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Exploring on  
The Risk Profile of China Insurance  
for setting solvency capital requirement



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# 1 Background

## CIRC's Regulatory Strategies:

### Three Pillar Principle (2005):

- (1) Governance    (2) Solvency    (3) Market Conduct

### The Five Regulatory Measures (2004):

- (1) Internal Control                      (2) Solvency Control  
(3) On site Inspection                  (4) Investment Control  
(5) Guarantee Fund

# Progress Review on 5 Measures

## (1) Internal Control

CIRC [No.131, 1999]: Internal Control Directive

## (2) Solvency Control

to be discussed more

## (3) On site Inspection

CIRC Life and P&C On-site Inspection Manuals

## (4) Investment Control

CIRC[No.6, 2003]: Administration on investment assets

## (5) Guarantee Fund

CIRC [No.16, 2004]: Guarantee Fund Administration

# More about (2): Solvency Control

**CIRC [No.1, 2003]: Solvency Regulation**  
Solvency Margin ( + Regulatory indicators )

Two components:

1) To calculate **Minimum Margin:**

**EU:** Council Directive 73/239/EEC, 2002/13/EC  
Council Directive 79/267/EEC, 2002/127/EC

2) To Calculate **Actual Margin:**

**CIRC** Statutory Accounting Standards No.1 --- 5

**CIRC** Actuarial Calculations[No.90, 1999; No.67, 2003]

**CIRC** [No.13, 2004]: Technical Provisions in Non-life

## 2 Our Research Target

- **Target questions:**

What is the right level of minimum capital requirement (or solvency margin) ?

- **Fundamental questions (study focus):**

What risks are damaging China insurers' solvency?  
What are common characters, and what are the specific characters of China market ? Among the risks, what should/can be controlled by capital requirement ?

(i.e. by risk-oriented approach)

# 3 Study Methodologies

How can we answer the above questions ?

**Example 1:** about Data

- (1) can we collect sufficient and true data ? If yes
- (2) can we predict future based on the data ?

**Example 2:** Risk identification techniques recommended by the “Risk Management Standard”

Brainstorming, Questionnaires, Business Studies, Industry Benchmarking, Scenario analysis, Risk Assessment Workshop, Incident Investigation, Auditing and inspection, Hazard & Operability Studies etc

# Our Study Approach

- **Static analysis**

selected use of existing methods--- 4 steps

- (1) Normative studies
- (2) Statistical analysis
- (3) Field study & case analysis
- (4) combine (1) --- (3)

- **Keeping up with a historical view on the evolving risk profile of China insurance**



# Details of the 4 steps

- Step 1:** study on other people' works, and summarise/list the risks of insurers
- Step 2:** comparison study and statistical analysis for estimating the quantitative risks on the list, with public and regulatory data.
- Step 3:** field studies on selected risks to further identify the significance of risks.
- Step 4:** case analysis for specific and significant risks of China insurers.

# Step 1: Study others' works

- Massey's Report (2001): Insurance Company Failure: the reasons why insurance companies fail.
- Sharma Report (2002): cause-effect approach + Case studies
- The HIH Royal Commission (2003): Failure of HIH
- The Failure of the Equitable Life
- The Serial failures of Japanese insurers
- Risk disclosures for IPO of China Life, PICC, Ping-an

# Step 2: Statistical analysis of significant quantitative risks

1	<b>Investment risk of insurers</b> e.g. Investment assets/equity assets
2	<b>Risks of Life Insurers</b> e.g. Pricing risk long-term interest rate guarantees , A/L matching etc
3	<b>Risks of P&amp;C Insurers</b> e.g. Reserving risk Pricing risk Receivable premium Reinsurance recovery etc

# Step 3 & 4: Case Analysis

- Example: *Receivable Premium*  
(Credit risk)

**Step 3:** Field studies to business branches

**Step 4:** Case studies by company visits

# 5 Initial Judgment

- **Common characters**

A rat is a rat --- one tail , four legs.

Risks are generally classified into

- 1 ) Technical risks (reserving, pricing)
- 2 ) Investment risks (and M/L for life insurers)
- 3) Credit risk
- 4 ) Operational, Governance & other risks

- **Specific characters**

- 1) The three-worlds risk map
- 2) The evolving & dynamic risk profile

## 5 Initial Judgment

For the purpose of solvency supervision, and referring to the current risk profile of China insurance, Capital Requirement of the first Pillar may be not so dominant.

The other two Pillars (governance, market conduct) are at least same important.

Thank you!