



PACICC

How Big is Too Big?

# The Tipping Point for Systemic Failure



2021 Western-ICLR Multi-Hazard  
Risk and Resilience Workshop

November 2, 2021

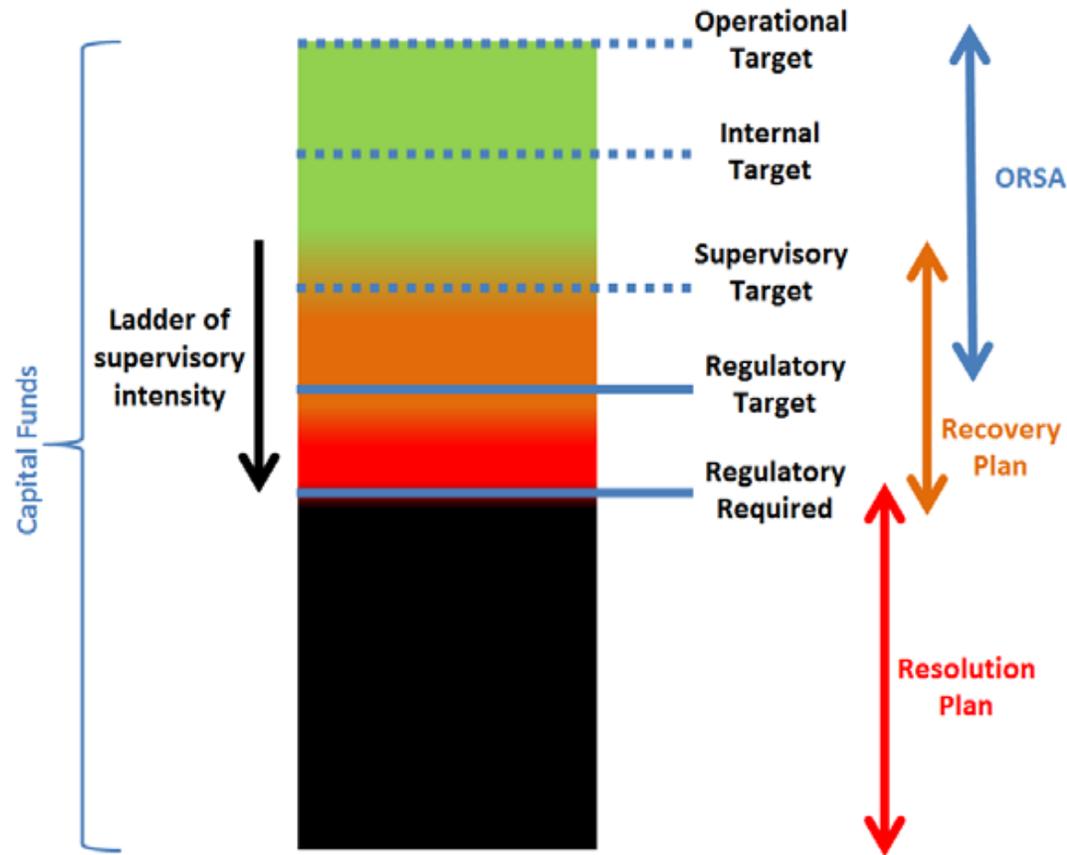
# What is PACICC?

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PACICC is Canada's policyholder protection plan for home, auto and business insurance. Our mission is to:

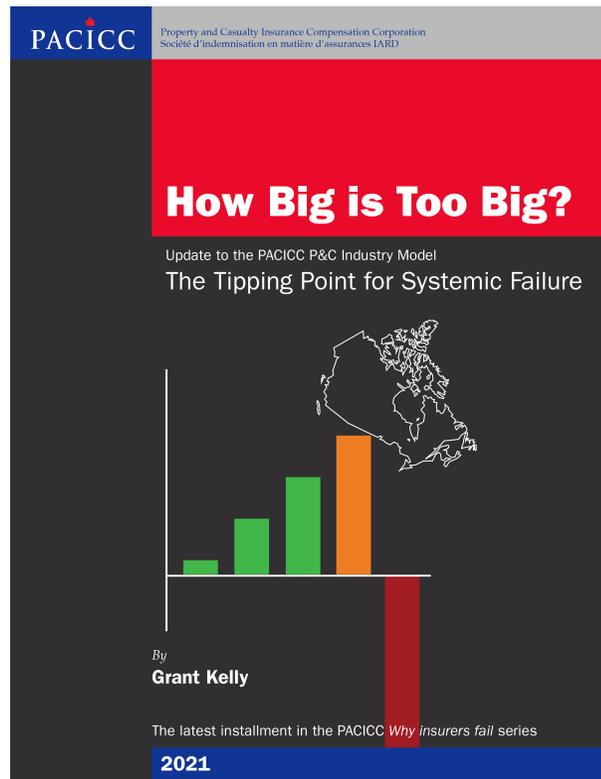
1. Protect eligible policyholders from undue financial loss should a Member Insurer become insolvent
2. Minimize the costs of insurer insolvencies
3. Seek to maintain a high level of consumer and business confidence in Canada's property and casualty insurance industry through the financial protection we provide to policyholders.

# Canada's system of monitoring insurer solvency works REALLY well



- 200+ private insurers compete in Canada
- The regulatory minimum requires insurers to prove they have \$1.50 for every \$1 in liabilities
- In Q2 2021, the “average” insurer held \$2.64 for every \$1 in liabilities
- PACICC exists to protect consumers if their insurer fails

# How the system works when an insurer fails



- Regulators close an insurer when they lose confidence it is a “going concern”
- Court-driven process that normally results in the assets of a failed insurer being frozen
- PACICC steps in to provide funds necessary to reimburse premiums paid in advance and pay outstanding claims
- PACICC collects this money by assessing surviving insurers

# How big an event can the system handle?

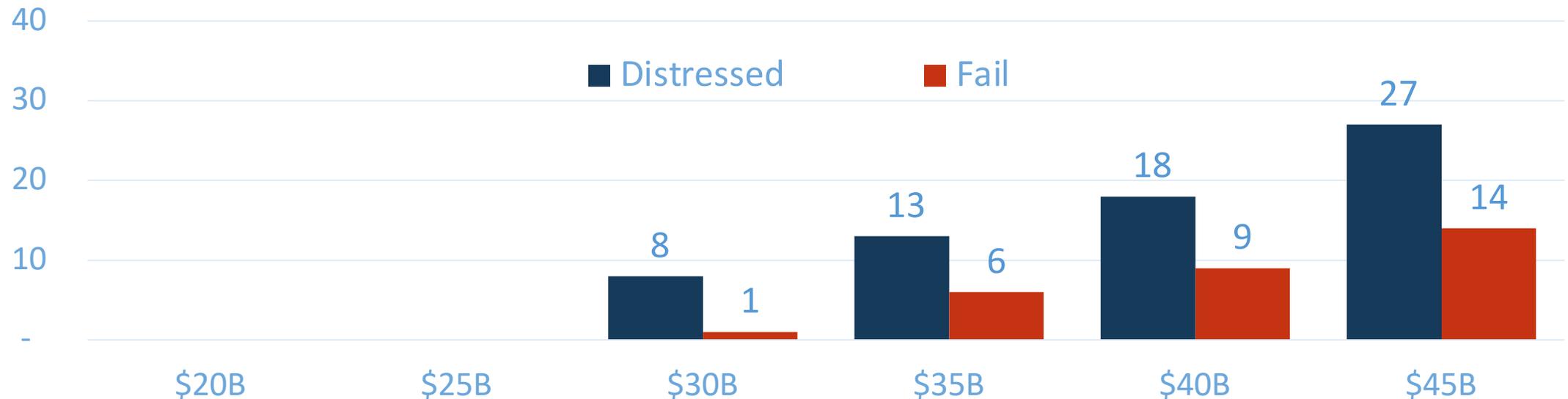
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1. Determine maximum capacity for each insurer: All excess Capital + All catastrophic reinsurance + Dedicated earthquake reserves
2. Shock system with a massive catastrophic event that causes between \$20 billion and \$45 billion in insurance claims
3. Allow insurers with post-cat capital scores below 100% (“distressed”) to seek additional capital
4. If PACICC does not find additional capital, insurer fails and PACICC levies an assessment on all surviving insurers
5. Repeat steps 3 and 4

# PACICC Model – British Columbia

## Can distressed insurers access additional capital or reinsurance from their “group”?

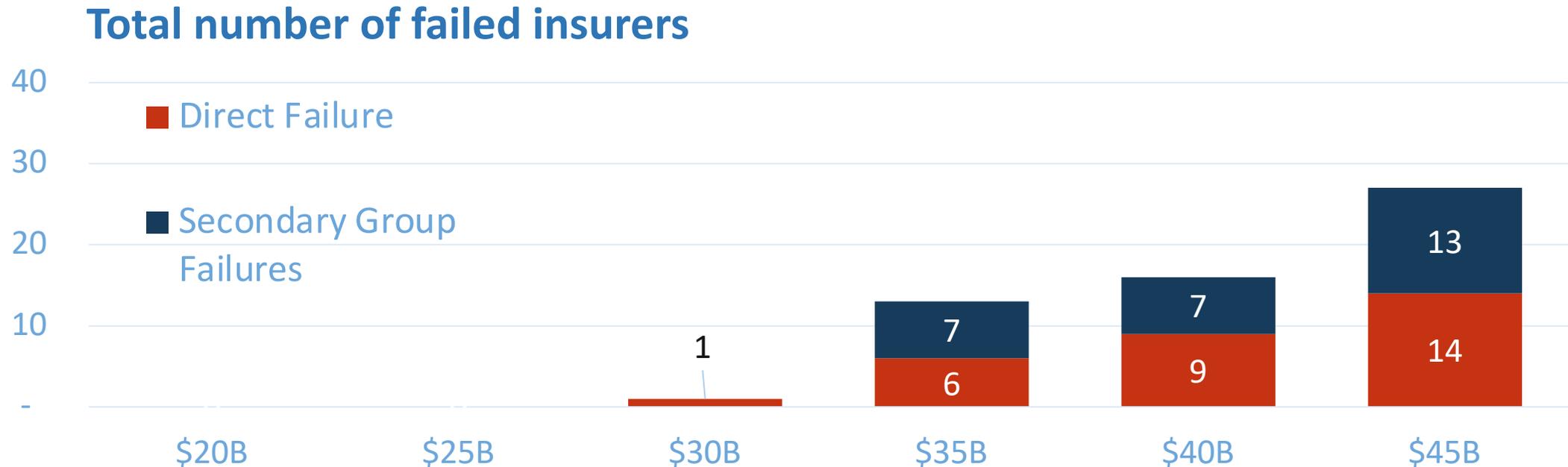
Number of “distressed” insurers following a catastrophic loss



“Distressed” insurers have a MCT < 100%. PACICC Model “saves” those if they are members of groups and if there is more capital/reinsurance available to get them back to solvency. If not...then insurer fails...

# PACICC Model – British Columbia

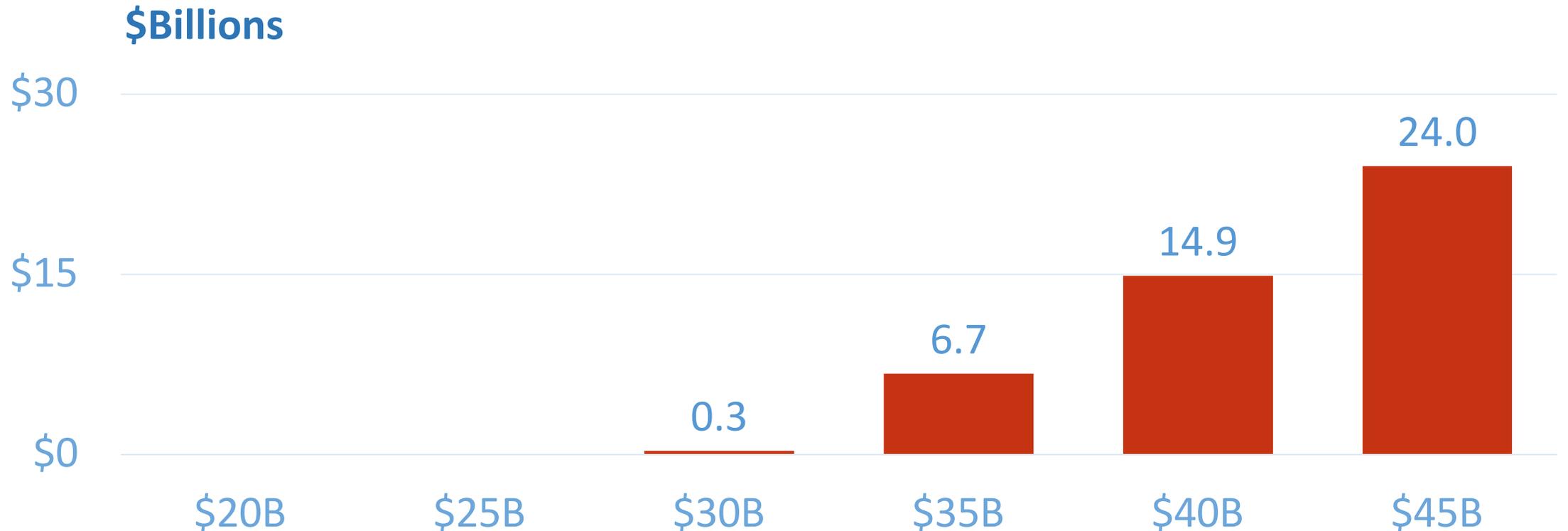
## Total number of insurer failures



But...at some point, the scale of the catastrophic losses is large enough to cause ALL of the related entities to fail

# PACICC Model – British Columbia

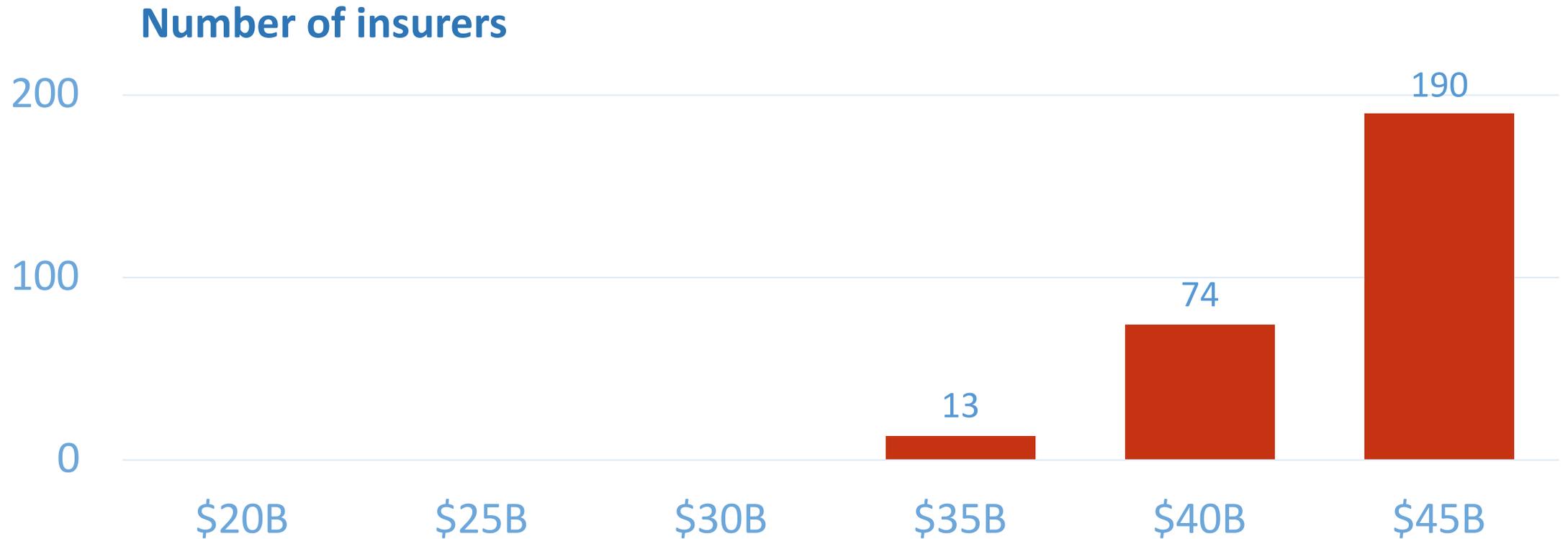
## Required assessment on PACICC Members



**PACICC assessments are calculated as: outstanding catastrophic claims + outstanding non-catastrophic claims + return of premiums paid in advance by policyholders**

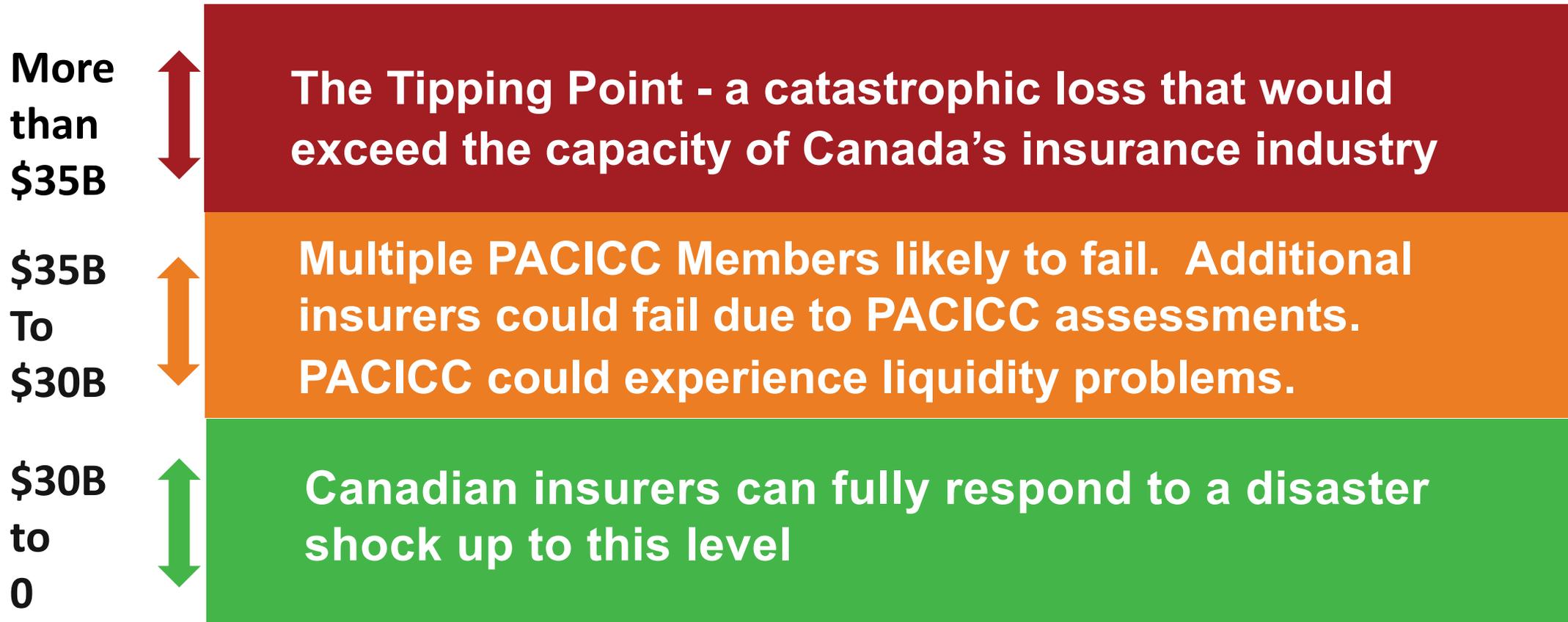
# PACICC Model – British Columbia

## Assessments would cause “surviving” insurers to fail



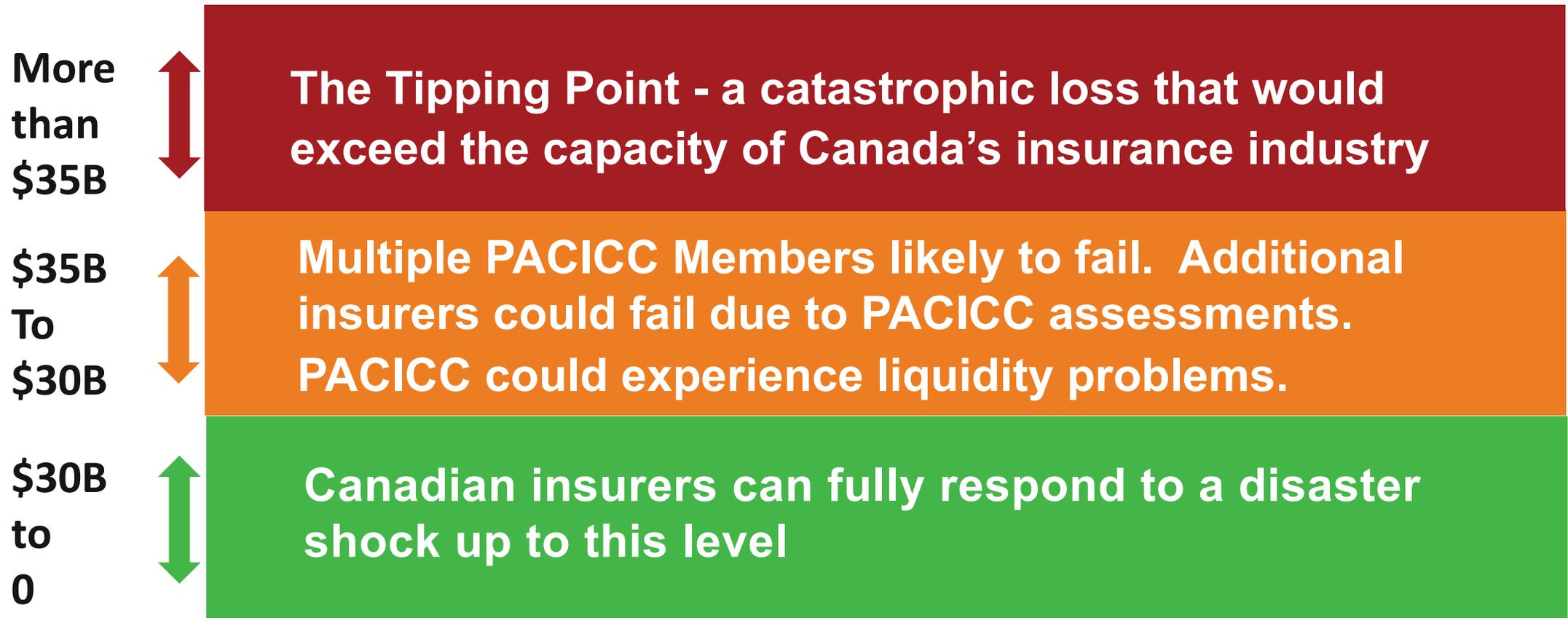
**Very quickly, the scale of the required PACICC assessment causes many other insurers to fall below MCT 100%**

# PACICC Model 2020 – British Columbia



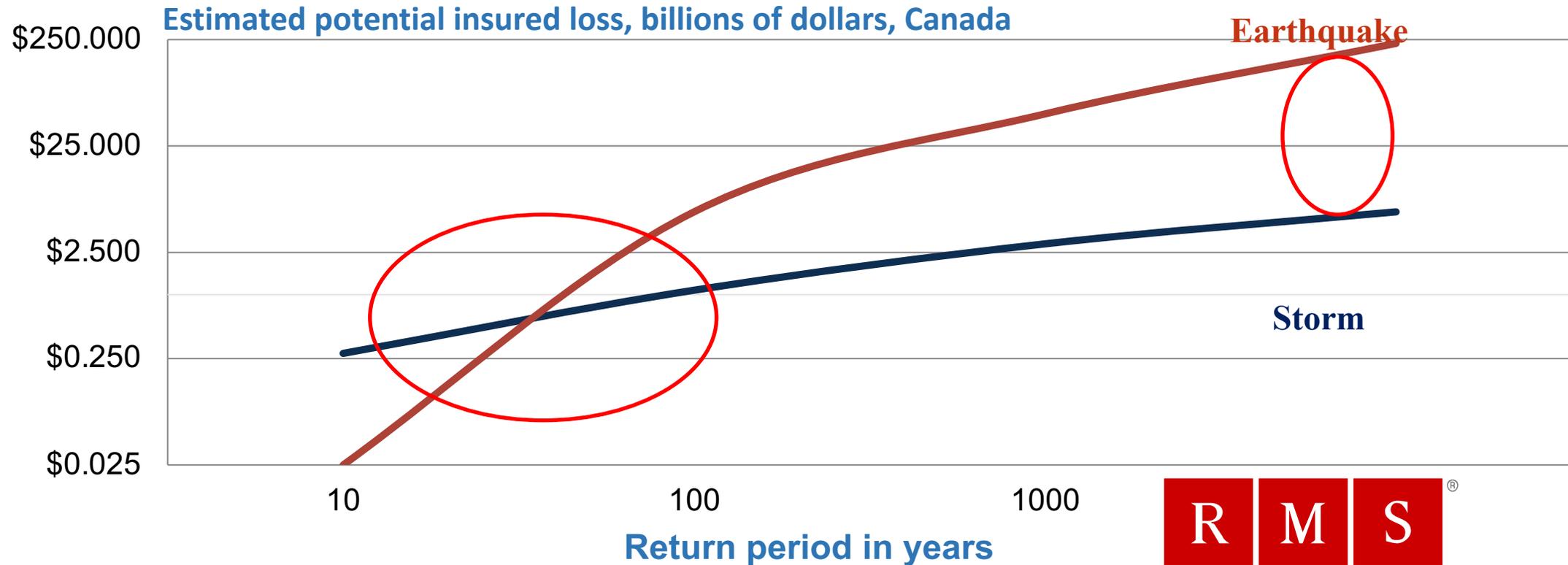
Source: PACICC

# PACICC Model 2020 – Quebec



Source: PACICC

# Catastrophic earthquake is special

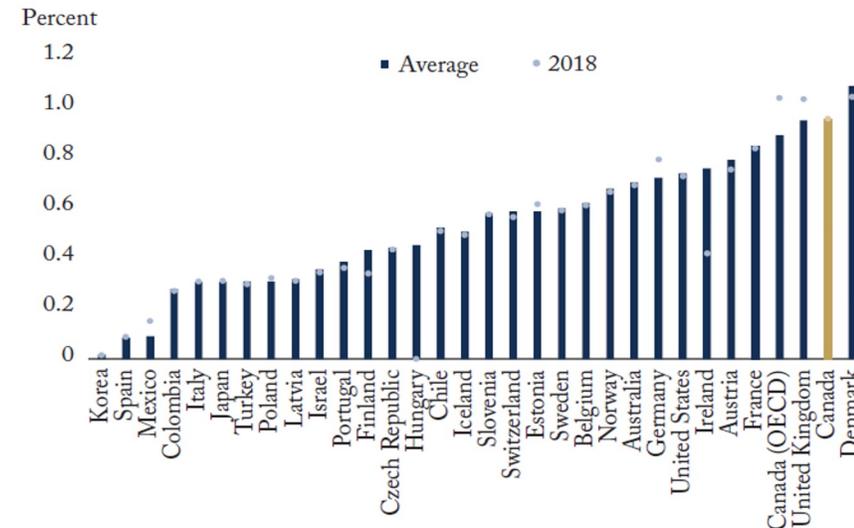


Severe weather could cause a single insurer to fail. Earthquake can cause the INDUSTRY to fail.

# Canadian premiums for homeowners' insurance are already high

- Most climate events are viewed as “earnings” events
- Climate events could result in failure of a single insurer.
- More frequent climate events likely to increase cost of homeowners' insurance in Canada.

Figure 9: Property Gross Written Direct Premiums as a Percentage of GDP, Canada and Other OECD Countries (2015-2018 Average)



Note: Canada's 2015-2018 average reflects public insurers' premiums, which are not included in the OECD data. We include the Canada ranking with only the OECD input.  
Source: OECD Insurance Indicators database, OECD GDP data, IBC, SGI, ICBC, MPI, SAAQ, authors' calculations.

<https://www.cdhowe.org/media-release/%E2%80%8Bcanadian-premiums-pc-insurance-among-highest-oecd>

# What events could cause systemic collapse of Canada's P&C insurance industry?

1. Catastrophic earthquake in British Columbia
2. Catastrophic earthquake in Quebec and Ontario
3. Asteroid striking an urban centre
4. Extreme space weather
5. Cyber attack
6. ?????



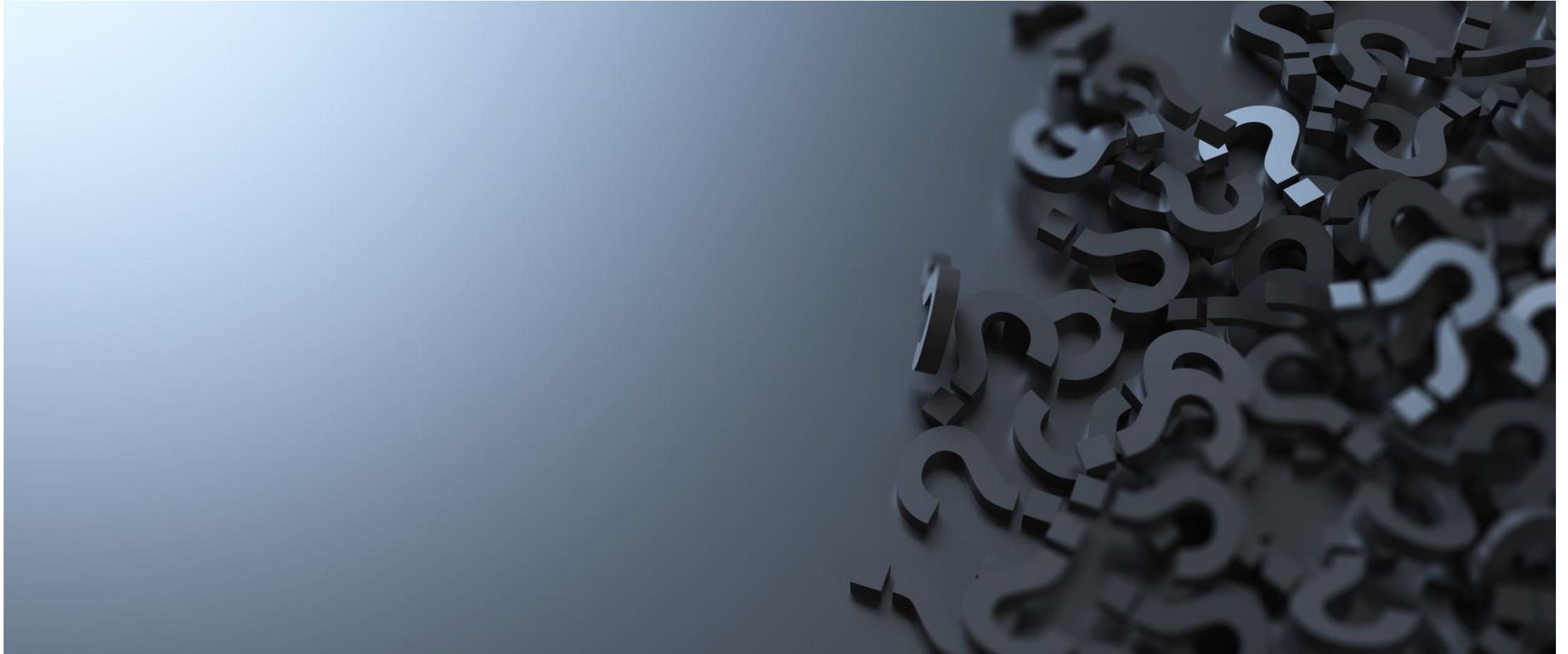
# PACICC Position – 2021

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- There is a finite capacity to the private insurance industry. PACICC was not designed to handle a catastrophic event. Canada's existing structures would **FAIL** Canadians following a mega-catastrophe event
- Canada is uniquely unprepared for mega-catastrophe event. Almost every other developed economy in the world with earthquake exposure has a backstop mechanism to deal with catastrophic risk
- COVID-19 pandemic demonstrates that it is better to have an “in-case-of-emergency-break-glass” plan developed – in advance – for severe but plausible tail-risk events
- Our nation needs to develop a made-in-Canada solution – **BEFORE** a mega-catastrophe strikes

# Questions?

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# Additional reading

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## PACICC and Catastrophic Risks

- <http://www.pacicc.ca/wp-content/uploads/2017/11/WIF-2013-Natural-Disasters.pdf>
- <http://www.pacicc.ca/wp-content/uploads/2017/11/WIF-2016-Natural-Disasters-2016-Update.pdf>
- The Geneva Papers on Risk and Insurance: <https://doi.org/10.1057/s41288-019-00141-x>
- [http://www.pacicc.ca/wp-content/uploads/2021/05/WIF\\_The-Tipping-Point-2021-EN-2.pdf](http://www.pacicc.ca/wp-content/uploads/2021/05/WIF_The-Tipping-Point-2021-EN-2.pdf)
- <https://www.cdhowe.org/media-release/%E2%80%8Bcanadian-premiums-pc-insurance-among-highest-oecd>

## Canadian Earthquake Risk

- <http://www.ibc.ca/pe/resources/studies/fault-lines-earthquakes-insurance-and-systemic-financial-risk>
- <https://www.iclr.org/wp-content/uploads/2020/11/Vancouver-Executive-summary-E.pdf>
- [https://www.iclr.org/wp-content/uploads/2019/11/Montreal-Executive-summary\\_E.pdf](https://www.iclr.org/wp-content/uploads/2019/11/Montreal-Executive-summary_E.pdf)