China Risk Oriented Solvency System

—— A practical view from an Emerging Market

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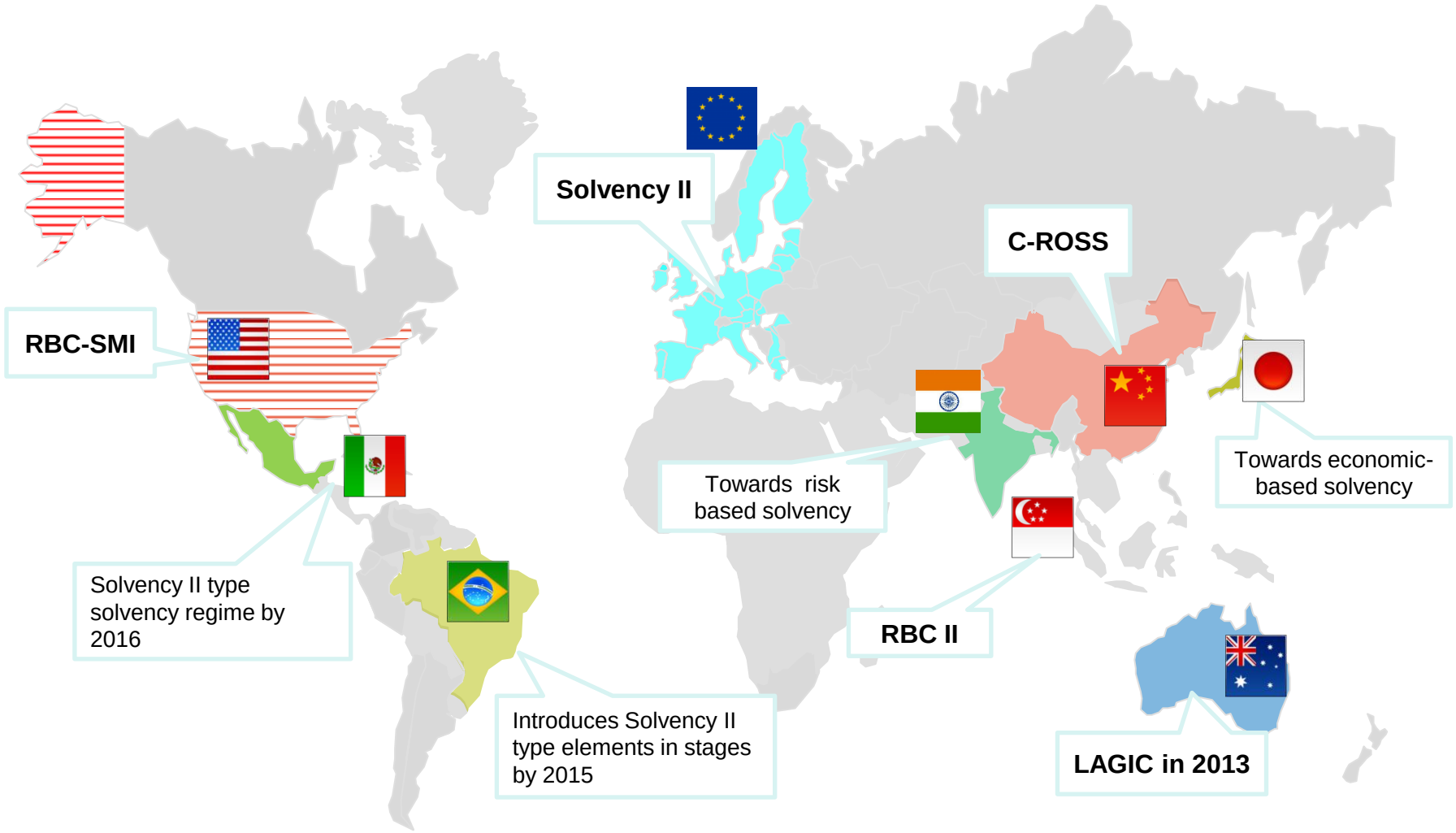
Worldwide Reforms of Solvency Regulation



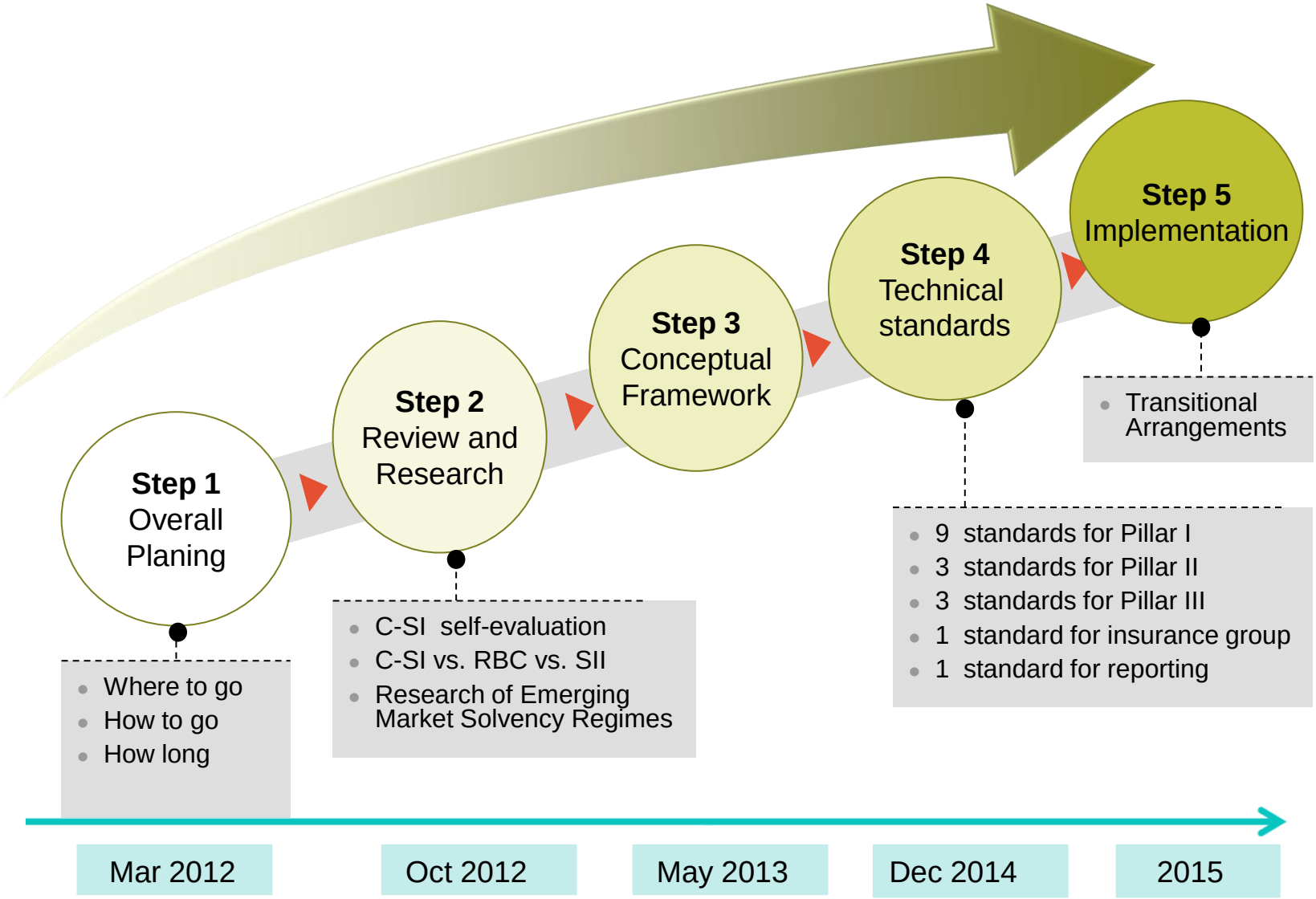
IAIS: Global regulatory architecture

Regulation Tiers	Legal Entity	Group	IAIG	G-SII
1st Tier: ICPs	Apply to legal entities	ICPs that apply to legal entities and groups		
2nd Tier: Com Frame		ComFrame that applies to IAIG		
3rd Tier：G-SII		G-SII package (BCR, HLA etc)		

Global regulatory model may not perfectly suit the emerging market

Hypotheses from Mature Market	Proposed Global Model
Complete Market Hypothesis Perfect Market Hypothesis Efficient Market Hypothesis	Complete Market consistent valuation
Mature and stable mechanism and regime, with slow market growth	Quantitative models to manage risks
Strong risk management awareness and ability within the insurance institutions	Self-assessment based system
Sufficient professional human resources within the insurance industry and the regulatory bodies	Scenario method Internal model

Timetable of C-ROSS
China Risk Oriented Solvency System



Goals and Principles of C-ROSS

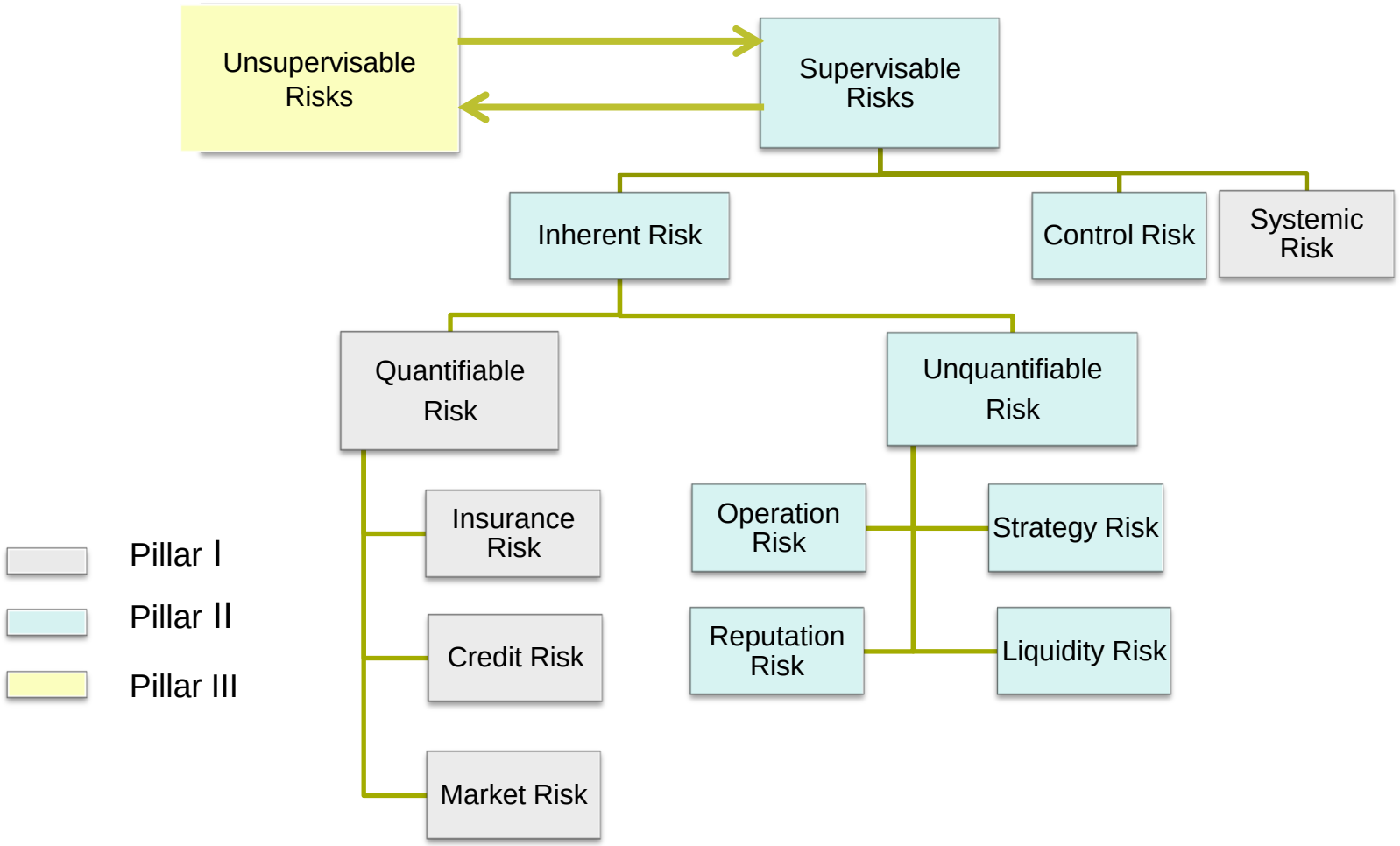
Overall Goals

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

Core Principles

- Risk oriented
- Characteristics of China's market
- Internationally comparable

Risk Stratification



Three-Pillar: Risks and Regulatory Structure

Quantitative Capital Requirement

Quantifiable Risks
- insurance Risk
- Credit Risk
- Market Risk

Regulatory Tools
- Quantitative capital requirement
- Actual capital assessment
- Capital stratification
- Stress test
- Regulatory measure

Regulatory Evaluation
- Comprehensive solvency ratio
- Core solvency ratio

Qualitative Supervisory Requirement

Unquantifiable Risks
- Operation Risk
- Strategy Risk
- Reputation Risk
- Liquidity Risk

Regulatory Tools
- Integrated risk rating（IRR）
- Solvency aligned risk management requirements and assessment （SARMRA）
- Liquidity risks
- Analysis and examination
- Regulatory Measure

Regulatory Evaluation
- IRR grade
- Control risk score

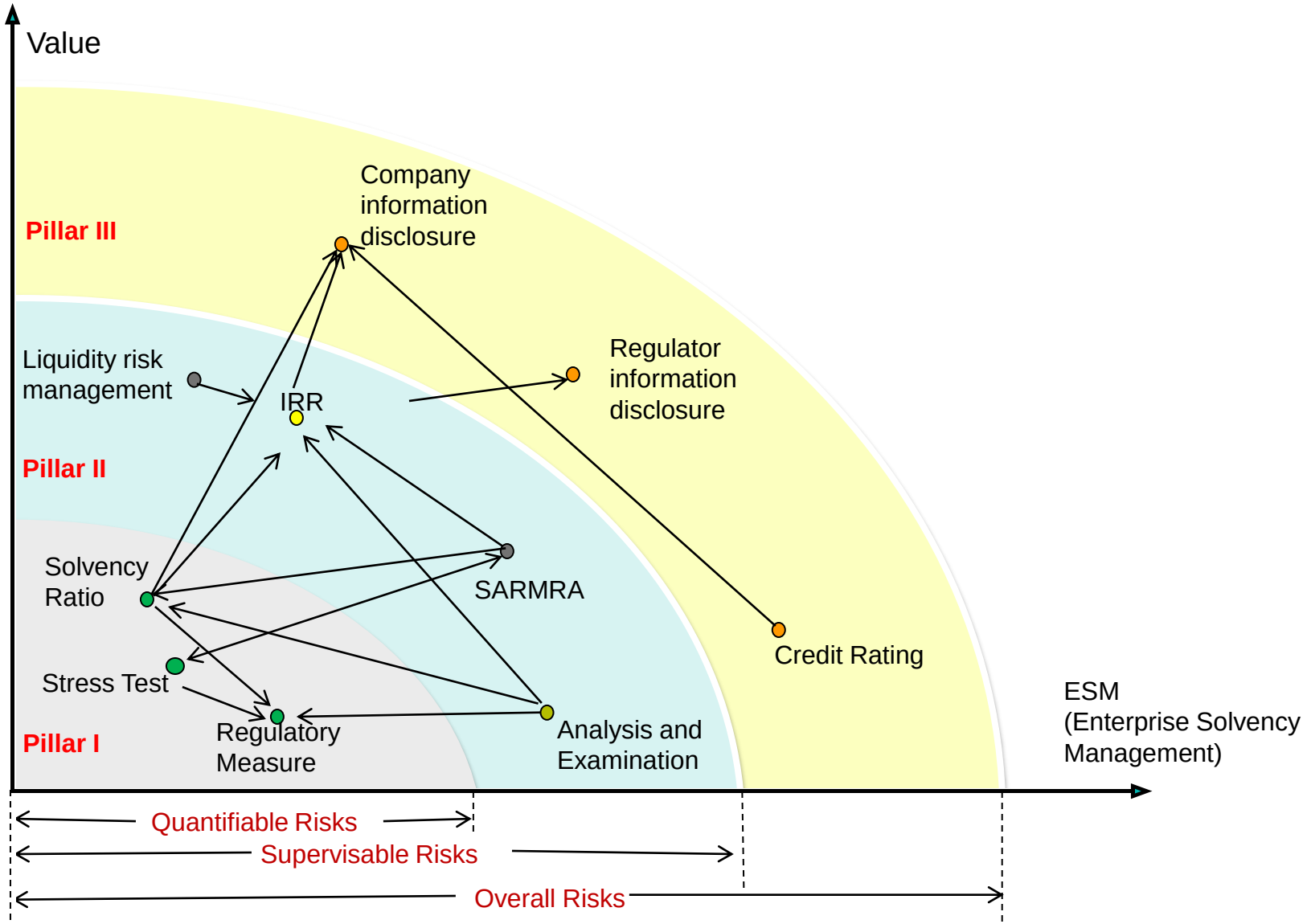
Market Discipline Mechanism

Unsupervisable Risks

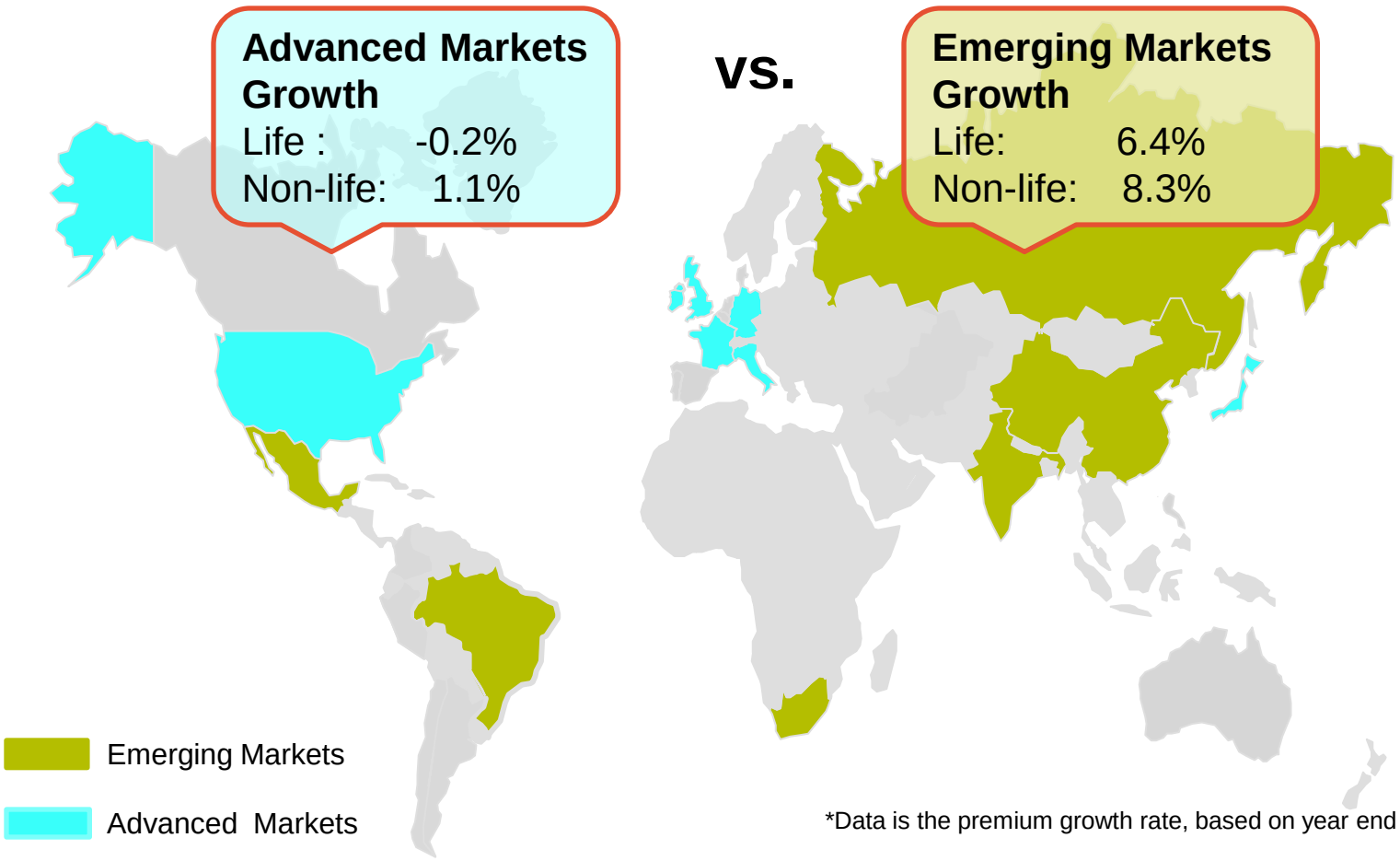
Regulatory Tools
- Company information disclosure
- Regulator information disclosure
- Credit Rating

Market Evaluation
- … …
- … …

Three-Pillar: Capital to balance Risks and Value



Global regulatory development should pay more attention on more and more important emerging markets



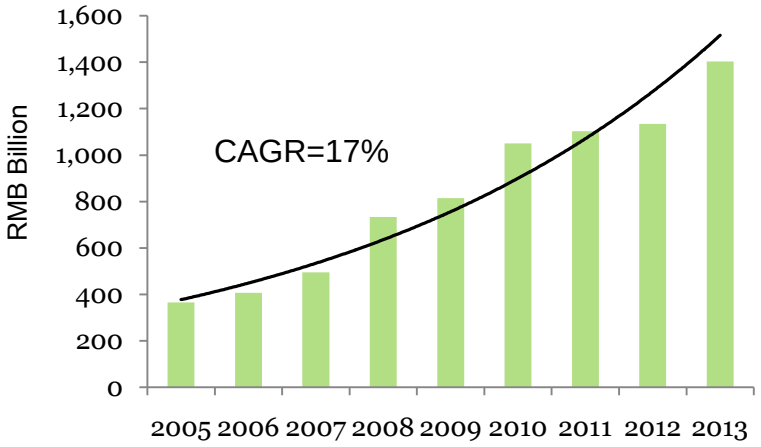
*Data is the premium growth rate, based on year end 2013.

Thank You!

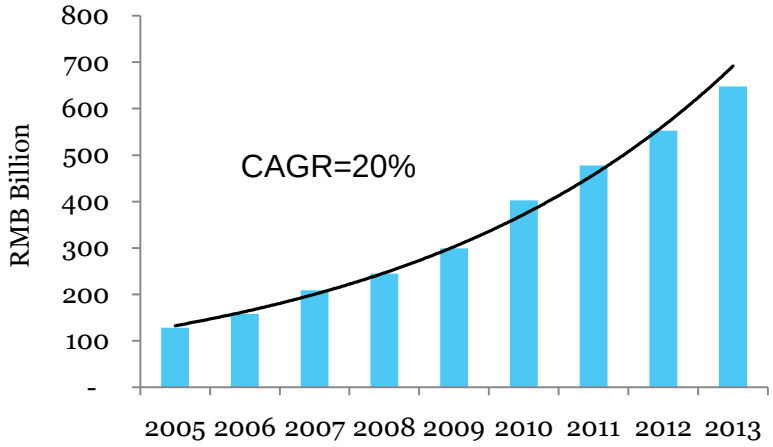
Annex:

2013 Overview of China Insurance Market

China Life Insurance Market Size (Direct Written Premium)



China Non-Life Insurance Market Size (Direct Written Premium)



❑ Life Insurance

- The past ten years have been the golden era for the rapid growth of the life insurance market in China.
- Main drivers were:
  - Continuous high growth in GDP
  - Aging population
  - Urbanization
  - Change in the social benefits.
- Insurance premium mainly came from participating business and bancassurance channel

❑ Non-Life Insurance

- Motor insurance has dominated the Chinese non-life market. Commercial property insurance, agriculture insurance and liability insurance are the next three most significant product lines.
- Motor insurance class of business will continue to dominate given the enormous growth in the motor industry and high demand from consumers for car ownership.
- Natural catastrophe events in China in recent years have raised awareness of the need for property insurance and catastrophe insurance.

Annex:

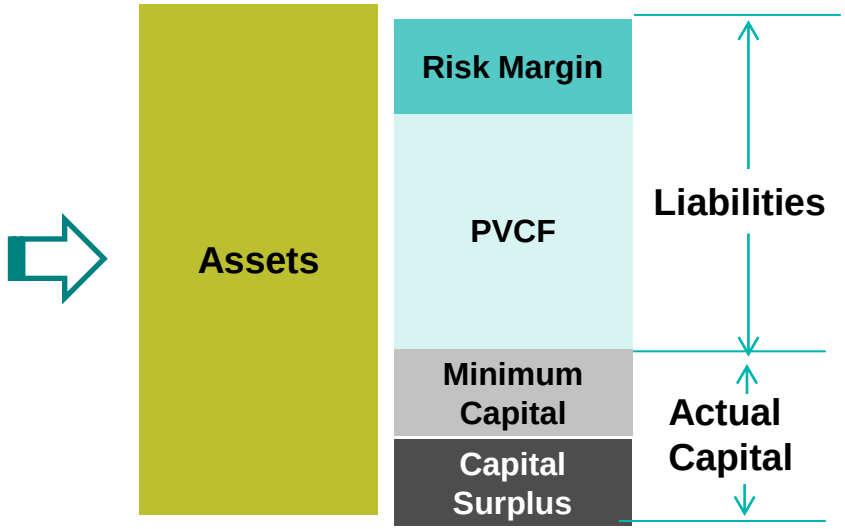
Chinese insurance risks have become more versatile and complex

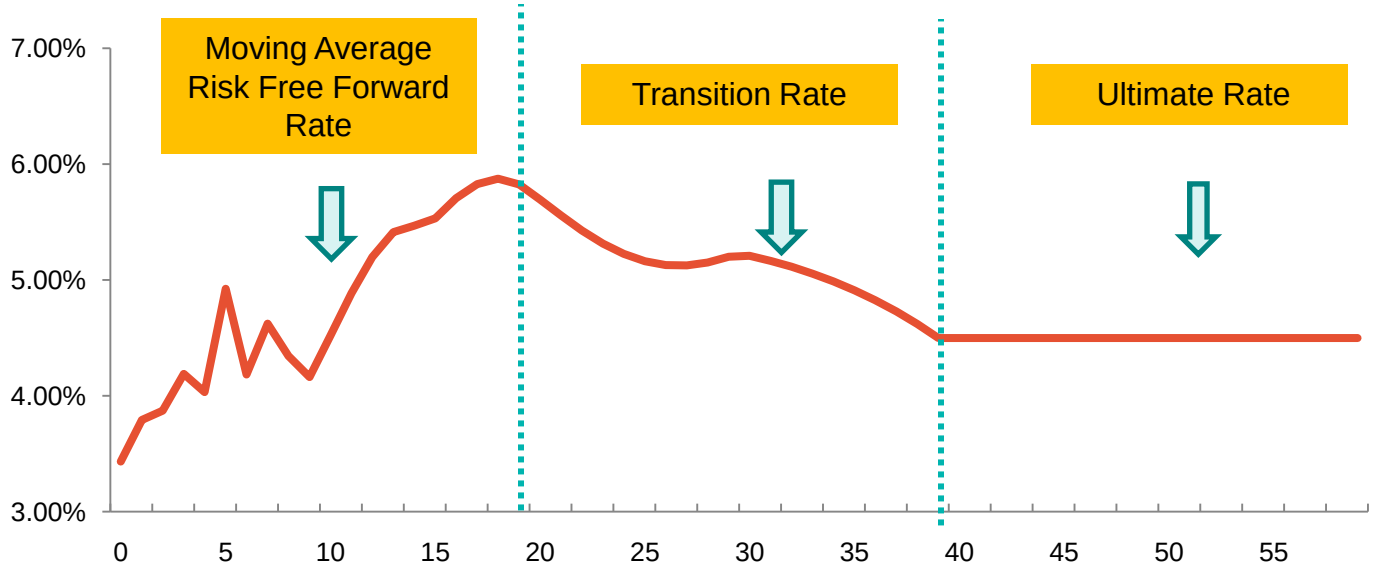
Products	• Traditional	• Participating (cash dividend / reversionary bonus) • Universal life • Unit linked • Variable annuity
Invested Assets	• Cash • Government bond • Term deposit	• Corporate bond • Mutual fund • Stock • Real estate • Private equity • Oversea investments
Market Participants	• Life insurers • P&C insurers • Reinsurers	• Insurance asset managers • Health insurers • Pension companies • Insurance groups • Conglomerates • Mutual insurers

Annex:
C-ROSS Pillar I – Valuation

Actual Capital Valuation

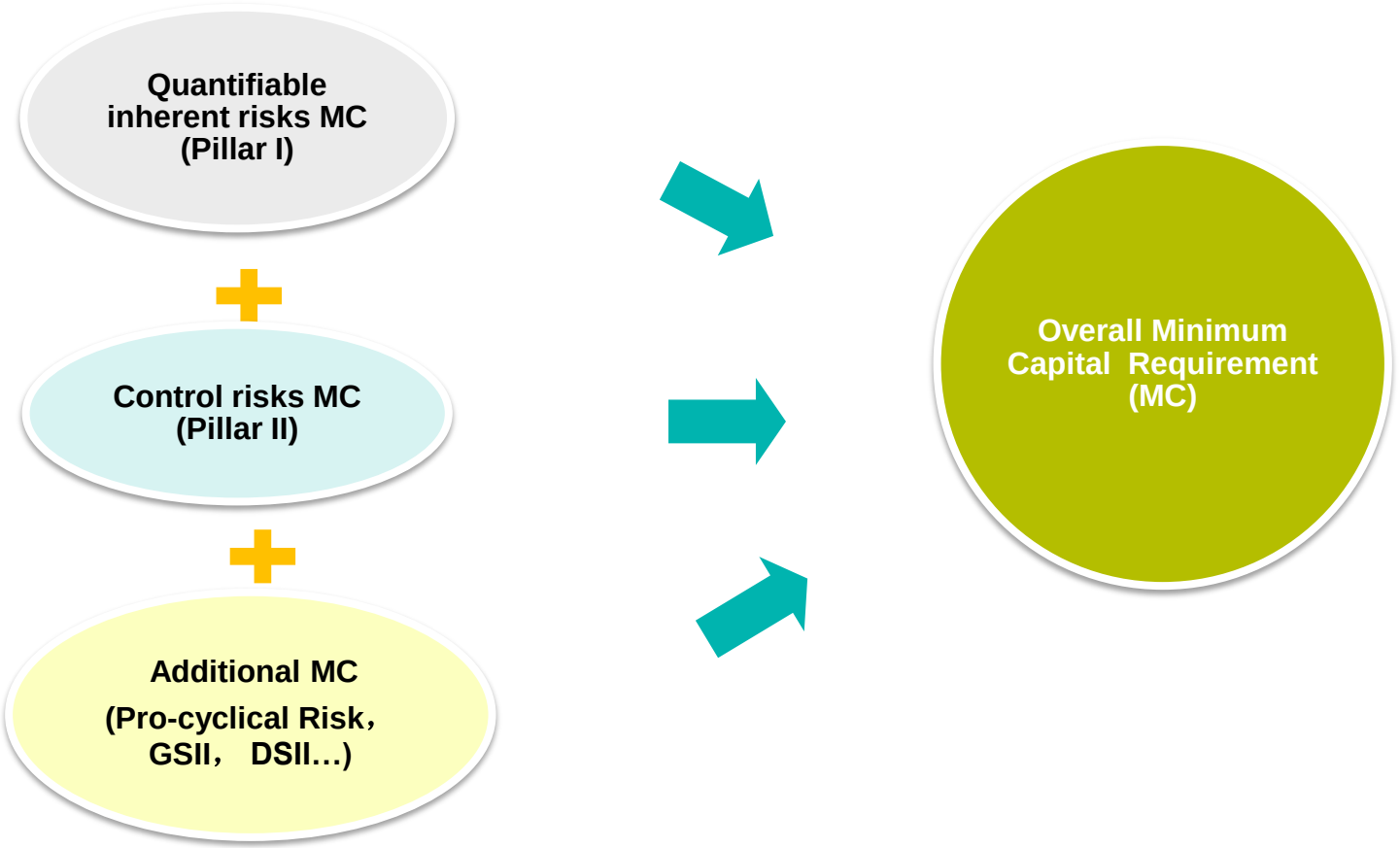
- GAAP based Assets and Liabilities Valuation Approach
- Insurance Liabilities = PVCF + Risk Margin





Annex:
C-ROSS Pillar I – Capital Requirement

Net Risk = Inherent Risk × Control Risk × Systemic Risk



Annex:
C-ROSS Pillar I - MC Calculations

➢Composite factor based method:

MC=EX × RF

which: EX is the risk exposure;

RF is the risk factor; RF = RF_0× (1+K)

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

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

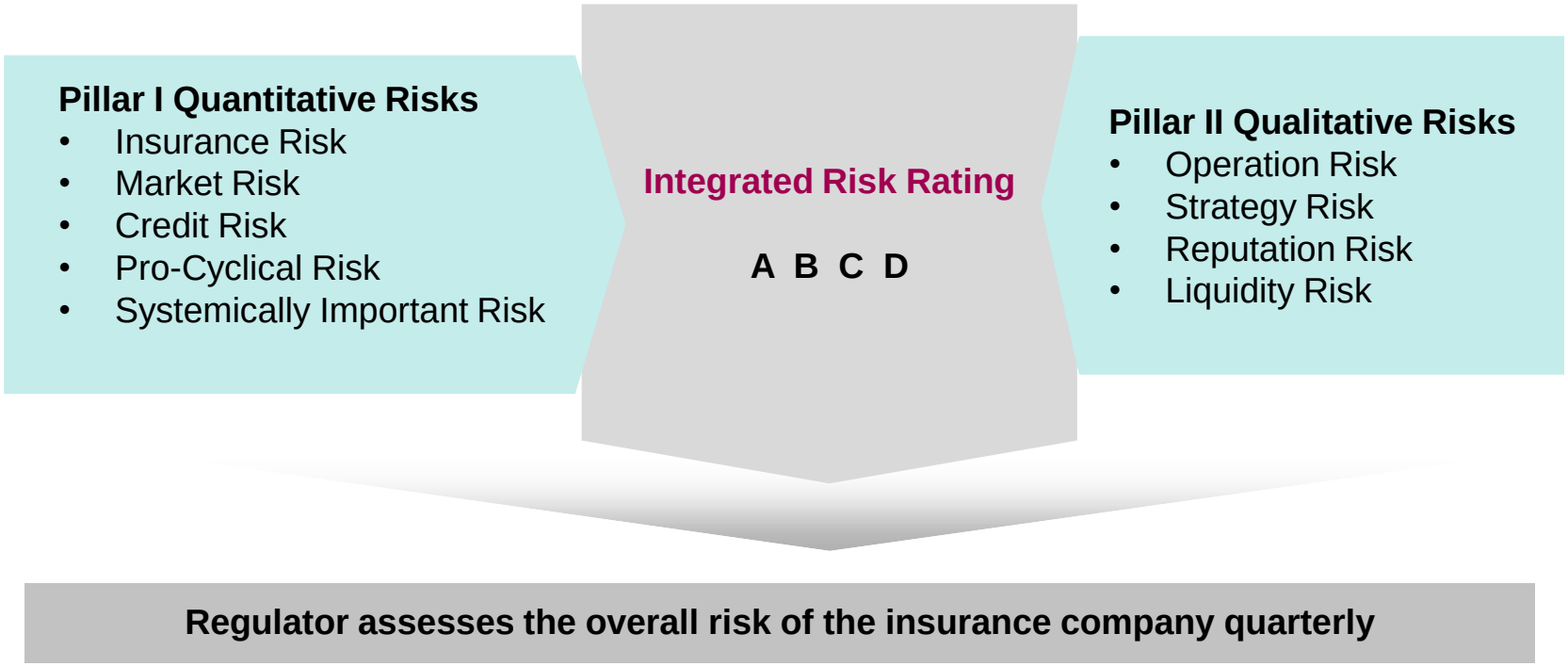
K_i is the characteristic factor based on specific risk or entity , n is the number of characteristic factors

➢Scenario based method:

Used to calculate one year VaR;

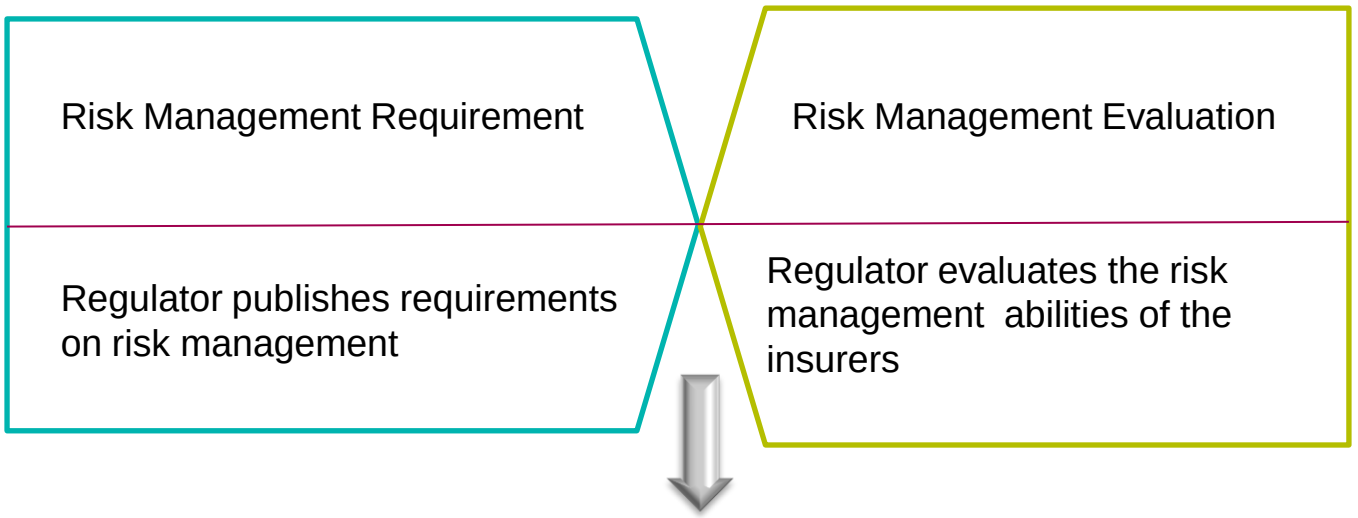
Applied on catastrophe risk for non-life, interest rate risk and insurance risk for life insurers

Annex:
C-ROSS Pillar II - Integrated Risk Rating (IRR)



Annex:
C-ROSS Pillar II - SARMRA

Risk Management Requirement and Regulatory Assessment



The result of evaluation will feed into the MC control risk:

$MC_{control\ risk} = Q \times MC_{quantifiable\ inherent\ risks}$

$Q = -0.005 \times S + 0.4$

S is the scores achieved by the insurance company under SARMRA

Annex:
C-ROSS Pillar III – Market Discipline