

Prepared by:

**Simon Herborn**, FIA, FIAI

**Ravi Shekhar**, CFA (ICFAI), APA

**Danny Quant**, FIA

**Mohammad Ali Makani**, FSA, FCIA-CA

June 2013



# India healthcare sector gratuity funding study

An analysis of gratuity funding  
among BSE 200 healthcare companies

---

**TABLE OF CONTENTS**

INTRODUCTION	1
2012 INDIA HEALTHCARE GRATUITY FUNDING STUDY	2
ABOUT THIS STUDY	7

## INTRODUCTION

Milliman conducts continual and extensive research on issues connected to the employee benefits offered by Indian companies.

We present here our first annual study of the gratuity obligations among healthcare companies in India to report the major trends with regard to these obligations. The main aim of the study is to educate and create awareness about the state of employer-sponsored retirement programs and foster a healthy dialogue among policy builders, employers, employees, and the general public about the future of retirement plans in India.

We focus our analysis on the 17 healthcare companies listed in the BSE 200 index as of 31 December 2012. We have extracted data from their 2011-2012 annual reports. The specific companies under consideration are outlined in Figure 1.

**FIGURE 1: IT COMPANIES IN BSE 200 AS OF 31 DECEMBER 2012**

COMPANY NAME	YEAR END
APOLLO HOSPITALS ENTERPRISES LIMITED	31 MARCH 2012
AUROBINDO PHARMA LIMITED	31 MARCH 2012
BIOCON LIMITED	31 MARCH 2012
CADILA HEALTHCARE LIMITED	31 MARCH 2012
CIPLA LIMITED	31 MARCH 2012
DIVI'S LABORATORIES LIMITED	31 MARCH 2012
DR. REDDY'S LABORATORIES LIMITED	31 MARCH 2012
FORTIS HEALTHCARE LTD	31 MARCH 2012
GLAXOSMITHKLINE PHARMACEUTICALS LIMITED	31 DECEMBER 2012
GLENMARK PHARMACEUTICALS LTD	31 MARCH 2012
IPCA LABORATORIES LIMITED	31 MARCH 2012
LUPIN LTD	31 MARCH 2012
PIRAMAL ENTERPRISES LIMITED	31 MARCH 2012
RANBAXY LABORATORIES LIMITED	31 DECEMBER 2012
STRIDE ARCOLAB LIMITED	31 DECEMBER 2012
SUN PHARMACEUTICAL INDUSTRIES LIMITED	31 MARCH 2012
WOCKHARDT LTD	31 MARCH 2012

Note that we consider only the company-specific obligations rather than the consolidated obligations, taking into account all their subsidiaries.

Throughout the remainder of this report we shall refer to the companies as A to Q. (The nomenclature to A to Q may not directly correspond to the ordering of the firms outlined above).

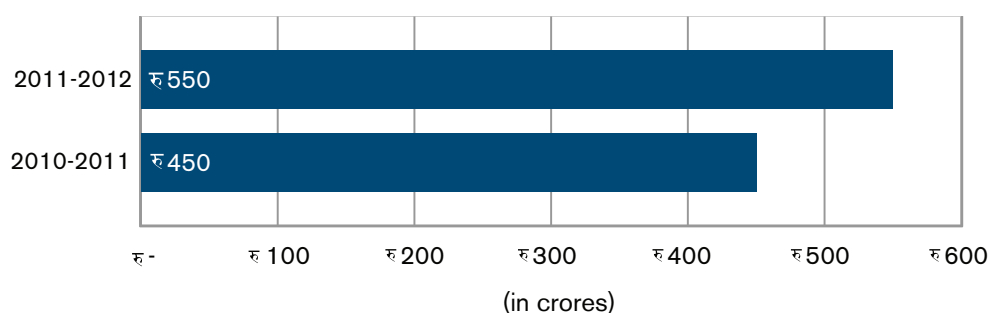
## 2012 MILLIMAN STUDY OF GRATUITY FUNDING AMONG HEALTHCARE COMPANIES IN THE BSE 200

### HIGHER PROJECTED BENEFIT OBLIGATION LEVELS RECORDED IN 2011-2012, ALONG WITH SLIGHT RISE IN EXPENSE

The 17 healthcare companies under consideration registered a rise in their projected benefit obligation (PBO) from the prior year. From 2010-2011 to 2011-2012, their combined PBOs increased by about 21%, from approximately Rs 450 crores to approximately Rs 550 crores.

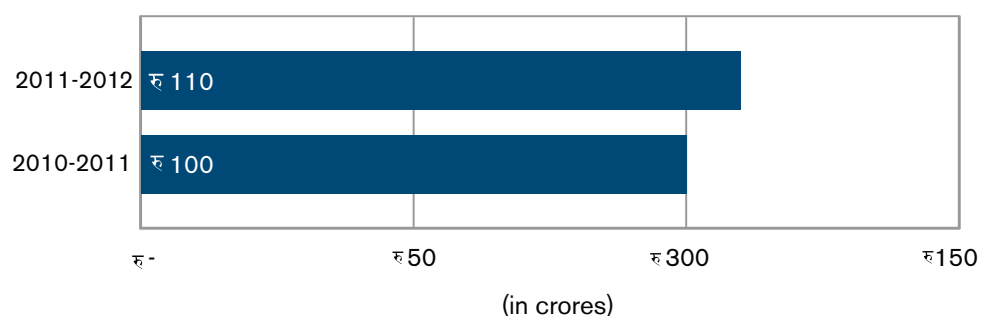
The combined increase among the companies can be attributed to several factors, including accrual of extra service, aging of the covered populations, demographic experience and changes in actuarial assumptions.

**FIGURE 2: PBO**



There was little change in gratuity expense in 2011-2012. Total charges to earnings were approximately Rs 110 crores, compared with Rs 100 crores in 2010-2011.

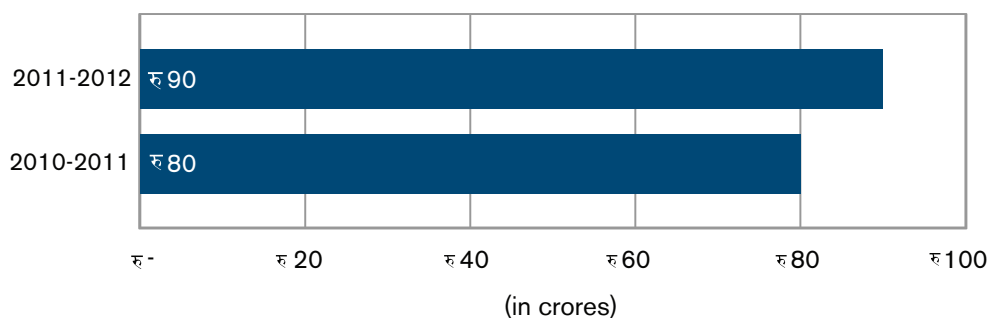
**FIGURE 3: EMPLOYER EXPENSES**



### EMPLOYER CONTRIBUTION LEVELS HAVE RISEN, FUNDED STATUS HAS DROPPED

The companies contributed approximately Rs 90 crores to their gratuity plans in 2011-2012. This is an increase of 11% relative to the figure for 2010-2011.

**FIGURE 4: TOTAL ER CONTRIBUTION**



The funded ratio of the companies' combined gratuity plans fell slightly during 2011-2012, reaching 80%. The aggregate gratuity deficit of approximately Rs 80 crores in 2010-2011 rose by approximately Rs 30 crores during 2011-2012 to approximately Rs 110 crores.

**FIGURE 5: PLAN ASSETS AND LIABILITIES**

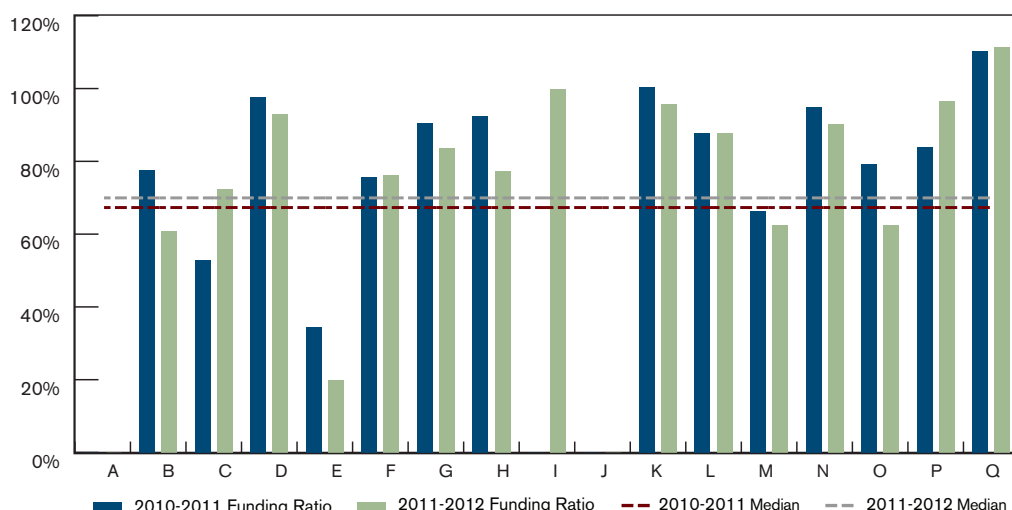


### A MIXTURE OF FUNDING POLICIES HAVE BEEN PURSUED

Two of the 17 companies studied have not provided any advance funding of their gratuity obligations. For the remaining 15 companies, the 2010-2011 PBO (excluding one company which moved from being unfunded to fully funded during the year), funded ratios ranged from a low of 35% to a high of 110%, with an overall funded status of 85%. In 2011-2012, the overall funded status fell to 83%, ranging from a low of 20% to a high of 111%.

Reasons for the changes in funded ratios include the level of employer contributions, changes in actuarial assumptions and the level of investment return.

**FIGURE 6: CHANGE IN FUNDING\***

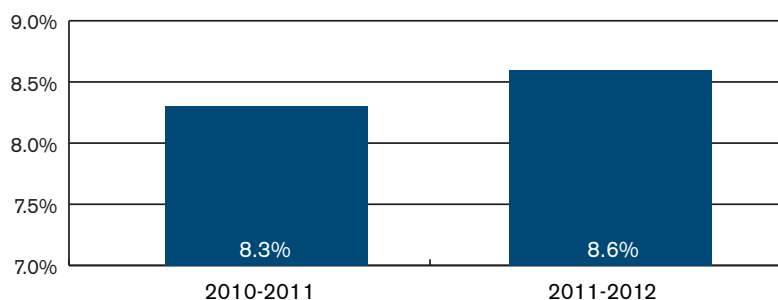


\* The fiscal year for companies E, K and M end on 31 December. All other companies have a fiscal year-end of 31 March.

Among the 15 companies with substantial advance funding to meet their gratuity obligation, 13 clearly articulated the assumption for the expected rate of return on invested assets. The median expected rate of return in 2011-2012 was 8.6%. The median expected investment return in 2010-2011 was 8.3%.

Eight of the 13 companies under consideration maintained the same expected rate of return between 2010-2011 and 2011-2012. The other five companies raised their expected rates of return.

**FIGURE 7: MEDIAN EXPECTED ASSET PERFORMANCE**

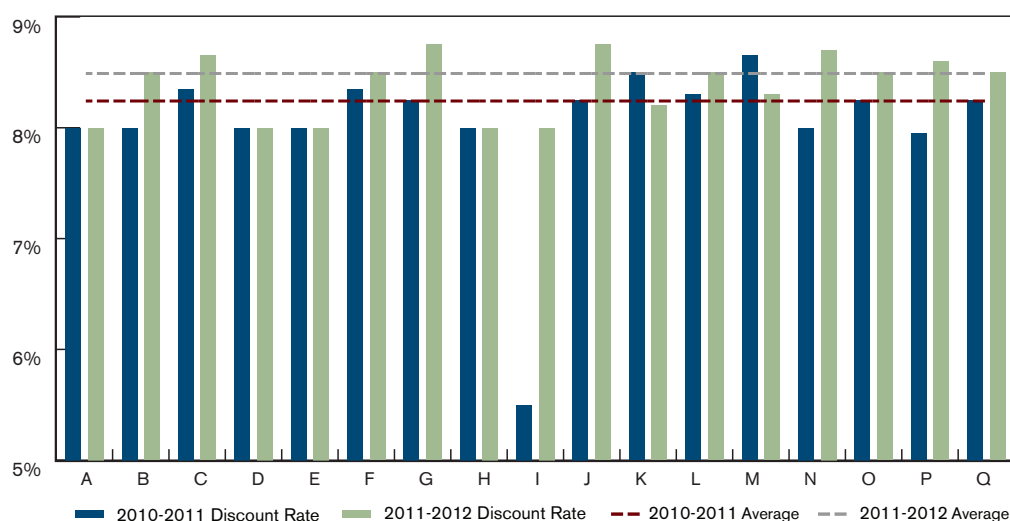


## DISCOUNT RATES HAVE RISEN

The companies will have set their discount rates with regard to the yield on Indian government bonds at the end of their fiscal years. It should reflect the notional yield on a bond with the same duration as weighted average expected future working lifetime of the covered employees. All else equal, a higher discount rate results in a lower disclosed benefit obligation.

Fourteen of the 17 companies under consideration take a fiscal year-end of 31 March. Among these companies, there was a rise in discount rate between 2010-2011 and 2011-2012 for 11 and an unchanged discount rate for the remainder. Overall, the median discount rate increased from 8.3% in 2010-2011 to 8.5% in 2011-2012.

FIGURE 8: DISCOUNT RATE DISTRIBUTION\*

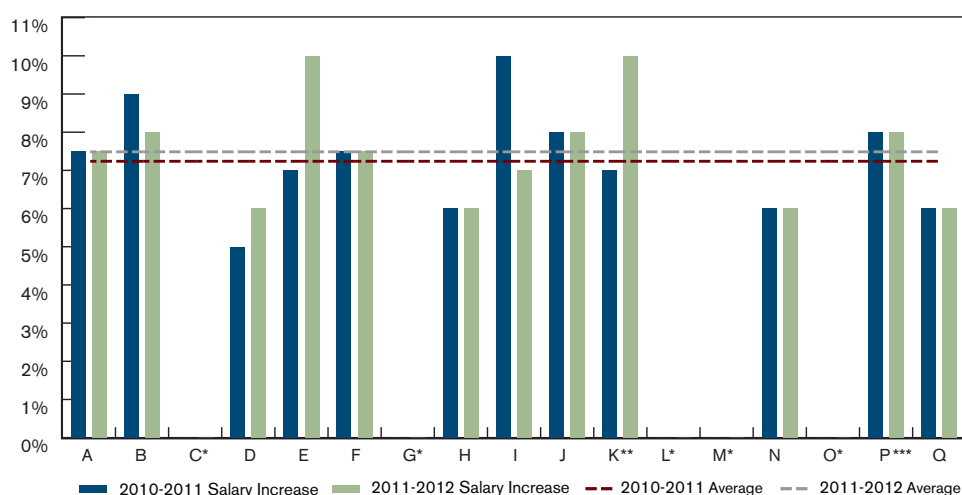


\* The fiscal year for companies E, K and M end on 31 December. All other companies have a fiscal year-end of 31 March.

## EXPECTED SALARY INCREASES HAVE RISEN

In measuring the obligation, an assumption is made about the expected long-term rate of increase in the salaries of prospective future recipients of the gratuity benefit. Five of the companies did not state the assumption made about future rates of salary increase. Of the remaining 12 companies under consideration, seven did not change the assumption for the rates of future salaries between 2010-2011 and 2011-2012, three raised their assumption and two lowered it. Overall, the median salary increase assumption rose from 7.3% in 2010-2011 to 7.5% in 2011-2012.

FIGURE 9: EXPECTED SALARY INCREASE DISTRIBUTION



\* Salary increase assumption not specified.

\*\* 2010-2011 assumption presented as 7.0%, but actual assumption is 10.0% in the first two years post valuation and 7.0% thereafter.

\*\*\* 2010-2011 and 2011-2012 assumptions both presented as 8.0%, but actual assumption is 9.0% in the first one/two years respectively post valuation and 8.0% thereafter.



---

## ABOUT THIS STUDY

### MILLIMAN 2012 INDIA HEALTHCARE SECTOR GRATUITY FUNDING STUDY

This study covers the 17 healthcare companies listed in the BSE 200 as of 31 December 2012.

The results of this study are based on the gratuity obligation accounting information disclosed in the footnotes to the companies' annual reports for the 2010-2011 and 2011-2012 fiscal years. These figures represent the generally accepted accounting principles (GAAP) accounting information that public companies are required to report under Accounting Standard 15 (Revised 2005).

Milliman also publishes similar studies for other Indian and international industry groupings.

---

Simon Herborn, FIA, FIAI, is a consulting actuary in the Mumbai office of Milliman.  
Contact him at [simon.herborn@milliman.com](mailto:simon.herborn@milliman.com).

Ravi Shekhar, CFA (ICFAI), APA is a consultant in the New Delhi office of Milliman.  
Contact him at [ravi.shekhar@milliman.com](mailto:ravi.shekhar@milliman.com).

Danny Quant, FIA, is a consulting actuary in the Singapore office of Milliman.  
Contact him at [danny.quant@milliman.com](mailto:danny.quant@milliman.com).

Mohammad Ali Makani, FSA, FCIA-CA, is a consulting actuary in the Dubai office of Milliman.  
Contact him at [mohammad.makani@milliman.com](mailto:mohammad.makani@milliman.com).







#### **ABOUT MILLIMAN**

Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in healthcare, property & casualty insurance, life insurance and financial services, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe. For further information, visit [milliman.com](http://milliman.com).

#### **Simon Herborn**

[simon.herborn@milliman.com](mailto:simon.herborn@milliman.com)

#### **Ravi Shekhar**

[ravi.shekhar@milliman.com](mailto:ravi.shekhar@milliman.com)

#### **Danny Quant**

[danny.quant@milliman.com](mailto:danny.quant@milliman.com)

#### **Mohammad Ali Makani**

[mohammad.makani@milliman.com](mailto:mohammad.makani@milliman.com)

[in.milliman.com](http://in.milliman.com)