Prompt Corrective Action Framework for Indian Life Insurance Industry

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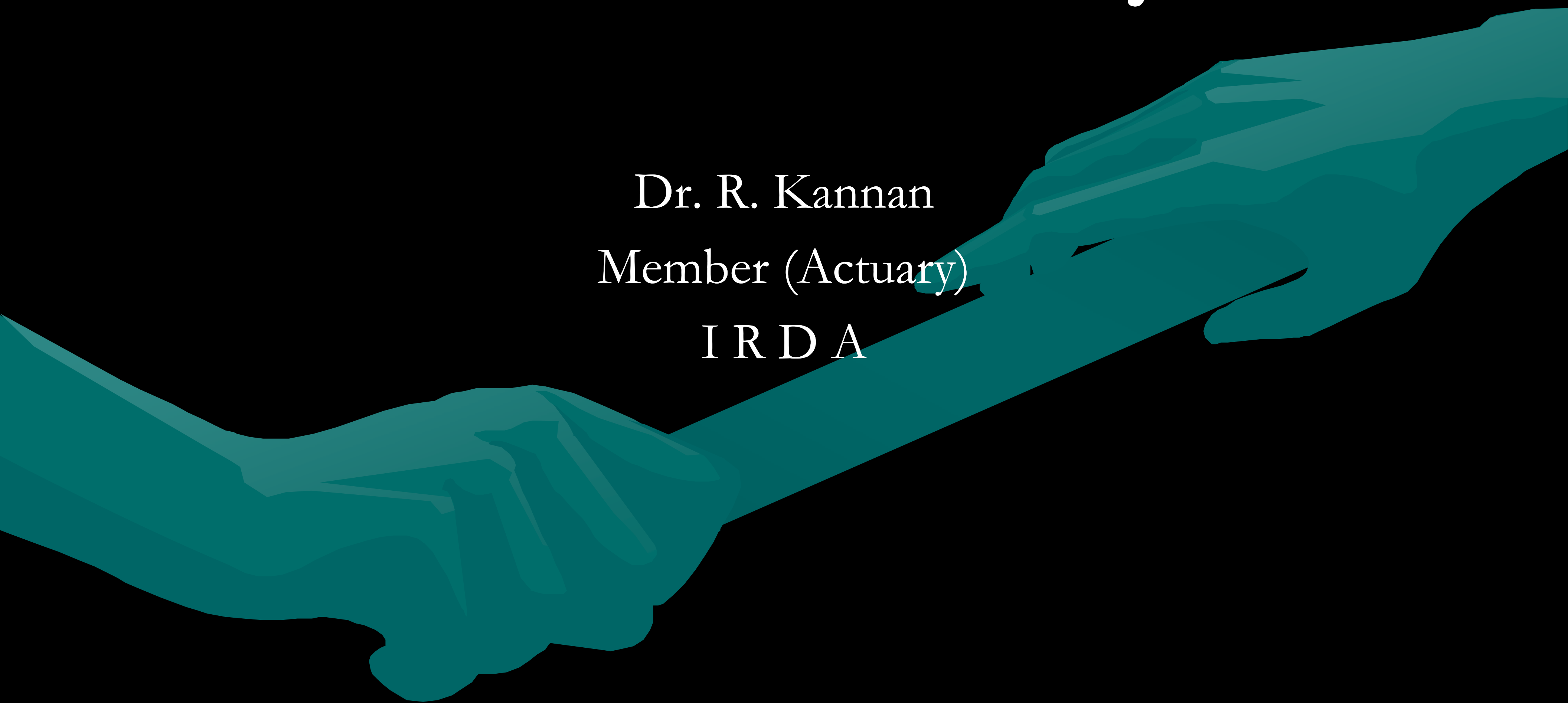
I R D A



Introduction

- 1980s and 1990s witnessed great stress and turmoil for financial institutions
- Brazil, Chile, Indonesia, Mexico and several Nordic countries were worst affected
- Cumulative loss crossed US $100 billion
- Many insurance companies went bankrupt in
  - Europe;
  - Few Asian countries

Introduction

- Failures of insurance companies
  - lead to search for appropriate supervisory strategies;
  - have a destabilizing effect on the economy;
  - long term savings and risk transfer mechanism suffered severely;
  - rescues and mergers far more common than outright closures;

Responsibility of regulator

- Early identification of problem insurers;
- Monitor / prevent failure so as to limit loss;
- Need for various trigger points and graded mandatory responses;
- PCA (EWP) is an important tool
  – cost of restructuring or liquidation likely to rise, the longer the action is delayed;

PCA-objectives

- PCA - two objectives:

a. reduce insurer's moral hazard behaviour

  - insurers tend to move for high risk assets and liabilities to cover up the losses;

b. reduce regulator's agency problem

  - regulators use their discretion to restore the solvency position;
  - if insurer does not respond and solvency continues to fall, appropriate sanctions become mandatory

PCA-objectives

- PCA
  - combination of discretionary and mandatory actions;
  - known to the industry;
  - regulator can influence ex-ante and are not faced as often with unexpected fait accompli.
- Insurance core principle;
- FSAP requirement;

Utilities of PCA framework

- Early identification of troubled insurers
  - To initiate immediate remedial action;
- Identify insurers
  - Require regular and closer monitoring to minimize any impeding insolvencies;
  - Require on-site inspections;
- Help insurers
  - To prioritize review process for the optimal use of limited resources available;
- Promote a framework
  - To grade insurers according to risk profile;

PCA Ratios

a. Solvency margin ratio

– Indicates financial backing available and adequacy of capitalization

b. Changes in AUM= [change in Assets/Assets (-1)]

- Represent improvement or deterioration in insurer's financial condition;

c. Claim ratio = [Total claims/Total gross premium]

- Represent profitability of writing insurance business

d. Commission ratio = [commission / Total gross premium]

- To measure acquisition costs;

e. Expense ratio = [Operating expenses / Total gross premium]

- Indicates administrative costs incurred in writing insurance and cost efficiency of the insurer

PCA Ratios—contd.,

f. Investment yield ratio = [net investment income/ average invested assets]
   - Represents quality of investment portfolio;

g. Liabilities to liquid asset ratio = [liabilities / liquid assets]
   - Indicates ability to meet claims;

h. Premium growth rate
   - Indicates stability of business—large increase is to be seen carefully;

i. Retention ratio = [net premium / gross premium]
   - Ability to cope up with the business and financial resources available;

j. Technical reserve ratio = [change in technical reserves / net premium]
   - Adequacy of reserving;

e. Lapse ratio

Ratios selected for this work

- Expense ratio
- Lapse ratio
- Yield on assets
- Claim ratio
- Solvency ratio

Finding the weights and determining the EW parameters

- Data for the period 2005-06 to 2007-08 were used.
- A multi variate linear regression using weighted least squares method was used as follows:
- RSM = f (ER, LR, CR and YoA)
- p values of each of the independent variables were found
- Weights were derived using the p values (for deriving lower and upper limits of the EW parameters)
- For each of the independent variables, a histogram was plotted and found 75 % and 95 % of the distribution of each of the independent variables
- The above procedure was used for the first three independent variables and for the YoA we used 25 % and 10 % values

Weights and percentile values for independent variables

Independent variable	75 percentile / 25 percentile for YOA	95 percentile / 10 percentile for YOA
Expense ratio (12.86)	52.75	69.01
Lapse ratio (27.47)	24.87	30.42
Claim ratio (29.87)	0.15415	0.2465
YoA (29.81)	7.01	4.68

EW Parameters

- $EWP_{LL} = \sum (w_i \text{ Lower percentile}_i) + w_4 (1 - \text{Upper percentile}_4)$

$EWP_{Ul} = \sum (w_i \text{ Upper percentile}_i) + w_4 (1 - \text{Lower percentile}_4)$

EWPs

Region	Green	Lower Amber	Upper Amber	Lower Red	Upper Red
Solvency ratio	1.7	1.5	1.3	1	
Expense ratio	52.75		69.02		
Lapse ratio	24.87		29.84		
Yield on assets	7.1		4.7		
Claims ratio	1.54 per 1000 no.of policies		2.465		

Industry

Expense ratio (%)

Frequency table

	Red	Amber	Green
Year	Exp > L2	L1<=Exp<=L2	Exp<L1
2005-06	0	3	10
2006-07	0	3	10
2007-08	1	2	10

Industry

Lapse ratio(%)

Frequency table

	Red	Amber	Green
Year	LR > L2	L1<=LR<=L2	LR<L1
2005-06	1	2	10
2006-07	1	2	10
2007-08	0	3	10

Industry

Yield on Assets(%)

Frequency table

	Red	Amber	Green
Year	YOA < L1	L1<=YOA<=L2	YOA>L2
2005-06	1	2	10
2006-07	1	2	10
2007-08	1	2	10

Industry

Claims ratio (No.)

Frequency table

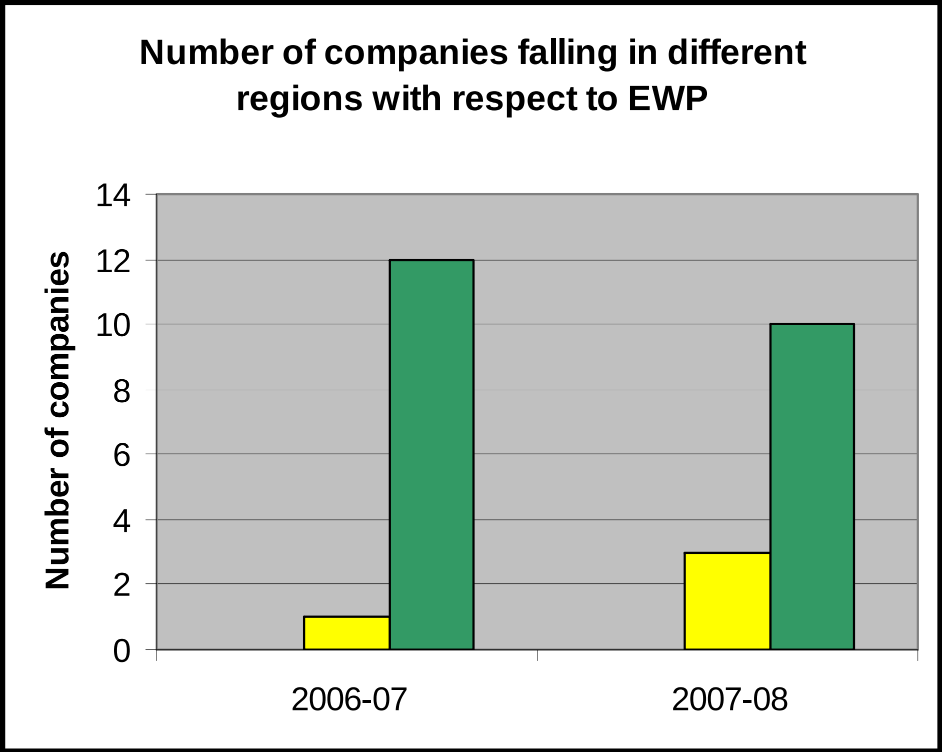
	Red	Amber	Green
Year	CR1 > L2	L1<=CR1<=L2	CR1<L1
2006-07	0	3	10
2007-08	0	3	10

Industry

Solvency ratio

Frequency table

	High Red	Red	Amber	Green
Year	SR<=1.3	1.3<SR<=1.5	1.5<SR<=1.7	SR>1.7
2005-06	1	0	2	10
2006-07	0	1	3	9
2007-08	0	0	3	10


Number of companies falling in different regions with respect to EWP
Number of companies
14
12
10
8
6
4
2
0
2006-07
2007-08

Mandatory and Discretionary policy actions

Policy actions	Lower Amber (1.5 ≤ SR < 1.7)	Upper amber (1.3≤SR <1.5)	Lower red (1.3≤ SR < 1.0)	Upper red (< 1.0)
Mandatory/ Discretionary	**<u>(All discretionary actions and no mandatory actions)</u>** 1. Review premium adequacy and in particular review group business 2. Put a limit on new branch expansion expenses 3. Increase government securities proportion and review the investment strategy	**(a combination of discretionary and mandatory actions)** • Review of item 6 of previous column • The insurer is put on a monthly monitoring process • Put limit on new business	**(all mandatory actions)** • 1. Same as in the previous column and 2 Plan for recapitalization 3. Ban on shareholders' transfers	1. Section 64VA—Clause 1 begins to operate 2. Some more clarity is needed 3. Absolutely no new business and all assets are ring fenced and cash flow movements are watched on a weekly basis

Mandatory and Discretionary policy actions

Policy actions	Lower Amber (1.5 ≤ SR < 1.7)	Upper amber (1.3≤SR <1.5)	Lower red (1.3≤ SR < 1.0)	Upper red (< 1.0)
Mandatory/ Discretionary	4. Action plan to reduce lapsation 5. Review the target markets for principal products 6. Discussion with the Board on their plan of corrective action and ask the Board to monitor and report to the Regulator	4. Review the guaranteed products and limit the sales 5. Review the investment strategy 6. Review the commission structure and move towards zero based budgeting	4. Bring in new management 5. Cap expenses including marketing, salaries etc., 6. Ring-fence assets and all investments in Govt. securities	4. New shareholders are identified and all provision regarding PHs' interest protection are strictly observed

Mandatory and Discretionary policy actions

Policy actions	Lower Amber (1.5 ≤ SR < 1.7)	Upper amber (1.3≤SR <1.5)	Lower red (1.3≤ SR < 1.0)	Upper red (< 1.0)
Mandatory/ Discretionary		7. Review the claim experience and withdraw loss making products 8. Take steps to reduce laps rates 9. Review reinsurance strategy	7. Regular interaction with the Board. 8. Discuss the continuation of the ownership 9. Appoint Regulator’s nominee in the Board 10. Explore financial re-insurance	

Thank you