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India defined benefit funding study

An analysis of pension and gratuity in the India market

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INTRODUCTION

Milliman's India office conducts an annual study of the pension and gratuity obligations of the 26 public sector banks 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. This is our second such publication.

The following report is divided into two sections: the Pension Study, which contains details about the state of funded defined benefit pension plans sponsored by the 26 public sector banks, and the Gratuity Study, which contains details about the funded defined benefit gratuity plans of the same 26 public sector banks. We have extracted data from their 2011-2012 annual reports.

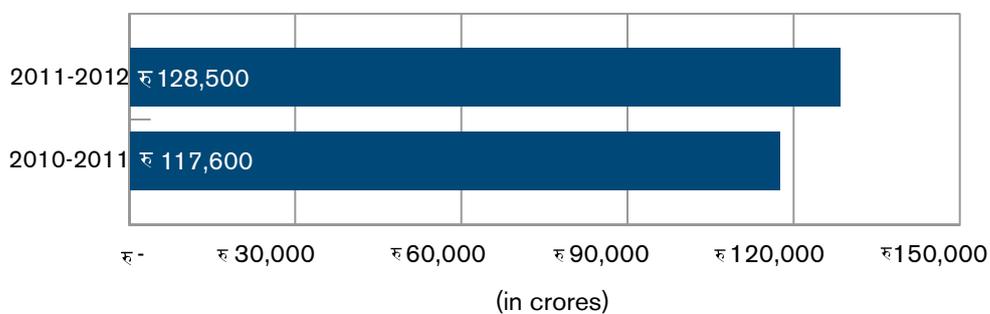
2012 MILLIMAN STUDY OF PENSION FUNDING AMONG INDIAN PUBLIC SECTOR BANKS

HISTORICALLY HIGH PBO AND EXPENSE LEVELS RECORDED IN 2011-2012

The 26 Indian public sector banks under consideration registered a historically high aggregated projected benefit obligation (PBO). During the year, combined PBOs increased by about 9% from approximately Rs 117,600 crores to approximately Rs 128,500 crores.

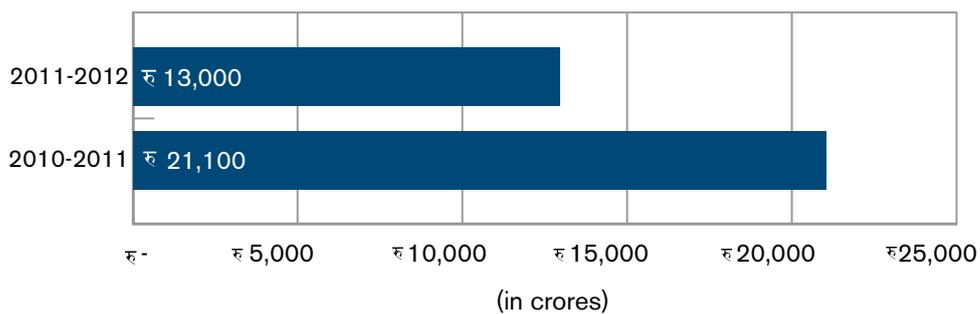
The combined increase can be attributed to several factors, including accrual of extra years of service, aging of plan population, demographic experience, and changes in economic assumptions.

FIGURE 1: PBO



There was a reduction in pension expense in 2011-2012. Total charges to earnings were approximately Rs 13,000 crores, compared with Rs 21,100 crores in 2010-2011.

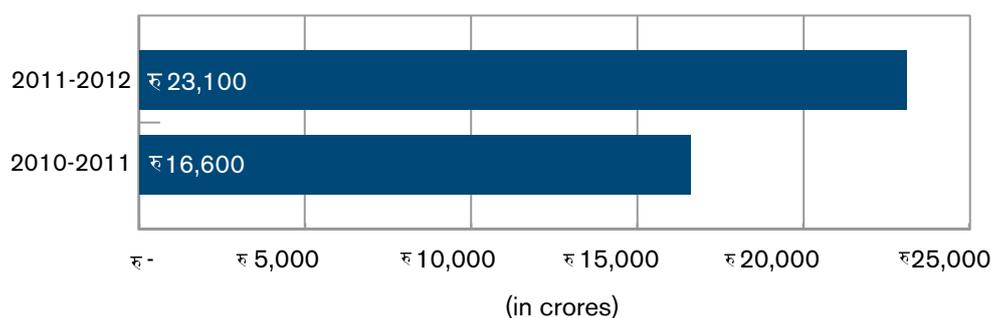
FIGURE 2: EMPLOYER EXPENSES



**AS A RESULT OF RECORD LEVELS OF EMPLOYER CONTRIBUTIONS,
THE OVERALL PENSION FUNDED STATUS HAS IMPROVED**

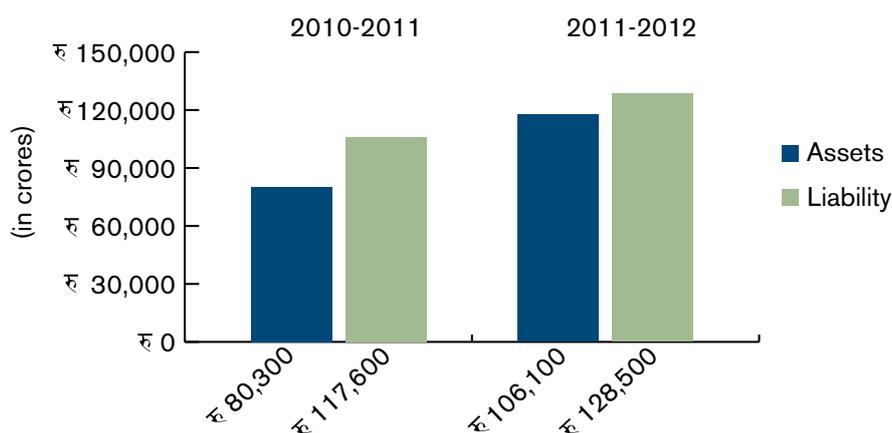
The banks contributed a record amount of approximately Rs 23,100 crores to their pension plans in 2011-2012. This is an increase of 39% over the figure for 2010-2011.

FIGURE 3: TOTAL ER CONTRIBUTION



The funded ratio of the banks' combined pension plans increased substantially during 2011-2012, reaching 83%. The aggregate pension deficit of approximately Rs 37,300 crores in FY 2010-2011 fell by approximately Rs 14,900 crores during FY 2011-2012 to approximately Rs 22,400 crores.

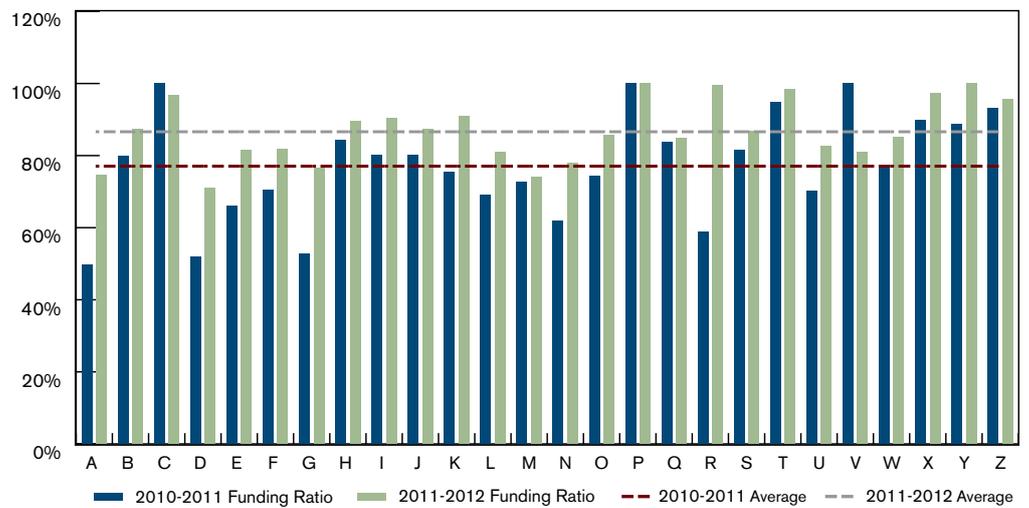
FIGURE 4: PLAN ASSETS AND LIABILITIES



In 2010-2011, the PBO funded ratios among the banks ranged from a low of 49% to a high of 100%, with an average of 68%. In 2011-2012, the funded ratios increased to an average of 83%, ranging from a low of 71% to a high of 100%.

Reasons for the rise in funded ratio include the increased levels of employer contributions, the higher discount rates, and better-than-expected investment returns.

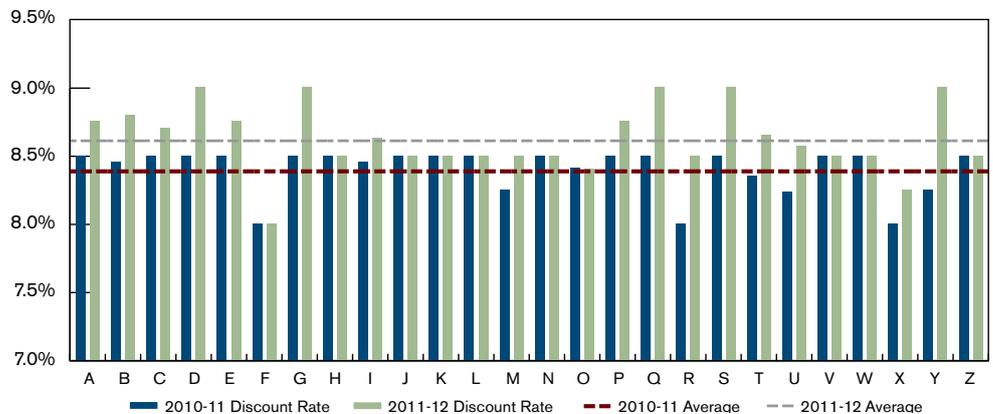
FIGURE 5: CHANGE IN FUNDING



DISCOUNT RATES USED TO MEASURE PLAN LIABILITIES INCREASE IN 2011-2012

The median discount rate in 2011-2012 did not change from 8.5%.¹

FIGURE 6: DISCOUNT RATE DISTRIBUTION



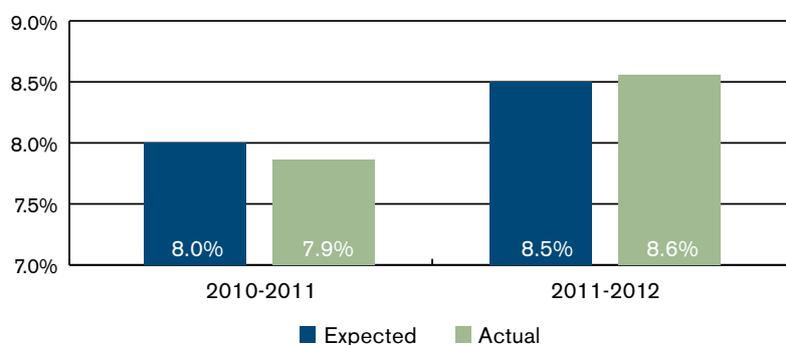
¹ The 8.4% average discount rate for 2010-2011 reported in last year's study was determined as a mean average. The figure quoted above is a median.

ASSET PERFORMANCE

The median investment return on pension assets for the banks in 2011-2012 was 8.6%. This compares to the average expected rate of return (as stated in the employee benefits disclosures in their annual reports) of 8.5%. The median investment return on pension assets in 2010-2011 was 7.9%, compared with a median expected rate of return of 8.0%.²

Only three banks in the group continued to assume an expected rate of return for 2011-2012 of 9.0% or higher.

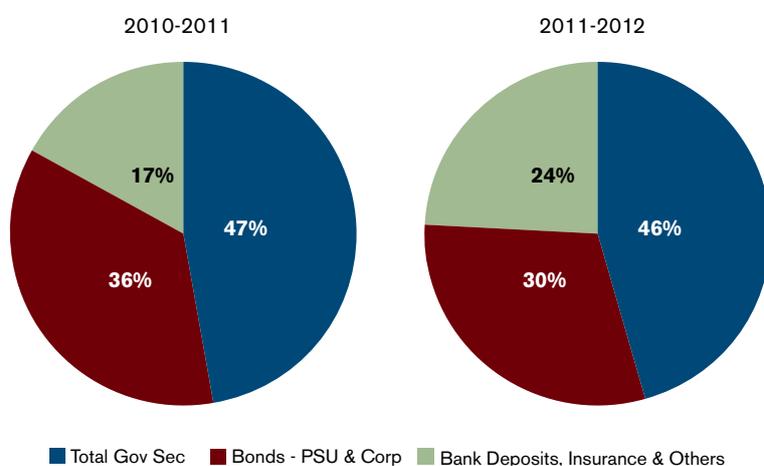
FIGURE 7: CHANGE IN PERFORMANCE 2010-2012



ASSET ALLOCATION

There were some changes in asset allocation in the last two years, particularly changes in assets allocated to non-bond type investments. These include cash, insurance company managed funds, and other asset classes. On average, the banks invested 46% of their pension fund assets in government securities (down from 47% in 2010-2011) and 30% in corporate bonds (down from 36% in 2010-2011). The remaining 24% of pension fund assets were invested in other asset classes (up from 17% in 2010-2011).

FIGURE 8: ASSET ALLOCATION



² The 8.3% average expected rate of return for 2010-2011 reported in last year's study was a mean average. The figure quoted above is a median average.

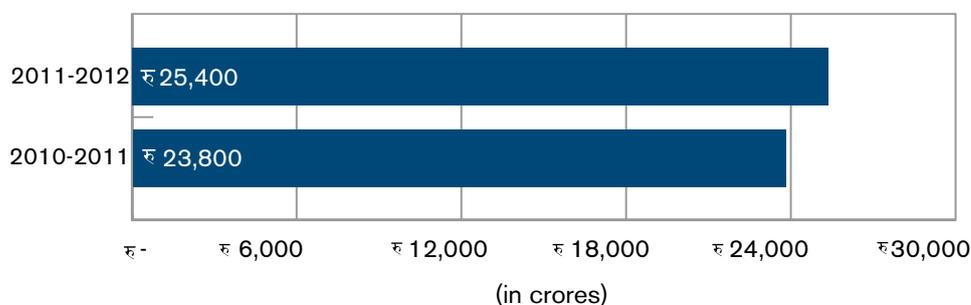
2012 MILLIMAN STUDY OF GRATUITY FUNDING AMONG INDIAN PUBLIC SECTOR BANKS

HISTORICALLY HIGH PBO AND EXPENSE LEVELS RECORDED IN 2011-2012

The 26 Indian public sector banks under consideration registered a historically high aggregated PBO. During the year, combined PBOs increased by about 7%, from approximately Rs 23,800 crores to approximately Rs 25,400 crores.

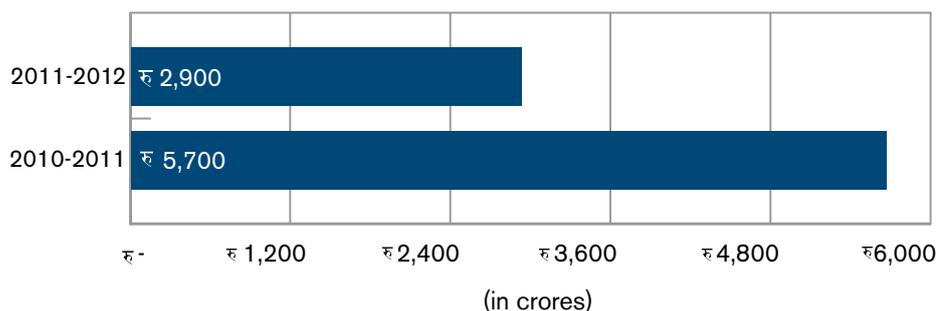
The combined PBO increase of about 7% among the banks can be attributed to several factors, including accrual of extra years of service, aging of plan population, demographic experience and changes in economic assumptions.

FIGURE 9: PBO



There was a reduction in gratuity expense in 2011-2012. Total charges to earnings were approximately Rs 2,900 crores, compared with Rs 5,700 crores in 2010-2011.

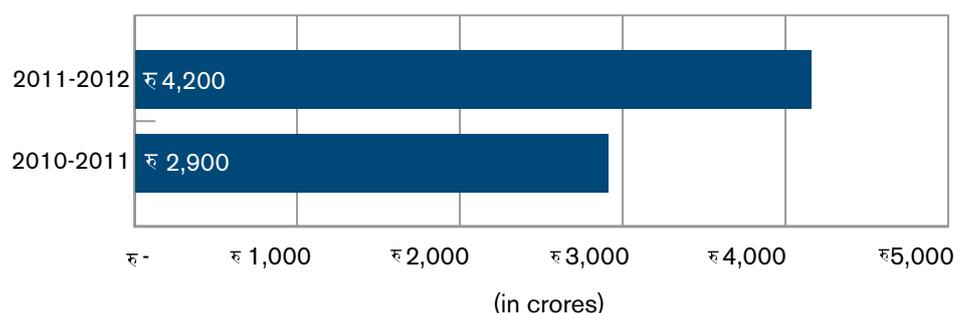
FIGURE 10: EMPLOYER EXPENSES



AS A RESULT OF RECORD LEVELS OF EMPLOYER CONTRIBUTIONS, THE OVERALL GRATUITY FUNDED STATUS HAS IMPROVED

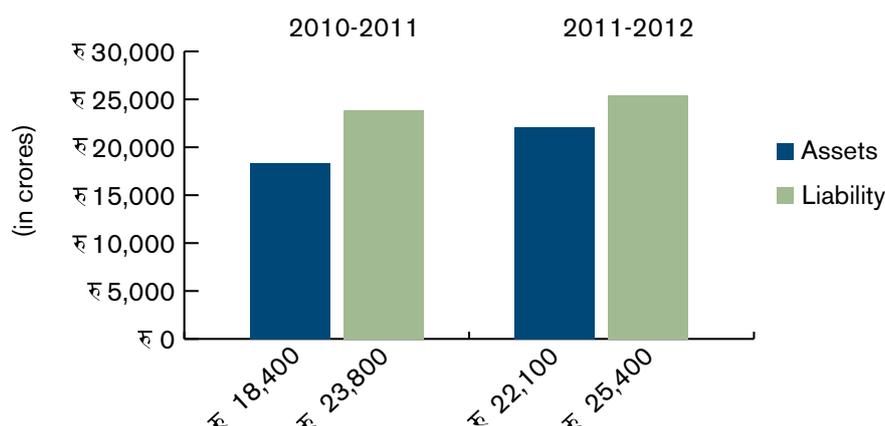
The banks contributed a record amount of approximately Rs 4,200 crores to their gratuity plans in 2011-2012. This is an increase of 43% over the figure for 2010-2011.

FIGURE 11: TOTAL ER CONTRIBUTION



The funded ratio of the banks' combined gratuity plans increased substantially during 2011-2012, reaching 87%. The aggregate gratuity deficit of approximately Rs 5,400 crores in FY 2010-2011 had fallen by approximately Rs 2,100 crores during FY 2011-2012 to approximately Rs 3,300 crores.

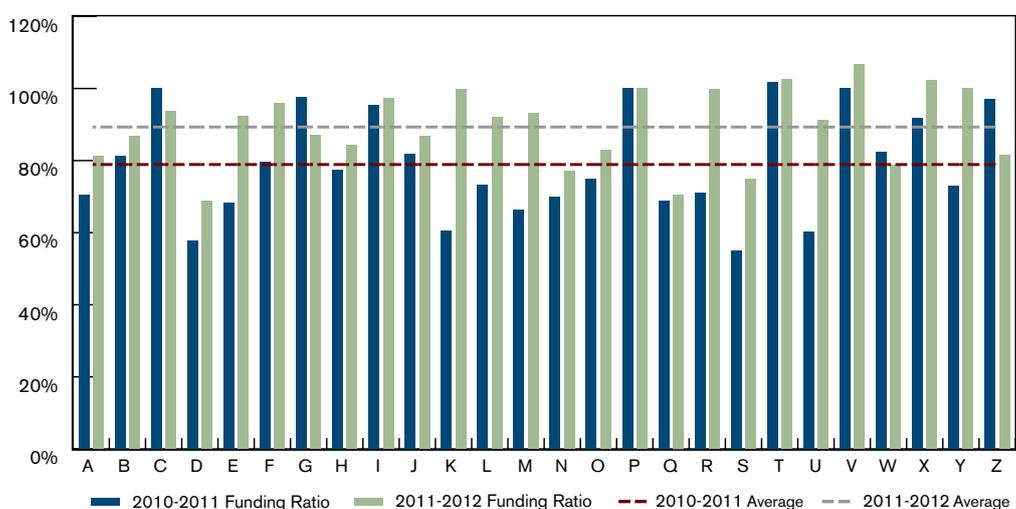
FIGURE 12: PLAN ASSETS AND LIABILITIES



In 2010-2011, the PBO funded ratios among the banks ranged from a low of 55% to a high of 102%, with an average of 77%. In 2011-2012, the funded ratios had increased to an average of 87%, ranging from a low of 69% to a high of 107%.

Reasons for the rise in funded ratios include the increased levels of employer contributions, the higher discount rates and better-than-expected investment returns.

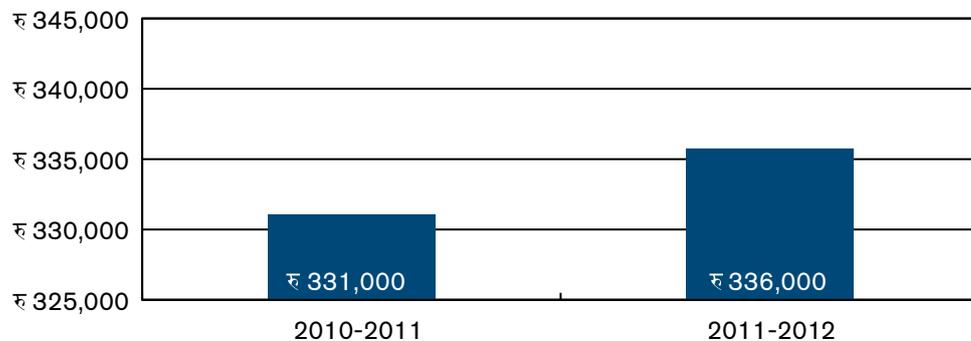
FIGURE 13: CHANGE IN FUNDING



IMPACT ON PBO PER EMPLOYEE

The average PBO per employee increased by about 1.4%, from around Rs 331,000 in 2010-2011 to around Rs 336,000 in 2011-2012.

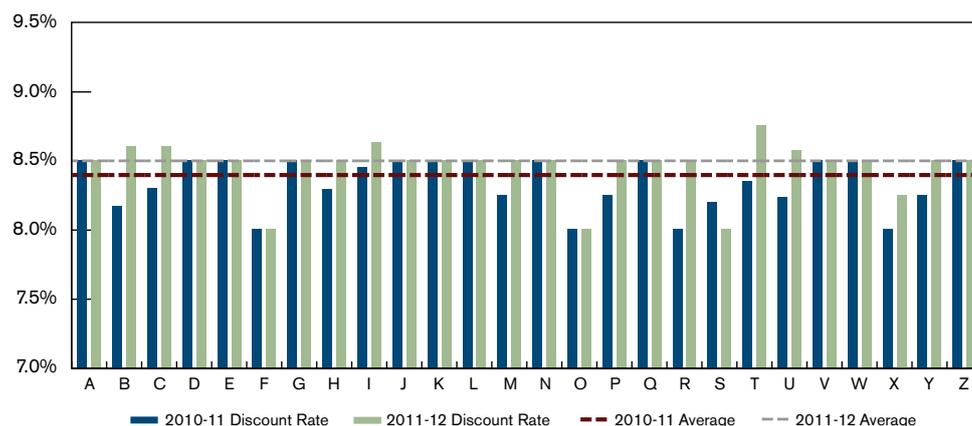
FIGURE 14: AVERAGE PBO PER EMPLOYEE



DISCOUNT RATES USED TO MEASURE PLAN LIABILITIES INCREASE IN 2011-2012

The median discount rate increased from 8.4% in 2010-2011 to 8.5%³ in 2011-2012.

FIGURE 15: DISCOUNT RATE DISTRIBUTION

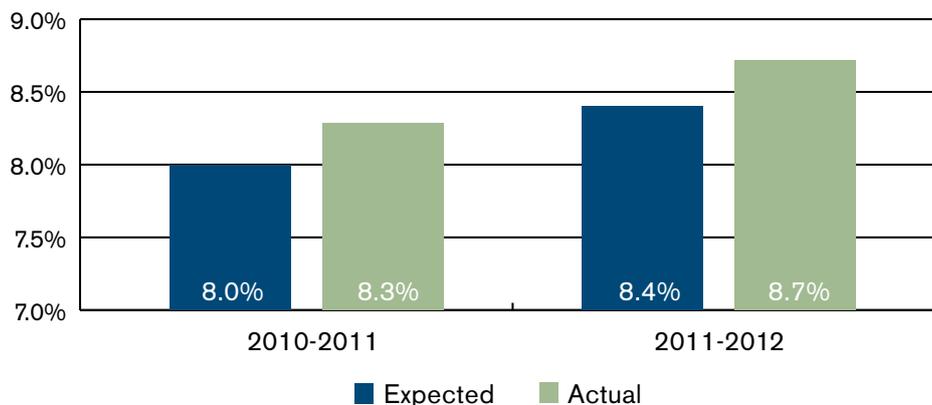


ASSET PERFORMANCE

The median investment return on gratuity assets for the banks in 2011-2012 was 8.7%. This compares with the average expected rate of return of 8.4% (as stated in the employee benefits disclosures in their annual reports). The median investment return on gratuity assets in 2010-2011 was 8.3%, compared with a median expected rate of return of 8.0%.⁴

Only four banks in the group continued to assume an expected rate of return for 2011-2012 of 9.0% or higher.

FIGURE 16: CHANGE IN PERFORMANCE 2010-2012

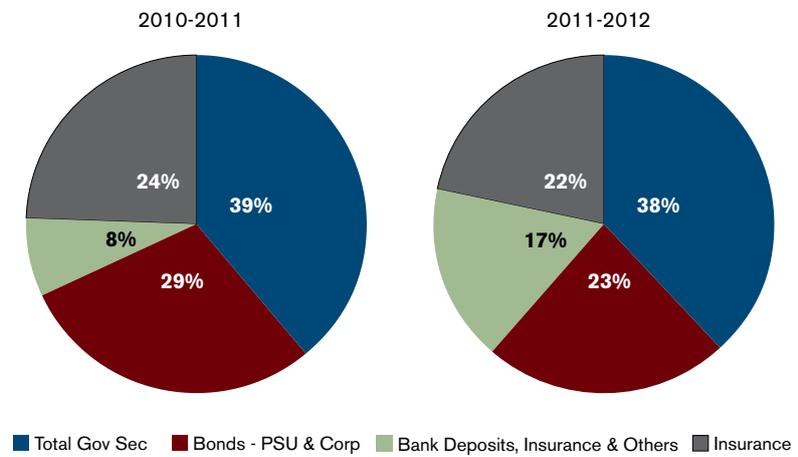


^{3, 4} The figures quoted for 2010-2011 reported in last year's study were mean averages. The figures quoted above are median averages.

ASSET ALLOCATION

There were some changes in asset allocation in the last two years, particularly in assets allocated to non-bond-type investments. These include cash, insurance company managed funds and other asset classes. On average, the banks invested 38% of their gratuity fund assets in government securities (down from 39% in 2010-2011) and 23% in corporate bonds (down from 29% in 2010-2011). The remaining 39% of gratuity fund assets were invested in other asset classes (up from 32% in 2010-2011).

FIGURE 17: ASSET ALLOCATION



ABOUT THIS STUDY

MILLIMAN 2012 INDIA PENSION FUNDING STUDY AND GRATUITY FUNDING STUDY

The results of the Milliman 2012 India Pension Funding Study and Gratuity Funding Study are based on the pension plan accounting information disclosed in the footnotes to the banks' 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). In addition to providing the financial information on the funded status of their pension plans, the footnotes may also include figures for the companies' gratuities and unfunded plans.

This study covers the 26 public sector banks, all of which have funded defined benefit pension and gratuity plans. Private companies and mutual insurance companies were excluded from the study.

Milliman also publishes an annual pension funding study and a monthly pension funding index for the 100 largest U.S. defined benefit plans.

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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](https://www.milliman.com).

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