

Reserving: Importance, Challenges and Suggestions

July 03, 2015

Agenda

Market overview

Importance of reserves

Indian industry and reserving evolution

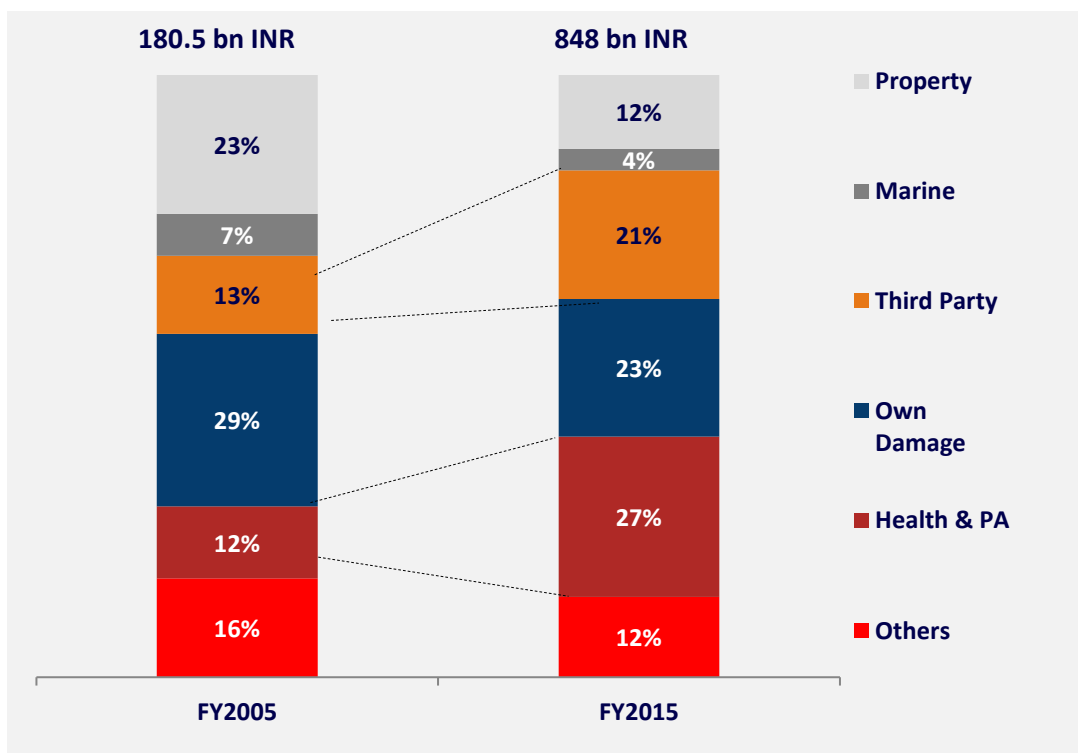
Challenges

Way forward

Industry overview

- **Currently there are 28 players operating in the industry**
 - 17 private general insurers, 4 public sector general insurers & 7 mono-line insurers
- **Industry's Gross direct premium has grown ` 180.46 billion in FY2005 to ` 848.02 billion FY2015**
 - CAGR of 17% over the last 10 years
- **Policy count has grown from 41.7 million in FY2004 to 113.7 million in FY2014**
 - Penetration has moved up to 0.8% from 0.6% over the past decade

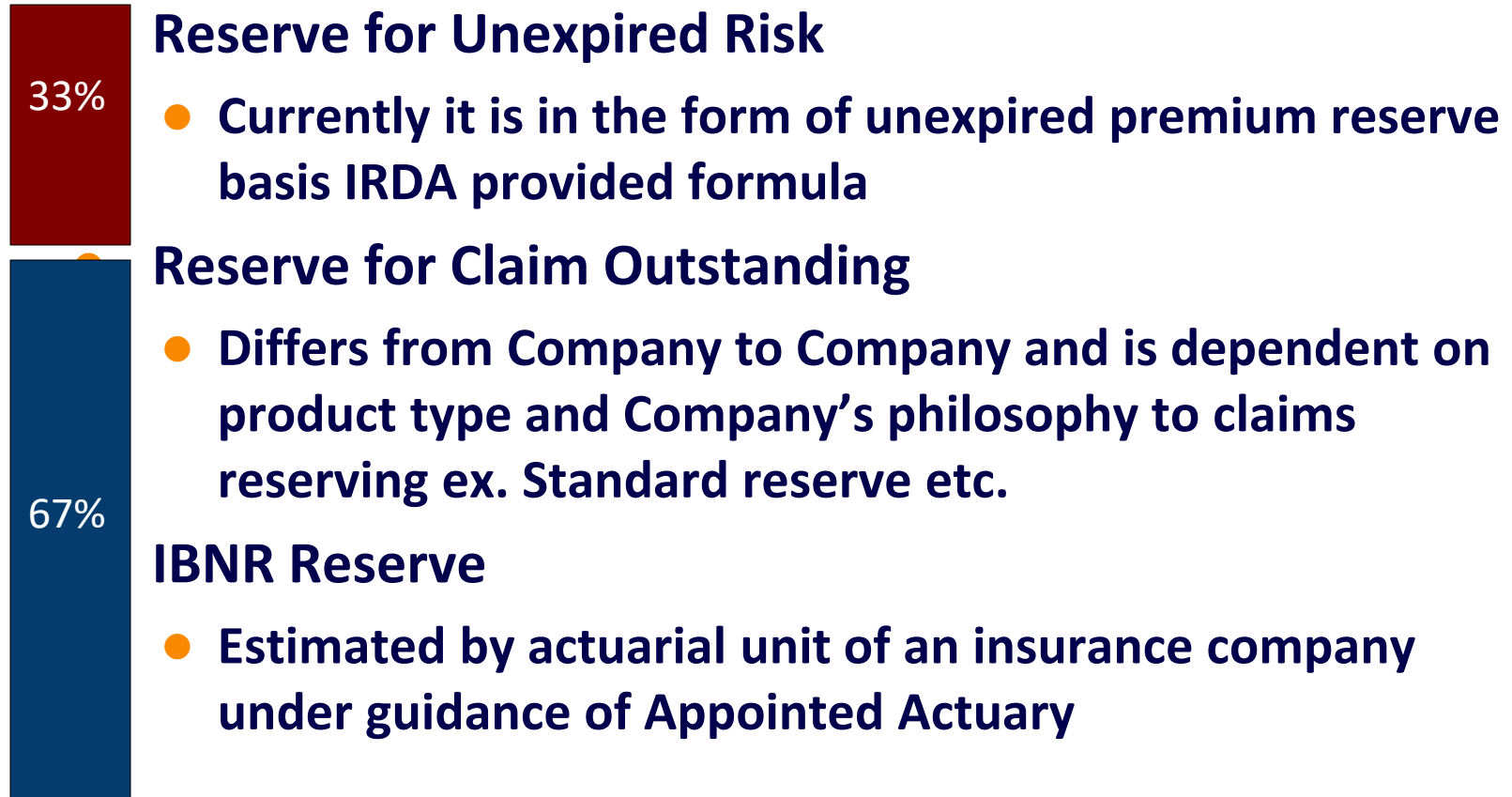
Industry product portfolio: premium



Motor Third Party is approximately the size of total GI Industry at FY2005

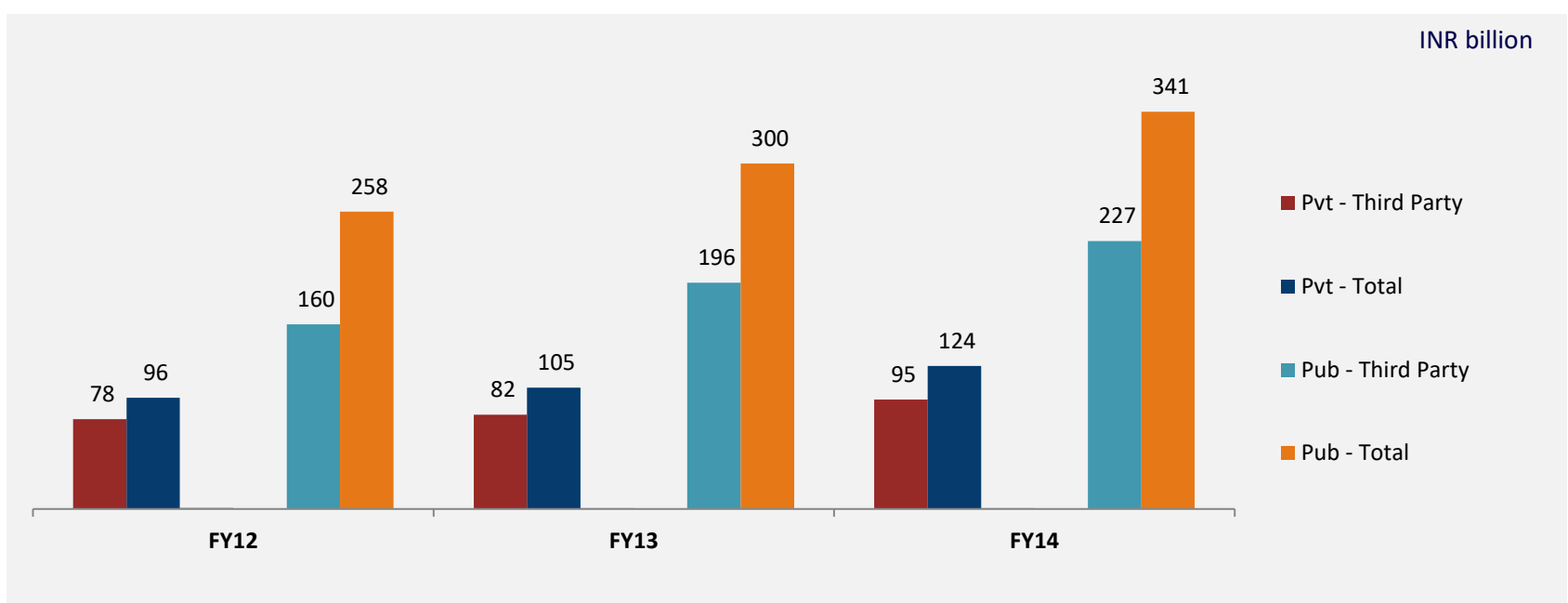
- **Motor is an important segment with contribution of 44%**
- **Health & PA is the second highest contributor with 27%**
 - **Rising awareness among people about the benefits of health insurance**
 - **Government schemes provide coverage to below the poverty line (BPL) population**

General Insurer Balance Sheet: Liabilities



* Data for 75% companies by premium volume
Source: Public disclosure

Industry product portfolio: reserves*



- Motor TP approx. INR 321 billion, constitutes 70% of industry net claims outstanding
 - TP reserves grew at 16% vis a vis non TP reserves at 11%

*Data for 75% companies by premium volume
Source: Annual Reports

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Why insurers fail?

Leading causes of insolvency

Jurisdictions	First	Second	Thlrd	Methodology	Number of companies	Source
Canada	Inadequate pricing/deficient loss reserves	Foreign parent (home office)	Rapid growth	Survey	35	PACICC (2007)
United States	Inadequate pricing/deficient loss reserves	Fraud	Significant change in business	Survey	871	A.M. Best (2004)
EU	Inadequate pricing/deficient loss reserves	Asset risk	failed systems	Survey	140	FSA (2002)
Asia*	Inadequate pricing/deficient loss reserves	Asset risk	Concentration/bus.	Regression	159	Chen & Wong (2004)

*Countries included in this study are Japan, Singapore, Malaysia and Taiwan.

Indian industry

- The Indian GI space displays the following characteristics

Characteristic	Risk (Type)
Reserving and Pricing	High
Rapid Growth	High
Catastrophe	High
Policy and legislative change	Moderate to High
Significant change in business	Moderate
Fraud	Moderate
Data and Systems	Moderate
Concentration/aggregation	Moderate

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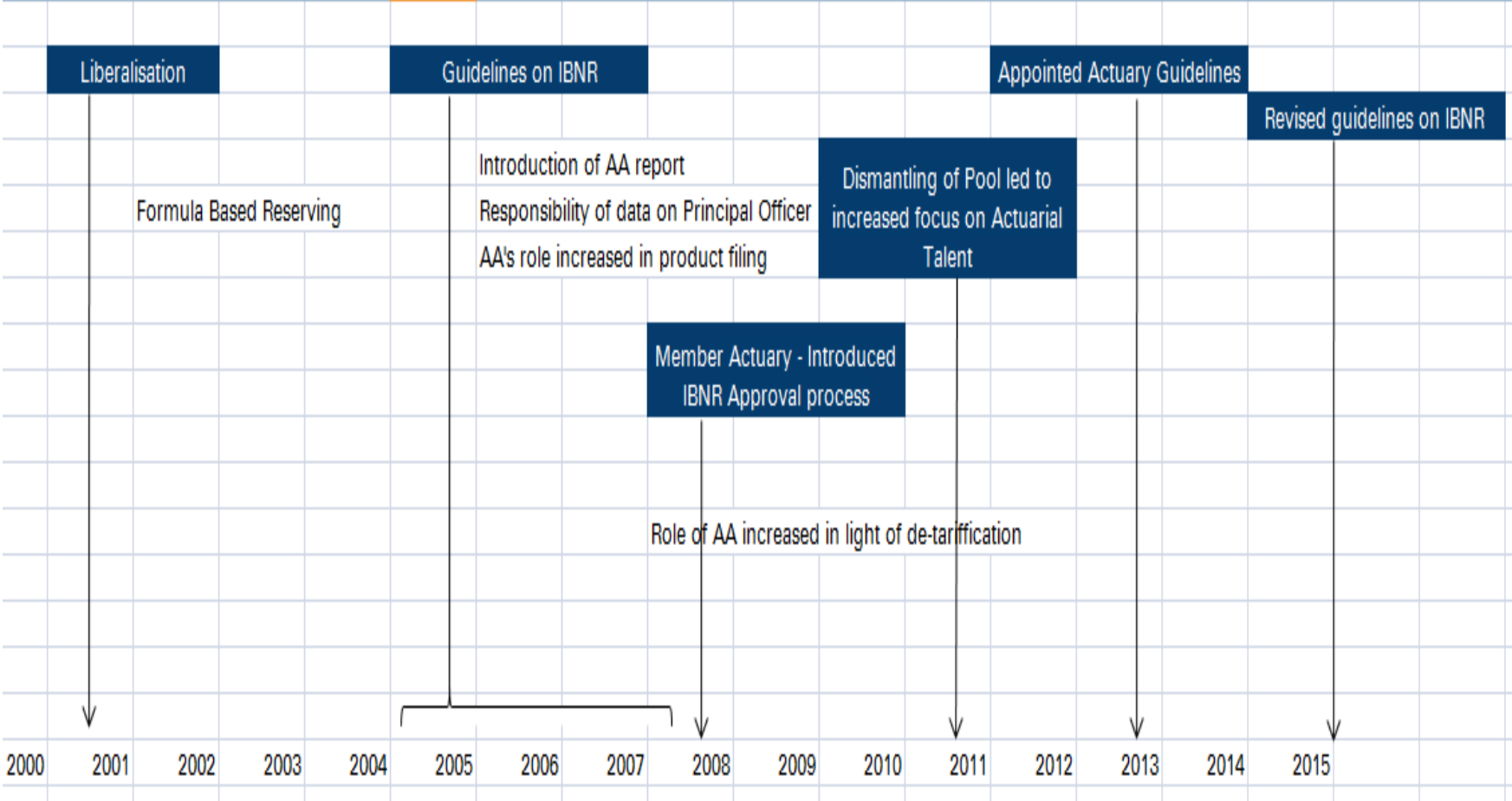
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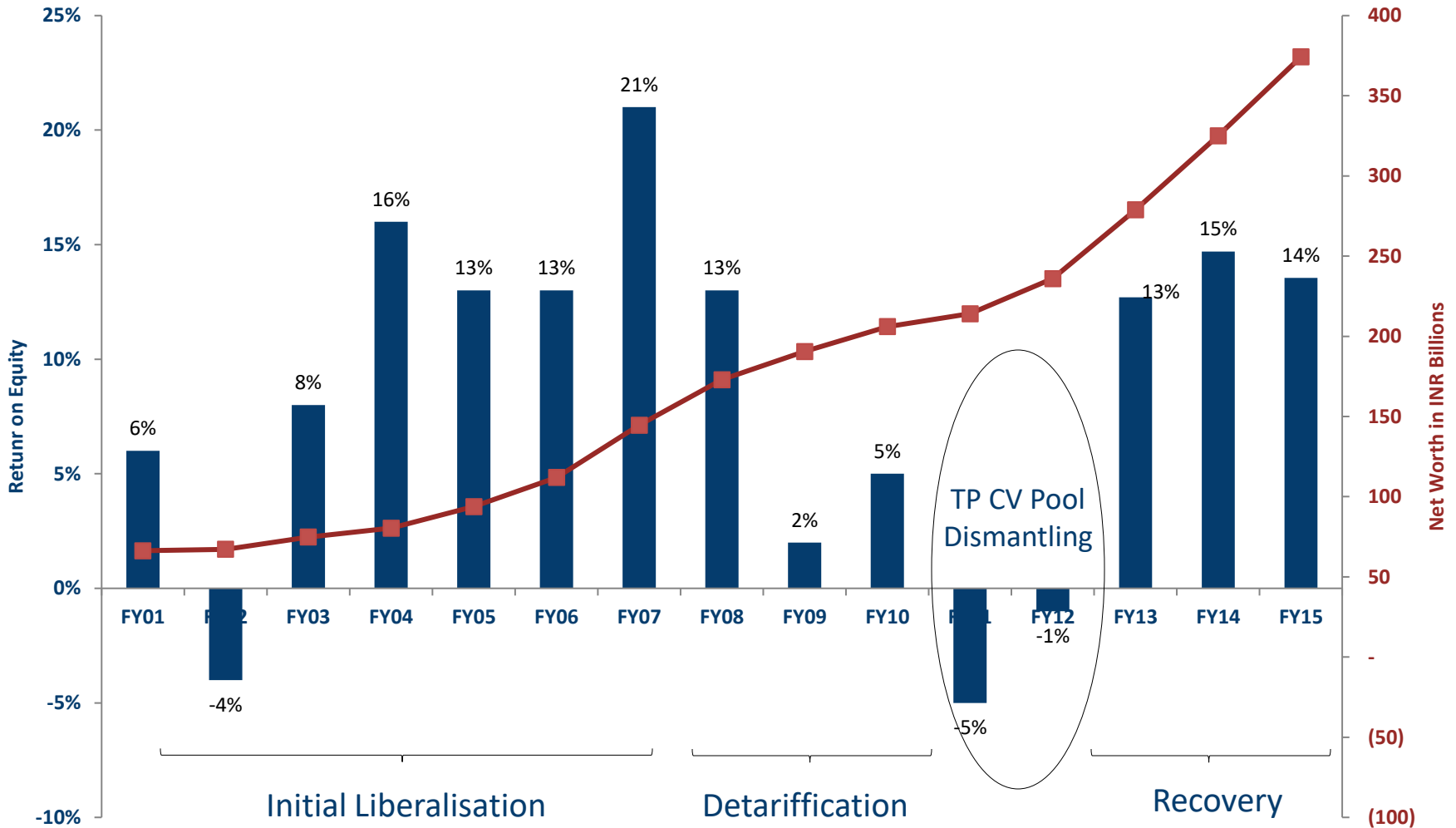
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Evolution of reserving practices in India



Indian Industry Evolution



Indian market reserving shock

- In year 2011 and 2012, the ultimate expected loss ratio for third party commercial pool were revised
 - Financial loss of more than INR 100 billion (approx. 50% of Net worth of Industry)
 - The regulator dismantled the pool and to aid the industry which needed huge capital infusion the following steps were taken
 - Relief in Solvency Ratio requirement
 - Allowance to defer the loss and cash settlement over a period of three years
- As at Mar 14 the net claims outstanding pertaining to motor third party is approx. 321 billion* against Industry net worth of approx. 325 billion**

*Data for 75% of market by premium volume

** Excluding unrealized gains at Mar14

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Primary challenges

- **Lack of experience (both data and personnel)**
 - **Motor Third Party intimations take 8 years and settlements 15**
 - **Given the market growth and entry of private players relevant & credible data is not available**
 - **Building actuarial talent is a continuing process for most companies**
 - **Few actuaries with extensive reserving experience**
- **Market disclosure and peer review**
 - **Unlike other markets there is no disclosure mechanism, and peer review is voluntary**
 - **Industry researches and initiative**
- **Established market standards for reserving**
 - **PDR and run-off triangles for IBNR**

Data challenges

- **More than 5% of claims reported in a year pertain to underwriting year more than 7 years old**
 - **Late claims reporting although a problem is still a problem that is relatively predictable**
- **Inflation and other trends**
 - **Settlement period 15 years but 15 years of historical inflation data is a challenge**
 - **Wage inflation and its impact on current reserves**
 - **Effects like legislative changes and legal rulings ex. Sarla Verma add to uncertainty**

Data challenges

- **Motor TP CV dismantled pool***

UWY/ Delay	Incurred Ratios								GAD Estimate
	12	24	36	48	60	72	84	96	
2007-08	9	69	97	134	157	155	162	170	159-197
2008-09	14	66	113	143	142	151	162		188-233
2009-10	17	68	117	120	131	144			200-249
2010-11	9	69	89	105	121				213-263
2011-12	8	36	54	66					145

Claims O/s ~ 18% of NIC till Date for UWY 2007-08

- **Industry research and initiatives**

- **In UK, GIRO formed a Third Party working Party in 2012 which reflects its finding in its updates**
 - Trends, Inflation, Reporting etc.
- **OGDEN Tables (published by GAD)**

Personnel challenge

Class of Membership	As on 31 st March 2005	As on 31st Jan 2015
Fellows	203	290
Affiliates	18	15
Associates	136	158
Students	3,486	9,846
Total	3,843	10,309
Hon. Fellows	6	6
Grand Total	3,849	10,315

- In year 2014 and 2013, 363 students appeared for SA series exams, only 16%(57) appeared for specialization on GI space
 - 3 out 57 people passed SA3 exam

Market disclosure

- No defined formats/practice to disclose quality of reserving
 - The market should adopt international practices such as Form 10-k from the developed markets for more transparency

<u>Year Ended</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
	(In \$ Millions)			
Net Liability for Unpaid Losses and LAE	\$ 21,329	\$ 22,022	\$ 21,344	\$ 21,039
Net Liability Re-estimated as of				
One Year Later	20,715	21,310	20,708	
Two Year Later	20,141	20,717		
Three Year Later	19,602			
Total Cumulative Net Deficiency (Redundancy)	\$ (1,727)	\$ (1,305)	\$ (636)	
Cumulative Amount of Net Liability Paid as of:				
One Year Later	4,493	4,952	4,534	
Two Year Later	7,416	7,915		
Three Year Later	9,487			

Source: <http://www.sec.gov/Archives> for The Chubb Corporation
Such information is also required by rating agencies ex. AM Best

US motor run off triangle

Accident Year	Development Year – Cumulative Claims Paid Data (In \$ thousands)									
	1	2	3	4	5	6	7	8	9	10
1988	154,058	326,916	447,963	528,167	574,471	599,428	613,573	619,616	621,956	626,097
1989	173,856	357,652	488,306	569,371	624,655	648,988	662,268	668,959	674,441	675,090
1990	181,888	391,331	527,129	616,793	667,426	698,277	712,917	718,396	720,782	723,059
1991	179,520	381,993	522,324	613,352	672,472	698,335	711,762	718,625	722,194	724,213
1992	181,066	403,957	548,391	648,274	706,559	731,033	744,628	752,396	756,024	758,922
1993	215,436	440,324	596,185	707,671	762,039	790,029	811,095	817,551	824,623	826,899
1994	249,231	490,657	662,138	768,095	834,689	872,255	885,664	892,395	896,207	901,277
1995	258,839	511,937	675,166	785,605	845,676	881,647	896,033	899,316	904,844	908,628
1996	271,565	510,191	672,921	789,596	862,107	901,679	920,294	927,686	929,875	934,577
1997	272,342	518,460	693,590	817,377	885,170	919,783	940,272	947,633	949,132	951,111

- Run off triangles published under Schedule P of NAIC(National Association of Insurance Commissioners, US)
 - Data above is data for Commercial Auto Data till 2006

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Suggestions

- **Industry level research initiative**
 - **GIRO (General Insurance Research Organizing) conventions and working parties**
 - Research publication and creation ex. OGDEN tables
 - Appropriate inflation index estimation
 - Study of phenomenon such as
 - New type of court rulings
 - Introduction of new guidelines ex. DAIR or new Motor vehicle act
- **Establishment of Indian GAD**
 - **Publishing standard claim diagnostics**
 - Average claim size
 - Frequency
 - Settlement delays

Suggestions

- **Professional guidelines**
 - **Technique/choice of method**
 - **Minimum benchmarks for assumptions under the technique**
 - **Criteria for deviation**
 - **Peer Review**
 - **Enhanced public disclosures**
 - **Reserving templates**
 - **Loss triangles**
 - **Communication**

Thank you