Enterprise Risk Management – by Insurers

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Global Leadership in Financial Supervision

Does this look familiar?

- Oh no, what does the supervisor want now?
- Darn – guess we have no choice but to do this
- Well, this is interesting – we did not know that
- We should have done this years ago – this makes a lot of sense

Adapted from presentation by A Campbell – Guarantee Company of North America

Enterprise Risk Management – focus on the insurer

Approach to this presentation – is to look at how companies address ERM issues –

- This is foremost an insurer's responsibility – not solely the Supervisor's concern

PACICC – Property and Casualty Insurance Compensation Corporation

- -Chief Risk Officers Forum
- - webinars

http://pacicc.ca/riskofficersforum/previouswebinars.html

A CRO's perspective on ERM

Why – important to understand how companies perceive ERM

- a regulatory burden, or
- an essential management process?

Focus on what companies do, and why

ERM – what is it about?

1. It has to be enterprise wide everybody in the company has to be involved
2. To manage risks – we must know what the risks are
   - risk awareness
3. Look forward – 3, 4, 5 years
4. We do this for ourselves
   - not to tell the regulator that we do it, although that is nice
5. A continuous process
   - we do not do this once a year
   - we are doing this all the time

A risk framework

- must be integrated
  - risks are already in existence
  - what might emerge in the future
- ORSA
- Any major decision to come under ERM review
- Scenario testing is critical – understand the sensitivities*
- International trend → CRO – how large of a team do you need?
  - large enough to meet demand
  - needs governance
- * e.g. – you cannot look at insurance in isolation

A risk framework

- if ERM is successfully implemented – this leads to good risk culture
- Pyramid (base) = ERM processes
  - Awareness – culture = day to day involvement of all
- Strong culture is embedded
  - NOT just at management level
  - good risk management flows up from front line staff
- risk acceptance only within the risk appetite
  - acceptance and mitigation to bring a risk within the Appetite
- the BUSINESS owns the risk
  - CRO does not own the risk
    - CRO provides oversight and challenge to the BUSINESS

The Risk Management Framework – this company

- The framework has evolved over many years
- The CRO owns Risk Mgmt Framework
    - RMF is the set of process to employed to
        - Identify, measure, manage, monitor, and report on the risks a firm faces – and,
- Determine the capital necessary to ensure that the firms solvency needs are met at all times

The RMF is the set of processes employed to:

1) Identify, measure, manage, monitor and report on the risks a firm faces; and ultimately

2) Determine the capital necessary to ensure that the firm's solvency needs are met at all times.

Embedding the risk management framework in our daily lives

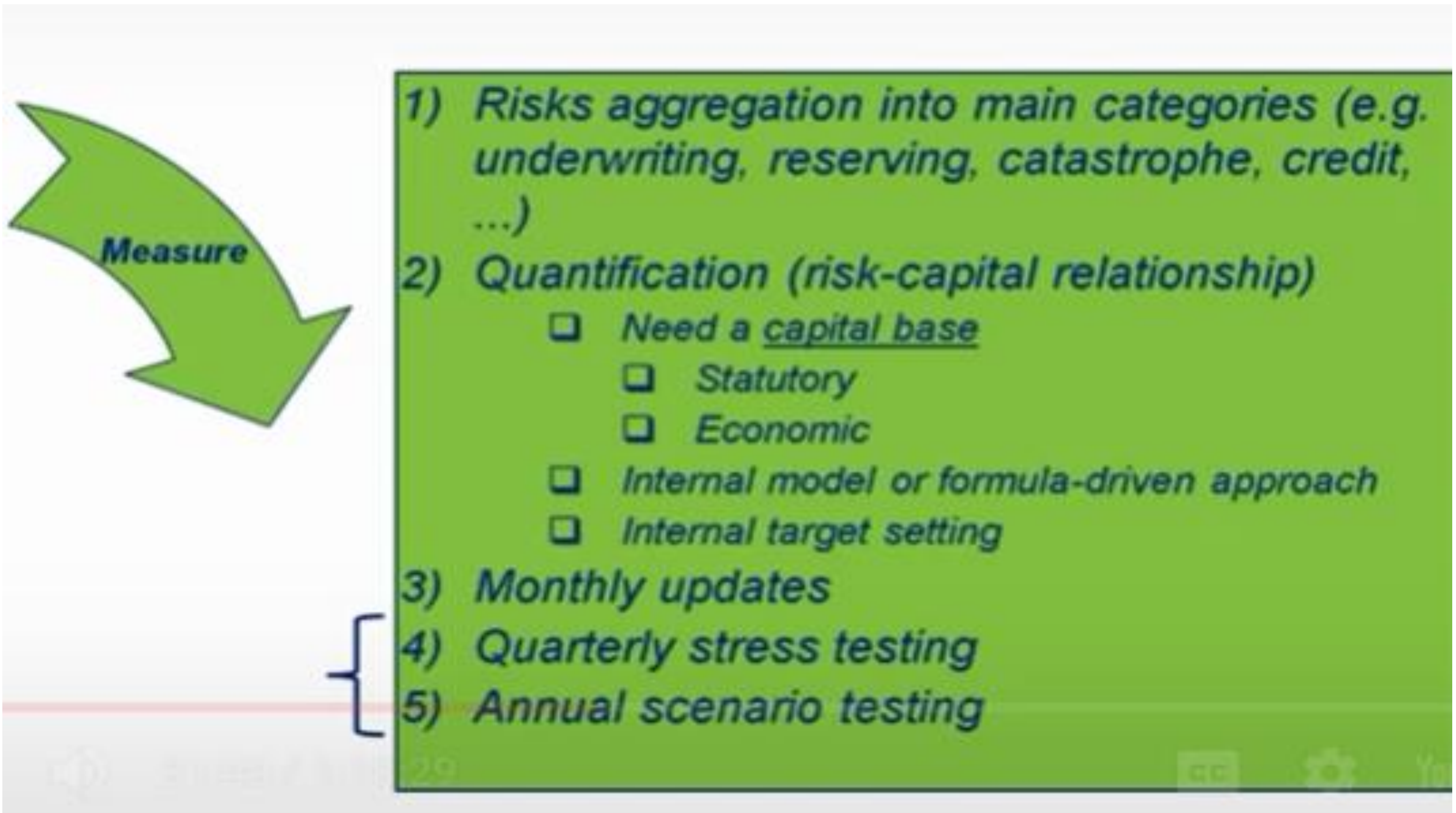
- Suite of risk identification processes
  - Risk workshops – these are quarterly – led by the business owner (RM personnel are there to help)
    - Staff are very supportive of this process
    - Helps develop action planning
  - Thematic reviews – these are conducted by the second line – the RM professionals
    - Want to explore in detail – ad hoc – any risk area they want
  - War gaming
    - Engaging the most sr mgmt of the company – throw at them something very ‘bad’ – review the scenarios – what to do if the risk materialized

Embedding the risk management framework in our daily lives

- Emerging risks spectrum – held with sr leaders (and teams) – a one sheet document per risk – e concise – talk about risks that are emerging – left, right, bottom, top – the normal mapping exercise (change of the Bank Act in 2017) – open forum – agree on the risks and discuss where it belongs on the spectrum – there is healthy debate but we do get alignments

Risk workshops – these are held by dept – e.g. personal lines – meet once a quarter – talk of any risks the business generates - e.g. – are they are understaffed – can't do the job, etc – or new product proposal that will not have a good customer outcome (focus on the customer – will they get value for the money)

The measurement of risk



The measurement of risk

- Risks aggregation into main categories – underwriting, reserving, cat, credit, etc
- Quantification process (risk capital relationship)
- Need the capital base
  - Statutory MCT (Capital Adequacy)
  - Economic – Solv II – and own view (we call it the ORSA view)
- Internal model or formula driven approach such as MCT (Capital Adequacy) or the std formula under Solv II
- Leads to setting a risk appetite statement
- On verge of implementing a combined system for risk issues and audit issues !!!!
- Monthly updates- do not make this too complicated

The measurement of risk

- Quarterly – stress testing – to understand the sensitivities
  - Credit risk – how much capital is being held – how is the risk changing -
  - Monitor closely risks that you think are volatile
  - Annual scenario testing – more complex possibilities that could impact capital - “stress testing on steroids” - more complex possibilities that may affect capital position

Monitoring

- *Determination of Risk Appetite Statements for monitoring purposes*
  - *MCT*
  - *Overall economic capital*
    - *Economic capital by risk type*
- *Actual measurement is then compared against the appetite statements*
- *Typically, a Red-Amber-Green framework would be used to determine the level of reporting and action necessary*
  - *Amber – Board*
  - *Red – OSFI*

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Monitoring:

- Approach -based on appetite statement – macro and micro
    - Micro – mainly on ops risk – quarterly ops risk committee – different people report on perspective of their department – **occurrences and where something might blow up**
    - Macro level:
        - Risk appetite statement, MCT (capital adequacy)of course – monitor monthly
        - Monitor risks separately
            - Eg underwriting – we have a range where we are comfortable
                - **Making claims – say asbestos – lower bound is 0**
                - **Normal claims – claims is not zero – we are in the business of insurance**

Managing the risk

Three Lines of Defense model for the management of risks		
First Line Management	Second Line Risk Function	Third Line Internal Audit
Accountable for the management of all risks relevant to its business	Accountable for providing challenge and oversight of the management of risks	Accountable for providing independent assurance on the adequacy of the management of risks

- We operate under the 3 lines of defense model – a brief explanation

- 2nd is accountable to provide challenge to management – and then responsible to provide provide oversight
- 1st line is management [the business] – they own their risks – this is a key principle

Reporting Phase

Reporting Phase

- # of mgmt committees
- e.g. ops risk committee, insurance committee, reserving – meet at least quarterly
- ERM Committee – comprised of exec members plus some heads of departments
    - Robust discussion – helps bring around alignment on the key issues and what has to be focused on
- - naturally reporting to board committee
    - CRO report quarterly - say 25 pages – key issues in the first two pages – what is impt – status – red amber green
    - Management actions – ½ hour on this
    - Other – talk of tolerance – what is in appetite – mgmt actions – goes all the way to granular levels
    - CFO/DUO report – complements CRO report

Governance


Chief Risk Officer Perspective on Enterprise Risk Manag...
AVIVA
• Governance at Aviva has 4 main components
Risk Management Policies and Business Standards
Committee Structure & Delegation of authorities
Risk Appetite Framework
Three Lines of Defense Model

Governance

- The what – what you have to do to support the framework
- The how – the business standards – say about 40 of them

- How the business has to live with the U/W risk policy
    - Tells the pricing actuary what they have to do to respect the risk policy

Governance

Governance Supporting RMF

AVIVA

- ***Governance at Aviva has 4 main components***
  - ❑ ***Risk Management Policies and Business Standards***
  - ❑ ***Committee Structure & Delegation of authorities***
  - ❑ ***Risk Appetite Framework***
  - ❑ ***Three Lines of Defense Model***
- ***Risk Management Policies & Business Standards***
  - ❑ ***Policies are owned by Board of Directors (The "What")***
  - ❑ ***Standards – Process-related risk management (The "How")***
- ***Committee Structure***
  - ❑ ***Documented "Terms of Reference"***
  - ❑ ***Delegation of authorities & escalation protocol***
- ***Risk Appetite Framework***
  - ❑ ***Overarching risk appetite statements***
  - ❑ ***Risk preferences***
  - ❑ ***Operational risk limits***

Risk Management Framework (RMF)

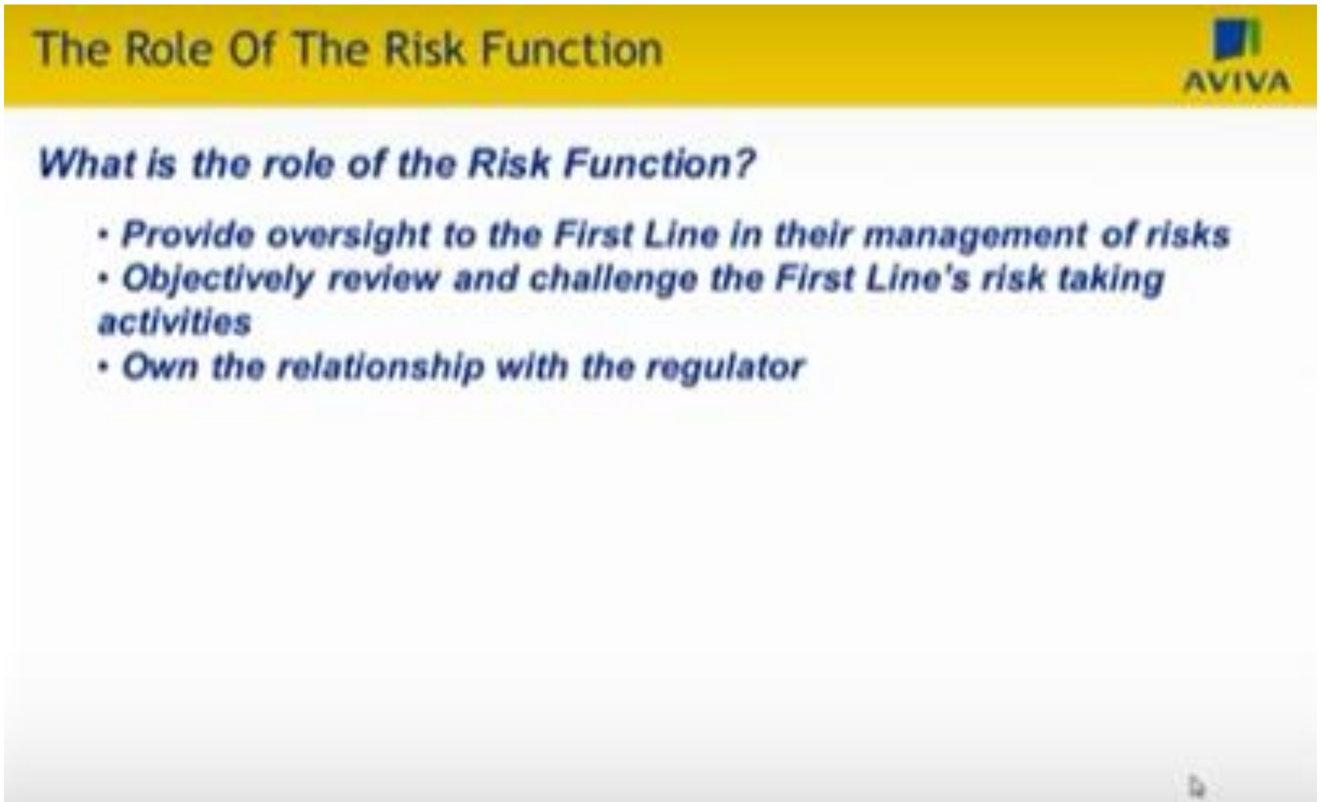
3 levels of granularity

1. overarching statements
   - MCT RA statement
   - Economic capital
   - Liquidity – risk app statement for liquidity – short term needs and extreme events
   - Franchise value RA statement – reputation and conduct statement – valuing customers
     - This is tough to apply measurement – but consider when all impt business decisions are made

Risk Management Framework (RMF)

2. risk preferences
   - Eg – no group business , no sub std auto risk
3. Operation risk limits
   - Eg max number of something

The Role of the Risk Function



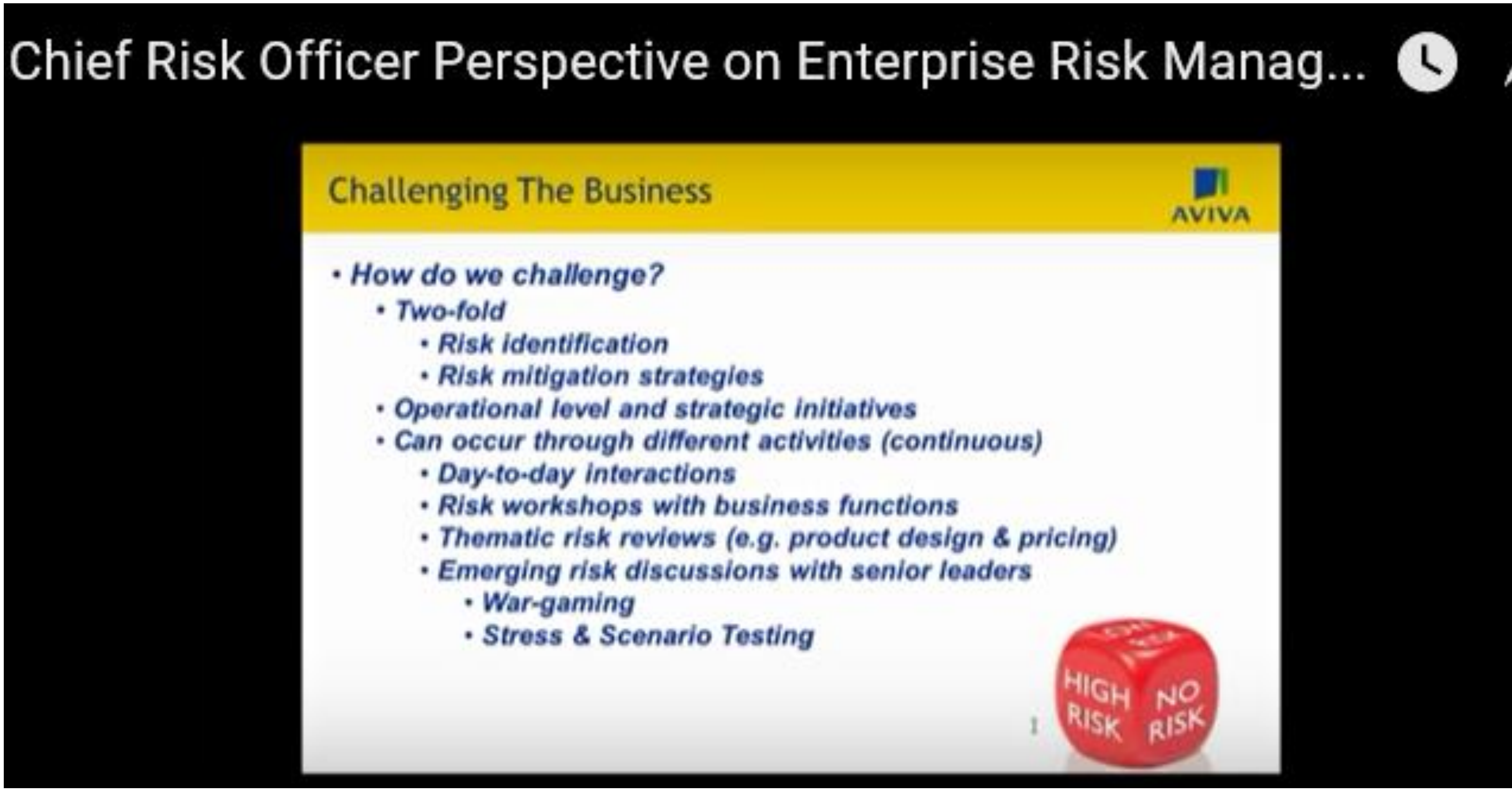
The Role of the Risk Function

- Provide oversight to 1st
- Objective review and challenge
- Own the relationship with the regulator – (with provinces – market conduct – this relationship is really owned by head of compliance)*

- * in Canada – prudential supervision and market conduct supervision are split between different jurisdictions - implications for your country?

The Role of the Risk Function

- Reality – need a balanced view of things – need to be proportional – some risks are not that critical – no mountains out of molehill
- Think cyber risk – yes this is important but – if want IT to eliminate this totally – this is impossible
  - To what extent needs to be target – as much rigor as a bank?
  - If risk were to crystalize – what is the impact
- Is it possible to reach middle ground – satisfy that you have done enough to mitigate the risk


Chief Risk Officer Perspective on Enterprise Risk Manag...
Challenging The Business
AVIVA
• How do we challenge?
• Two-fold
• Risk identification
• Risk mitigation strategies
• Operational level and strategic initiatives
• Can occur through different activities (continuous)
• Day-to-day interactions
• Risk workshops with business functions
• Thematic risk reviews (e.g. product design & pricing)
• Emerging risk discussions with senior leaders
• War-gaming
• Stress & Scenario Testing
HIGH RISK
NO RISK

Challenging The Business: Strategic Business Plan

AVIVA

- ***Various activities form the overall challenge***
  - ***Comparison of risk-adjusted pricing indications to plan loss ratios***
  - ***Stress Testing and Reverse Stress Testing of plan assumptions***
    - ***What would it take to "break" the plan?***
  - ***Economic capital metrics fully integrated in planning process***
    - ***Serves as a check***
  - ***Have customer outcomes been appropriately considered?***
  - ***Are targets aspirational enough? Too aspirational?***
  - ***Is the implied level of execution risk within our appetite?***
  - ***Is there a risk to regulatory capital levels? Economic capital?***
  - ***Is the overall plan aligned to our strategic objectives?***

Challenge the 'business'

- List of activities – not exhaustive
- Stress – eg – changing investment returns
- Reverse stress testing – what elements would break the plan
- What would it take to be really disappointed
- Conduct risk – are customers getting value from purchased products

- Targets -are they aspirational – this should motivate people – but go too far – you discourage people
- Execution – can always come up with strategy – but execution is the tough part
- Any of these challenges by RM can change the Strat Plan - this is impt

Emerging Risks

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Emerging Risks

What Are The Outcomes?

AVIVA

- *Role of Risk*
  - *Facilitate the discussion*
  - *Challenge the business (risk identification and mitigation)*
- *Outcomes*
  - *Risks identified*
  - *Expected impact of risks determined*
  - *Adequate pre-emptive actions determined*
    - *Clear actions, owners and timelines (if appropriate)*
  - *Opportunities identified*
  - *Development of a "Playbook" in case of materialization*

Emerging Risks

- Diff types of outcomes
- Key – is risk identification
  - Can be small - medium - large
  - Or, can be dollars
- Pre-emptive – ‘change bank act’ [or legislative change] – then there are people who know what they have to do
- Shift in the mkt – there may be opportunities
- **Playbook** = a step by step manual to follow up if risk materialized

A systemic risk – a process

Systemic risk is inflation:

- Tell the story of inflation in the 70's, 80's
- Tell the story of what this applied
- Use your historical knowledge

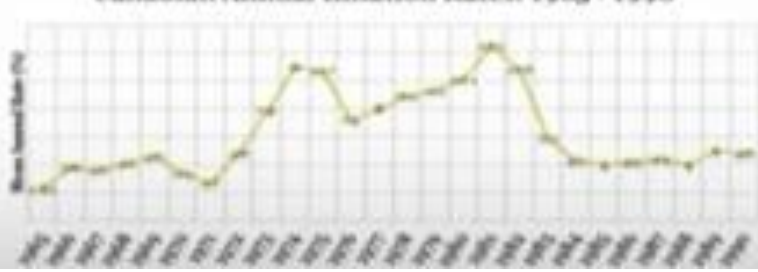
A systemic risk – a process

A War-Gaming Scenario Example: Inflation

AVIVA

- *Scenario is "Worst-case": State of the economy through the 1970s*
  - *Story of what lead up to the crisis is provided*
    - *Extreme examples of political and economic events*
- *Discussion*
  - *What would the risks / challenges be for the business throughout this scenario?*
  - *What, if any, risks /challenges are relevant today?*
  - *Actions, mitigation and monitoring*

Canadian Annual Inflation Rates: 1965 - 1990



- Give the story of the deep shift
- You will walk away with actions that can be taken – might only be monitoring – but monitoring is not passive – Identify you trigger points and what your actions will be

Enterprise Risk Management

Guiding Principles – Insurance Core Principle 16

ICP 16 Enterprise Risk Management for Solvency Purposes

> The supervisor establishes enterprise risk management requirements for solvency purposes that require insurers to address all relevant and material risks.

16.1 The supervisor requires the insurer’s enterprise risk management framework to provide for the identification and quantification of risk under a sufficiently wide range of outcomes using techniques which are appropriate to the nature, scale and complexity of the risks the insurer bears and adequate for risk and capital management and for solvency purposes.

16.2 The supervisor requires the insurer’s measurement of risk to be supported by accurate documentation providing appropriately detailed descriptions and explanations of the risks covered, the measurement approaches used and the key assumptions made.

16.3 The supervisor requires the insurer to have a risk management policy which outlines how all relevant and material categories of risk are managed, both in the insurer's business strategy and its day-to-day operations.

16.4 The supervisor requires the insurer to have a risk management policy which describes the relationship between the insurer's tolerance limits, regulatory capital requirements, economic capital and the processes and methods for monitoring risk.

16.5 The supervisor requires the insurer to have a risk management policy which includes an explicit asset-liability management (ALM) policy which clearly specifies the nature, role and extent of ALM activities and their relationship with product development, pricing functions and investment management.

16.6 The supervisor requires the insurer to have a risk management policy which is reflected in an explicit investment policy which:

- specifies the nature, role and extent of the insurer's investment activities and how the insurer complies with the regulatory investment requirements established by the supervisor; and
- establishes explicit risk management procedures within its investment policy with regard to more complex and less transparent classes of asset and investment in markets or instruments that are subject to less governance or regulation.

16.7 The supervisor requires the insurer to have a risk management policy which includes explicit policies in relation to underwriting risk.

16.8 The supervisor requires the insurer to:

- establish and maintain a risk tolerance statement which sets out its overall quantitative and qualitative risk tolerance levels and defines risk tolerance limits which take into account all relevant and material categories of risk and the relationships between them;
- make use of its risk tolerance levels in its business strategy; and
- embed its defined risk tolerance limits in its day-to-day operations via its risk management policies and procedures.

16.9 The supervisor requires the insurer's ERM framework to be responsive to changes in its risk profile.

16.10 The supervisor requires the insurer’s ERM framework to incorporate a feedback loop, based on appropriate and good quality information, management processes and objective assessment, which enables it to take the necessary action in a timely manner in response to changes in its risk profile.

16.11 The supervisor requires the insurer to perform its own risk and solvency assessment (ORSA) regularly to assess the adequacy of its risk management and current, and likely future, solvency position.

16.12 The supervisor requires the insurer's Board and Senior Management to be responsible for the ORSA.

16.13 The supervisor requires the insurer's ORSA to encompass all reasonably foreseeable and relevant material risks including, as a minimum, underwriting, credit, market, operational and liquidity risks and additional risks arising due to membership of a group. The assessment is required to identify the relationship between risk management and the level and quality of financial resources needed and available.

16.14 The supervisor requires the insurer to:

- determine, as part of its ORSA, the overall financial resources it needs to manage its business given its own risk tolerance and business plans, and to demonstrate that supervisory requirements are met;
- base its risk management actions on consideration of its economic capital, regulatory capital requirements and financial resources, including its ORSA; and
- assess the quality and adequacy of its capital resources to meet regulatory capital requirements and any additional capital needs.

16.15 The supervisor requires:

- he insurer, as part of its ORSA, to analyse its ability to continue in business, and the risk management and financial resources required to do so over a longer time horizon than typically used to determine regulatory capital requirements;
- the insurer’s continuity analysis to address a combination of quantitative and qualitative elements in the medium and longer-term business strategy of the insurer and include projections of its future financial position and analysis of its ability to meet future regulatory capital requirements.

Role of Supervision in Risk Management

16.16 The supervisor undertakes reviews of an insurer's risk management processes and its financial condition, including the ORSA. Where necessary, the supervisor requires strengthening of the insurer's risk management, solvency assessment and capital management processes.

Thank you

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