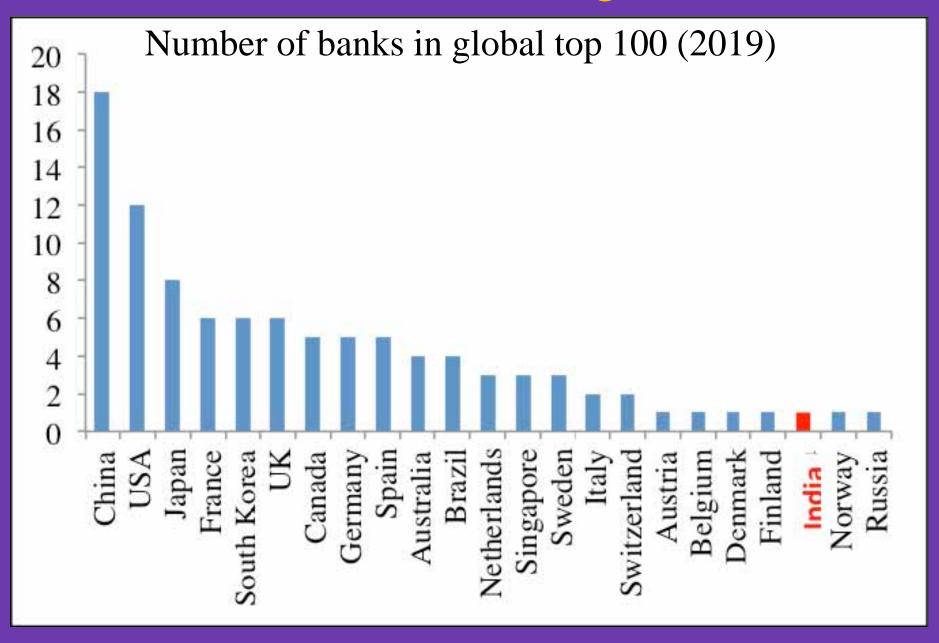
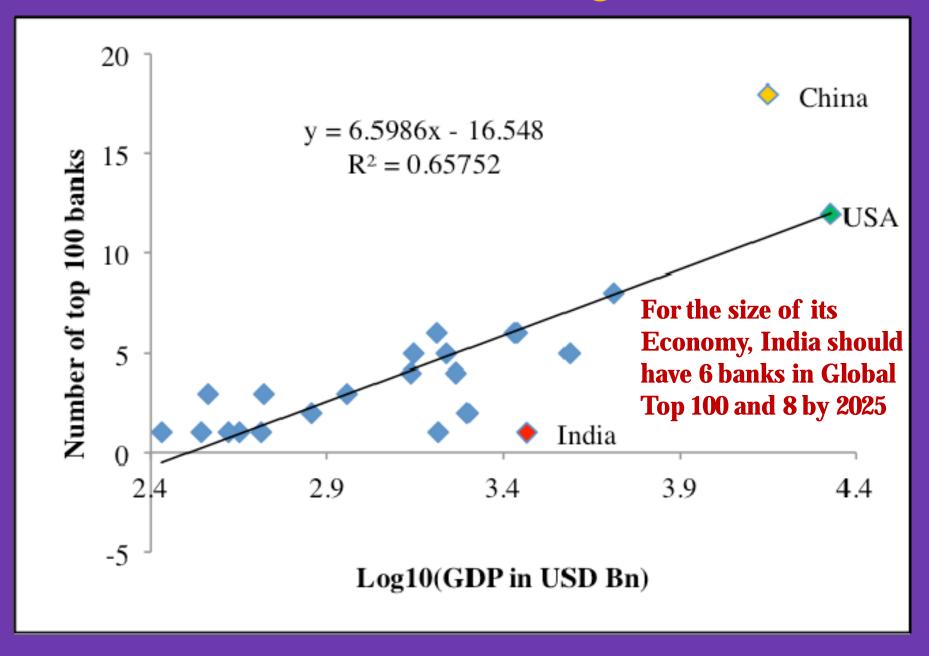
# The \$5tn goal: Importance of the banking sector

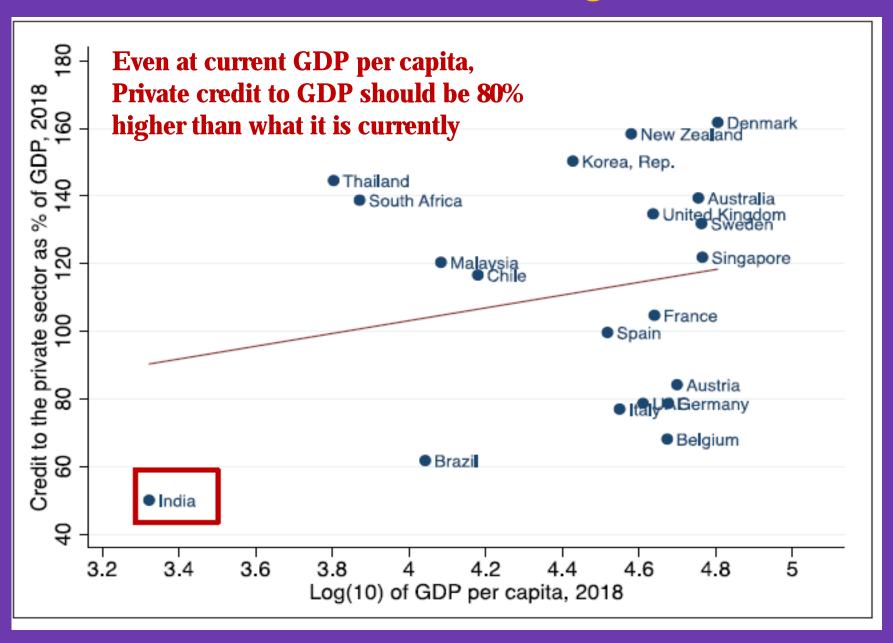
Dr. K V Subramanian Chief Economic Adviser Government of India

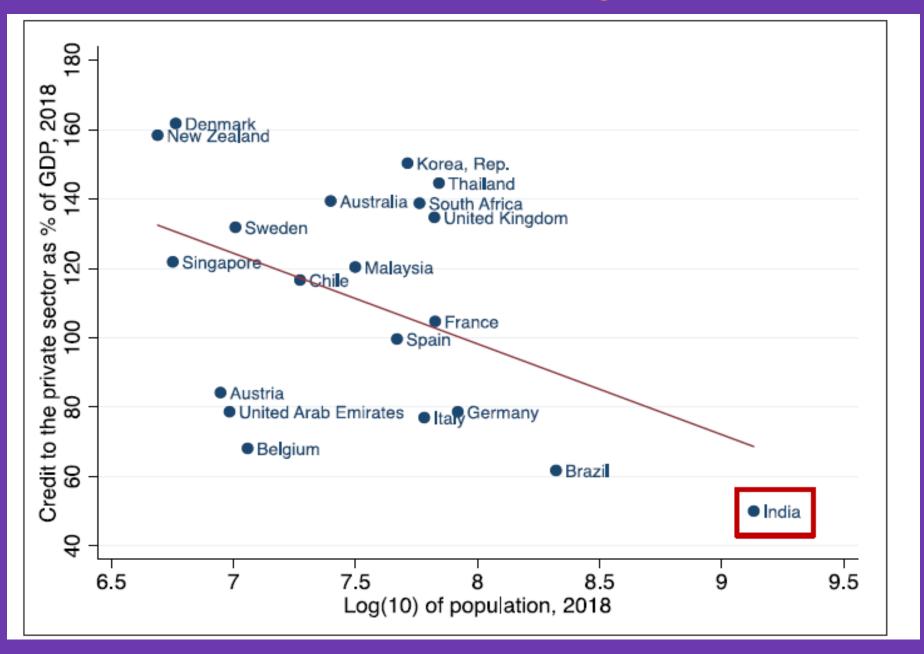
### The Banking Sector and the Economy

- □ In the last 50 years, the top-five economies have always been ably supported by their banks
- □ The support of the U.S. Banking system in making the US an economic superpower is well documented.
- □ In the 80s, during its heydays, Japan had 15 of the top 25 largest banks.
- □ Top four largest banks globally are all Chinese. As of 2019, 18 of the top 100 largest banks globally are Chinese banks.
- □Yet, 50 years after bank nationalisation, the 5<sup>th</sup> largest economy in the world has one bank in top 100 a lowly 55<sup>th</sup> ranked SBI

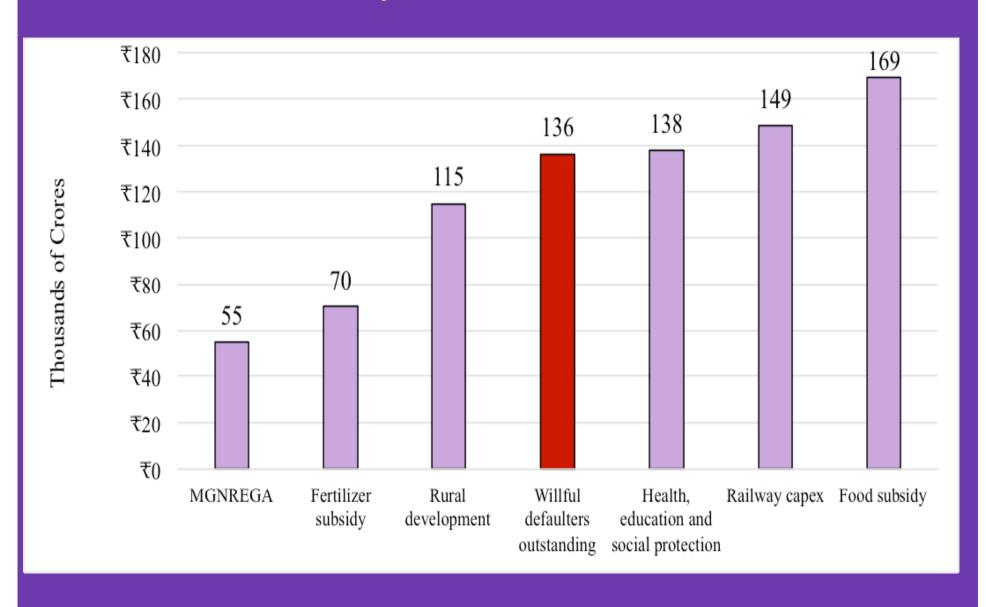




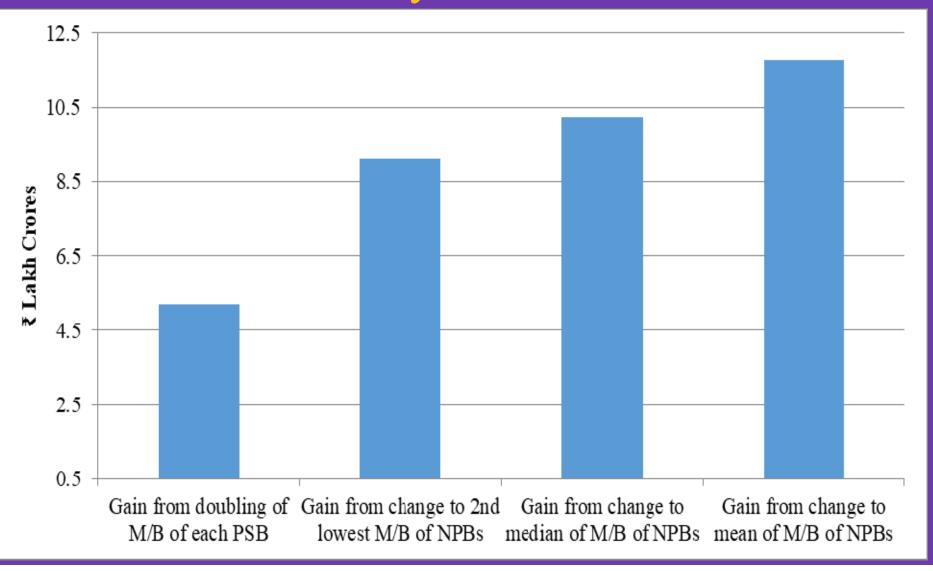




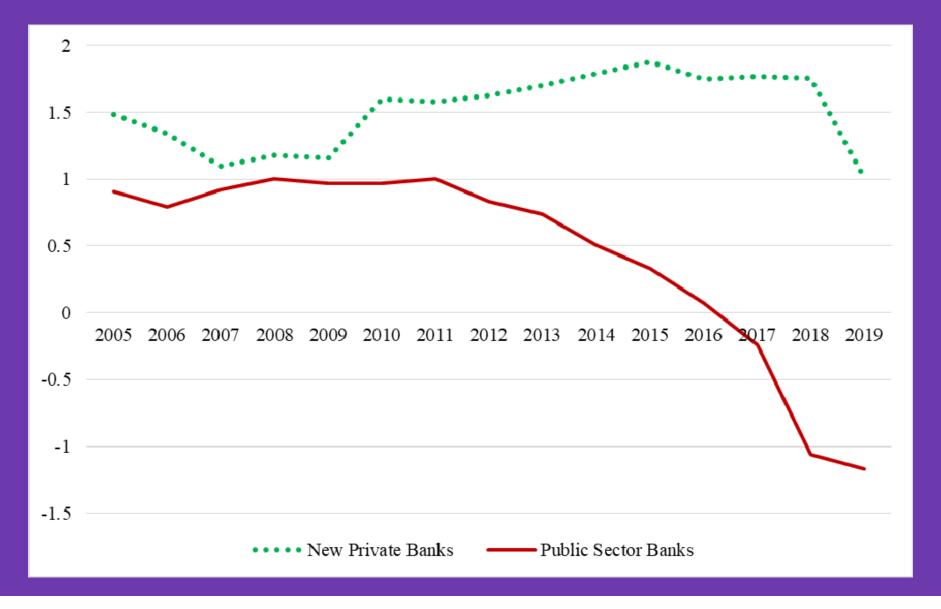
### Wealth erosion by willful defaulters



### Potential gains to the taxpayer from enhanced efficiency in PSBs



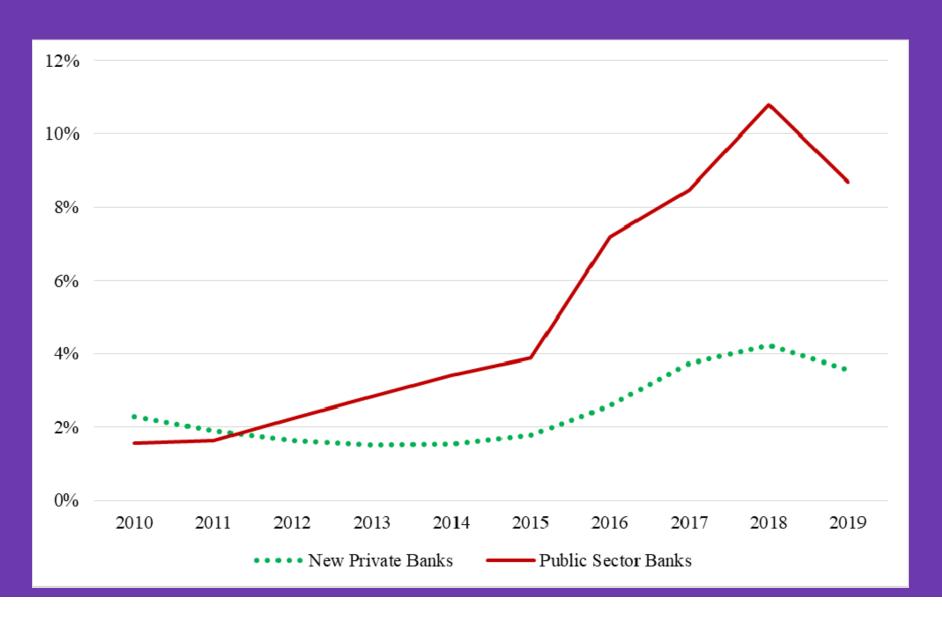
#### Return on Assets



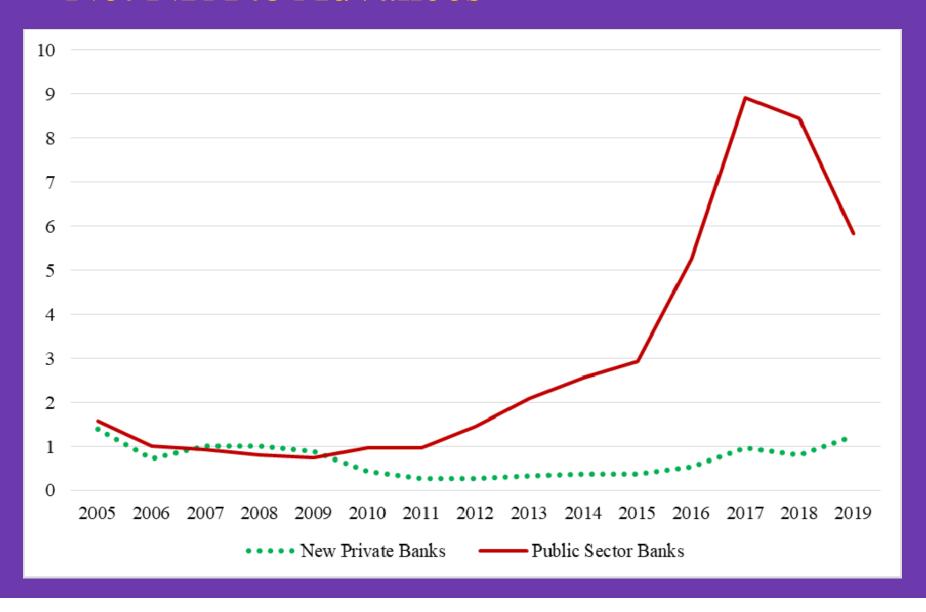
### Return on equity



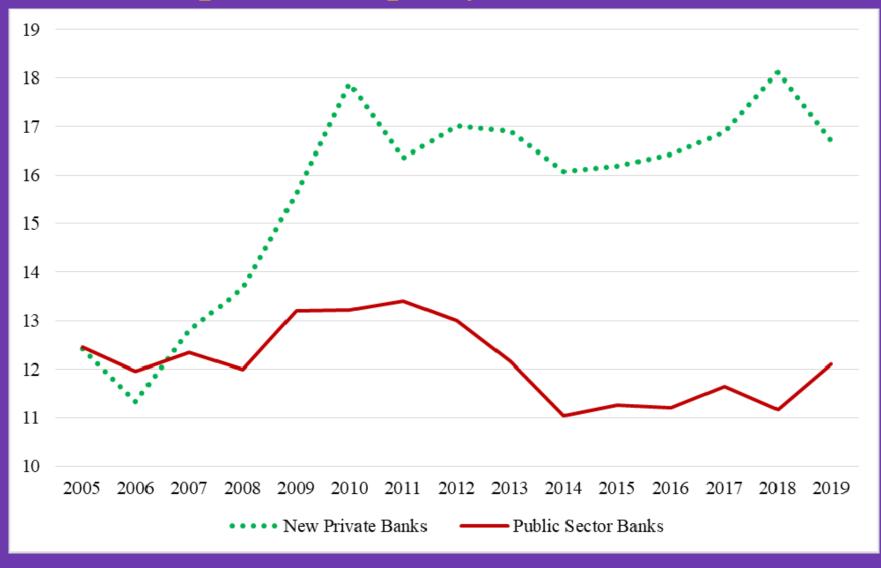
#### Gross NPA to Advances



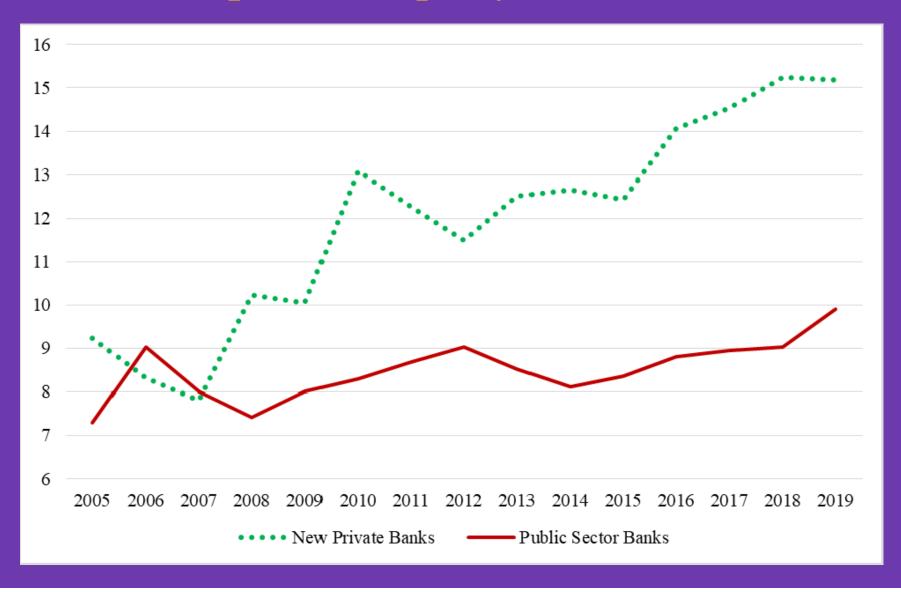
#### Net NPA to Advances



### Total Capital Adequacy Ratio



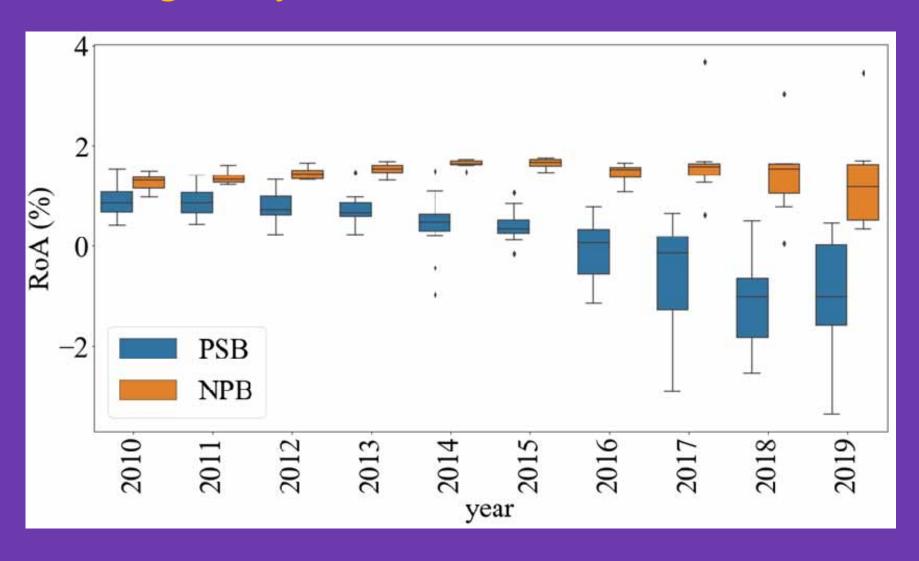
### Tier-1 Capital Adequacy Ratio



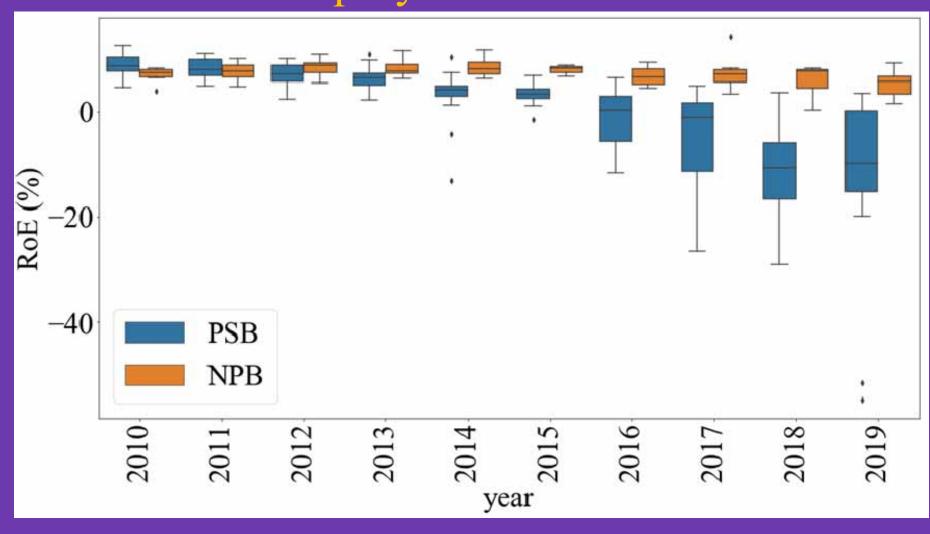
#### A key statistical principle for correct inference

- □Note carefully why a comparison between the <u>average</u> performance of PSBs and <u>average</u> performance in NPBs is an appropriate, apples-to-apples comparison.
- □ In any economic activity, heterogeneity is inevitable
- ☐ Wide variation within PSBs in their performance
- ☐ Similarly, some variation in NPBs performance too
- □But, incorrect to "pick one NPB to say NPBs no better!"
- □Comparing performance of average PSB with either best or worst performing NPB is incorrect
  - ❖Mixes up two statistical measures averages and outliers
  - **❖**Leads to an apples-to-oranges comparison

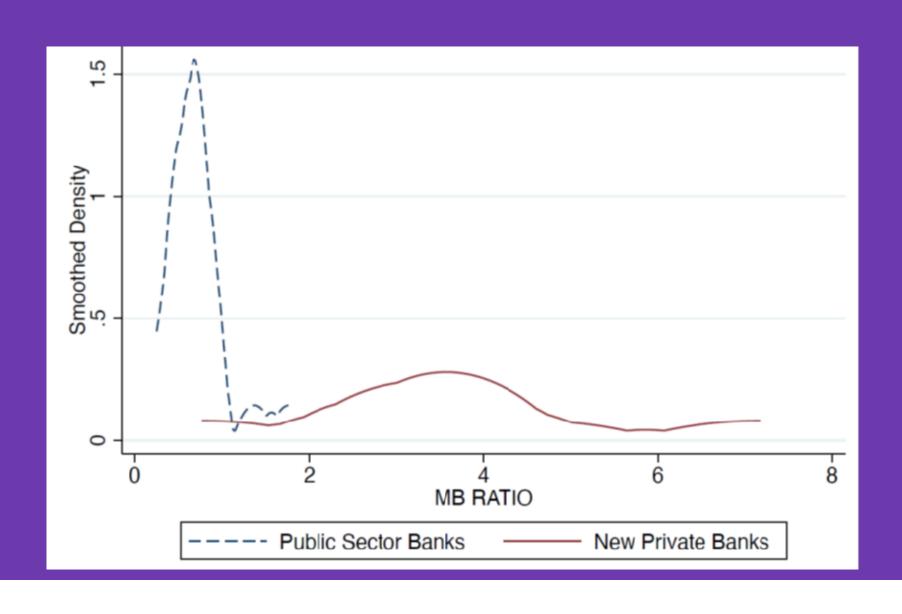
# Comparison accounting for heterogeneity: Return on Assets



# Comparison accounting for heterogeneity : Return on Equity



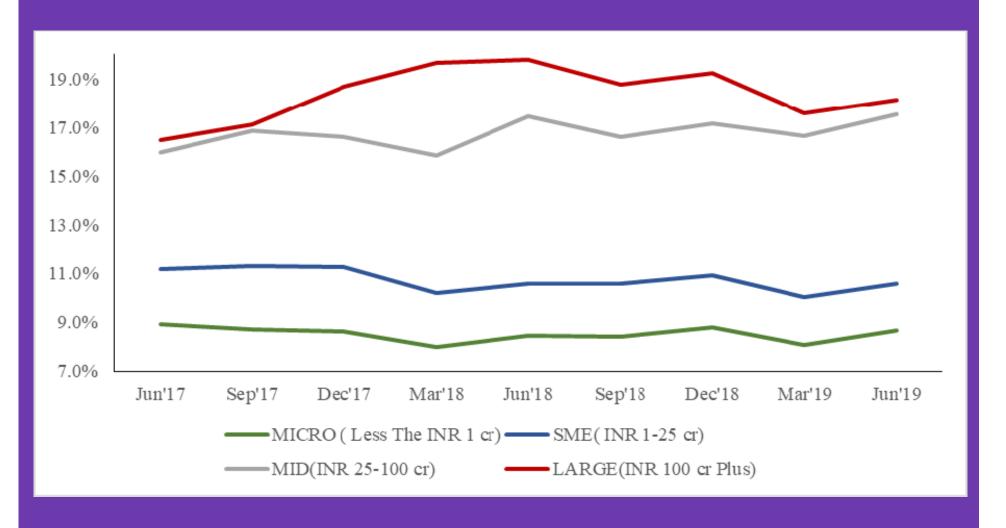
### Distribution of Market-to-book ratios



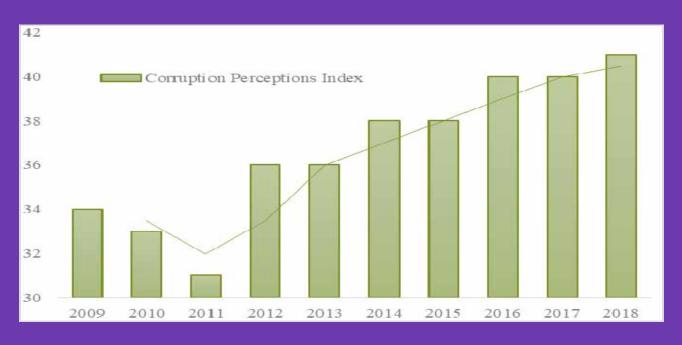
#### PSBs need radical transformation

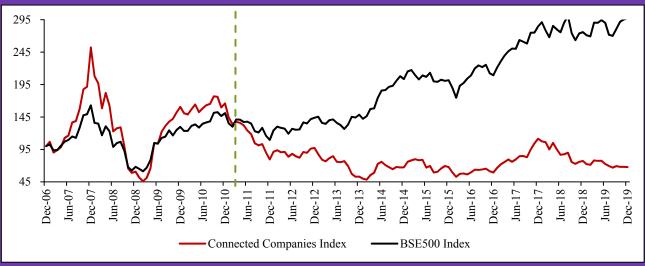
- □Estimate of return on equity in 2019 highlights that every rupee of taxpayer money invested in PSBs as equity by the Government loses 23 paise.
- □ The market-to-book ratio, which indicates the quality of a bank's governance, is 0.5 as of 2019 while that of the average private sector bank is >3.
- ☐ To enable PSBs to become efficient and thereby catalyse the banking sector and stimulate economic growth, structural solutions are necessary.

### Non-Performing Asset (NPA) Rate by Size of the Loan

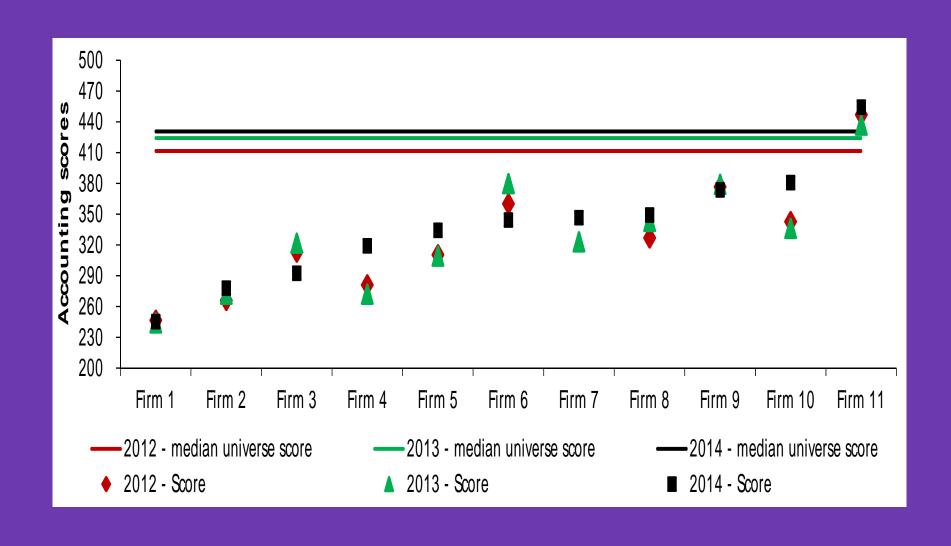


### Pro-crony policies undermine trust

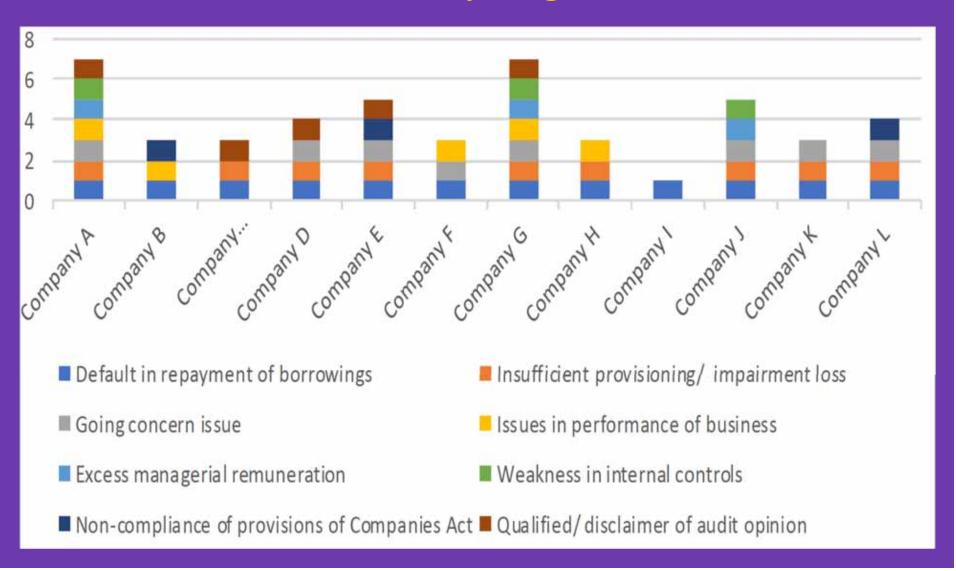




# Leading Indicators using quality of financial statement disclosures by large defaulters



### Leading Indicators using quality of financial statement disclosures by large defaulters

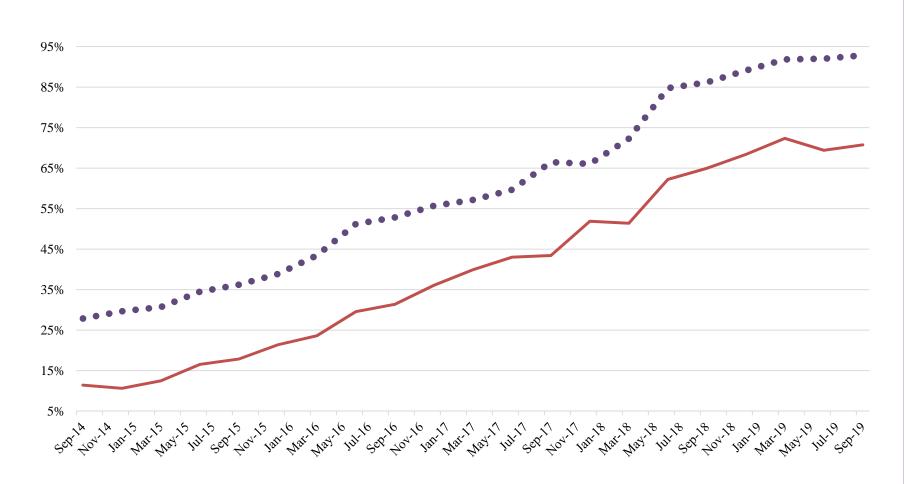


# Leading Indicators: Related party transactions and Share Pledging by willful defaulters

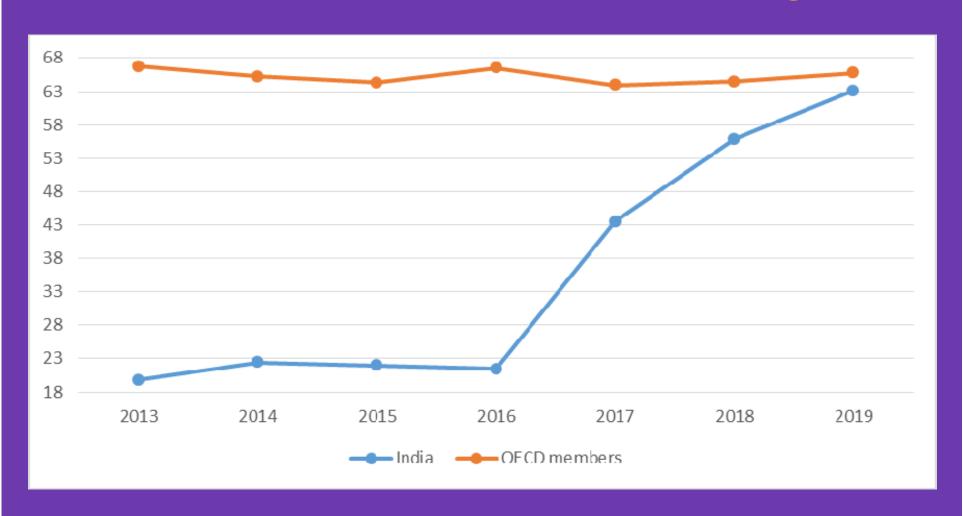


### Leading Indicators: Information with other banks

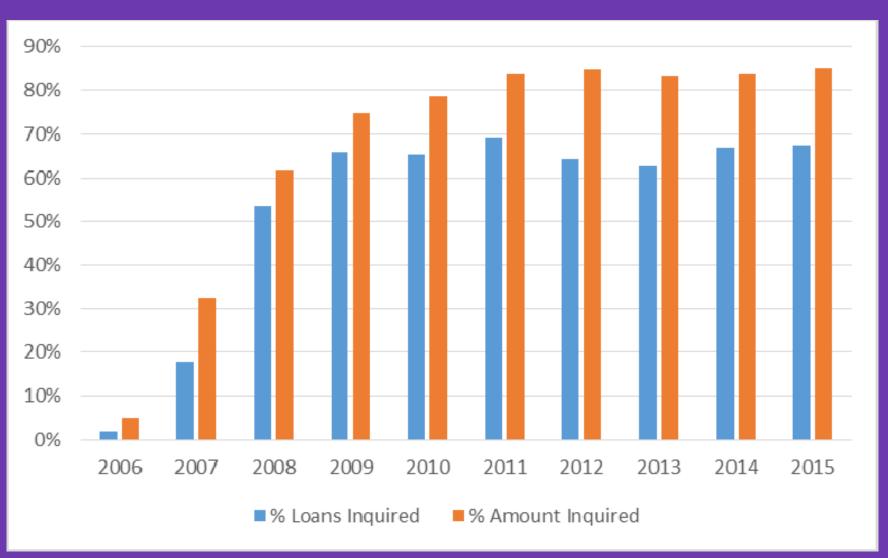
Proportion of Lenders Tagging an already tagged NPA (by Another Bank) as NPA in their books



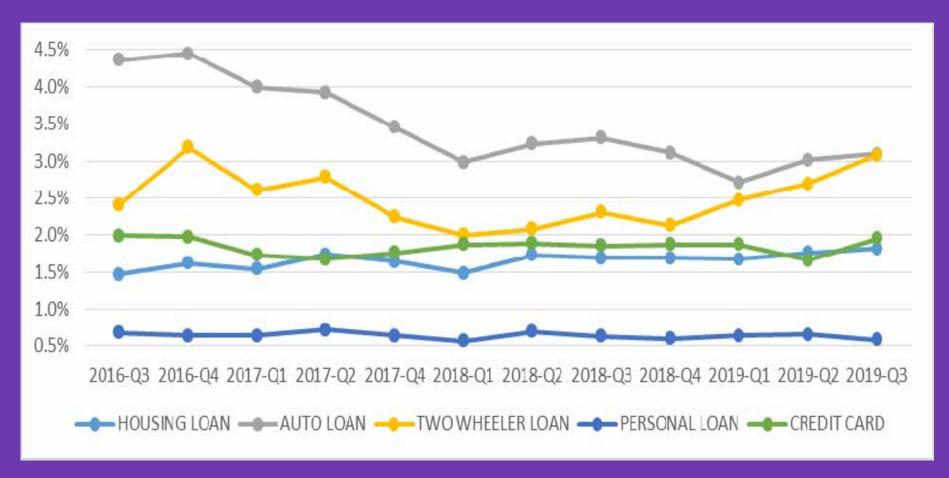
# Learning from use of data and analytics in Retail loans: Credit bureau coverage



### Learning from Retail loans: Use of Credit Bureau Data in NPBs



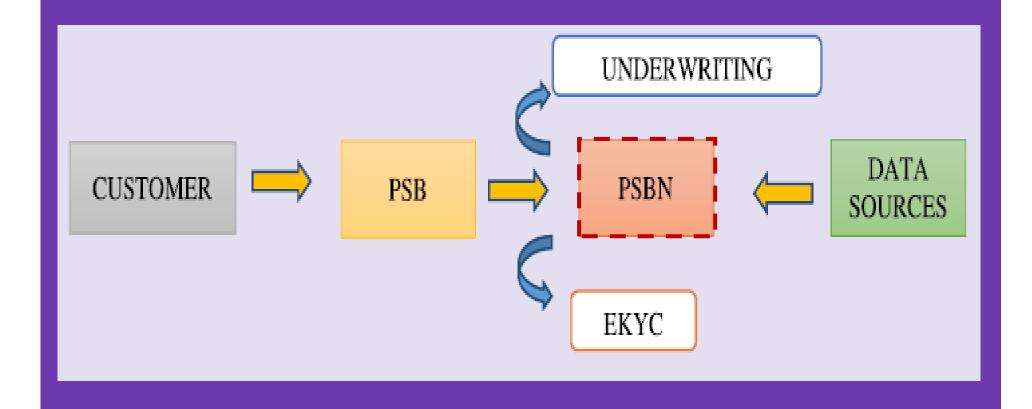
### Learning from use of data and analytics in Retail loans: NPAs since 2016



#### Solutions

- □Several suggestions in Narasimham Committee (1991, 1997), Rajan Committee (2007) and P J Nayak Committee (2014)
- □ Employee ownership via ESOPs
  - ❖To benefit from data & analytics, HR is key
  - Employee ownership via ESOPs to provide incentives for being at the cutting edge of banking
  - Heavy investments in generating high-quality data
  - ❖ Enable PSBs to hire the best from the IITs to build data analytics platforms; set them on a fast track
  - Extremely intensive training of current personnel to use data, analytics, AI, Machine Learning
- □ Large shareholders, especially activist investors

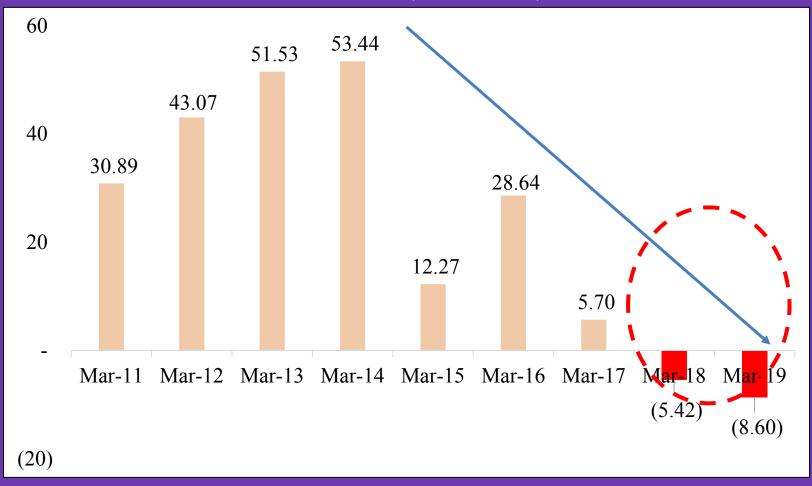
### Suggested Architecture and Solution Flow for FinTech in PSBs



# Thank You

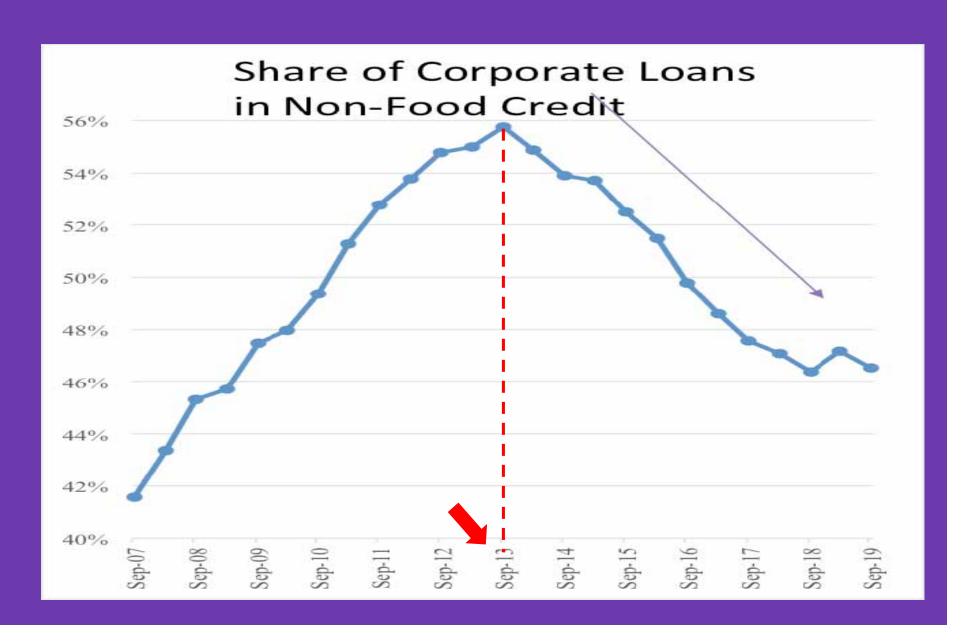
### Financial Fragility in the NBFC Sector

**Health Score (HFC Sector)** 



The Survey proposes an EWS (Early Warning Score) to highlight potential fragilities in NBFCs.

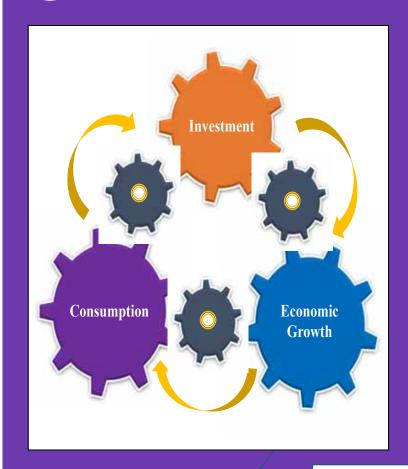
### **Boom & bust in Corporate Credit**

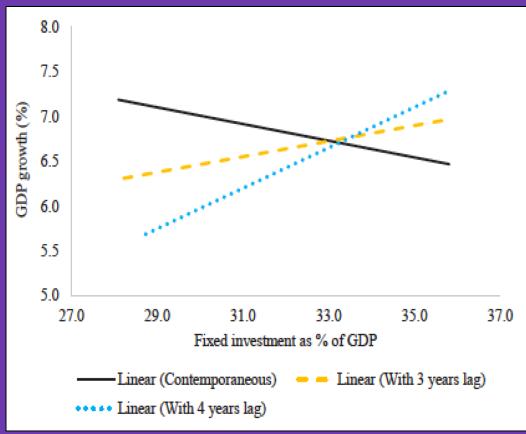


### Investment affected by Declining Credit

| Firm Year | Credit Expansion (Increase in debt/assets ratio) | Investment<br>(Growth in<br>Fixed Assets) | Relationship             |
|-----------|--------------------------------------------------|-------------------------------------------|--------------------------|
| 2011      | 2006-10                                          | 2011-15                                   | Not Significant          |
| 2012      | 2007-11                                          | 2012-16                                   | Not Significant          |
| 2013      | 2008-12                                          | 2013-17                                   | Significant and Negative |
| 2014      | 2009-13                                          | 2014-18                                   | Not Significant          |
| 2015      | 2010-14                                          | 2015-19                                   | Not Significant          |

# Lagged effect of declining investment on growth





The growth decline since 2017 is partly due to a 4 year lag effect of decline in investment