

# ACCA 2<sup>nd</sup> Webinar on ERM: The Risk Book

June 15, 2017



Actuarial Consulting Congress of Asia

# Actuarial Consulting Congress of Asia (ACCA)

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# Introduction

Sanchit Maini

ACCA ERM Committee - Chair



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# Today's Agenda

#	Topic	Speaker	Speaker Details	Hong Kong Time
1	Introduction	Sanchit Maini	ACCA ERM Ctee. Chair	09.00 – 09.05
2	Welcome – ACCA	Hideyuki Yoshida	President – ACCA	09.05 – 09.10
3	Welcome – IAA	Masaaki Yoshimura	President Elect – IAA	09.10 – 09.15
4	Risk Book Vision	Dave Sandberg	Chair IAA IRC	09.15 – 09.25
5	Operational Risk	Toshihiro Kawano	Author	09.25 – 09.55
6	Distribution Risk	Sam Gutterman	Author	09.55 – 10.25
7	Governance of Models and ISAP1A	Godfrey Perrott	Author	10.25 – 10.55
8	Closing Remarks	Liyaquat Khan	ED – ACCA	10.55 – 11.00



# Welcome - ACCA

Hideyuki Yoshida

President - ACCA



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# Introducing ACCA



- **WELCOME**
- **Actuarial Consulting Congress of Asia**
- Not-for-profit, non-political, non-government and non-religious organisation created with the key objective of strengthening the subject of consulting in general and delivery of actuarial advice in particular in the Asia Region
- History: IAA-IACA, APACA, ACCA
- [www.accaasia.org](http://www.accaasia.org)



# Introducing ACCA

- **Vision, Mission and Values**

## The Vision

ACCA to be globally well recognized actuarial professional organization whose members are respected and valued for giving actuarial advice and are thought leaders of the day thus enabling recipients of actuarial advice to manage uncertainties of future financial outcomes.





# Introducing ACCA

## ■ Vision, Mission and Values... The Mission/Objectives

While keeping in sight the VISION:

- To encourage and assist in the development of consulting in general and actuarial consulting in particular in countries within the ACCA region where there is an identifiable need for actuarial skills;
- To enhance actuarial capacity in the ACCA region and facilitate growth of the application of actuarial science;
- Create a networking platform among ACCA members;
- To facilitate the exchange of views and information on an international basis among actuaries on matters affecting their professional responsibilities and business interests; and,
- Create a platform to engage with receivers of actuarial advice and enhance the overall service offerings of the Actuaries.



# Introducing ACCA

## ■ Vision, Mission and Values... The Values

### While keeping in sight the VISION:

- Integrity: Doing the right thing even when no one is watching;
- High Standards of Professionalism: Conforming to the applicable Professional and Practice standards in a demonstrative way;
- Advice based on well acquired and rigorous application of appropriate knowledge: Always update on relevant knowledge through recognised Continuing Professional Education (CPE) programmes;
- To be responsive and Sensitive: Always listen well to stakeholders and avoid being reactive while interacting; and,
- Respect for others' views: Without meaning to agree if disagreement is unavoidable, always be receiving and respectful to others' views.



# Introducing ACCA

- **History of ERM Webinar**
- The first ACCA ERM Webinar was held on December 10, 2015 with the theme of “Creating Value Through Effective Enterprise Risk Management.”
- ERM Webinar was originally implemented by SOA. The first webinar was held in January 2008.
- In total, SOA ERM Webinar was held 7 times until 2014.



# Welcome on Behalf of IAA

Masaaki Yoshimura  
President Elect - IAA



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# About the IAA



Represents **60,000+** actuaries in **108+** countries

**16** Committees  
**13** Subcommittees  
**6** Working Groups



**7** Sections  
**5,000+** Section members

Formed in **Switzerland**  
Based in **Canada**

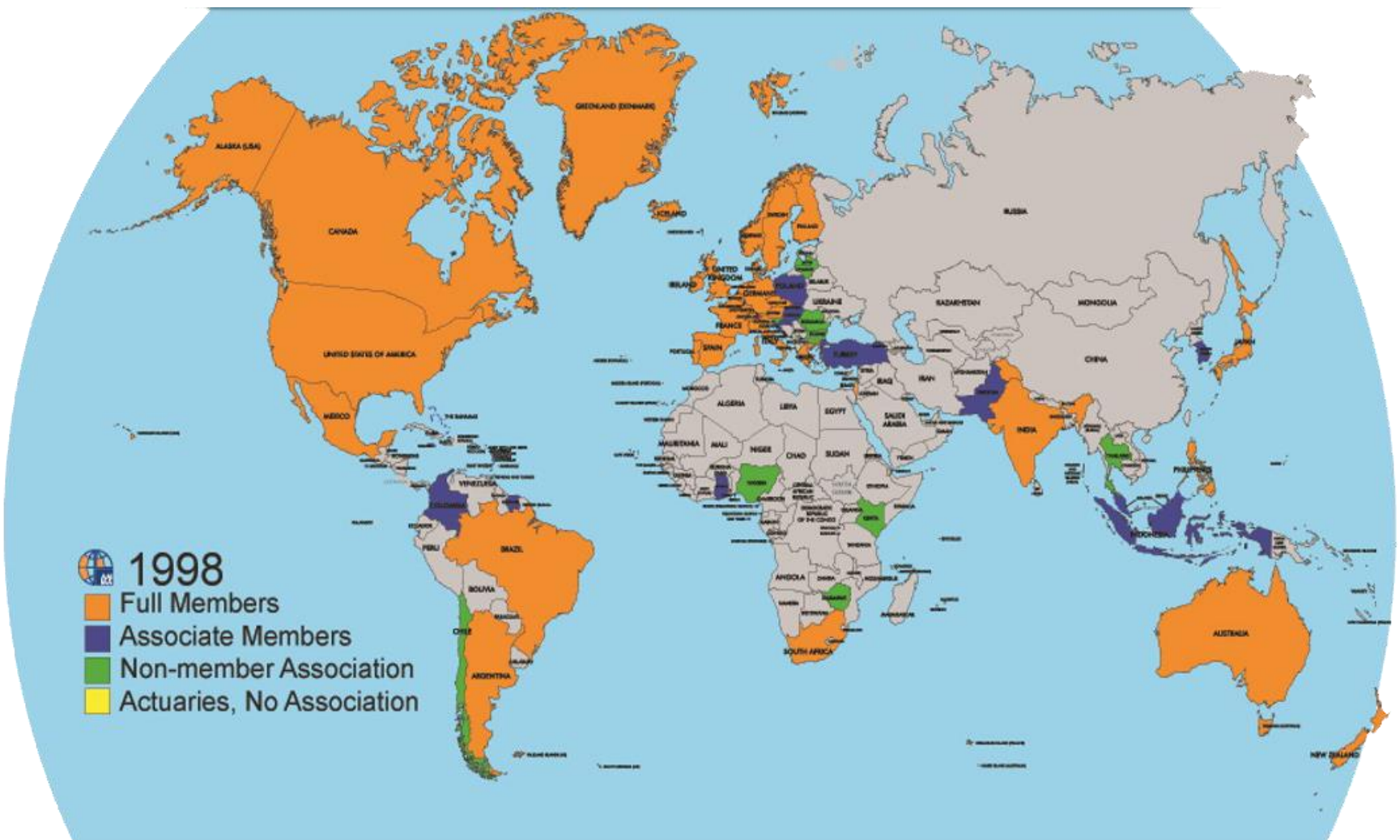


**800+** Volunteers

Encourages the **development of a global profession**

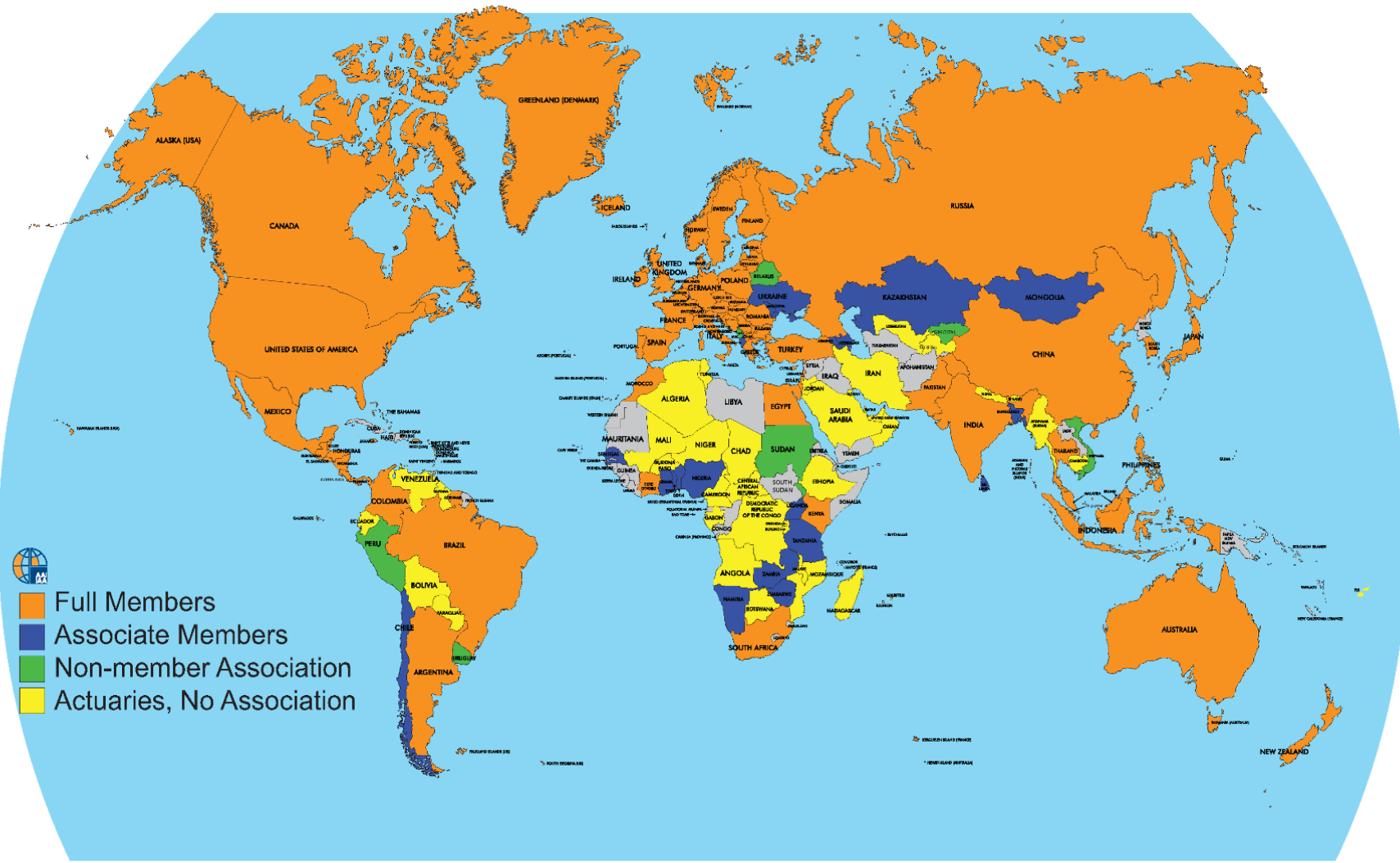


# The IAA's Membership in 1998



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# The IAA's Membership in 2017



# Our Vision

Be recognized worldwide as a major player in the decision-making process within the financial services industry...

Contribute to the well-being of society as a whole

# Our Mission

Represent the actuarial profession and promote its role, reputation and recognition...

Promote professionalism, develop education standards and encourage research...





# Our Objectives

# 1

Develop **Relationships** with key international audiences

# 4

Support the profession's development, organization, and promotion

# 2

Expand the scientific knowledge and skills of the actuarial profession

# 5

Provide a **forum for discussion**

# 3

Encourage sound **practice and education** standards

# 6

Improve recognition of the actuarial profession (branding)



# Risk Book Vision

Dave Sandberg

Chair – Insurance Regulation Committee, IAA



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# About the IAA Risk Book

## ■ Background

- IRC published Blue Book on Insurer Solvency Assessment in 2004
- The Blue Book described the then current "best practice" elements of a framework for insurer solvency assessment for international consideration
- The Risk Book has been a three year project to update our prior work to reflect current perspectives on risk
- No single risk measure provides the full "video" picture of risk. The Risk Book reviews the multiple tools available to a company and to a supervisor to manage risk in a sustainable manner



# About the IAA Risk Book

## ■ Contributors

- Risk Book steering committee includes regulators, current practitioners and retirees
- Individual authors – from around the world
- Many more contributing to review
- Objective = write each chapter in 20 pages or less
- Geared more to practice than theory



# About the IAA Risk Book

- How it works (on the website), how it gets updated and how to access
  - Chapters being submitted as they are completed (18 out of 20 @ June 2017)
  - Located at IAA website under PUBLICATIONS, pull down to RISK BOOK
  - Or  
<http://www.actuaries.org/index.cfm?lang=EN&DSP=PUBLICATIONS&ACT=RISKBOOK>
  - The IRC will accept and respond to comments
  - Intend to update chapters as needed



# About the IAA Risk Book

## Table of contents

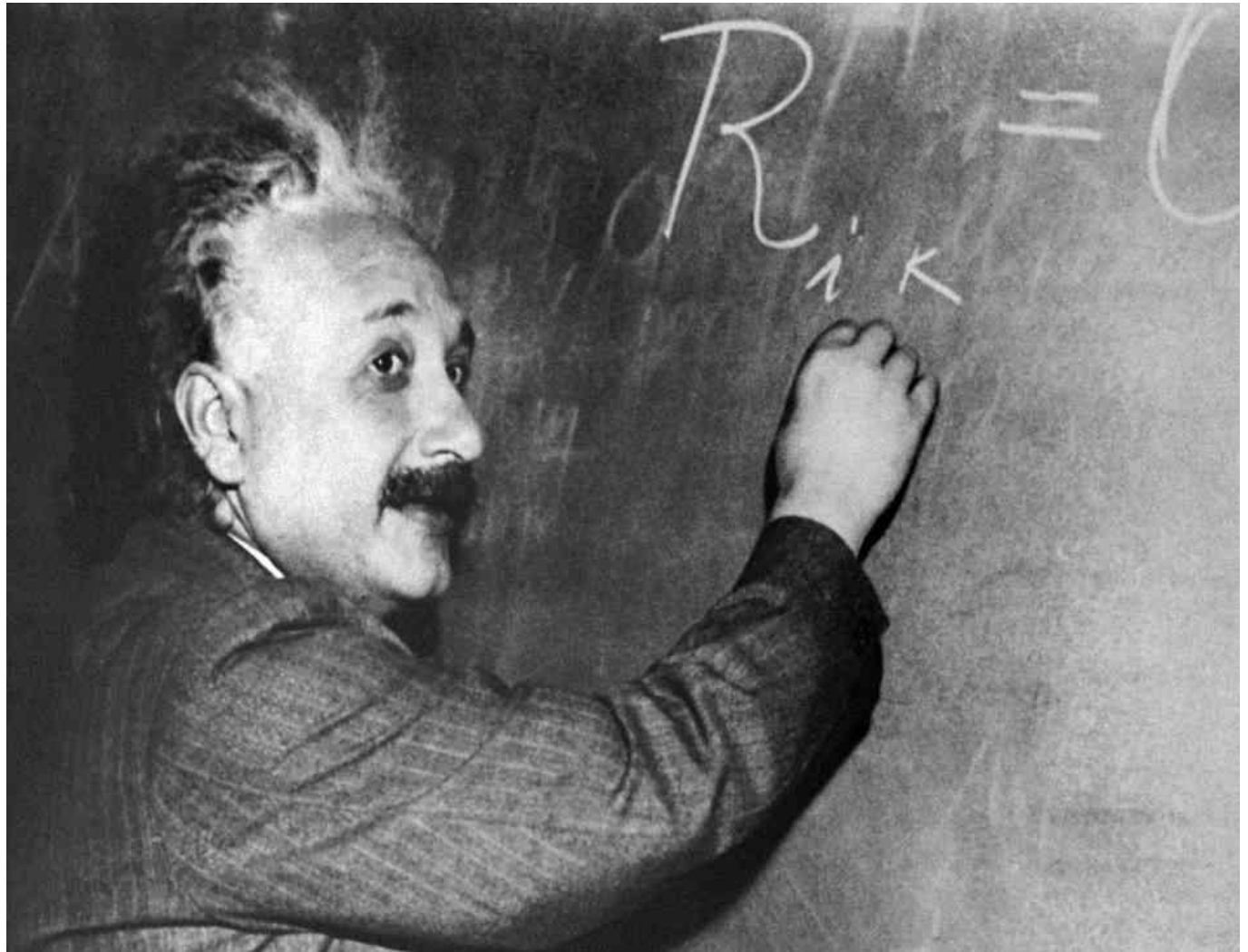
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|-----|--|-----|--|
| 1.  | Introduction                                       | 11. | Resolution/Recovery                            |
| 2.  | Actuarial Function                                 | 12. | Capital  |
| 3.  | Professional Standards                             | 13. | ALM  |
| 4.  | Operational Risk                                   | 14. | Financial Statements                           |
| 5.  | Catastrophe Risk                                   | 15. | Governance of Models                           |
| 6.  | Non-Proportional Reinsurance                       | 16. | Materiality &<br>Proportionality               |
| 7.  | Intra-Group Reinsurance                            | 17. | Risk and Uncertainty                           |
| 8.  | Addressing the Consequences<br>of Insurance Groups | 18. | Policyholder Behaviour &<br>Management Actions |
| 9.  | Distribution Risk                                  |     |  |
| 10. | ORSA   |     |  |



# About the IAA Risk Book

- Last Two Chapters (still in development)
  - 19 Dynamic Hedging
  - 20 Stress Testing





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# Chapter 1 Introduction

## Key messages include:

- Managing and Communicating Uncertainty – Our Professional Opportunity & Responsibility
- ERM Is the Core Franchise Value of Insurance

## What is the Important Problem?

- What Pillar 2 (ERM) processes and tools can be used to sustain the Balance Sheet before Pillar 1 indicates the “ship has sunk”.
  - And, are they robust or smoke and mirrors?



# Chapter 1 Introduction

## What are the Important Solutions?

- To manage and communicate uncertainty, processes are essential
- Can the Actuarial Function step into and/or assist these roles more directly?
  - ORSA
  - Model governance
  - Stress testing
  - ERM
  - Recovery and resolution planning oversight
  - Micro (firm specific) vs macro (sector specific) implications



# Your Turn

**Questions**  
**Comments**  
**Observations**



# Operational Risk

Toshihiro Kawano

Member of the IAA

Actuarial Standards Committee



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# Presentation Agenda

- Introduction
- Operational and Other Risks
- Prerequisites for the Quantification of OP Risk
- Assessment of OP Risk
- Conclusions



# Introduction

- Quality & maturity of risk management process are key indicators that can impact potential losses arising from OP risk events
- OP risk is closely linked to the risk culture of an insurer; qualitative issues (such as strength of governance processes and oversight functions) play large role in management of OP risk



# Operational and Other Risks

- When comparing OP risk across different sectors, care must be taken to pay attention to the different nature of the business
- Banks are in the borrowing and lending business, while insurers act as risk takers and managers of insurable risks



# Prerequisites for the Quantification of OP Risk

- Reliability of any OP risk modelling exercise is strictly connected with actual quality of the overall data (internal or external data) - generally an unknown
- Data source
- Data quality
- Data relevance





# Assessment of OP Risk

- Appropriate model calibration in the data-poor environment of OP risk is one of the most significant and persistent challenges for insurers
- OP risk events for high-frequency/low-severity events can be captured & modelled; tail events that are low frequency/high severity are where a qualitative scaling assessment can be most effective



# Conclusions

- Typically a capital charge or other mitigation method acts to reduce risk exposure, but adding an OP risk charge based on past losses (or the lack thereof) can be pro-cyclical
- Credible approach for OP risk should include a blend of qualitative and quantitative assessments to evaluate the effectiveness of management processes to address OP risk exposures to both low and high-severity events



Your Turn

**Questions**  
**Comments**  
**Observations**



# Distribution Risk

Sam Gutterman

Vice Chair of the Resource and Environment  
Working Group and the Population Issues  
Working Group of the IAA



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# Presentation Agenda

- Introduction
- Risks to the insurer
- Risks to the distribution channel
- Risks to the consumer
- Roles of supervisors and actuaries
- Summary



# Introduction

- Distribution risk
  - A risk associated with the distribution of an entity's products or services
  - Encompasses marketing, communication and relation with a customer, and the sale of a product
- Distribution channel
  - The vehicle through which the entity's products are "sold" to customers
  - Examples: agents, independent brokers, the entity's employees, the customer's employer and the Internet



# Risks to the insurer

- Distribution risks are similar to operational risks – may be unpredictable, but can inflict significant reputational harm and financial costs
  - Selection of distributors can affect quality of distribution staff and in turn business volume and performance/quality
  - Compensation can result in inappropriate incentives
    - ◆ As in recent Wells Fargo scandal (incentivized actions inconsistent with customer's needs) – profit and brand damage and CEO termination
  - Needs continuous monitoring and risk management



# Risks to the insurer (2)

- Actions of agents or sub-contracts can have significant effects on the success of the firm
  - For example, actions of security staff of United Airlines
- Requires continuous risk management and monitoring
- Perceived concerns regarding sustainability or brand impairment can have serious short and long-term concerns
  - Perceptions can be as damaging than actuality





# Risks to the distribution channel

- Any risk to the insurer or insurance industry is a risk to the distributor
  - Perceived concerns regarding sustainability or brand impairment can result in a rapid deterioration in the size and effectiveness of the distributor
- Insufficient support
- Continuity of distributor management
  - Head of distribution can lead or ruin the channel



# Risks to the consumer

- Inadequate or misleading training / education provided to
  - Distribution staff
  - Consumers
- Miss-selling
- Conflicts of interest
  - Some contend that percentage compensation / bonuses can lead at least to apparent conflicts



# Role of the supervisor

- Charged with ensuring
  - Sales and service of insurance policies deliver acceptable value to the consumer, e.g., standards for agents, policy forms, prices and illustrations, as applicable
  - Promises made are
    - ◆ Consistent with the public interest
    - ◆ Kept
      - Through soundly capitalized insurers
      - A complaint receipt mechanism with feedback loops



# Role of the actuary

- Involved in assessing the quality of sales and estimating and monitoring policy performance in pricing process
- Help to identify, measure and manage the risks of the distribution and conduct of business
  - Part of overall Enterprise Risk Management (ERM) process
- May need to sign off on accuracy of illustrations of new sales / enforce insurance policies that explain the mechanics of complex or long-term products and information (advice) on suitability of sales to customers



# Summary

- Although financial sustainability of an insurer is not often threatened by risks associated with its distribution system and marketing practices, these risks can lead to significant financial and reputational harm from lack of new business or poor quality of business
  - Can adversely affect an insurer's income, brand value, and value as a going concern
  - All stakeholders can be impacted



# Your Turn

**Questions**  
**Comments**  
**Observations**



# Governance of Models

Godfrey Perrott

Vice Chair of the IAA

Actuarial Standards Committee



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# Governance of Models

## Reason for the Chapter?

- Various forces have converged to increase concern about models used in financial reporting and capital determination, and how they are governed.

## Goals

- Show that model governance is critical and must be embedded in the organization
- Show that model governance is an ongoing process, not an end point





# Sources of Concern

## Major financial failures

- Long Term Capital Management (1998)
- Dysfunction in the 2008 Crash

## Other forces

- Sarbanes Oxley legislation (U.S. 2002)
- Solvency II internal model requirements
- General concerns of the Financial Stability Board (FSB)



# Long Term Capital Management

- Hedge Fund with a set of Blue Ribbon principals
  - Nobel Laureates
  - Prominent Wall Street Traders
- Bailed out by 16 banks in 1998 when it faced imminent collapse
- Claimed it was a 1 in 1 billion event that took it down



# Sarbanes Oxley

- Legislation following Enron Crash
- Focused on documentation and transparency
- Only affected model governance tangentially
- However paved the way for future developments



# Regulatory Actions

- Financial institutions (banks and insurers) were increasing use of models in management
- Pressure to use internal models rather than prescribed formulas to determine required capital
- Both the EU (Solvency II) and the FSB expressed concerns over internal models
- Formal governance of models is the result of these forces



# Sources of Model Failure

- Failure of communication
- Cutting corners
- Hubris
- [Fraud]



# Model Governance can help

- Require transparent communication
- MG Structure prevents Lone Wolf
- Transparency and formal governance structure discourage fraud



# Actuarial Standards can help immensely

- Spell out appropriate MG processes and structures
- Differentiate actuaries as the profession with standards.
- Provide practicing actuaries with a safe harbor.



# Key messages

## The most important points from this chapter are:

- Model governance and the management of model risk are critical considerations within the insurance industry.
- A formal governance structure is necessary to mitigate both operational risk and reputation risk
- Risks Include financial misstatements, or inappropriate reliance on model results for both strategic and operational decisions.
- Model governance is both complex and broad.
- Scope includes models such as asset allocation models
- Actuarial Standards can help





Your Turn

**Questions**  
**Comments**  
**Observations**



# Closing Remarks

Liyaquat Khan

Executive Director - ACCA



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# Closing Remarks

The RISK BOOK is, in some sense, a Signature Project of International Actuarial Association (IAA) the global overseeing body of the actuarial profession and for ACCA to have an opportunity to carry its message to ACCA members and other participants of this Webinar is an honour.

We in ACCA are grateful indeed to Masaaki Yoshimura San, President elect of the IAA for blessing this Webinar and to Dave Sandberg, Chair of the Insurance Regulation Committee to deal with the VISION of RISK BOOK.



# Closing Remarks...

Indeed the whole leadership behind the Risk book; Dave Sandberg, Chair of the Insurance Regulation Committee, Toshihiro Kawano of the Actuarial Standards Committee, Sam Gutterman, Vice Chair of Resource and Environment Working Group and Godfrey Perrott, Vice Chair of the Actuarial Standards Committee joined hands together to put the content in place.

While closing this event, I must put on record that for ACCA to collaborate with IAA this event is the beginning.



# Thank You



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