Basel and Solvency
Strategic Implications

14 November 2014

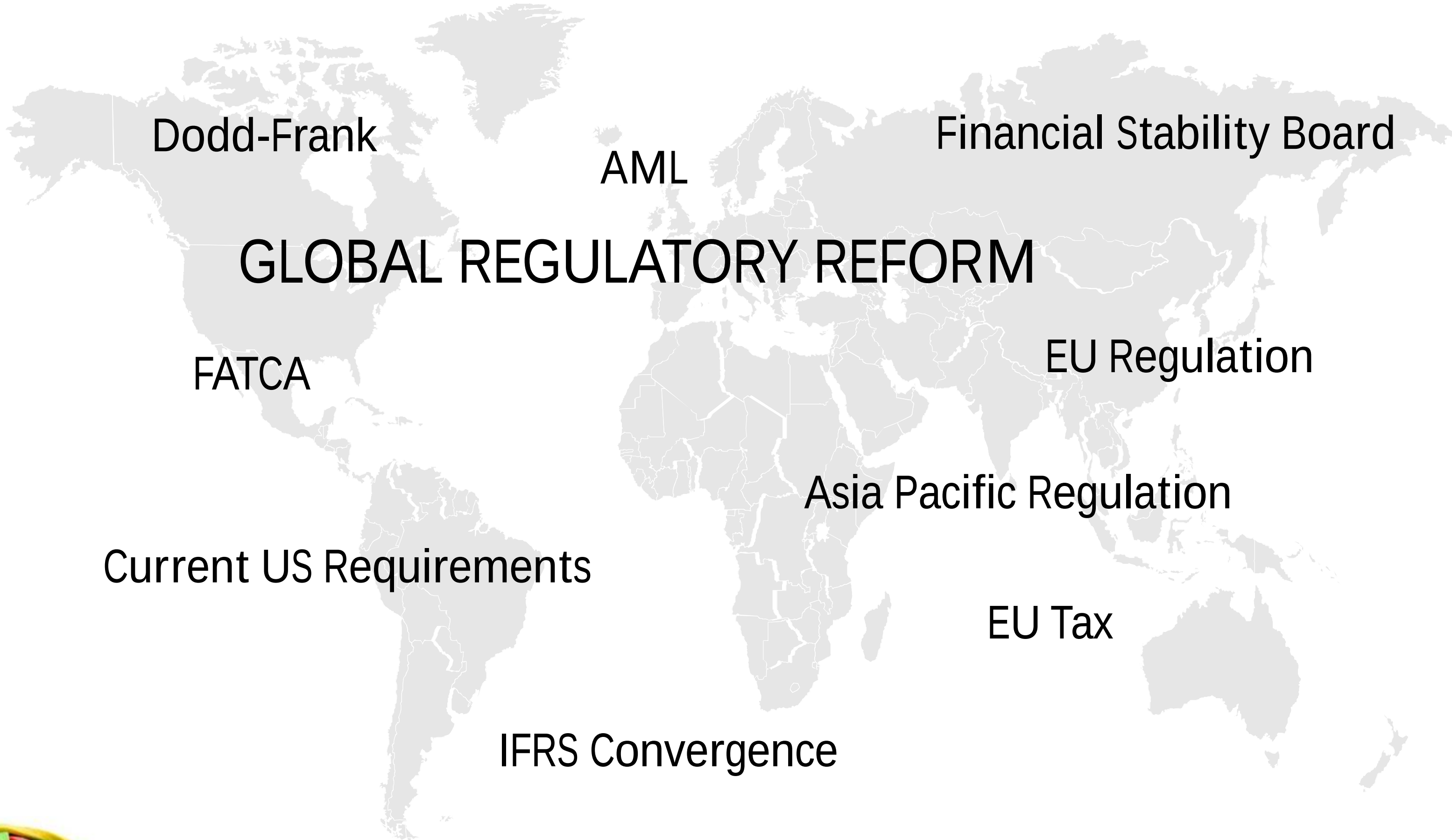
Christian G. Lauron

SGV

Building a better working world

Table of contents

Basel and Solvency



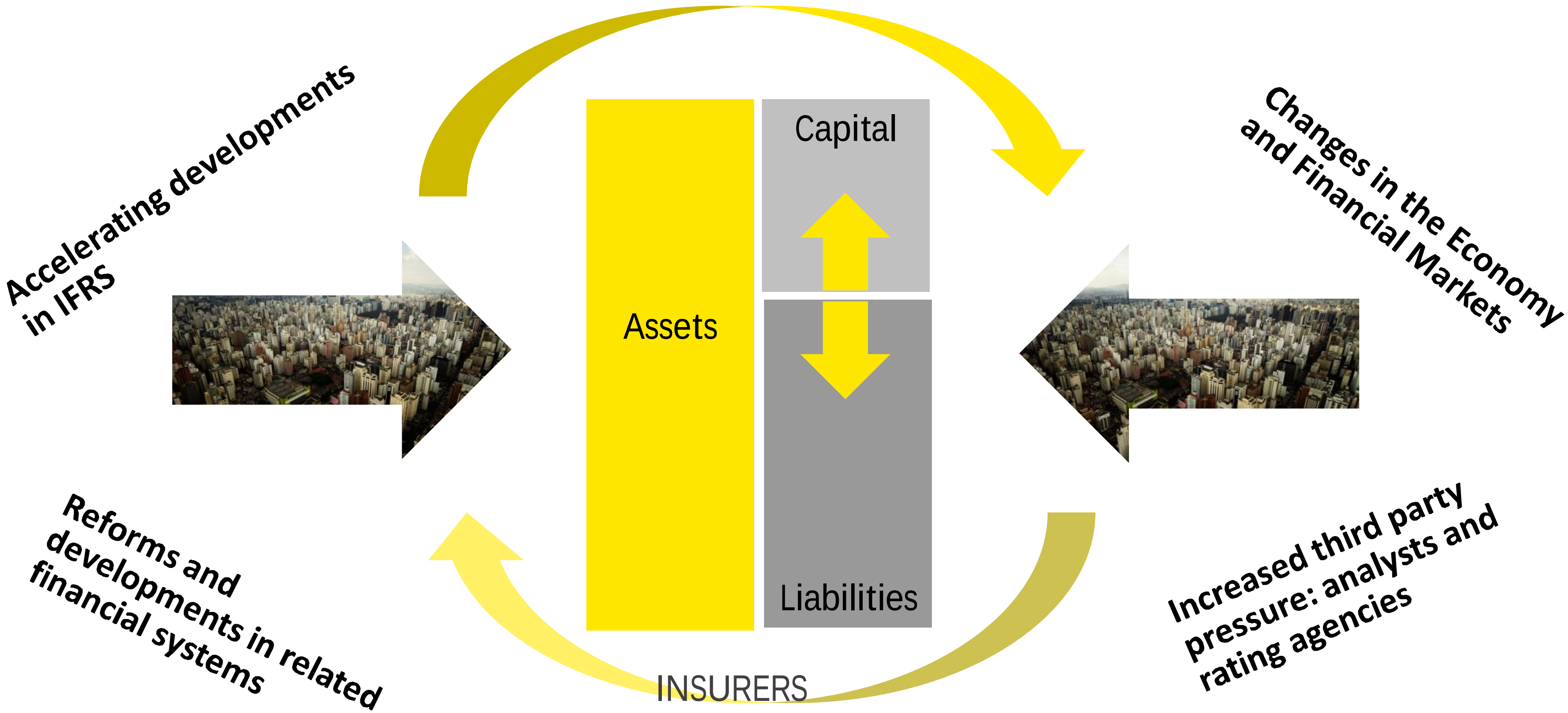
Comparison of RBC/Solvency with Basel

Aspect	RBC/Solvency	Basel
Focus	Insurance companies	Banks
Objectives on supervisory guidelines	To improve risk measurement practices, disclosure and protect policyholders against the risk of isolated bankruptcies	To enhance measurement practices, improve stability of international banking system and reduce systemic risk
Relevant supervisory bodies	RBC: Local Regulators Solvency: European Insurers and Occupational Pension Authorities (EIOPA)	Basel Committee on Banking Supervision (BCBS) Local Regulators

Comparison of RBC/Solvency with Basel

Aspect	RBC/Solvency	Basel
Legal Mandate	Solvency: It should be noted that all countries under the European Union are legally bound to adopt the Solvency II regime. RBC: Local regulators formulate and enforce their respective RBC frameworks as they deem fit.	Global: BCBS has no supranational authority to legally enforce supervisory guidelines and rather rely on the commitment of its members to uphold and implement its principles. Local regulators have the discretion if they (and consequently how) will adopt Basel standards.

Challenges and drivers for change



Economic capital or regulatory surplus are under pressure from both sides of the Balance Sheet.

Risk Classification for Insurance Companies

Insurance companies must ensure that their solvency assessment process captures all relevant risk exposures.

Risks

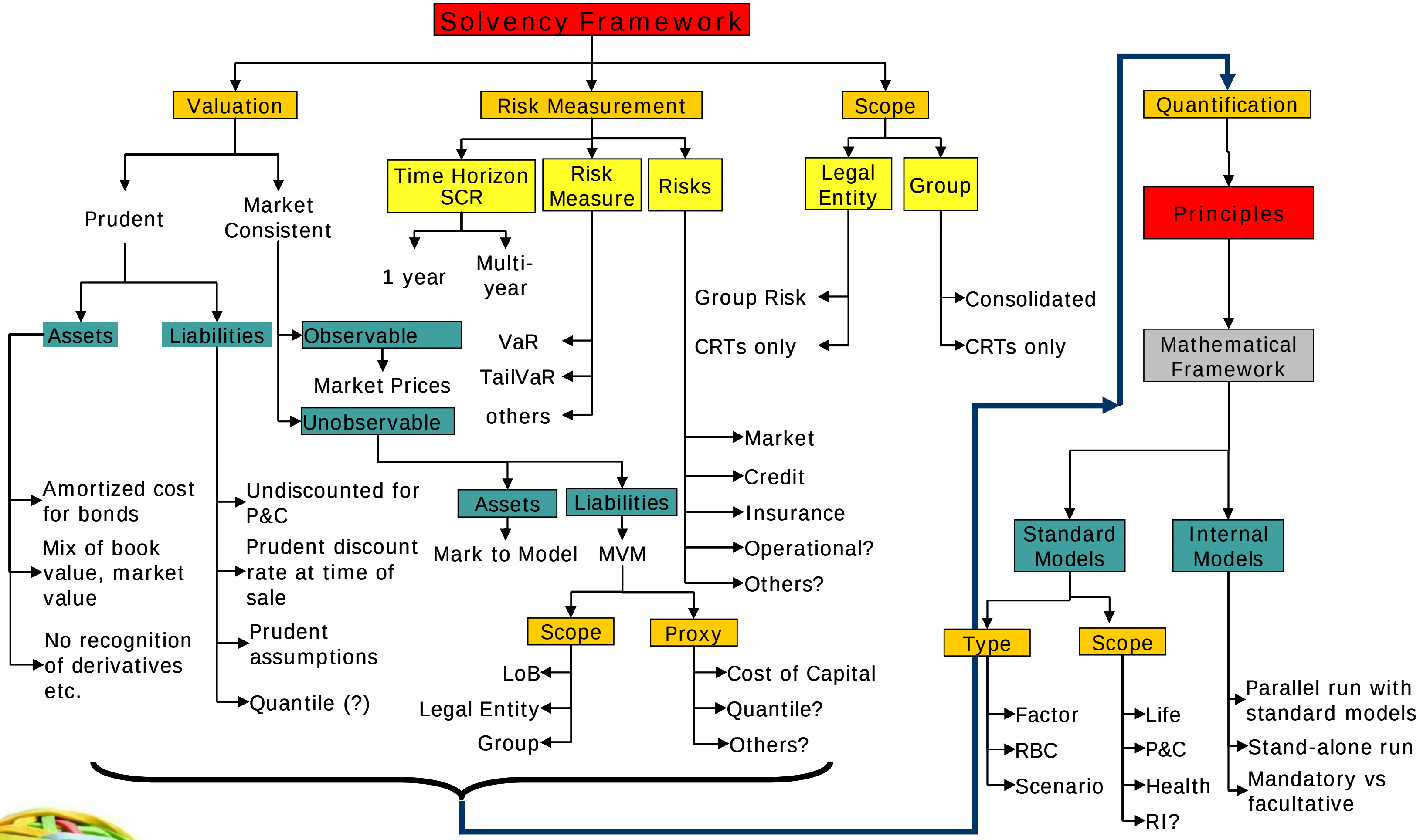
- Underwriting Risks: Pricing, Claims, Concentration, Economic factors, Catastrophe
- Market Risks: Interest rate, Forex, ALM, Concentration, Volatility
- Credit Risks: Default, Spread, Concentration, Reinsurers
- Liquidity Risks: Surrender, Disaster
- Operational Risks: Processes, People, Systems

Source: Risk Classification from the International Association of Actuaries

Key elements of current risk-based supervision regimes

- Three Pillar Approach
  - Pillar 1: Minimum Capital Requirement
  - Pillar 2: Internal Assessment and Supervisory Review
  - Pillar 3: Market Discipline and Public Disclosures
- Total Balance Sheet Approach
  - Takes into account asset and liability risks and their relationships and independencies for solvency assessment
- Trigger for regulatory action before insolvency
  - Two levels of capital intervention: Minimum Capital Requirement (MCR) and Solvency Capital Requirement (SCR)
- Convergence of regulatory and internal models
  - Harmonization of measurement principles and financial reporting (e.g., IFRS 4, IFRS 9, IFRS 13, and Solvency/RBC)

Elements of a Risk-based Solvency Framework



55th Annual Convention
Actuarial Society of the Philippines
13-14 November 2014, Bellevue Resort, Bohol

Source: EY Material on Solvency II Roundtable in Canada

SGV

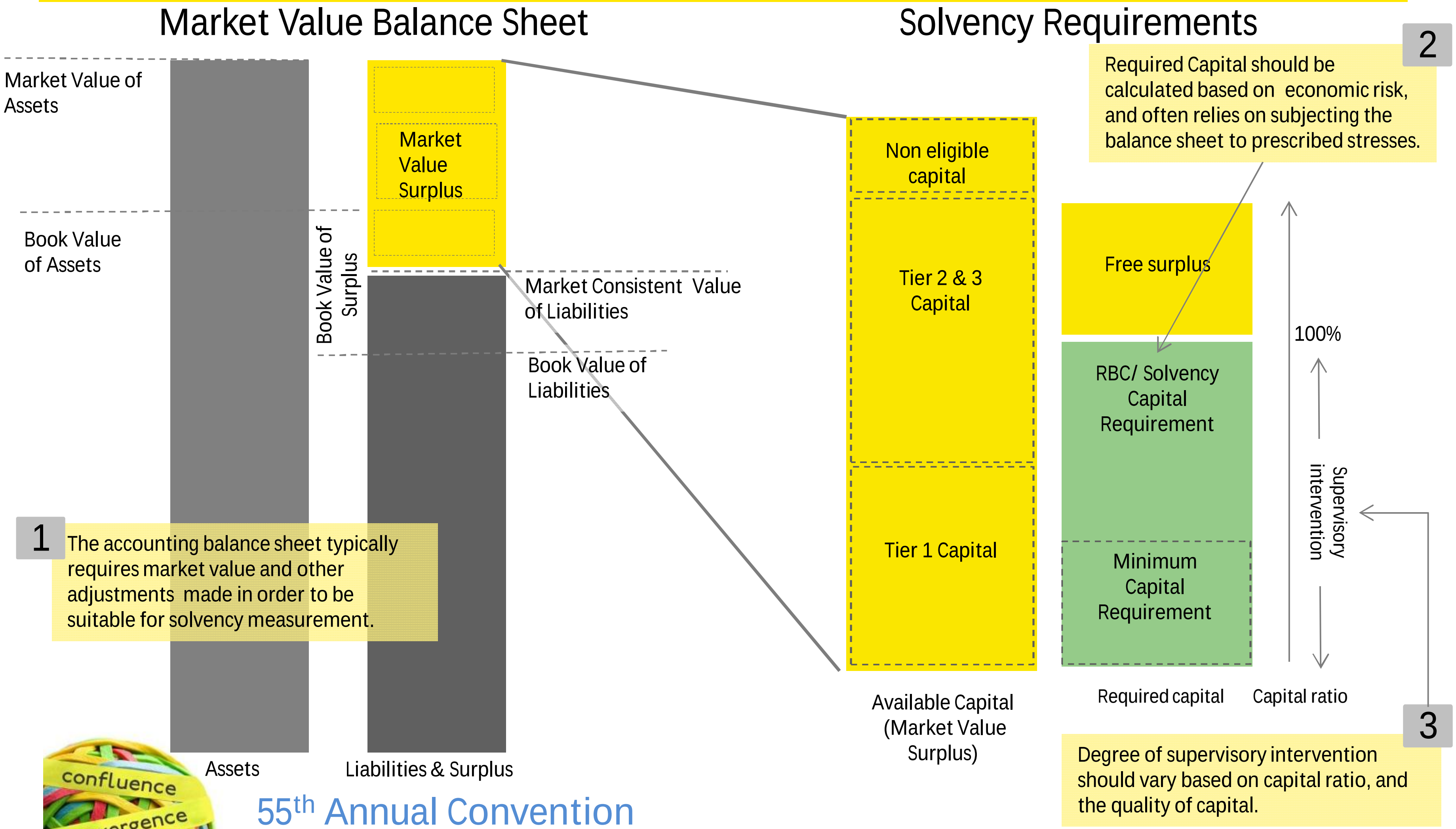
General principles on capital allocation framework

- Economic capital resources can be viewed as comprising different capital tiers representing a hierarchy of the extent to which each is at risk:

Capital Tier	Definition
Regulatory Capital	Market value of assets to support both regulatory reserves and capital required by Regulator, less market value of liabilities
Risk-Based Capital	Excess of market value of assets over market value of liabilities to ensure (economic) solvency at a given confidence level
Respectability Capital	Amount of economic capital resources held in excess of regulatory and risk-based capital to meet external perceptions
Excess Capital	Amount of economic capital resources held surplus to above requirements

Source: EY Material on Actuarial Seminar in Zurich

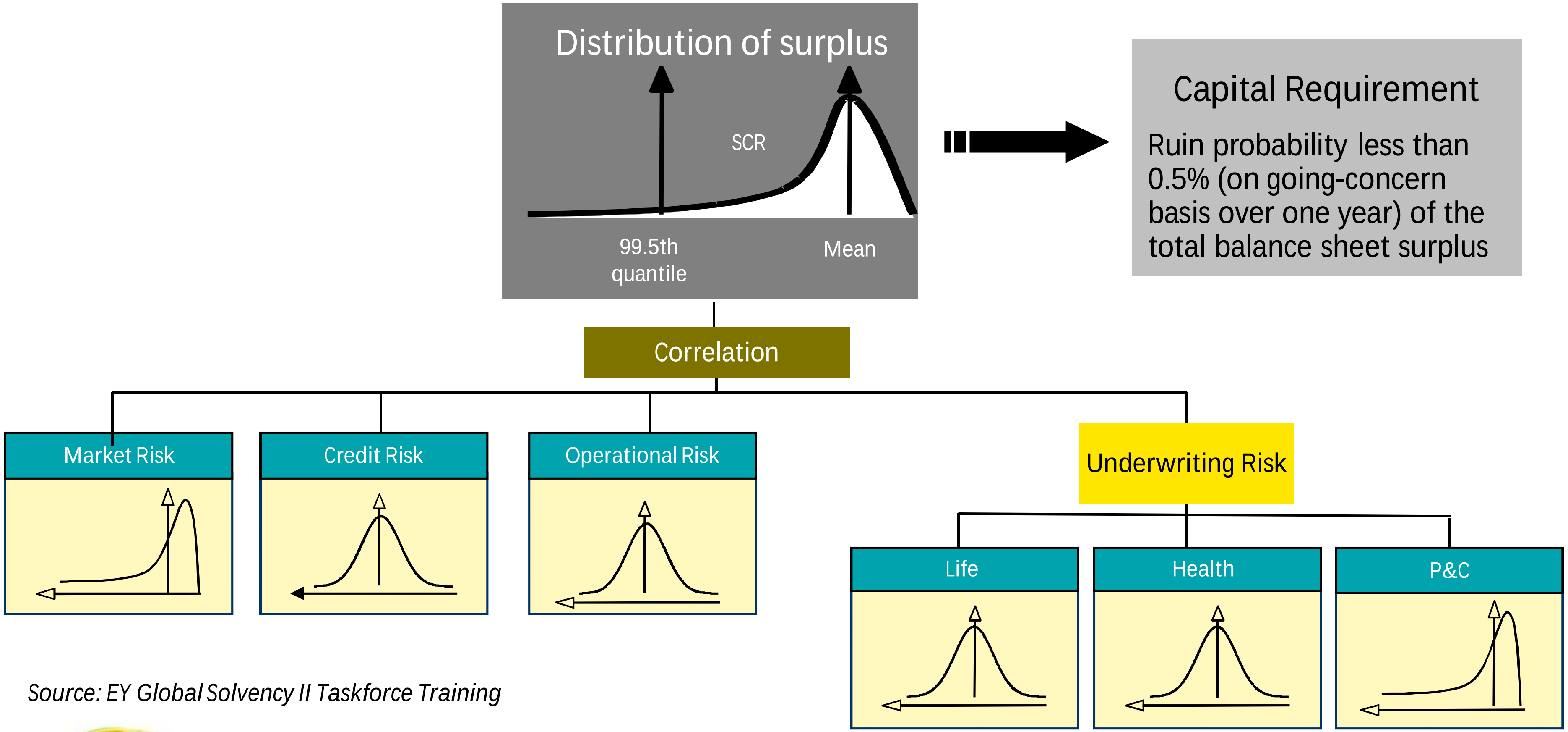
Measurement of capital under Solvency requirements



Comparison of RBC/Solvency with Basel

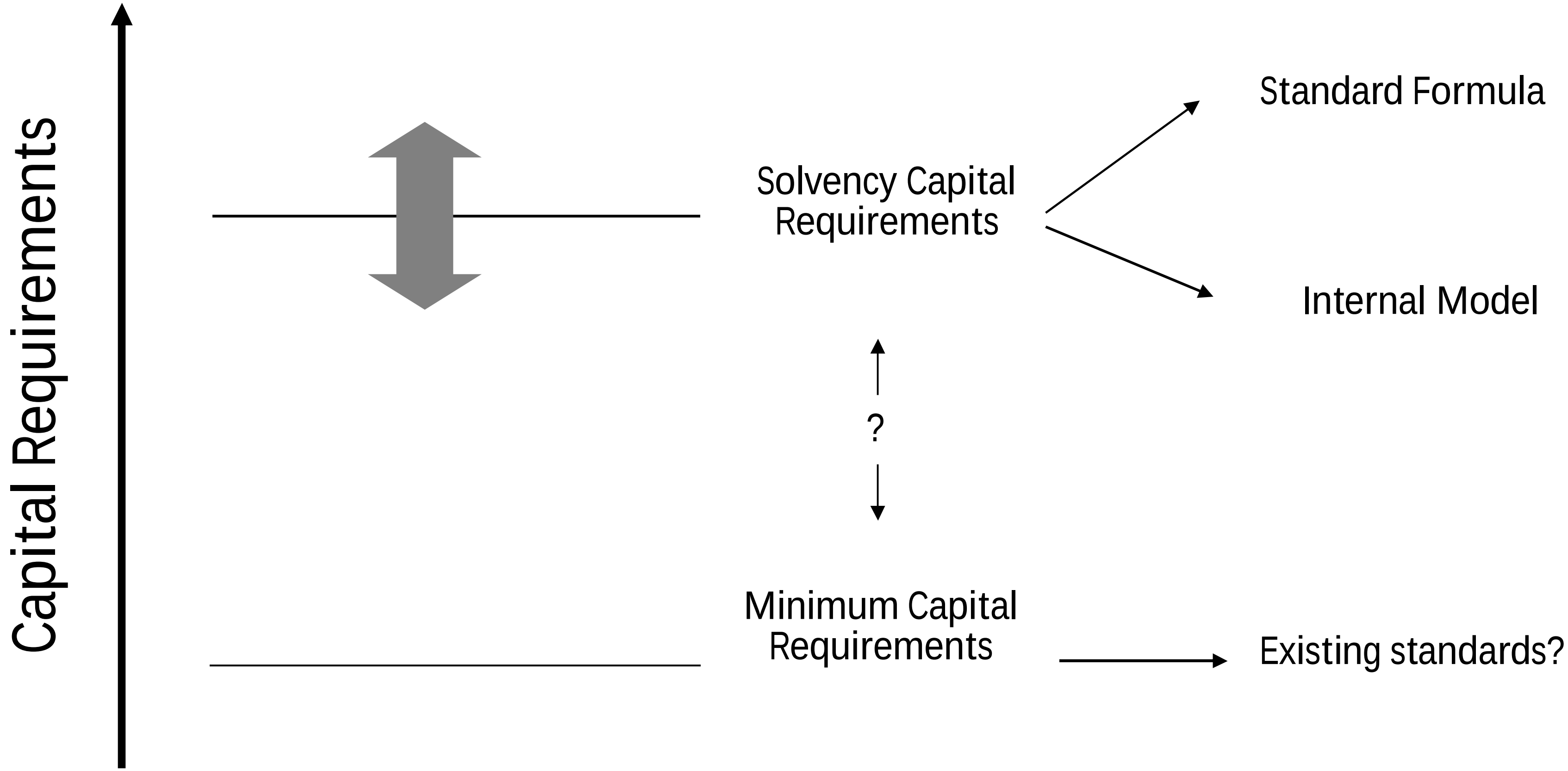
Aspect	RBC/Solvency	Basel
Pillar 1	Risk-based: Credit, Market, Operational plus underwriting risks, etc. Internal models subject to permission	Risk-based: Credit, Market and Operational Risks Internal models subject to permission
Pillar 2	Internal Capital Adequacy Assessment Process (ICAAP): Covers risks not in Pillar 1 & stress tests Supervisory review process	Own Risk and Solvency Assessment (ORSA): Covers risks not in Pillar 1 & stress tests Supervisory review process
Pillar 3	Extensive risk based disclosures	Extensive risk based disclosures

Pillar 1: Aggregation of risks – quantification for Solvency purposes



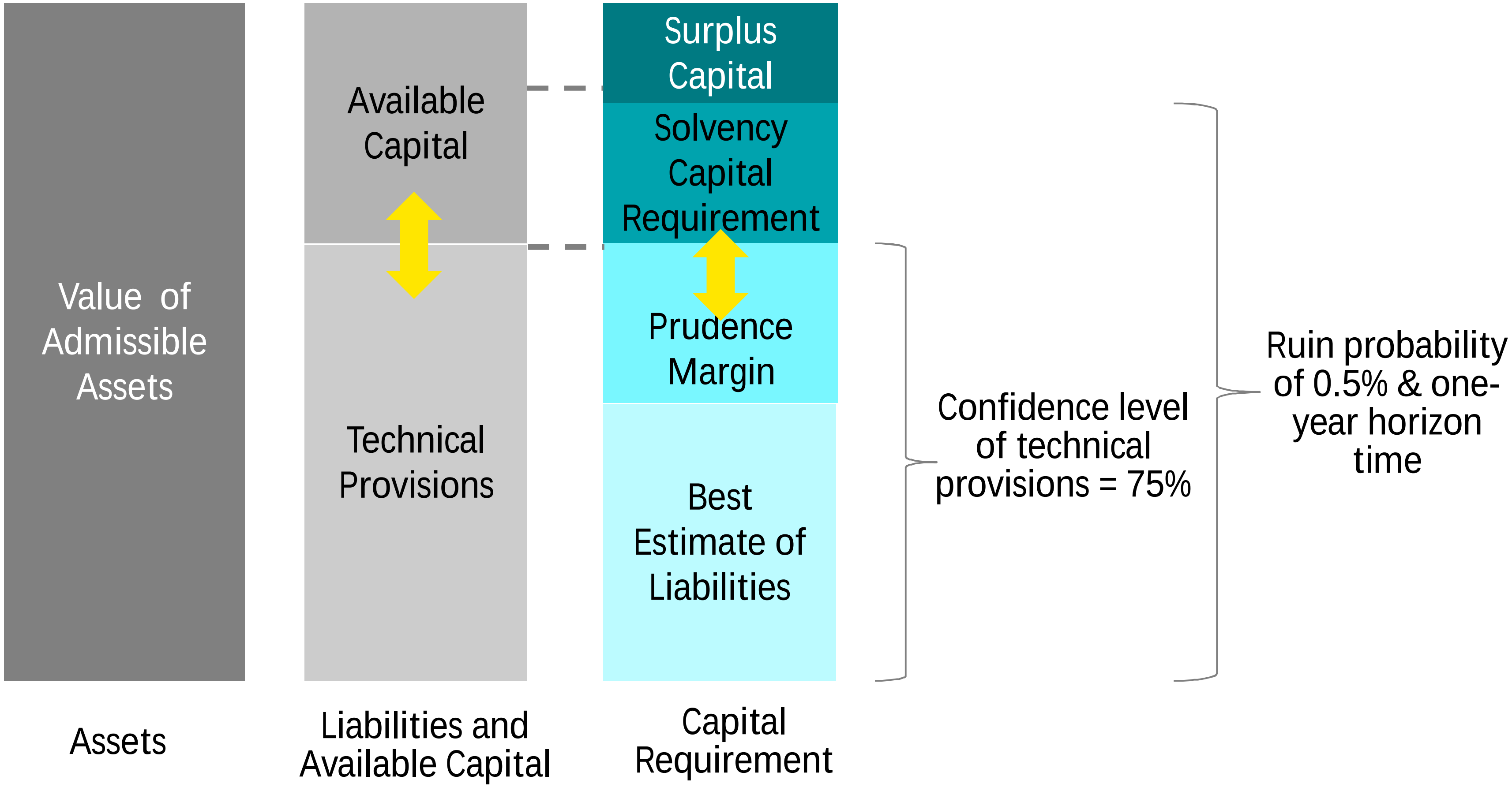
Source: EY Global Solvency II Taskforce Training

Pillar 1: Two capital requirements with different purposes and calibrated accordingly



Source: EY Global Solvency II Taskforce Training

Pillar 1: Capital requirements based on the risk of adverse changes to the best estimate of liabilities



Source: EY Global Solvency II Taskforce Training

Topical discussion of issues

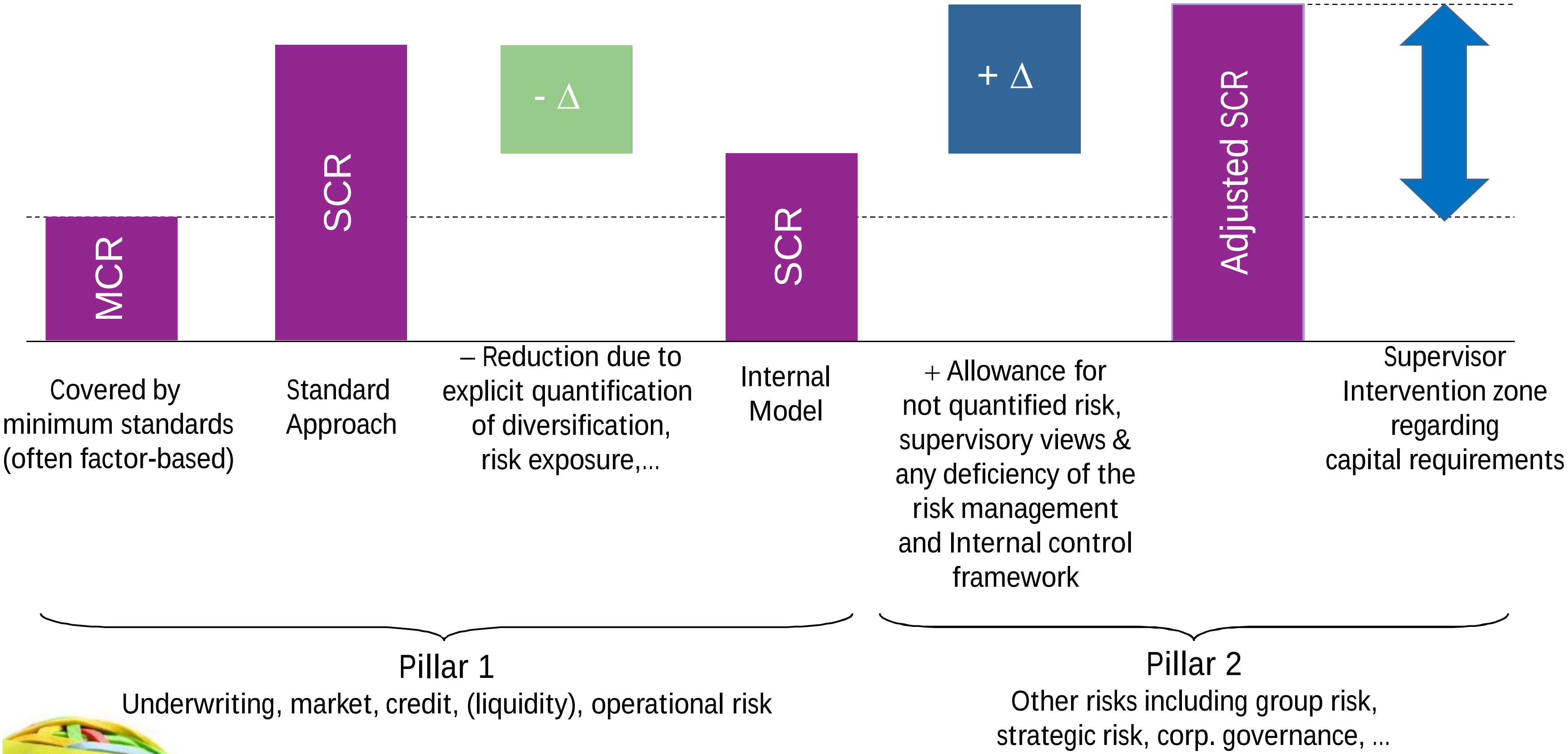
1. Policyholder behavior	11. Discretionary features
2. Acquisition costs	12. Recognition
3. Liability adequacy test (LAT)	13. Unit of account
4. Gain/loss on issue	14. Life measurement attributes
5. Non-life pre-claims	15. Non-life claims liabilities
6. Participating contracts	16. Linked contracts
7. Margins	17. Unbundling
8. Estimates	18. Credit characteristics
9. Discount rates	19. Reinsurance
10. Embedded options	20. Salvage and subrogation

Pillar 2: Supervisory process and internal control & risk management

- Supervisory processes guided by capital requirements and actual capital margin (capital which counts toward meeting requirements)
  - Supervisory process shall be more guided by the risk profile of individual company.
  - Intervention zone between minimal and target solvency capital, within which the supervisory authority can intervene before the company falls short of the minimum solvency capital.
- Pillar 2 takes into account other risks like group/conglomerate risk, business environment risk, and strategic risk by adjusting SCR levels.
- Companies have to implement sound risk management processes.
  - Actuarial principles regarding reserving practice
  - Asset Liability Management (ALM)

Interaction between Pillar I and Pillar II

- MCR, SCR and Supervisor intervention zone



Pillar 3: Market transparency and disclosure

- Disclosure of the actual risk and return situation should increase market transparency and lead to increased market discipline
- Strongly follows Basel and IFRS guidelines
- Fair value accounting, quarterly reporting, and increased disclosure requirements may lead to an increasing volatility of reported results
- Need to be aware on the dangers and unintended effects that increased disclosure requirements can have (e.g., capital drain in the case of a deterioration of the risk situation)

Three Major Themes Impacting Solvency/RBC Implementation

Insurers playing catch-up with their banking brethren?
The Basel experience

IFRS: Greater convergence of measurement principles?

Solvency as a bridge to enterprise risk management (ERM)

Major Themes:
1. Playing catch-up with Banks? The Basel Experience

Solvency issues worth comparing and contrasting with Basel II:

- Uncertainty on the cost of technology and systems requirements for both banks and insurers
- Investments in internal risk and capital models, which allow more flexibility for insurers

Major Themes:
1. Playing catch-up with Banks? The Basel Experience

Improvements in internal models (even for banks!)

Better methodology

- More granular portfolios
- Scenario tests
- Combined scenario analysis
- Dynamic lapses
- Simulation models

Better analysis underlying the calibration

- Detailed experience studies, credibility theory
- Market loss data for catastrophes
- Expense projections including wind up scenarios

Major Themes:
1. Playing catch-up with Banks? The Basel Experience

Solvency issues worth comparing and contrasting with Basel II:

- Senior staff and management require additional Solvency and Basel education
  - Need to upgrade the skills of finance, actuaries and risk managers
  - Emphasis on role of senior management to approve and regularly reassess the principles of the company's risk strategy, assign risk responsibility and determines the company overall risk appetite
  - Growing emphasis on the Board to effectively oversee
- How will Basel III shape the Solvency II regime? Quality of capital and capital filters? Preparing for industry consolidation? Introduction of recovery and resolution planning? Policy implication on tiering of insurers according to size and risk profile

Basel III coverage: Capital and liquidity

Capital

Capital Requirements

Common Equity Tier 1 ratio should be at least 4.5% (BSP: 6%).

Tier 1 Capital ratio should be at least 6% (BSP: 7.5%).

Capital adequacy ratio (CAR) should be at least 8% (BSP: 10 %).

Non-allowable capital

- Tier 3 capital (available to cover market risk) is being eliminated.
- Hybrid Tier 1 capital instruments with an incentive to redeem are to be phased out.

New capital buffers

- A capital conservation buffer, of 2.5% of RWA, will be added to the minimum CET1 level of 4.5% (BSP: 6%), bringing total CET1 to 7% (BSP: 8.5%).
- It will be built up in “good times” and can be drawn upon in “bad times.”
- Country-specific countercyclical buffer will vary between 0% and 2.5%.
- 1 - 3.5% additional surcharge proposed by the Financial Stability Board for SIFIs.

Leverage Ratio

- A leverage ratio will be introduced as a supplementary measure to the Basel II risk-based framework.

Market Risk

- Stressed VaR, incremental risk capital charge, capital charge for correlation trading portfolios, and new securitization requirements

Counterparty Risk

- Effective expected positive exposure, CVA charge and Pillar 1 capital charge for wrong-way risk

Liquidity

Liquidity coverage ratio

- The LCR requires banks to have sufficient high-quality liquid assets to withstand a 30-day stressed funding scenario that is specified by supervisors.

Net stable funding ratio

- The NSFR is a longer-term structural ratio designed to address liquidity mismatches. It covers the entire balance sheet and provides incentives for banks to use stable sources of funding.

Supervisory monitoring

- The liquidity framework includes a common set of monitoring metrics to assist supervisors in identifying and analyzing liquidity risk trends at both bank and system-wide level.

Type I and II regulations...

Type I: Minimizing probability of default

- Capital Adequacy
- Liquidity
- Leverage
- Reserving

Type II: Minimizing the severity of impact

- Recovery and Resolution Planning (RRP)
- Over-the-counter (OTC) derivatives

Major Themes:
2. Greater convergence of measurement principles?

- Previous uncertainty now rapidly moving towards greater harmonization:
  - Solvency II
  - IFRS 4 Phase II IASB insurance contracts project
- A majority of respondents use indicators besides accounting data to monitor risk
- Alignment initiatives needed for convergence and compatibility in order to avoid multiple reporting and valuation tools

Major Themes:

2. Greater convergence of measurement principles?

- Companies intending to implement the presentation, measurement and disclosure requirements of all monitoring, regulatory and financial initiatives in parallel, should consider that the amount, timing and uncertainty of cash flows are evaluated and quantified consistently for management reporting, regulatory reporting and external reporting.
- This will prevent any additional costs should various regulatory and reporting platforms result in different measurement bases.

Major Themes:
3. Solvency II and Enterprise Risk Management (ERM)

Solvency II is driving a welcomed need for improved risk management.

- Financial and regulatory reporting requirements are focused on risk measurement and amount, timing, and uncertainty of future cash flows.
- Solvency II gives insurers the opportunity to:
  - Link regulatory requirements with business strategy and risk appetite
  - Drive business value through ERM

Conclusions:
There is still significant work to be done.

Solvency II is not only about compliance — it is driving improved enterprise risk management.

- Driving the convergence of economic capital techniques and enterprise-wide risk management in the global insurance industry will have global impact.
- Solvency II is forcing insurers to take on a more holistic approach to risk.
- Along with IFRS and Basel, Solvency II is aligning the metrics used to measure companies with the underlying risks, including not only insurance risk, but also market, credit, and operational risk.
- These risks are all now being used to measure performance.

Conclusions:
There is still significant work to be done.

The greatest challenges around implementation include:

- Inadequate data collection and access to information
- Insufficient people skills (additional education needed for senior staff, management and the Board)
- Systems limitations due to multiple legacy systems (particularly for larger companies)

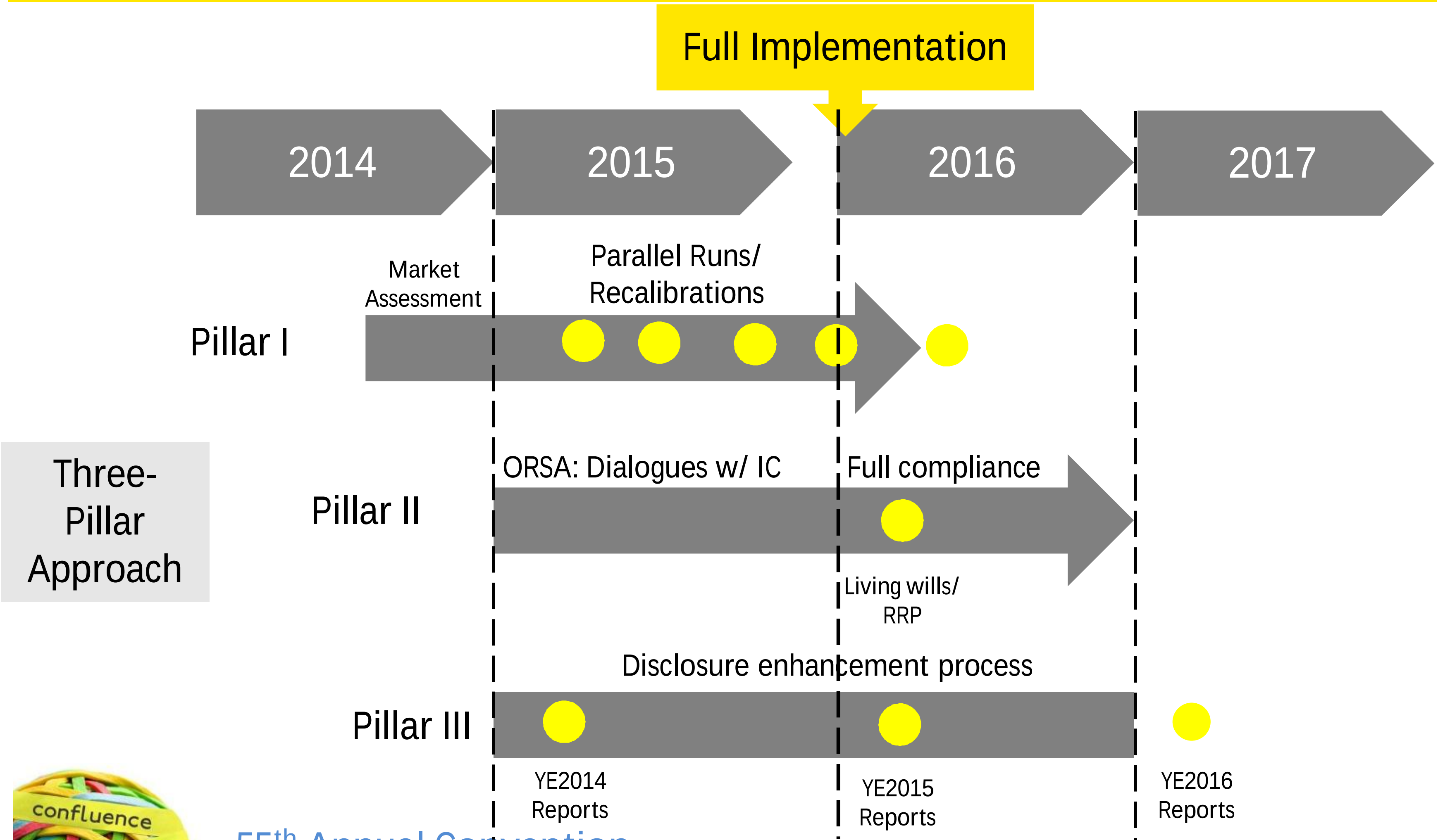
Conclusions:
There is still significant work to be done.

A reporting revolution is taking place — across the entire industry.

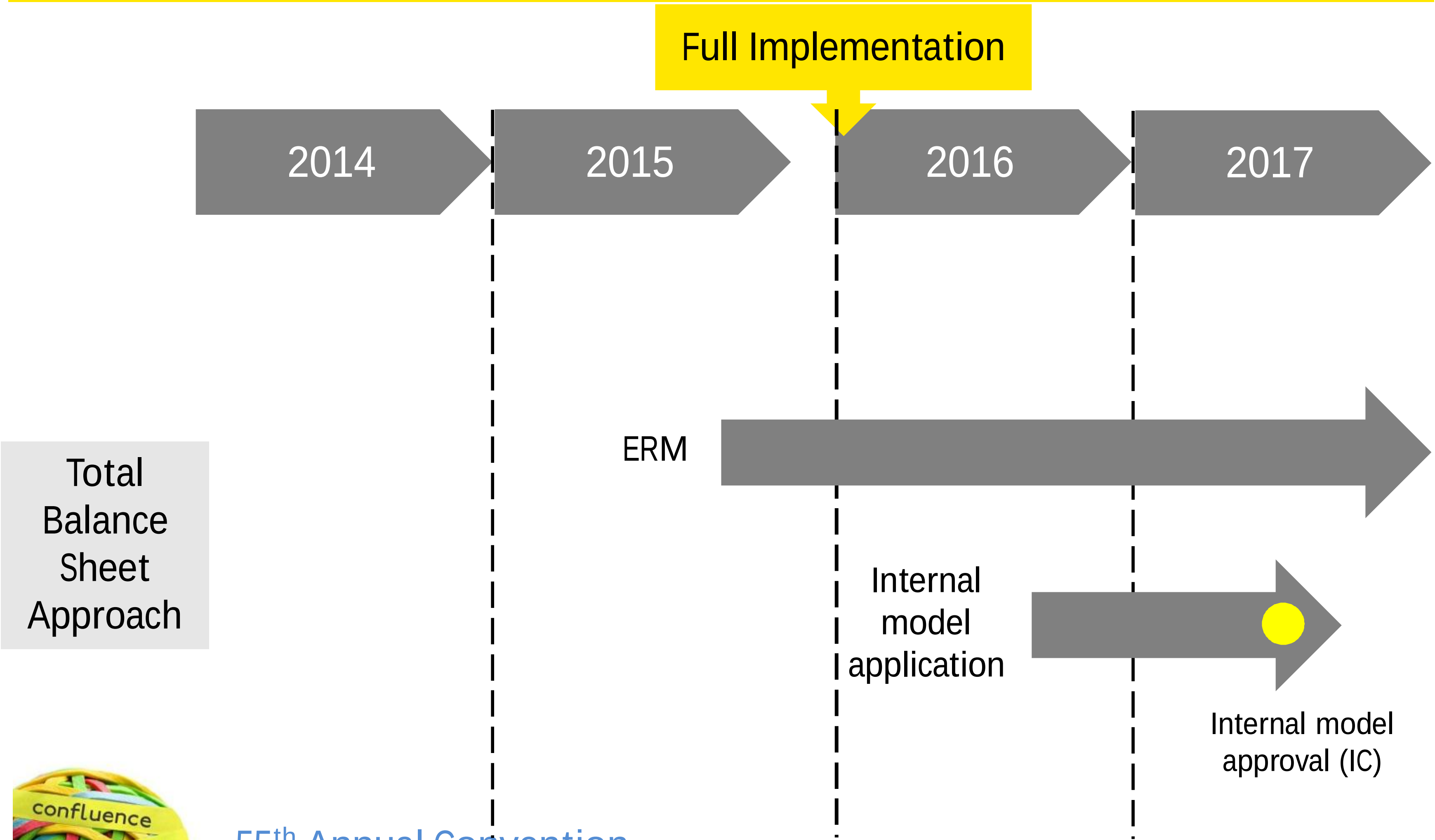
- Important changes to financial reporting by insurers will be made in the next two years. Parallel efforts in Solvency and IFRS should be undertaken, along with the relevant implications of Basel.
- There is consensus that the measurement basis used for financial reporting should be at least reconcilable to the basis that is used for regulatory reporting.
- There is a growing view that financial reporting standards and solvency requirements should primarily be driven by the way the business is managed.

Appendices

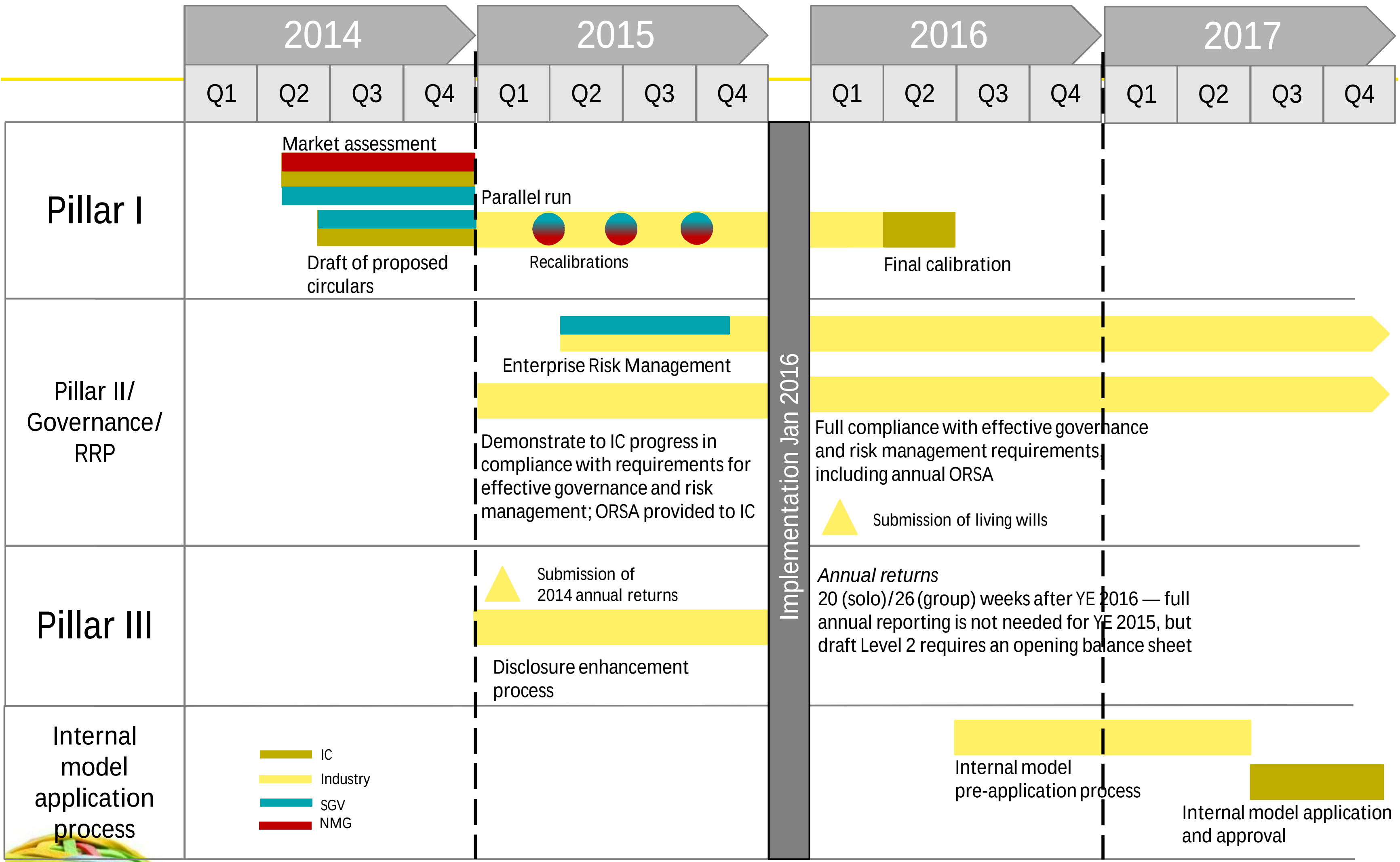
Risk-Based Capital: Regulatory Timeline



Risk-Based Capital: Regulatory Timeline



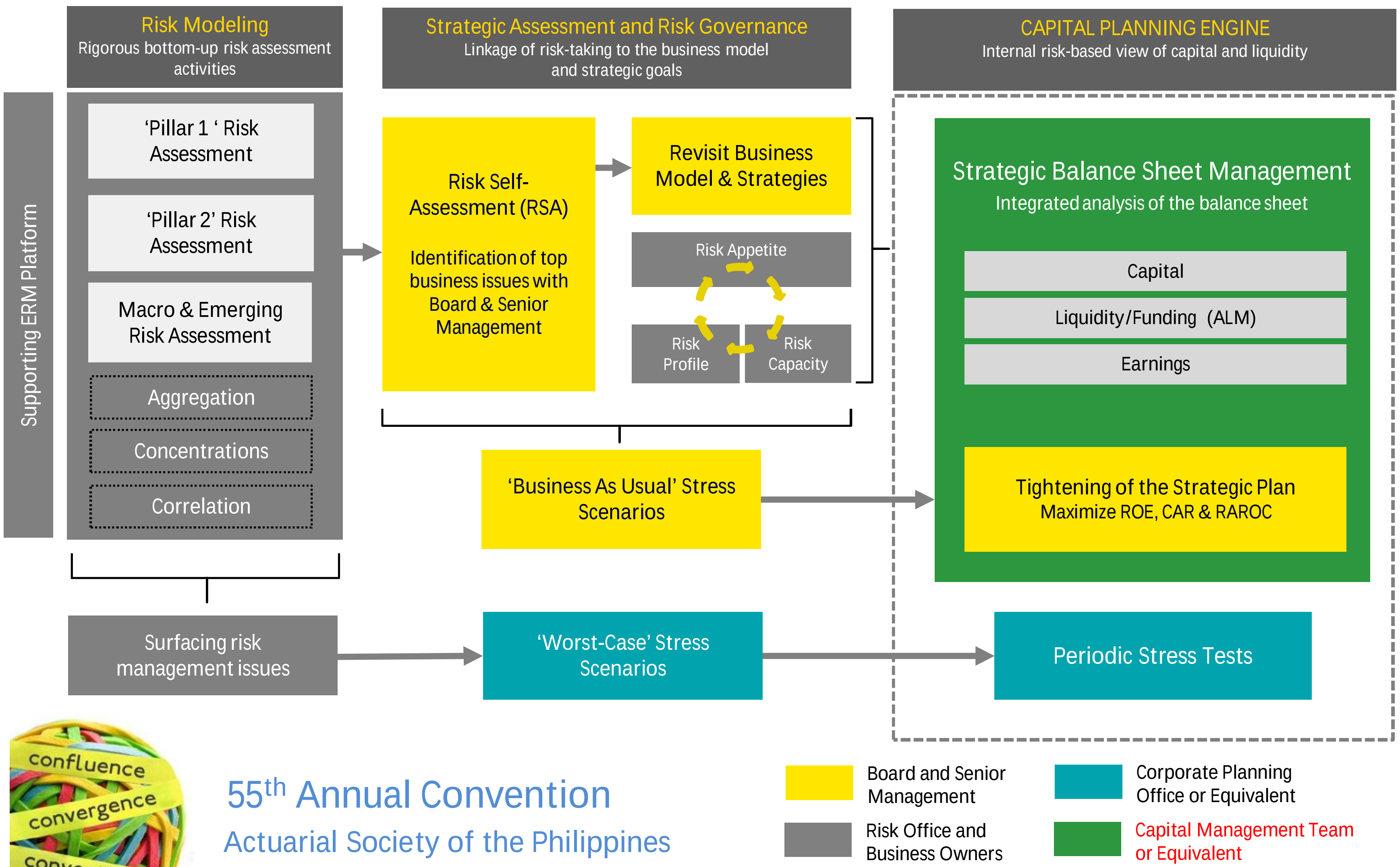
Industry Timeline



Risk-Based Capital Planning

Framework and work streams for the Philippine financial sector

(Banking and Capital Markets, Insurance, Asset Management and Pensions)

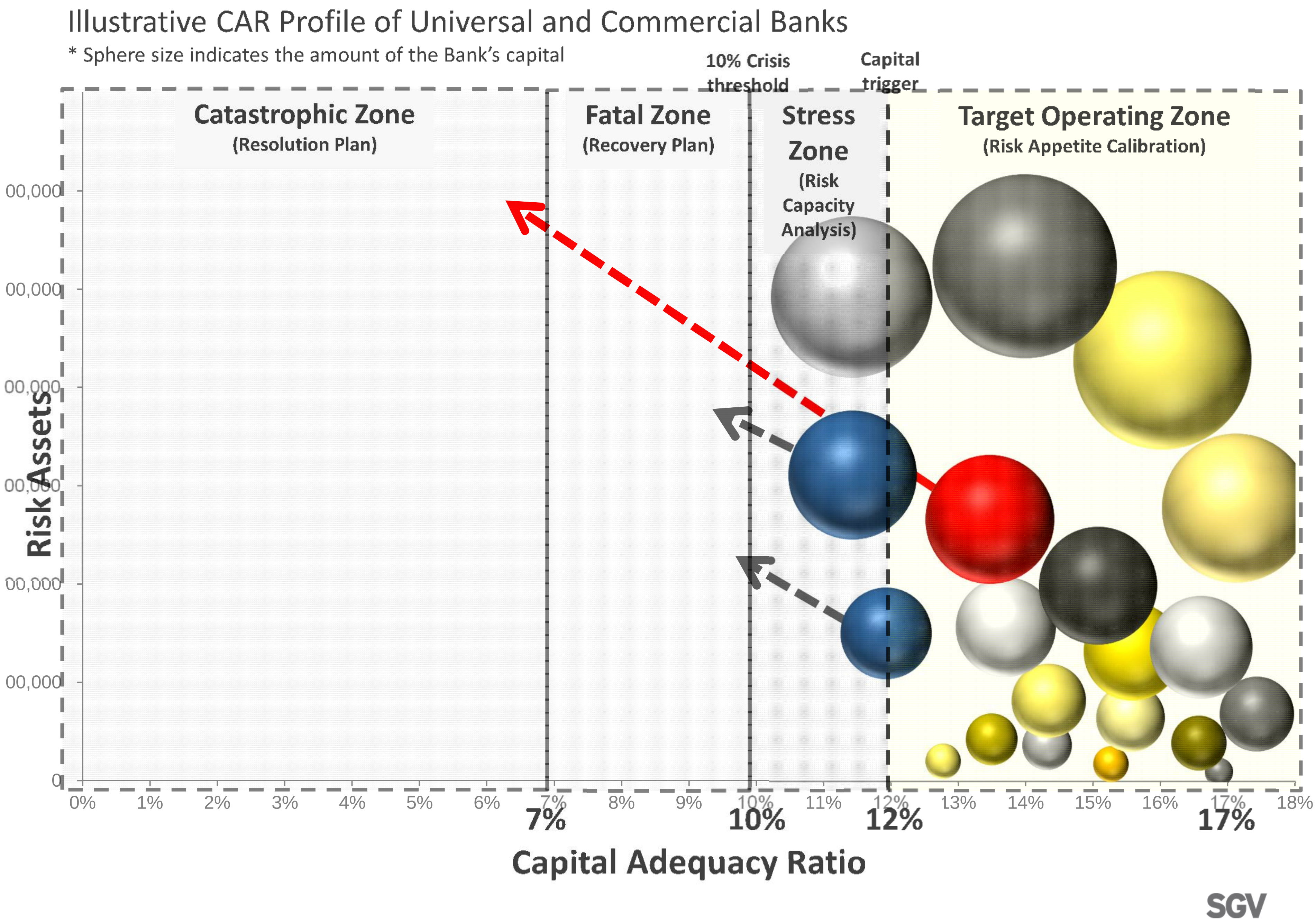


55th Annual Convention

Actuarial Society of the Philippines

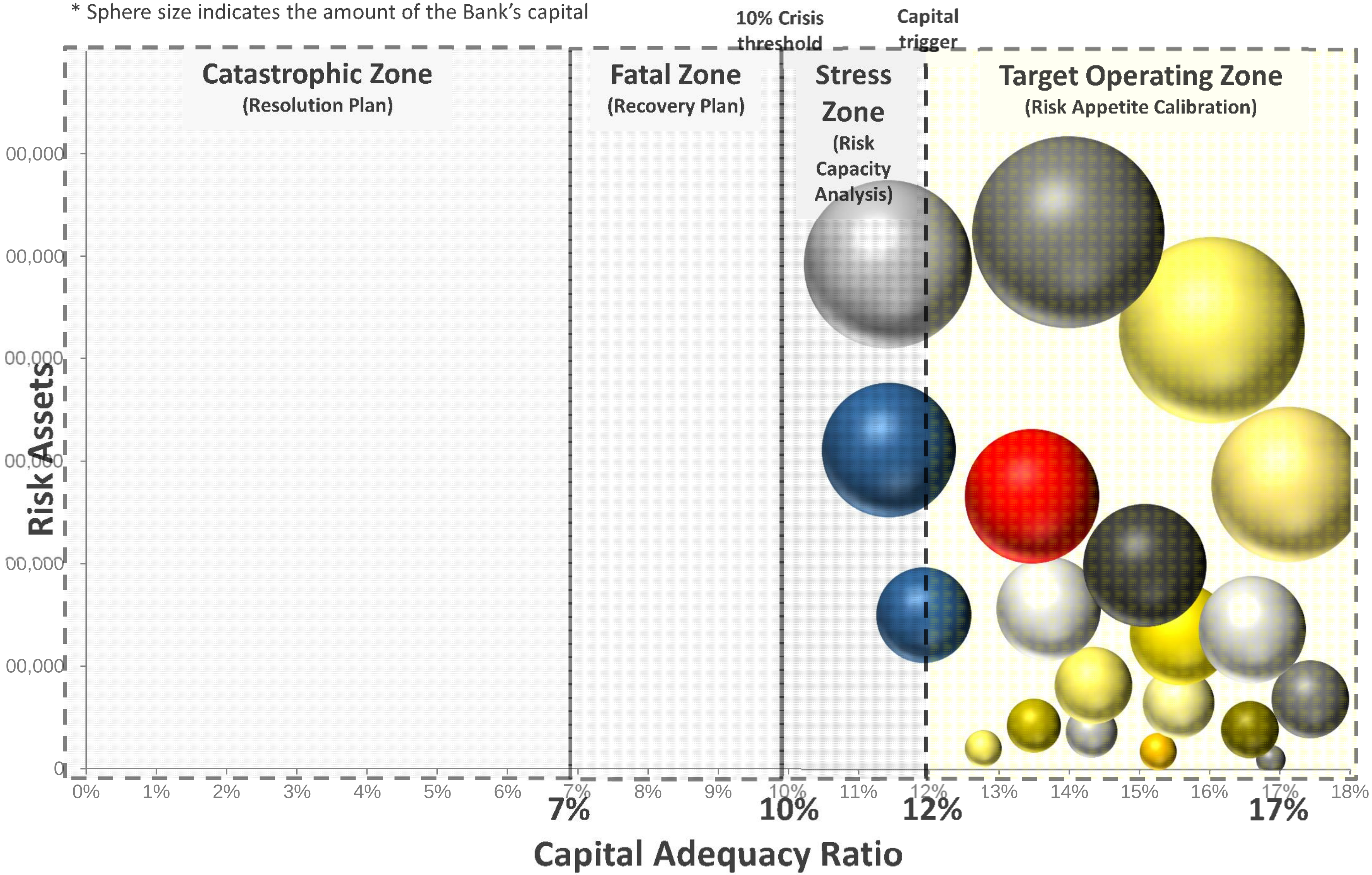
13-14 November 2014, Bellevue Resort, Bohol

SGV


Illustrative CAR Profile of Universal and Commercial Banks
* Sphere size indicates the amount of the Bank's capital
10% Crisis threshold
Capital trigger
Catastrophic Zone
(Resolution Plan)
Fatal Zone
(Recovery Plan)
Stress Zone
(Risk Capacity Analysis)
Target Operating Zone
(Risk Appetite Calibration)
Risk Assets
00,000
00,000
00,000
00,000
00,000
00,000
0
0%
1%
2%
3%
4%
5%
6%
7%
8%
9%
10%
11%
12%
13%
14%
15%
16%
17%
18%
7%
10%
12%
17%
Capital Adequacy Ratio
SGV

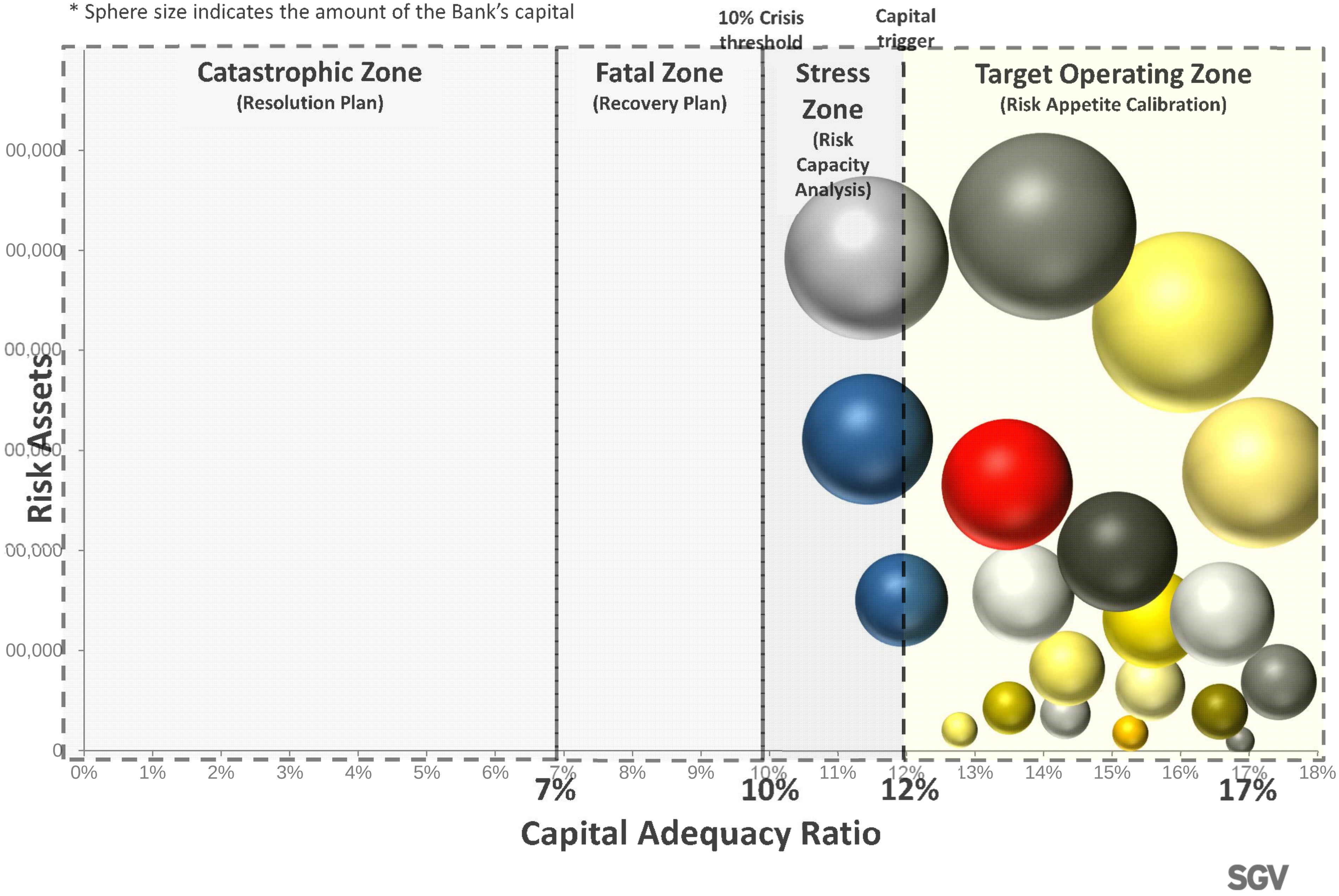
Illustrative CAR Profile of Universal and Commercial Banks

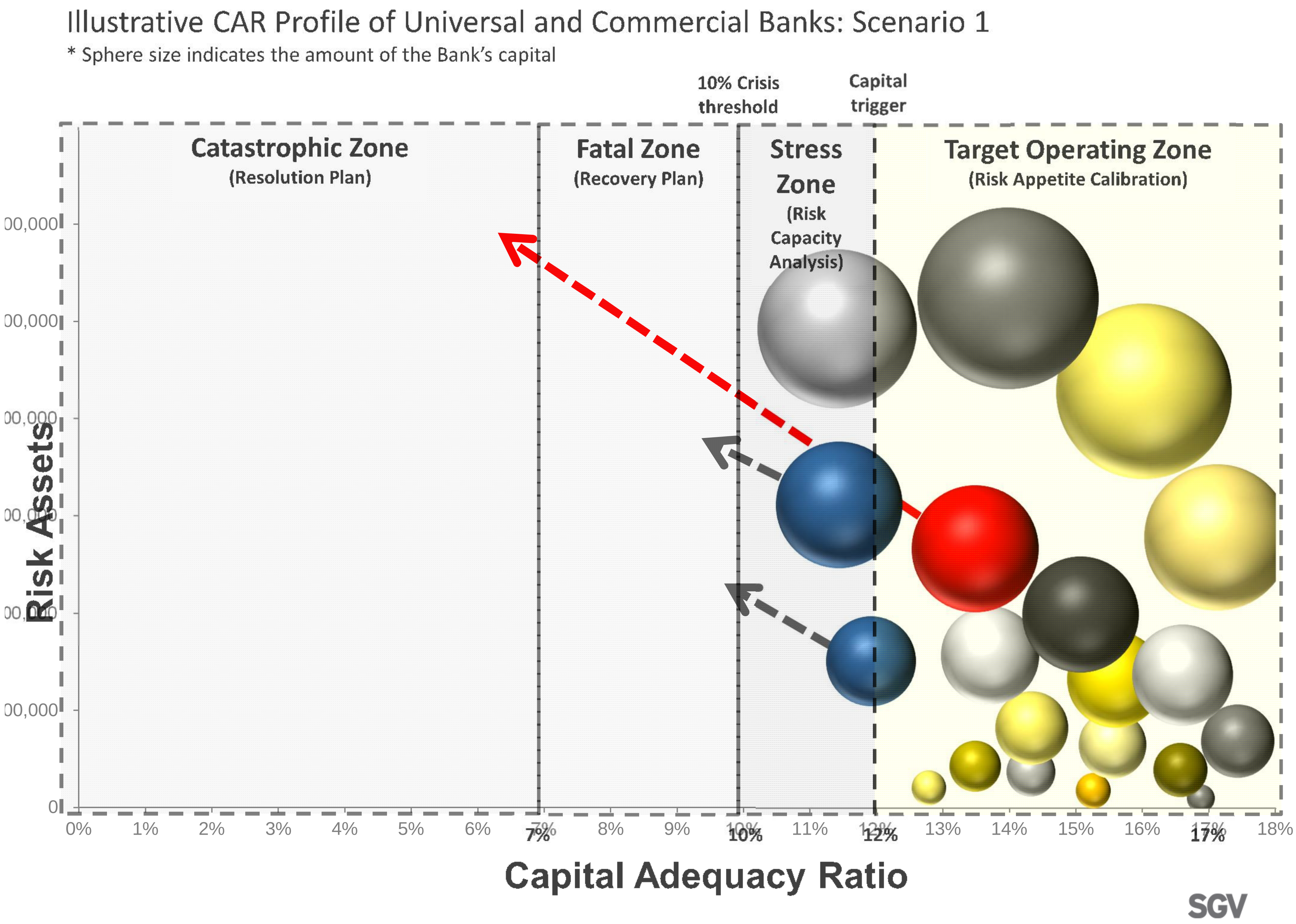
* Sphere size indicates the amount of the Bank's capital



SGV

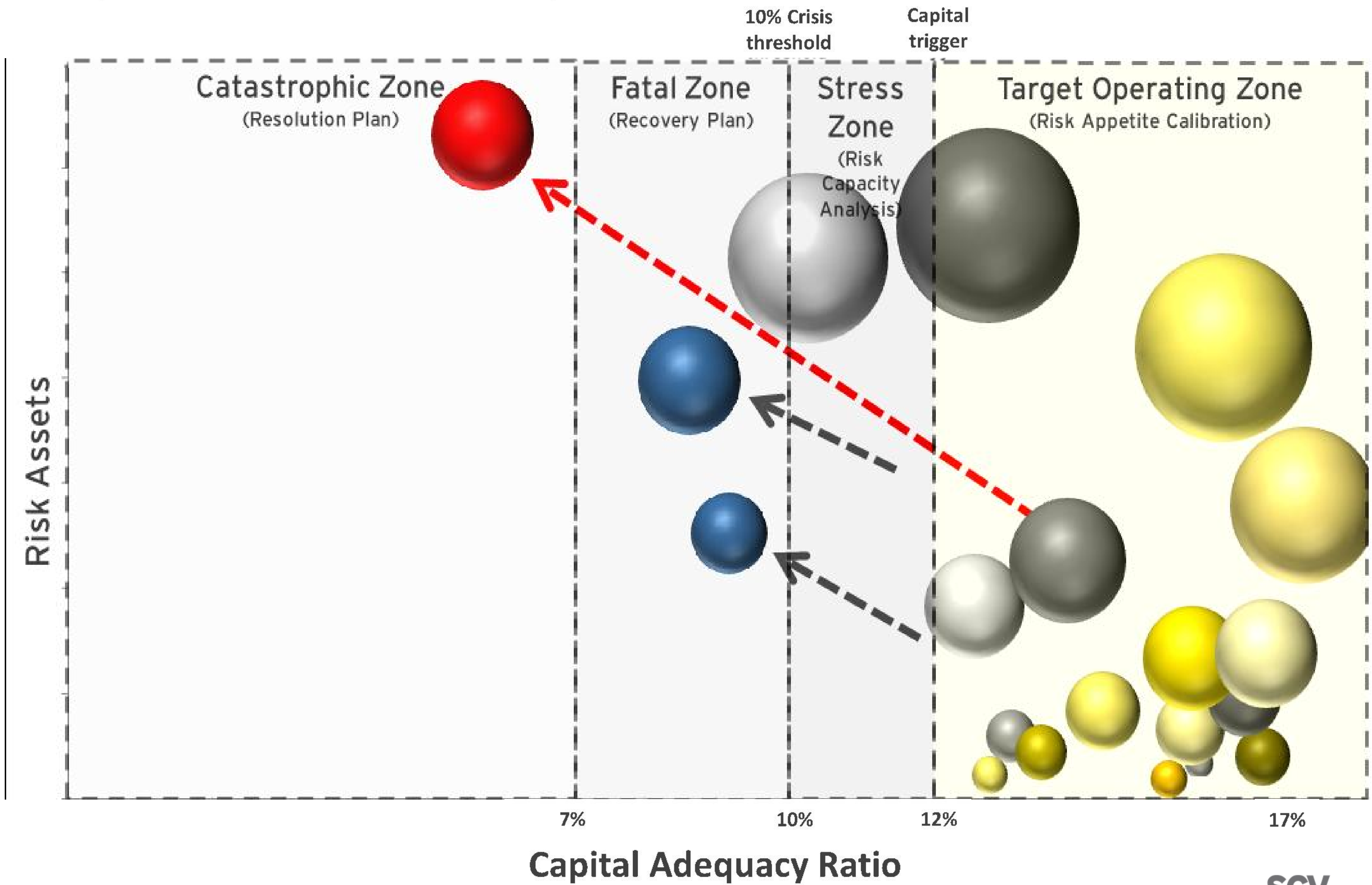
Illustrative CAR Profile of Universal and Commercial Banks



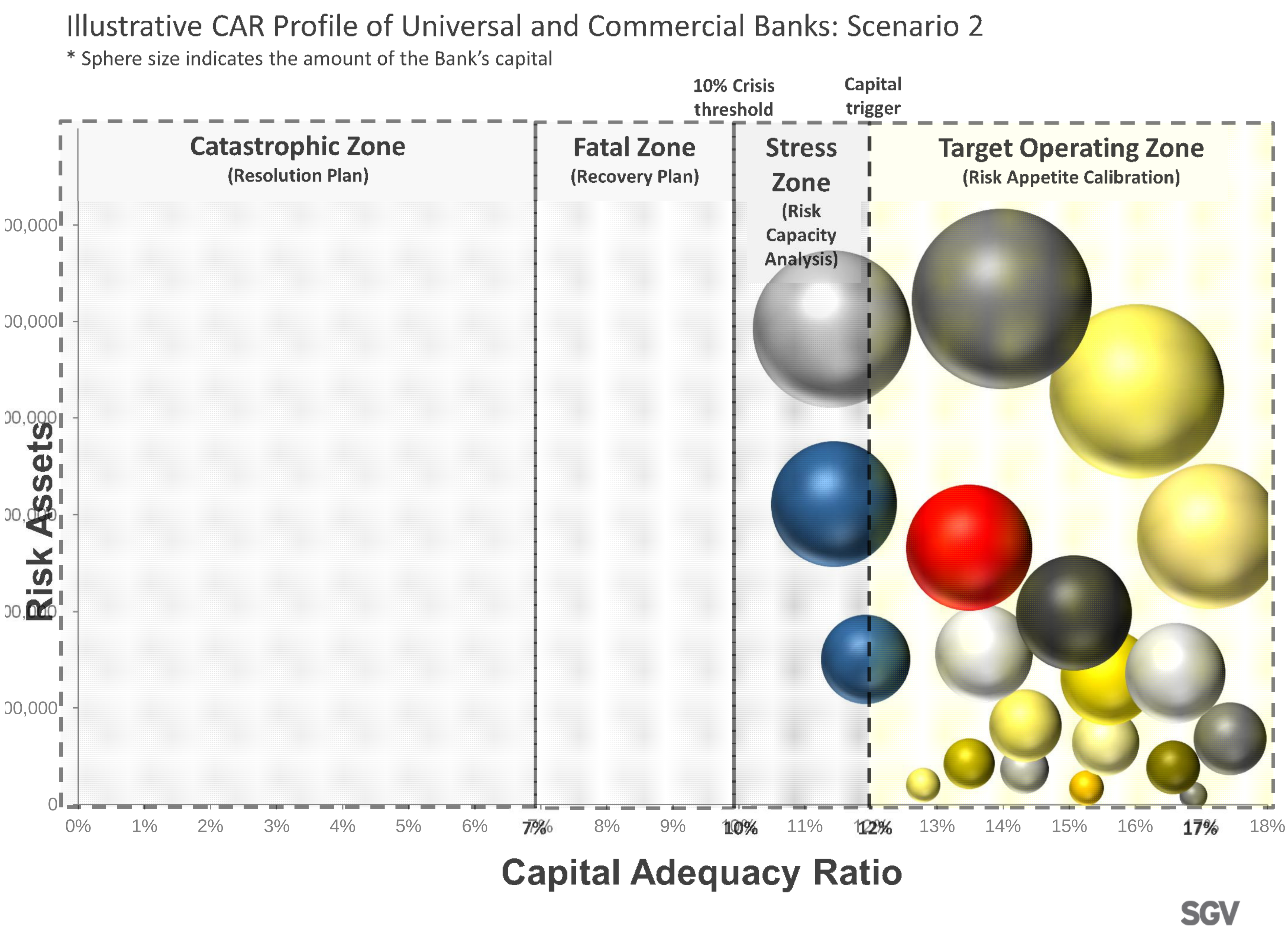

Illustrative CAR Profile of Universal and Commercial Banks: Scenario 1
* Sphere size indicates the amount of the Bank's capital
10% Crisis threshold
Capital trigger
Catastrophic Zone
(Resolution Plan)
Fatal Zone
(Recovery Plan)
Stress Zone
(Risk Capacity Analysis)
Target Operating Zone
(Risk Appetite Calibration)
Risk Assets
0
0% 1% 2% 3% 4% 5% 6% 7% 8% 9% 10% 11% 12% 13% 14% 15% 16% 17% 18%
7%
10%
12%
17%
Capital Adequacy Ratio
SGV

Illustrative CAR Profile of Universal and Commercial Banks: Scenario 1

* Sphere size indicates the amount of the Bank's capital



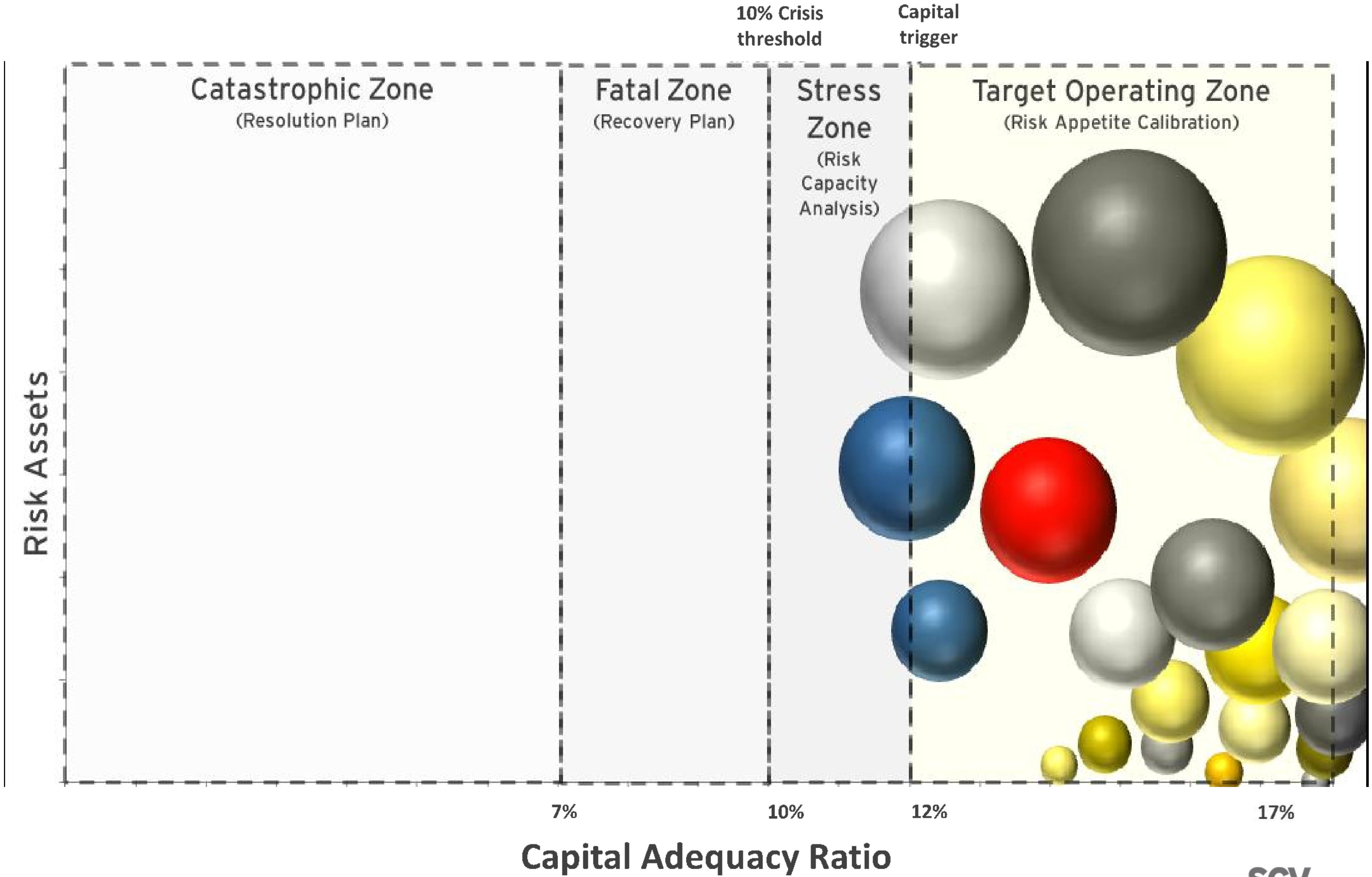
SGV



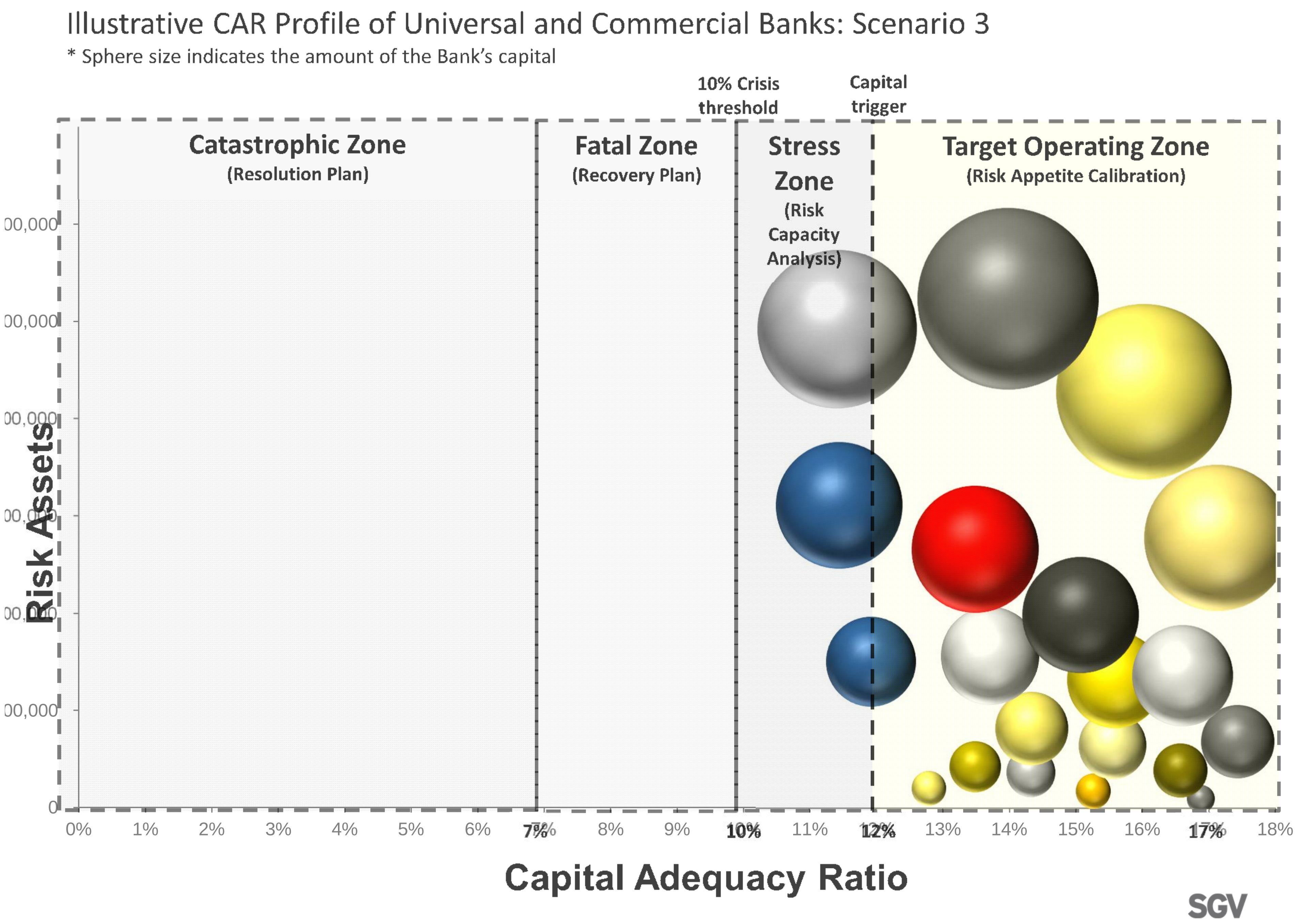
Illustrative CAR Profile of Universal and Commercial Banks: Scenario 2
* Sphere size indicates the amount of the Bank's capital
10% Crisis threshold
Capital trigger
Catastrophic Zone
(Resolution Plan)
Fatal Zone
(Recovery Plan)
Stress Zone
(Risk Capacity Analysis)
Target Operating Zone
(Risk Appetite Calibration)
Risk Assets
0
0%
1%
2%
3%
4%
5%
6%
7%
8%
9%
10%
11%
12%
13%
14%
15%
16%
17%
18%
Capital Adequacy Ratio
SGV

Illustrative CAR Profile of Universal and Commercial Banks: Scenario 2

* Sphere size indicates the amount of the Bank's capital

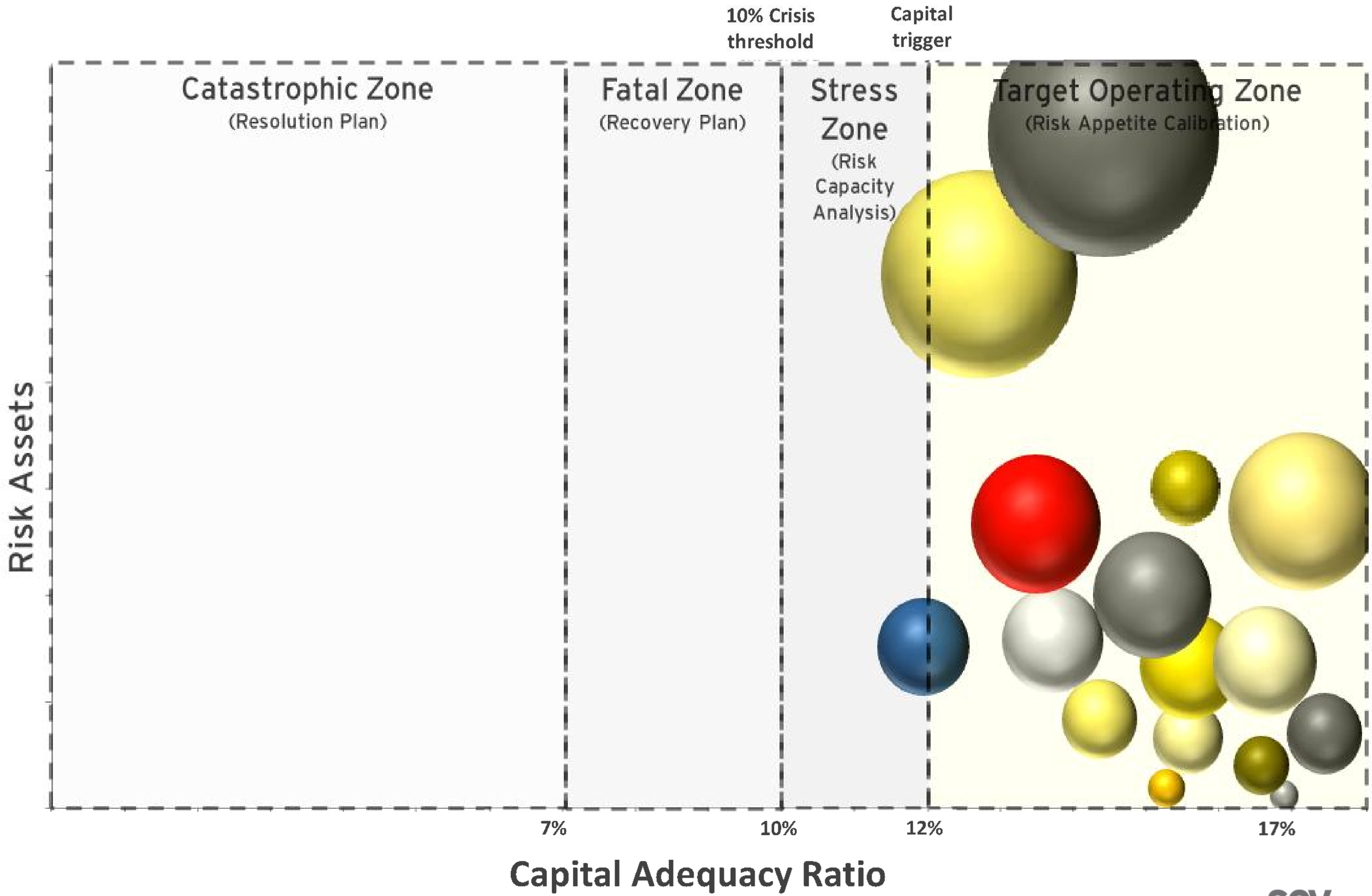


SGV


Illustrative CAR Profile of Universal and Commercial Banks: Scenario 3
* Sphere size indicates the amount of the Bank's capital
10% Crisis threshold
Capital trigger
Catastrophic Zone
(Resolution Plan)
Fatal Zone
(Recovery Plan)
Stress Zone
(Risk Capacity Analysis)
Target Operating Zone
(Risk Appetite Calibration)
Risk Assets
0
0%
1%
2%
3%
4%
5%
6%
7%
8%
9%
10%
11%
12%
13%
14%
15%
16%
17%
18%
Capital Adequacy Ratio
SGV

Illustrative CAR Profile of Universal and Commercial Banks: Scenario 3

* Sphere size indicates the amount of the Bank's capital



SGV

Thank you!

This presentation material has been prepared for general informational purposes only and is not intended to be relied upon as accounting or other professional advice.

This presentation material is provided to you for your exclusive use and may not be sold in part or their entirety to any third party. Further, this material may not be shown, shared or transferred to any other third party without the express written consent of SGV & Co. This material should not be used or duplicated – in whole or in part – for any other purpose.