

# Insurance in India: Determinants of growth and the case of climate change

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# Outline

LSE,  
Autumn  
Symposium

Subir Sen

Outline of  
Presenta-  
tion

Background

Structure  
and Perfor-  
mance

Agricultural  
Insurance

- ① *Socio-economic and Political* background
- ② *Structure and Performance* of insurers post liberalisation
- ③ *Strength of insurers*
- ④ *State of Agricultural insurance*

# Socio-Economic and Political Determinants

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Structure  
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Agricultural  
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- From Hammond, Houston and Melander (1967) till Outreville (2012)...

# Socio-Economic and Political Determinants

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Background

Structure  
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- From Hammond, Houston and Melander (1967) till Outreville (2012)...
- *Economic Variables*: Budget, no. of credit cards, homeownership, national income, personal income (current/ expected/ future/ family), net worth/ wealth/ savings, occupation, price of insurance, other prices/ inflation/ interest rate, expected inflation, social security, stock market, market structure
- *Demographic Variables*: Age, bequest motive (family size/ no. of children/ dependency ratio/ life stage), birth rate, life expectancy at birth, consumer sentiment, education, gender, geographic mobility, information seeking, work ethics
- *Socio-Political Variables*: Legal system, political environment, enforcement of property rights, regulations, religion, culture and community, risk aversion

# Indian Exercise: *Life Insurance*

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Presenta-  
tion

**Background**

Structure  
and Perfor-  
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Agricultural  
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- Income, financial depth, interest rate, ... significant economic determinants

# Indian Exercise: *Life Insurance*

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Presenta-  
tion

Background

Structure  
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mance

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- Income, financial depth, interest rate, ... significant economic determinants
  - Overall GDP growth: 6.5% in 2011-12 against 8.4% in 2010-11. Growth in real GDP placed at 5.5% in Q1 of 2012-13. ... *How is stagnation going to affect the growth of the insurance industry?*
  - M3 growth year-on-year has fallen from 13.4% in Sept 2012 compared to 16.6% previous year. Banks are controlling NPAs and NBFCs activities are expanding. *Will these have a negative impact on the insurance sector?*
  - Bank rate 9% compared to 6% previous year, economy experiencing higher inflation. *Inflation and higher interest rate may affect growth.*

- Price of insurance, dependency ratios, literacy, life expectancy, Urbanisation, ... provide ambiguous results

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  - *Is price deregulation not affecting the growth of the insurance industry?*
  - *Are there alternative financial or social instruments similar to insurance?*
  - *Is insurance business localised in Urban centres?*
  - *Have regulations towards the promotion of insurance business in rural sector reached desired level?*
- Role of IRDA and delays in implementation of forward looking policies



# Structure

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Presenta-  
tion

Background

Structure  
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- 1 24 Life insurers and non-life insurers respectively (as on September 2012)
- 2 1 reinsurer - General Insurance Corporation of India

# Recent Trends 1

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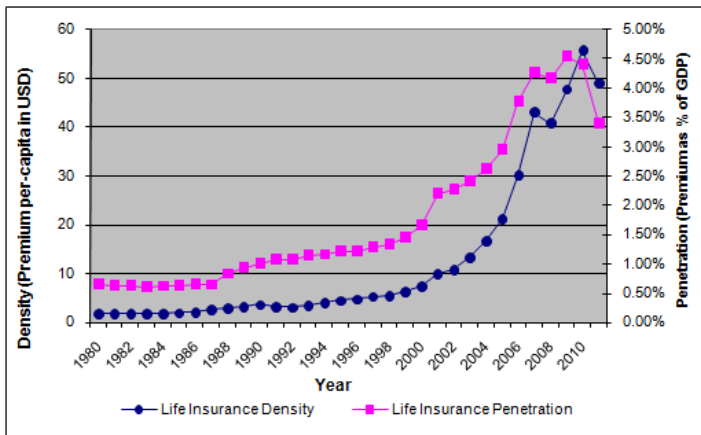
Outline of  
Presenta-  
tion

Background

Structure  
and Performance

Agricultural  
Insurance

## Life Insurance Density and Penetration



# Recent Trends 2

## Non-Life or General Insurance Density and Penetration

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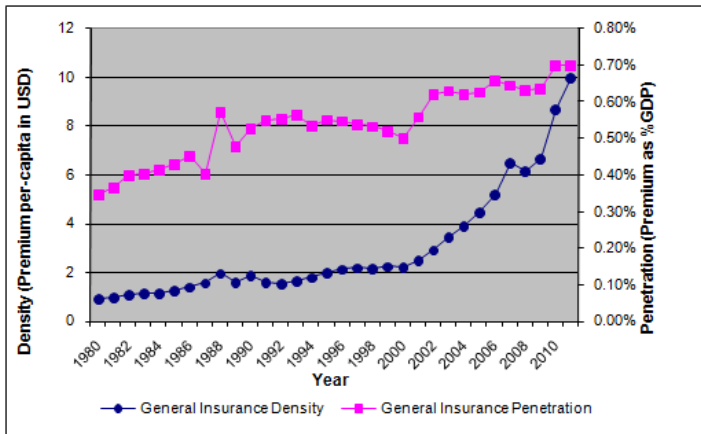
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Presenta-  
tion

Background

Structure  
and Perfor-  
mance

Agricultural  
Insurance



# Recent Trends 3

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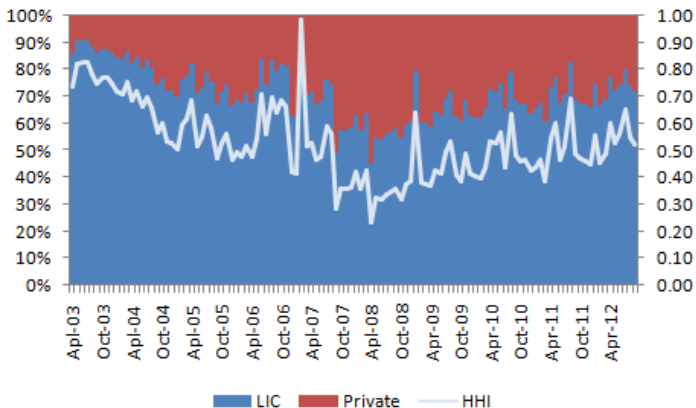
Outline of  
Presenta-  
tion

Background

Structure  
and Perform-  
ance

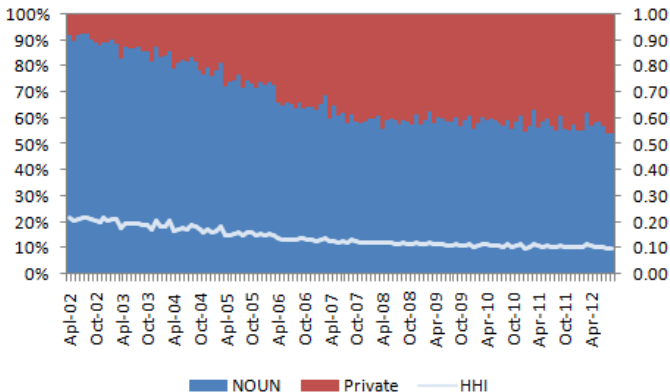
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## Life Insurance Market Structure



# Recent Trends 4

## General Insurance Market Structure



# Performance

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Presenta-  
tion

Background

Structure  
and Perfor-  
mance

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- LIC is the most efficient life insurer. No convergence towards perfect competition . . . market could be considered a natural monopoly. *If so, why is it increasing the number of insurers after liberalization?*
- Private insurers with knowledge of Indian financial system are better performers. *What are the constraints that prohibit expansion of private insurers and especially those promoted by banks?*
- Large agency force is unproductive, raises expenses, and impacts operating margin. *How LIC is dominating despite its size?*
- In the general insurance segment, private insurers are efficient. *Which are the lines of business where competition is cut throat?*
- *Is FDI going to improve efficiency?*

# Strength of Insurers

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tion

Background

Structure  
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By strength, the emphasis is on **solvency**

- 1 Definition of required solvency margin and the solvency ratio
- 2 Importance of both capital and investments
- 3 Bigger insurers fail to comply. For example, LIC, National, ICICI Lombard
- 4 Size of firm (not market share) is important factor.
- 5 *Is it necessary to raise foreign equity cap to 49 per cent as provided in the Insurance Laws (Amendment) Bill, 2008 as against the 26 percent?*
- 6 *Should Govt. permit GIC to raise capital from the market and allow entry of foreign re-insurers to enhance protection of the insurers?*

# Issues and Recommendations

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Presenta-  
tion

Background

Structure  
and Perfor-  
mance

Agricultural  
Insurance

- Due to limited penetration of formal risk pooling mechanisms, farmers dependence on traditional modes and methods
- Heavy reliance on Government spending to manage various risks and lack of private interests. *Whether it is a supply side problem or a demand side problem?*



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Presenta-  
tion

Background

Structure  
and Perfor-  
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- Heavy reliance on Government spending to manage various risks and lack of private interests. *Whether it is a supply side problem or a demand side problem?*
- In 1965, the Crop Insurance Bill was introduced. The model was proposed for State governments' approval with the Central Govt. acting as re-insurer, but most states declined to be a part of this programme on financial grounds

## Issues and Recommendations

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Presenta-  
tion

Background

Structure  
and Perfor-  
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- *First experiment:* GIC in 1972-73 insured H-4 cotton growers in Gujarat. Later extended to other crops (groundnut, wheat and potato) and states (Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Tamil Nadu and West Bengal). The product was offered till 1978-79 covering only 3110 farmers for a premium of Rs. 4.54 Lakhs and paid Rs. 37.88 lakhs as claims.

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Presenta-  
tion

Background

Structure  
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- Shift from *homogeneous approach* to *individual approach* and back to *Homogenous Area Approach*
- Pilot Crop Insurance Scheme (PCIS) launched in 1979-80 covering food crops (cereals, millets), oilseeds, cotton, potato and chickpea. Confined only to loanee farmers of institutional sources on a voluntary basis

## Issues and Recommendations

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tion

Background

Structure  
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- Move from PCIS to CCIS(1985-86) to ECIS(1997-98) to NAIS(1999-2000) to FIIS (2003-04) to MNAIS(2010-11)
- Several Pilot Weather based indexed insurance:  
*Rainfall Insurance* - ICICI Lombard(2003-04),  
*Barish-Bima* - IFFCO-Tokio(2004-05), *Varsha Bima* - AIC(2004-05), ...
- Proposal for *Monsoon-linked insurance indices*
- As on 2007-08, farmers covered as % of total stands at 15.27 percent
- Developments in *Microinsurance*

# Recommendations

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Background

Structure  
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- What are the initiatives required while introducing WBCIS or MNAIS?
  - Infrastructure, Pricing, payment facilities, Dissemination and information sharing, Pilot and experimentation, and Government Role
- What measures are necessary for better, efficient and practical implementation of new practices in the event of climate change?
  - To consider *village panchayat* as the insurance unit
  - Phase out Govt. subsidy or design a policy of incentives
  - Promotion of risk mitigation culture
  - Insurance beyond sowing to harvest and coverage extended for post harvest losses?
  - Changes in the concepts related to calculation of threshold or guaranteed yield; to incorporate and develop pricing based on actuarial practices

## References:

- 2008 “Are Life Insurance Demand Determinants valid for Selected Asian Economies and India?” Madras School of Economics Working Paper; No. 36/2008; Madras School of Economics.
- “Sources of (In-)Efficiency for Indian Life Insurers After a Decade of Liberalisation” (work under review; Co-author Prof. Paul Klumpes)
- “Predicting Market Structure and Solvency Determinants for Indian Insurers: Analysis of Financial Statement Information” (work in progress)
- “Risk Management”, Chapter for the National Mission on Sustainable Agriculture: *Strategies for Meeting the Challenges of Climate Change*, Ministry of Agriculture, Govt. of India.

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**Thank You**  
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