C-ROSS: Construction and Implementation

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Two questions:

• Where are we now?
• What can we learn?
Where are we now?
Roadmap

Starting
Overall Planning

- Where to go
- How to do
- How long it takes

Blueprint
Conceptual Framework

Milestone
17 Technical Standards

New era
Official launch of C-ROSS

- 9 standards for Pillar I
- 3 standards for Pillar II
- 3 standards for Pillar III
- 1 standard for insurance group
- 1 standard for reporting

Never stop exploring

Three-Layer Framework: Risk, Capital and Value
Transformed to Three-Pillar Regulatory Framework

**Capitalised Risks**
- Insurance Risk
- Credit Risk
- Market Risk

**Uncapitalised Risks**
- Operational Risk
- Strategy Risk
- Reputation Risk
- Liquidity Risk

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

**Supervisory Tools**
- Integrated Risk Rating (IRR)
- Solvency Aligned Risk Management Requirements and Assessment (SARMRA)
- Liquidity Risk Indicators
- Analysis and Examination (A&E)
- Regulatory Measure

**Regulatory Discipline**
- Comprehensive Solvency Ratio
- Core Solvency Ratio

**Unregulated Risks**
- Supervisory Tools
  - Company Information Disclosure
  - Regulator Information Disclosure
  - Credit Rating

**Unregulated Risks**
- Market Discipline
  - … …

**Regulatory Discipline**
- IRR Ratings
- Control Risk Scores

**Market Discipline**
- … …
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

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

Risk Detecting System
Risk Measuring System
Risk Managing System
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
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
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.
We observe solvency systems based on:

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

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

- **Market Formation**
- **Market Behavior**
- **Business Operation**

This is where we are used to focusing on

**Pragmatics Layer**

**Semantics Layer**

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

The way insurance regulators being organized

- Unified regulatory organization or federal regulatory model?
  - China is “one regulator” vs US has 50 regulators vs. EU has 27 regulators

Demand side
- Social governance system
- Social security system
- Disaster protection system
- Financing structure
- Social axiology and social goal
- …

Supply side
- Business models to fulfill insurance needs and long-term finance needs
- No. of insurance participants or alternative institutions and level of competition
- Threshold of licensing
- …

Maturity level & goal of insurance market

- The level of maturity of associated markets (financial market is a typical associated market insurance market underlying)
- Development stage of alternative markets

The maturity level of associated markets
2. “Semantics Layer” - How insurance markets behave?
2. “Syntactics Layer” - How insurance businesses operates?

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

Key topics of business operations:
- Product Mix
- Asset Portfolio
- Valuation Models
- Risk Management
- Supervisory Intervention
- IT System
- Channels
- Technical Specification (VaR, T-VaR)
- Performance Measurement
- ...
2. Features of emerging markets & implications for solvency system

- **Rapid growth**
  - Fast changing

- **Immature associated markets**

- **Low awareness of risk management**

- **Lack of expertise & financial resources**

- **Unique risks & different risk characteristics**

- **Qualitative over quantitative models**

- **Practical over advanced tool**

- **Regulatory driven over self-development**

- **Collectivism over individualism**

- **Customized over standardized**
3. Capital cannot resolve everything

Capitalised risks
Risks that if eventuates, can be resolved using capital. For example insurance risk, credit risk, market risk etc.

Uncapitalised risks
Risks that if eventuated, can NOT be resolved through holding capital. For example, operational risk, strategic risk, reputation risk and liquidity risk.

High solvency ratio does not necessarily mean financial security, because most fatal risks are uncapitalised risks.
3. Different risk nature, different tools

Different risk nature require different tools to supervise

- **Regulated risks**
  - **Capitalised risks**: Managed through capital requirement, solvency ratio and stress testing
  - **Uncapitalised risks**: Managed through Integrated Risk Rating (IRR), analysis and examination

- **Unregulated risks**: Managed through information disclosure and market discipline
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
Thank you!