

# C-ROSS: Construction and Implementation

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33rd Regulation and Supervision (PROGRES) Seminar  
“Governance, Cyber, ICS... Regulation going global?”  
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# C-ROSS: Construction and Implementation

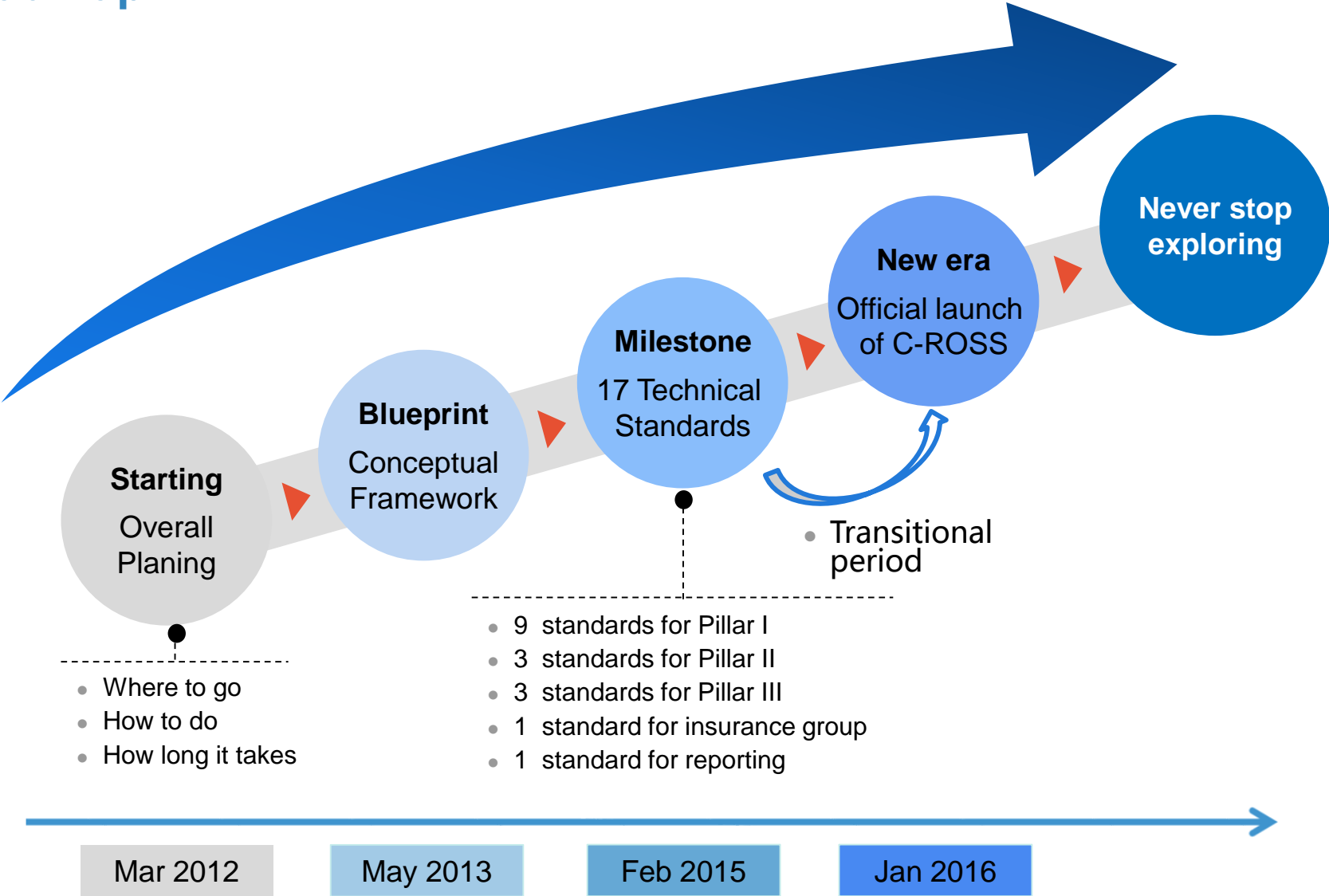
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## **Two questions:**

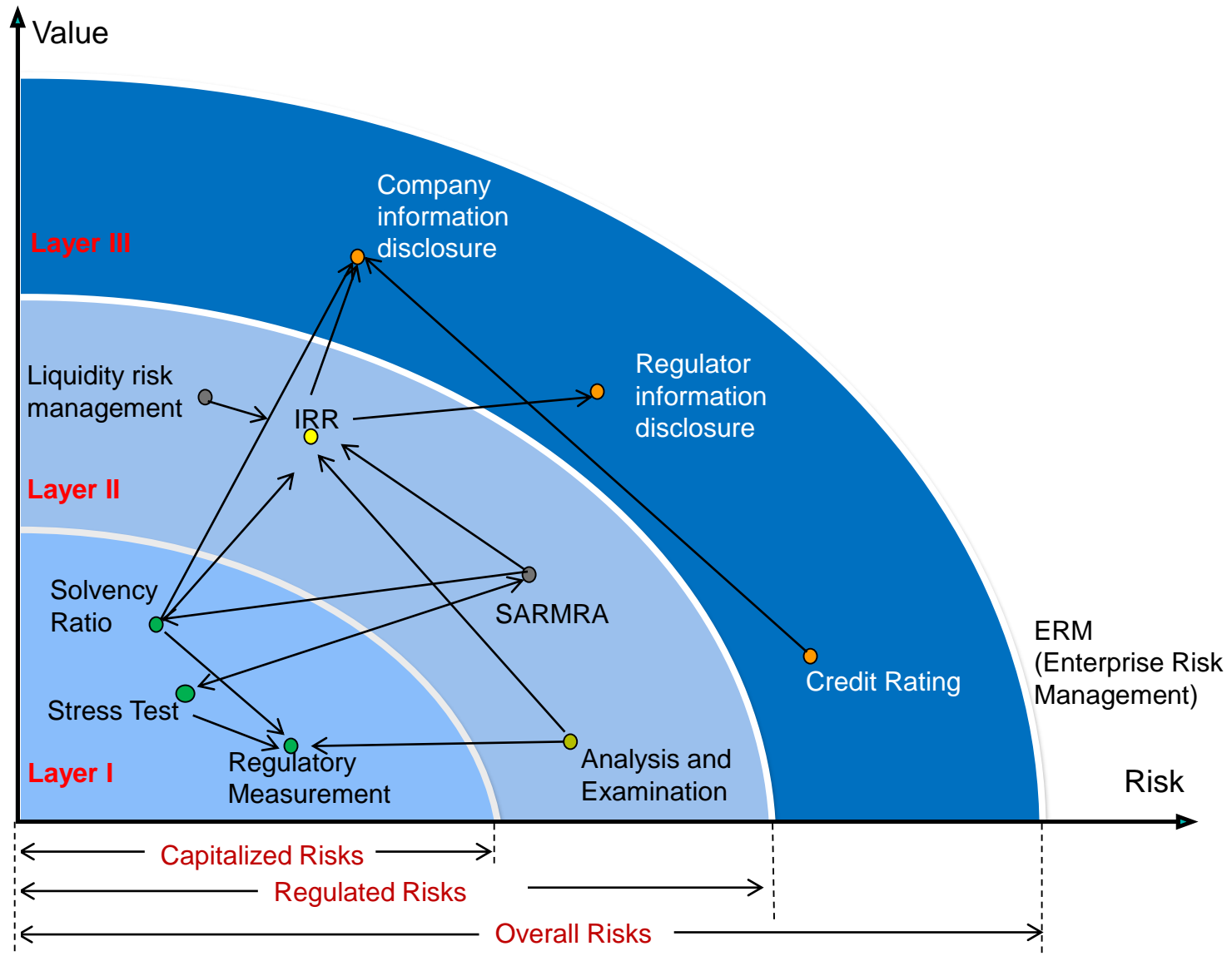
- **Where are we now?**
- **What can we learn?**

**Where are we now?**

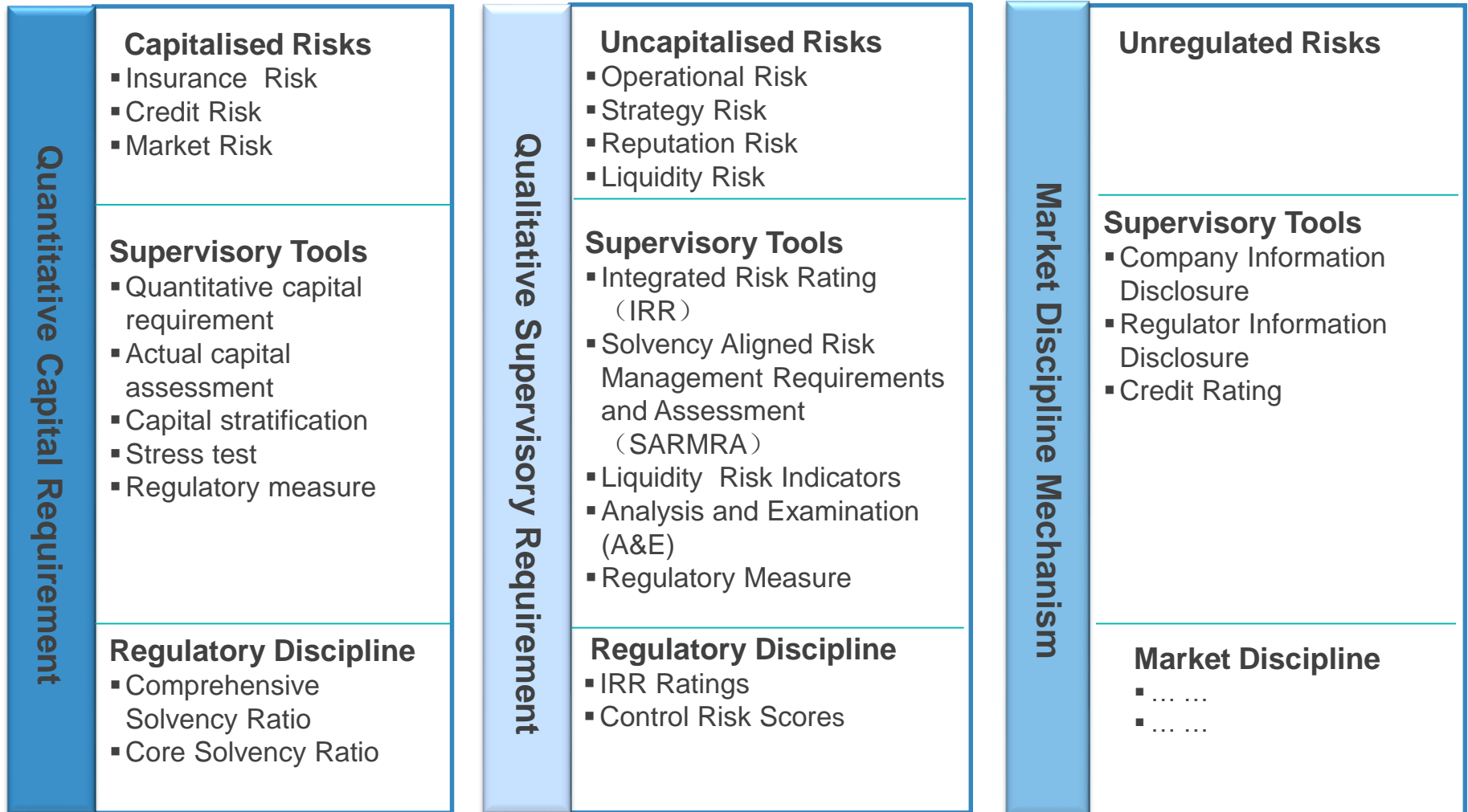
# Roadmap



# Three-Layer Framework: Risk, Capital and Value

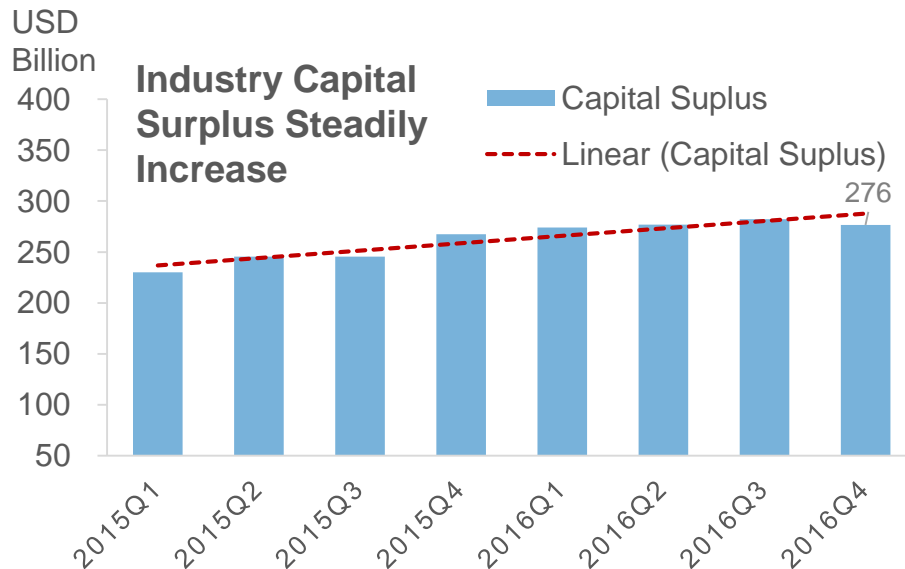
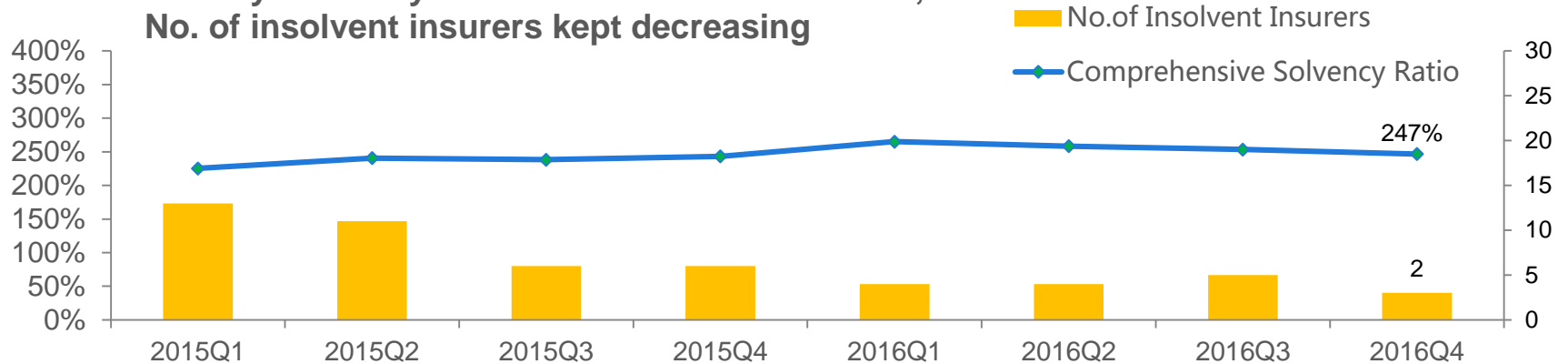


# Transformed to Three-Pillar Regulatory Framework



# Industry Solvency Maintain Stable and Sufficient Capital Surplus Steadily Increase

Industry Solvency maintain stable and sufficient,  
No. of insolvent insurers kept decreasing



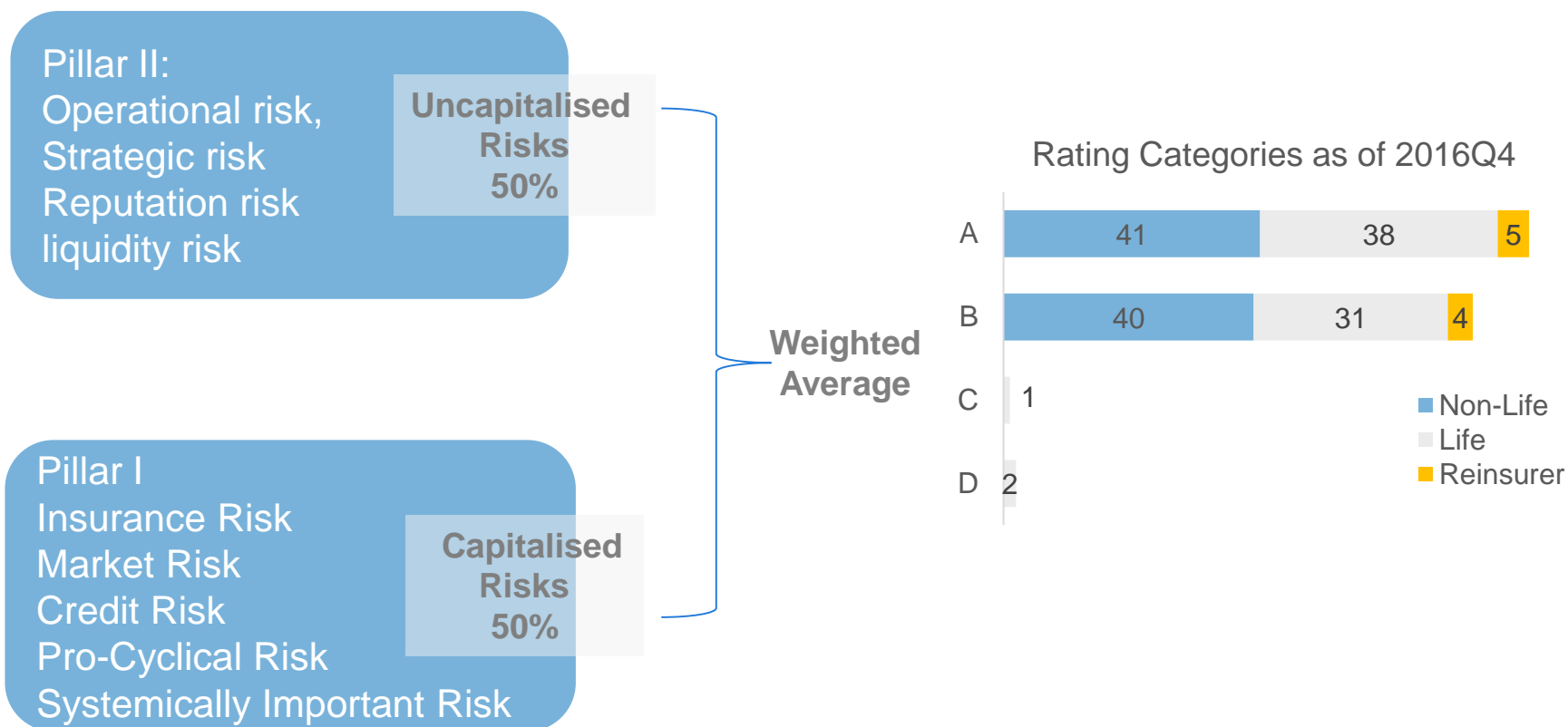
The industry average comprehensive solvency ratios maintain stable and far above the required 100%. Number of insolvent insurers keep decreasing, from 13 in 2015 Q1 to only 2 in 2016Q4. By 2016Q4, almost 100% of companies have reached the solvency standards.

Industry total capital surplus has gradually increased for the past 2 years, indicating the industry's ability to resist risks continue to increase.



# Pillar II: Integrated Risk Rating (IRR) Officially Launched

IRR: quarterly evaluation of company's overall risk exposure



As of 2016Q4, among 162 companies assessed, 3 companies are classified as C, and 2 as D. For such companies, certain regulatory interventions apply, such as restrictions on investments and expansion.

## Pillar II: Solvency Aligned Risk Management Requirement & Assessment (SARMRA) Accomplished for the First Time

SARMRA: Annual assessment of insurance companies risk management capability

$$MC_{\text{Control risk}} = Q \times MC_{\text{Capitalised risk}}$$

Q is the risk factor and  $Q = -0.005S + 0.4$ , where S is the score of SARMRA



Method

- ❑ CIRC: Set up assessment team and monitor results
- ❑ CIRC local bureaus: Draw up assessment plan and conduct on-site evaluation



Result

- ❑ Feedback to company
- ❑ Reflected in control risk minimum capital calculation from 2016 Q4

SARMRA results were reflected in the control risk minimum capital requirement. In 2016Q4, industry total minimum capital requirement has reduced 1% (approx 1.8 billion USD), with largest decrease being 1 billion USD company wise.

# Pillar III : Market Discipline

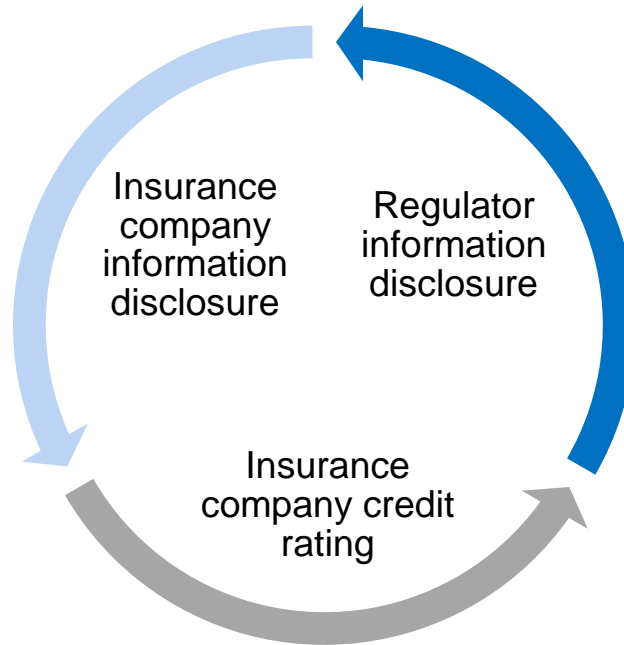
**Insurance companies should disclose solvency information to the public and stakeholders**

## ■ Quarterly Disclosure

- Disclosing an abstract of quarterly solvency report
- Within 30 days after the end of each quarter
- On official website, as well as on official website of Insurance Association of China (IAC)

## ■ Regular Disclosure

- Disclosing solvency information to stakeholders in the course of day-to-day operations



**Continuous and interactive solvency information exchange mechanism with stakeholders**

## ■ Quarterly Disclosure

- CIRC&CIRC local Bureaus release quarterly Integrated risk rating (IRR) Results

## ■ Semi-annual Disclosure

- CIRC disclose semi-annual solvency regulation information, including solvency profile of the industry, CIRC solvency regulation work, and other regulation information.

## **Insurance company credit rating**

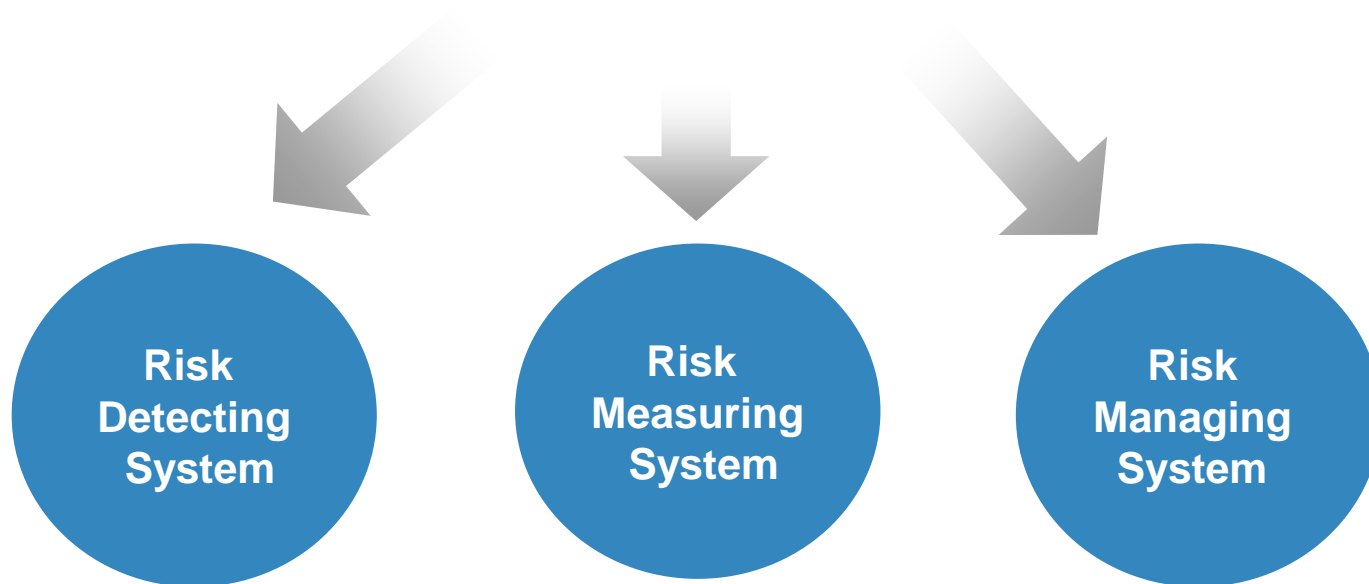
- Insurance companies should conduct credit rating when issuing debt instrument and capital instruments
- Regulating rating agencies' behavior with qualification requirements, administration and Supervision

**What can we learn?**

# 1. Finding the “Greatest Common Divisor”

## Objective determines nature of solvency system

Three different objectives, three types of systems



# 1. Finding the “Greatest Common Divisor” (cont.)

## Risk Detecting (Early Warning) System

- Originated from regulator demand, resulting in regulator-centric system
- Prudent margin on valuation aims to identify risk and provide early warning
- Focus on correlation rather than cause and effect
- Often require supplementary financial analysis and assessment tools
- Result oriented , practical and cost effective
- Imperfect theory

# 1. Finding the “Greatest Common Divisor” (cont.)

## Risk Measuring System

- Originated from market demand, resulting in regulated entity friendly system, including adoption of self assessment and internal model
- Emphasis on theoretical completeness and refinement of technical details
- Focus on identification and quantification of risk
- Asset liability valuation basis subordinates to risk quantification basis, tending to capture all market volatility
- High implementation cost
- Lack of practical validation

# 1. Finding the “Greatest Common Divisor” (cont.)

## C-ROSS is a risk managing solvency system

- ✓ A solvency system that is not just to identify and prevent risk, but to stimulate industry’s own risk management capability through reward-and-penalty mechanism.
- ✓ A solvency system that is risk-oriented and value-aligned
- ✓ Top down structure of risk limits with bottom up modelling of risk requirement to avoid over regulation and redundancy in capital requirements
- ✓ Solvency ratio is to demonstrate meaningful movement in asset/liability value and risk exposures.
- ✓ Asset liability valuation system to be consistent where possible with China GAAP
- ✓ Simple to implement, and implementation benefit higher than cost

**Risk and Value:  
Two Sides of the Same Coin**





## **2. C-ROSS is the most suitable solvency system for China**

**No one-size-fits-all or the perfect solvency system, only the most suitable solvency system for designated market.**

# 2. C-ROSS is the most suitable solvency system for China (cont.)

We observe solvency systems based on :

- Product mix
- Investments
- Valuation Models
- Risk Management Actions
- Supervisory Intervention

**What's Underneath**



# 2. C-ROSS is the most suitable solvency system for China (cont.)

This is where we  
are used to  
focusing on



*Business* **O***peration* **Syntactics Layer**

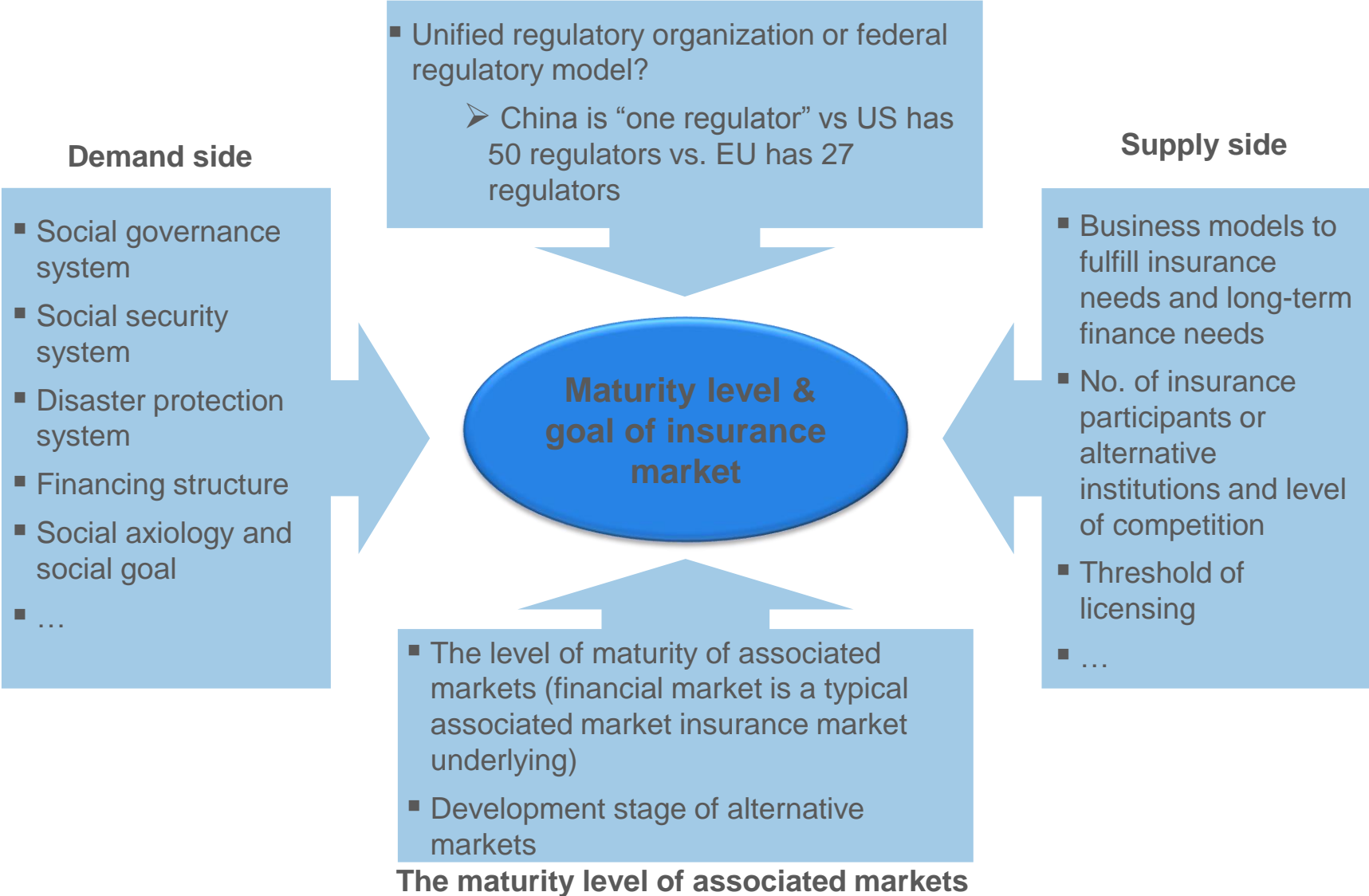
*Market* **B***ehavior* **Semantics Layer**

*Market* **F***ormation* **Pragmatics Layer**



# 2. “Pragmatics Layer” – the composition of insurance market

## The way insurance regulators being organized



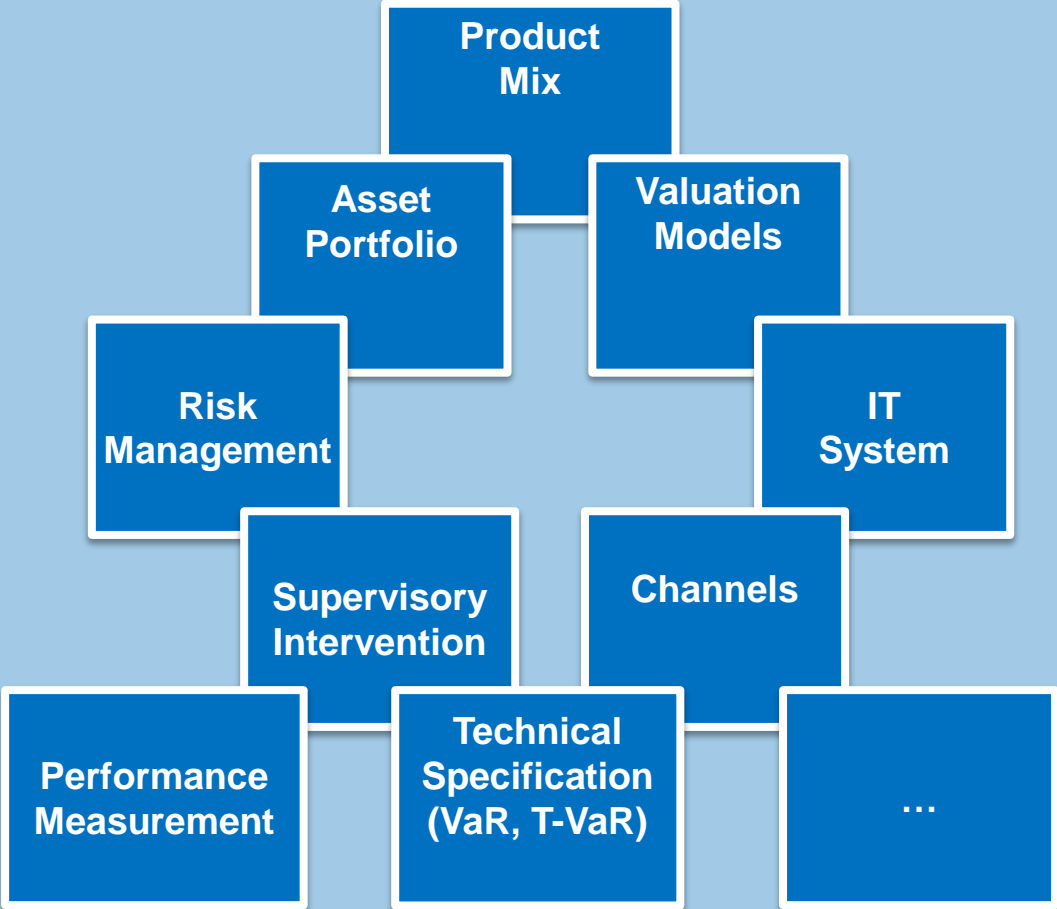
## 2. “Semantics Layer” - How insurance markets behave?

Key elements of market behavior				
<b>Insurer</b>	<b>Market Structure</b>	<b>Corporate Governance</b>	<b>Database &amp; Expertise</b>	...
<b>Insured</b>	<b>Awareness &amp; Knowledge</b>	<b>Demographics</b>	<b>Risk Preference</b>	...
<b>Regulator</b>	<b>Independence &amp; Power of Regulator</b>	<b>Market Constancy</b>	<b>Capital Resources</b>	...

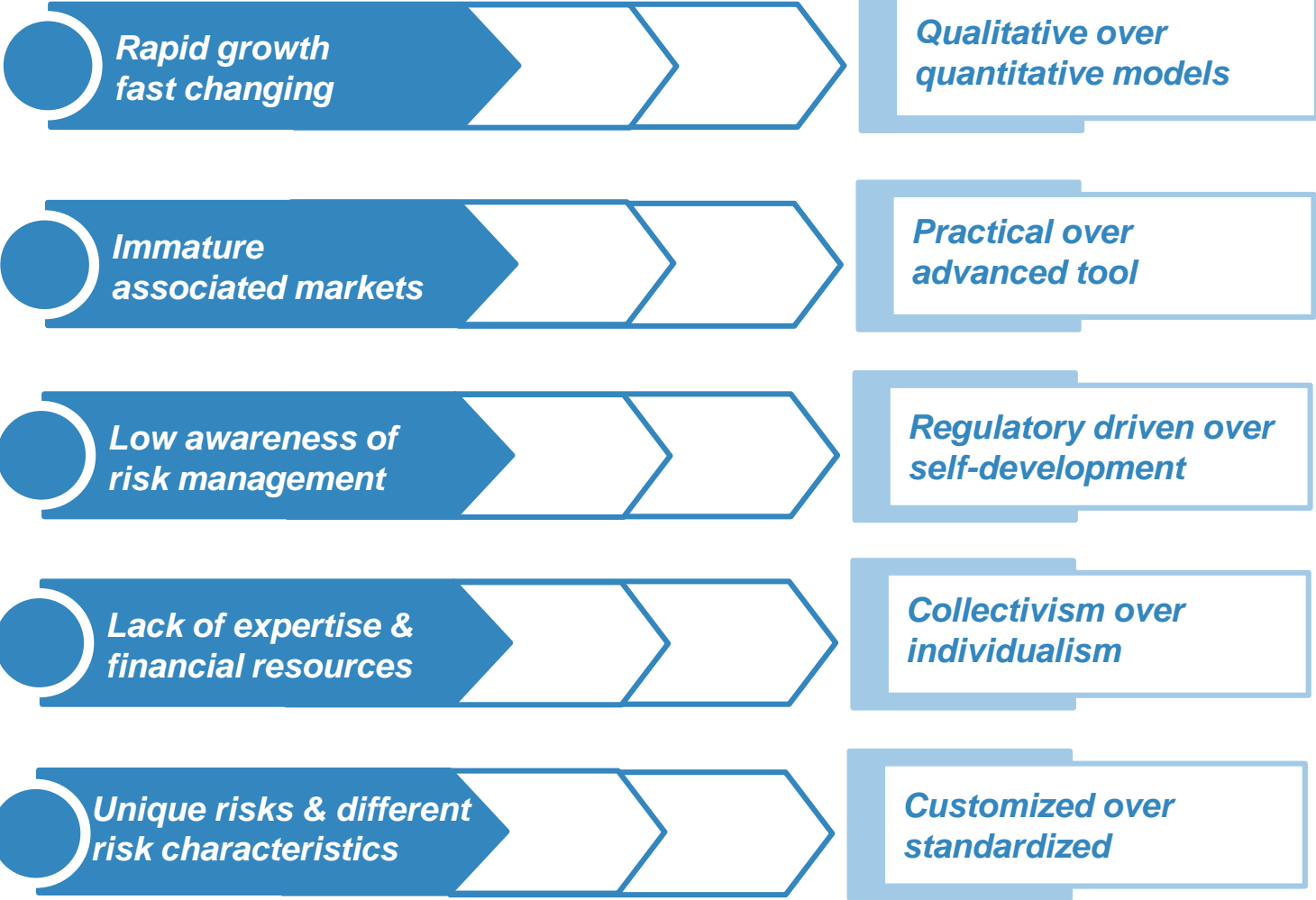
# 2. “Syntactics Layer” - How insurance businesses operates?

## Key topics of business operations

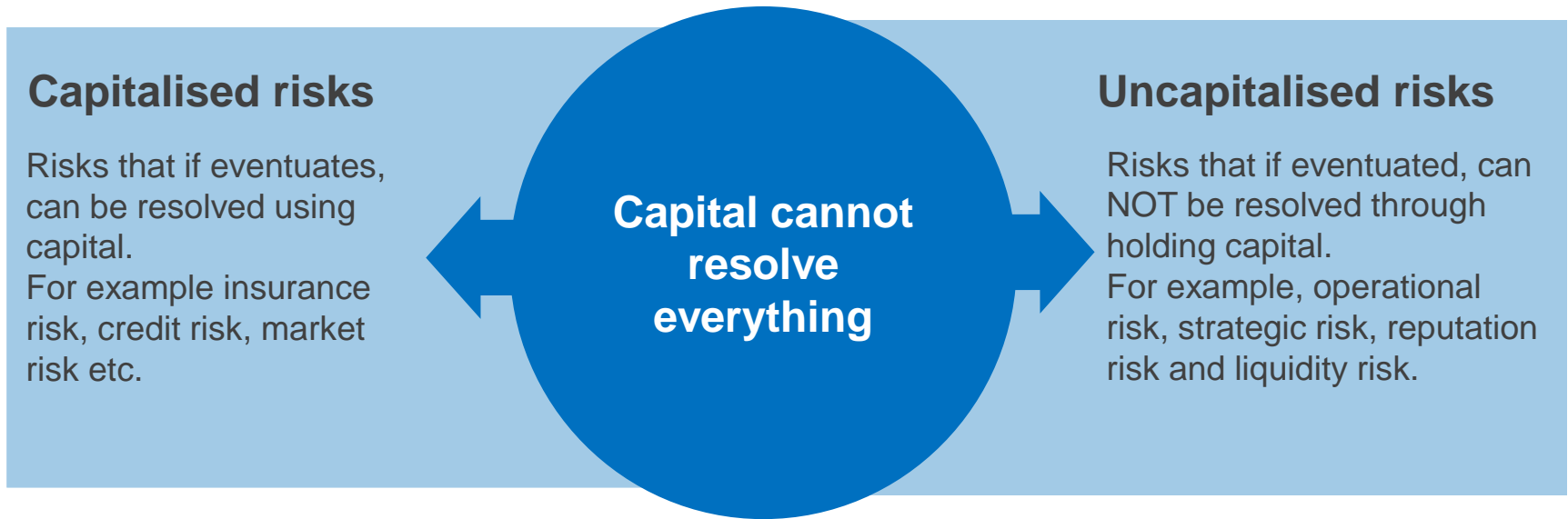
Usually these elements are determined by market behavior level or market formation level.



## 2. Features of emerging markets & implications for solvency system



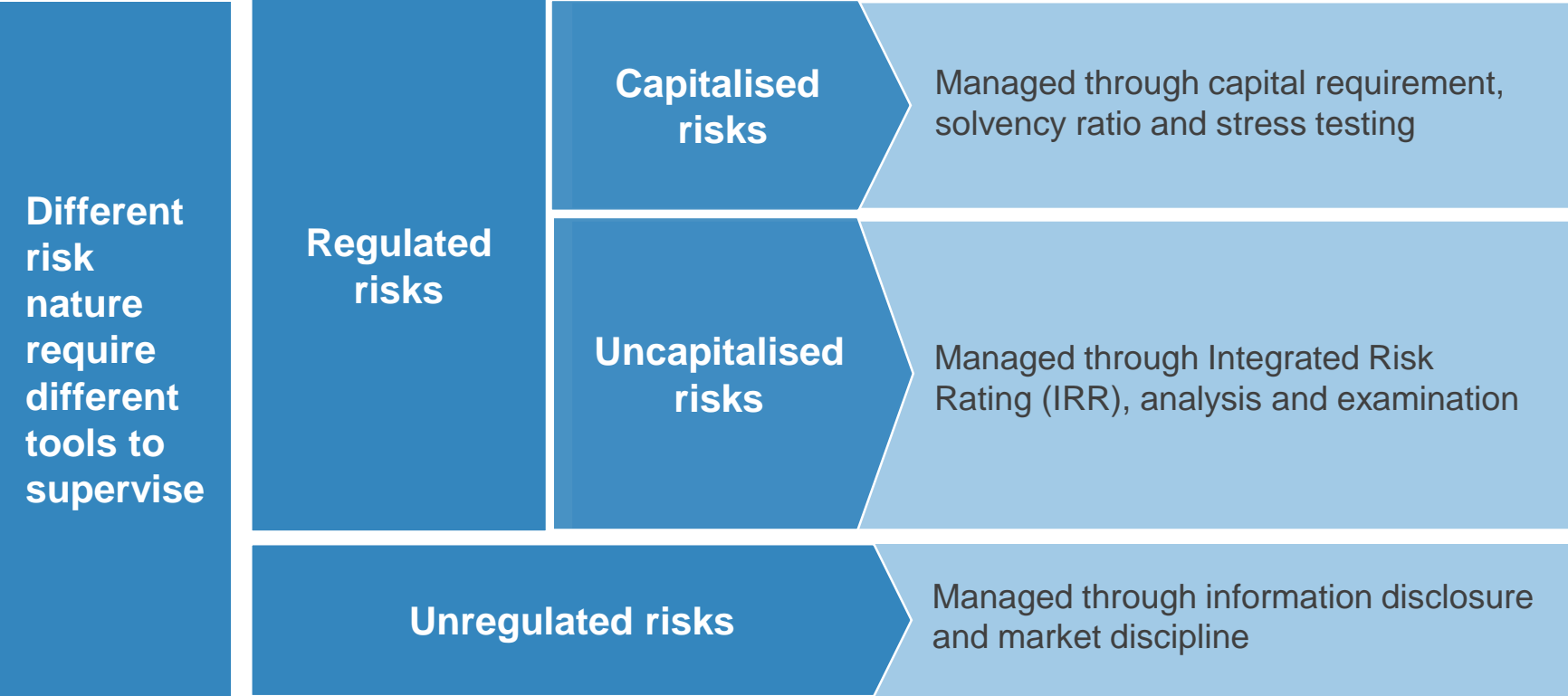
### 3. Capital cannot resolve everything



High solvency ratio does not necessarily mean financial security, because most fatal risks are uncapitalised risks.



### 3. Different risk nature, different tools



# 4. Strong Execution

Execution is always the key

## Communication

CIRC has carried out a great deal of publicity, testing, and discussions, enabling the industry to be familiar with the overall framework and technical standards

## Punctuality

CIRC's strong leadership in delivering all key milestones on schedule paved the way for smooth implementation

## Momentum

To keep the momentum rolling, we need scientific time management, resource deployment and **lots of overtime.**

## 4. And never stop exploring: C-ROSS Phase II to be launched in 2017



### Fill the void

- Technique standards for group supervision
- Include pension insurance company and AMC in IRR
- Specify capital requirements for innovative financial instruments
- Supervision towards mutual insurance, captives



### Update the Existing Standards

- Review and calibration of the current risk factors
- Penetration of multi - layer nested investment products



### Strengthen Supervisory Cooperation

- Inter-product, inter-market, inter-industry supervisory cooperation mechanism

**The very beginning mind itself is the most accomplished mind of true enlightenment**

**- Avatamsaka Sutra**

The image has a solid blue background. In the upper half, there is a faint, light-colored grid pattern overlaid on a dark silhouette of a world map. The lower half of the image shows a city skyline, likely Shanghai, with various skyscrapers and the Oriental Pearl Tower on the right. The text "Thank you !" is centered in the middle of the image.

**Thank you !**