InsurEconomy 2024

Measuring the value of the property and casualty insurance industry to the economy

$\widetilde{G}^{2}(\varepsilon) = \widetilde{S}^{2}(\varepsilon) = \frac{\sum_{i=1}^{n} e_{i}^{2}}{n - 2n}, (1)$ **NOVA SCOTIA** $\widetilde{G}^{2}(\varepsilon) = \widetilde{S}^{2}(\varepsilon) = \frac{\sum_{i=1}^{n} e_{i}^{2}}{n-2}, (t)$ $\varepsilon_{ex} = \frac{dQ_{ex}}{de} \cdot \frac{e}{Q_{ex}}; \ \varepsilon_{im} = \frac{dQ_{im}}{de} \cdot \frac{e}{Q_{im}}.$ $NE(e) = Q_{ex}(e) - eQ_{im}(e),$ $E = \frac{dQ_{ex}}{de} \Delta e - e \frac{dQ_{im}}{de} \Delta e - eQ_{im}.$



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The InsurEconomy report is published by Insurance Bureau of Canada (IBC) and presents statistics on the P&C insurance industry's importance and economic contribution to Canada and its provinces. Data in the report is sourced from IBC, Statistics Canada and MSA Research Inc., with other supporting information collected from secondary sources.

IBC commissioned Statistics Canada to use their input-output model to simulate the P&C insurance industry's 2022 direct, indirect and induced impacts on output and employment at the national and provincial levels. IBC provided the 2022 estimate of P&C insurance industry output used in the model shocks.

The most recent data available is used for the major P&C issues highlighted within the report.

In some instances, figures may not add up to the listed total due to rounding.

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Chapter 1: Key Findings



In 2022, Nova Scotia's property and casualty (P&C) insurance industry directly contributed \$330 million to the province's nominal gross domestic product (GDP), with the total economic impact of over \$510 million when the indirect supply chain purchases and the induced impact of re-spending are taken into account.



In Nova Scotia, P&C insurance carriers and brokerages directly created 2,200 jobs in 2022. For every 100 P&C insurance jobs, a further 78 jobs were generated due to supply chain impacts and the multiplier effect of employees' re-spending of earnings. The total number of jobs attributable to the P&C insurance industry was estimated to be 4,000.



Those working in life and health (L&H) and P&C insurance carriers in Nova Scotia earned an hourly compensation that was 60% above the 2022 provincial average (Exhibit 2), reflecting their productivity. On average, labour productivity at an insurance carrier was triple the average industry in Nova Scotia (Exhibit 4).



The insurance industry furthers gender equality by employing a substantial percentage of women. As of 2021, L&H and P&C insurance brokerages achieved a 60% rate of employment for women, while carriers registered 62%, compared with 49% for the average industry in Nova Scotia (Exhibit 3).



The P&C insurance industry contributes substantially to Nova Scotia's tax revenue. In 2022, the industry directly contributed \$7 million in Nova Scotia corporate income taxes and \$87 million in insurance premium taxes (**Exhibit 5**). Additionally, the industry contributed \$115 million in taxes and levies at the provincial level, which brought the industry's total tax contribution to \$209 million.





The P&C insurance industry transfers risks from individuals and businesses. Insurers accomplish this by pooling and spreading individual and business risks among a wide range of perils, businesses and individuals. Insurers price policies to match the expected value of the risk, administrative costs and a profit margin. By constructing a large, diversified portfolio of these risks, the industry manages P&C risks in Nova Scotia.

However, primary insurance carriers do not do this work in isolation. Insurance carriers depend on the distribution channels and consumer education services of insurance brokerages and agents. Brokers and agents work directly with consumers to select insurance coverages that most accurately matches the consumer's budget and risk profile.

Within the P&C insurance industry, reinsurance companies provide risk transfer services to primary insurance carriers. Similar to how insurers pool risks from individuals and businesses, reinsurance companies pool risks from insurers. By using reinsurance contracts,

primary insurance carriers can transfer risk for certain policies to the reinsurer and meet obligations for capital adequacy that are set by government regulators.

Although the nature of the P&C insurance industry remains relatively stable over time, and despite the challenges with natural catastrophes over the last few years, the business strategy continues to evolve to reflect the changing risk and regulatory environment in which the industry operates.



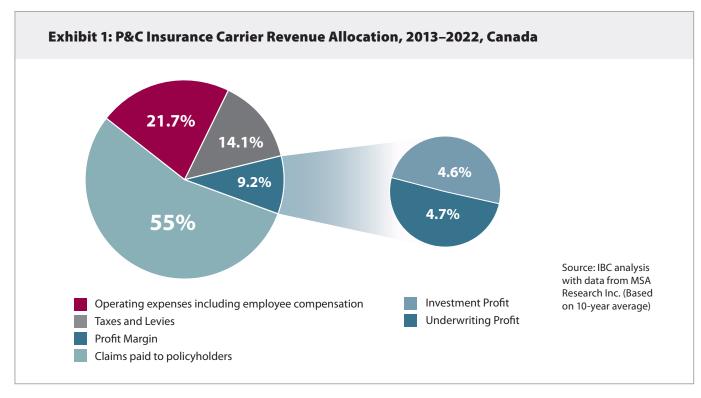


Chapter 3: The Importance of the P&C Insurance Industry for Canada

The P&C insurance industry in Canada expertly fulfills its role of transferring and managing the risks of individuals and businesses. These risk transfer and management services generate revenue and simultaneously spur investment. Beyond the economic impact, the industry provides secondary functions and societal benefits to Canadian society which are explained in further detail in Chapter 8.

Revenue Allocation across Canada (2013-2022)

Every dollar of revenue that Canadian P&C insurance carriers generate is typically allocated in the manner illustrated in **Exhibit 1**. For the 2013–2022 period, claims paid to policyholders, on average, made up the largest allocation (55%) of the P&C insurance industry's revenue in Canada, with the profit margin accounting for the smallest allotment (9.2%), on average. Overall, each insurer assumes and manages the risk of its clients in exchange for a premium that covers claims, operating expenses and other obligations.



Revenue Allocation across Canada (2022)

In 2022, the P&C insurance industry paid out 48% of its revenue directly to claimants, when compared to the average allocation of 55% over the last 10 years (Exhibit 1). In the same year, the industry retained 14% of revenue as profit, which was significantly higher than the recent 10-year average of 9.2%. The higher-than-normal profit reflected a decline in claims frequency and severity because of the downturn in economic activity during the COVID-19 pandemic. This underwriting profit will likely not stay at this level, given inflation and claims trends. Concurrently, the deterioration in investment returns reflected the sharp increase in interest rates and the resulting mark-to-market losses on most invested assets of P&C insurers, specifically, as it related to unrealized losses from bonds and equities. Currently, the industry's profit margin is almost exclusively underwriting income,

Table 1: P&C Insurance Carrier Revenue Allocation, 2022, Canada

Allocation	% of Revenue
Claims Paid to Policyholders	47.7%
Operating Expenses	22.4%
Taxes and Levies	15.7%
Profit Margin	14.3%
Underwriting Profit	14.1%
Investment profit	0.2%

Source: IBC analysis with data from MSA Research Inc.

although investment income would traditionally make up approximately half of the industry's profit.

By fulfilling its risk transfer function, the P&C insurance industry contributes significantly to Canada's competitiveness and prosperity. The industry offers a relatively high remuneration to its very productive and diverse workforce, while contributing a substantial amount in taxes to municipal, provincial and federal governments.

In addition to the direct economic contribution of the P&C insurance industry, there are also indirect and induced impacts.¹ Indirect impact captures the upstream supply chain activity of intermediate inputs to the industry. The induced impact captures economic activity attributable to the wages of workers in the industry and its supply chain.

Investment in Government Bonds

The P&C insurance industry invests heavily in government bonds that support Canada's economy. In 2022, the P&C insurance industry held a total of almost \$39 billion in federal, provincial, municipal, public authority and school bonds. This level of investment in government bonds in 2022 was marginally higher than the \$34 billion in 2018.

¹ Statistics Canada. "User's Guide to the Canadian Input-Output Model", June 2009.

Chapter 4: Employment Contributions



Jobs

Across Nova Scotia, P&C insurers directly employed 800 workers in 2022. Including brokerages, which act as expert advisors to address consumer insurance needs, the industry's direct contribution to the employment market reached more than 2,200 workers.²

The broad P&C insurance industry is responsible for substantially more jobs than its direct employees. These indirect and induced jobs include occupations in a wide variety of areas such as legal services, accounting, telecommunications, data processing and motor vehicle repair services. Accounting for the indirect jobs resulting from supply chain activity and induced jobs generated through employees re-spending their earnings, an additional 1,800 jobs were created in 2022, which brought the total employment attributable to the P&C insurance industry up to 4,000 workers.

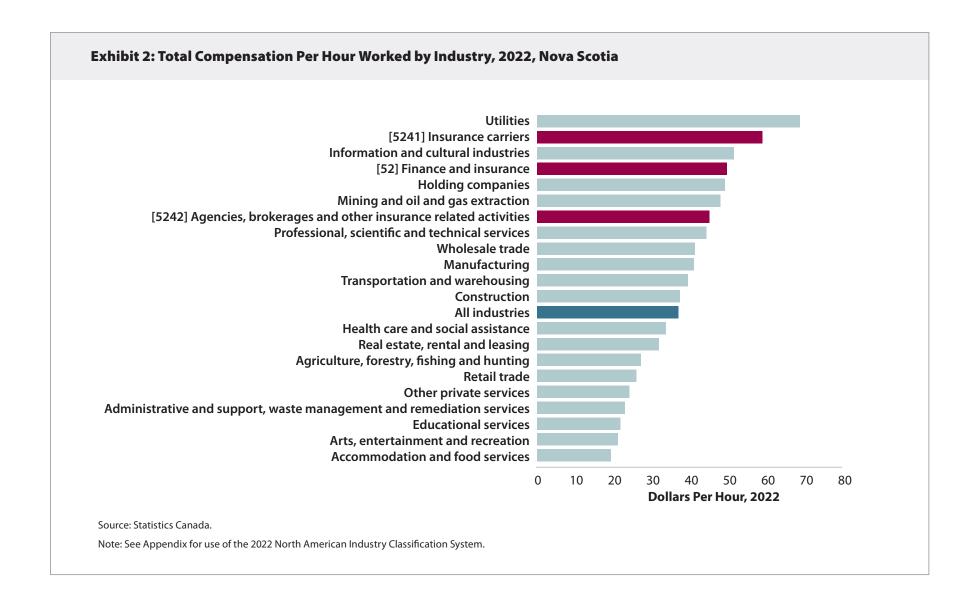
Labour Income

The insurance industry is not only a major source of employment in Nova Scotia's economy, it also supports high-quality, high-paying jobs. In 2022, workers at L&H and P&C insurance carriers made an average of \$60 per hour, and workers at L&H and P&C insurance brokerages earned an average of \$45 per hour. These average hourly wages were significantly more per hour than Nova Scotia's average employee, which was \$37 per hour (**Exhibit 2**).

In 2022, Nova Scotia's P&C insurance industry employees at carriers and brokerage earned close to \$160 million. Allowing for the indirect jobs generated through the supply chain impacts and the multiplier effect of employees re-spending their earnings, an additional \$90 million in compensation was added, which brought the total attributable labour income to \$250 million. The multiplier effect refers to the effect on the national income and product of an exogenous increase in demand. The investment of the P&C insurance industry leads to increased demand and consumption in other parts of the Canadian economy.

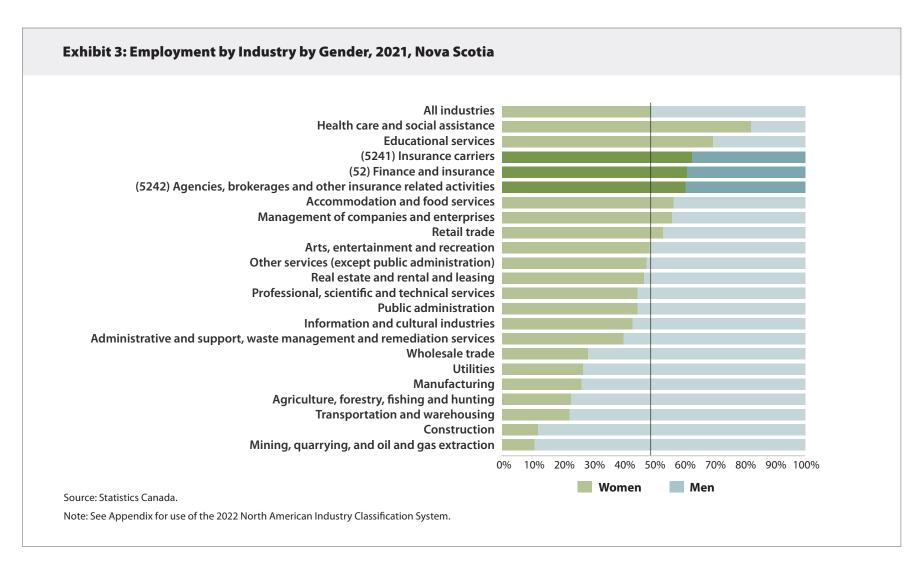
² See Appendix for the methodology used by Statistics Canada to compute the direct, indirect and induced impacts.





Diversity

The 2021 Canadian census revealed that Nova Scotia's finance and insurance industry employed more women (61%) than men (**Exhibit 3**). L&H and P&C insurance brokerages employed 60% women and carriers employed 62%, both higher than the average industry in Nova Scotia (49%).



The P&C insurance industry supports a significant number of jobs, employs a significant percentage of women and pays above-average wages, all of which contributes to both the economic dynamism of the province and its gender equality.

Chapter 5: Economic Contributions



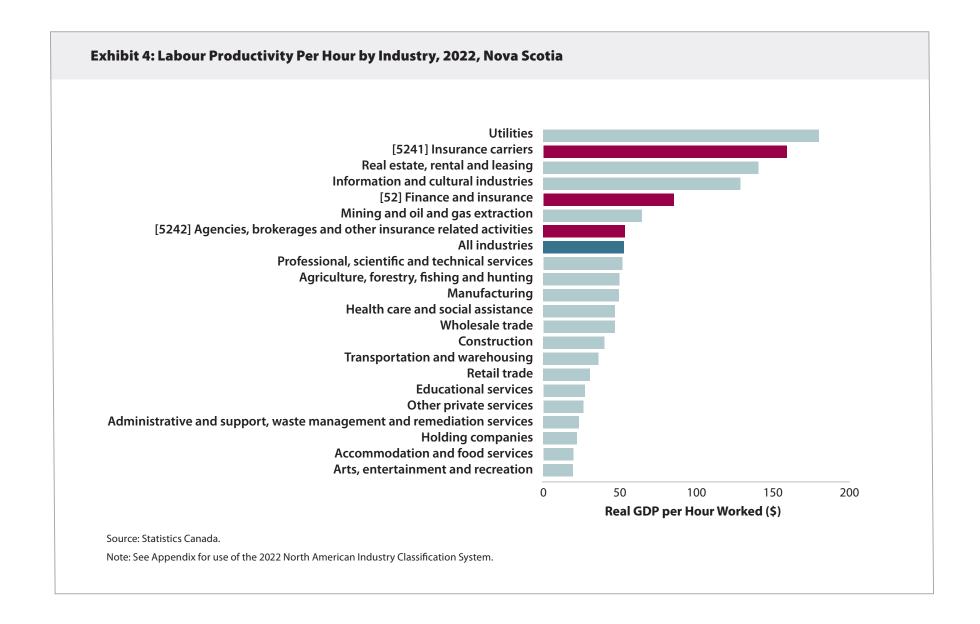
Gross Domestic Product

In 2022, the P&C insurance carriers directly added \$210 million to Nova Scotia's GDP through a combination of its risk transferring services and the return on its investment activities. P&C insurance brokerages added \$120 million in GDP, which brought the industry's total direct contribution to Nova Scotia's economy to a little more than \$330 million.

The P&C insurance industry's operations indirectly creates goods and services in its supply chain and, through employees re-spending their earnings, induces additional activities across the economy, which contributed a further \$180 million to Nova Scotia's GDP in 2022. Overall, for 2022, the cumulative direct, indirect and induced impact of the P&C insurance industry's contribution to Nova Scotia's GDP was slightly more than \$510 million.

In addition to the P&C insurance industry's large overall contribution to Nova Scotia's economy, the labour productivity (measured as real GDP per hour worked) of insurance carriers was estimated to be 210% above the 2022 provincial average. This makes employees at L&H and P&C insurance carriers among Nova Scotia's most productive workers (Exhibit 4).



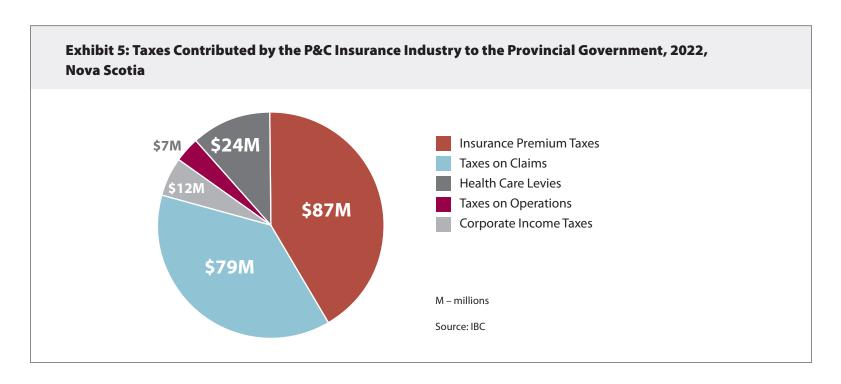




Tax Revenue

The P&C insurance industry directly contributed \$7 million in Nova Scotia corporate income taxes and \$87 million in insurance premium taxes in 2022 (**Exhibit 5**). The industry additionally contributed \$115 million in taxes and levies through its business operations, which brought the total tax revenue contribution to Nova Scotia's government to nearly \$209 million. In 2022, the largest direct source of provincial taxes was insurance premium taxes. P&C insurers pay a 4.0% tax on their annual collected premiums to the Nova Scotia government.³

The P&C insurance industry also contributed federal government tax revenue. In 2022, P&C insurers across Canada contributed almost \$4 billion in taxes to the federal government. These payments included corporate income taxes (\$0.4 billion) and payroll taxes for the industry's employees (\$2 billion).



 $^{^{3}\ \}underline{https://www2.gnb.ca/content/gnb/en/departments/finance/taxes/insurance-premium-tax.html}$

Chapter 6: Commercial Insurance



According to 2022 estimates, Nova Scotia's commercial insurance sector provided substantial value to Canada's economy by contributing to GDP, labour income and job creation. The sector's activities generated a direct economic impact of nearly \$103 million in GDP, close to \$49 million in labour income and 700 jobs.

When factoring in the multiplier effect, each \$100 of GDP and \$100 of labour income in the sector generated an additional \$55 and \$60, respectively, in other industries. Similarly, the sector created 78 jobs for every 100 jobs in the commercial insurance sector in Nova Scotia. This brought the total economic impact of the commercial insurance sector in 2022 to nearly \$160 million in GDP, close to \$80 million in labour income and 1,200 jobs. These trends highlight the significant economic impact and job creation potential of the commercial insurance sector in Nova Scotia.

Moreover, during the 2022 fiscal year, insurers in Nova Scotia disbursed roughly \$350 million to help settle commercial insurance claims. These payouts play a pivotal role in supporting businesses, enabling them

to recuperate from their losses and swiftly restart their operations following unforeseen events. By providing the necessary financial support, the commercial insurance industry continues to be a crucial partner in the recovery and resilience of businesses across Nova Scotia.

The ability of Canada's P&C insurance industry to act as a financial shock absorber is heightened in challenging times like today, as businesses feel the impact of an inflationary environment and periods of lower economic growth, illustrated most plainly by price shocks and the subsequent cost of living crisis. In such a landscape, insurers have a unique perspective and, indeed, a responsibility to absorb the impact for both consumers and the wider economy.

At the end of 2022, close to 21,000 businesses were active in Nova Scotia.⁴ All have one thing in common: without the right insurance coverage, each could be wiped out by a disaster or a lawsuit.

⁴ Statistics Canada.



Chapter 7: Major P&C Issues



Natural Disasters

Like other Atlantic provinces, Nova Scotia has historically faced windstorms and water-related perils. However, in 2023, the province faced a significant amount of loss attributed to fire-related catastrophes because of wildfires. While this was unprecedented, it should not be dismissed as an outlier as it followed the trend of wildfires across the country. Overall, Nova Scotia is coming off its two worst years for catastrophic losses on record, with 2022 totalling \$567 million and 2023 totalling \$581 million. On a per capita basis, Nova Scotia had the highest amount of loss out of any province for 2023 and the second highest for 2022.

Auto Insurance Input Costs

The auto insurance product in Nova Scotia has not been reformed in close to a decade. The government conducted a consultation in early 2023, during which IBC made a series of recommendations to help stabilize consumer premiums and increase the number of insurance options available to consumers.

Nova Scotia has also experienced a period of high inflation, with auto insurance providers being hit especially hard over the last three years by soaring input costs. The annual inflation rate in Nova Scotia moderated to 4.0% in 2023, from 7.5% in 2022, which was significantly higher than the province's average annual inflation rate of 1.6% over the prior 10 years. Despite inflation moderating, the cumulative effect was felt by businesses and consumers. From an auto insurance perspective, between 2020 and 2023 period, vehicle purchase costs increased by 16.8% and vehicle parts, maintenance & repairs went up by 14.9% within the province. In contrast, passenger vehicle insurance premiums have only increased by 7.1% over the same time span.⁶

Direct Claims Incurred

Direct claims incurred in Nova Scotia are at record highs for both commercial and personal property. In 2022, direct claims incurred for personal property was the highest year on record at \$533 million, almost tripling the amount for 2021. Commercial property also had a record high of \$249 million direct claims incurred for 2022, more than tripling the amount for 2021.⁷

⁵ IBC analysis with data from CatlQ.

⁶ IBC analysis with data from Statistics Canada

⁷IBC analysis with data from MSA Research, Inc.



Chapter 8: Secondary Functions and Societal Benefits of the Insurance Industry

Beyond the direct economic impact of the P&C insurance industry on national accounts, and therefore on Canadian economic well-being, there are often subtle, hidden but widespread socio-economic benefits to P&C insurance. Some of those benefits are as follows.

Financial Loss Minimizer

The primary benefit of insurance is to help minimize financial losses. This benefit can range from repairing and rebuilding a commercial property damaged by a natural catastrophe (e.g., a wildfire, flood or earthquake) to helping cover legal costs from a liability lawsuit. The enhanced financial security provided by insurance gives companies and consumers peace of mind, and helps families and businesses remain financially stable in times of unanticipated hardship.⁸

Financial First Responder

Preventive measures may not always be possible for all types of risks. For risks that are high-impact and low-probability, such as a natural

⁸ Grant, Eric. (2012). The Economic and Social Value of Insurance. The Geneva Association, 10.
⁹ Ibid., 12.

catastrophe, insurance carriers often act as financial "first responders", paying claims to those suffering losses before government assistance or charitable efforts get underway. By dispatching staff to assist with recovery efforts and quickly working to mitigate and repair damage, insurers help accelerate post-disaster efforts so that businesses and individuals can quickly get back on their feet. While insurance hedges against loss, it also facilitates economic re-start and recovery.

Capital Provider and Supporter of Public Finance

Insurers generally carry a diversified portfolio of stable, long-term investments such as corporate and government bonds. These investments allow insurers to invest in assets that support their



underwriting obligations, which would be too risky to insure without this fallback support.¹⁰ By purchasing government bonds, insurers implicitly help finance vital social services such as education and health care. Governments rely on capital markets to finance their activities, which means taxpayers do not bear full responsibility for government spending. In this way, insurers contribute to the overall fiscal and socio-economic health of Canada.

Insurance also helps support the supply and demand levers of the economy by facilitating national and international trade. For example, cargo and credit insurance allow businesses to import goods from overseas, bolstering the supply of goods in Canada. Insurance also supports demand when a business that has coverage for business interruption losses cannot fulfill orders because of an insured loss.

Innovation Facilitation

In the innovation ecosystem, many small, capitalized start-up companies take on enormous risk as they develop novel technologies. Many technological breakthroughs occur through a lengthy incubation process in which the enterprise is created and capitalized by investors. Start-up companies can engage in research and development on a pre-revenue basis for years (or even decades), generating intellectual property in the process – all prior to the commercial launch of their new product or service. Managing the financial risk associated with this process would be extremely difficult without liability insurance, errors and omissions insurance, directors' and officers' liability insurance, and other forms of insurance, since a single claim or operational error could effectively bankrupt the enterprise and deplete the invested capital. Commercial insurance helps the end-to-end scientific discovery process to manifest itself in a commercial space.

Commercial Credit Facilitator

When businesses have a brick-and-mortar presence, proof of commercial insurance is a pre-condition to securing a business loan. For this reason, insurers are also credit facilitators in the economy. This credit, in turn, facilitates the production, distribution, and use of the goods or services that the business produces.

Reputation Protector

All businesses must monitor and closely manage any risk to their reputation. When a business is able to demonstrate to clients and consumers that it has mitigated potential risks with insurance, it gives the clients and consumers greater confidence in the business. While insurance is not always required for all types of businesses, clients like to know they are dealing with a reputable company that takes the safety of its staff and clients seriously and appropriately addresses its financial risk.

Capital Formation Enabler

Insurance can help businesses save money over the long term if they pair adequate commercial insurance coverage with in-house risk management strategies. By actively managing risks, a business is less likely to have significant and frequent claims on their policy. This, in turn, helps demonstrate to their insurer that the company is "risk aware" and taking steps to prevent unnecessary losses. With fewer claims on the books, a business may be able to lower its overall insurance costs as its risk profile improves.

Workplace Safety Promoter

In addition to standard commercial insurance coverage, supplementary coverages help encourage a business and its employees to operate safely.

¹⁰ Grundl, H., M. Dong, and J. Gal. (2016). "The Evolution of Insurer Portfolio Investment Strategies for Long-Term Investing," OECD Journal: Financial Market Trends, 2016 (1).





The 2022 North American Industry Classification System¹¹ defines insurance carriers and agencies, brokerages and other insurance-related activities as follows.

5241 – Insurance carriers

This industry group comprises establishments primarily engaged in underwriting annuities, insurance policies and reinsurance. The establishments of this group invest premiums to build up a portfolio of financial assets to use against future claims. Contributions and premiums are set based on actuarial calculations of reserves. This industry group includes direct insurance carriers that are primarily engaged in underwriting annuities and insurance policies directly to policyholders, and reinsurance carriers that are primarily engaged in assuming all or part of the risk associated with existing insurance policies originally underwritten by other insurance carriers. Industries are defined in terms of the type of risk against which the policyholders are being insured, such as death, loss of employment due to age or disability, and property damage.

52411 – Direct life, health and medical insurance carriers

52412 – Direct insurance (except life, health and medical) carriers

52413 - Reinsurance carriers

5242 – Agencies, brokerages and other insurance-related activities

This industry group comprises establishments primarily engaged in selling insurance or providing services related to insurance.

52421 – Insurance agencies and brokerages

52429 – Other insurance-related activities

Methodology used by Statistics Canada

All nominal GDP, employment, personal income and tax values in this report are provided by Statistics Canada, which used detailed supply-and-use tables and input-output models, unless otherwise stated. The results of the model quantify the combined direct, indirect and induced economic impacts (total impact):

- Direct impacts relate only to businesses, employees and those self-employed workers in insurance carriers (NAICS 5241) and agencies, brokers and other insurance-related activities (NAICS 5242), for example, premium taxes paid directly by insurance carriers.
- Indirect impacts (or supply chain impacts) are generated by the upstream (supply chain) purchases made by operations identified in the direct impact phase. For example, operations in the P&C insurance economy require external legal and administrative services.

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¹¹ Statistics Canada.



• Induced impacts are derived when employees of businesses identified in both the direct and indirect impact phase spend the earnings made from the activity under analysis. This re-spending results in additional levels of employment, income and tax revenues, which can be observed across a wide range of industries.

Total Impact of P&C Insurance Carriers

Statistics Canada produces GDP, employment, personal income and taxes on products by detailed tax and taxes on production by level of government estimates for insurance carriers. However, these estimates include both the P&C and L&H insurance industry segments. To isolate the direct contribution of the P&C insurance industry, Statistics Canada uses detailed financial data from insurance carriers to calculate the output estimates for the P&C and L&H insurance industries. As defined in the 2008 system of national accounting, the output for each of these two industries was calculated by adding insurance premiums earned to investment income, then subtracting

insurance claims incurred. Investment income is the sum of interest and dividend income, realized gains and investment expenses. The P&C insurance industry's share of the total output for the insurance industry was then calculated by dividing the output from P&C insurance carriers by the total output for insurance carriers (defined as L&H plus P&C insurance). This share was then applied to all economic impact parameters for insurance carriers available from Statistics Canada, yielding estimates for P&C insurance carriers.

Total Impact of P&C Insurance Agencies, Brokerages and Other Insurance-related Activities

Almost all of the output of insurance brokers, agents and adjusters is purchased by insurance carriers. As a result, the impacts of P&C insurance agencies, brokerages and other insurance-related activities were estimated by running an output shock on the insurance carriers; the economic impacts of this industry are included in the model results as indirect impacts of insurance carriers.

