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**EMPLOYEES' PENSION SCHEME, 1995**

**13<sup>TH</sup> VALUATION REPORT**

**AS ON 31<sup>ST</sup> MARCH 2009**

**P.A. BALASUBRAMANIAN,  
ACTUARY.**

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**P.A.BALASUBRAMANIAN**

**ACTUARY**

25<sup>th</sup> February,2013

To

Employees' Provident Fund Organisation  
(Ministry of Labour, Govt. of India )  
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New Delhi 110066

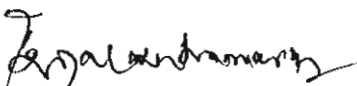
Dear Sirs

As required in your communication ref. No. Actuarial/ 18(3) / 2008 / 85835 dated 19<sup>th</sup> February,2010 I have completed the 13<sup>th</sup> Valuation of Employees' Pension Scheme, 1995 as on 31 st March, 2009.I have pleasure to submit the Valuation Report

I wish to acknowledge with thanks cooperation extended to me by all concerned Officers and Staff in providing required data and information for the valuation exercise..

Thanking you

Yours faithfully



P.A.Balasubramanian

**EMPLOYESSS' PENSION SCHEME, 1995**

**REPORT OF ACTUARIAL VALUATION  
AS ON 31<sup>ST</sup> MARCH, 2009**

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**Report of Actuarial Valuation as on 31 March 2009 of**  
**EMPLOYEE PENSIONS SCHEME, 1995**

**1. Introduction**

1.1 I have been requested by EPF Organization vide reference letter dated 19<sup>th</sup> February 2010 to carry out valuation of EPS 95 as on 31 March 2007, 2008 and 2009 and submit the report.

1.2 The purpose of valuation is to value the assets and liabilities of EPS '95, review the rate of contribution and quantum of pension and other benefits and to determine the surplus/deficit of the EPS fund and in case of surplus recommend the rate of discretionary additions to the basic pension payable for the valuation period.

1.3 The valuation is being made pursuant to section 32 of EPS '95 Scheme.

1.4 Current valuation is made as on 31 March 2009. Previous annual valuation was made as on 31 March 2008.

**2 Executive Summary of 13<sup>th</sup> Valuation Report as on 31<sup>st</sup> March, 2009**

I have completed the valuation of assets and liabilities of EPS '95 as on 31<sup>st</sup> March, 2009 for which data of members and pensioners were made available.

**2.1. Members and Pensioners**

Of the 4,47,82,788 members of the Scheme as on 31<sup>st</sup> March, '09 individual member data was provided for 81,55,430 members. Out of this data, on removal of duplicate records only 24,05,973 records were useable for valuation calculations. Efforts to supplement more data complete in all respects were not successful.

As for Pensioners data in respect of 15,86,056 ( out of actual number 20,36,655) and 7,93,919 beneficiary pensioners (out of actual number 12,09,476) were provided to determine all Pensioners' liability.

With the limitation in data availability (very severe in respect of current members) as mentioned above, valuation of liability of the Pension Scheme had to be projected to arrive at an estimate based on actual valuation using available data and assumptions on demographic and economic factors considered reasonable and appropriate to the Scheme. Owing to data constraint there is an element of uncertainty as to the value of total liability of the Scheme and the resultant financial position of EPS'95 Fund.

**2.2 Receipts and Payments and assets of the Scheme**



During the inter-valuation period, 1 04 2008 to 31 03 2009 contribution income was Rs. 10,487.78 Cr. investment income was Rs. 8,392.41 Cr and total benefit outgo Rs.4,790.78 Cr.. As a result the Fund increased to Rs.1,10,053.81 Cr as on 31st March, 2009.

The assets of the Scheme as on 31<sup>st</sup> March, 2009 comprise Deposit in Public Account Rs.41,213.17 Cr, investments in securities Rs.68,964..25 Cr and cash etc. Rs(-) 123.62 Cr. The return on the assets was 8.49 % during 2008-'09 The investments in Securities to a greater extent (68 %) have outstanding term to redemption / maturity of less than 10yrs with weighted average term of 9.3yrs. This is too short compared to average duration of emerging liabilities which is quite long. There is mismatch of duration of assets and liabilities exposing the Fund to mismatch risk and uncertainty of the rate of return .A review of investment management is recommended to streamline the same with clear objective to manage efficiently and effectively so as to optimize the returns having regard to asset liability matching requirement and also taking into consideration investment guidelines under National Pension Scheme regulated by PFRDA.

Consistent with the valuation of liability, assets were valued at Book Value

### 2.3. Valuation Basis

Assumptions have been made as judged reasonable and appropriate, having regard to the nature and term of the liabilities and assets and expected trend over the future of the elements forming the valuation basis.

Main assumptions:

Interest Rate: 8% for pre retirement period and 7% for post vesting period.

Salary increase: 6% p.a. during the period of service.

\*Withdrawals: Smoothed rates based on experience of EPS members (as reflected by a sample study)

Early retirement: As per Scheme experience

Mortality Rates: Pre retirement: 90% LIC assured lives Mortality Table (94-96)

Post vesting: LIC annuitants Mortality Table (96-98)

### 2.4 Valuation Results

Total value of liability in respect of current Members and Pensioners and Beneficiary Pensioners net of value of future contributions of current Members as per valuation projection including certain provisions is Rs 1,71,662 cr. on 31 st March,2009. The Scheme Fund as on that date is 1,10,054 cr. resulting in deficit of Rs. 61,608 cr. compared to the deficit of Rs. 54,203 cr. as at 31<sup>st</sup> March 2008. The current deficit is the net effect of several factors, mainly:



- i. Increase in membership from 4,05,85,860 to 4,47,82,788 (of which new Entrants are 73,04,642 --19.15%) and of pensioners from 29,52,622 to 32,46,131 and higher accrued liability of existing members but with inadequate contribution. (Increase in Liability).
- ii. The continuing effect of raised pensionable salary limit from Rs.5000/- to Rs.6500/- made effective for all members in the past without infusion of additional funds to meet the higher liabilities.
- iii. Valuation carried out using available data set and projected data set (to project to the total membership distributed as regards age, pensionable salary and past pensionable service similar to the corresponding characteristics of the limited records made available) and estimating liability based on these two valuation results.
- iv. Specific addition to the liability in respect of (a) employees where Employers' contribution was in arrears and (b) pension claims pending settlement.
- v. Inadequacy of contribution rate owing to changed economic scenario and membership behaviour especially related to exit from the scheme (resulting in funding deficit).
- vi. Constraints on data quality and different characteristics of members' data as compared to the data provided for the previous valuation

Measures for corrective action are suggested in the following para.

#### 2.5. Recommendations:

- a. Make one time lump sum contribution of Rs. 61,068 Cr to Pension Fund. OR The existing contribution rate of 9.49% of pensionable salary (8.33% by Employer and 1.16% by the Government) will need to be raised to 14.5%. OR Achieve (with professional investment management) return on investment of not less than 9% p.a. over the future combined with increase in contribution rate by not less than 3%.
- b. Consider change in the superannuation age to 60 years from 58 years. However the effect on the Liability will depend on how the change will be structured, having regard to the expectation of members.
- c. Streamline investment management separating the assets supporting the liability of existing members' group from those of current pensioner group with clear objective to optimize returns having regard to assets-liability matching requirements and risk-reward consideration.
- d. Suitable mechanism to be put in place for effective control on contributions receivable and benefit outgo especially pensions.
- e. Large Scale improvements MUST be made as regards data maintenance and availability for periodical valuation. It is essential to make available data for 100% membership and pensioners and required individual data for new entrants/exits. To achieve this objective immediate steps are required to set up Statistical Section at the Head Quarters and the Regional Offices of EPFO adequately manned with suitable skill set, supported by IT infrastructure, with responsibility to capture all required information correctly for every member and

pensioner and update information periodically to serve the purposes of administration and valuation.

- f. Any review of the Scheme (including measures (a) and (b) above) should be based on appropriate actuarial assessment with complete and consistent data made available for the purpose.

### 3. Statement of Benefits Valued (Sections' reference is to EPS'95 Scheme)

Superannuation pension (section 12 & 13)

Early retirement pension (section 12)

Disability pension (section 15)

Death Benefit (spouse's pension and children's pension/ Pension to nominees or parents) (section 16)

Withdrawal benefit (deferred pension/return of contributions) (section 12 & 14)

Current Pension (to member pensioners and beneficiary pensioners)

Details of various benefits applicable on the happening on certain contingencies are covered in sections (12) to (16) of the Scheme.

### 4. Membership

4.1 As per information available from EPFO, the number of members covered under the scheme as on 31 March 2008 was 4,05,85,860.

4.2 During the financial year 2008-09 there has been addition of new members joining the scheme and reduction in members to exit by way of death in service, superannuation, early retirement, withdrawals and there was net increase of 41,96,928 members resulting in total members increasing to 4.47,82,788 as on 31<sup>st</sup> March,2009 as per details below.

#### 4.3 Current Members

**Table 1**

	No. of members 2008-09	No. of members 2007-08
Death in service	35,442	33,983
Superannuation	2,72,997	2,72,418
Retirement	1,71,940	1,63,349
Disablement retirement	3,396	2,464
Withdrawals (with deferred pension) and Withdrawals (with return of contribution)	26,23,939	24,43,564
Total Exits	31,07,714	29,15,778
Total Membership net of exits	3,74,78,146	3,28,14,512
New members during the financial year	73,04,642	77,71,348
No of members as on 31 <sup>st</sup> March	4,47,82,788	4,05,85,860

#### 4.4 Current Member Pensioners and Beneficiary Pensioners

On 31.03.08 there were 29,52,662 pensioners of different categories receiving pensions. The number of pensioners has increased to 32,46,131 as on 31.03.2009 as per details below.

**Table 2**

Category	31.03.08	Additions 2008/09	Exits 2008/09	31.03.09
Member Pensioners	18,05,012	2,78,388	46,745	20,36,655
Widow(er) pensioners	5,97,940	56,426	27,289	6,27,077
Children Pensioners	5,20,625	57,575	28,704	5,49,496
Orphan Pensioners	13,226	2,459	857	14,828
Nominee / Parent Pensioners	15,819	2,256*	--	18,075
<b>Total</b>	<b>29,52,622</b>	<b>3,97,104</b>	<b>1,03,595</b>	<b>32,46,131</b>
* net addition				

The figures of additions in Table 2 when compared to exits in Table 1 (entering pensioner category) as reported by EPFO appear inconsistent.

### 5. Receipts and Payments

5.1 Receipts and Payments in respect of EPS'95 Fund for the financial year 2008-09 are given in Table 3 below

**Table 3**

Amounts in Rs Crore

1. Opening Balance	95,920.57	83,837.66	Withdrawal/Reti rement Benefit	1669.28	1309.09
2. (a) Contributions - Employers	9320.56	8022.46	Life Assurance benefit	0.66	0.92
2. (b) Contributions - Government	785.00	561.24	Pension	3120.84	2727.97
2. (c) Arrears by Government	382.22	428.76	<b>Total benefits</b>	<b>4790.78</b>	<b>4037.98</b>
<b>Total contributions (2a + 2b + 2c)</b>	<b>10487.78</b>	<b>9012.46</b>	Expenses	19.35	138.77
3. Interest on investments	8577.48	7274.33	Accrued Interest	185.07	102.44
4. Other receipts - contribution account	66.92	76.18	Other Payments	3.74	0.88
			Closing Balance	110053.81	95920.57
<b>Total</b>	<b>115052.75</b>	<b>100200.64</b>	<b>Total</b>	<b>115052.75</b>	<b>100200.64</b>

(Source: as per audited accounts)

(subject to rounding off error)

*Ly*



## 5.2 Statement of Assets

**Table 4**

Amount in Rs.Crore

Particulars	As on 31.03.09	As on 31.03.08
Deposits in Public Account	41213.17	36809.06
Central/State Government securities/PSU Bond & PSB FD	68964.25	59151.99
Cash/Remittance in transit	(123.61)	(40.49)
Total	110053.81	95920.56

(Source: as per audited accounts)

## 5.3 Inter-valuation period

During this inter-valuation period 01.04.08 to 31.03.09, 40,361 new establishments were added to the EPFO resulting in additional membership to the Scheme of 73,04,642 persons including increase in membership of existing establishments.

The annual contribution (including Govt contribution and arrears) has increased from Rs 9012.46 cr. To 10487.78 cr. arising from net addition to membership (from entry of members from new establishments as well as addition of new members in existing covered establishments) and salary increases.

There has been no change in rates of contribution to EPF '95 during the inter-valuation period. Employer contribution continued to be made at 8.33% of pensionable salary and government contribution at 1.16% of pensionable salary (As a result of valuations in the past recommendation had been made to increase the contribution rate. At the previous valuation as on 31.03.08 recommendation included raising total contribution to 14.5 %). During the inter valuation period 2008-09 total income by way of contribution was 10,487.78 cr., investment income Rs.8,392.41 cr. and benefit outgo Rs.4,790.78 cr. The Fund has increased from Rs.95,920.57 cr. to Rs.1,10,053.81 cr. as on 31 March 2009.

## 6. Data for Valuation

### 6.1 Current Members

6.1.1 Data compiled from 80 offices in 26 regions of EPFO covering 81,55,430 members and from 75 offices (under 36 ROs) covering withdrawals with payment of cash benefit (cumulative for all years up to date) of 55,97,648 members as on 31.03.09 were submitted for processing.

6.1.2 On removal of duplicates and checking the data for completeness of all information required for calculation of the liability for pension, death benefit, and withdrawal

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payment to current members and consistency of data , only 24,05,973 individual data records of members were found useful for making valuation of liability. High volume of data did not contain basic information like date of birth, date of joining FPS/EPS, pensionable salary etc. I was given to understand that there was no scope for completing the blank fields in the rest of the (incomplete) data provided, though essential.

6.1.3 I have drawn the attention of EPFO orally and in writing and talked to RPFC –I (Pension) with a view to mitigate the data constraint to some extent. EPFO vide its communication Ref. No: Actuarial/18(3)2008/13142 dt.21<sup>st</sup> Sept.2011 informed that I have to complete the valuation exercise with the data constraint explained above.

6.1.4 As against 447.83 lakh active members of EPS '95 as on 31.03.09 useable data for valuation (24.06 lakh) is 5.37%. Representativeness of data processed for valuation is unknown and in projecting the liability for the actual number of members based on this small volume of data results in greater uncertainty of the actual liability. In making the projection there is implicit assumption that the member profile especially as to actual distribution by age, service and pensionable salary and by gender and marital status of members is no different from what the valuation data file represents.

## **6.2 Current Pensioners**

6.2.1 Member pensioners data found complete for valuation covers 15,86,056 pensioners compared to actual pensioners 20,36,655 (78% of actual numbers). Beneficiary pensioners data found complete for valuation covers 7,45,449 pensioners as against actual number 12,09,476 (62% of actual numbers).

6.2.2 Based on data valued, liability for actual number of current member pensioners and beneficiary pensioners has been projected. In the process, there is implicit assumption that distribution by age, gender, amount of pension and pension option exercised of the data set represents and replicates the characteristics of the class of actual pensioner group. This results in some extent of uncertainty in value of actual liability though the probability of large deviation is much lower as compared to liability determined in respect of current members.

## **6.3 Exit Members**

6.3.1 In terms of the EPS '95 in respect of members who withdraw from the scheme on resignation with scheme certificate or eligibility for deferred pension, liability for deferred pension needs to be determined for those surviving as on each valuation data. The actual number of such members is not available. Members for which data are made available are considered and deferred pension liability is calculated and included in the liability for withdrawal benefit.

6.4.1 I have relied completely on EPFO as to correctness of the data provided and applied valuation checks to remove inconsistent data. Based on the processing of validated data the following average parameters emerge:



Average age of Members: 35.09 yrs  
Average past service in EPS'95: 5.68 yrs  
Average pensionable salary (p.m): Rs 4030

6.4.2 Sample data set for valuation is found to include net addition at duration 1,2 & 13 of 2,92,204 (239%),56401 & 19256 members compared to Member data at duration 0,1& 12 in the sample data sent for the previous valuation (on 31.3.2008).At all other duration there is net reduction in member data which could possibly be accounted by exits due to death / withdrawal / early retirement during F.Y 2008-09 out of members included in the Data set for previous valuation (on 31.3.2008).The net addition could have resulted from inclusion of the data of these members for the first time and/or of members in the category of holders of Scheme certificate re-entering with credit for past scheme service.

6.4.3 In the absence of information as to the distribution by age, past service, and pensionable salary of the total members of the EPS, consistency of valuation data set could not be checked, though found on average measurement basis consistent with similar parameters arising in the last valuation except as regards average pensionable salary which currently happens to be higher by 11% .This apart, distribution of number of members by age attained, and past pensionable service and proportion of total pensionable salary at each age based on current valuation data differs with that based on data used for previous valuation. This will result in variation in valuation results and lack of consistency in results when compared to previous valuation.

## **7. Experience Analysis**

7.1 A valuing actuary is required to analyze the actual experience as regards the demographic and economic factors forming the basis for determining the liability since the last valuation, so as to take note of any significant changes and accordingly consider changes in any of the factors to be made for current valuation of liabilities.

The factors are:

### **7.2 Demographic factors:**

1. Mortality rate of current members
2. Mortality rate of current pensioners
3. early retirement rate (including disablement)
4. superannuation rate
5. other exits (withdrawals)

### **7.3 Economic factors:**

1. Rate of interest
2. Rate of salary increase including inflation

7.4 No data has been made available with required information (as not maintained) to enable proper analysis of experience related to demographic factors and salary increases to be carried out .However some sample data relating to exits by withdrawal and early

retirement was provided giving the number of members tabulated according to age at exit. Though it is not known to what extent this data is representative of the experience of the scheme, this has been used to project to the total membership to derive the indicative experience of withdrawal, compare on a broad basis, with that expected on the previous valuation basis for withdrawal from scheme and decide the rates to be used in the current valuation.

## **8. Funding Objective**

Funding objective is to ensure that the EPS '95 fund is solvent i.e. there are adequate assets to meet the pension benefits of the scheme to all eligible pensioners and accrued pension liabilities of current members and further that the contribution rate is adequate to meet the emerging pension benefits of all members and beneficiaries.

Contribution rate of 8.33% of pensionable salary by employer and 1.16% of pensionable salary by government remain without change since inception of the scheme though changes in the rules of the scheme (like pension salary cap increase) in the nature of effectively improving applicable pension amounts were made with significant impact on the liability (resulting in inadequacy of the contribution rate and deficit in the fund) as revealed in the reports of past valuations.

## **9. Methodology for valuation**

9.1 The Aggregate method is used. It values all benefits for active members. The actuarial liability is based on the total benefits expected to be awarded taking into account both pensionable service accrued up to valuation date and potential service after that date. Allowance is made for contributions to be paid after the valuation date at the level of contribution rate fixed for the Employer and the Government.

9.2 The actuarial liability as at the valuation date is calculated taking into account all types of decrements- death in service, early withdrawal with or without scheme certificate, early and superannuation retirement. In such calculations (including calculation of present value of contributions payable) pensionable pay is projected from valuation date up to the assumed date of retirement, date of leaving service or date of death ( and dates of payment of contribution ) as appropriate. Allowance is made both for general increase in pay and also for career progression.

9.3 The amount of benefits payable on various contingencies arising after valuation date including allowance made for contributions receivable is discounted to the valuation date to calculate present value of liability of active members.

Deferred pension liability in respect of members who left service early prior to valuation date is calculated allowing for contingencies of death and retirement and discounted to the valuation date.

9.4 Actuarial liability in respect of Member Pensioners and Beneficiary Pensioners is based on the pension amount drawn on valuation date allowing for contingencies as applicable (i.e. death, remarriage, termination of benefits as per Rules of the Scheme for children) and discounted to the valuation date.

## **10. Valuation Basis**

### **10.1 Demographic Factors**

Considering the size of membership of the scheme and pensioners and beneficiaries maintenance of required data (complete and accurate) on continuing scale would have facilitated in experience analysis being made for the scheme relating to mortality rate, withdrawal rate, early retirement rate, disablement rate and mortality rate of member pensioners and beneficiary pensioners and thus serve as a base for assumptions on these factors for the future. There is no mechanism in EPFO to ensure such data maintenance and there is a lack of information to base assumptions on the scheme experience. I have considered the profile of membership of the scheme which has a mix of industries - small, medium and large establishments, unskilled, semi-skilled and skilled workers, and administrative employees spread over the country and aggregate exit information as provided by the office. I have also considered published table especially of mortality of assured life, annuitants of LIC and industry experience of withdrawals and early retirements.

Having regard to the above considerations I have used my best judgment to arrive at the assumptions as under:

#### **10.1.1 Mortality rate of current members:**

Latest available published table of assured lives is LIC 94-96. More than 10 years has elapsed since then and the overall trend in mortality is improvement in survival rates (reducing death rates). However having regard to class of lives covered in the scheme (mentioned above) and indicative trend of number of deaths (aggregate) on comparison of actual to expected as applied to projected age wise distribution of members based on the sample valuation data provided, keeping in view the limitations of aggregate comparison, I consider it is appropriate to use LIC 94-96 mortality table with adjustment for reduction in mortality by 10% at all ages. The basis is 90% LIC 94-96 Mortality Table (assured lives)

Refer annexure for mortality rates.

#### **10.1.2 Mortality rate of pensioners and beneficiary pensioners:**

In the absence of information on the scheme experience, I have used LIC annuitants table LIC (96-98) (as mentioned in the annexure) being a standard published mortality table and more reliable at ages above 60 yrs.

#### **10.1.3 Retirement Rates**



Having regard to the nature of establishment where the members are employed and limited information on age wise retirements indicative of trend and overall industry experience I have provided for early retirements at 10% at age 50,6% at age 51,8% at age 57 and uniformly at 4% between age 52 to 56.

#### 10.1.4 Withdrawal Rates

There is no complete experience data from the Scheme but sample data of age wise distribution of withdrawing members for a few years were provided. Though how far this sample is representative of the members withdrawing from the scheme is unknown this sample data was used to project for the total membership taking the number of withdrawals in to consideration and indicative withdrawal rates were derived and smoothed for use in the valuation having regard to overall industry experience and the nature of establishments where members are employed. I have used revised withdrawal rates (as mentioned in annexure) as used in the previous valuation, as these rates result in total exits closer to the actual.

### 10.2 Economic Assumptions

#### 10.2.1 Interest Rate

10.2.1.1 The assets of the pension scheme as on 31.03.09 comprise of deposit in public account (37.34%) on which the government credit interest on fixed rate of 8.5% p.a and investment in securities in central government, state government and PSUs of short, medium and long term and fixed deposits of short/medium term (62.66%) carrying coupon/interest rate respectively at different rates.

10.2.1.2 The return on the assets (calculated using total earnings on the assets and using average assets during the accounting year) was 8.49% during 2008-09(8.31% during 2007-08)

10.2.1.3 In determining the rate of interest for valuation of liabilities, while return on existing assets is kept in view, the return expected on reinvestment of maturing securities in the future needs to be taken into account. Besides return expected on the investment of the excess funds over payment of the pension scheme in the future is on important factors. The interest on deposits in public account currently stands at 8.5% pa while in the immediate future it may be assumed to continue as this rate, there could be a review in future aligned to government's fiscal policy leading to lower rate of interest on such deposits in public account.

10.2.1.4 The return on investments in government securities and PSU securities and fixed deposits of PSU banks are subject to fluctuations in future because of influence of market forces. The trend as Indian economic factors indicate is lower rate of interest over the long term in the future.

There is one Fund for the EPS'95 the assets of which cover the prospective pension liability of current members as well as pension outgo for current pensioners. While liability duration for current members is quite long, for current pensioners' liability

duration is short as there is immediate cash outgo year to year implicitly involving disinvestment of assets supporting this liability. Even in the existing context of all assets being in a single Fund it would entail investments in shorter term securities to the extent required to meet the asset matching requirement for Pensioners' liability. As a continuing scheme using current income flow to meet the current pension outgo implies inter generation transfer of assets covering liability of the current members to current pensioner group with consequent opportunity cost devolving on current members (reflecting in lower returns on the invested assets of this group)

10.2.1.5 Further in respect of current members pension vests on superannuation/ early retirement which is at a more distant future. Determination of post vesting Pension liability involves using an interest rate to discount the vested pension for lifetime to the valuation date. Being a long distant future time uncertainty increases as to the rate of return to be expected and this risk should be appropriately reflected in deciding rate of interest to discount post vesting liability of current members.

10.2.1.6 For the above reason as a matter of prudence it is required to use a lower discount rate for valuing liability of current pensioners and post vesting pension cost of current members.

10.2.1.7 Going by the current position of investment applicable to pension scheme (all of fixed interest types), having regard to the above considerations I consider valuation rate of interest of 8% during contributory service of members and 7% during pension payment period would not be unreasonable. This rate may need to be reviewed in the future valuation depending on the investment scenario as it emerges having regard to asset-liability matching requirement of the Scheme.

#### 10.2.2 Salary Increases

No data with required information is available to study the trend of increase in pensionable salary of members. As mentioned in earlier sections of this report, I considered the type of establishments covered, the profile of employees and skills sets, the movement in average pensionable salary on aggregate basis and relevant general experience as regards salary increases. Having regard to the above factors and based on my discussion with EPFO, in my view salary increase at 6% p.a over the future would not be inappropriate. Accordingly I have assumed salary increase at 6% pa over the future.

### 10.3 Other Assumption

There are elements which include proportion married, age difference of member and spouse, number of children and their ages, remarriage rates which need consideration in the valuation liabilities. There is no data relating to the scheme to give indication of the experience on the above elements. I have considered the assumption made in the previous valuation and related information from general population and allowed for this broadly. These assumptions have a minor effect only on the valuation of liabilities.

### 10.4 Valuation of Assets

10.4.1 Assets include Deposits in Public Account Rs.41,213.17 cr (which is credited with fixed rate of interest decided by the Central Government) and investments in Securities Rs. 68,964.25 cr which portfolio is managed by SBI (Fund Manager).

\*Investments comprise Central government securities (37%) State Govt. Securities (21.8 %), State Govt. guaranteed securities (2.4%), Special Deposit (2.1%) and Bonds and Fixed Deposits in Public Financial Institutions (36.7%). These investments carry different coupon rates/ interest rates and varying terms short/ medium/ long.

(\* Percentage based on statement of category wise investments as on 31 03 2009 as per Annual Report)

10.4.2 Of the invested Securities (Rs. 68,964 cr) 24% mature within 5 years, 44% between 6 to 10 years 13% between 11 to 15 years and 19% beyond 15 years.

10.4.3 Weighted Average Term of these Securities (face value wise) is 9.3 years. This average duration is too short compared to the average duration of emerging pension liabilities of current members which is quite long taking into account the future service years and lifetime thereafter. This indicates duration mismatch of assets to liabilities which exposes the Fund to the uncertainty of interest rate risk and mismatch risk.

10.4.4 Assets of the Fund are taken on book value basis for the valuation purposes consistent with valuation liabilities.

#### 10.5 Valuation Basis

For the valuation as on 31 st March 2008, changes were made to assumption as regards mortality rates and withdrawal rates keeping assumption as to Pensioners' mortality , valuation interest rate and salary escalation rate unchanged as compared to the valuation as on 31 st March 2007. The same basis as used in the valuation on 31 st March,2008 is used for the current valuation. The basis is as under:

**Table 5**

Mortality rates - members	90% LIC (94-96) Assured lives Mortality Table
Mortality rate - pensioners	LIC (96-98) Annuitants Mortality Table
Interest rate	8% pre retirement period and 7% post retirement period
Salary Increase	6%
Withdrawal rates	Age <21 21-25 26-30 31-35 36-40 41-50 >50 Rate% 4 10 8 5 3 2 1

#### 11. Amendments to EPS '95 Scheme

11.1 Govt. of India had issued the following amendments effective from date of publication:



1) Gazette Notification No. G.S.R 431(E) dated 15<sup>th</sup> June, 2007.

The eligible service for superannuation / early retirement pension has been changed to minimum 10 yrs (as against 20 yrs) subject to retirement at the age provided in the Scheme.

2) Gazette Notification No .G.S.R 438(E) dated 9th June, 2008.

Table B giving factors for computation of past service benefit under the ceased Family Pension Scheme for existing members on exit from employment and Table D giving factors for return of contribution on exit from employment have been revised downwards.

3) Gazette Notification No.G.S.R 688(E) dated 26th September, 2008.

Para 12 A and 13 of EPS,'95 have been deleted ( in effect benefit of commutation and Return of Capital are totally removed for all pensions where commencement of pension is on or after 26<sup>th</sup> September,2008 and reduction factor for early retirement pension has been increased from 3% to 4% with effect from 26<sup>th</sup> September,2008.

11.2. I have allowed for the revised scheme provisions as applicable above.

## 12. Valuation results & Observations

12.1 Based on the assumptions mentioned in the earlier paragraphs, the actuarial liability was calculated using the limited volume of data (24,05,973 records) of active members.

Based on the distribution of this data according to age, past service and pensionable salary projected grouped data age wise for the total members on the valuation date (4,47,82,788) were derived giving estimated number of members and total pensionable salary for each age group subdivided into completed pensionable service. Whereas a total active member on valuation date is available in the Annual report of the Scheme there is no information on the total pensionable salary for the total membership. Therefore the total pensionable salary was derived based on the amount of contribution income for the financial year 2008-09 as per audited accounts and the rate of contribution by Employer (8 1/3%) with adjustment for arrears of contribution. On this grouped data actuarial liability was calculated on the same valuation assumptions as applied to actual data set. There is significant variation in estimated liability of current members based on valuation of actual data set and that based on projected data set.

12.2 It is not known how far the data set valued is representative of the total membership of the Scheme. Therefore, neither the estimation based on the results of actual data set nor the valuation results based on the derived grouped data of members ( which has inherent limitation as a grouped data ) could be taken as the actuarial liability in respect of members in service .Keeping in view overall consistency of certain practical valuation ratios for the different benefits I have blended the valuation calculations of these two sets of valuations as considered appropriate in my view to determine the estimated final actuarial liability for active members.

12.3 The volume of valuation data for Member Pensioners and Beneficiary Pensioners being a higher proportion of actual numbers, the final liability was projected based on the

Valuation calculations and annual outgo on Pensions allowing for adjustment for arrears of Pension payment as available in the Annual Accounts and Report of EPS'95 Scheme  
The valuation results are given in the Table below.

### Valuation Results

12.. The valuation results using the basis for the current valuation as stated in Table 5 are as under ( Table 6).

**Table 6**

		Amount in Rs.Crore	
		Assets	Liabilities
Scheme assets	1,10,054	Current members	
Value of future contributions	1,16,191	(a) Pension benefits	1,85,210
		(b) Death benefit	26,027
		(c) Withdrawal benefit (including members left with scheme certificate)	42,166
		Current Pensioners and beneficiaries	32,050
		Expense of administration	1,130
Deficit	61,608	Reserves for inaccuracy in data	1,270
<b>Total</b>	<b>2,87,853</b>	<b>Total</b>	<b>2,87,853</b>

*Note: Future Expenses of Pension Administration are provided at 0.7% of value of future contribution plus 1% of liability of current pensioners and beneficiary pensioners.  
Reserves for inaccuracy in data are provided at 0.5% of value of benefits of current members. Actual provision required could vary depending on the extent of inaccuracy.*

12.5 Total value of liability in respect of active Members, Pensioners and Beneficiary Pensioners net of value of future contributions of current Members as per valuation projection is Rs. 1,71,662 Cr.as on 31<sup>st</sup> March 2009.The Scheme Fund as on that date is Rs. 1,10,054 Cr. resulting in deficit of Rs.61,608 Cr. compared to Rs. 54,203 Cr. as at 31<sup>st</sup> March 2008.

12.6 The deficit is the net effect of several factors, mainly:

- i. Increase in membership from 4.05,85,860 to 4,47,82,788 (of which new Entrants are 73,04,642--16.31%) and of pensioners from 29,52,622 to 32,46,131 and higher accrued liability of existing members but with inadequate contribution. (Increase in Liability).

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- ii. The continuing effect of raised pensionable salary limit from Rs.5000/- to Rs.6500/- made effective for all members in the past without infusion of additional funds to meet the higher liabilities.
- iii. Modified approach to determine valuation liability using results of valuation carried out using available data to project to the total membership distributed as regards age, pensionable salary and past pensionable service similar to the corresponding characteristics of the limited records made available and estimation of valuation results based on the valuation calculations of actual (limited) data set provided and projected data set.(ref: section 12.2)
- iv. Specific addition to the liability in respect of employees where Employers' contribution was in arrears and also for pension claims pending settlement.
- v. Inadequacy of contribution rate owing to changed economic scenario and membership behaviour especially related to exit from the scheme .(resulting in funding deficit)
- vi. Constraints on data quality and different characteristics of members' data as compared to the data provided for the previous valuation.

12.7 Given the quality and too low a proportion of valid data made available for valuation the above results have limitations and could be a broad indication of financial position of EPS'95 as obtaining on the date of valuation .The possibility of firmer conclusion on the extent of deficit in the Fund will be enhanced if complete and accurate data of a greater proportion of total members representing the total membership and the class of Pensioners and Beneficiary Pensioners covered by the Scheme are provided to carry out valuation of liability as also the required individual data of New Entrants and all Exits , to make experience analysis.

#### 12.8 Sensitivity of Valuation results

Valuation results are particularly sensitive to assumptions on interest rates, salary increase rate, mortality rates and withdrawal rates as illustrated below.

S.No	Change in valuation basis	Change in liability
1.	Interest rate falls 0.5% (Valuation rate 7.5%/6.5%)	+15.2%
2.	Interest rate rises 0.5%(Valuation rate 8.5%/7.5%)	(-)14.1%
3.	Salary rate rises by 10% (from 6% to 6.6%)	+2.5%
4.	In service mortality rates lower by 10%	(-)0.5%
5.	Withdrawal rates rise 10%	*

\* Negligible

### 13. Recommendations

1. Make one time lump sum contribution of Rs 61,608 Cr. to the Pension Fund to make good the deficit

OR

As the current contribution rate of 9.49% of pensionable salary (Employers' 8.33% & Govt. 1.16%) is inadequate revise the rate upwards to 14.5% for the existing members so that the deficit is met by higher future contribution.

OR

Achieve (through professional investment management) return on investment of not less than 9% p.a over the future combined with increase in contribution rate (for existing members) of not less than 3%.

( Before taking any decision with respect to the above recommendation an actuarial valuation based on truly representative data of adequate volume and quality is necessary to assess the deficit with a greater degree of certainty)

2. Consider change in the superannuation age to 60 years from 58 years. However the effect on the liability will depend on how the change will be structured, having regard to the expectation of members.

### 3. Investment Management

Investment of funds needs to be separated for assets supporting liability of current pensioners (including beneficiary pensioners) from those of members in service ( for the reasons stated in section 10.2.1.4) and further to be streamlined with clear objectives to manage efficiently and effectively having regard to Asset-Liability matching requirements of the two groups (viz members in service and current Pensioners) and optimizing returns on investment to meet the expectation of Scheme members and Pensioners..

The Fund assets are wholly invested in fixed interest instruments. The pension benefits of the Scheme being in real terms (related to salary ) though mitigated to some extent by pensionable salary cap of Rs.6500 p.m. it makes sense to invest in real assets like Equities (with prudent investment policy approved by Trustees) as these assets over a long term provide higher returns through dividend income and capital appreciation over fixed interest securities and match the real time cost of Defined Benefit liability and could also give rise to surplus in the fund which may be utilized to meet the expectation of pension increases. It may be worth reviewing the investment strategy for the Pension Fund in light of investment regulations/ guidelines applicable for NPS by PFRDA.

Even within the portfolio of fixed interest securities inclusion of investment in Rated Corporate Bonds/ Debentures and limited trading in Govt. securities will help improve the returns as borne out by the experience of LIC in its management of insurance funds.

### 4. Control on Fund inflows and outflows

It is not known what process is in place to exercise control on the contribution receivable towards the Pension Scheme from employers in respect of every employee enrolled into the Scheme and if there are gaps in contribution(which need to be treated as

provided in the Rules of the Scheme) as this is relevant for allowing past service credit. A comprehensive and properly designed electronic data File relating to every member, Pensioner and beneficiaries capturing basic information (including contribution) required for administration of the Scheme and periodical actuarial valuation, needs to be created and maintained.

There is need to review the procedure to ensure timely reporting and recording of death of pensioners and beneficiaries as the related control statistics indicate otherwise (which could distort experience analysis).

5. One time exercise needs to be undertaken with simultaneous **setting up of Statistical Section at HQ and all Regional Offices** to complete data entry of all physical forms of existing members received at point of entry into the Scheme, initiate validation process to capture missing data. (A separate Note on the set up and functions of Statistical Section is appended). This needs to be time bound so that future valuation may be carried out with substantial volume of complete, accurate and consistent data the results of which would enable drawing firm conclusions on the financial position of the Pension Scheme emerging based on which appropriate review of contribution and benefits could be made.

6. **Any improvement to the provision of benefits like increasing the pensionable salary cap (from the existing limit of Rs. 6500) should be considered only after investigation of the financial position of the scheme and evaluation through actuarial valuation.**

#### **14. Reliance and limitations**

14.1 In producing this report I have relied upon data in CDs and information, both written and verbal, supplied by the officials of EPFO HQ. I relied upon the general completeness and accuracy of this information without independent verification. The accuracy of the results presented in this report is dependent on the accuracy of data and information.

14.2 I have reviewed the data for valuation provided for overall reasonableness and consistency with my knowledge of the EPS'95 and I have not carried out independent checks of the data supplied to me. The conclusions set out in this report are dependent on the accuracy and completeness of the information provided to me and constrained by the limitation of data provided. This report and the opinions and conclusions are for the internal use of EPFO only.

14.3 This report has been prepared on the basis as set out in the report and its annexure. Judgments as to the information contained in the report should be made only after studying the report in its entirety as it may be inappropriate to draw conclusions by review of a section or sections on isolated basis.

14.4 Actual future results will vary from this report as the results of the valuation have been based on limited data made available and certain assumptions and parameters. Supply of higher volume of complete accurate and consistent data as also deviations from these assumptions and parameters could alter the results significantly. These assumptions



and parameters include those which may be influenced by the decisions of the Trustees of EPS'95 Fund (like change of rules of the Scheme) and external factors such as inflation rates, investment yields and general economic environment.

14.5 The assumptions and parameters and valuation of the Scheme are made on 'continuing scheme' basis.

Dated: 25<sup>th</sup> February 2013

  
P.A. BALASUBRAMANIAN

(Fellow of Institute of Actuaries of India)  
( M.No.: 8 )

**ASSURED LIVES' MORTALITY**

Annexure-(1)

LIC 94-96

Age	Deaths per million	Age	Deaths per million	Age	Deaths per million
14	713	43	2602	72	45392
15	770	44	2832	73	50639
16	823	45	3110	74	56404
17	873	46	3438	75	62728
18	919	47	3816	76	69655
19	961	48	4243	77	77231
20	999	49	4719	78	85502
21	1033	50	5244	79	94519
22	1063	51	5819	80	104331
23	1090	52	6443	81	114992
24	1113	53	7116	82	126553
25	1132	54	7839	83	139067
26	1147	55	8611	84	151077
27	1159	56	9433	85	162298
28	1166	57	10294	86	174149
29	1170	58	11025	87	186638
30	1170	59	11951	88	199775
31	1171	60	13073	89	213560
32	1201	61	14391	90	227995
33	1246	62	15904	91	243072
34	1308	63	17612	92	258782
35	1387	64	19516	93	275109
36	1482	65	21615	94	292031
37	1593	66	22724	95	309522
38	1721	67	25617	96	327549
39	1865	68	28823	97	346073
40	2053	69	32372	98	365052
41	2247	70	36294	99	384436
42	2418	71	40623		

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ANNUITANTS' MORTALITY  
LIC 96-98 EXPERIENCE

Annexure-2

AGE	Deaths per million	AGE	Deaths per million	AGE	Deaths per million
20	919	51	4719	81	77335
21	961	52	5386	82	84210
22	999	53	6058	83	91428
23	1033	54	6730	84	98988
24	1063	55	7401	85	106891
25	1090	56	8069	86	115136
26	1113	57	8710	87	123723
27	1132	58	9397	88	132652
28	1147	59	10130	89	141924
29	1159	60	10907	90	151539
30	1166	61	11721	91	161495
31	1170	62	11750	92	171794
32	1170	63	12120	93	182436
33	1171	64	12833	94	193419
34	1201	65	13889	95	204746
35	1246	66	15286	96	216414
36	1308	67	17026	97	228425
37	1387	68	19109	98	240778
38	1482	69	21534	99	253473
39	1593	70	24301	100	266511
40	1721	71	27410	101	279892
41	1865	72	30862	102	293614
42	2053	73	34656	103	307679
43	2247	74	38793	104	322087
44	2418	75	43272	105	336836
45	2602	76	48093	106	351928
46	2832	77	53257	107	367363
47	3110	78	58763	108	383139
48	3438	79	64611	109	399258
49	3816	80	70802	110	415720
50	4243				

Annexure - 3							
EPS -95 Valuation -31.03.2008							
Assumption of Rates of Withdrawal ( including scheme certificate)							
Age group	<21	21-25	26-30	31-35	36-40	41-50	>50
Rates (%)	4	10	8	5	3	2	1



## Functions of Statistical Section

Annexure-4

### Regional Offices

1. Collection of data covering required information for administration and actuarial valuation (as per format advised) in respect of every member entered / entering EPS'95 from all the offices under the jurisdiction of each RO of the EPFO.
2. Validation of data and ensuring completeness of information by interaction with the offices concerned.
3. Updation of information in respect of all members and pensioners including beneficiary pensioners) with regard to dynamic information such as change in marital status, salary changes, children status.
4. Updation of member status on continuing basis like death, withdrawal, retirement, disability and status with regard to exit of pensioners.
5. Compiling valid data for actuarial valuation annually and submit to controlling office (Statistical Section).
6. Preparing MIS Statements as per requirement for consolidation and review at controlling office.

### Controlling Office ( EPFO HQ)

1. Monitor the work of Statistical Section at R.Os and provide direction and guidance.
2. Consolidate MIS Statements of R.Os for review (this will include information on EPS'95 contribution from employers as also outgo for various benefits –pension as well as lump sum)
3. Consolidate valuation data from R.Os, carry out validation checks for consistency accuracy and completeness of data and obtain wherever required, revalidated data from R.Os. Take overall responsibility for submission of all required data for actuarial valuation.
4. Carry out statistical analysis annually related to the following:
  - Distribution of Members by age group \ Pensionable salary\ past pensionable service preferably broad industry group wise.
  - Experience as to death, withdrawal, and retirement of Members according to age at exit and deriving decrement rates at each age (and also duration for withdrawal) with guidance of an Actuary.
  - Analysis of salary increase separately for different employee categories \ industry groups.

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**Resources for effective functioning of Statistical Section**

Statistical Section at R.Os and controlling office must be provided with required resources like computers and operators to capture and maintain data in electronic form and covered by network to enable effective functioning.  
The staff selected for the section should be capable of utilizing computer applications data processing and programming.

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## Age-wise distribution of Number, salary and salary weighted by service

## Sample Data Valued

Age	Number	Salary	Salary x Service
18	9,312	13,023,050	14,240,270
19	19,512	31,645,366	31,622,732
20	36,854	65,112,368	81,985,266
21	52,708	99,163,799	145,943,843
22	64,243	141,017,596	219,450,838
23	79,877	203,882,605	351,533,357
24	90,458	258,568,386	484,164,019
25	94,875	297,798,281	619,140,274
26	94,549	323,473,669	747,135,087
27	94,828	335,262,220	839,238,977
28	91,073	341,371,756	1,051,634,398
29	95,854	361,371,596	1,245,847,499
30	87,082	347,146,772	1,330,819,996
31	87,921	348,062,770	1,484,194,201
32	84,583	339,522,166	1,613,440,899
33	85,668	352,524,406	1,819,042,710
34	84,905	347,320,069	1,936,758,978
35	79,103	330,355,783	1,989,202,309
36	76,638	318,037,747	2,046,808,434
37	77,484	319,052,646	2,173,144,737
38	71,689	301,522,227	2,192,033,298
39	76,329	305,803,030	2,337,378,157
40	67,487	291,765,275	2,344,998,544
41	66,521	287,464,686	2,410,270,954
42	61,252	265,391,493	2,324,090,899
43	56,447	253,212,746	2,290,651,523
44	58,109	258,691,144	2,419,134,169
45	52,325	248,141,218	2,430,578,464
46	47,760	227,682,857	2,273,462,581
47	45,600	227,202,817	2,316,493,560
48	41,400	209,361,756	2,205,521,201
49	43,738	218,217,971	2,293,637,265
50	36,842	203,785,516	2,215,720,176
51	33,275	190,348,340	2,098,767,944
52	29,295	176,871,303	1,980,267,910
53	28,982	181,260,531	2,087,808,173
54	27,029	174,335,181	2,018,423,136
55	23,824	153,811,131	1,803,214,792
56	21,786	147,837,812	1,777,258,557
57	20,739	148,563,977	1,774,536,679
58	8,017	50,784,634	579,927,586
<b>Total</b>	<b>2,405,973</b>	<b>9,695,768,696</b>	<b>64,399,524,392</b>

## Age-wise distribution of number, salary and salary weighted by service.

Projected from sample data available for actual valuation

Age	Number	Salary	Salary x Service
18	173,327	127,959,974	139,910,027
19	363,180	310,914,326	310,691,934
20	685,969	639,726,155	805,501,669
21	981,063	974,279,991	1,433,891,894
22	1,195,765	1,385,491,741	2,156,094,954
23	1,486,763	2,003,137,652	3,453,799,802
24	1,683,711	2,540,423,080	4,756,890,401
25	1,765,925	2,925,855,002	6,083,026,025
26	1,759,857	3,178,114,538	7,340,569,357
27	1,765,050	3,293,936,618	8,245,486,193
28	1,695,158	3,353,949,701	10,332,261,870
29	1,784,148	3,550,460,177	12,240,397,274
30	1,620,871	3,410,701,782	13,075,248,178
31	1,636,488	3,419,701,648	14,582,144,022
32	1,574,356	3,335,790,388	15,851,985,282
33	1,594,553	3,463,536,975	17,872,015,790
34	1,580,352	3,412,404,688	19,028,574,032
35	1,472,358	3,245,731,142	19,543,825,248
36	1,426,476	3,124,707,159	20,109,804,806
37	1,442,224	3,134,678,365	21,351,052,950
38	1,334,358	2,962,442,708	21,536,631,792
39	1,420,727	3,004,501,410	22,964,638,500
40	1,256,147	2,866,580,947	23,039,507,048
41	1,238,166	2,824,327,738	23,680,804,322
42	1,140,096	2,607,459,819	22,834,091,436
43	1,050,661	2,487,804,113	22,505,550,372
44	1,081,593	2,541,629,118	23,767,887,372
45	973,933	2,437,976,690	23,880,327,990
46	888,967	2,236,974,125	22,336,670,290
47	848,759	2,232,257,821	22,759,448,254
48	770,582	2,056,970,114	21,669,149,866
49	814,100	2,143,981,989	22,534,885,876
50	685,746	2,002,183,842	21,769,354,468
51	619,354	1,870,164,128	20,620,303,432
52	545,275	1,737,752,894	19,456,046,506
53	539,447	1,780,876,830	20,512,624,450
54	503,100	1,712,835,559	19,830,919,236
55	443,436	1,511,187,670	17,716,506,940
56	405,505	1,452,499,993	17,461,487,212
57	386,020	1,459,634,586	17,434,745,372
58	149,222	498,956,804	5,697,763,054
<b>Total</b>	<b>44,782,788</b>	<b>95,260,500,000</b>	<b>632,722,515,496</b>

EPS '95 VALUATION - 31 March 2009								Appendix - C	
Primary Pensioners									
Distribution by age and pension amount (valued data)									
Monthly Pension amount									
Age	<300	301-400	401-500	501-600	601-700	701-800	801-900	>900	Total
<50	385	79	47	32	13	7	7	32	602
50	95	146	27	12	7	2,034	1,310	945	4,576
51	977	971	1,715	4,813	2,526	9,428	7,614	11,178	39,222
52	1,745	1,131	803	11,065	4,649	4,367	9,771	17,977	51,508
53	2,323	1,358	3,681	11,418	5,111	6,724	10,621	21,393	62,629
54	2,576	2,822	9,536	9,479	6,767	8,605	10,954	18,064	68,803
55	2,805	6,011	8,402	9,279	7,869	10,618	8,859	17,028	70,871
56	2,988	6,658	8,501	9,051	9,833	9,058	9,364	16,105	71,558
57	3,536	8,554	9,651	11,099	10,629	9,925	10,386	16,659	80,439
58	3,298	8,414	8,443	9,837	9,878	9,073	8,523	25,119	82,585
59	4,935	10,005	10,563	14,092	12,876	10,581	14,035	68,054	145,141
60	4,011	8,005	9,433	13,455	11,982	10,725	12,732	62,521	132,864
61	3,682	7,792	9,989	14,442	13,037	11,632	14,361	52,612	127,547
62	3,255	10,207	12,582	12,358	16,526	12,876	8,919	35,262	111,985
63	2,575	9,644	12,025	12,405	16,440	10,894	6,196	23,983	94,162
64	4,085	9,078	11,454	12,532	15,707	9,387	7,129	11,386	80,758
65	7,764	9,309	10,601	8,524	11,934	9,858	5,040	2,624	65,654
66	8,913	10,621	10,512	5,985	13,572	5,939	275	163	55,980
67	12,841	13,564	4,727	15,735	4,085	434	43	59	51,488
68	9,661	10,517	3,828	14,016	1,602	32	25	44	39,725
69	8,872	10,255	6,094	13,753	1,536	11	4	14	40,539
70	4,098	9,769	6,508	8,153	3,458	3	2	7	31,998
71	2,933	8,578	5,835	7,301	1,848	9	1	4	26,509
72	2,249	6,421	4,589	5,518	64	-	2	2	18,845
73	1,673	5,033	3,393	3,832	11	-	-	2	13,944
74	1,288	3,687	2,481	2,118	3	-	1	-	9,578
75+	945	2,719	1,702	1,171	7	1	-	1	6,546
<b>Total</b>	<b>104,508</b>	<b>181,348</b>	<b>177,122</b>	<b>241,475</b>	<b>181,970</b>	<b>152,221</b>	<b>146,174</b>	<b>401,238</b>	<b>1,586,056</b>

## Distributions of Members salary and service bands (valued data)

Service Years	Salary Bands Rs.					TOTAL
	1001-2000	2001-3000	3001-4000	4001-5000	>5000	
0	13487	41866	62184	6469	1832	125838
1-5	112099	182567	445596	479504	90637	1310403
6-10	3003	53512	149978	143793	14293	364579
11	57	9058	15585	25127	2133	51960
12	60	11427	17342	29479	1789	60097
13	10433	28807	59534	92541	301781	493096
<b>TOTAL</b>	<b>139139</b>	<b>327237</b>	<b>750219</b>	<b>776913</b>	<b>412465</b>	<b>2405973</b>

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