadian result in this line of business. It is also possible that Canadians receive higher accident benefits compensation than citizens in many other countries, and/or that a greater portion of total costs for treatment of bodily injury is borne by property & casualty insurers rather than private or public health coverage purchased/provided separately.³
- Our results also suggest that Canada's largest province, Ontario, could reduce costs by better controlling claim fraud and auto theft, and that provinces with government-run monopolies in auto insurance could benefit from introducing market competition.
- Property insurance premiums are more consistent province-by-province (and are consistently high relative to international benchmark peers). Alberta has seen substantial catastrophic events in the last decade and premiums are correspondingly high (and climbing). But the higher average property premiums paid by consumers and businesses almost across the board cry out for more holistic solutions – true public-private partnerships to address tail risk are a common feature of almost all other developed economies... but unfortunately not Canada.

2 As this paper goes to press, Alberta has (finally) announced plans to implement a form of “no-fault” which will, at least in part, mitigate these very high average automobile insurance premiums.

3 International benchmarking analysis of this would also be of real value, but lies outside the scope of this project.

This benchmarking study confirms that the first iteration's findings were not some statistical aberration. The relative (and relatively high) Canadian premium levels for comparable lines of business, such as property and automobile insurance found in the first study, are still the case. Continued focus by the industry and our governments on the key drivers of these results, and the identification of common-sense measures to mitigate the worst contributors to these higher-than-average risk transfer costs, would benefit all Canadians – both consumers and businesses.⁴

COMMENTS ABOUT METHODOLOGY – APPROACH AND ISSUES

The primary data source for our benchmarking study is an OECD database (“OECD Insurance Indicators”) incorporating a comprehensive range of data elements across premiums, expenses, returns, and loss ratios by line of business. While the OECD database has been maintained throughout the period we are evaluating now (i.e., consistent categories, contributors), certain jurisdictions have again produced anomalous results. Generally speaking, however, they are different jurisdictions than those with problematic data in the original study. And those with puzzling results in the 2015-2018 database have largely produced results for the current period more in line with results of their peer jurisdictions. This outcome has increased the general comfort we have with the reliability of the database overall.

One big challenge is that, unlike any other OECD nation, a significant portion of Canadian P&C industry premium is collected by state-run, monopoly insurers. We have had to separately source results for the government-run insurers in three provinces (British Columbia, Saskatchewan and Manitoba) and we have also had to estimate

premiums for the portion of automobile insurance coverage (accident benefits and bodily injury) in another province (Quebec) where the premiums paid via driver's license fees are absorbed into a state-run fund. Here, we have used the same methodology that was used in the original study for the sake of consistency.

Canada has made things even more difficult this time, however, for reasons that are not known to this author. In the years since the publication of our first benchmarking study in 2021, Canada has simply ceased to report insurance data to the OECD at all. As a result of this failure of the federal government to report suitable data, we have had to rely exclusively on the Insurance Bureau of Canada (IBC) for Canadian source data (and then added to it the state-run components described above). Thus, throughout this report, you will see two results for Canada: “Canada Private” for the private-sector totals reported through IBC, and “Canada” for the combined results of both private and public insurance. It goes without saying perhaps, but one of the key benefits of Canada's engagement with the OECD is to enable benchmarking. The failure of the federal government to submit our data on insurance to the OECD is inexcusable.

We spent a great deal of time evaluating different bases for comparison before finally settling on GDP as a denominator for most of our analyses. We also acknowledge upfront the obvious drawbacks of using this metric. While use of other denominators might result in different benchmarking rankings, I believe GDP is an entirely legitimate measure to use for our purposes as it generally captures the total economic activity of a nation, while insurance premiums can be seen as a surcharge on that activity to fund the costs of required risk transfer. Where appropriate, we have also checked our GDP-based rankings against other measures, such as the

4 An important recent paper which could help guide Canadian public policy practitioners on how best to tackle this issue is “High-level Framework for Public-Private Insurance Programmes against natural Hazards” (G7 Finance Track 2024).

number of cars and homes, and generally speaking we have not seen these metrics generating ranking results that are meaningfully different.

More recently, one Canadian provincial automobile insurance rate review board (Alberta) has published a benchmarking comparison among provinces using personal disposal income (the economist's term for after-tax income) as the denominator.⁵ This has clear attraction as it provides a reading on the cost of insurance as a "cost-of-living" item paid for by consumers out of after-tax income. But it does not provide as useful a basis for evaluating total insurance spend – which includes commercial insurance policies for property and liability. We considered applying it as an alternative metric in this updated study, at least for home and car insurance, but did not find that using this different basis provided any meaningful difference in overall results, relative to our preferred GDP base.

Given the data limitations, all of the comparisons presented in this *Commentary*, particularly international ones with GDP as the denominator, likely suffer from significant margins of error. It is important that readers consider these rankings with an understanding that they are sensitive to many different factors (including data revisions and updates). Therefore, a rank difference of, say, one or two, is not as relevant as a country's overall relative position. To address concerns about data volatility, we have used a three or four-year data average in the two study periods.

Finally, I must note that, as Canada and much of the rest of the developed world (the largest exception being the United States) move to adopt a new insurance accounting standard (IFRS 17), results for the next several years will almost certainly produce (even) more anomalies than usual. And the new results (including entirely new ways to define and label key categories such as revenue,

expenses and losses) will make benchmarking against prior periods impossible. This also means that this benchmarking study will likely be the last of its kind for at least a few years as insurers, auditors and regulators find their way through a complicated transition process and develop a consensus around new key metrics. All the more reason to do the work and understand precisely where we stand now.

INTERNATIONAL BENCHMARKING – TOTAL PREMIUMS, CLAIMS, EXPENSES AND ROE

Due to severe data limitations, any attempt at benchmarking Canada internationally, or benchmarking provinces within Canada, will suffer from unavoidable shortcomings unless the insurance industry improves its data collection and sharing. However, with the data we have available, we can compare some aspects of the Canadian insurance industry to other OECD countries. While these comparisons are generally only available at a high level (for instance we cannot look at losses and expenses by class of business – such as auto, property, and liability), these high-level comparisons still offer insights into the overall relative positioning of P&C insurance in different jurisdictions.

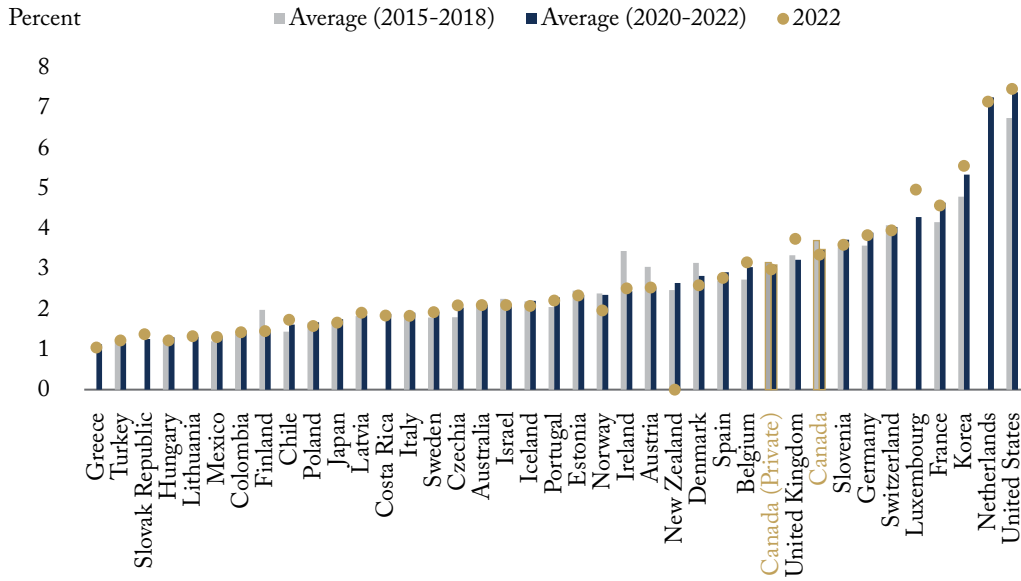
We begin by looking at the penetration and density of "non-life insurance"⁶ across OECD countries for which data are available. To guard against potential volatility in reported results for any single year in the data series, we use a three-year average from 2020-2022⁷ (the original study used a four-year average from 2015-2018). Where possible we have also shown the most recent year for which data is available (2022) in the following analysis.

5 <https://albertaairb.ca/wp-content/uploads/2024/04/2.4.1-2024-Auto-Insurance-Affordability.pdf>

6 "Non-life" insurance means property and casualty insurance – and excludes life and health insurance and annuity premiums.

7 The 2020-2022 average was calculated using the data available for this period.

Figure 1: Non-Life Insurance Penetration* – Initial Study (2015-2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone



* Direct gross written premiums in US dollars divided by GDP.

Sources: OECD Insurance Indicators database, Insurance Bureau of Canada, author’s own calculations for public insurance.

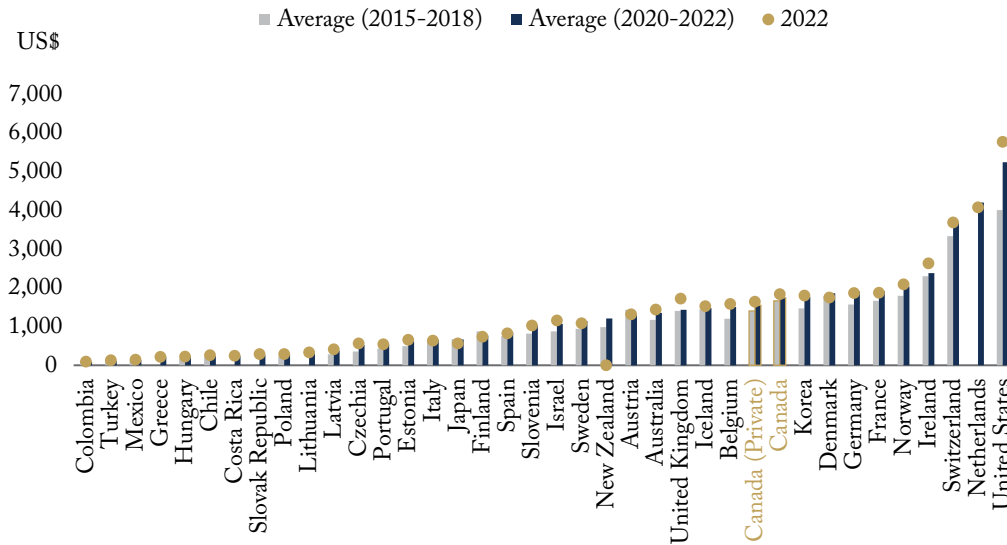
The OECD defines “penetration” as direct gross written premiums⁸ divided by GDP, and considers it a measure of the importance of the insurance industry to the overall economy. The OECD defines “density” as direct gross written premiums divided by population, and considers it a measure of average insurance spending per capita. The two Figures below show the 2015-2018 average compared to the average of the three most recent years available for both OECD “penetration” and “density” measures for the “non-life” insurance industry in select OECD countries. For Canada, we have used OECD data for the initial period and IBC data for the most recent study period (as discussed in our

Methodology section above). In both periods, we added in our own estimates for premiums paid to public insurers.

Based on this high-level data, the Canadian P&C insurance industry is of only slightly greater than average importance relative to the Canadian economy, and our spending per capita is also relatively average. The peers directly adjacent are other developed jurisdictions and are largely consistent across the two study periods. The outliers from the initial study also remain the outliers using updated data. It is notable that, while a handful of jurisdictions have seen declines in penetration, almost all jurisdictions (including Canada) have

8 Direct gross written premiums are the total premiums written by the insurer, not including reinsurance accepted.

Figure 2: Non-Life Insurance Density* – Initial Study (2015-2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone



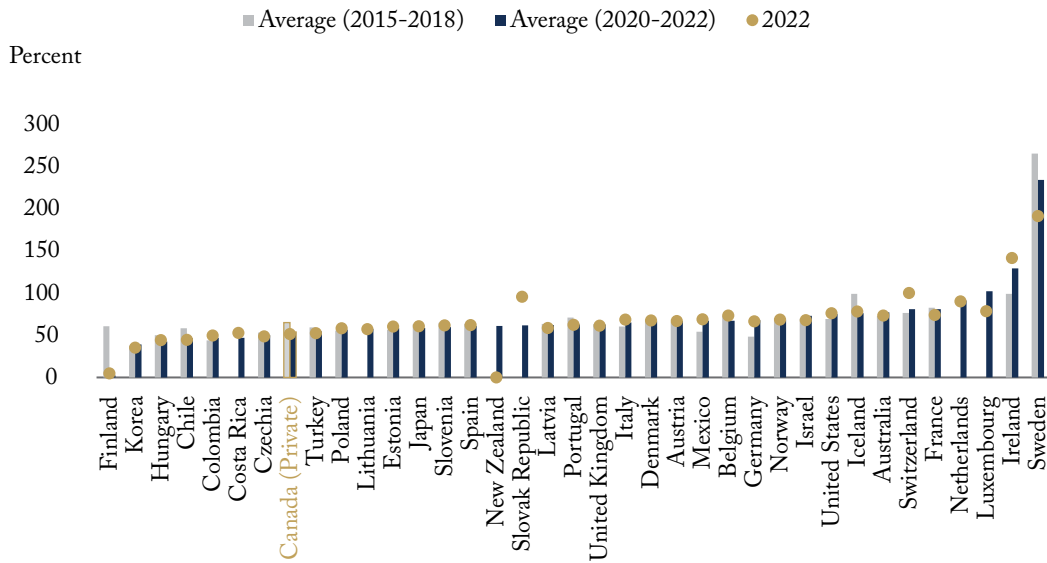
* Direct gross written premiums in US dollars divided by population.

Sources: OECD Insurance Indicators database, Insurance Bureau of Canada, author's own calculations for public insurance.

Key Concept Explainer – Measures of the P&C Industry’s Profitability

Apart from the standard return on equity used in business, the insurance industry uses two key measures of profitability: loss and expense ratios. In line with the OECD’s definition, we calculate the loss ratio as the gross claims paid plus changes in outstanding claims provisions divided by gross written premiums. We calculate the expense ratio as the gross operating expenses, plus commissions, divided by gross written premiums. The combined ratio is simply the sum of the loss and expense ratios.

Figure 3: Loss Ratio – Initial Study (2015-2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone, Canada and OECD Countries



Sources: OECD Insurance Indicators database, Insurance Bureau of Canada.

seen increases in density. Particularly noteworthy in this regard is the spike upwards in the United States where car, home and business insurance premiums have all been on a rapid rise.

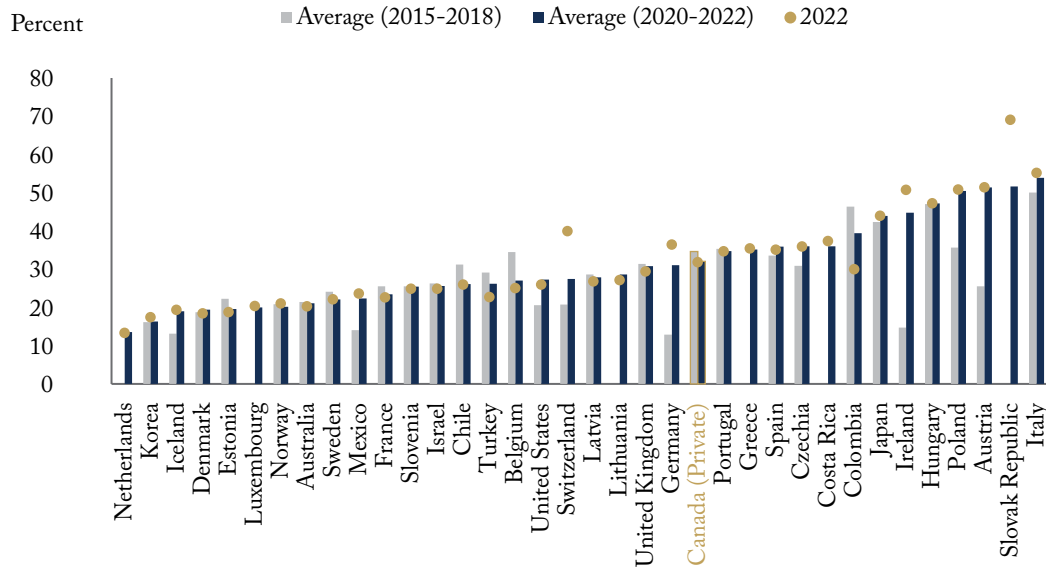
Benchmarking using total premiums is problematic however, because different jurisdictions have higher or lower shares of risk transfer borne by the private vs public sector. The United States is an outlier here and a good example of this problem, since that jurisdiction’s higher premiums incorporate entire lines of business which in Canada are in public hands. These would include worker’s compensation and crop insurance just as two examples. All this to say that benchmarking based on total premiums paid can only take us so far, which is why – in the first study and in this one – we have focused more of our analysis on comparable lines of business (commercial

liability, property and automobile). Later in the analysis, we will see that average personal and automobile insurance premium levels in Canada are higher than in many, if not most, international benchmark comparators. But before we move to the direct comparators, we can still use these overall numbers to look more closely at high-level industry performance in Canada vs benchmark peers.

KEY COST DRIVERS

We now move to an examination of the loss and expense ratios in the non-life insurance industry, which will yield insights into the core drivers of profit and loss in the insurance industry. In line with the OECD’s definition, we calculate the loss ratio as the gross claims paid, plus changes in outstanding claims provisions, divided by gross

Figure 4: Expense Ratio – Initial Study (2015–2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone, Canada and OECD Countries



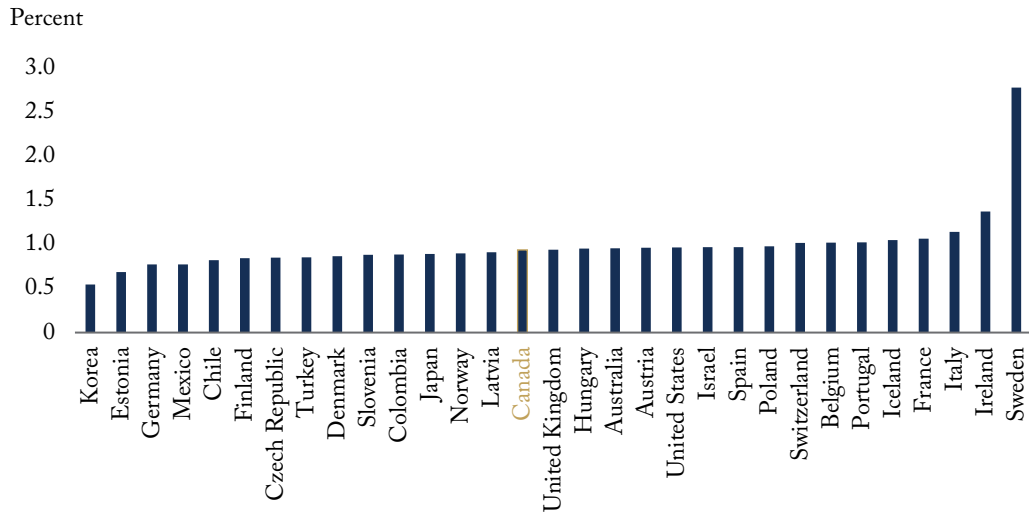
Sources: OECD Insurance Indicators database, Insurance Bureau of Canada.

written premiums. The expense ratio is calculated as the gross operating expenses, plus commissions, divided by gross written premiums. Note that the OECD separates the numerators in these calculations (gross claims paid, gross operating expenses, outstanding claims provisions, and commissions) into life, non-life, and composite insurers (selling both life and non-life). In most cases, the split of premiums within “composite” is available. Unfortunately, however, for Canada, this breakdown was not available in the initial benchmarking study, and for the more recent period (as mentioned previously) no Canadian data are provided at all. Therefore, in the figures below, we rely on the comprehensive domestic data available via the Insurance Bureau of Canada and use this to compare against the OECD data for all other jurisdictions.

Generally speaking, P&C insurers across the developed world tend to price their products by targeting a loss ratio in the 60–65 percent range (somewhat lower for commercial lines and higher for automobile). Given the vagaries of climate-related events and other natural disasters, there will always be volatility in actual results around these targeted averages, by jurisdiction and by year. Even when smoothed using three- or four-year averages, one can see movements of significance upward and downward across the range of sampled jurisdictions.

Figure 3 shows clearly, however, that most jurisdictions in this study are indeed grouped around the target range. For the 2015–2018 period, Canada’s loss ratio was very much in line with “normal” levels, with a loss ratio (64.9 percent) perhaps marginally higher than target. And this makes Canada’s relatively significant decline in

Figure 5: Combined Ratio – Initial Study (2015-2022), Canada and OECD Countries



Sources: OECD Insurance Indicators database, Insurance Bureau of Canada.

loss ratios, and overall-lower-than-average loss ratios for the more recent study period, particularly noteworthy. Given the well-publicized and continued rise of wind, water and wildfire-related losses in Canada and the spreading plague of automobile theft over the recent period, the lower ratio results may be a surprise to many. However, they are almost certainly the combined result of steady, high-single-digit rate increases in both commercial and property insurance premiums over the period, combined with a dramatic reduction in claims activity (particularly the frequency of car accidents⁹) through the COVID-era “lockdowns” (of which Canada was a particularly vigorous practitioner).¹⁰

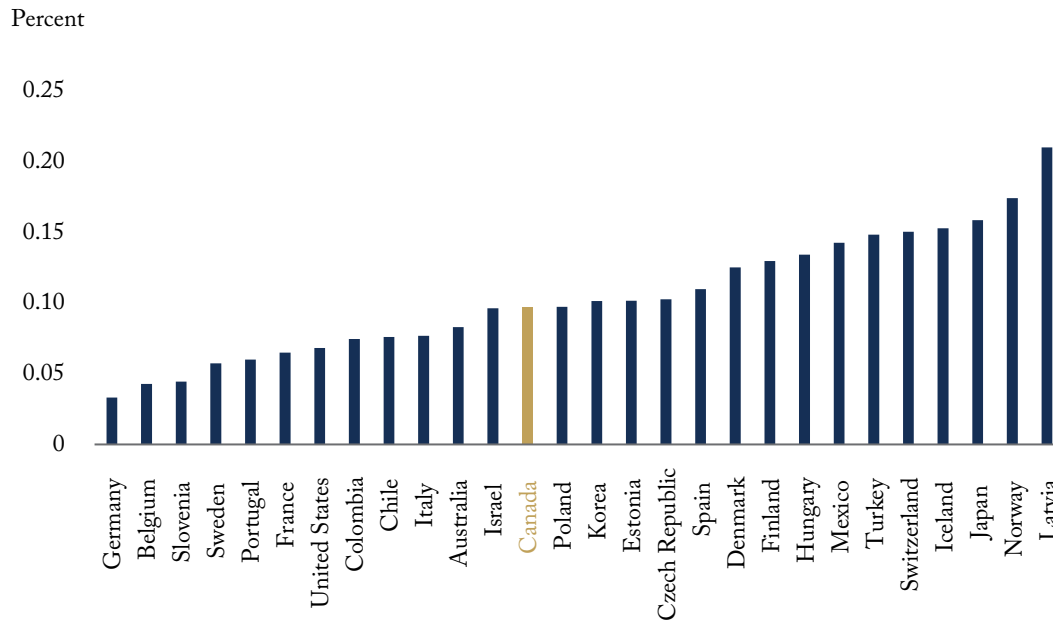
Figure 4 shows expense ratios for the benchmarking peer group and illustrates that

Canada’s 32.0 percent expense ratio is still marginally higher than the 30.7 percent average of the group overall, but has trended down appreciably in the more recent study period. Expense loads are driven primarily by costs of distribution, and different jurisdictions’ results will vary simply based on the degree and cost of intermediation (direct sales vs. brokerage, for instance). Canada’s distribution model has a materially higher share of independent brokerage distribution in personal lines than many (if not most) other developed nations, but the cost of the advice-based channel preferred by Canadians appears not to be a major driver of overall differences in premiums.

9 <https://tc.canada.ca/en/road-transportation/statistics-data/canadian-motor-vehicle-traffic-collision-statistics-2020>

10 See <https://ourworldindata.org/covid-stringency-index>

Figure 6: Returns on Equity* – (2015-2022 average), Canada and OECD Countries



*Net Income/Average Shareholders' Equity.

Sources: Net Income and SHE – OECD, Insurance Bureau of Canada.

BOTTOM LINE RESULTS

Figure 5 shows the results after combining the two major cost inputs reviewed above. At a most basic level, one can think of a 100 percent Combined Ratio (“COR” – losses plus expenses relative to premium charged) as a breakeven result (this arithmetic excludes investment returns for simplicity). One of the most interesting findings of the original benchmarking study and our newer version, is that overall higher premiums for personal insurance in Canada are not resulting in higher profits for insurers. On the contrary, higher average premiums appear to be in line with losses incurred and are yielding normal average loss ratios relative to the benchmark group. This reality, coupled with marginally higher expense loads, meant that Canadian insurers are producing totally average (or even marginally worse than average) CORs. In

Figure 6, we can see that this unimpressive COR performance flows directly through to shareholder returns, with Canadian P&C insurers consistently earning lower ROEs, over the combined study period, than most benchmark peers among other developed nations. These results are consistent with a highly competitive Canadian P&C sector (as is shown in Box 1 below).

INTERNATIONAL BENCHMARKING – COMPARABLE LINES (AUTO, PROPERTY AND LIABILITY)

Methodology

Many factors impact the total insurance premiums paid, including the total number of policies sold, the number of cars, homes and businesses insured, as

Box 1: Competition in the Canadian P&C Sector

We evaluated the relative level of competition within Canada’s P&C insurance industry by using the Herfindahl-Hirschman Index (HHI), a commonly accepted measure of market concentration. The index can range from close to zero to up to 10,000. The lower the number, the less concentration in the market: an HHI of less than 1,500 indicates a competitive marketplace, an HHI of 1,500 to 2,500 indicates a moderately concentrated marketplace, and an HHI of 2,500 or greater indicates a highly concentrated marketplace.

In calculating the index, we used the top 20 P&C private insurance firms by direct written premiums in 2022, as reported by Canadian Underwriter. These 20 firms account for 83.4 percent of a market composed of more than 160 licensed insurers. The market share of each of these firms and the resulting HHI index score is reported in the table below.

Top 20 Private P&C Insurers and HHI, 2022	
Company	Market Share (percent except HHI)
Intact Financial Group	17.35
Aviva Group	7.82
Desjardins Group	7.48
Lloyd’s Underwriters	6.83
Security National	5.54
Co-operators Group	5.37
Wawanesa Mutual	4.82
Definity	4.39
Northbridge Group	3.65
Allstate Group	3.22
Beneva	2.65
CAA Club Group	2.03
Travelers Group	1.98
Chubb	1.95
Zurich Insurance Company Ltd.	1.86
AIG Insurance Company	1.85
SGI Canada	1.50
Groupe Promutuel	1.33
Liberty Mutual	1.06
Trisura Guarantee	0.87
All others (88 companies)	0.43 (avg.)
HHI *	638.2
Source: Market Share as a percentage of Direct Premiums Written (DPW), Canadian Underwriter (2022).	

* Note: The HHI is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. For example, for a market consisting of four firms with shares of 30, 30, 20, and 20 percent, the HHI is 2,600 ($30^2 + 30^2 + 20^2 + 20^2 = 2,600$).

well as the number of traffic accidents, the relative degree of litigiousness and the number and type of weather-related events. Other determining factors will include risk culture and consumer behaviour. Any benchmarking analysis must acknowledge that there will be differences across jurisdictions regarding the competitive structure of their insurance sector, legal requirements for insurance coverage as well as the litigiousness of the local legal system. However, as a general rule, general liability insurance in developed economies is an absolute requirement for businesses to function, auto insurance is compulsory for drivers, and home insurance is a must for consumers seeking to secure mortgage financing. Therefore, comparison of these sectors should be generally valid.

We begin by benchmarking Canada's overall national result for the sum of auto, property and liability insurance, against OECD peers for which data are available. But, in order to benchmark Canada, we must deal with a major gap in Canada's data by adding in the premiums for compulsory and optional automobile insurance paid to public insurers in BC, Saskatchewan and Manitoba. We also need to add in the portion of premiums paid by drivers in Quebec, via their driver's license fees, for accident benefits and bodily injury coverage provided by the SAAQ (Quebec Automobile Insurance Corporation). The process for doing this is not without its own special challenges and our assumptions are outlined in Box 2.

Total Insurance Premiums

Using GDP as a benchmarking metric, we can see that Canada pays a relatively higher share of total GDP to fund risk transfer in the three main comparable lines (Figure 7). When total premiums are adjusted to incorporate the government monopolies in car insurance, we in fact pay the highest share in the benchmark group (again, Figure 7). This was true in the earlier study but is even more vividly true in the more recent benchmark period, as our rate of growth in total

premiums paid was even greater than our closest peer – the United States.

Canada's auto, property and liability gross written premiums from 2020 to 2022 averaged 3.2 percent of GDP, compared to an OECD average of 1.5 percent and a G7 (excluding Canada) average of 2.2 percent. These results indicate that Canadian premiums are somewhat higher than our North American neighbour and much higher than other G7 and OECD peers.

Commercial Liability Insurance

Next, we look specifically at commercial liability (the only component of corporate insurance risk-transfer costs that can be explicitly broken out in the data). Commercial liability covers significant risks such as product liability, errors and omission, director's and officer's liability, as well as cyber liability.

These liability-specific data show a different picture from the overall result, with a handful of nations paying more than Canada as a percentage of GDP – including two G7 peers. Canada's average gross written premiums as a percentage of GDP stood at 0.42 percent, compared to an OECD average of 0.21 percent, and a G7 average of 0.38 percent. So, while Canada's risk transfer costs for commercial liability are materially higher than the OECD average, they are not fundamentally out of line with G7 peers and are, in fact, lower than several of these peers.

Normally, one would expect nations with a well-established rule of law, clear access to courts for aggrieved counterparties, as well as strong consumer protection legislation, to acquire larger limits of liability coverage. As expected, the US business community, with its particularly litigious environment, paid a high price for commercial liability coverage in both periods – roughly double (as a percentage of GDP) Canada's average over the more recent period. It is certainly surprising however to see the common-law UK ranking even higher by this metric, but this is likely a data anomaly, as reported UK premiums may

Box 2: Assumptions in Auto Insurance Premiums across Canada

Due to the public-private nature of auto insurance in some Canadian provinces, there are methodological challenges when calculating and comparing total and personal auto insurance premiums across Canada. We have made every effort to fully document our assumptions in order to provide an informed basis for discussion. For example, Saskatchewan General Insurance (SGI), the province's public P&C insurance provider, is comprised of two different parts: the Auto Fund, which provides compulsory auto insurance, and SGI Canada, which writes other lines of insurance in Saskatchewan and also provides P&C insurance in other provinces.

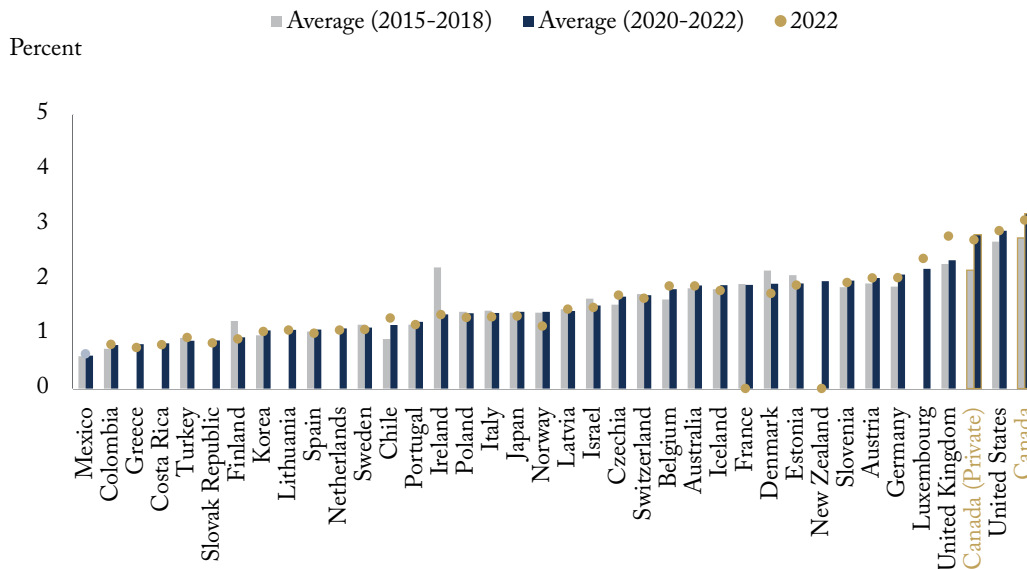
The Auto Fund does not provide a breakout of personal and commercial compulsory auto lines. Therefore, for our later comparisons of personal lines of auto insurance, we have assumed (after discussion with SGI) that 85 percent of premiums comes from personal lines and the remaining 15 percent is a mix of commercial and farm-vehicle registrations. We also note that the Auto Fund numbers are reported over the fiscal year from April 1 to March 30, rather than the calendar year used by other insurers. However, since we are looking at averages over multiple years, we believe the impact of this on the results is negligible. In addition, we have had to assume that SGI and its counterparts in Manitoba and BC (Manitoba Public Insurance (MPI) and the Insurance Corporation of British Columbia (ICBC)), have no assumed and ceded reinsurance premiums.* This assumption likely biases lower our estimates of auto insurance premiums. However, a comparison of direct premiums solves for this bias.

Quebec's mixed public-private auto insurance poses another challenge. Quebec's public insurer, SAAQ, administers bodily injury and accidents coverage, and its private insurers provide civil liability and property damage coverage. SAAQ provides the bodily injury and accidents coverage by way of administering driving licenses. In other words, there are no separate premiums for this coverage. Instead, we assumed that the insurance contributions to SAAQ's operations represent the portion allocated toward providing this coverage. As well, SAAQ does not provide a breakout of these contributions by personal and commercial lines. Using Statistics Canada data on vehicle registrations by province, we assume that vehicles weighing less than 4,500 kilograms represent private passenger vehicles** and we use that number to estimate the portion of Quebec's total contributions that is for personal coverage for our later comparisons of personal lines.

* Reinsurance is accepting the risk of another insurance company in exchange for a premium. The premiums received by an insurance company to cover that risk are assumed premiums. The premiums paid by an insurance company to transfer that risk are ceded premiums.

** The total number of Canadian vehicles weighing fewer than 4,500 kilograms is in line with other international estimates of Canada's private passenger cars. This supports the use of this measure for estimating the number of private passenger cars in Quebec.

Figure 7: Auto, Property and Liability Gross Written Direct Premiums as a Percentage of GDP – Initial Study (2015-2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone, Canada and OECD Countries



Sources: OECD Insurance Indicators database, Insurance Bureau of Canada.

include workers' compensation premiums, which are recorded separately in the US, and are offered via government mechanisms in many other jurisdictions – including Canada.

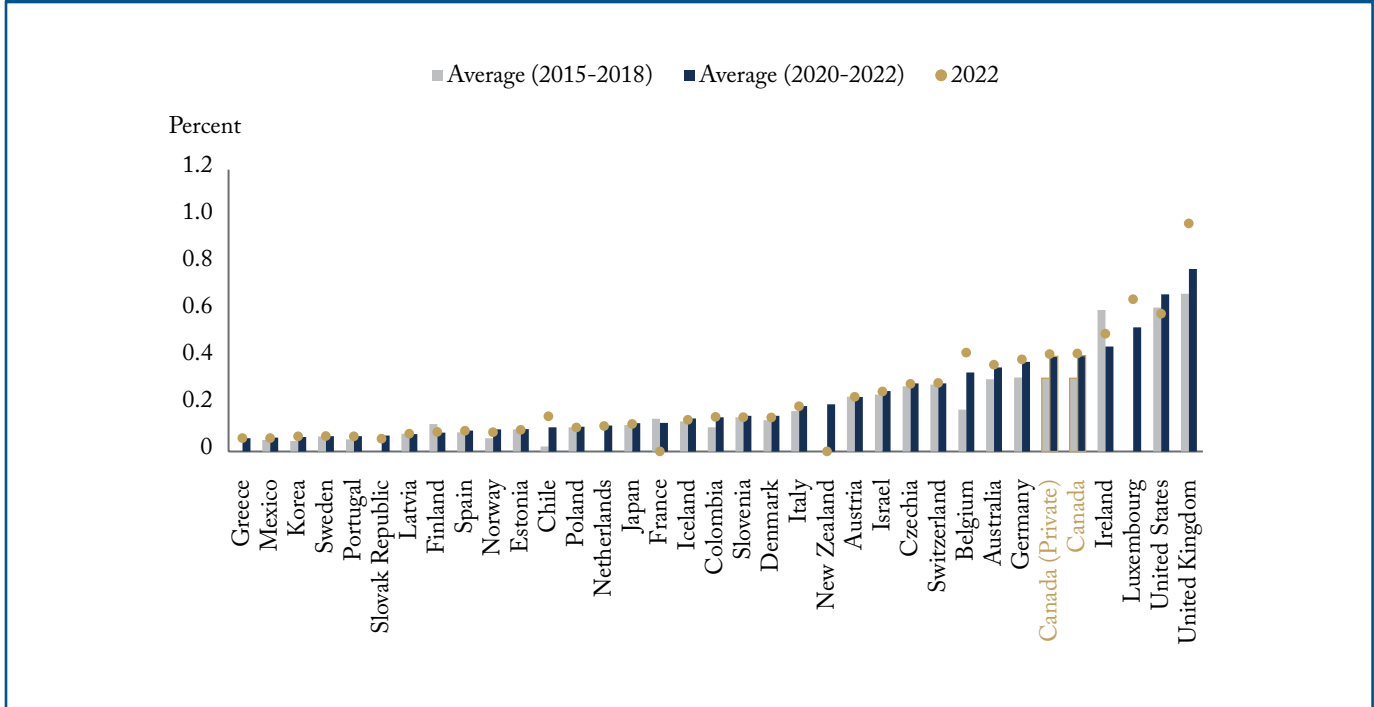
Several other elements in this exhibit are worth noting. First, we know that commercial insurance in Canada saw a “hard market” throughout this period (as mentioned earlier, this is industry slang for a period when insurance rates are rising faster than overall prices due to availability/capacity restraints) and Canada's upward trend in premiums is reflected clearly in the study findings. Second, Canada's relative market position has not changed in this newer study period. Third, the significant rate of growth in our liability premiums (relative to GDP) appears to be very much in line with our North American neighbours. Finally, if our liability premiums are at the higher end, but certainly lower than several major

benchmark comparators such as the US and UK, then the higher overall premiums ranking for Canada, as seen in Figure 7, must be the result of relatively higher premiums in auto and/or property. This arithmetic reality is illustrated compellingly in Figures 9 and 10, which we discuss next.

Property Insurance

When we turn to benchmarking for property insurance (which here includes both commercial and personal property), we see that Canada is again in the top ranks, paying 1.23 percent of GDP in premiums, almost double the 0.66 percent average of other G7 peers and even higher than the 0.52 percent OECD average (Figure 9). Also noteworthy is the size of the increase for Canada between the initial study and this most recent one.

Figure 8: Liability Gross Written Direct Premiums as a Percentage of GDP – Initial Study (2015-2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone, Canada and OECD Countries



Sources: OECD Insurance Indicators database, Insurance Bureau of Canada.

In this period, Canada’s payments for property risk transfer as a percentage of GDP increased by almost 30 percent.

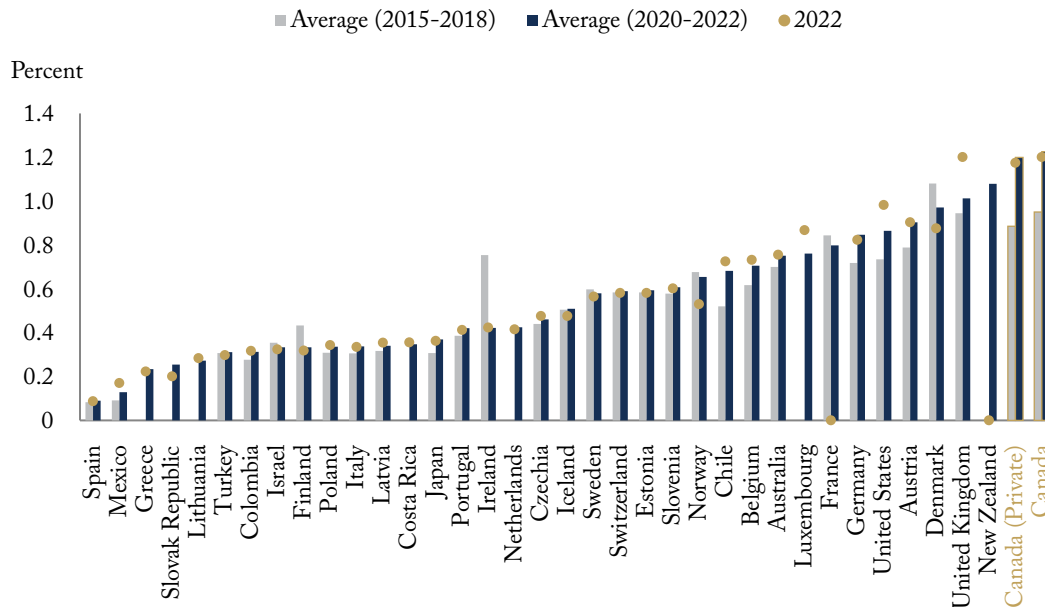
One possible explanation for the indisputably high (and rising) Canadian numbers in this benchmarking analysis could of course be structural differences among different countries’ insurance markets. For example, in many developed countries (notably France, Germany, and the US), more risk is transferred to governments via state-run pools or catastrophe backstop mechanisms for natural disasters including flooding and earthquakes. In Canada, the current absence (in the case of

earthquake risk, an inexcusable absence¹¹⁾ of such backstop mechanisms could help explain why Canadian homeowners end up paying more for their insurance than those in other nations.

A recent study regarding uptake of earthquake insurance by BC residents compared to similarly earthquake-exposed neighbours in Washington state suggests another possible explanation – innate Canadian conservatism and prudence (Kelly et al. 2021). It is entirely possible that Canadians’ natural risk aversion is reflected in a higher insurance-buying propensity, combined with a preference for lower self-insured amounts (deductibles). Both of

11 See Nick Le Pan’s important 2016 analysis (Le Pan 2016) at https://www.cdhowe.org/sites/default/files/2022-04/Commentary%20454_0.pdf. See also Grant Kelly’s 2021 paper (Kelly 2021) at https://www.pacicc.ca/wp-content/uploads/WIF_The-Tipping-Point-2021-EN-2.pdf

Figure 9: Property Gross Written Direct Premiums as a Percentage of GDP – Initial Study (2015-2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone, Canada and OECD Countries



Sources: OECD Insurance Indicators database, Insurance Bureau of Canada.

these biases would contribute to relatively higher average premiums.

Finally, we know that capital standards established by the Office of the Superintendent of Financial Institutions, and applicable to all insurers operating in Canada, require a particularly high level of capital and reinsurance for insurers choosing to write property risks in disaster-prone areas, relative to other developed jurisdictions. It is possible that Canada's ranking on this metric is, at least in part, driven by this added "price for prudence," paid to cover the cost of the extra capital allotted to protect the system from insurer failure.

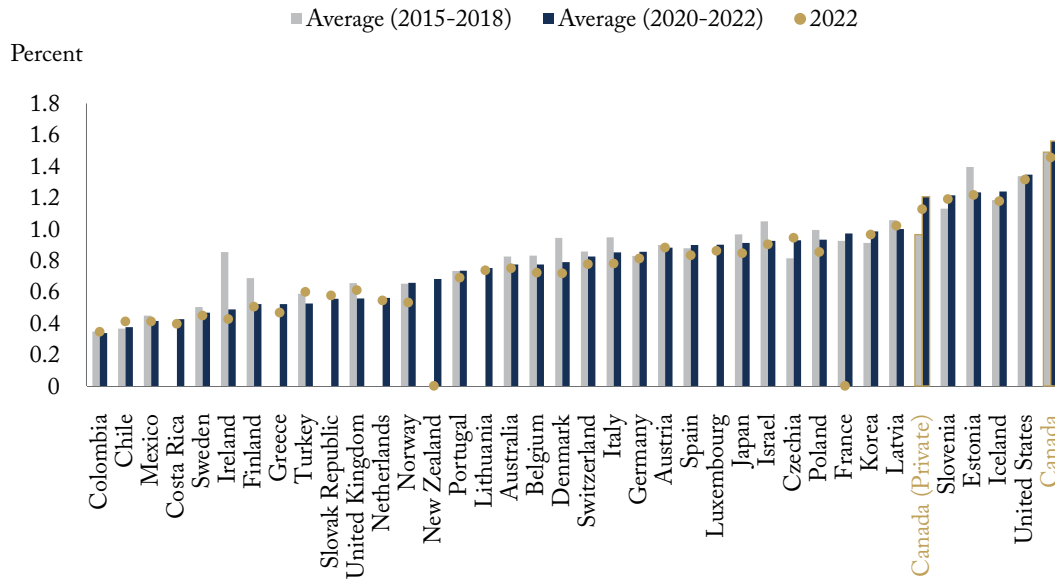
Automobile Insurance

In Figure 10 we see that for automobile insurance (which here includes both personal and commercial

auto), Canadians appear to be paying, on average, the highest premiums in the world relative to GDP (with Estonia – the unexplained outlier in the first benchmarking study – slipping back towards average).

It is important to note that there are many more countries within a close margin of the overall average of the automotive-premiums-to-GDP ratio, and a much smaller gap between the top and bottom quartiles, than is the case in our property analysis above. The top quartile paid, on average, 1.2 percent of GDP on automobile coverage over the 2020-2022 period, more than twice as much as the .42 percent average paid by the bottom quartile. In comparison, the top quartile paid four times as much as the bottom quartile for property coverage (0.89 percent versus 0.21 percent) and roughly eight times as much as the bottom quartile on liability

Figure 10: Auto Gross Written Direct Premiums as a Percentage of GDP – Initial Study (2015-2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone, Canada and OECD Countries



Sources: OECD Insurance Indicators database, Insurance Bureau of Canada, SGI, ICBC, MPI, SAAQ, author’s calculations.

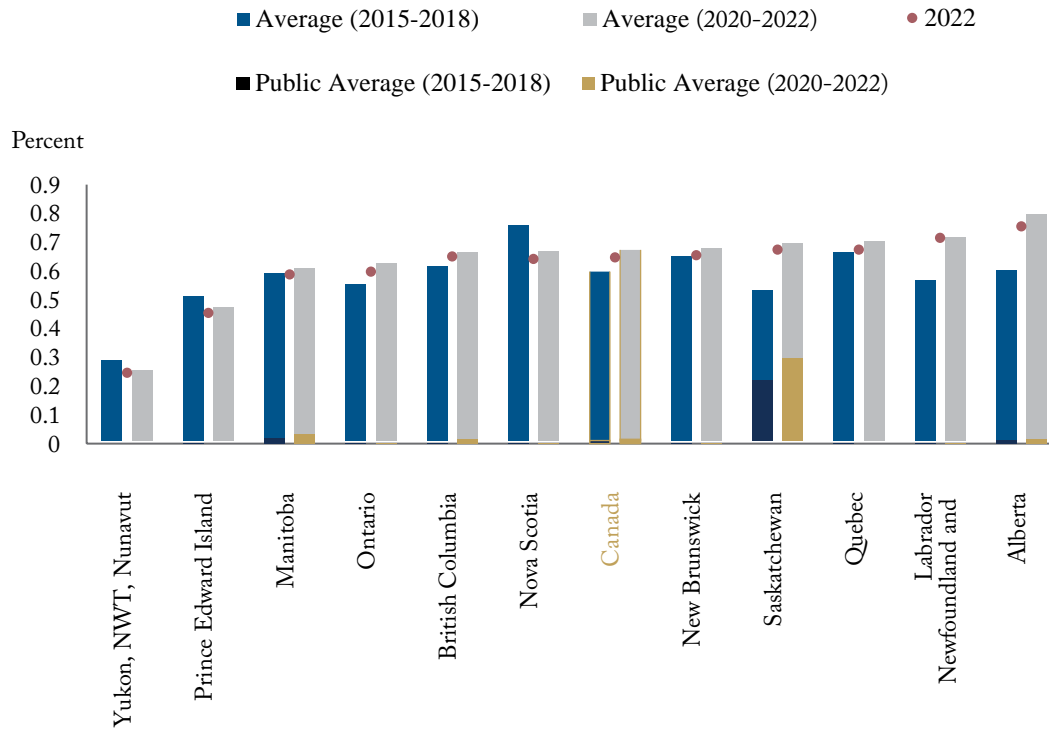
coverage (0.47 percent vs 0.06 percent). This smaller auto insurance costing gap is presumably explained by the commonality in types of exposure represented by automobile insurance losses, as well as a consistency in the cost of remediation (including replacement parts and repair costs) after such losses. Recent and particularly egregious auto theft levels in Canada may widen the gap between Canada and others in future studies. We discuss this further in the next section.

Given the risks, discussed earlier, of small shifts in GDP data creating large swings in this type of benchmarking, it is important not to read too much into this finding. Rather, Canada’s ranking at the top should be interpreted as a general placement in the higher range among the sample of 31 OECD countries. That having been said, our high ranking throughout both study periods – coupled with the noticeable continued upward trend of premium

growth – affirm our outlier status at the top end of this benchmarking dataset.

When looking at auto insurance premiums, it is also important to appreciate the substantial portion of claim costs taken up by compensation for accident benefits and bodily injury. It is highly likely that different jurisdictions will allocate coverage for these costs differently – with varying portions funded via public health services, private employee benefits and/or auto insurance premiums. Even within Canada (as we shall see in subsequent sections) there is significant variation with certain provincial jurisdictions having particularly generous policy limits funded via consumer-paid auto premiums. It is possible that Canada has a higher weighting of such costs borne by consumers and private insurers than other jurisdictions, but this analysis is beyond the scope of this benchmarking paper.

Figure 11: Canada Personal Property Gross Written Direct Premiums as a Percentage of GDP by Province – Initial Study (2015-2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone



Sources: OECD Insurance Indicators database, Insurance Bureau of Canada.

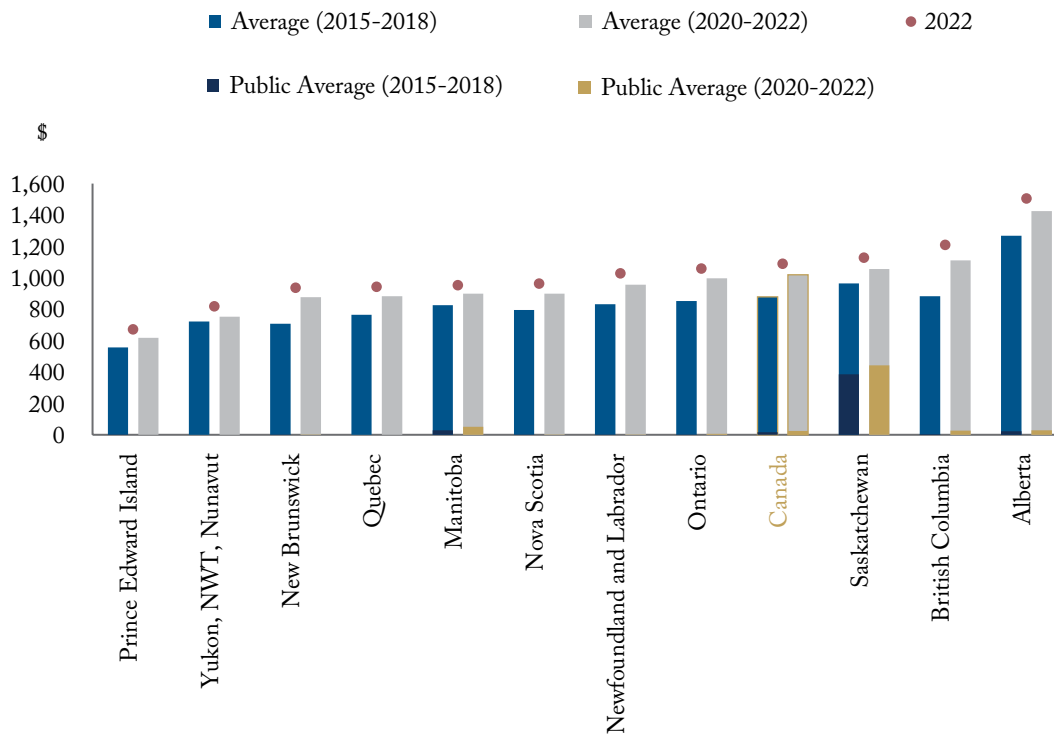
As we shall see in the next section, there are substantial variations between provinces within Canada, with certain provinces paying premiums as a percentage of GDP which are far higher than the average. It is also an arithmetic reality that these provincial outliers are the primary driver of the relatively higher overall Canadian ranking among international benchmark peers.

INTER-PROVINCIAL BENCHMARKING – PERSONAL PROPERTY AND AUTOMOBILE

Canada has both diverse geography and disparate relative economic wealth, so it is not unreasonable

to assume that there will be at least some disparity in provincial insurance costs as a percentage of GDP. It is also probably true that the cost to replace a car or rehabilitate someone injured in a car is relatively constant across Canada. The basic cost of reconstruction for damaged property is likely also relatively consistent, within a range. It is likely, then, that relatively less well-off provinces might pay more – as a percentage of GDP. However, since insurance purchased is a proxy metric for total owned assets, it is also fair to assume that richer provinces/regions will have higher investment in risk transfer simply because they have more assets to protect – thereby paying more as a percentage of GDP. As a result, we believe the GDP gauge is

Figure 12: Canadian Personal Property Gross Written Direct Premiums per Home by Province – Initial Study (2015-2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone



Sources: OECD Insurance Indicators database, Insurance Bureau of Canada, SGI, ICBC, MPI, SAAQ, author's calculations.

a legitimate one for inter-provincial benchmark comparison, and that material variances are still noteworthy.

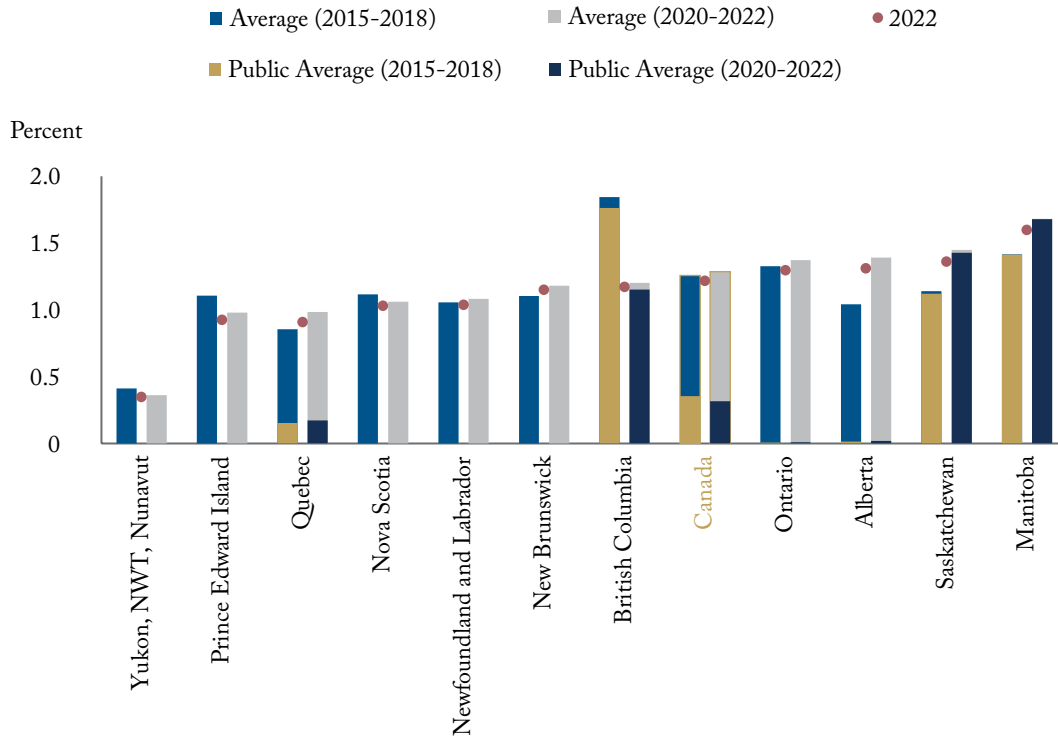
Personal Property

We begin by looking at personal property direct gross written premiums as a percentage of GDP by province, using IBC data (Figure 11).¹² The first obvious note is that – with the exceptions of our three territories and our smallest province – the

averages are strikingly consistent across the country. Simply put, the higher average premiums paid in Canada – relative to the rest of the developed world – appear to be shared equally by all. Second, the five provinces with above-average results are spread across the entire country. The third finding of interest (intuitively understood by all readers who have been seeing their own personal home insurance bills climb each renewal for the last few years) is that – with the exception of the four previously noted outliers and Nova Scotia – the

12 In addition to the premiums written by private insurers reported by the IBC, we add the portion written by the public insurer SGI in Saskatchewan, as well as SGI Canada in Alberta, BC, Manitoba, and Ontario.

Figure 13: Canadian Personal Auto Gross Written Direct Premiums as a Percentage of GDP – Initial Study (2015–2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone



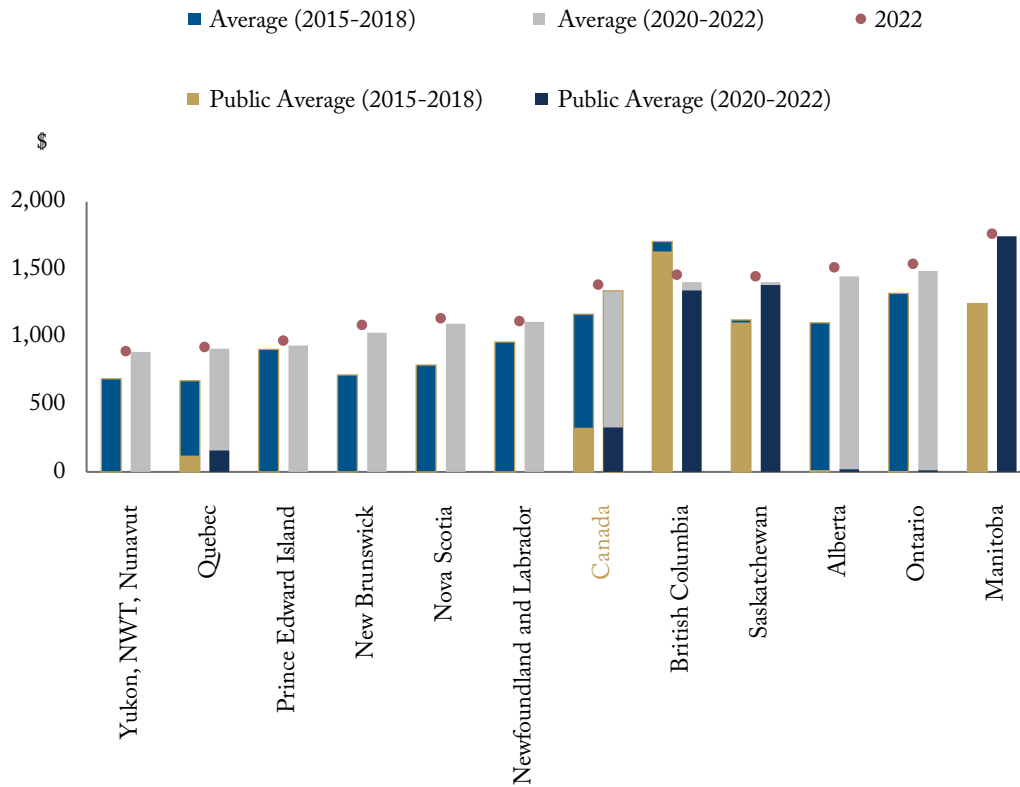
Sources: OECD Insurance Indicators database, Insurance Bureau of Canada.

rate of premium growth since the first study is substantial.

We also benchmarked premiums paid per-home in the most recent study period (Figure 12) and, as was the case in the first study, found that this rubric provides additional insight. Alberta, with its relatively higher GDP per capita, still ranked first using GDP as denominator. But on a per-home basis, Alberta tops the premium charts by an even wider margin. Given the devastating wave of natural catastrophes experienced by that province over the last decade, and the severe underwriting losses incurred there by the Canadian insurance industry over that period, this result is not surprising.

British Columbia also stands out in this analysis. Their significant earthquake exposure and relatively high take-up rate for earthquake cover (compared to also-quake-exposed but very low take-up rate Quebec) can certainly help explain BC’s high ranking. This quake exposure also helps explain why BC’s premiums per-home are rising faster than the rest of Canada. Reinsurance premiums (insurance purchased by insurers to protect against risks including natural catastrophe losses) have been climbing in recent years and insurers are clearly allocating the costs (and charging the premiums) where the exposure is incurred.

Figure 14: Canadian Personal Auto Gross Written Direct Premiums per Car – Initial Study (2015-2018 average) vs Most Recent 3-year Average (2020 – 2022) and 2022 Stand-alone



Sources: IBC, SGI, ICBC, MPI, SAAQ, Statistics Canada and author’s own calculations.

PERSONAL AUTO¹³

As we have already seen, Canadians – on average – pay higher costs for auto insurance than drivers in other countries as a percentage of GDP. But province-by-province comparisons of personal auto insurance show that there are substantial differences among provinces, with four jurisdictions producing

higher-than-average results (see Figure 13). Two of the four (Saskatchewan and Manitoba) are government-monopoly jurisdictions. In fact, these are the two highest. While the two others (Ontario and Alberta) are served by a competitive private sector, both also have high degrees of government involvement in the design and pricing of the automobile insurance product.

13 I remind readers to refer to Box 2 for the assumptions made in order to address the methodological challenges arising from the mix of public and private mechanisms providing auto insurance in some Canadian provinces.

It is fascinating to note that the nation-leading province in our first study (British Columbia), which is also a state-run monopoly, has moved suddenly and rather dramatically to an average cost (as a percentage of GDP) below the national average. In all likelihood, the explanation lies in the significant product reform implemented by the BC provincial government in 2020 (effective May 2021), which moved the province to a “no-fault” environment.¹⁴ The beneficial consequences for consumers appear to have been almost immediate.

The fact that the above-average jurisdictions are a mix of public and private markets suggests that the particular business model is not the primary cause of Canadians paying higher average auto insurance costs. It is also important to note that almost all jurisdictions saw upward trends for pricing in the auto insurance line of business. An increasing cost-of-repair trend for ever more sophisticated cars (“computers on wheels” as they have been called) was compounded by supply chain pressures during the pandemic. These same pressures also increased cost-of-replacement in a period of endemic car theft.

The cost pressures discussed above are universal and should impact all jurisdictions roughly equally. How then to explain the very clear differences among jurisdictions? It is possible that Canadians receive higher accident benefits compensation than citizens in many other countries and/or that a greater portion of total costs for treatment of bodily injury is borne by property & casualty insurers, rather than private or public health coverage purchased/provided separately. More work could be done to confirm this logical explanation. But I would submit a shortlist of my own additional suggestions as to the specific drivers of the key variances we see among provinces. That

list would include lack of market competition (MB and SK), disproportionate shares of claims costs allocated to the legal profession (AB), and failure to adequately mitigate claims fraud and reduce auto theft (ON).

We also benchmarked provincial personal auto costs “per car” (see Figure 14) as a check on the credibility of the percentage-of-GDP metric. The four higher-than-average provinces remain above average using the per-car metric. And British Columbia, the third of the state-run jurisdictions, also produces an above-average result on a per-car basis.

CONCLUSIONS

This benchmarking study confirms that the results of the initial benchmarking study were not a statistical aberration. Key findings in this study update include:

- Canadians still pay higher-than-average risk transfer premiums relative to the benchmark – and, again, our costs are among the highest. But, in this study period, they are even higher relative to benchmark averages. This is true for both property and auto lines of business. *Nota bene*, Canada’s outlier position is not just correlated with issues in a single category of insurance. Rather it is the result of higher premiums in several very distinct types of coverage, and is all the more notable because of this fact.
- Comparison by province within Canada also yields findings of interest. For instance, the no-fault reforms introduced by the province of British Columbia in their monopoly automobile line appear to have produced substantial early benefits (presumably directly correlated with reduced frictional costs for claims administration). But the two other large provinces, with government monopolies (Manitoba and Saskatchewan) now lead the pack

14 No-fault insurance is a system of insurance whereby each party is indemnified through their own insurer, regardless of the source/cause of loss. No-fault insurance systems may also remove or limit a policyholder’s right to sue another party who they deem responsible for an accident or personal injury.

in costs. And the one private market (Alberta) that has chosen until recently to embrace a costly tort environment continues to see much higher automobile premiums than average. These jurisdictions contribute materially to the higher overall Canadian result in this line of business.

- The study also suggests that Canada's largest province, Ontario, could reduce costs by better controlling claim fraud and auto theft, and that government-run monopolies in auto insurance could benefit from introducing market competition.
- Property insurance premiums are generally consistent province-by-province and are consistently very high relative to international benchmark peers. As one would expect, Alberta, which has seen disproportionately numerous (and large) catastrophe events in the last decade, pays premiums which are correspondingly higher (and still climbing). But it is not just one province driving the variance. All Canadian homeowners are paying more.

The higher average property premiums paid by consumers and businesses cry out for more holistic solutions – true public-private partnerships to

address tail risk are a common feature of almost all other developed economies... but unfortunately not Canada. Current (if belated) efforts to find a better blend of public-private risk transfer for flooding are welcome. But they need effective implementation soon. The long-ago promised and repeatedly postponed initiative to develop a better liquidity backstop mechanism for earthquake risk (addressing a significant risk in both Western and Central Canada) is now long overdue. All Canadians are experiencing a higher cost of living because of this failure to execute.

Continued focus by the industry and our governments on the key drivers of these results, and the identification of commonsense measures to mitigate the worst contributors to these higher-than-average risk transfer costs, would benefit all Canadians – both consumers and businesses.

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