

# 18<sup>th</sup> IFS Project: Employee Benefits Liabilities in India: Balance Sheet Impact

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# Background

- The purpose of this project is to assess the impact of employee benefit liabilities on company's Balance Sheets
- This project is based on financial data collected from audited annual reports of India's top 100 listed companies as available in the public domain
- The following topics are addressed in the presentation:
  - Summary of employee benefit liabilities and funding levels
  - Key actuarial and financial assumptions and sensitivities of liabilities to assumptions
  - Risk exposures for companies with regard to employee benefits
  - Other key findings and highlights

# DB plans in India

- Accounting of employees benefits are covered under Accounting Standard 15 Revised issued by ICAI
- DB and other long term benefits are required to be valued using actuarial methods and assumptions
- Actuarial reports under AS15 are covered under GN26 of IAI

## Types of DB Plans in India

- Gratuity
- Pension
- Long term Compensated Absences (Leave Encashment)
- Post Retirement Medical Benefits
- Long Service Awards
- Provident Fund (interest guarantee)

# Data

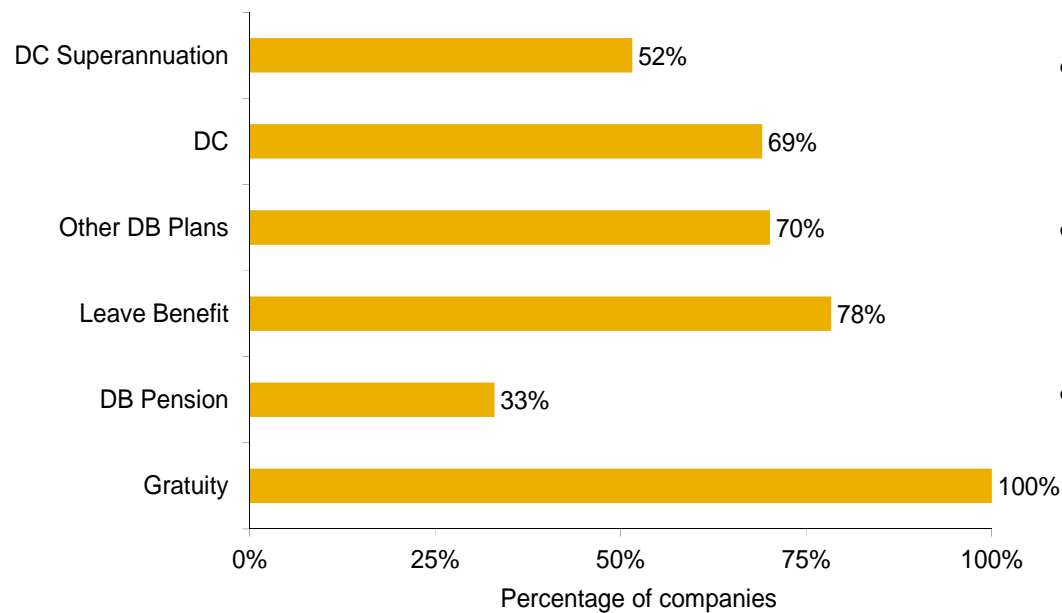
- The information used in the project is based on the disclosures made by companies, under AS15, from audited annual reports of BSE Top 100 companies (based on market cap) in India for the financial year ended 31 March 2012

		All figures in INR Crores			
Industry	Number of companies	Total employee benefits liabilities	Average	Total P/L charge	Average
Automotive	6	44,303	7,384	1,502	250
Basic Materials	12	156,070	13,006	4,327	361
Consumer Goods	10	4,924	492	385	38
Energy	8	14,376	1,797	1,902	238
Financial	25	109,773	4,391	12,329	493
Industrial	15	8,787	586	1,107	74
Pharmaceuticals	8	1,320	165	143	18
Technology	4	2,033	508	360	90
Telecommunications	4	738	184	98	24
Utilities	8	5,667	708	1,292	161
<b>Grand Total</b>	<b>100</b>	<b>361,922</b>	<b>3,619</b>	<b>23,443</b>	<b>234</b>

- Financial and Energy have the largest employee benefits liabilities
- Automotive and Basic Materials liabilities are skewed due to foreign liabilities of Tata Motors and Tata Steel

# Types of Benefit Schemes

**Figure 1**  
**Plan Types covering 97 companies of BSE 100**

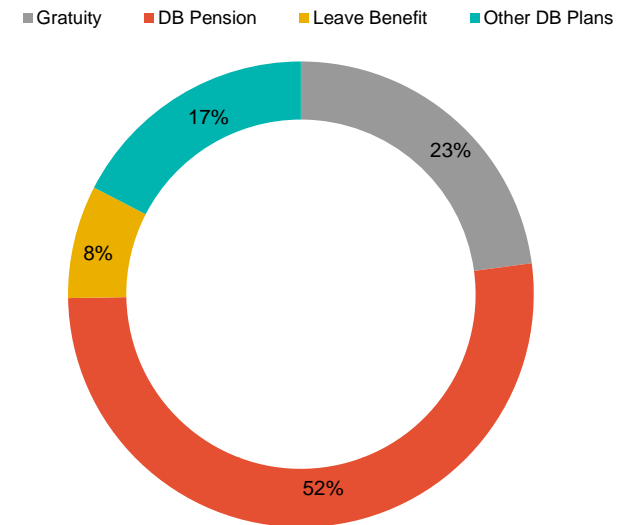


- DC plans comprise primarily of Provident Fund any other contribution made by the employer as Defined Contribution Plans
- Where companies report PF as DB and book a liability for interest guarantee portion, the same has been considered as other DB plan
- Other DB plans also include PRMB, long- term service awards, death benefits and terminal benefits

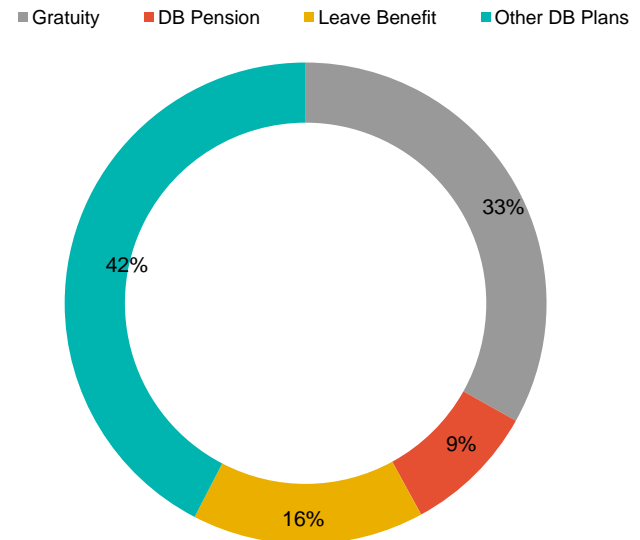
# Scheme size

- DB pension continue to be the biggest contributor to total liabilities with 52% of total liabilities, followed by Gratuity which contribute 23%
- Leave Benefits and Other DB plans contribute 8% and 17% respectively to total liabilities
- This is majorly due to PSU Banks, which have significant DB Pension liabilities contributing more than 80 percent to the total banking sector liabilities in 2012 driven by huge DB pension liabilities of State Bank of India
- Similar analysis after excluding PSU banks shows significantly different results. After excluding PSU banks, other DB Plans and Gratuity emerge as biggest contributors with 42% and 33% of liabilities respectively

**Figure 2**  
Classification of Defined Benefit Schemes by Liability  
(97 out of BSE 100)

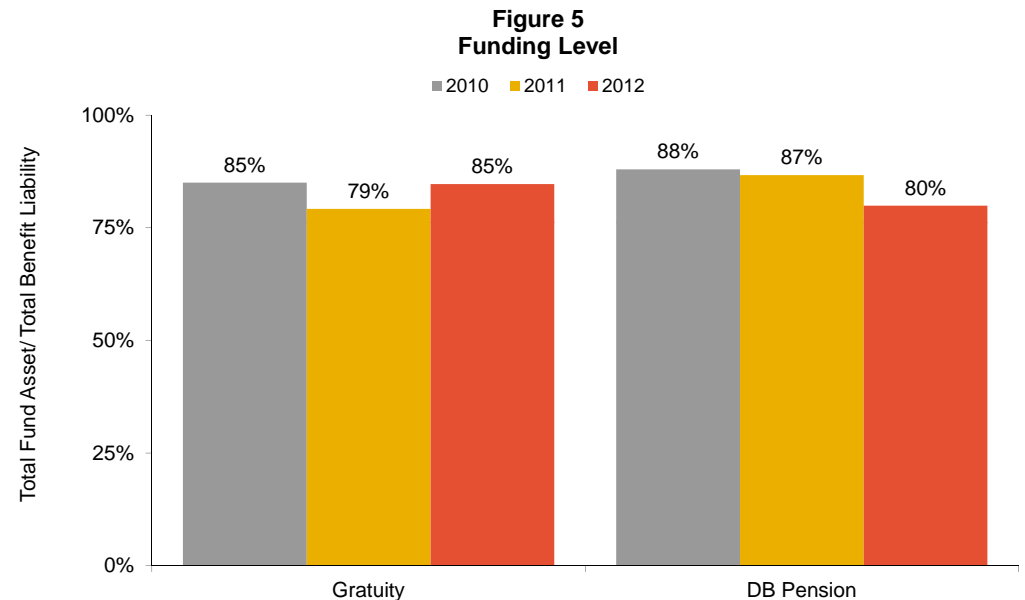


**Figure 3**  
Classification of Defined Benefit Schemes by Liability  
(BSE 100 excluding PSU banks)



# Overall liabilities and Funding Levels

- The combined employee benefits liabilities across the BSE100 companies were about 350,000 crores in 2012
- Bulk of this is attributable to DB pension liabilities of PSU Banks (85,000 crores) and foreign subsidiaries of some private companies (e.g. Tata Steel, Tata Motors)
- The liabilities have increased by over 20% in last one year
- Overall funding levels are 85% and 80% for Gratuity and DB Pension respectively
- Leave Benefit and Other DB Plans (excluding PF) are largely unfunded



Funding level = value of assets / amount of liability

About 30% of pension plans are unfunded

# Assumptions

- Employee benefit cost and liability valuations are dependent on some key financial and demographic assumptions
- Most companies have only disclosed the discount rate, expected salary increases and expected rate of return on assets. Attrition assumptions are usually not disclosed
- Analysis shows that actuarial gains and losses form 39% of the total benefits cost (median value)
  - This is very high and introduces significant volatility in the company's financial statements (since under AS15, actuarial gains and losses are recognized immediately through P/L)
  - This highlights the importance of setting appropriate assumptions
  - In particular, salary growth contributes to largest share of actuarial losses
- While AS15 says that assumption setting is the responsibility of employers, it is expected that actuaries provide the necessary inputs and guidance to arrive at the most appropriate assumptions keeping in mind the following:
  - Company's past experience
  - Industry trends
  - Long term outlook
  - Macroeconomic economic factors



# Summary of Assumptions

Financial assumptions		
	Commentary	Median used in 2012
Discount rate	Market driven based on government bond yields at valuation date; highly volatile	8.5%
Salary growth	Should be long term keeping in mind inflation, seniority, promotion and other relevant factors, such as supply and demand in the employment market	5%
Expected return on assets	Long term expectation of returns over the duration of liabilities	8.4%
Pension increase	Mostly relevant for PSU's where pension increases are linked to DA increases. Should therefore be consistent with long term inflation	Only one PSU Bank disclosed 2.5%
Medical inflation	Should be consistent with best estimate of long term medical inflation, which has been higher than general inflation	6%

Demographic / Actuarial assumptions	
	Commentary
Attrition	Should reflect past experience, industry, company outlook
Mortality in service	Almost all companies use LIC a (94-96)
Mortality post retirement	Almost all companies use LIC a (96-98)

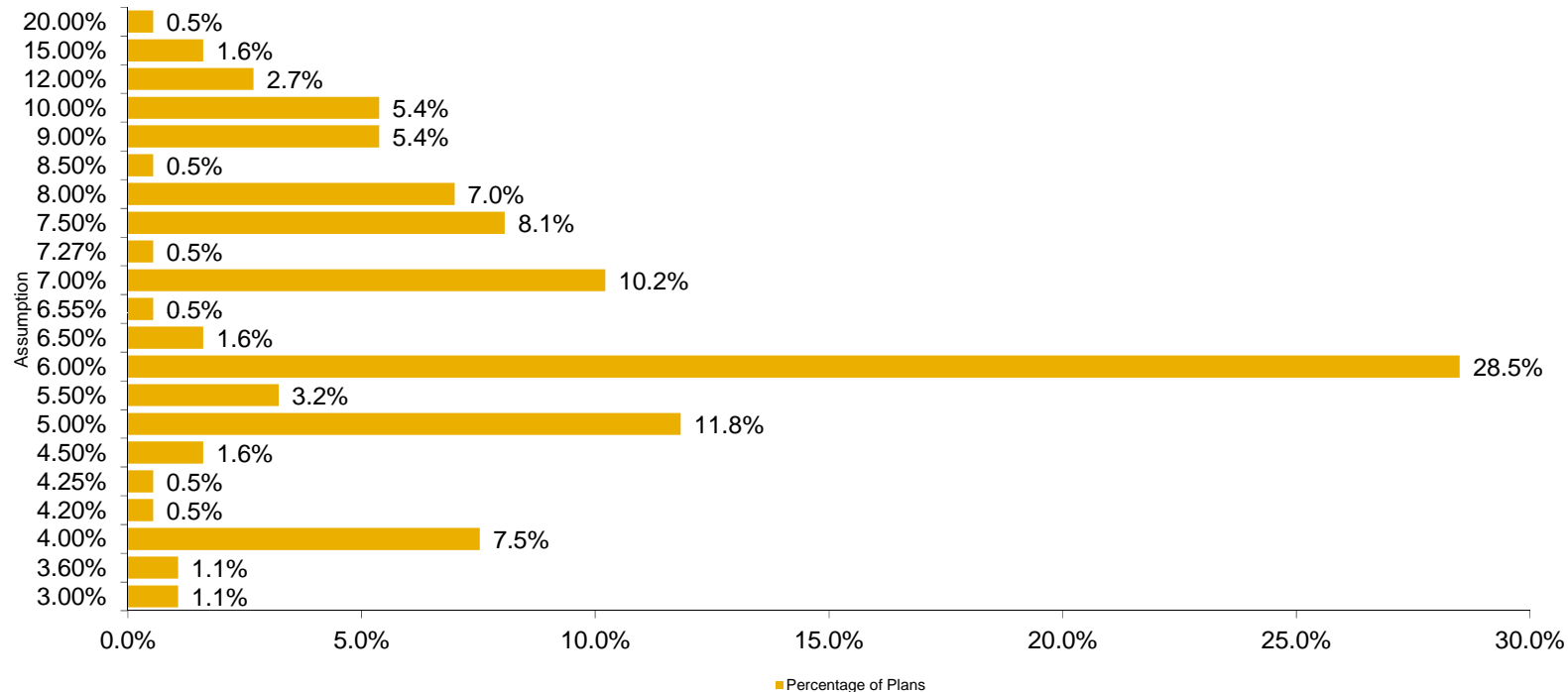
# Assumption impact on PSU Banks

Figures in INR crore				
Bank Name	Discount Rate	Salary Escalation	Gratuity Liability	Pension Liability
SBI	8.50%	3% to 6%	8,514	45,956
PNB	8.50%	5.00%	2,399	10,591
Canara	8.70%	2.50%	1,473	7,742
Bank of India	9.00%	4.00%	1,478	7,139
Bank of Baroda	8.75%	4.00%	1,417	7,034
Central Bank	Not available	4.00%	1,047	5,997
Union Bank	9.00%	4.00%	991	5,259
IOB	8.50%	3.50%	941	4,389
Indian Bank	8.63%	2.50%	755	3,864
UCO	8.50%	5.00%	820	3,251
Allahabad Bank	8.50%	5.00%	722	3,175
Andhra Bank	8.40%	3.50%	546	2,395
P&S	8.50%	5.25%	438	2,318
UBI	8.50%	not available	553	2,028
Corp Bank	8.57%	5.75%	401	1,861
IDBI	9.00%	5.00%	370	964
<b>TOTAL</b>			<b>22,866</b>	<b>113,962</b>

Approximate impact on liability			
Assumption	Sensitivity	Pension	Gratuity
Discount rate	-1%	+16%	+6%
Salary growth	+1%	+16%	+4%
Post retirement mortality	Rated down by 3 years	+7.5%	N/A

# Salary Increase Assumption

**Figure 9**  
**Salary Increase Assumption**



- Median salary increase across all industries is about 6%. For PSU Banks, it is about 5%. Only 25% of BSE100 companies use salary assumptions of 8% and above
- This can be considered fairly low
- Past inflation in India over last 10 years has been 7-8%

# Risk Exposure

- Employee benefit plans can make a company susceptible to various risks
  - A high deficit between the DB liabilities and assets of the company could have an adverse impact on ability to pay benefits when they are due
  - Reduced capacity to raise public funds
  - Could affect the profits and lead to a volatile P/L that could affect dividend distribution and share price
  - This being said, employee benefits are not only very important for retention and attraction of the right talent but also crucial for employee engagement. It is therefore imperative to ensure the plan is governed efficiently and optimally
- In this section we use some key risk measurement ratios to portray the risk faced by BSE 100 companies in 2012

# Employee benefit – Financial risks

BSE Overall Benefits Risk				
RISK MEASURE	25th Percentile	Median	75th Percentile	Mean
Total Plan Deficit / Operating Cash flow	0.68%	2.56%	13.18%	31.14%
Service Cost / Personnel Cost	0.86%	1.76%	3.33%	2.92%
Benefits Cost / Operating Profit	0.50%	0.91%	3.22%	3.77%
Employer Contributions / Operating Cash flow	0.41%	0.92%	3.60%	9.08%
Total Plan Deficit / Retained Earnings	0.16%	0.62%	3.59%	3.91%
Total Benefit Obligations / Market Cap	0.28%	0.73%	3.02%	5.98%
Total Plan Deficit / Market Cap	0.05%	0.21%	0.88%	1.40%

- The table above shows us that on an average employee benefit plans have a small impact on the financial position of the companies in the sample. The deficit upon market capital and deficit upon retained earnings indicate that mostly the benefit plans are well funded and should not affect the dividend policy
- The proportion of benefit cost upon operating profit highlight the impact employee benefit plans have on the profitability of the company. While these ratios are not alarming, the plans could prove to be a high strain on the profits in a stressful situation
- PSU Banks by far have the highest risk of the extent of employee benefits liabilities against their finances. The median benefit cost as a percentage of operating profit for PSU Banks is about 30% compared to only 1% for BSE100 overall

Source: Annual reports and Bloomberg

# Summary of key themes and highlights

- Overall employee benefits liabilities are a small proportion of company's balance sheet and operating profits in India
  - However, large PSU's and PSU Banks in particular have large exposures to DB pension
  - While some measures have been taken to move to DC, some of India's largest Banks are exposed to uncertain liabilities
- Are assumptions appropriate?
  - Salary assumptions in particular are not appropriate in the Indian context
  - Overall, Indian companies (especially PSU Banks) may be under-provisioning to a large extent
  - Are experience analysis conducted for key assumptions, e.g. attrition?
  - Mortality improvements may not be factored appropriately
- Are Indian companies doing appropriate level of due diligence when making foreign acquisitions? Major foreign acquisitions with large pension liabilities:
  - Tata Steel acquisition of Corus
  - Tata Motors acquisition of JLR
  - Hindalco acquisition of Novelis

# Questions?