

ERM Benchmark Survey Report

A report on PACICC's seventh ERM benchmarking survey

September 2019

2019

Member Survey on ERM Practices

A report on PACICC's seventh ERM benchmarking survey

September 2019

Prepared by Ian Campbell, Vice President, Operations, PACICC

Contents

Executive Summary	1
Introduction	3
Background	4
2019 ERM Survey Findings	5
1. Corporate governance	5
2. Differing approaches to risk management	6
3. Importance of ORSA and ECM	8
4. Top emerging risks	9
Survey comparison	11
Key risk management terms used in this survey	12
Appendix I - PACICC's Risk Management Advisory Committee	13
Appendix II - 2019 ERM Survey Questions	15

**Property and Casualty Insurance
Compensation Corporation**

20 Richmond Street East, Suite 210
Toronto, Ontario M5C 2R9

Executive summary

PACICC is the industry-funded, non-profit resolution authority for Canada's Property and Casualty (P&C) insurance industry. PACICC's mandate focuses on initiatives to address solvency risk in the industry. This includes member surveys that explore the depth and quality of the industry's enterprise risk management (ERM) programs. PACICC has surveyed its members on their ERM practices seven times now over the past nine years. These surveys encourage member dialogue on industry ERM best practices and highlight practical elements that underpin a robust risk management program. This report presents four key findings from the latest survey, conducted earlier in 2019.

First, the survey confirms that earlier differences in corporate governance practices between larger and smaller firms in the industry are disappearing – including which parties are responsible for ERM management, receive direction from Head Office and have access to the Board of Directors or a Board Committee. This year's survey results show similarities in ERM frameworks of larger and smaller companies in the industry. This includes C-suite concentration of ERM responsibilities, greater autonomy from a head office for larger and smaller companies and enhanced ERM manager access to the Board of Directors or a Board Committee in smaller firms.

Second, the survey highlights some differences in the approaches taken to risk management between larger and smaller companies in the industry. A greater number of larger companies have a formal process in place to identify new and emerging risks, compared to smaller companies. Surprisingly, many larger firms said they viewed ERM as a regulatory compliance exercise rather than an initiative that was “embedded in” or accepted by the business. While the number of smaller firms viewing this as a regulatory exercise has fallen over time, the number of larger firms having this viewpoint increased threefold over the past year. Most larger companies responding to the survey said they maintain a risk profile of all material risks identified. The percentage of smaller companies engaged here is increasing, but there is still work to do to adopt best practices. While all larger companies said they have a business continuity plan and cyber protection plan in place for the entire organization, this is not the case with smaller companies.

Third, the survey identifies the increased emphasis that companies attach to Own Risk and Solvency Assessment (ORSA) and Economic Capital Models (ECM). A significant percentage of both large and smaller companies engage external resources to complete and/or review their ORSAs. Uptake here is almost identical. Over the past year, both larger and smaller companies reported greatest use of their ORSA results for capital management and ERM. A growing number of both larger and smaller companies report use of an ECM on a regular basis. Over the past year, larger companies used their ECM for capital management and ERM. Smaller companies used it principally for capital management and to inform strategic planning.

Fourth, the survey enquired about top emerging risks – in the next three years and over the next 10 years. In the near term, respondents said the top issues was cyber security, followed closely by both climate change and technological change. Over the longer term, the focus shifts to technological change and the effect that this will have on how products are delivered to market. The top six long-term risks cited in 2017 remain the top-six concerns for respondents in 2019, albeit in a slightly different order. Four of the six long-term risks are ranked in the same order as in 2017.

For purposes of this survey, the breakpoint between “larger companies” and “smaller companies” is deemed to be \$500 million in annual direct written premium (DWP).

PACICC will continue to survey members regarding ERM practices in order to enhance industry education on the merits of a robust ERM program. Surveys like this one help to foster industry dialogue and increase effective risk management oversight and practices in the industry.

Introduction

Enterprise Risk Management (ERM) is widely viewed as a best practice for P&C insurance companies to employ in managing risks. Top-performing companies have distinguished themselves through demonstrated superior risk management capabilities and practices. Their financial performance is influenced by how well they integrate risk management activities across the organization. Canada's insurance regulators have strongly recommended that P&C insurance companies seek to enhance their risk management practices on an enterprise-wide basis. Risk management is essential to the business of insurance. Key risk areas include: underwriting, credit, market, liquidity, operational, strategic, reputation and emerging risks.

In its role as the resolution authority for Canada's P&C insurance industry, PACICC remains committed to assisting member companies in strengthening the depth and quality of their risk management capabilities and practices. This will help to mitigate industry solvency risk. PACICC has distributed ERM surveys to its members (in strict confidence) seven times now over the past nine years in 2011, 2013, 2015, 2016, 2017, 2018 and 2019. The surveys, conducted using SurveyMonkey for ease and simplicity, were developed in consultation with PACICC's Risk Management Advisory Committee (an industry advisory committee of risk management experts). The survey questions encourage dialogue among members regarding leading ERM practices and highlight practical elements that underpin a robust ERM program.

Following each survey of members, PACICC issues a summary report to members with aggregate results showing how well the industry is managing enterprise risks, where progress is being made and where further attention may be required. This report presents 2019 survey findings and includes comparisons against past results. Members of the Advisory Committee are listed in Appendix I. The full list of survey questions (which compares this year's responses against those received in the year that each question was first posed) appears in Appendix II.

Background

PACICC's ERM benchmark survey initiative has three goals:

1. Encourage dialogue among industry stakeholders regarding ERM best practices;
2. Highlight practical elements that underpin a robust ERM program; and
3. Identify areas where further progress may be needed.

Questions in the 2019 survey focused on company characteristics, governance procedures, ERM framework and practices, Own Risk and Solvency Assessment (ORSA), Economic Capital Models (ECM) and tools and resources. This survey omits some questions from past ERM surveys where there was clear industry consensus (consistent 90%+ support). An example is the use of a risk appetite statement outlining specific goals, benchmarks, parameters and limits – considered a best practice. The complete list of survey questions in Appendix II includes 2019 responses as well as benchmark responses from when each question was first posed to members. This enables readers to see how responses have changed over time and the magnitude of the change.

Industry response to the latest ERM survey was very strong.

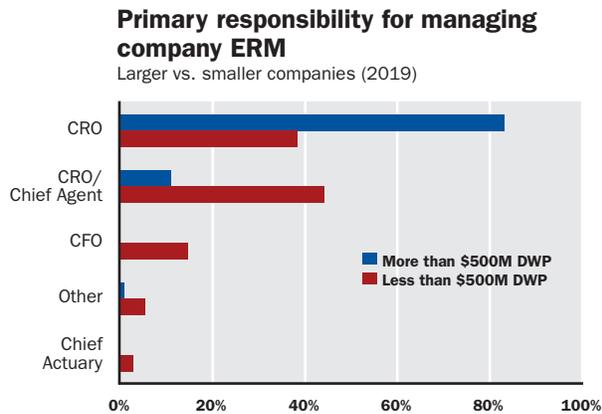
- Direct and related-company responses were received from 113 companies in the industry – up from 108 last year.
- Responses accounted for 86.9% of total private industry DWP – up from 81.7% last year.
- 18 of the 20 largest firms in the industry responded to the survey – up from 17 last year.
- 34 smaller firms responded to the survey – up from 30 last year.
- Respondents with more than \$1 billion in DWP accounted for 73.7% of industry market share – up from 68% last year.
- Respondents with more than \$500 million in DWP accounted for 78.5% of industry market share – up from 75.5% last year.
- 72.6% of respondents are regulated by OSFI, accounting for 71.6% of total private industry DWP.

Market share references relate to the most recent published figures (2018 DWP) for the industry. The high response rate is a good indication of the degrees to which Canadian P&C insurers are engaged in the whole concept of ERM and are interested in exchanging best practices information. Note: Percentages in the survey may not add to 100 due to rounding and/or to respondents missing or skipping questions.

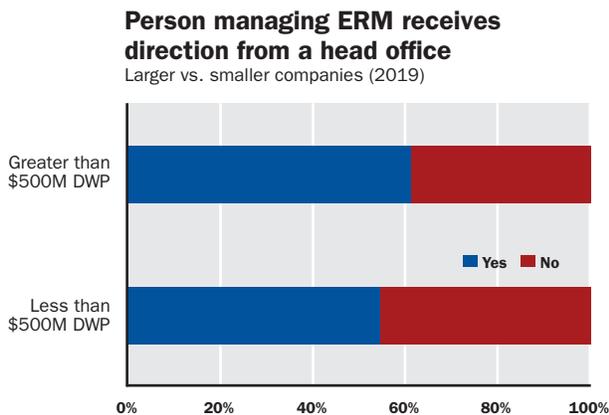
2019 ERM Survey Findings

1. Corporate governance

This year's survey results show similarities in the corporate governance framework of larger and smaller companies in the industry. This includes C-suite concentration of ERM responsibilities, greater autonomy from a head office in risk management and enhanced ERM manager access to the Board of Directors or a Board Committee.



ERM responsibilities continue to be consolidated in the offices of the Chief Risk Officer, CEO and Chief Agent. In 2013, 74% of respondents said these one of these three positions had primary responsibility for ERM. This year, that figure has grown to 86.5% across the industry – 94.4% for larger firms (up from 93% last year) and 82.3% for smaller firms (up from 70% last year). In 2019, 53.8% of all respondents said ERM was the responsibility of their CRO – up from 51% last year, and 46% in 2013 when the question was first posed. “Other parties” were cited for ERM responsibilities by 28% of respondents in 2013, but only 13.4% in this year’s survey.

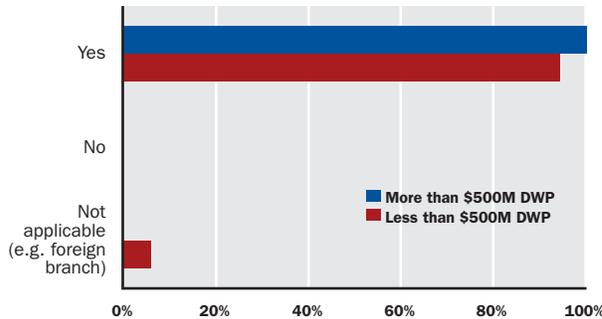


Responses here show more autonomy being exercised by both larger and smaller firms in the industry. In 2016 when the question was first posed, 62% of firms reported taking direction from a head office. That decreased to 60% last year, and now sits at 55.7% of firms in the latest survey. The percentage of larger companies taking direction from a head office decreased from 71% last year to 61.1% in 2019. Similarly, the percentage of smaller firms taking direction from a head office fell from 57% last year to 52.9% in the latest survey.

The percentage of parties with ERM responsibilities having access to the Board or a Board Committee overseeing ERM has increased dramatically over the past two years. In 2017, 94% of large firms reported Board access for their ERM managers. This increased to 100% in the latest survey. For smaller firms, the increase was also quite significant – from 85%

Person managing ERM has access to Board or Board Committee

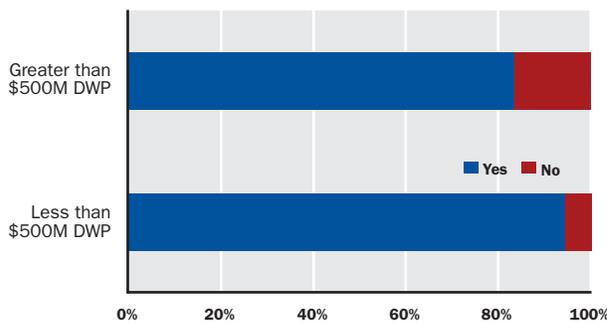
Larger vs. smaller companies (2019)



in 2017 to 94.1% in the latest survey. Differences in approaches between larger and smaller firms are lessening. The 9% gap in Board access that we saw between larger and smaller firms in the 2017 survey is now less than 6%.

Person managing ERM is part of Executive Management Team

Larger vs. smaller companies (2019)



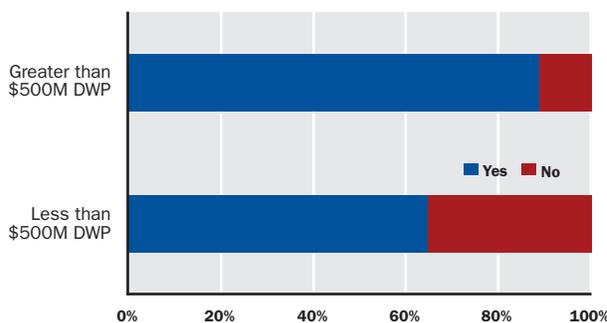
In 2017, 75% of firms said the person managing ERM was part of the EMT. That increased to 87% last year, and to 90.4% in the latest survey. An interesting development is that larger and smaller companies have effectively switched places with summary responses here. In 2017, 94% of larger firms and 85% of smaller firms reported that the person managing ERM was part of their EMT. This year, it is 94.1% of smaller firms and 83.3% of larger firms answering in the affirmative. With more task specialization in larger firms, there may be less likelihood for the ERM manager to be part of the firm’s EMT.

2. Differing approaches to risk management

The survey shows differences in the approaches taken to risk management between larger and smaller companies in the industry.

Company has a formal process in place to identify new and emerging risks

Larger vs. smaller companies (2019)

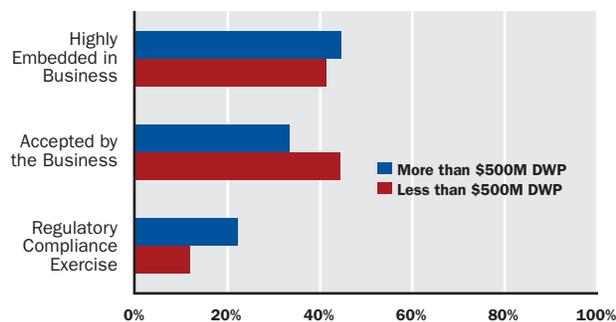


There has been slow improvement over time with respect to firms implementing a formal process to identify new and emerging risks. The industry average increased from 68% of firms in 2016 to 73.1% in 2019. This trend is led by larger firms, with their support increasing from 79% last year to 88.9% in the latest survey. Smaller firms have been enhancing their emerging risk identification capabilities over time, but at a much slower pace – from 60% in 2016, to 63% in 2018, to 64.7% in the latest survey. This shows that there is still work to do in aligning larger and smaller firm approaches to risk management.

There has been some industry pushback regarding the role of ERM in firms in the industry. There was 81% industry acceptance when the question was first posed in 2015. Industry support increased to 90% last year – 93% support from larger firms and 86% support from smaller firms. In this year’s survey, industry acceptance is down to 82.7% – 77.7% support

How does your company view ERM?

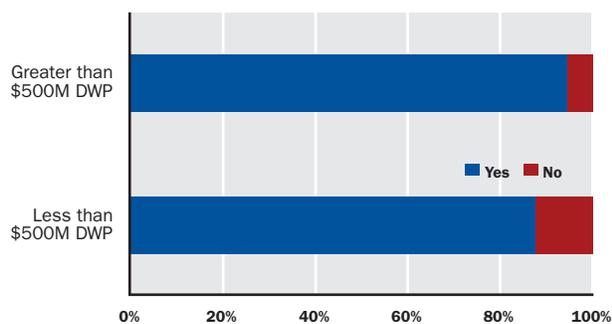
Larger vs. smaller companies (2019)



from larger firms and 85.3% support from smaller firms. Many larger firms were less supportive of ERM in this year’s survey. There has been a threefold increase in larger firms viewing ERM as a regulatory compliance exercise – from 7% in 2018 to 22.2% in the latest survey. 13% of smaller firms viewed ERM as a compliance exercise last year. That figure decreased to 11.7% in the latest survey.

Company maintains a risk register of all material risk identified

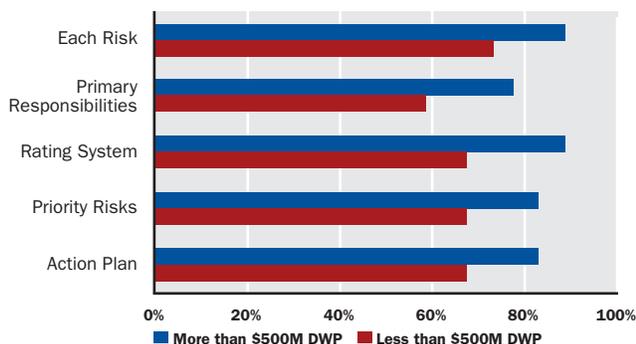
Larger vs. smaller companies (2019)



While the percentage of respondents who said they maintain a risk register of all material risks identified has increased over time (from 79% in 2011 to 90% last year) it slipped back this year to 86.5%. Larger firm support increased slightly, from 93% last year to 94.4% this year. Smaller firm support slipped from 87% last year down to 82.3% this year. The Survey enquired about specific risks that companies’ risk profiles address. Larger firms’ risk profiles were more robust. While larger firms (88.9%) and smaller firms (73.5%) are both focused on management practices, larger firms are also more focused on prioritizing individual risks (83.3%) and developing action plans to mitigate priority risks (83.3%). Smaller firm support here was 67.6% in both cases.

Company’s risk profile addresses...

Larger vs. smaller companies (2019)



The percentage of firms employing a business continuity plan has increased, from 88% in 2016 when the question was first posed to 90.4% in 2019 – 100% for larger firms and 85.3% for smaller firms.

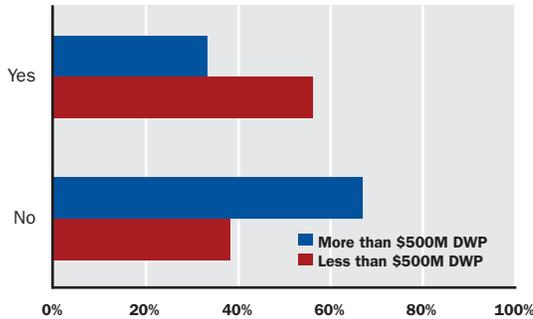
Most firms test once a year for disaster recovery (65.4% in 2019, down from 67% in 2016) and business continuity (61.5% in 2019, up from 45% in 2015). Most organizations have a cyber protection plan in place (88.5% in 2019, virtually unchanged from 89% in 2016) – 100% for larger firms and 82.3% for smaller firms in the industry. Cyber protection plans are tested once a year by 42.3% of respondents (down from 47% in 2016), or on an ad hoc basis by 38.5% of respondents (down from 44% in 2016).

3. Importance of ORSA and ECM

A third area of interest in the Survey is the importance that companies attach to Own Risk and Solvency Assessment (ORSA) and Economic Capital Models (ECM).

External resources engaged to complete and/or review ORSA

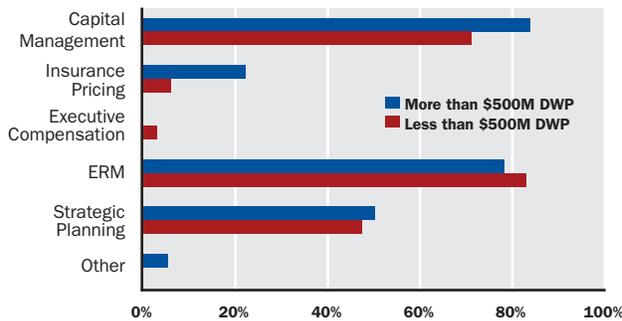
Larger vs. smaller companies (2019)



A significant percentage of all respondents engage external resources to complete and/or review their ORSAs – 48.1% in 2019, compared to 42% when the question was first posed in 2015. Larger firm use of external resources has declined over the past year, from 50% last year to 33.3% this year. Smaller firm use increased marginally from 53% last year to 55.9% this year. Larger and smaller firms are close to having identical experiences using external resources to complete or review their ORSAs.

Your company uses its ORSA results for..

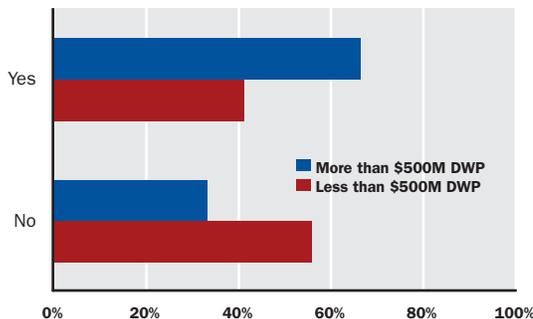
Larger vs. smaller companies (2019)



Over the past three years, all firms have reported significantly greater use of their ORSA results in most areas probed: capital management (75% in 2019 vs. 70% in 2016); insurance pricing (11.5% in 2019 vs. 9% in 2016); ERM (80.7% in 2019 vs. 75% in 2016); strategic planning (48.1% in 2019 vs. 45% in 2016); and executive compensation (1.9% in 2019 vs. 0% in 2016). This year, firms made greatest use of their ORSA results for capital management (83.3% for larger firms; 70.6% for smaller firms) and ERM (80.7% for larger firms; 82.3% for smaller firms).

Company uses an Economic Capital Model on a regular basis

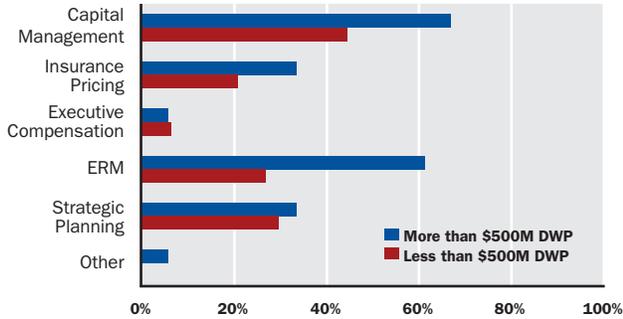
Larger vs. smaller companies (2019)



A growing number of companies are using an Economic Capital Model on a regular basis. The total number of respondents answering in the affirmative has increased from 31% in 2015 when the question was first posed to 50% in 2019. Larger company use has increased from 56% to 66.7% in that time. Over the same time period, smaller firm use has also increased, from 32% to 41.2%.

If ECM used regularly, the ECM results were used for...

Larger vs. smaller companies (2019)



This year, 66.7% of larger firms indicated that they used an Economic Capital Model regularly. The greatest use of their Economic Capital Model was for capital management (66.7%) and ERM (61.1%). Only 41.2% of smaller firms reported using an Economic Capital Model regularly. For these firms, greatest use was made for capital management (44.1%) and to inform their strategic planning activities (29.4%).

4. Top emerging risks

The survey enquired about top emerging risks – in the next three years and over the next 10 years. No sample risks were provided to prompt replies. Answers were rolled up into summary categories.

Top emerging risks confronting your company over the next 1 to 3 years

(All Respondents)

1. Cyber security	23.4%
2. Climate change	20.0%
Technological change	20.0%
4. Government regulation	12.2%
5. Industry competition	11.3%
6. Human capital	4.3%
Broker consolidation	4.3%

In the near term, the top risk issue for respondents was cyber security (at 23.4%). Concerns about high-profile data breaches over the past number of years likely account for the industry’s continuing focus on cyber security. This was the number one short-term risk cited in in last year’s survey (16.1%). Climate change and technological change (both at 20%) closely follow cyber security as key short-term risks this year. These three issues accounted for almost two-thirds of all responses regarding short-term risks.

Over the longer term, the effect of technological change was the number one risk cited by respondents (32.9%), ahead of climate change (26.6%), industry competition (11.7%) and cyber security (10.6%). The top four long-term risks cited last year remain the top long-term risks for respondents. Respondents are concerned about the way that technological change may reshape the business of insurance with new ways of measuring, controlling and pricing risk (e.g. artificial intelligence, blockchain, Internet of Things, telematics, cloud computing, Insurtech, FinTech, etc.).

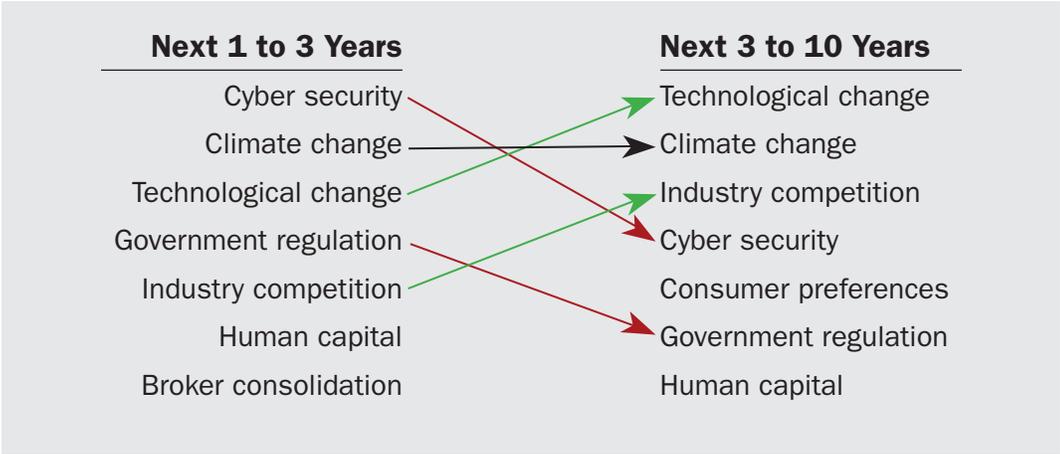
Top emerging risks confronting your company over the next 3 to 10 years

(All Respondents)

1. Technological change	32.9%
2. Climate change	26.6%
3. Industry competition	11.7%
4. Cyber security	10.6%
5. Consumer preferences	5.3%
Government regulation	5.3%
7. Human capital	4.2%

Top emerging risks

(All Respondents)



This graph compares respondents' 2019 summary responses over the two time periods (1-3 years and 3-10 years). The top-six short-term risks (accounting for more than 90% of responses) remained on the list of long-term risks. Top-of-mind short-term concerns for respondents were cyber security, climate change and technological change. In the longer term, respondents' clear concern is on technological change. Concern remains regarding climate change and the increasing frequency and severity of natural disasters. Respondents are less concerned about cyber security over the longer term.

Survey comparison

Following is a table summarizing responses to common questions appearing in past ERM surveys (2011, 2013, 2015, 2016, 2017, 2018 and 2019).

■ Responses highlighted in green show improvement in results since the previous survey.

Question	2011		2013		2015		2016		2017		2018		2019	
	Yes %	No %	Yes %	No %										
Do you maintain a risk register of all the material risks identified by your company?	79	21	79	21	77	23	92	8	96	4	90	10	87	10
Is the individual with primary responsibility for managing your company's enterprise risks part of the company's executive management team?	75	25	87	13	87	13	89	11	88	12	78	22	90	10
Does this individual have direct access to the Board of Directors?	86	14	100	0	97	3	90	10	88	12	87	2 N/A 10	96	0 N/A 4
Does your risk profile address...														
• Information relating to each risk?	83	17	92	8	88	12	88	12	80	20	85	15	79	21
• "Owner"/person primarily responsible?	75	25	92	8	84	16	77	23	86	14	73	27	65	35
• Consistent process and rating system?	78	22	78	22	79	21	83	17	78	22	83	17	71	29
• Prioritization of individual risks?	76	24	75	25	63	37	69	31	76	24	69	31	73	27
• Action plan to mitigate priority risks?	81	19	83	17	81	19	65	35	78	23	91	9	73	27
Which key risk areas are explicitly addressed in your risk profile...														
• Underwriting risk?	93	7	100	0	97	3	98	2	100	0	98	2	96	4
• Credit risk?	94	6	86	14	92	8	90	10	98	2	96	4	88	12
• Market risk?	95	5	94	6	95	5	96	4	98	2	98	2	90	10
• Liquidity risk?	87	13	83	17	89	11	83	17	94	6	90	10	85	14
• Operational risk?	90	10	87	13	97	3	98	2	100	0	100	0	94	6
• Strategic risk?	84	16	77	23	82	18	86	14	90	10	86	14	79	21
Does your company...														
• Form an aggregate measure of its enterprise risks?	10		13		9		8		14		6		6	
• Manage risks individually?	48		47		37		33		38		32		40	
• Both?	42		40		54		59		48		62		54	
Has your company's risk management function been assessed by an external (independent) advisor?			30	70	35	65	40	60	46	54	46	54	44	56

Key risk management terms used in this survey

The survey document included the following definitions to ensure common understanding among respondents.

Enterprise Risk Management (ERM)

A process (implemented by an entity's Board of Directors, management and other personnel, applied in strategy setting and across the entity) designed to identify potential events that may affect the entity, to manage risk to be within its risk appetite, and to provide reasonable assurance regarding the achievement of entity objectives.

Risk appetite

The degree of risk (broadly measured, in quantitative terms) that an insurance company is willing to accept in pursuing its business goals and values. Risk appetite requires an insurer to consider its total risk-taking philosophy, including the expectations of its shareholders. A risk appetite statement can also include qualitative factors.

Risk profile

A summary of the most material risks an insurer faces (perhaps five to 10), ranked on an appropriate basis considering severity and probability. Some insurers may also compile a more extensive list (e.g. Risk Catalogue or Risk Register) including less significant risks.

Risk tolerance

Requires an insurance company to consider, in quantitative terms, exactly how much of its capital it is willing to lose, as well as its tolerance of volatility in earnings and other measures of performance and value.

Risk limits

Requires an insurance company to consider in detail how much risk that individual managers should be allowed to take.

Appendix I - PACICC's Risk Management Advisory Committee

The Risk Management Advisory Committee provides PACICC's Board of Directors with ongoing technical expertise regarding current and emerging risk management issues. The Advisory Committee oversees the work of PACICC's Risk Officer's Forum and is composed of senior industry risk officers who are supported by a PACICC Administrator.

2019 Advisory Committee Members*

Brandon Blant	Intact Financial Corporation (Committee Chair)
Sanjeev Agarwal	AIG Canada
Randy Besse	SGI Canada
Manon Débigaré	Desjardins General Insurance Group
Michele Falkins	Heartland Farm Mutual Inc.
Sonia Kundi	Aviva Canada Inc.
Tracy Mann	Economical Mutual Insurance Company
Committee Administrator:	Ian Campbell, Vice President, Operations, PACICC

* Susan Meltzer (formerly of Aviva Canada Inc.) retired from the Advisory Committee in 2019, as did Randy Musselman (The Guarantee Company of North America). PACICC thanks Susan and Randy for their contributions to the work of the Risk Management Advisory Committee.

Forum Mandate

The Forum seeks to enhance risk management within the P&C insurance industry by:

- Discussing and sharing risk management best practices within industry;
- Reviewing and communicating topical risk management information;
- Serving as a risk management resource for PACICC and for insurance regulators;
- Discussing major existing risks and significant emerging risks within the industry; and
- Providing resources, references and information to facilitate research of risk management and related governance topics.

Forum Membership

Membership in the Forum is open to staff of any Canadian licensed insurer or reinsurer (Federal, Provincial and Territorial) with management responsibility for ERM in their respective organizations. This includes PACICC member insurers and risk officers with insurers and reinsurers that are not PACICC members.

Forum Activities

Forum activities include a series of half-day, in-person Forum meetings (held in Toronto) as well as a series of Emerging Risks Webinars.

- **Forum meetings** – feature a guest speaker addressing a topical industry issue followed by two panel sessions featuring industry experts and senior risk officers from the industry who seek to engage attendees in frank discussion on a variety of current ERM issues and topics.
- **Emerging risks webinars** – feature recognized experts who delve into technical aspects of a single ERM issue. Webinars enable Forum members across Canada to easily participate from remote locations. Questions are received in advance to help guide the online discussion in real time, in a talk show format. Links to all past webinars are available on the PACICC website for future on-demand rebroadcast.

Appendix II - 2019 ERM Survey Questions

Following are summary responses (Total) for each of the questions posed in the 2019 ERM Survey, in bold. Percentages are rounded and may not add to 100%. In brackets is the 2019 breakdown for large companies (>\$500M in DWP) vs. small companies (<\$500M in DWP). Also included is the benchmark Total for each question along with the year that that question was first included in the survey.

Company characteristics

1. a) **What was your company's total Direct Written Premium in 2018?**

All replies are received in strict confidence.

b) **Please specify the nature of your company. (Select one)**

- Domestic (Canadian-owned company)
– **63.5% Total** (Large 61.1%; Small 64.7%); 66% Total in 2016
- Subsidiary of a foreign parent
– **21.1% Total** (Large 33.3%; Small 14.7%); 19% Total in 2016
- Branch of a foreign parent
– **15.4% Total** (Large 5.5%; Small 20.6%); 17% Total in 2016

c) **At what level is your organization regulated? (Select one)**

- Federal – **48.1% Total** (Large 50%; Small 47%); 41% Total in 2018
- Provincial – **32.7% Total** (Large 11.1%; Small 44.1%); 34% Total in 2018
- Both – **17.3% Total** (Large 33.3%; Small 8.8%); 25% Total in 2018

Governance

2. **Does your company have a documented Enterprise Risk Management (ERM) framework or policy with established procedures?**

- Yes – **92.3% Total** (Large 100%; Small 88.2%); 87% Total in 2013
- No – **7.7% Total** (Large 0%; Small 11.7%); 13% Total in 2013

3. **Does your organization have a Board-approved risk appetite statement?**

- Yes – **94.2% Total** (Large 100%; Small 91.2%); 51% Total in 2013
- No – **5.7% Total** (Large 0%; Small 8.8%); 49% Total in 2013

4. a) **Who has primary responsibility for your company's ERM framework? (Select one)**

- CEO or Chief Agent
– **32.7% Total** (Large 11.1%; Small 44.1%); 28% Total in 2013
- Chief Risk Officer
– **53.8% Total** (Large 83.3%; Small 38.2%); 46% Total in 2013
- Chief Actuary
– **1.9% Total** (Large 0%; Small 2.9%); Option not included in 2013
- Chief Financial Officer
– **9.6% Total** (Large 0%; Small 14.7%); Option not included in 2013
- Other (Please specify)
– **1.9% Total** (Large 5.5%; Small 0%); 28% Total in 2013

4. **b) Does the person with primary responsibility for managing ERM receive direction for risk management activities from a head office?**
- Yes – **55.7% Total** (Large 61.1%; Small 52.9%); 62% Total in 2016
 - No – **42.3% Total** (Large 38.9%; Small 44.1%); 38% Total in 2016
5. **a) Does the person with primary responsibility for managing ERM have direct access to the Board of Directors or to the relevant Committee of the Board? (Select one)**
- Yes – **96.1% Total** (Large 100%; Small 94.1%); 86% Total in 2011
 - No – **0% Total** (Large 0%; Small 0%); 14% Total in 2011
 - Not applicable (e.g. foreign branch) – **3.8% Total** (Large 0%; Small 5.9%); Option not included in 2011
- b) Is the person with primary responsibility for managing ERM part of the company's executive management team?**
- Yes – **90.4% Total** (Large 83.3%; Small 94.1%); 75% Total in 2011
 - No – **9.6% Total** (Large 16.7%; Small 5.9%); 25% Total in 2011
6. **Do ERM activities in your company help to determine executive compensation? (Select one)**
- Yes – **11.5% Total** (Large 22.2%; Small 5.9%); 7% Total in 2015
 - Minimally – **32.7% Total** (Large 33.3%; Small 32.3%); 39% Total in 2015
 - Not at all – **53.8% Total** (Large 38.9%; Small 61.7%); 54% Total in 2015
7. **Has your company's ERM function been assessed by an external (independent) advisor? (Select one)**
- In the last year – **9.6% Total** (Large 16.7%; Small 5.9%); 23% Total in 2015
 - In the last 3 years – **19.2% Total** (Large 22.2%; Small 17.6%); 12% Total in 2015
 - More than 3 years ago – **15.4% Total** (Large 22.2%; Small 11.7%); 0% Total in 2015
 - Not assessed – **55.7% Total** (Large 38.9%; Small 64.7%); 65% Total in 2015

ERM framework and practices

8. **Which of the following key risk categories are explicitly addressed in your company's ERM program? (Select all that apply)**
- **Underwriting risk** – Risks assumed through the insurance contracts written and reinsurance ceded by your company – **96.1% Total** (Large 94.4%; Small 97%); 93% Total in 2011
 - **Credit risk** – Risks related to changes in the credit quality of counterparties or intermediaries to which your company is exposed (including reinsurance receivables) – **88.4% Total** (Large 94.4%; Small 85.3%); 94% Total in 2011
 - **Market risk** – Risks that arise from volatility in financial markets, including changes in interest rates, bond and stock prices – **90.4% Total** (Large 100%; Small 85.3%); 95% Total in 2011

- **Liquidity risk** – Risks related to possible cash-flow shortfalls, including cash calls following major loss events, credit-rating downgrades, problems accessing financial markets
– **84.6% Total** (Large 94.4% Small 79.4%); 87% Total in 2011
- **Operational risk** – Risks arising from potential deficiencies with respect to people, processes or systems in any of the risk areas noted above, as well as claims management and information technology – **94.2% Total** (Large 100%; Small 91.2%); 90% Total in 2011
- **Strategic risk** – The risk of loss arising from strategic business decisions
– **78.8% Total** (Large 88.9%; Small 73.5%); 84% Total in 2011

9. Does your company have a formal process in place to identify new or emerging risks?

- Yes – **73.1% Total** (Large 88.9%; Small 64.7%); 68% Total in 2016
- No – **26.9% Total** (Large 11.1%; Small 35.3%); 32% Total in 2016

10. Does your company consider ERM to be primarily: (Select one)

- A regulatory compliance exercise
– **15.4% Total** (Large 22.2%; Small 11.7%); 19% Total in 2015
- Accepted by the business
– **40.4% Total** (Large 33.3%; Small 44.1%); 41% Total in 2015
- Highly embedded in the business and valued by Senior Management and Board of Directors (or equivalent) – **42.3% Total** (Large 44.4%; Small 41.2%); 40% Total in 2015

11. Which of the following impacts are considered in your company's ERM framework while assessing risk? (Select all that apply)

- Potential impact on income/earnings
– **92.3% Total** (Large 94.4%; Small 91.2%); 92% Total in 2015
- Potential impact on regulatory capital
– **92.3% Total** (Large 100%; Small 88.2%); 94% Total in 2015
- Reputational impact
– **88.5% Total** (Large 94.4%; Small 85.3%); 79% Total in 2015

12. How broadly has your company communicated principles in its risk appetite statement?

(Select all that apply)

- Communicated to the Board
– **94.2% Total** (Large 100%; Small 91.2%); 95% Total in 2015
- Communicated internally to senior management
– **92.3% Total** (Large 100%; Small 88.2%); 92% Total in 2015
- Communicated internally to all employees
– **23.1% Total** (Large 22.2%; Small 23.5%); 14% Total in 2015
- Communicated externally
– **7.7% Total** (Large 11.1%; Small 5.9%); 15% Total in 2015

13. Does your company maintain a risk profile of all of the material risks identified by the company?

- Yes – **86.5% Total** (Large 94.4%; Small 82.3%); 79% Total in 2011
- No – **9.6% Total** (Large 5.5%; Small 11.7%); 21% Total in 2011
(If No, please skip to question #15)

14. Does your company's risk profile address the following? (Select all that apply)

- Information relating to each risk (including causes and triggers), existing management practices or controls? – **78.8% Total** (Large 88.9%; Small 73.5%); 83% Total in 2011
- Person(s) primarily responsible for managing each risk?
– **65.4% Total** (Large 77.8%; Small 58.8%); 75% Total in 2011
- A consistent process and rating system used to measure and assess the severity and probability of each risk? – **71.1% Total** (Large 88.9%; Small 67.6%); 78% Total in 2011
- Prioritization of individual risks based on the ratings assigned?
– **73.1% Total** (Large 83.3%; Small 67.6%); 76% Total in 2011
- Action plans to mitigate priority risks?
– **73.1% Total** (Large 83.3%; Small 67.6%); 81% Total in 2011

15. How does your company manage enterprise risks (for example, as related to economic capital)? (Select one)

- Forms an aggregated measure of its enterprise risks
– **5.7% Total** (Large 16.7%; Small 0%); 10% Total in 2011
- Manages risks individually
– **40.4% Total** (Large 16.7%; Small 52.9%); 48% Total in 2011
- Both – forms aggregated measure of its enterprise risks and manages risks individually
– **53.8% Total** (Large 66.7%; Small 47.0%); 42% Total in 2011

16. Which of the following methodologies and techniques does your company use to assess risk? (Select all that apply)

- Key risk indicators – **86.5% Total** (Large 83.3%; Small 88.2%); 86% Total in 2015
- Loss event data – **69.2% Total** (Large 83.3%; Small 61.7%); 62% Total in 2015
- Economic capital modelling
– **59.6% Total** (Large 77.8%; Small 50.0%); 48% Total in 2015
- Facilitated workshops – **40.4% Total** (Large 61.1%; Small 29.4%); 41% Total in 2015
- Interviews – **55.7% Total** (Large 88.9%; Small 38.2%); 52% Total in 2015
- Other – **1.9% Total** (Large 5.5%; Small 0%); Option not included in 2015

17. Which area of your company leads the review of new products and lines of business prior to launch?

- Underwriting – **80.7% Total** (Large 77.8%; Small 82.3%); Option not included in 2015
- Corporate Actuarial – **25.0% Total** (Large 27.8%; Small 23.5%); 47% Total in 2015
- Enterprise Risk Management – **26.9% Total** (Large 27.8%; Small 26.5%); 40% Total in 2015
- Finance – **25.0% Total** (Large 22.2%; Small 26.5%); 47% Total in 2015
- Legal – **21.1% Total** (Large 27.8%; Small 17.6%); 27% Total in 2015
- Other – **13.5% Total** (Large 22.2%; Small 8.8%); Option not included in 2015

18. Does your company systematically quantify the operational risks deemed material to the organization?

- Always – **19.2% Total** (Large 16.7%; Small 20.6%); 20% Total in 2015
- When possible – **67.3% Total** (Large 72.2%; Small 64.7%); 65% Total in 2015
- Never – **13.5% Total** (Large 11.1%; Small 14.7%); 15% Total in 2015

19. Does your company employ business continuity planning for the entire organization?

- Yes – **90.4% Total** (Large 100%; Small 85.3%); 88% Total in 2016
- No – **7.7% Total** (Large 7%; Small 11.7%); 12% Total in 2016

If Yes...

a) How often do you test disaster recovery?

- Once a year – **65.4% Total** (Large 83.3%; Small 55.9%); 67% Total in 2016
- Every 2-3 years – **7.7% Total** (Large 11.1%; Small 5.9%); 11% Total in 2016
- Every 3-5 years – **5.7% Total** (Large 5.5%; Small 5.9%); 4% Total in 2016
- Ad hoc basis – **15.4% Total** (Large 0%; Small 23.5%); 16% Total in 2016

b) How often do you test business continuity?

- Once a year – **61.5% Total** (Large 83.3%; Small 50.0%); 45% Total in 2015
- Every 2-3 years – **5.7% Total** (Large 5.5%; Small 5.9%); 11% Total in 2015
- Every 3-5 years – **3.8% Total** (Large 5.5%; Small 2.9%); 15% Total in 2015

20. Does your company have a cyber protection plan in place for the entire organization?

- Yes – **88.5% Total** (Large 100%; Small 82.3%); 89% Total in 2016
- No – **11.5% Total** (Large 0%; Small 17.6%); 11% in 2016

If Yes, how often is this cyber protection plan tested?

- Once a year – **42.3% Total** (Large 61.1%; Small 32.3%); 47% Total in 2016
- Every 2-3 years – **9.6% Total** (Large 5.5%; Small 11.7%); 5% Total in 2016
- Every 3-5 years – **0% Total** (Large 0%; Small 0%); 5% Total in 2016
- Ad hoc basis – **38.5% Total** (Large 33.3%; Small 41.2%); 44% Total in 2016

Own Risk and Solvency Assessment (ORSA) and Economic Capital

21. In your company, is the Chief Risk Officer or head of ERM responsible for ORSA?

- Yes – **84.6% Total** (Large 88.9%; Small 82.3%); 82% in 2018
- No – **15.4% Total** (Large 11.1%; Small 17.6%); 16% in 2018

22. Has your company engaged external resources to assist in completing and/or reviewing its ORSA?

- Yes – **48.1% Total** (Large 33.3%; Small 55.9%); 42% Total in 2015
- No – **48.1% Total** (Large 66.7%; Small 38.2%); 58% Total in 2015

23. Does your company use its ORSA results for: (Select all that apply)

- Capital management – **75.0% Total** (Large 83.3%; Small 70.6%); 70% Total in 2016
- Insurance pricing – **11.5% Total** (Large 22.2%; Small 5.9%); 9% Total in 2016
- Executive compensation – **1.9% Total** (Large 0%; Small 2.9%); 0% Total in 2016
- ERM – **80.7% Total** (Large 77.8%; Small 82.3%); 75% Total in 2016
- Inform strategic planning – **48.1% Total** (Large 50.0%; Small 47.0%); 45% Total in 2016
- Other – **1.9% Total** (Large 5.5%; Small 0%); Option not included in 2016

24. Does your company use an economic capital model on a regular basis?

- Yes – **50.0% Total** (Large 66.7%; Small 41.2%); 31% Total in 2015
- No – **46.1% Total** (Large 33.3%; Small 55.9%); 69% Total in 2015

If Yes, does your company use its economic capital model results for: (Select all that apply)

- Capital management – **51.9% Total** (Large 66.7%; Small 44.1%); 89% Total in 2015
- Insurance pricing – **25.0% Total** (Large 33.3%; Small 20.6%); 42% Total in 2015
- Executive compensation – **5.7% Total** (Large 5.5%; Small 5.9%); 16% Total in 2015
- ERM – **38.5% Total** (Large 61.1%; Small 26.5%); 79% Total in 2015
- Inform strategic planning
– **30.7% Total** (Large 33.3%; Small 29.4%); Option not included in 2015
- Other – **1.9% Total** (Large 5.5%; Small 0%); Option not included in 2015

Tools and resources

25. What technological tools currently support (that is, identify, analyze and report) risk management activities in your company? (Select all that apply)

- In-house developed applications – **32.7% Total** (Large 22.2%; Small 38.2%); 36% Total in 2015
- Excel / MSOffice suite – **80.7% Total** (Large 94.4%; Small 73.5%); 85% Total in 2015
- Third-party applications – **32.7% Total** (Large 44.4%; Small 26.5%); 38% Total in 2015
- Other – **1.9% Total** (Large 5.5%; Small 0%); Option not included in 2015

26. How many full-time equivalent (FTE) employees are assigned to your company's risk management function?

- Larger company average – **9.4 FTE employees** (7.25 FTE employees in 2017)
- Smaller company average – **2.1 FTE employees** (1.5 FTE employees in 2017)

27. What are your company's plans for 2019 regarding resources in the ERM function? (Select one)

- Planning to increase headcount or allocation to external resources
– **15.4% Total** (Large 22.2%; Small 11.7%); 20% Total in 2015
- Planning to decrease headcount or allocation to external resources
– **0% Total** (Large 0%; Small 0%); 0% Total in 2015
- No changes planned to headcount or allocation to external resources
– **82.7% Total** (Large 77.8%; Small 85.3%); 80% Total in 2015

28. What are your company's plans for 2019 regarding tools in the ERM function? (Select one)

- Planning to increase investment in tools
– **25.0% Total** (Large 27.8%; Small 23.5%); 24% Total in 2015
- Planning to decrease investment in tools
– **0% Total** (Large 0%; Small 0%); 0% Total in 2015
- No changes planned to investment in tools
– **75.0% Total** (Large 72.2%; Small 76.4%); 76% Total in 2015

29. Have you, or your company's designate, participated regularly in Risk Officer's Forum meetings and/or Emerging Risks Webinars during 2018?

- Yes – **75.0% Total** (Large 88.9%; Small 67.6%); 37% Total in 2015
- No – **13.7% Total** (Large 0%; Small 20.6%); 63% Total in 2015

30. What are three emerging risks confronting your company over the next 1-3 years?

2019		2017	
1. Cyber security	23.4%	1. Industry competition	20.3%
2. Climate change	20.0%	2. Technological change	19.7%
Technological change	20.0%	3. Cyber security	18.4%
4. Government regulation	12.2%	4. Climate change	13.8%
5. Industry competition	11.3%	5. Government regulation	11.2%
6. Human capital	4.3%	6. Consumer preferences	7.9%
Broker consolidation	4.3%	7. Political environment	3.3%

31. What are three emerging risks confronting your company over the next 3-10 years?

2019		2017	
1. Technological change	32.9%	1. Technological change	32.5%
2. Climate change	26.6%	2. Industry competition	19.4%
3. Industry competition	11.7%	3. Climate change	10.1%
4. Cyber security	10.6%	4. Cyber security	8.5%
5. Consumer preferences	5.3%	Consumer preferences	8.5%
Government regulation	5.3%	6. Government regulation	6.9%
7. Human capital	4.2%	7. Human capital	4.6%

**Property and Casualty Insurance
Compensation Corporation**

20 Richmond Street East, Suite 210

Toronto, Ontario M5C 2R9

Phone (416) 364-8677

Fax (416) 364-5889

www.pacicc.ca