

An overhead photograph of a group of people sitting around a wooden table in a meeting or workshop. There are five people visible: a man in a yellow jacket, a man in a white shirt with glasses, a woman with curly hair, a man in a blue shirt, and a woman in a white shirt. They are all looking at laptops or notebooks. The table is cluttered with various items including laptops, notebooks, pens, and coffee cups. A dark blue semi-transparent rectangle is overlaid in the center of the image, containing white text.

Emerging Leaders Program

Welcome
Networking Breakfast

Emerging Leaders Program



An Executive Perspective Alyson Bailey-Flynn

Global Head & Managing Director Capital Markets,
Wealth Management, Insurance, Asia Pacific,
Internal Audit, **Royal Bank of Canada**



Emerging Leaders Program:

Design a Risk Management Framework

Tony Peccia

Executive in Residence

Toronto

March 2024

Learning Objectives

Learn how to think and act like a high performing CRO by designing a comprehensive Risk Management Framework.

Even though you may not be a CRO, thinking and acting like a CRO will enhance your ability to identify, evaluate, and create an action plan for improving risk management processes within your area of responsibility.

It's about know-how-to not just know-about.

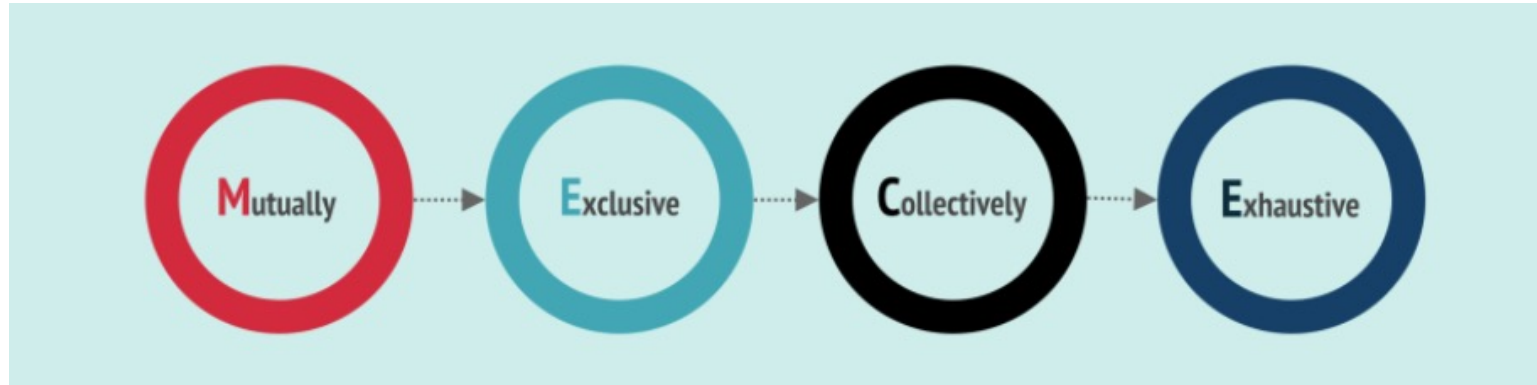
Value of a Risk Management Framework

- What comes to mind when you talk about risk?
- Why is having a risk management framework important?
- How does a risk management framework help the CRO and others in risk?

Group activity

- In your table groups, generate a list of items you would include in a risk management framework.

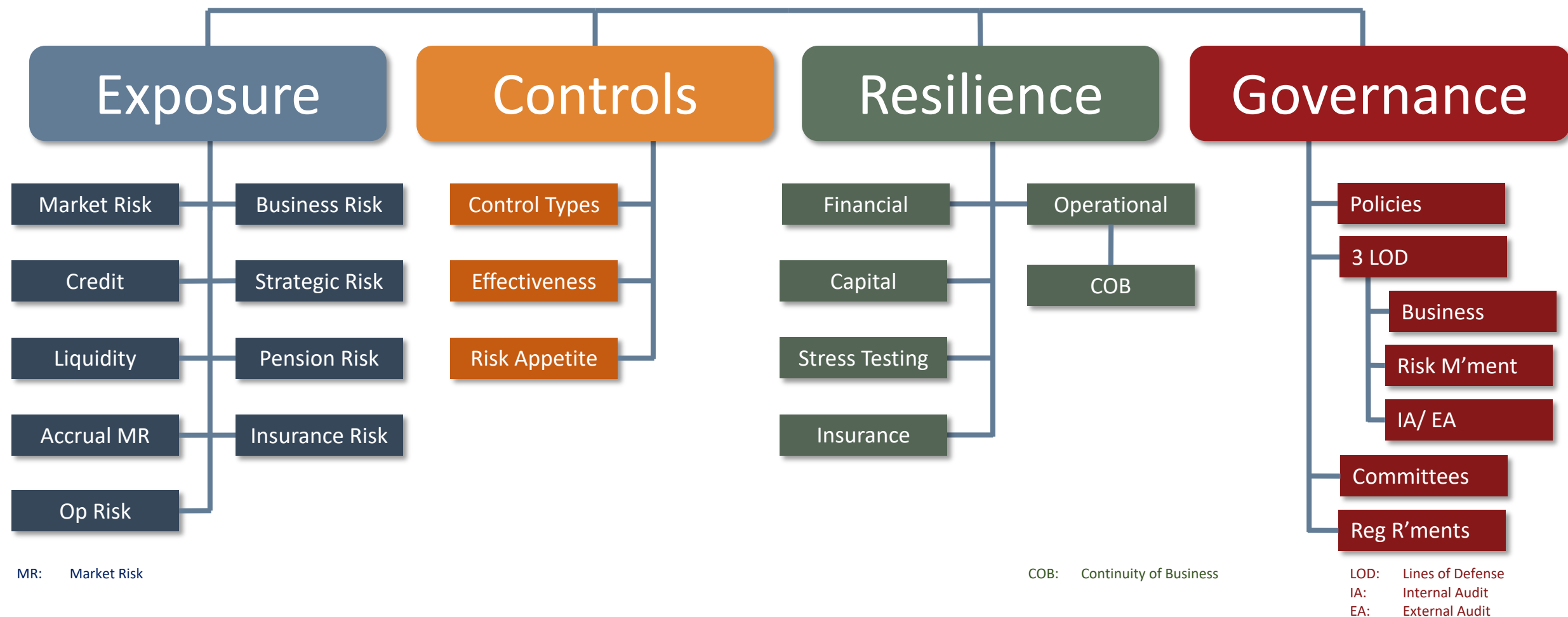
MECE Approach



MECE is a method of grouping information into categories that are mutually exclusive and collectively exhaustive. This helps you sharpen your thinking and simplify complex ideas into something that can be easily understood.


- **Mutually exclusive** refers to the fact that information cannot appear in two categories – they don't overlap.
- **Collectively exhaustive** means that the sets of ideas are comprehensive - inclusive of all possible options.

Example of Risk Management Framework



Debrief

- What are some benefits of using the MECE structure in creating the Risk Management Framework?
- What are some actionable insights you can take and apply to your role?

An overhead photograph of a group of people working at a wooden table. The table is cluttered with various items including laptops, notebooks, pens, and coffee cups. One person is wearing a yellow jacket, another a white shirt, and another a blue shirt. The background is a light-colored floor.

Emerging Leaders Program Break

An overhead view of a group of people sitting around a large wooden table in a meeting. There are several laptops and tablets on the table, some displaying charts. A person in a white shirt is pointing at a laptop screen. A person in a yellow jacket is on the left. A person with curly hair is on the right. A person in a brown shirt is also on the right. A person in a white shirt is at the bottom. A person in a purple shirt is at the bottom right. There are coffee cups and a notebook on the table.

Emerging Leaders Program: Risk Appetite

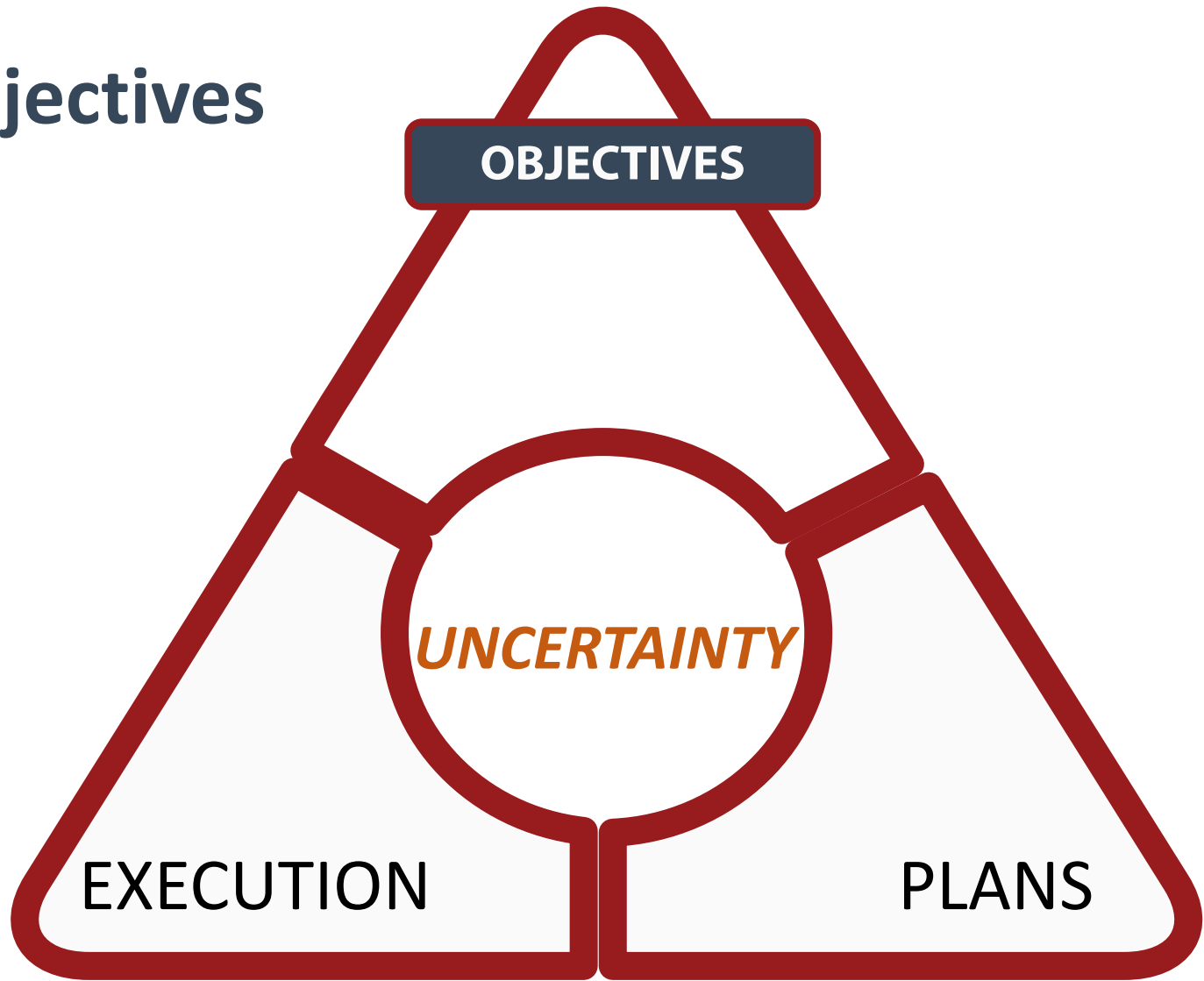
Michael Stramaglia
Executive in Residence

Toronto
March 2024

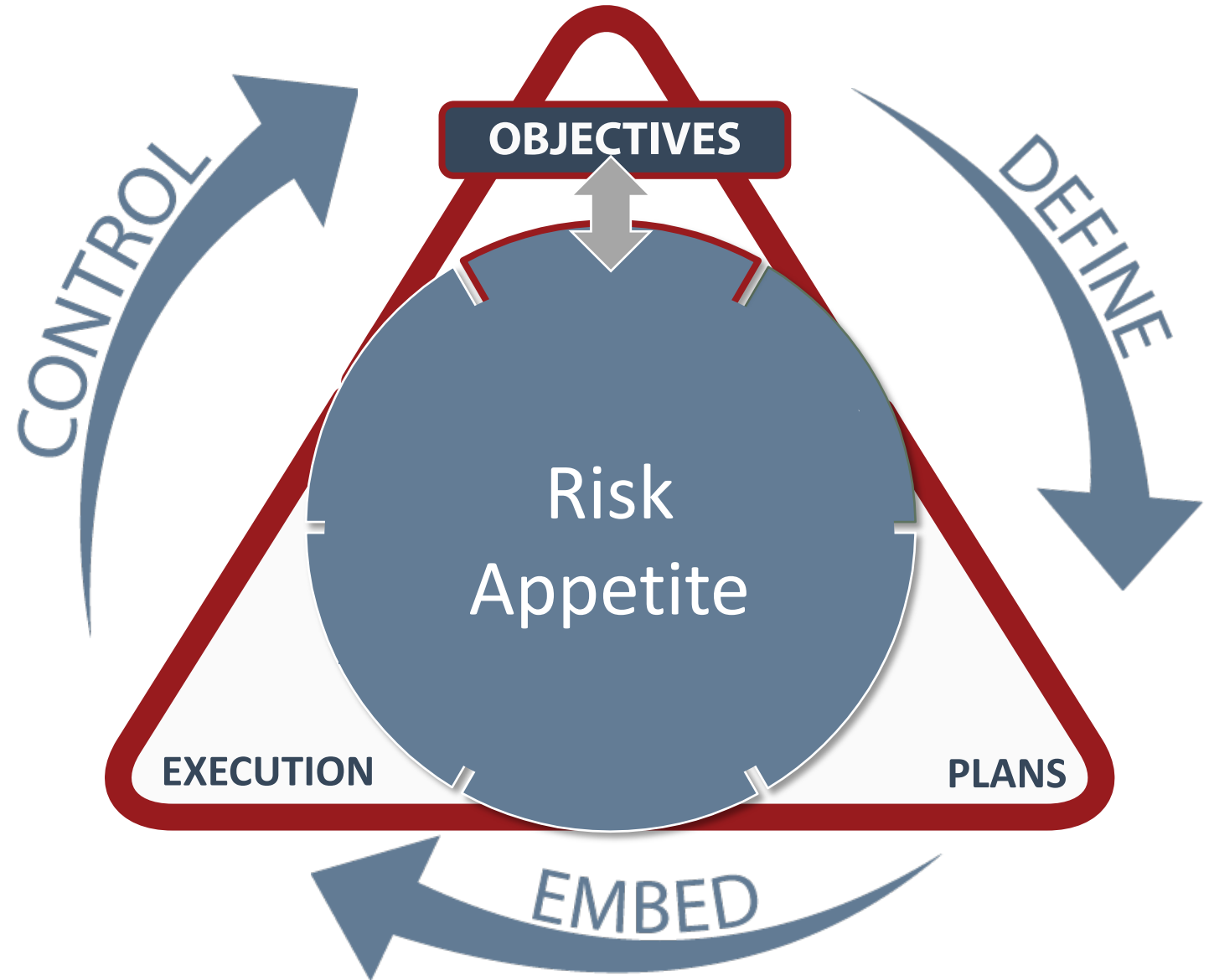
Learning Objectives

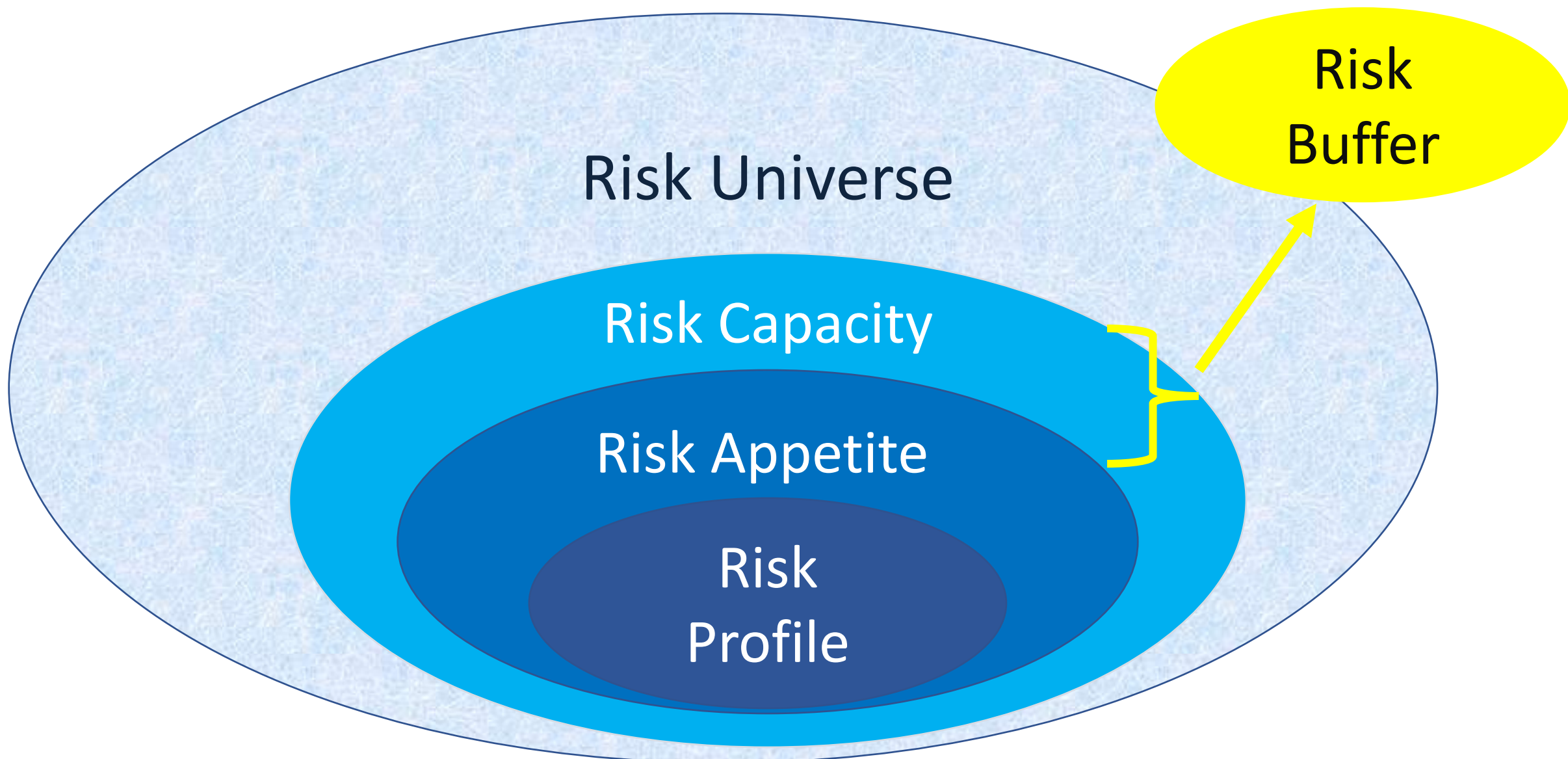
- Gain insights into the relationship between an organization's Strategy and its Risk Appetite, including as it pertains to Innovation-related priorities.
- Understand the key elements that define an organization's Risk Appetite, with a particular focus on "Guiding Principles".
- Gain understanding of how an organization's Risk Appetite needs to be embedded, not management decision-making.

Focus on Business Objectives



Risk Appetite





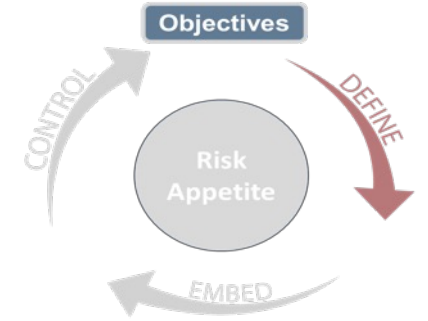
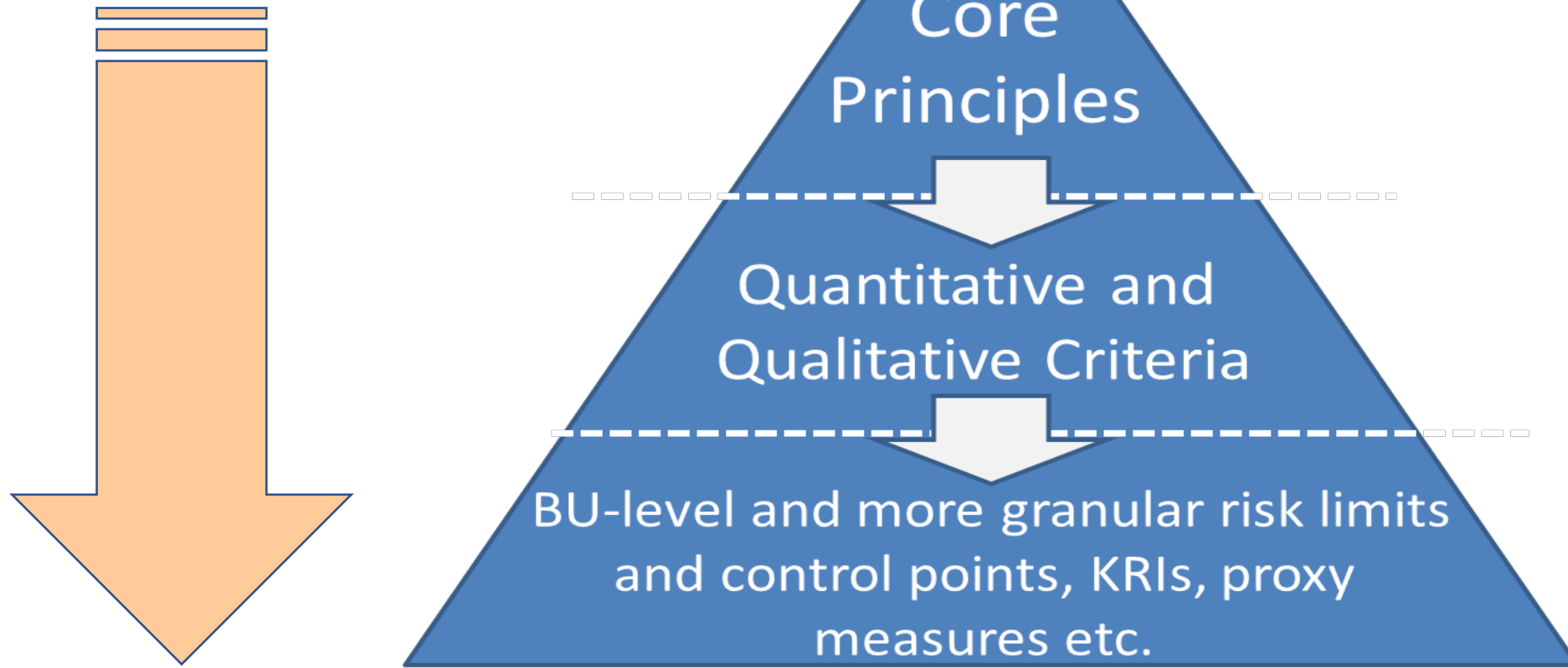
Risk Appetite Statement

A formal document, ultimately approved by the board, that articulates the risk appetite and key elements of the supporting Risk Appetite Framework

Proposed Key Elements

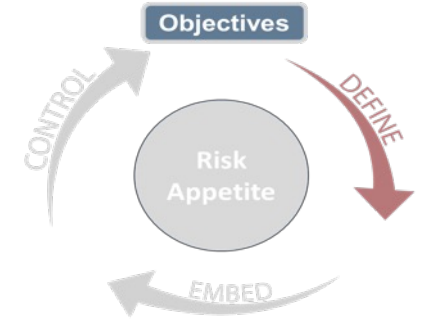
1. Summary of Risk-Taking Philosophy and Core Principles
2. Qualitative and Quantitative Criteria/Limits
3. Expectations Regarding Key Applications/”Use test”
4. Roles and Responsibilities
5. Monitoring, Reporting and Breach Protocols

“Top-Down” Process



Sample Core Principles

- Strategic Alignment
- Balance Stakeholder Interests
- Capability/Capacity Alignment
- Total Portfolio Perspective
- Returns Commensurate with Risk
- Culture and Values Alignment

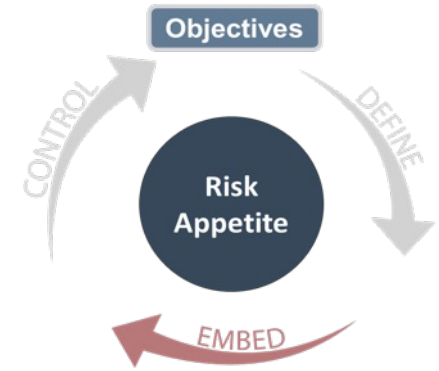


Discussion:

Risk Appetite Design Choices

Some Key Applications

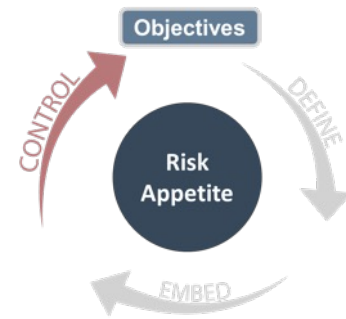
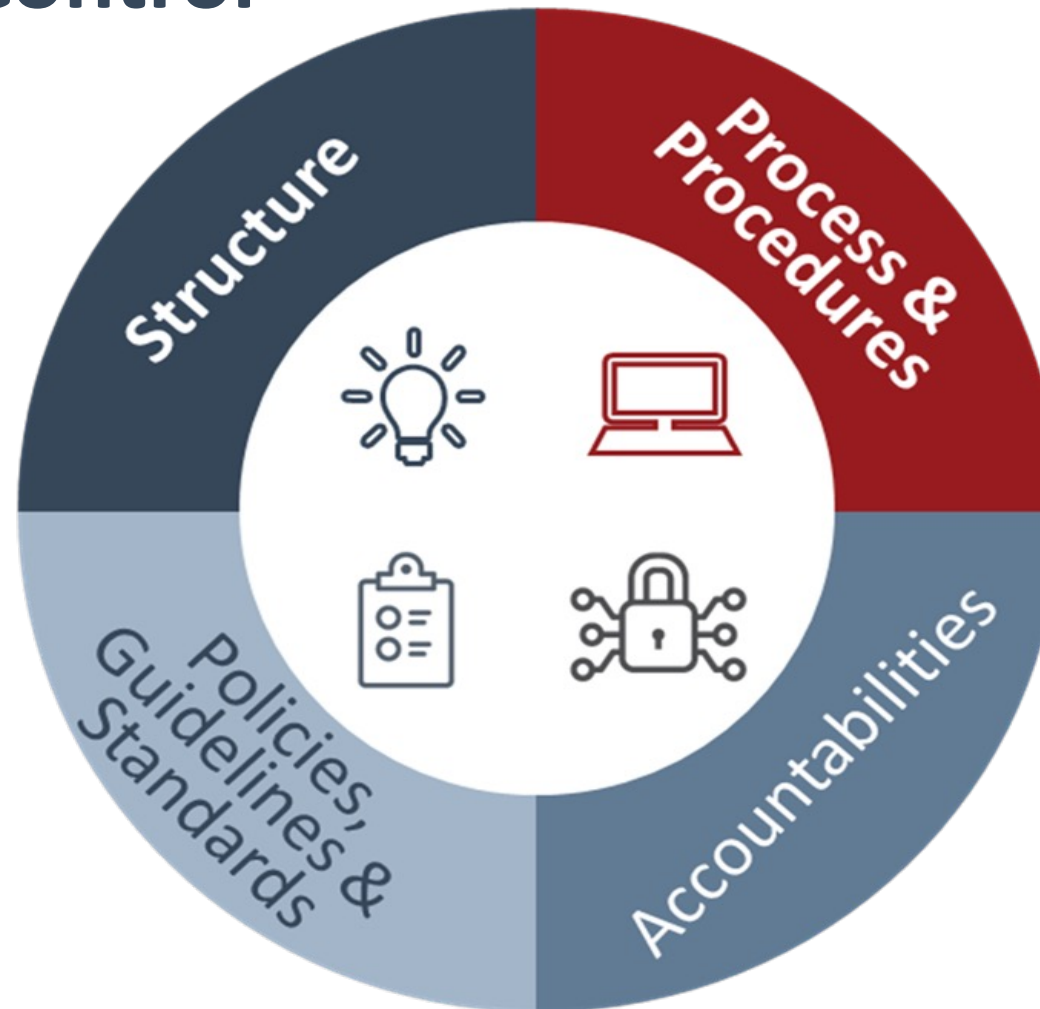
- Strategic Planning Process
- Capital Planning and Budgeting (ICAAP/ORSA)
- Investment and Lending Policy Development
- Underwriting Policies and Guidelines
- Business Case Approval Process
- M&A Process
- Product Development and Pricing
- Treasury and A/L Management
- Legislative Compliance Management Program
- Performance Management and Incentive Compensation
- Operational Risk Management Policies & Practices



Break-Out Group Exercise:

Canadian Family Assurance Group

Risk Appetite - Control



Discussion:

Risk Appetite and the Innovation Imperative

Discussion



Some Suggested Readings

- *Risk Appetite Statements: What's on Your Menu?*, Michael Stramaglia, Joint Risk Management Section of CIA, SoA, CAS Issue 19 (2009)
- *What is our Risk Capacity?*, Michael Stramaglia, Canadian Institute of Actuaries publication, *ERM: How do we Govern it?* (2016), <https://www.cia-ica.ca/docs/default-source/2016/216001e.pdf>
- *Corporate Governance Guideline*, OSFI (2018)
- *Exploring Risk Appetite and Risk Tolerance*, Risk and Insurance Management Society (RIMS), (2012)
- *Principles for An Effective Risk Appetite Framework*, Financial Stability Board (2013)
- *Risk Appetite and Tolerance*, The Institute of Risk Management (2011)

Case Study: Canadian Family Assurance Group

Sample Core Principles

- Strategic Alignment
- Balance Stakeholder Interests
- Capability/Capacity Alignment
- Total Portfolio Perspective
- Returns Commensurate with Risk
- Culture and Values Alignment

Case Study: Canadian Family Assurance Group

- TSX listed insurance company offering a broad range of retail and small commercial P&C insurance products through various direct response and broker channels
- Continuous innovation, data driven decision making and high levels of organizational agility are key hallmarks of corporate culture
- Strong capital position
- Considerable pressure to increase profitability and growth
- Third party broker has presented opportunity to participate in a Western Canada commercial property catastrophe risk pool, with very high indicative ROEs
- Management has assessed the opportunity and is seeking approval to bid
- Board is considering this recommendation in context of recently developed risk appetite principles

Principle	Opportunity Alignment	Notes
Returns for Risks Assumed <ul style="list-style-type: none"> Company is appropriately compensated for level of risk assumed 		
Strategic Alignment <ul style="list-style-type: none"> Risk enables strategic goals Aligns with vision, mission This risk taking is critical for delivery of core customer value proposition 		
Total Portfolio Perspective <ul style="list-style-type: none"> Marginal contribution to existing risk profile and, Diversification/concentration effects are favourable 		
Stakeholder Interests <ul style="list-style-type: none"> Risk appropriately reflects and balances stakeholders' reasonable expectations "no surprises" 		
Culture/Values Alignment <ul style="list-style-type: none"> Aligns with core corporate values Acceptable reputation/brand risk profile 		
Capability/Capacity <ul style="list-style-type: none"> Risk taking is appropriately supported by available risk taking capacity (financial and other) 		
Other Principles?		

An overhead photograph of a group of people sitting around a wooden table in a meeting or workshop setting. The table is cluttered with several laptops, notebooks with handwritten notes, pens, and coffee cups. The participants are engaged in discussion and looking at the devices. A dark blue rectangular box is superimposed over the center of the image, containing the text "Emerging Leaders Program Networking Lunch" in white.

Emerging Leaders Program Networking Lunch



Emerging Leaders Program: Risk Actions

Michael Stramaglia
Executive in Residence

Toronto
March 2024

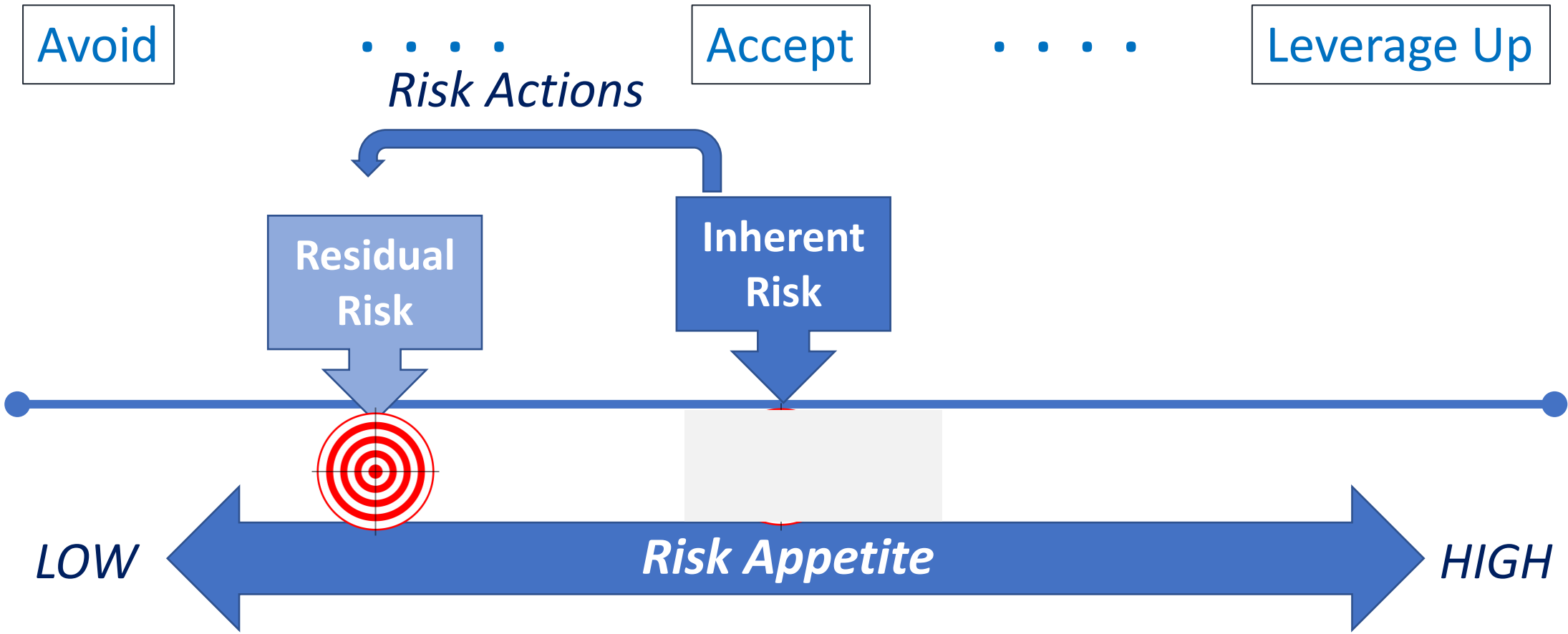
Learning Objectives

- Understand the relationship between Inherent Risk, Residual Risk, and Risk Actions and how these elements are informed by Risk Appetite and Assessment
- Develop appreciation of potential “unintended consequences” and how these might undermine the effectiveness of management’s Risk Actions
- Gain appreciation of Risk Trade-Offs and how these should help to shape management’s Risk Actions.

$$\text{Residual Risk} = \text{Inherent Risk} - \text{Net Impact of Risk Actions}$$



Target Residual Risk Profile



Exercise:

Residual Risk-Based Actions

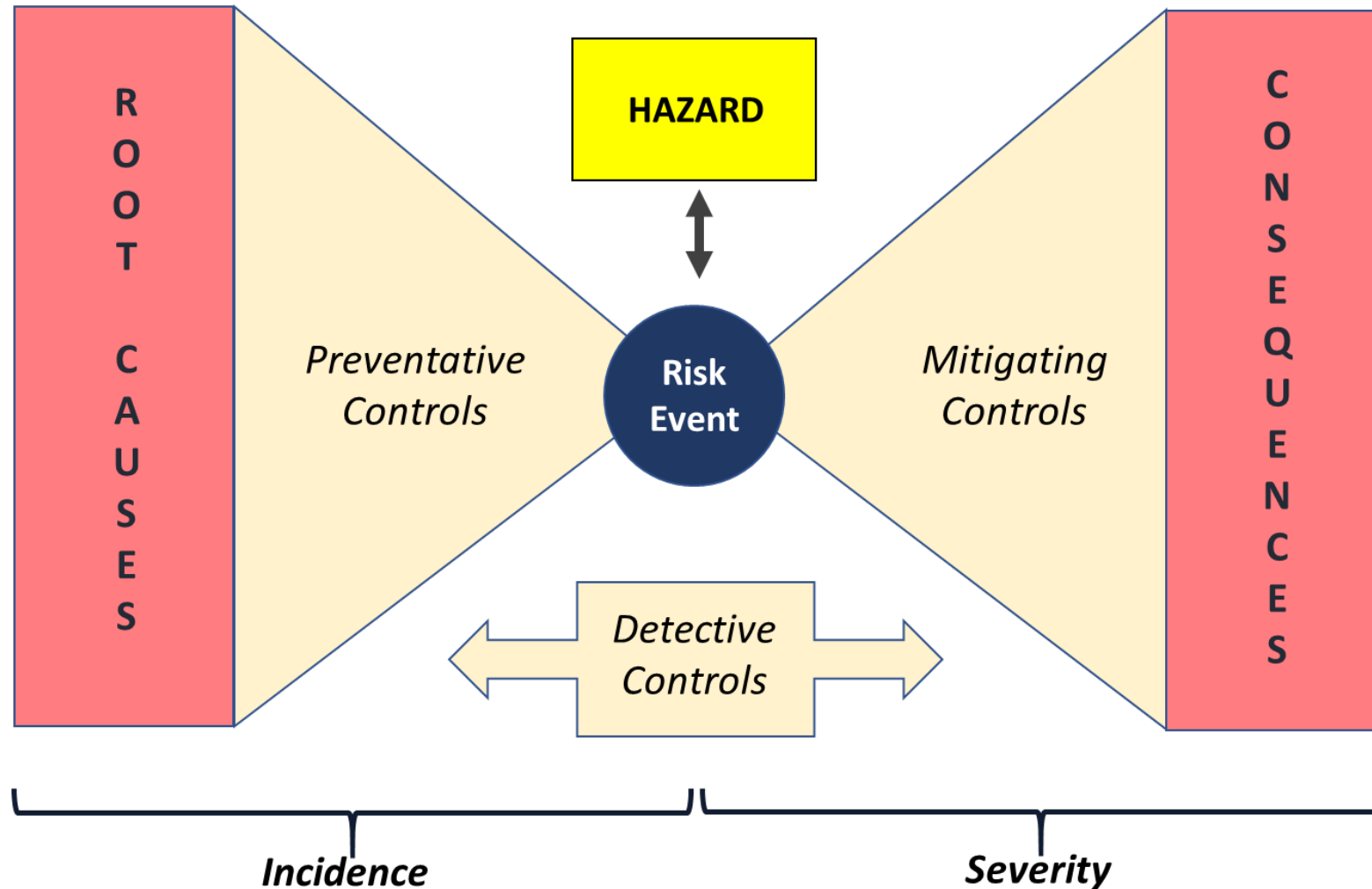
Break-Out Group Exercise:

Residual Risk-Based Actions

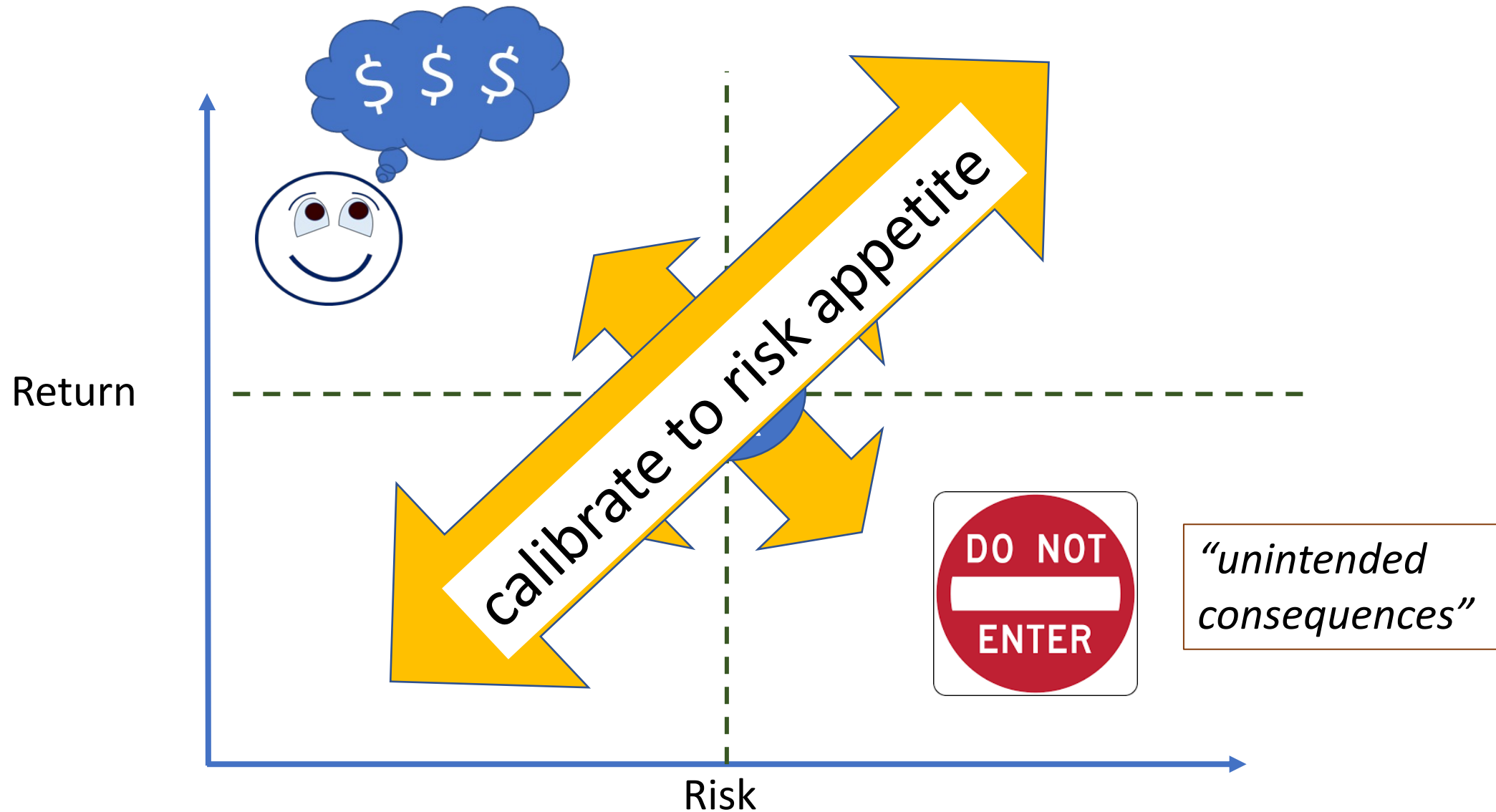
	Opportunity A	Opportunity B
Expected Return (RoE)	14%	13%
Residual Risk*	10	12

* Based on applicable VaR measure

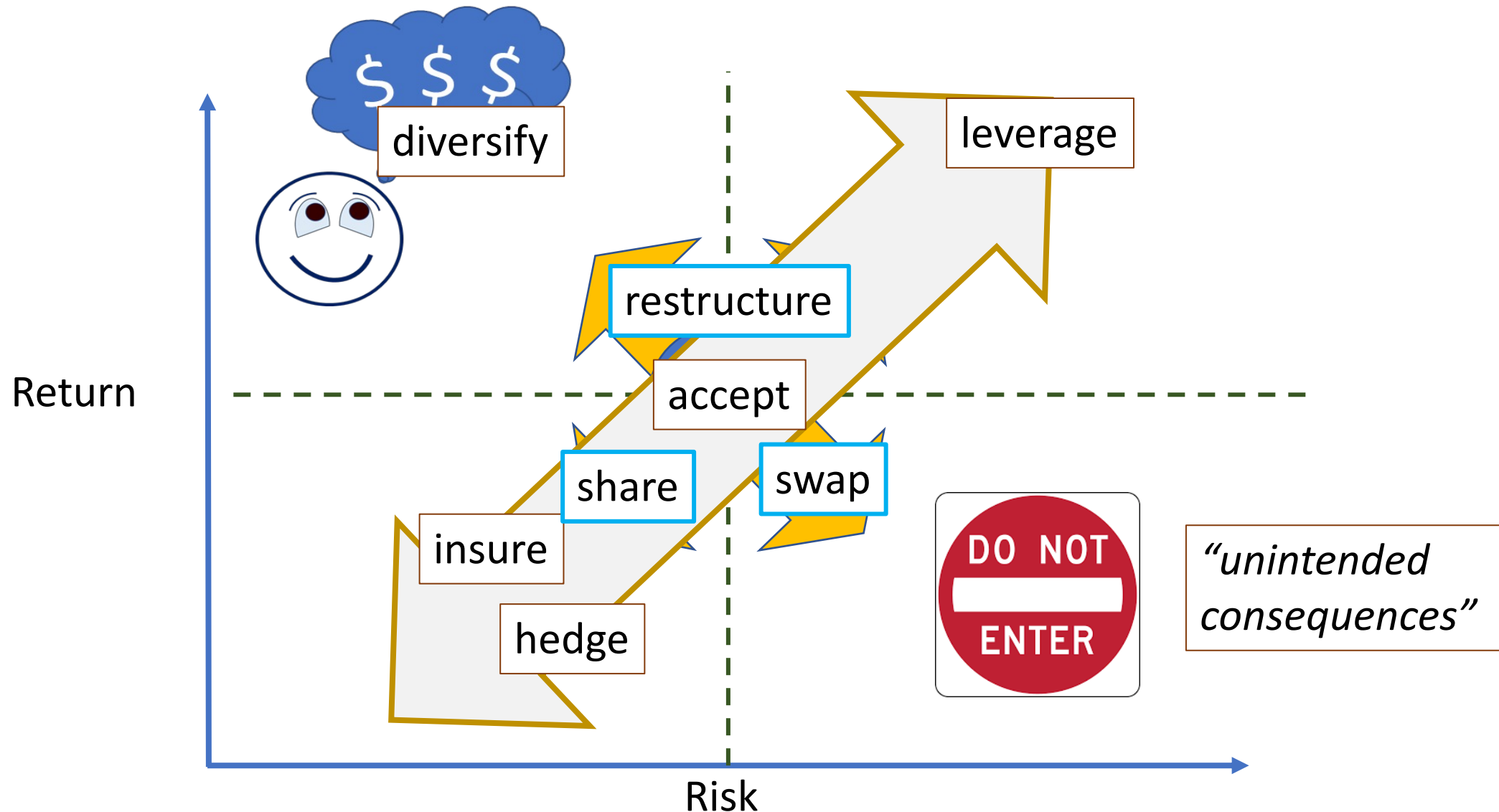
Risk Assessment



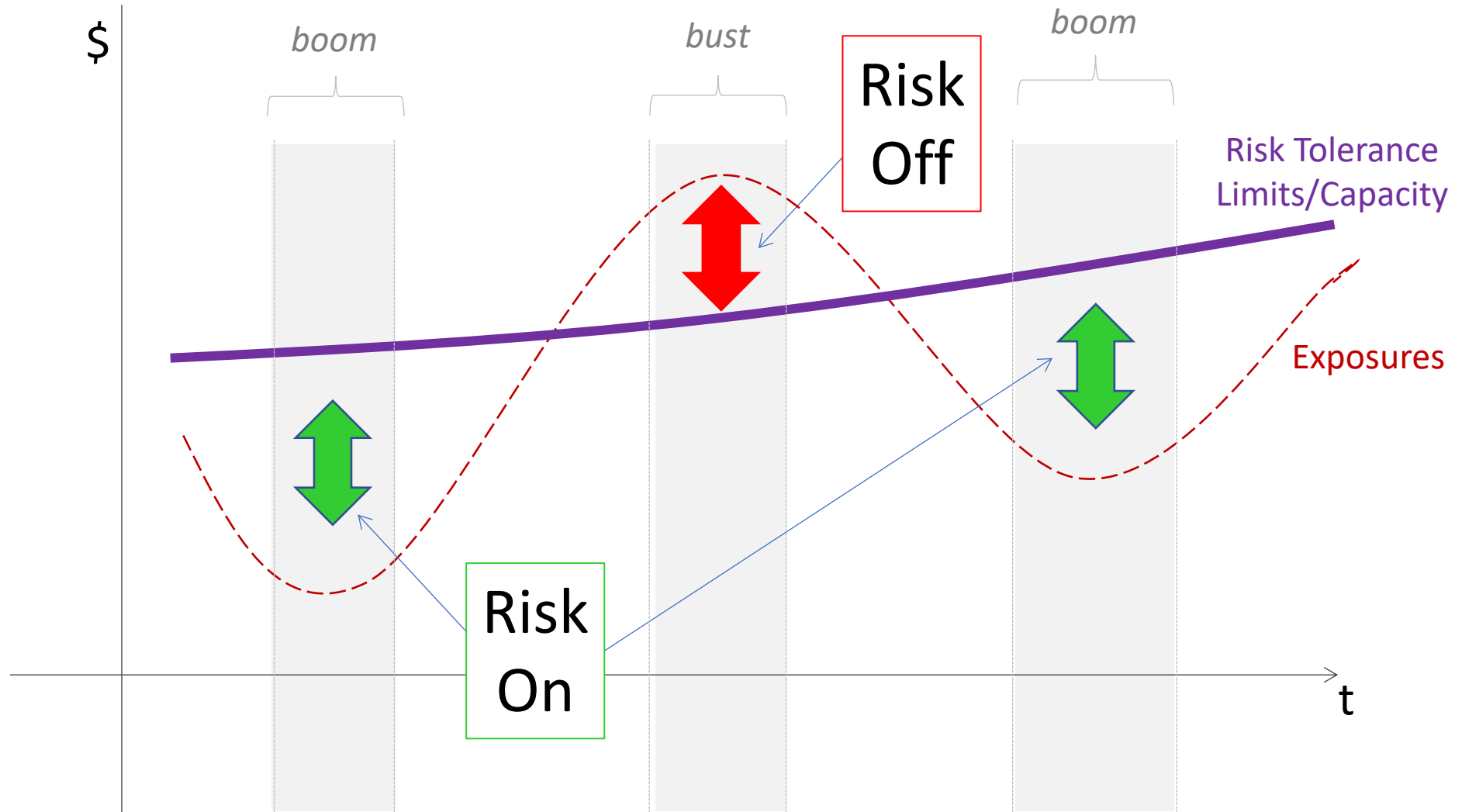
Navigating Risk/Return Trade-offs



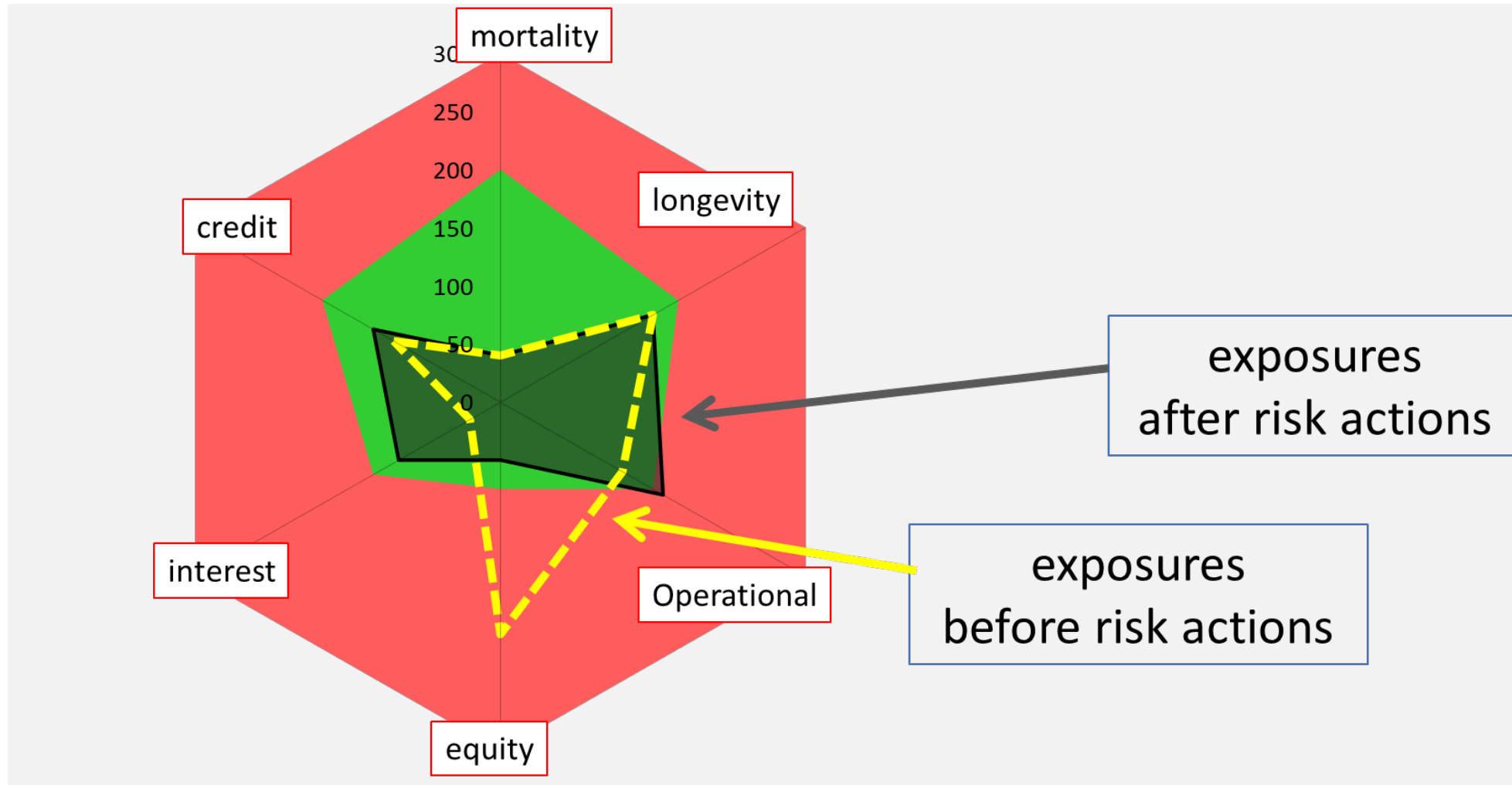
Navigating Risk/Return Trade-offs



Managing Inherent Pro-cyclicality



Gross vs Net Exposures



Break-Out Group Exercise:

Traduro SL

Case Study Exercise

Traduro S.L.

- Publicly listed Spanish manufacturer of construction and large agricultural equipment
- Significant growth outside of traditional home market (approx. 60% of total sales now come from US)
- Currency risk contributes to significant earnings and debt service coverage volatility
- Needs to finance a pending expansion in production capacity
- Has not traditionally hedged currency exposure ... management has been very bullish on US\$

Discussion





Emerging Leaders Program: Risk Identification

Lois Tullo
Executive in Residence

Toronto
March 2024

Risk Identification

The **risk (or event) identification** process produces a comprehensive list of risks (and often opportunities as well), organized by risk category (financial, operational, strategic, nonfinancial/emerging) and sub-category (market, credit, liquidity, etc.) for business units, corporate functions, and capital projects.

Adapted from: COSO (Committee of Sponsoring Organizations of the Treadway Commission, Risk Assessment in Practice.

Risk Identification - Model



Risk Identification

The risk identification process importantly ties back to the risk appetite process discussed in the previous session. Once risks are thoroughly identified, management and the board will set appetite levels/limits for risk assumption given the strategies and resources of the firm.

At the initial stages, a wide net is cast to understand the universe of risks making up the enterprise's risk profile. While each risk captured may be important to management at the function and business unit level, the list requires prioritization to focus senior management and board attention on key risks. This prioritization is accomplished by performing the risk assessment

Adapted from: COSO (Committee of Sponsoring Organizations of the Treadway Commission, Risk Assessment in Practice, 2012.

Strategy & Risk Identification



Strategy – SWOT Analysis



ERM Model: Risk Identification



RISK IDENTIFICATION is the process of determining events and/or uncertainties that could potentially effect the:

- Assets – loans and investments
- Liabilities – funding/liquidity, claims/commitments
- program / project
- Enterprise / reputation

from achieving its objectives.

RISK IDENTIFICATION is oftentimes the hardest part ... once you identify the risk(s) and you are aware, you can work them through the process.

Defining Inherent Risk and Residual (Net) Risk

Inherent Risk is the **risk** to an entity in the absence of any actions management might take to alter either the **risk's** likelihood or impact.

Residual Risk is the **risk** remaining after management's response to the **risk**.

Source: COSO, Enterprise Risk Management – Integrated Framework, 2004

Residual Risk – **risk** remaining after risk treatment (or mitigation)

Source: ISO 31000:2009, Risk Management – Principles and Guidelines



Risk Inventory



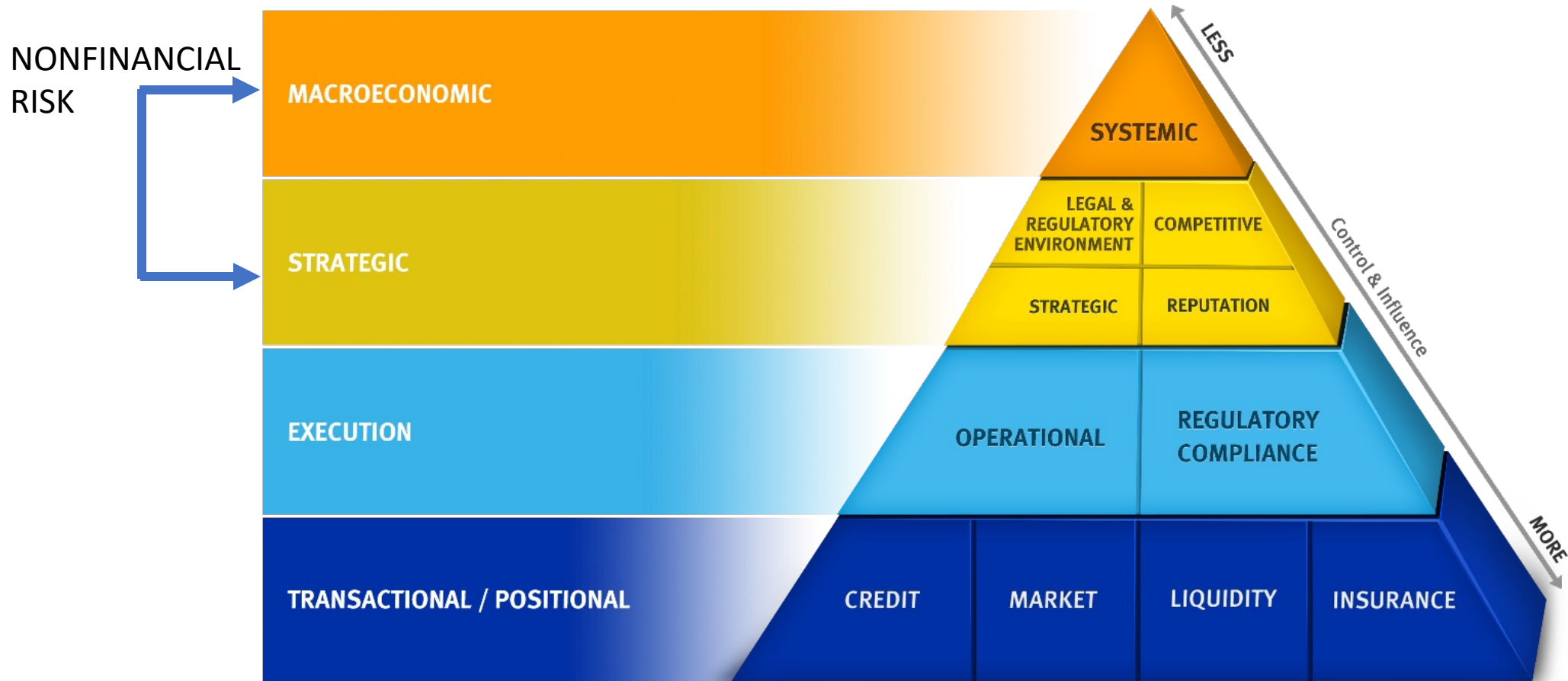
Developing a Risk Inventory

- A Risk Inventory is a formal, systematic detailing of all of a firm's materials risks
 - A single document categorized by business and risk category
 - Reviewed with the business and other control groups
 - Updated annually
- For each business and risk category, detail the nature and level of the risk
 - Along with key controls
 - Also including any audit or regulatory issues / deficiencies
- Over the next few pages, we develop out a simple illustration of a Risk Inventory
 - The first page highlights the material risks identified in each of the businesses

Residual Risk

- Once all risks have been identified, catalogued, evaluated and mitigated, the firm is left with its residual risk position
 1. Are we comfortable with this inventory of risk?
 2. Are we comfortable that our risk limits, controls and mitigation steps have resulted in an acceptable risk position?
 3. Do all risks have a identified owner – do we know that roles and responsibilities of the three lines of defense?
 4. Are we within our Risk Appetite?
 - By business? By risk category?
 5. Are there further steps we can take to mitigate risks?
 - Should we build up higher capital or liquidity levels?
 - Should we consider macro hedging positions (perhaps even deep out of the money options) to groom our risk profile

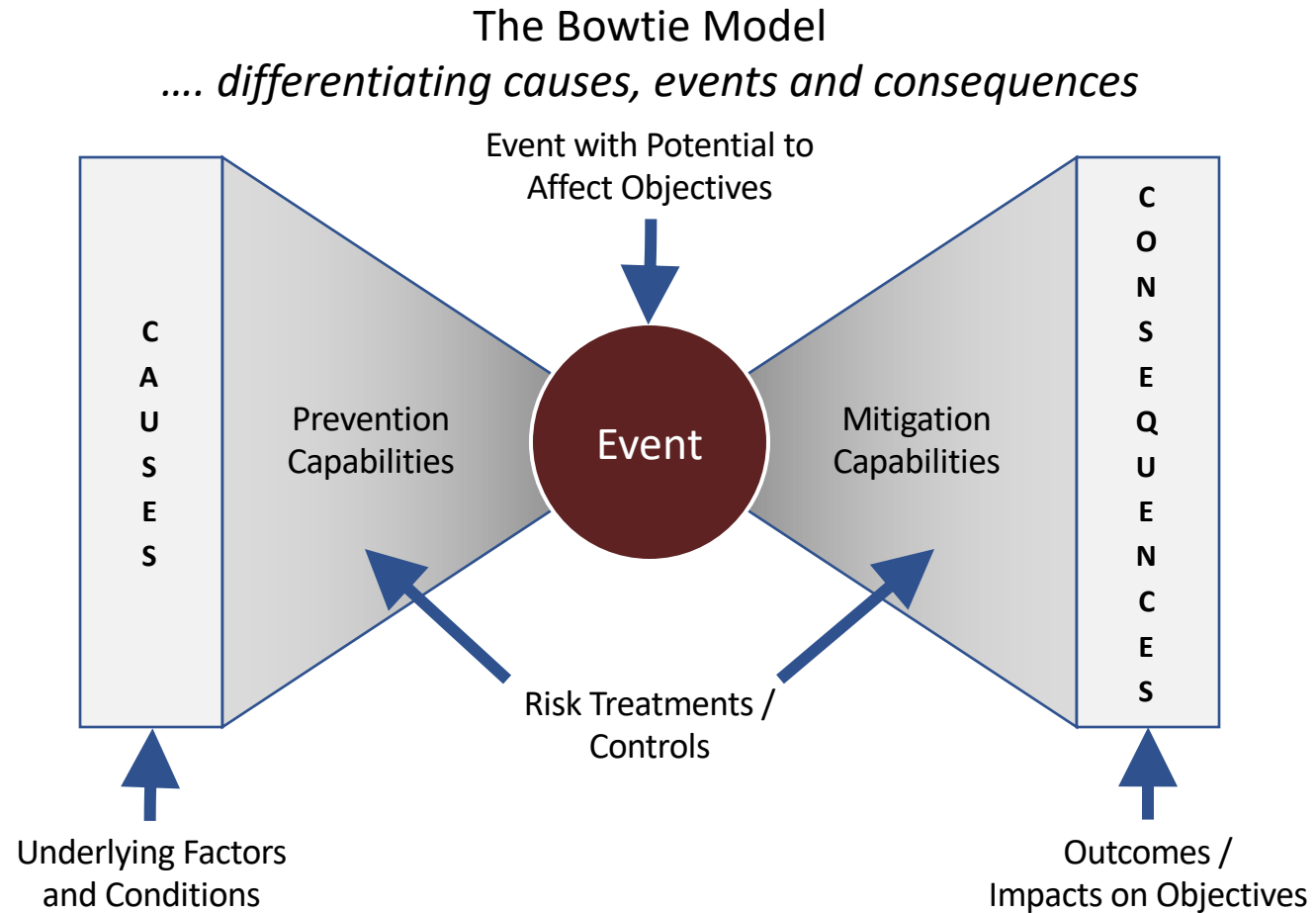
Categories within Risk Inventory



Key Risk Indicators



Risk Indicators



Risk Indicators

The Bowtie Model
.... differentiating factors, events and consequences

Understanding the relationship between:

- A **risk factor** (also called a cause or issue or underlying condition), which is the precursor of a risk event
- A **risk event** (also called a problem or opportunity) that occurs when a risk becomes manifest
- A **consequence** (also called outcome) that results when a risk transcends from possibility to actuality.

Key Risk Indicators

Key risk indicators can sharpen the focus on changing risk exposures and emerging risks

Key Risk Indicators (KRIs) are metrics used by organizations to provide an early signal of increasing risk exposures in various areas of the enterprise. COSO (Committee of Sponsoring Organizations of the Treadway Commission), Developing Key Risk Indicators to Strengthen Enterprise Risk Management, 2010.

Key Risk Indicators (KRIs) can warn management and the board of evolving issues that may increase or reduce risks, and should be developed and factored into risk discussions and analyses. John Fraser, The Challenges and Solutions for Implementing Enterprise Risk Management, upcoming publication, 2016.

How to identify the leading indicators of risk events?



EXAMPLE:

KRIs to inform risk of debt covenant default

It shows the linkage of KRIs to both root cause events and intermediate events

Emerging / Nonfinancial Risks



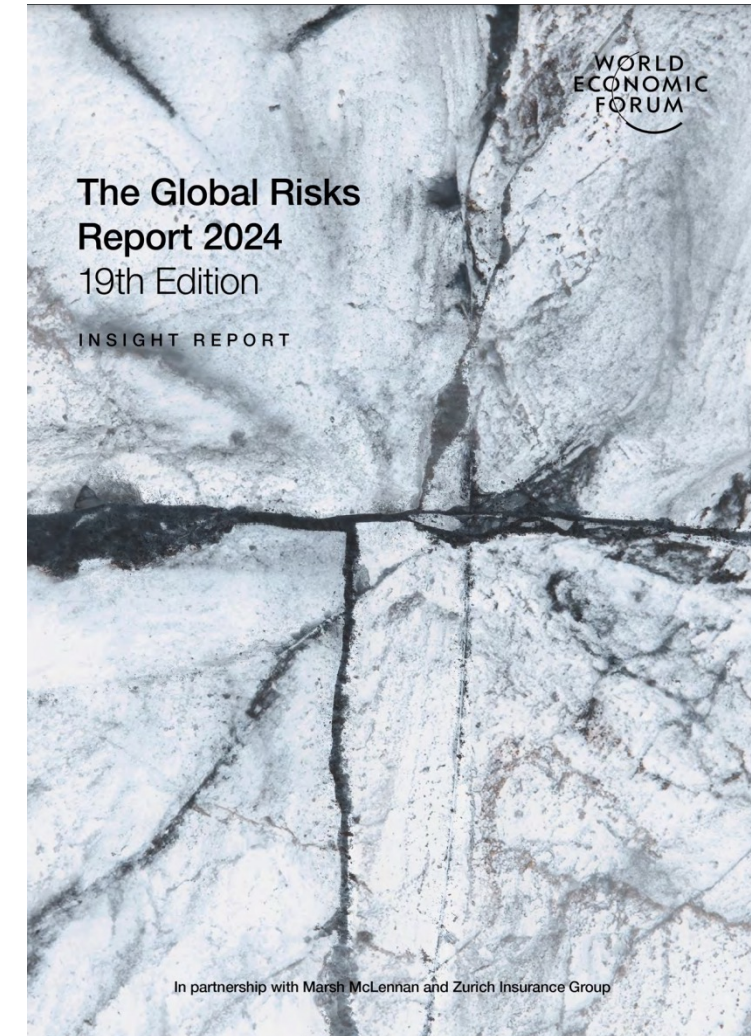
Defining Emerging / Nonfinancial Risks

The WEF defines Global risks as an uncertain event or condition that, if it occurs, can cause significant negative impact for several countries or industries within the next 10 years.

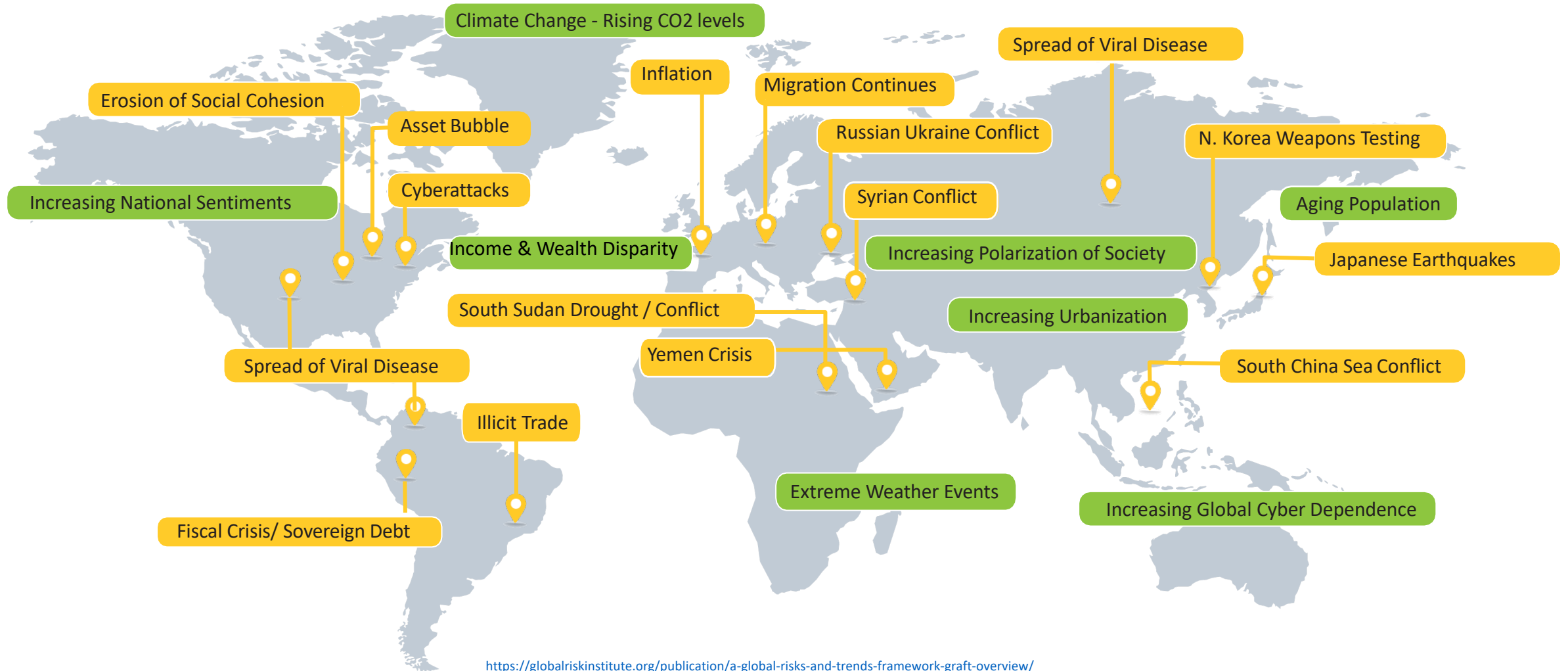
- In science and systems theory, “emergence” is about radically novel patterns arising spontaneously out of complex system.
- IRGC (International Risk Governance Council) **defines “emerging” as a risk that is new, or a familiar risk in a new or unfamiliar context or under new context conditions (re-emerging).** NFR/Emerging risks are issues that are perceived to be potentially significant, but which may not be fully understood and assessed, thus not allowing risk management options to be developed with confidence.
- Organizations need to proactively deal with emerging risks to:

Anticipate emerging risks and opportunities: identify, evaluate and prioritize potential threats and opportunities

Respond to emerging risk: assess and respond to those threats that may develop into risks to an organization



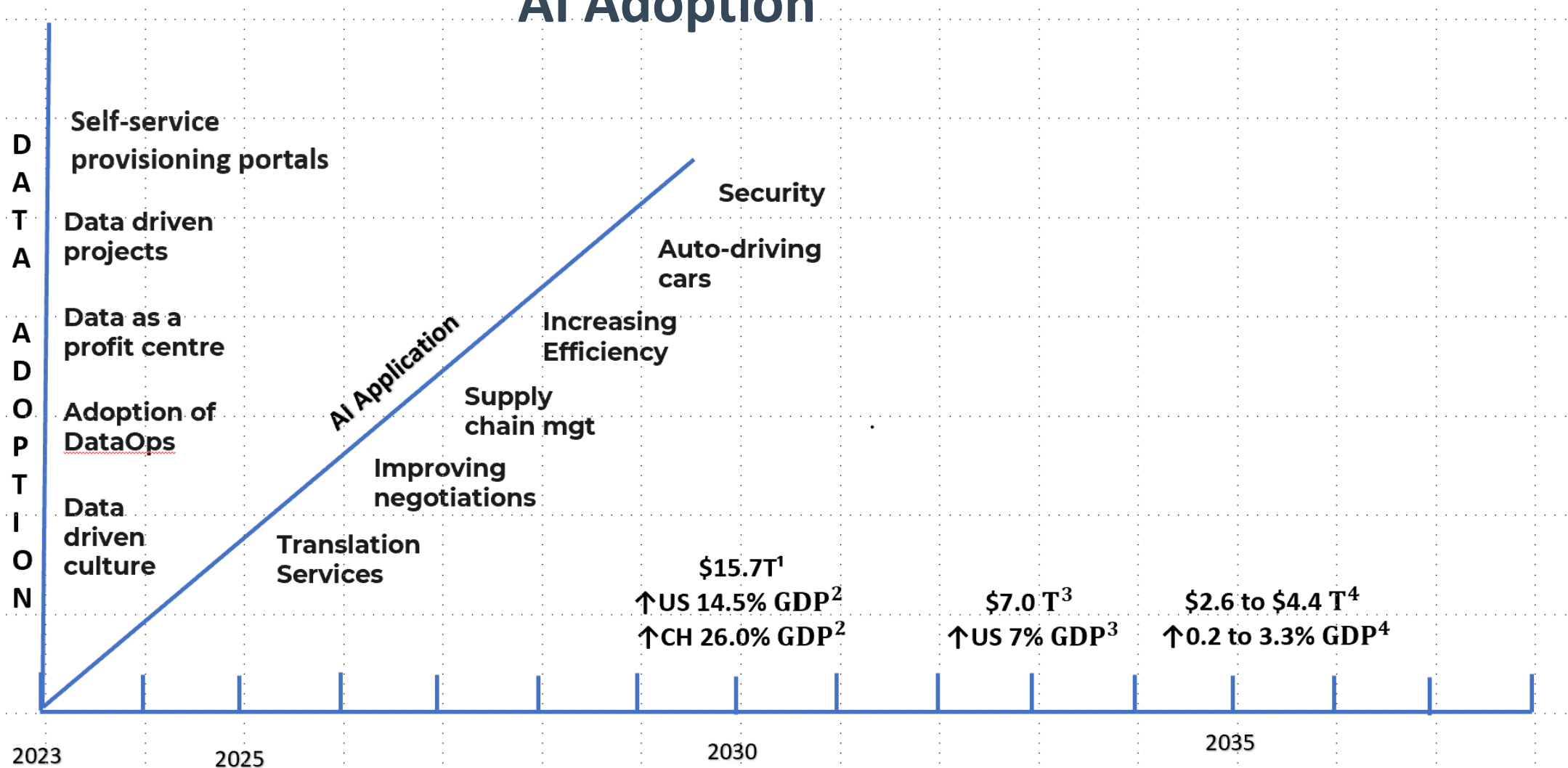
“How do we make sense of our changing world?”



Maple Risk Identification - AI

Identification	Implication

AI Adoption



¹ Bank of America, AI contribution to global economy

<https://business.bofa.com/en-us/content/economic-impact-of-ai.html#:~:text=Global%20revenue%20associated%20with%20AI,with%20%24318%20billion%20in%202020.&text=According%20to%20some%20estimates%2C%20AI,the%20global%20economy%20by%202030.>

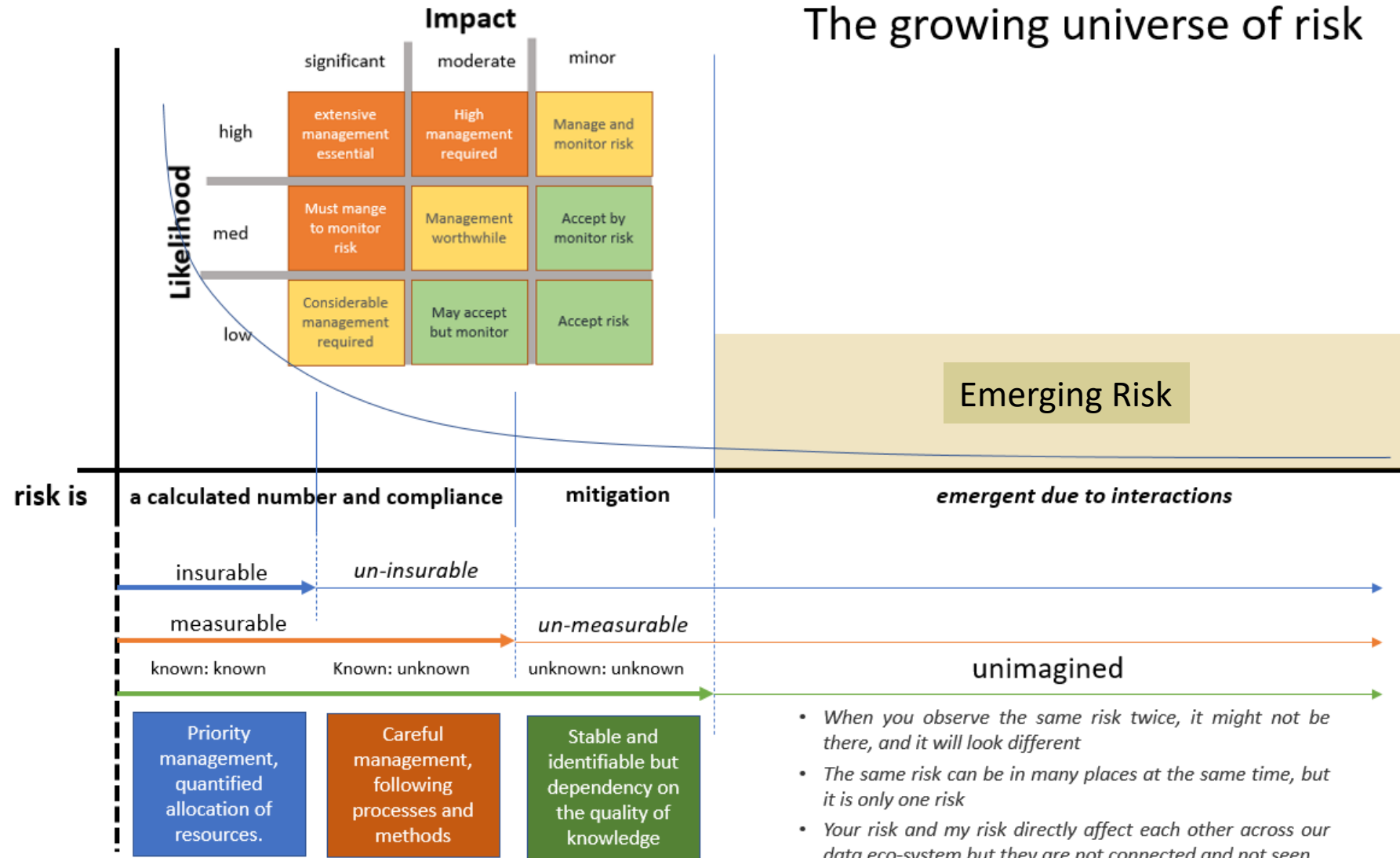
² PWC <https://www.pwc.com/gx/en/issues/data-and-analytics/publications/artificial-intelligence-study.html>

³ Goldman Sachs <https://www.gspublishing.com/content/research/en/reports/2023/03/27/d64e052b-0f6e-45d7-967b-d7be35fabd16.html>

⁴ McKinsey <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier#key-insights>

Risk Identifications - Maple Financial Case - AI

The growing universe of risk



Emerging Leaders Program



Please take
Day 1 survey