

The Dynamic China P&C Market - An Update



CAS Spring Meeting, Colorado Springs
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Table of contents

1	Comparison of China and U.S. P&C Markets	<u>2</u>
2	China Auto Insurance Rate Reform	<u>15</u>
3	China Risk Oriented Solvency System (C-ROSS)	<u>22</u>

China Insurance Market Overview

Total asset

- ❑ As of YE2014, the insurance sector has total asset of RMB 10.2 trillion (USD 1.65 trillion), representing annual growth of 20%.

Total premium

- ❑ 2014 total premium is RMB 2.0 trillion, grew 17% from a year ago
- ❑ **P&C premium 720 billion (USD 116 billion)**, over 70% of which is automobile insurance

Number of players

- ❑ 75 life insurers (47 domestic, 28 foreign JVs)
- ❑ **68 P&C insurers (47 domestic, 21 foreign-owned)**
- ❑ **5 pension insurers (all domestic)**

Quick Comparison of The Two Markets



United States

- ▶ **Mature market** – High insurance penetration, slow growth
- ▶ Litigious society, **high percentage of liability insurance premium**
- ▶ **Fragmented market** – Aside from a few large national carriers, there are many successful regional companies. The top 10 companies have slightly less than half of the market
- ▶ Insurance is **regulated at the state level**, with some level of coordination through NAIC and the Federal Insurance Office



China

- ▶ **Low insurance penetration, fast growing market** (double-digit growth in each of the past ten years)
- ▶ Not yet a litigious society, **liability premium is only 3% of the total**
- ▶ **Concentrated market** dominated by a few large domestic companies
- ▶ **Centralized regulatory regime** led by China Insurance Regulatory Commission (CIRC)
- ▶ **Domestic companies are increasingly pursuing overseas M&A** (Meadowbrook, Ironshore, the Waldorf Hotel, and more...)

Insurance Penetration and Insurance Density

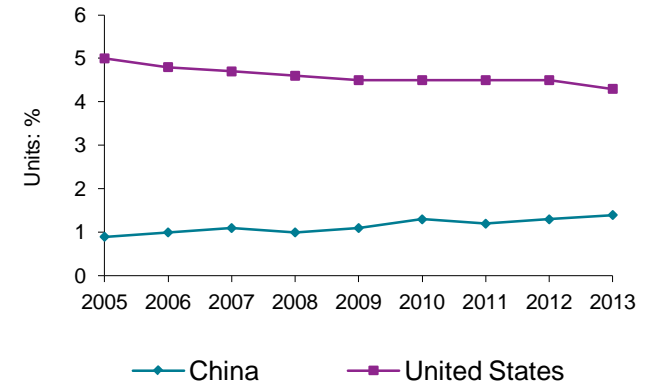
1 Insurance Penetration

(Unit: %)

	2005	2006	2007	2008	2009
China	0.9	1	1.1	1	1.1
United States	5.0	4.8	4.7	4.6	4.5
	2010	2011	2012	2013	
China	1.3	1.2	1.3	1.4	
United States	4.5	4.5	4.5	4.3	



Insurance Penetration comparison



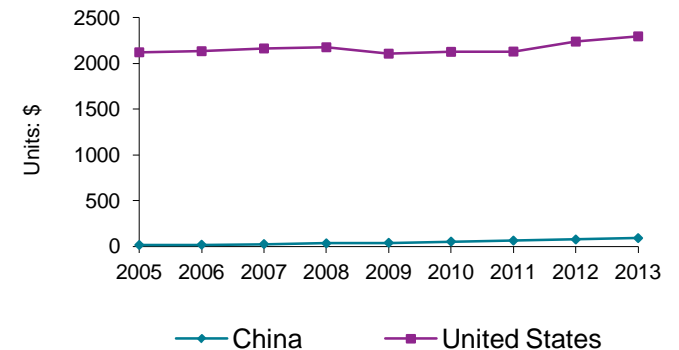
2 Insurance Density

(Unit: USD)

	2005	2006	2007	2008	2009
China	16	19	26	34	40
United States	2,122	2,134	2,164	2,177	2,107
	2010	2011	2012	2013	
China	53	64	76	91	
United States	2,127	2,130	2,239	2,296	



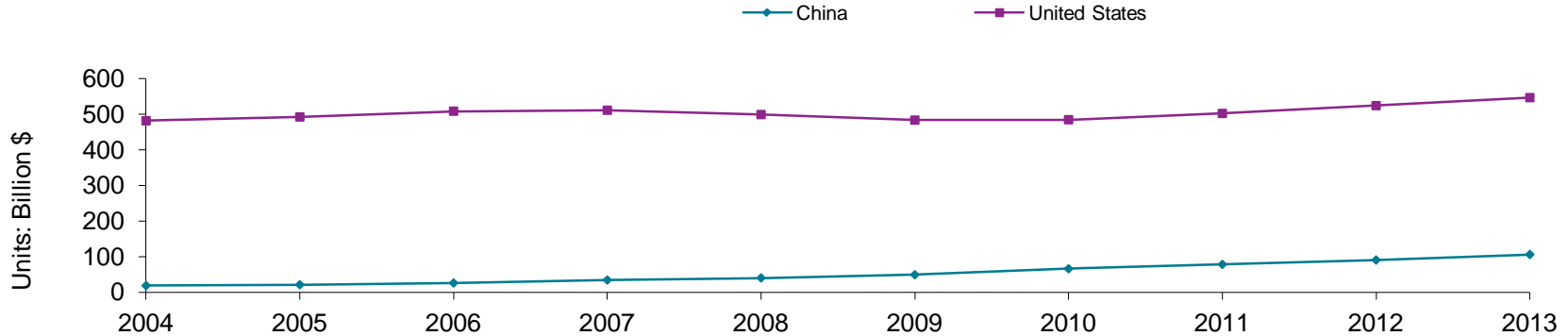
Insurance Density comparison



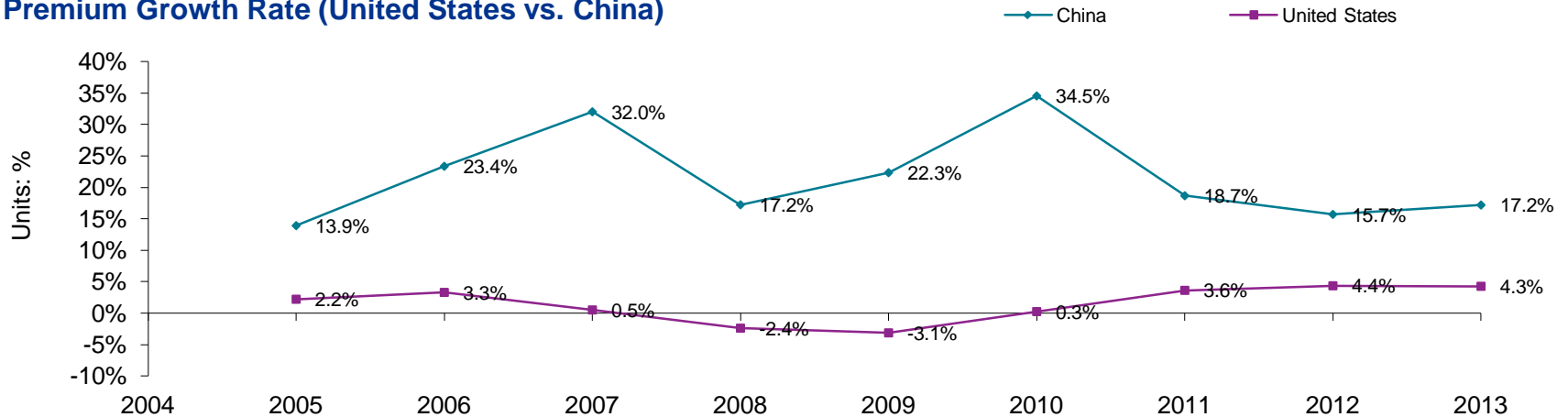
Despite the continuous strong growth in the Chinese insurance market, China is still in its early stage of insurance development.

Premium Size and Premium Growth

Premium Size (United States vs. China)



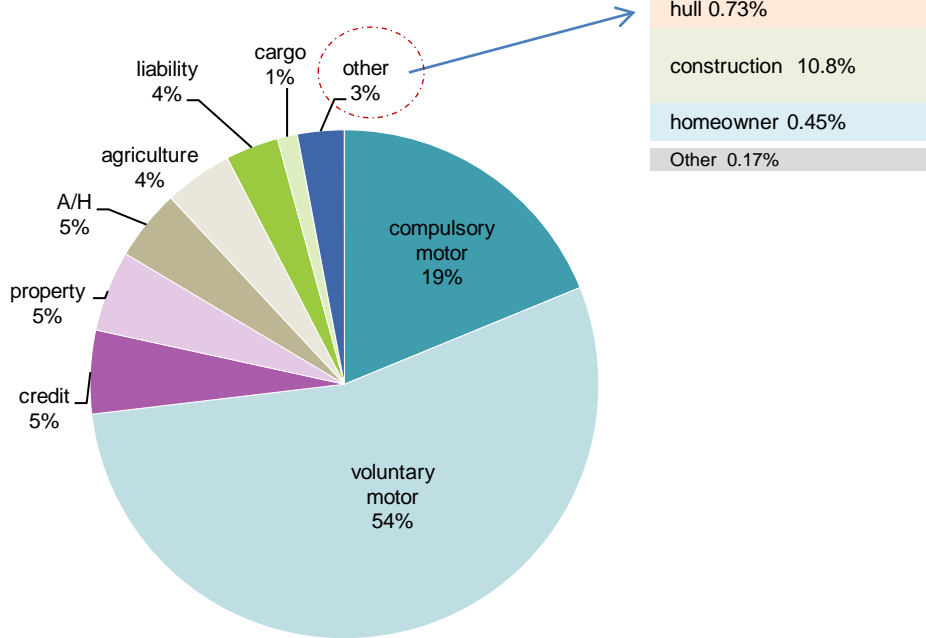
Premium Growth Rate (United States vs. China)



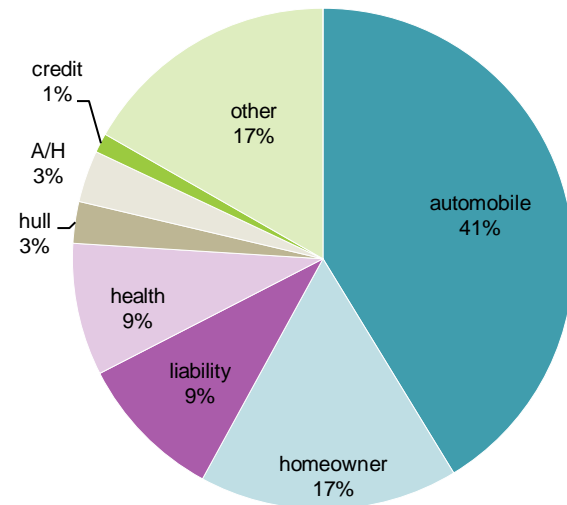
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Business Mix

Business Mix in China (2014)



Business Mix in the U.S. (2013)

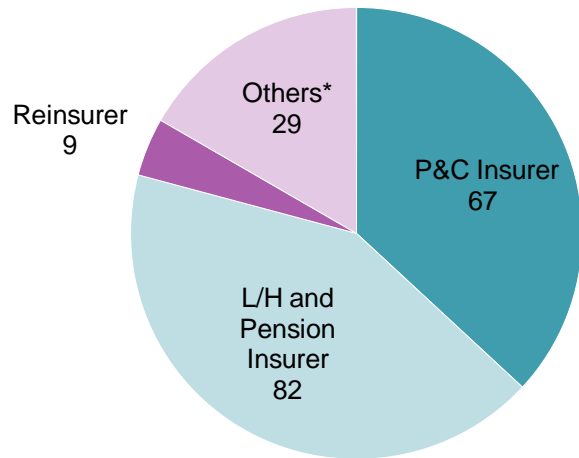


In China,

- ❑ Automobile insurance is 73% of the total
- ❑ Homeowner insurance share is minimal
- ❑ Credit and agriculture insurance are growing fast

Market Concentration

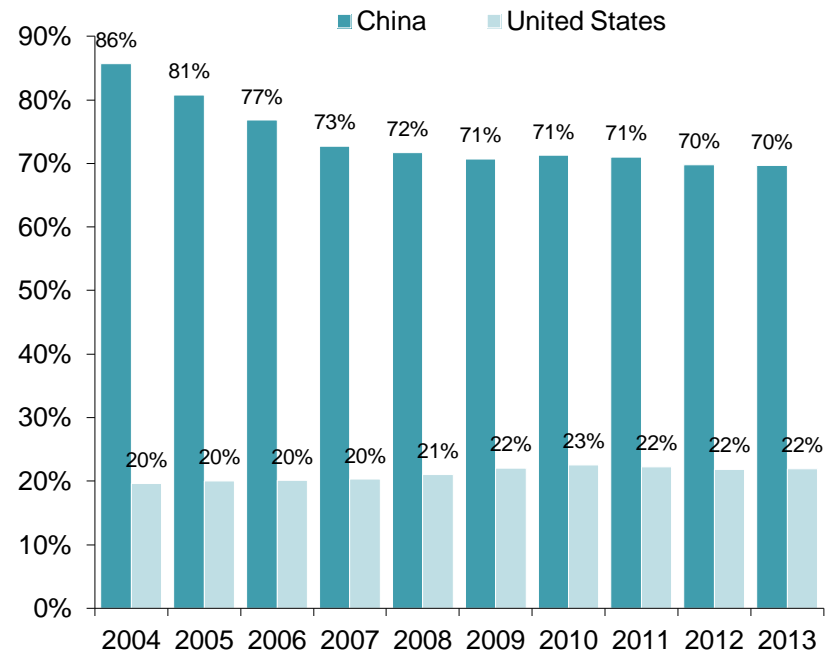
Insurance Market Players in China



*Others include insurance group holding companies and insurance asset management companies.

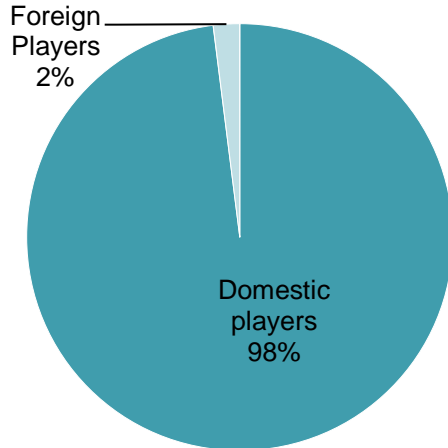
- Insurance market concentration is much higher in China, and there are fewer market players

Market Concentration (Top 4 insurance companies' market share)

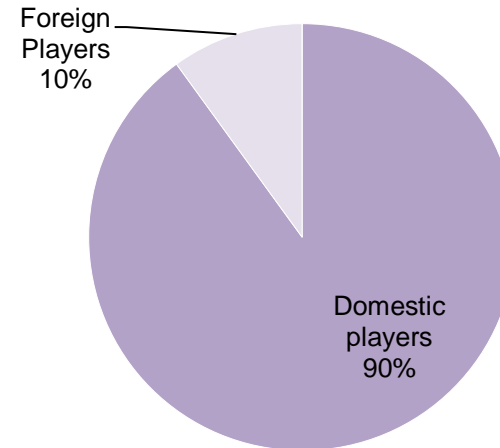


Domestic vs. Foreign Players

Market Share in China



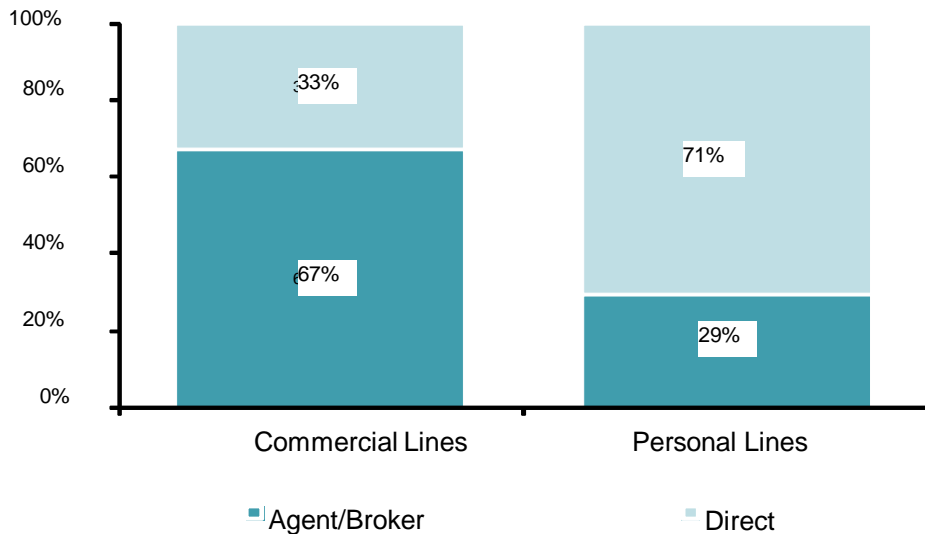
Market Share in United States



- While most large international groups have operations in China, the market is dominated by local players. The total life market share for foreign players is 5%, and **the total foreign P&C market share is merely 2%. The China operations of AIG, Starr, Liberty Mutual, Chubb, and XL have a combined market share of 0.4%.**
- **The foreign players have not outperformed their domestic counterparts in terms of distribution channel, products, operating model, or financial performance.**

Distribution Channels

United States (2011)



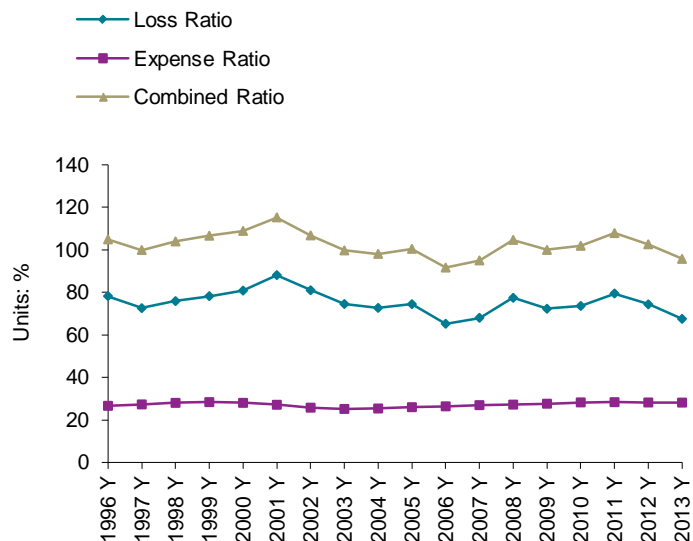
China (2012 and 2013)

	2012	2013
Direct Channels	35.9%	36.4%
Agent	58.1%	57.7%
Broker	5.9%	6.0%

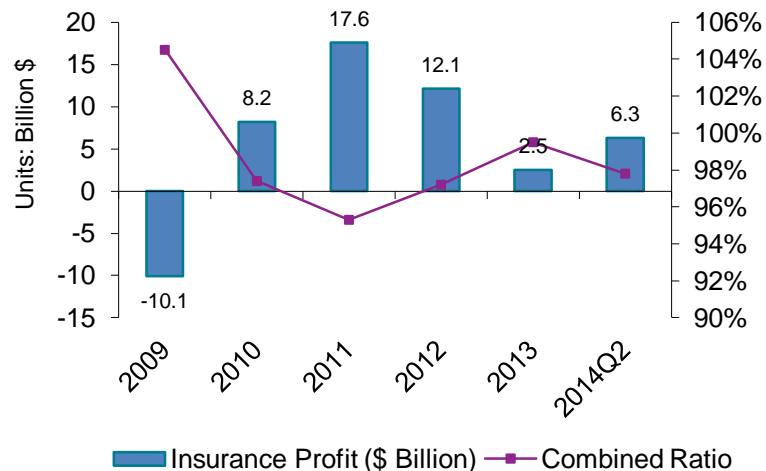
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Underwriting Performance

Combined Ratio in United States



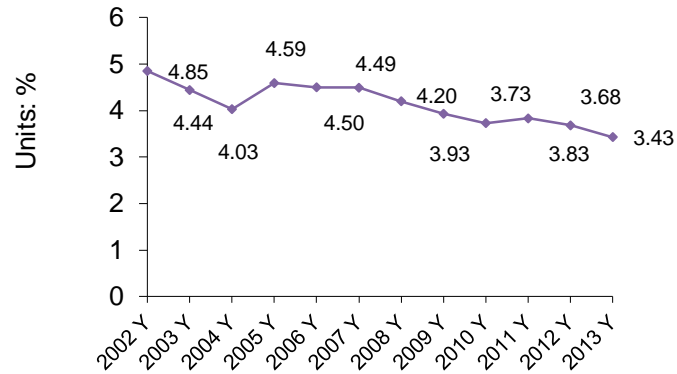
Profit and Combined Ratio in China



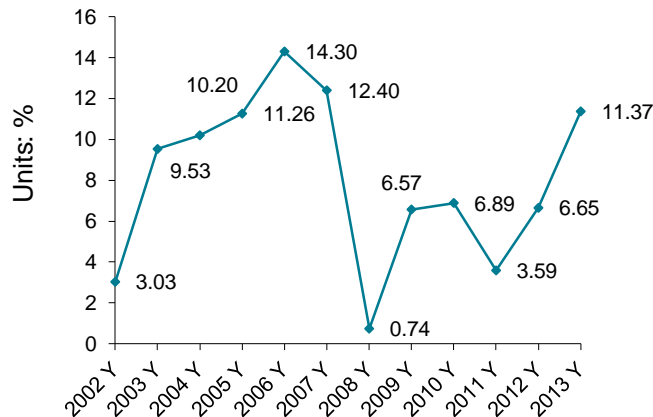
The China P&C market is entering a soft cycle, after experiencing its best combined ratio in 2011. The industry combined ratios are around 100% in both 2013 and 2014. In general, the Chinese companies are suffering from higher expense ratios than their U.S. counterparts. Catastrophe losses are not yet a driver in industry performance due to low product penetration.

Investment and ROE Performance

Investment Yield in the United States



ROE in the United States



Investment and ROE Performance in China

- ❑ The total P&C insurance capital increased 17% in 2014
- ❑ In China, the main investment is corporate bonds until 2013, when more risky classes of investments became allowed for insurers. Investment yields were at 3% to 4% for a long time
- ❑ Capital adequacy differs among insurance companies, and large companies faced with capital pressure due to fast premium growth
- ❑ The large listed P&C insurers were able to achieve over 20% ROE in recent years due to high leverage ratio (1:4 surplus to premium) and underwriting profit

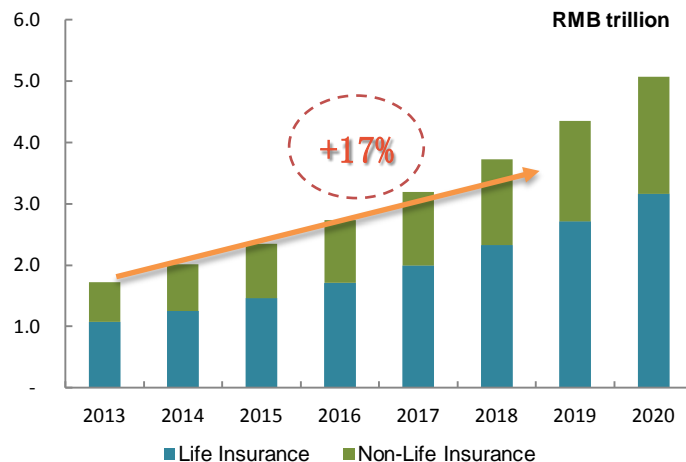
Central Government's New Policy Incentives



On August 13, 2014, *the State Council's opinions about speeding up the development of modern insurance services*, known as the “State Ten Opinions” were issued. For the first time, the “State Ten Opinions” formally recognizes that:

- ✓ Clarify the position of modern insurance industry in the development of the economy and society as a whole, point out the “insurance is a critical industry in the modern economy, a basic approach to risk management, and an important element for social civilization progress, economic development and social governance.”
- ✓ The healthy development of the insurance industry will provide protection to the stability and development of the society as a whole.

Projected 2014-2020 Insurance Premium Growth



Target of The “State Ten Opinions”

By 2020:

- ✓ Insurance premium is expected to reach RMB 5.1 trillion, with an average annual growth rate of 17%.
- ✓ Total insurance assets is expected to reach RMB 20 trillion.
- ✓ Premium for new policies is expected to reach RMB 1.2 trillion.

Recent Key Regulatory Developments

China



- ❖ State Council's policy push to accelerate the development of the insurance industry (the "State Ten Opinions")
- ❖ **China Risk Oriented Solvency System ("C-ROSS")**
- ❖ **Auto insurance (voluntary part only) rate reform, life insurance rate reform**
- ❖ Distribution (rectifying the agency channel, bancassurance, direct channels)
- ❖ Investment
- ❖ Products (health, tax deferred pension, agriculture, catastrophe, internet-oriented insurance)
- ❖ Market entry and exit
- ❖ Infrastructure (credit system, CIITC, actuarial)

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Auto Insurance Rate Reform Background

In China, auto insurance policies and forms are essentially uniform across the whole country. They comprise of:

Compulsory third-party liability Insurance (CTPL)

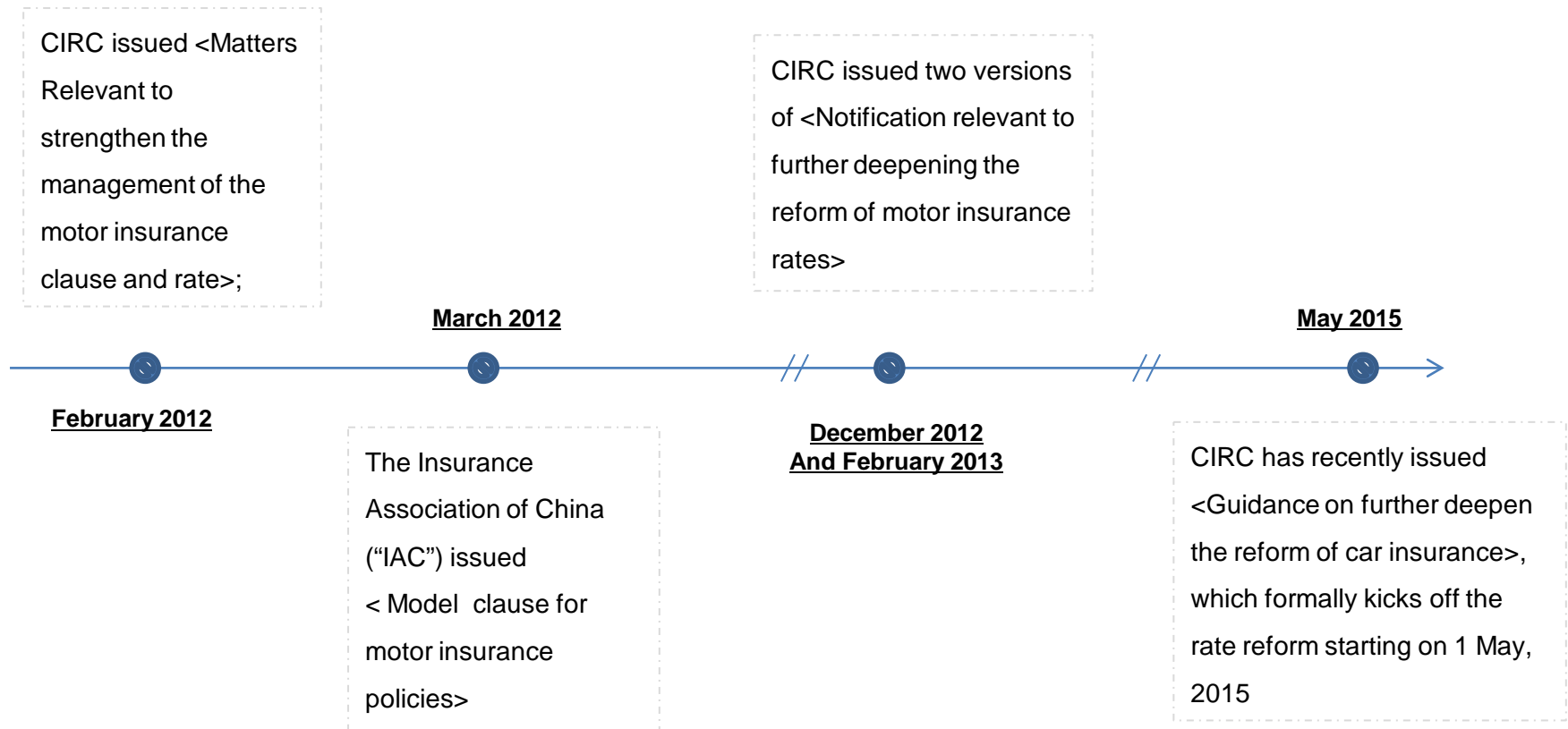
Introduced in July 2006. It is designed to provide minimum liability coverage and to generate break-even financial results for the industry.

Commercial motor insurance (CMI)

voluntary coverage and offers increased liability limits, passenger liability coverage and motor damage/theft coverage. The current premium rates have been tariffed since 2007, along with nearly uniform insurance policy terms. As a key part of CIRC's market-oriented reform agenda, the CMI rate reform is gradually taking its shape.

- ❑ **Insurers are suffering from the inability to adjust rates for claim inflation or use more actuarially sound pricing**
- ❑ **Low market efficiency, money is made by other players in the insurance value chain**
- ❑ **Auto insurance rates have become only fixed on paper, resulting many market conduct issues**
- ❑ **Customers are complaining about the limited product choices and poor services, lots of negative media attention**

Development Timeline of The Rate Reform:

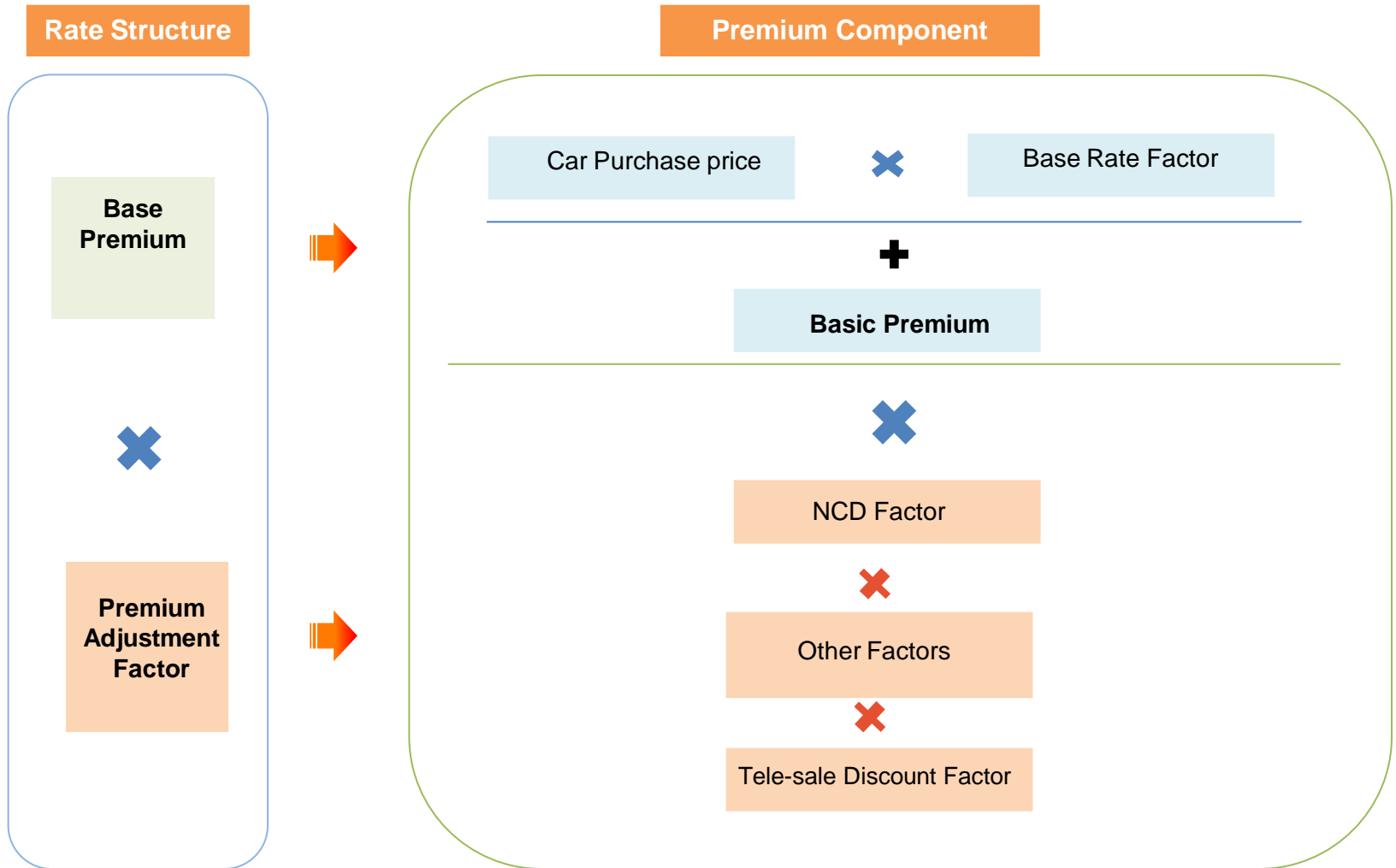


Industry-wide Rate Research

Rate reform principals

- 1 Smooth transition**
 - No significant overall rate level change pre and post-reform
 - Improve actuarial rate equality and introduce proper level of price competition
 - Control individual policyholder rate level changes
- 2 Fair and credible**
 - Two separate groups of research teams (independent consultant vs. a team of company actuaries)
 - Ensure rate calculation accuracy
- 3 Plan for the future**
 - Establish the mechanism and methodology for industry data collection, cleansing, and analysis
 - Set up foundation for making industry pure premium tables

The Current CMI Rate Structure



The New CMI Rate Structure

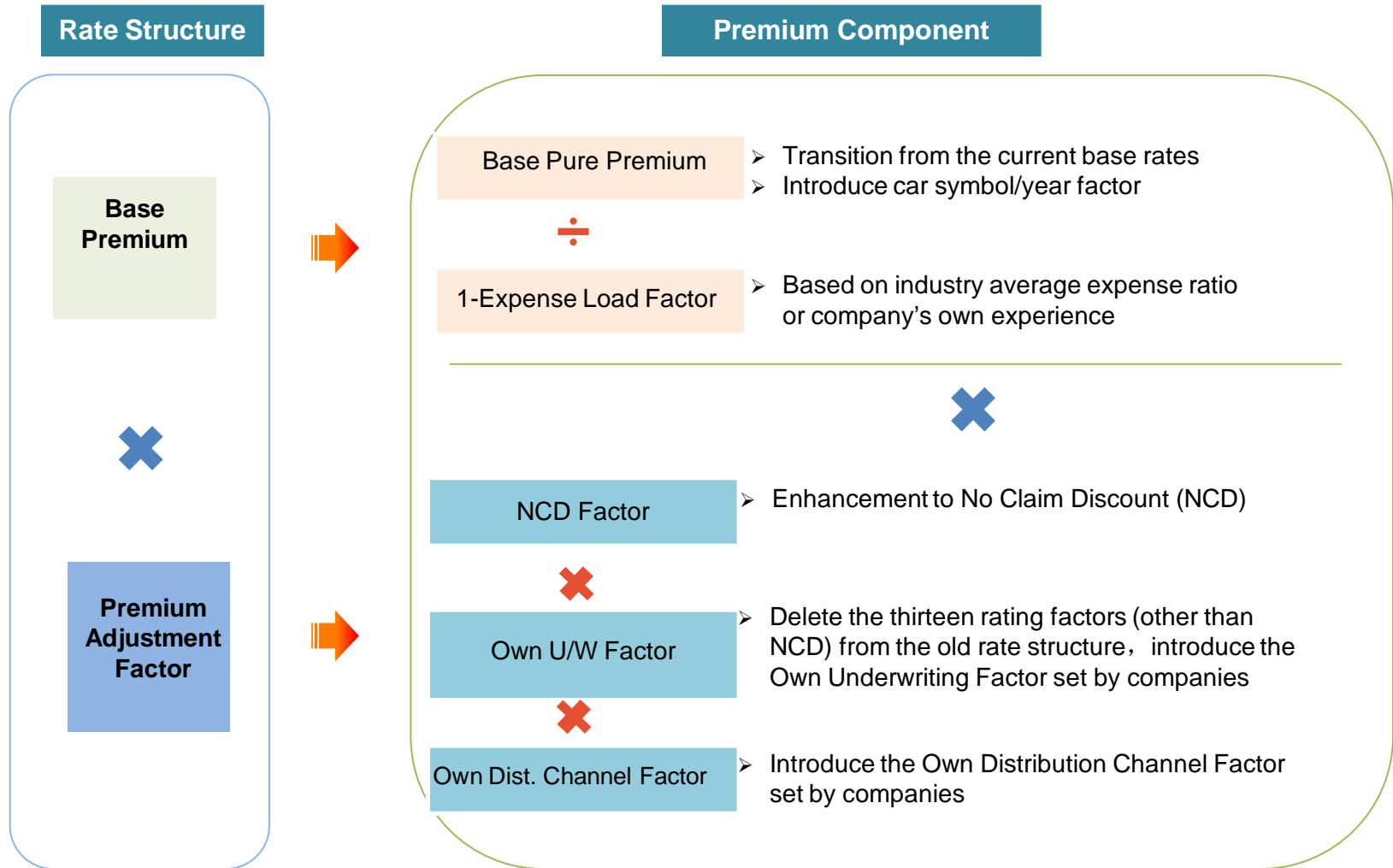


Illustration of The Rate Structure Changes

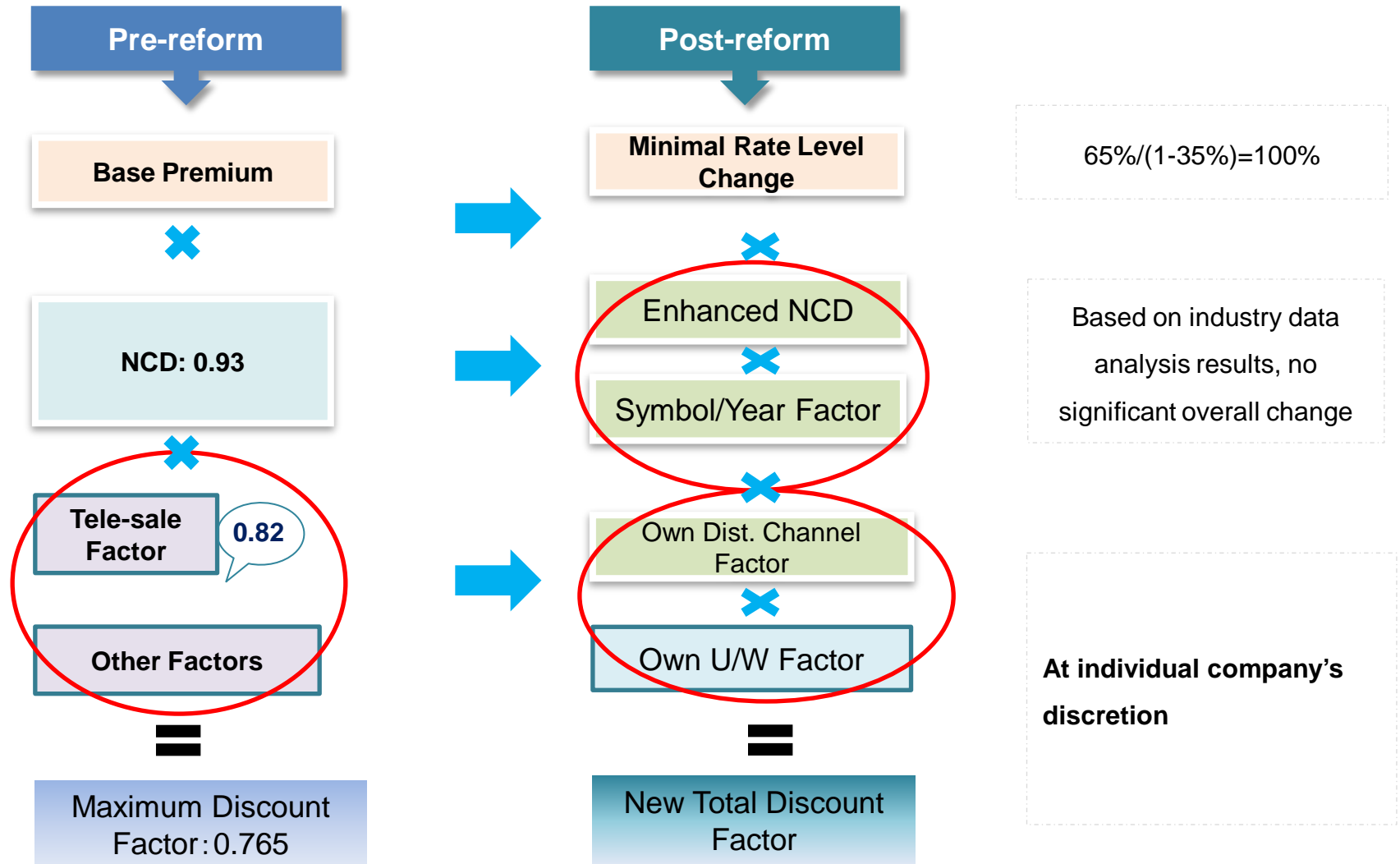


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The Current China Insurance Solvency Regime (C-SI)

C-SI Facts

- ❑ Put in place in 2008, prudent asset and liability valuation
- ❑ Volume based fixed ratio capital requirement
 - **16%/18% of P&C insurance net premium**
 - 4% of life insurance reserve

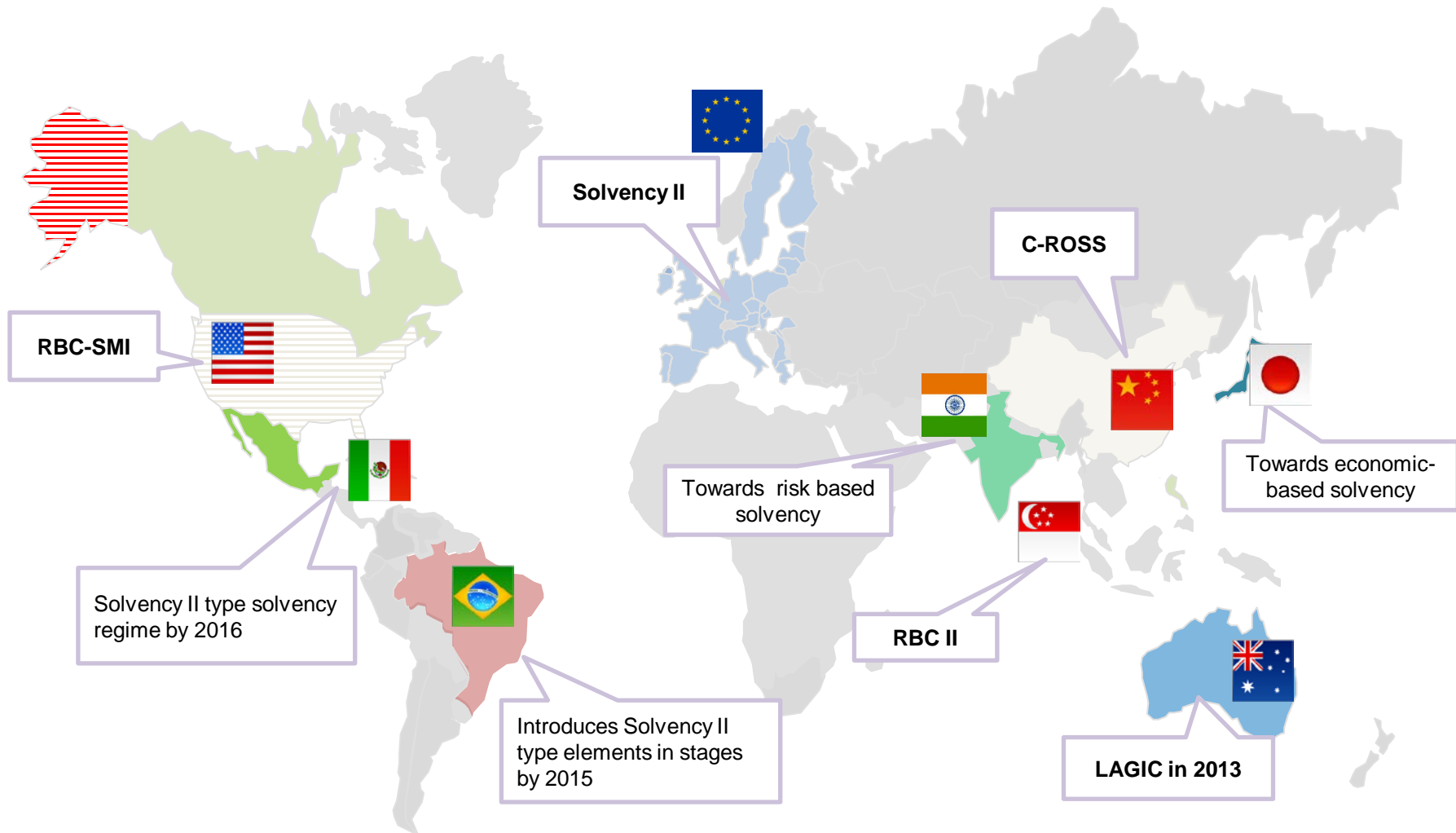
Main Issues

- ❑ Does not comprehensively reflect risks
- ❑ Low sensitivity to risks
- ❑ Capital requirement rather than risk management

❖ Difficult to meet the requirements of:

- The management and regulation on more versatile and complex risk profile.
- Market oriented reform of insurance market.
- Sustainable and healthy growth of insurance industry

Worldwide Reforms of Solvency Regulation



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Goals and Principles of C-ROSS

Overall Goals

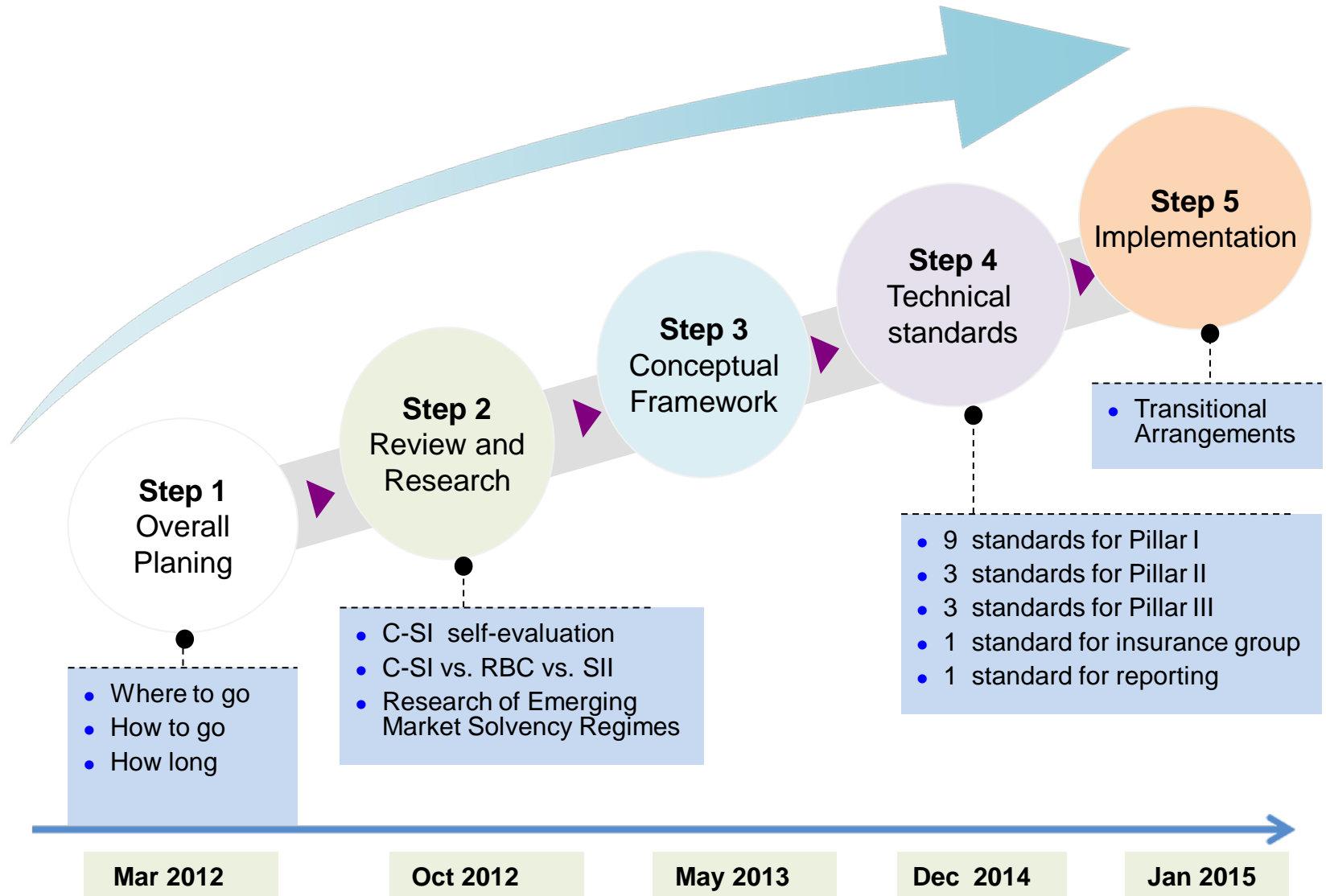


- Scientifically measure risks
- Promote effective risk and capital management
- Mechanism to enhance enterprise risk management
- Provide useful experience to other emerging markets

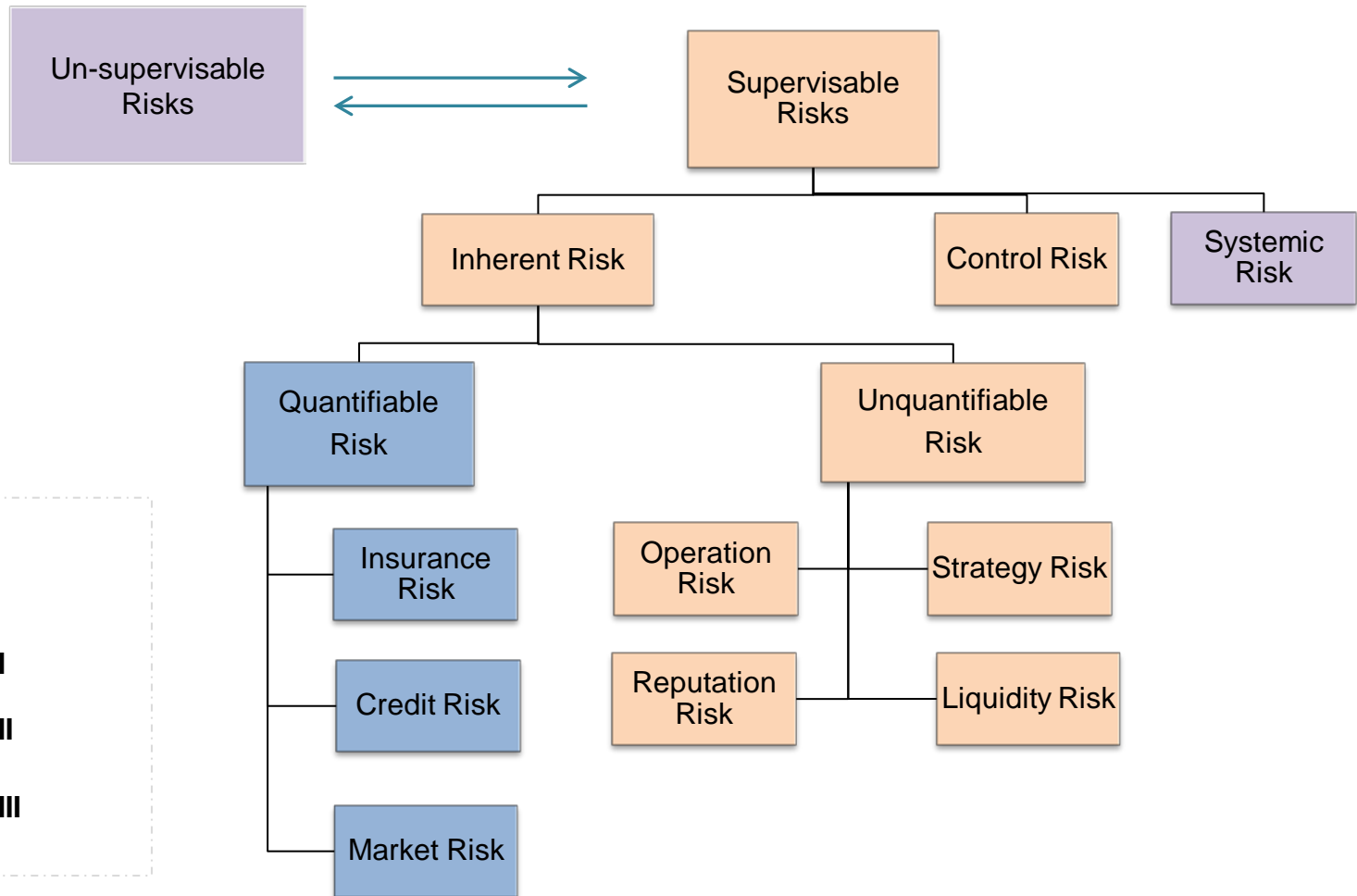
Core Principles



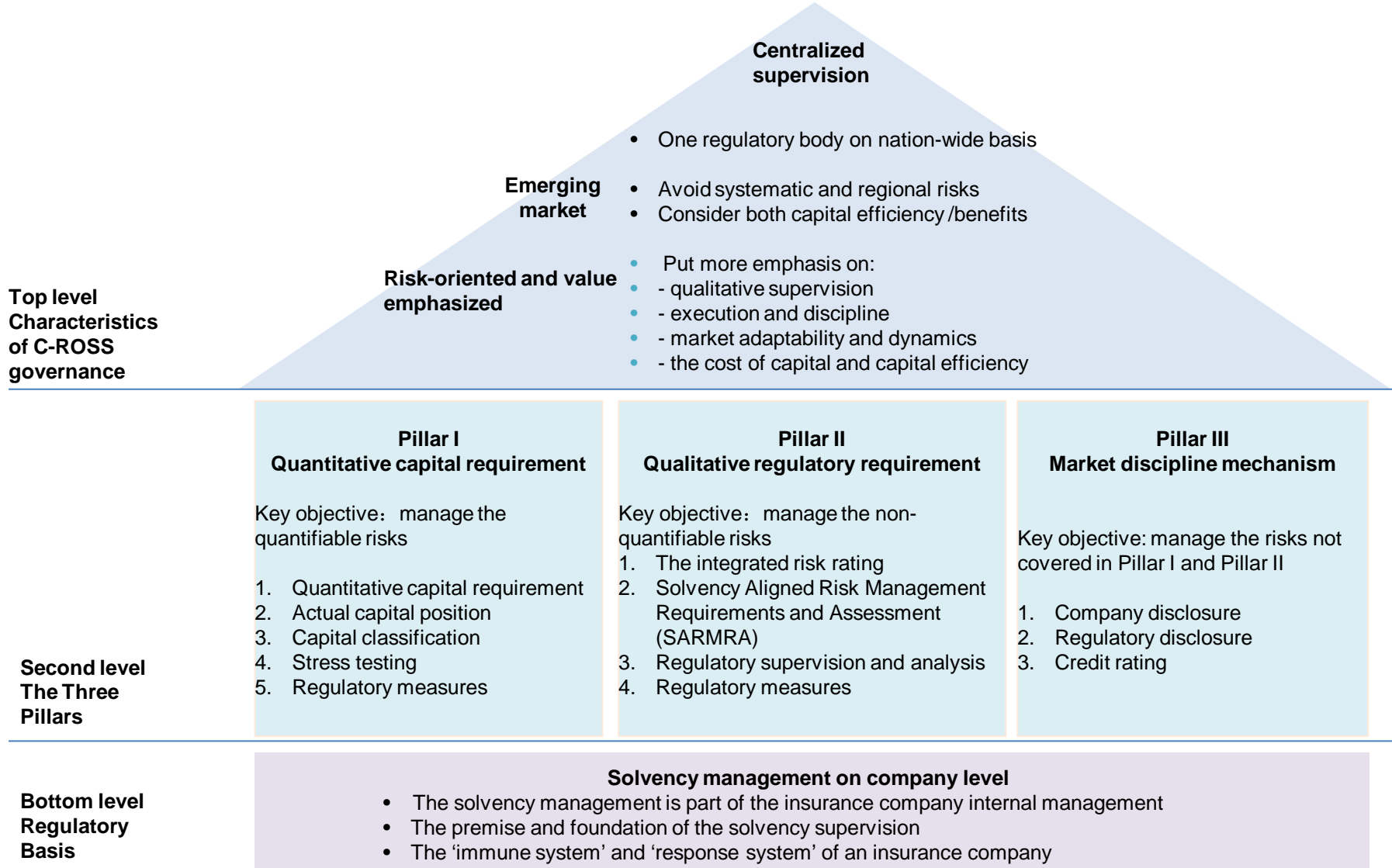
Development Timeline of C-ROSS



C-ROSS Risk Stratification

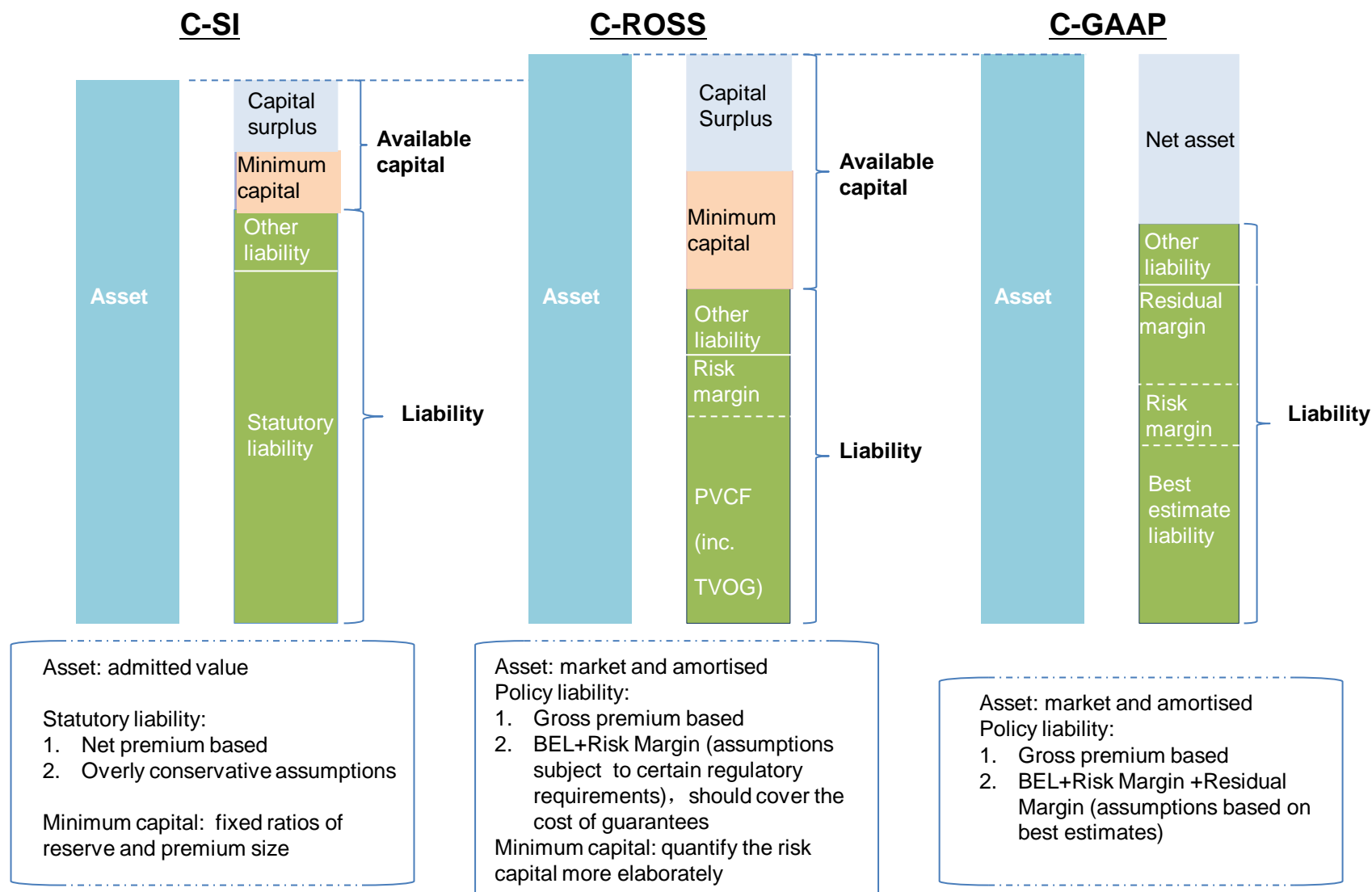


C-ROSS Three-Pillar Structure



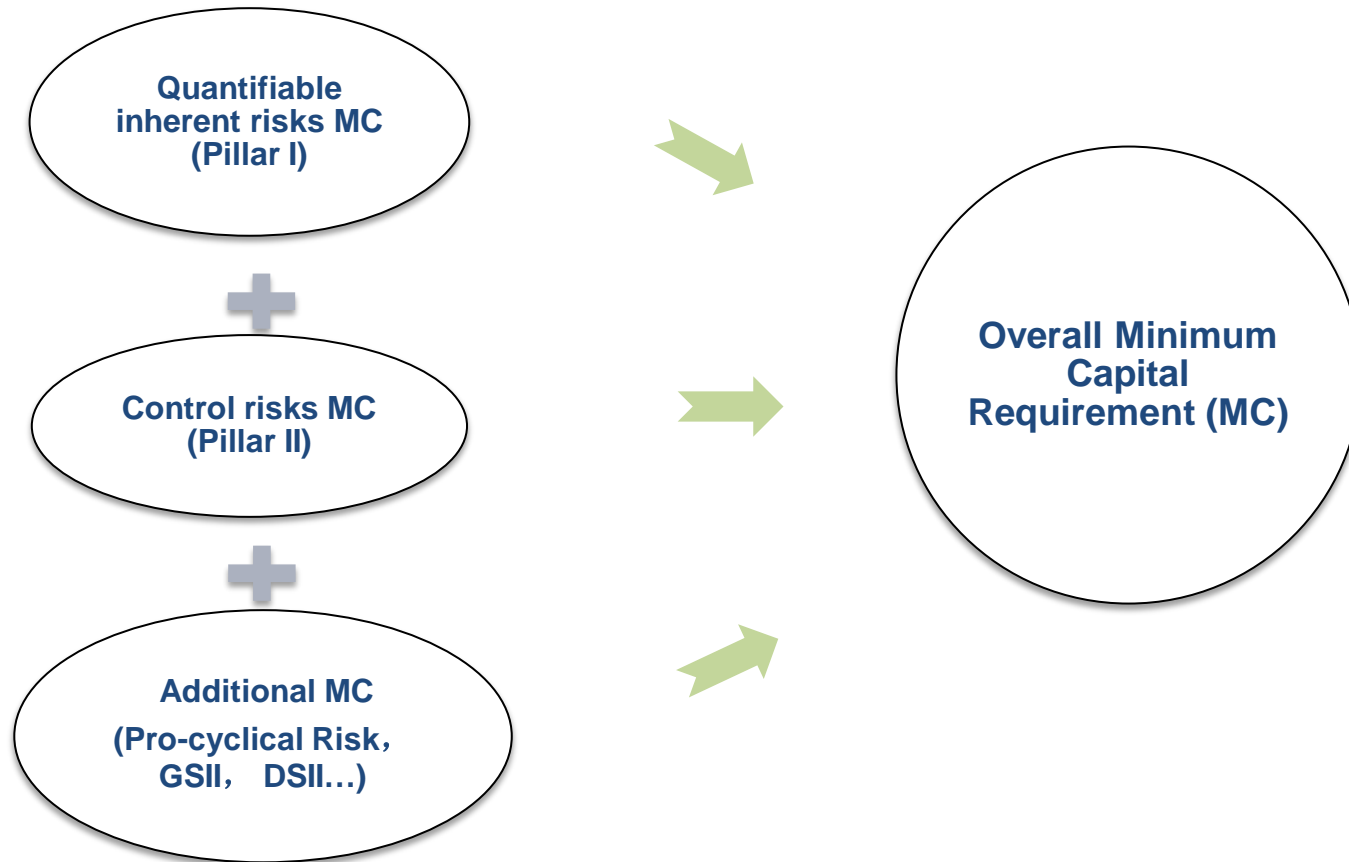
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Pillar I Methodology – Total Balance Sheet Approach

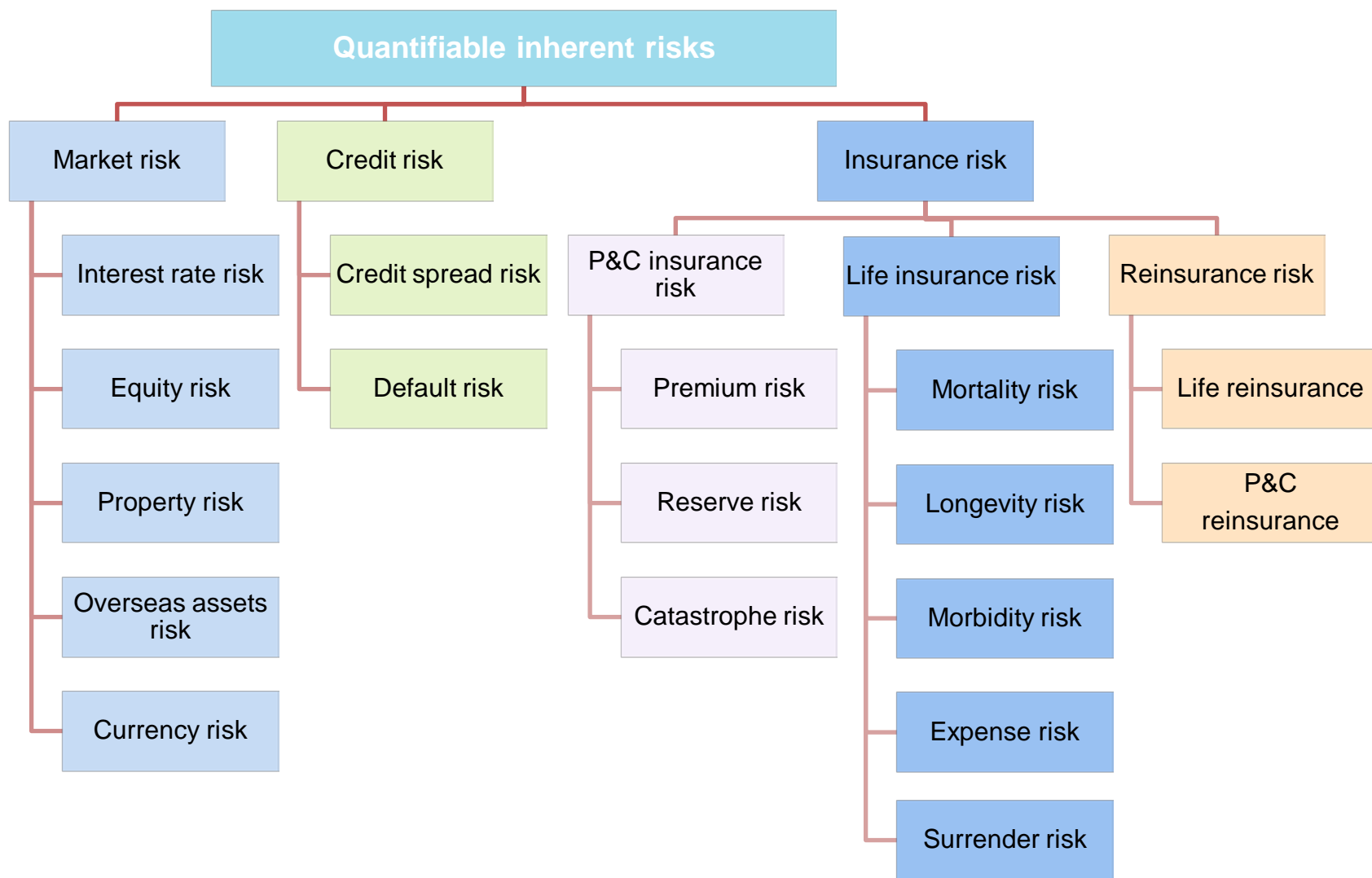


Pillar I Methodology – Capital Requirement

$$\text{Net Risk} = \text{Inherent Risk} \times \text{Control Risk} \times \text{Systemic Risk}$$



Pillar I Methodology – MC Components



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Pillar 1 Methodology - MC Calculations



➤ Composite factor based method:

$$MC = EX \times RF$$

which: EX is the risk exposure;

RF is the risk factor; $RF = RF_0 \times (1+K)$

RF_0 is the base risk factor, K is the characteristic factor

$$K = \sum_{i=1}^n k_i = k_1 + k_2 + k_3 + \dots + k_n$$

k_i is the characteristic factor based on specific risk or entity, n is the number of characteristic factors

➤ Scenario based method:

Used to calculate one year VaR;

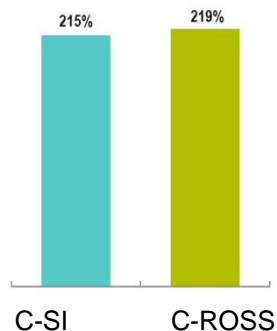
Applied on catastrophe risk for P&C, interest rate risk and insurance risk for life insurers

Pillar 1: Quantitative Testing Results

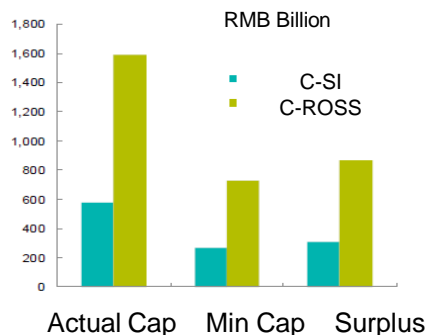
Although the change to overall industry solvency capital position is expected to be insignificant, the solvency position at individual company level should vary greatly, prompting capital injection need for many insurers and reinsurers.

Solvency Ratios: Industry

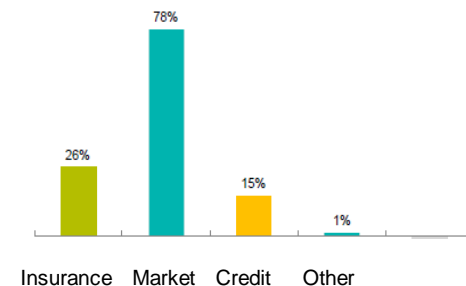
Life Companies



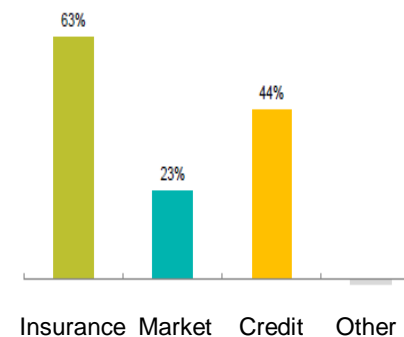
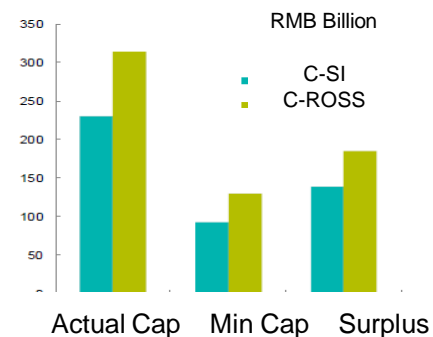
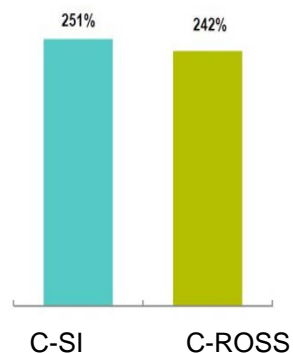
Actual Capital, Minimum Capital and Surplus



Minimum Capital Composition under C-ROSS



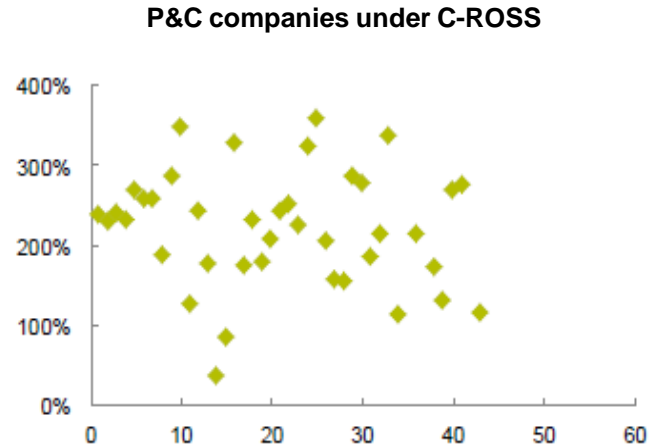
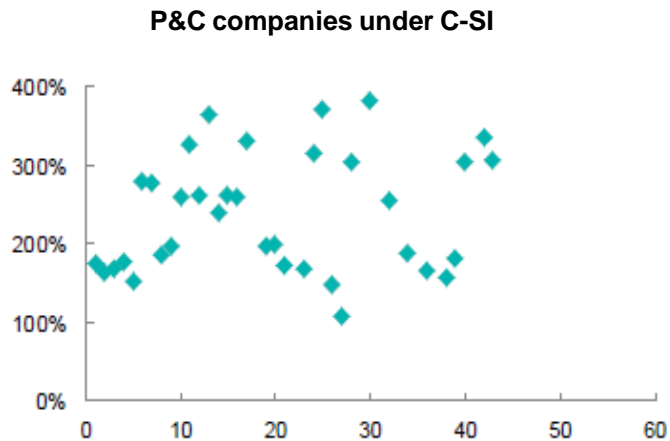
P&C Companies



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Pillar 1 Methodology - MC Calculations

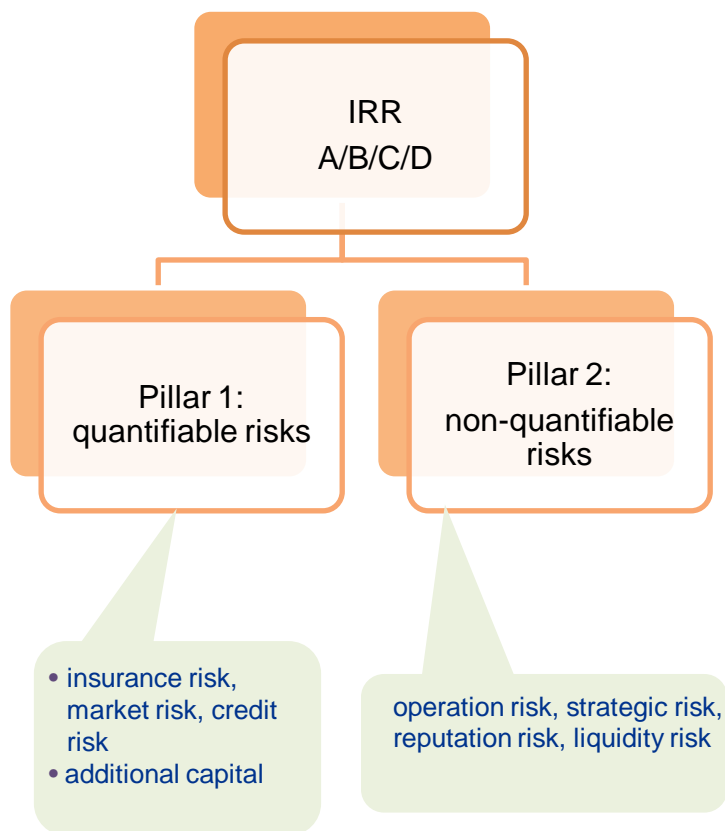
Company Level Solvency Ratios



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Pillar 2: Qualitative Supervisory Requirement

Integrated Risk Rating (IRR)



Risk Management Requirements and Assessment Framework (SARMRA)



Liquidity Risk Management

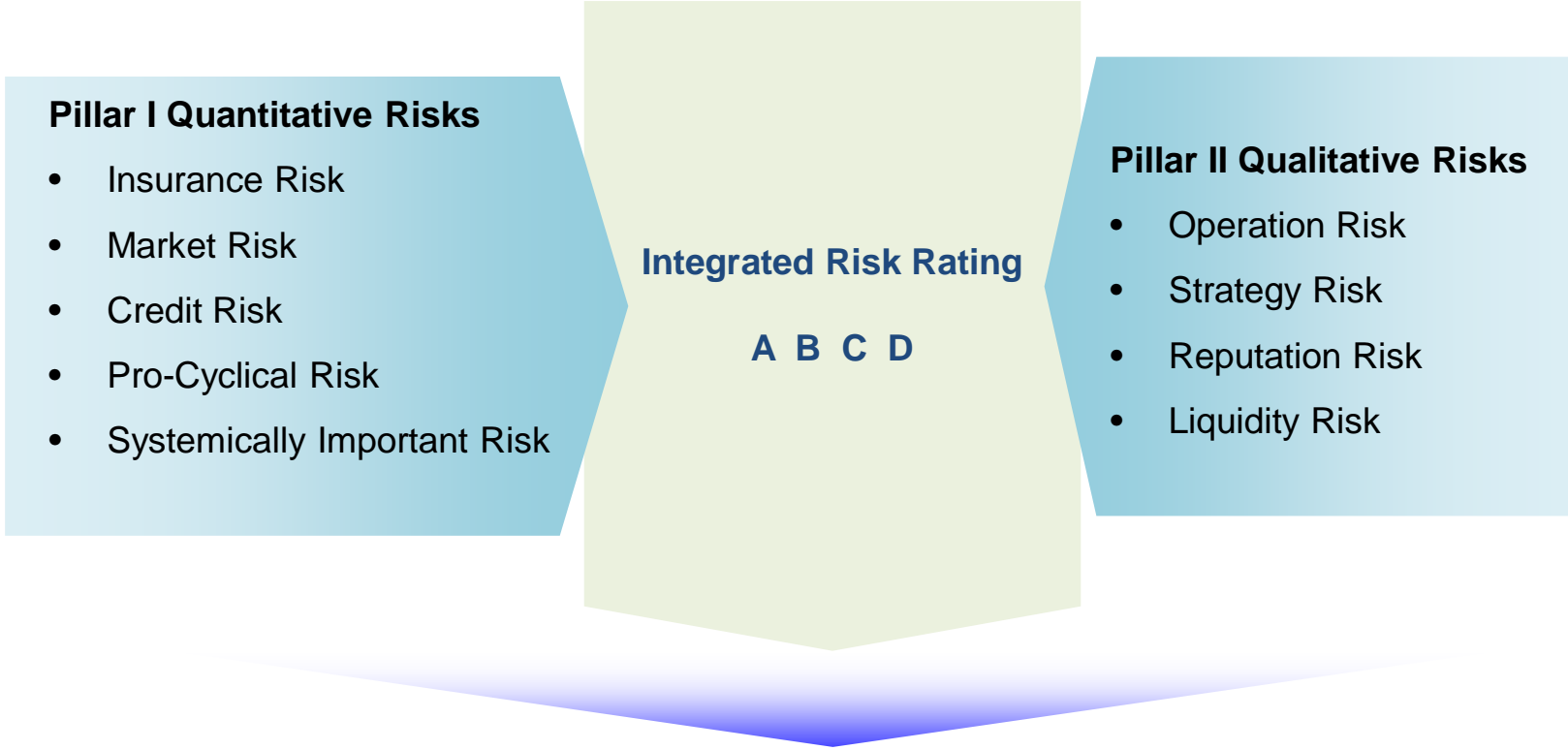
Key Indicators:

- ❖ Net cash flows
- ❖ Comprehensive Liquidity Ratio
- ❖ Liquidity Coverage Ratio

Assessed by CIRC each quarter

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Integrated Risk Rating (IRR)



Pillar I Quantitative Risks

- Insurance Risk
- Market Risk
- Credit Risk
- Pro-Cyclical Risk
- Systemically Important Risk

Integrated Risk Rating

A B C D

Pillar II Qualitative Risks

- Operation Risk
- Strategy Risk
- Reputation Risk
- Liquidity Risk

Regulator assesses the overall risk of the insurance company quarterly

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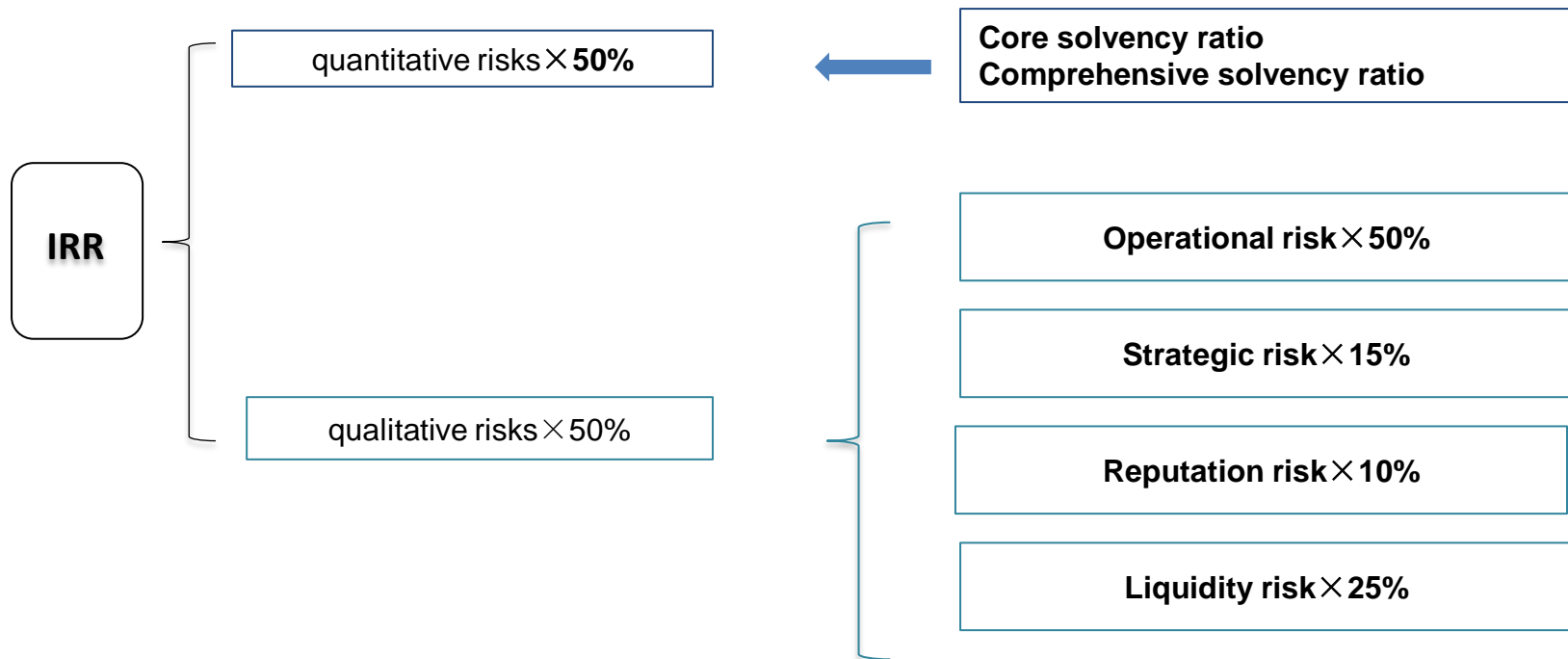
Integrated Risk Rating (IRR)

CLASS	Quantitative risk	Qualitative risk
A	solvency ratio meet regulatory requirements	Small operational risk, strategic risk, reputational risk and liquidity risk
B	solvency ratio meet regulatory requirements	Relatively small operational risk, strategic risk, reputational risk and liquidity risk
C	solvency ratio meet or not meet regulatory requirements	Relatively big risks such as operational risk, strategic risk, reputational risk or liquidity risk
D	solvency ratio meet or not meet regulatory requirements	Severe risks such as operational risk, strategic risk, reputational risk or liquidity risk

Integrated Risk Rating (IRR)

Weighted average method

Depending on the absolute level and variance of the solvency ratio



Influenced by risk factors such as external environment, the distribution characteristic, expected loss and historical data etc.

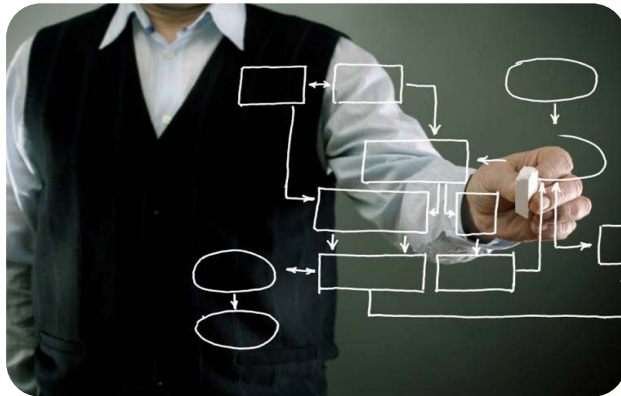
Solvency Aligned Risk Management Requirement and Assessment (SARMRA)

Risk Management Requirement and Regulatory Assessment

Risk Management Requirements

Risk Management Evaluation

Regulator publishes requirements on risk management

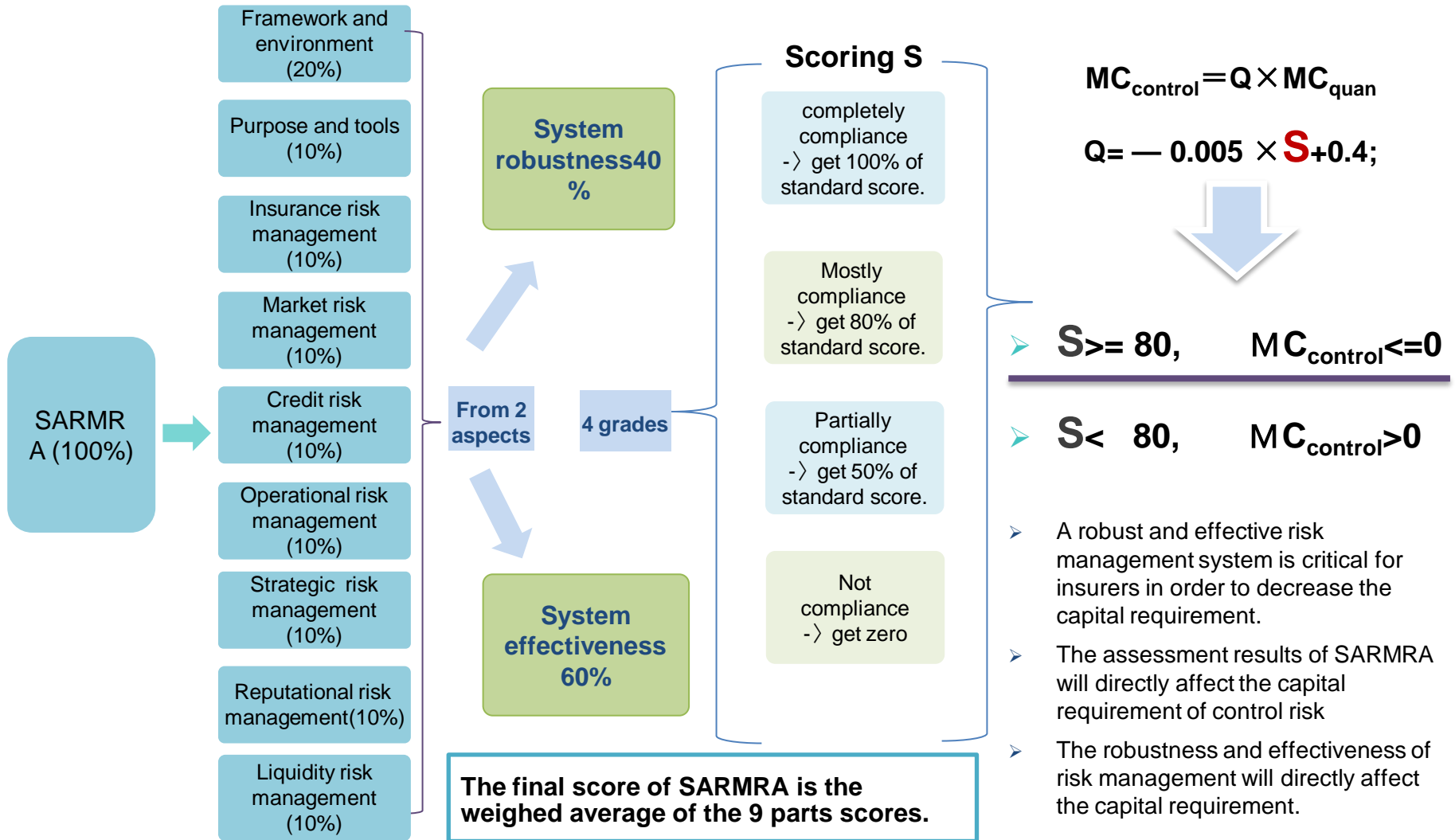


Regulator evaluates the risk management abilities of the insurers

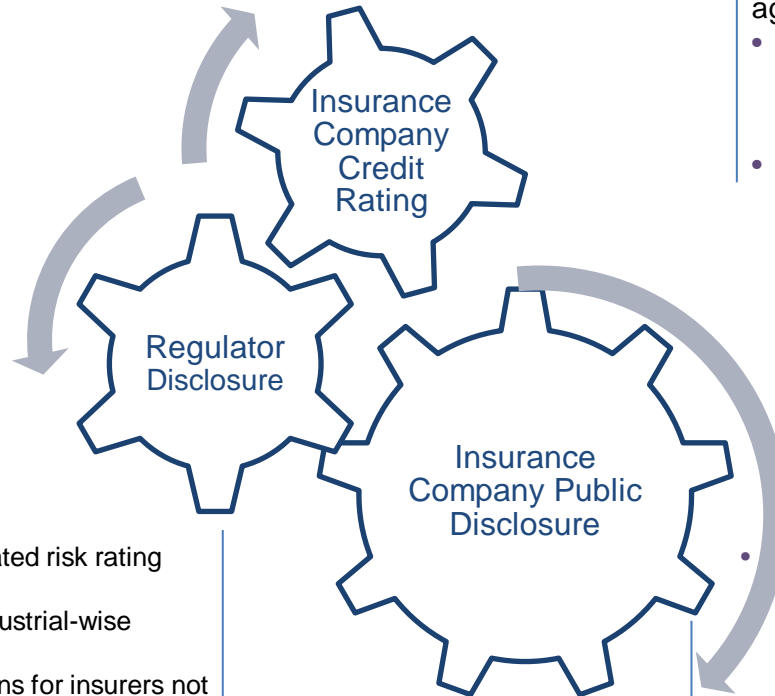
	First ED	Second ED	Third ED
Assessment and assessment of inherent risk and internal control risk	Quantifiable inherent risk measured by capital requirement, internal control risk identified by solvency and risk evaluation	Internal control risk and quantifiable inherent risk measured by minimum capital, unquantifiable inherent risk evaluated by comprehensive risk rating method	
Foreign-owned reinsurance company Chinese branches	The same classification rules as domestic companies	Tier II	
Risk management committee	Insurance company should set risk management committee within the board	Insurance subsidiaries of an insurance group (holding) company under specific requirements may not setup a risk management committee; Risk management responsibilities are performed by senior management for branches of foreign insurance companies without the board of directors; Tier II companies may not setup risk management committee	
Head of risk management committee	Veto rights on key decisions	N/A	
Frequency of senior management submitting company solvency level and risk management situation to Risk management committee	Quarterly		Yearly
Professionals request for Risk management department	Tier I: at least 10 risk management staffs with professional background Tier II: without Risk management department setup risk management position and hire professionals	Tier I: at least 8 risk management staffs with professional background, and 5 of which must have more than 3 years relevant experience; Tier II: without risk management department: assign suitable department in charge of it, and at least 2 professionals with more than 3 years experience	
Frequency of Internal audit department evaluating the implementation of risk management	Regularly	Yearly	
The weight of risk management indicator in Tier I company assessment	The weight is no less than 70% on assessment indicators for Risk management department and senior management in charge of risk management, the weight is no less than 20% on assessment indicators in other department and senior management	The weight is no less than 60% on assessment indicators for risk management department and senior management in charge of risk management, the weight is no less than 15% on assessment indicators in other department and senior management	

Note: the information contained herein is based on our analysis of data from SNL Financial, CIRC, and a few industry publications. It is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

Control risk Capital Requirement



Pillar 3: Market Discipline Mechanism



- > Quarterly integrated risk rating results
- > Summary of industrial-wise solvency status
- > Regulatory actions for insurers not complying with disclosure requirements

Insurers are encouraged to be rated by rating agencies

- Public tendering, at least 3 rating agencies should be invited, and at least 1 of them should be domestic.
- Rating classes logics should be explained to CIRC

- **Quarterly Report:** within 25 days after quarter end
 - Company Information
 - Board & Management Statements
 - Basic information/Key indicators
 - Management analysis and discussion
 - Major events
 - Admitted capital/Minimum capital
 - Classified supervision (IRR)
 - Risk management framework
 - Independent opinion from external institutions
- **Quarterly Bulletin:** within 12 days after quarter end
- **The 4th Quarter Audited Report: before 30th, April the following year**



cutting through complexity

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