

**Report of the
Group to Study the Pension Liabilities
of the State Governments**

**Reserve Bank of India
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Dear Dr. Rakesh Mohan,

It was indeed a pleasant surprise to me when I received an invitation from the Reserve Bank of India in February, 2003 to chair a Group constituted, as a sequel to the discussions at the Eleventh Conference of the State Finance Secretaries held in the RBI, to examine the various issues relating to the growing pension liabilities of the State Governments and to make suitable recommendations.

I had no hesitation in giving my consent to the proposal which gave me an opportunity to study the problems of State finances and the contributory role of growing pension liabilities of the State Governments in compounding these problems.

As majority of the members of the Group were State Finance Secretaries and they were preoccupied with the work connected with State Budgets in the months of February and March, the Group could hold its first meeting only in April, 2003. The very fact that the Group could arrive at a consensus on various complex issues involved in the subject and submit the Report within about six months of holding the first meeting is testimony to the deep interest shown by all the members of the Group.

During this period, the Group held six meetings. A few representatives of the Group, including the Chairman and the Convenor, also visited seven States (Kerala, Andhra Pradesh, West Bengal, Orissa, Punjab, Haryana and Uttar Pradesh) with a view to obtain greater insight into the problems by holding discussions with the officials of the States concerned and, wherever possible, getting the opinions and suggestions from the State Finance Ministers. Such interactions helped the Group not only in appreciating the problems of the States, but also in formulating pragmatic suggestions.

In view of the divergences among the States in terms of coverage of their pension schemes, degree of viability of State finances, administrative and political history, etc., the Group felt that a rigid and uniform set of recommendations may not serve the purpose. The Group has, therefore, recommended certain alternative long-term structural solutions to the pension problems of the States. Even in matters of extension of the proposed new schemes to the existing employees, future treatment of employees of Grant-in-Aid Institutions, urban and rural local bodies (Corporations, municipalities, Zilla panchayats, etc.), there are likely to be variations among the States due to the differences in 'Initial Conditions' referred to earlier. Similarly, with regard to parametric changes in the existing schemes of Retirement Benefits (Pension, Commutation, Family Pension,

Leave encashment at the time of retirement, *etc.*) and in exploring the possibility of pre-funding part of the Pension commitments, while mutual discussions among the States may lead to certain degree of uniformity of approach, some differences may remain. Considering all these factors, the Group, after discussing the issues involved, has adopted a flexible approach and suggested alternative solutions.

Lack of adequate data regarding the profile of State Government employees, employees of Local Bodies and Grant-in-Aid institutions covered under State Pension Schemes, Pensioners, *etc.* was a major constraint. This has come in the way of making any precise forecasting of future pension liabilities. This constraint will also seriously affect the capability of the State Governments to design rational pension schemes in future. The Group has, accordingly, recommended compilation of relevant data regarding all employees covered by the State Pension Schemes, periodic updating and verification of data, computerisation of data, *etc.* It will be a good idea if this subject is periodically discussed at the Conference of the State Finance Secretaries convened by the Reserve Bank of India.

I must keep on record, however, that the task of the Group became quite congenial because of the excellent hospitality and logistic support provided by the Reserve Bank. My sincere thanks are due to you and Shri M.R. Nair, Adviser, Department of Economic Analysis and Policy, RBI, for facilitating smooth completion of our task. It would not have been possible for the Group to complete its deliberations within a period of six months, but for the excellent Research support and analytical inputs provided by Shri M.R. Nair, Dr. B.N. Anantha Swamy and all the other officers of the Department of Economic Analysis and Policy of the Reserve Bank of India, whose contributions have been gratefully acknowledged in the Report.

I must also thank every member of the Group who provided valuable information and enthusiastically participated in the deliberations in a positive and constructive manner which made it possible for us to produce a unanimous Report within a short period. My thanks are due to the special invitees, Dr. R. Bannerji, Joint Secretary, Ministry of Finance, Government of India, Dr. N.J. Kurian, Adviser (Plan Finance) Planning Commission, Government of India, and Smt. Usha Thorat, Executive Director, RBI who have taken time off from their busy schedule to participate in the meetings of the Group and made valuable contributions which have enriched this Report.

The Group has recommended that the Report be given wide publicity, including bringing it in the public domain. While the RBI will, no doubt, forward the Report to the State Governments, Union Territories, Government of India (Departments of Finance, Personnel and Labour), Planning Commission, Life Insurance Corporation, the Institute of Actuaries, *etc.*, some efforts may also be necessary to ensure that the Report reaches as many representative Bodies of various Stake holders as possible.

The subject of Pension Reforms has been a matter of serious public debate in the developed countries as well as in some of the newly industrialised countries and countries emerging out of the former 'Iron Curtain' area. However, in India, though at the official level the matter is being discussed

during the last 2/3 years, it has not provoked much public debate. One reason, of course, is that Pension Reforms are being talked of only in the context of pension Schemes of Central and State Governments which cover a very small percentage of total workforce in the country. The other reason is that enough attempt has not been made so far to sensitise the general public about the importance of the issues involved. Not many people are aware how precarious is the position of finances of many State Governments and to what extent pension payments have already contributed to the same and what will be its impact in the coming decades if reform measures are not undertaken immediately.

May I take the liberty of suggesting that, apart from discussing the Report in the next Conference of the State Finance Secretaries convened by the Reserve Bank of India and giving wide publicity to the Report, RBI may also take the initiative in organising Regional Level Workshops to sensitise the parties concerned about the important findings of the Group and its recommendations regarding Pension Reforms.

I, once again, sincerely thank you for initiating this Study and for providing necessary intellectual and material support to the Group to enable us to fulfil our task successfully.

I have great pleasure in submitting the Report of the Group to the RBI with the hope that this Report will form the basis for further deliberations and decisions by the State Governments regarding State Level Pension Reforms.

With personal regards,

Yours sincerely,



(B.K. Bhattacharya)

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LIST OF ABBREVIATIONS

ADB	:	Asian Development Bank
CGEGIS	:	Central Government Employees Group Insurance Scheme
CPF	:	Central Provident Fund
CSPS	:	Civil Service Pension System
CSRS	:	Civil Service Retirement System
DB	:	Defined Benefit
DC	:	Defined Contribution
EDLIS	:	Employees' Deposit Linked Insurance Scheme
EET	:	Exempt contributions, Exempt investment income and Taxed benefits
EPFO	:	Employees' Provident Fund Organisation
EPFMPPS	:	Employees' Provident Fund and Miscellaneous Provisions Scheme
EPFPS	:	Employees' Provident Fund Scheme
EPI	:	Employees' Pension Insurance
EPS	:	Employees' Pension Scheme
FERS	:	Federal Employees' Retirement System
GPF	:	General Provident Fund
GIA	:	Grant-in-Aid Institutions
IRDA	:	Insurance Regulatory and Development Authority
ICS	:	Indian Civil Servants
IRA	:	Individual Retirement Accounts
LBs	:	Local Bodies
LIC	:	Life Insurance Corporation of India
MOGAHA	:	Ministry of Government Administration and Home Affairs
NZSF	:	New Zealand Superannuation Fund
OECD	:	Organisation for Economic Cooperation and Development
PAYG	:	Pay-As-You-Go
PFRDA	:	Pension Fund Regulatory and Development Authority
PPF	:	Public Provident Fund
NOAP	:	National Old Age Pension
NDC	:	Notional Defined Contribution

NSAP	:	National Social Assistance Programme
OASIS	:	Old Age Social and Income Security
PCSPS	:	Principal Civil Service Pension Scheme
PfMs	:	Pension Fund Managers
POP	:	Points of Presence
PRDA	:	Pension Regulatory and Development Authority
SEBs	:	State Electricity Boards
SERPS	:	State Earnings-Related Pension Scheme
SRO	:	Self Regulatory Organisation
SRTC	:	State Road Transport Corporation
UK	:	United Kingdom
US	:	United States

GLOSSARY

Accrual rate: The benefit of pension divided by the length of qualifying service.

Actuarial valuation: A valuation of a pension scheme made on an actuarial cost method to determine whether the contributions being collected are made at a sufficient rate to ensure that the benefit promise can be met when it is due from the fund.

Actuary: A person professionally trained in the technical and economic aspects of pension, insurance and related fields particularly to determine the rate at which individual contributions are annually required to fund a promise made when it is due.

Annuity: An arrangement for providing a monthly stream of benefits for a specified period or during the lifetime of an individual.

Contract-out: A pension plan which provides a portion of the social security benefit in exchange for a lower contribution rate to the social security system, as in UK.

COLA: Cost of living adjustments paid to beneficiaries in order to increase their nominal benefits to offset the effect of inflation eroding the real value of benefits.

Commutation of Pension: The option available to an employee to get upfront a portion of the pension that is due.

Commutated Value of Pension: The lumpsum value of pension an Employee gets when he exercises a choice to commute pension. This value is arrived at by taking into account the percentage of pension accruing for a year, multiplied by the factor applicable from the Table of Commutation Values constructed on an actuarial basis.

Dearness Relief: Compensation made to a retired employee for the rise in cost of living.

Defined Benefit Scheme: A pension plan in which the benefit to which an employee is eligible is based on a defined benefit formula which may have as its parameters a flat rate per year of service or a percentage of salary or a percentage of salary times the years of service.

Defined Contribution Scheme: A pension plan in which the individual makes contributions over the length of his service and the benefit receivable by him is dependant on the balance in his account at the time of his retirement. The balance includes his contribution and the yield earned on the investment of his contributions.

Earnings Related Benefits: Benefits are related to earnings. The parameters generally adopted are length of the period used to calculate pension reference earnings, the benefit accrual rate and the penalty or reward for early retirement.

Family Pension: Pension payable to a spouse or eligible family member on the demise of the employee before or after retirement.

Flat Rate Benefit: Pension benefit unrelated to earnings but which are structured with the objectives of the pension scheme a country has in view.

Funded Benefit: A pension benefit that is financed by the employee and the employer or only the employees or employer as the case may be.

Gratuity: A lumpsum onetime benefit available to an employee based on the length of service.

Hybrid Scheme: A scheme, which combines the features of a defined contribution and defined benefit scheme.

Index Funds: Stock or bond portfolios structured so that their risk levels closely approximate those of stock or bond market indices.

Invalid Pension: Pensionary benefit available to an employer who is retired from service on account of any bodily or mental infirmity, which permanently incapacitates him from rendering service.

Locked in Benefits: Accrued pension benefits which cannot be refunded to the employee in cash before retirement age.

Lumpsum Payment: Payment made in toto at a point of time as compared to a stream of benefit payments over a period of time.

Mandatory Saving System: A compulsory defined contributory- pension system where benefits are paid either as a lumpsum amount or in the form of annuities based on the employee and sometimes employer contributions and returns on investment of funds as in Chile.

Normal Retirement Age: Age at which unreduced pension benefits are received by employees.

Notional Defined Contribution Scheme: A defined contribution scheme where the individual has an account in which his contributions are credited but no funds are deposited. The account is periodically revalued -upwards based on the index adopted.

Occupational Pension Scheme: A pension plan offered through an individual's employment to private or public sector employees. Benefits are generally paid as an annuity or even as a lumpsum.

Pay-As-You-Go: An unfunded pension scheme where current revenues fund pension benefits.

Price Indexation: Indexation of pension benefits to price changes so as to maintain the purchasing power of the pension benefits.

Provident Fund: A fully funded defined contribution scheme in which funds are managed by the Public Sector.

Replacement Rate: Refers to the relationship between pension and wage levels. The portion of a reference salary or final earnings replaced by pension.

Wage Indexation: Indexation of pension benefits to revision in wages.

Executive Summary

On the basis of the decision taken in the Eleventh Conference of State Finance Secretaries held in the Reserve Bank of India (RBI) during January 2003, a Group was constituted by the RBI in February 2003 to study the pension liabilities of the State Governments and make suitable recommendations (Chapter 1).

2. The terms of reference were comprehensive covering areas such as: to study the existing pension scheme of the State Governments and the trends in pension payments and their fiscal implications; to assess the future liabilities of the existing pension schemes; to examine cross-country practices concerning pension reforms and the funding arrangements thereof; to consider the feasibility of introducing necessary modifications in the existing pension schemes; and to suggest appropriate mechanisms regarding funding arrangements to meet the growing pension liabilities (Chapter 1).

3. The Group recognised that the issues and concerns relating to civil service pension schemes differ vastly from the universal social security schemes in several respects. Though there are several theoretical expositions regarding the social security schemes, the debate on them continues to be inconclusive and engage the attention of academicians and policy makers. While the main objectives of pension schemes are stated to be poverty relief, consumption smoothing and insurance in respect of longevity, there could be several alternative pension schemes with different features. For example, the schemes could be voluntary or mandatory; funded or pay-as-you-go; defined benefit or defined contribution or notional defined contribution, public or private, *etc.* (Chapter 2).

4. Pension schemes across countries can be categorised in to three pillars based on the need they address and the funding nature. The first pillar schemes, which are mandatory and redistributive, offer defined benefits that are largely financed on a PAYG basis and are publicly managed. The second pillar schemes or defined contribution schemes, in which contributions are placed in individual or group funds, could be managed either by private sector pension companies or by the public sector. The third pillar schemes comprise voluntary personal pensions. The three pillars can be complementary to each other. While some countries avail of only one or two of the pillars, there are several advantages in adopting multi-pillar system (Chapter 2).

5. The Group, after examining the social security systems across the world came to the conclusion that, despite some differences in the features, there are many similarities that could be delineated. Social security benefits provided by various countries, by and large, reflect differences in the level of development, historical experiences, political philosophies, and cultural differences concerning the roles and responsibilities of the individual, family, employer, capital markets, and the Government (Chapter 3).

6. Country experiences revealed that civil service pension systems had evolved in various countries much before the establishment of formal social security systems covering substantial proportion of the population. Further, there is no uniform pattern of pension scheme for civil servants across the countries. Even though civil service pension started as a contributory system in many countries, over the years, the Governments took over the liability of paying pensions out of public funds. With the increasing pension liabilities, many countries have introduced (or are in the process of introducing) reforms in their pension systems which also include setting up of contributory pension funds (Chapter 3).

7. There are several risk factors that may affect the viability of the pension schemes and these could arise from macro-economic shocks, demographic shocks, political risks, management risks, investment risks, and market risks. In this context, governance and regulatory issues pertaining to pension funds assume critical importance (Chapter 3).

8. An examination of the cross-country experience of pension reforms revealed that civil service pension reforms do not differ markedly from the reform measures in the national pension system. In most of the industrialised countries, the retirement pensions for civil servants continued as separate schemes even after the introduction of broad based national social insurance schemes. Since World War II, maintenance of separate pension schemes for public service employees has, however, been increasingly criticised, particularly in countries where there is high proportion of civil servants in the workforce. In a number of developed countries, though the civil service pension system is operated by the States like other occupational plans in the private sector, there is a tendency to align the civil service schemes with the national social insurance plan. In a majority of countries, however, civil service pension scheme is still kept separate (Chapter 4).

9. In many countries, financing of civil service pension is primarily dependent on payroll taxes that are shared by the employees and the State as an employer, with the Government covering any shortfall out of general revenues. In the context of growing pension liabilities, several countries have initiated modifications in the civil service pension schemes, which focus on: (i) reducing the pension liabilities through parametric changes, (ii) gradually shifting towards some form of advance funding of benefit obligations, (iii) designing systems that allow greater pension portability, and (iv) harmonising compensation components to attract, retain, and motivate civil servants. In recent years, many countries have taken measures to reduce the civil service pension liabilities by introducing higher retirement ages and or longer service periods; increasing the employee contribution rates; lowering the rates of benefit accrual; and changing the post retirement indexation policy (Chapter 4).

10. The Group undertook a detailed analysis of the existing pension schemes of State Government employees and identified certain important issues, which need immediate resolution. Even though the existing pension schemes of most of the State Governments have many common features, there are

some variations with regard to certain aspects. In all the States, pension schemes cover the State Government employees. In the case of employees of grant-in-aid (GIA) institutions and Local Bodies (LBs), while some State Governments have accepted the entire burden relating to both the salary and pension expenditure, there are many instances where the pension burden of such employees is borne by the concerned institutions themselves (Para 5.5-5.7).

11. During the period 1980-2002, pension payments of the State Governments have sharply risen at an annual compound rate of 23.6 per cent from Rs. 268 crore in 1979-80 to Rs. 28,197 crore in 2001-02. State-wise trends show that the growth rates varied widely across the States. Pension payments as percentage of total revenue receipts of the States rose from 2.1 per cent in 1980-81 to 11.0 per cent in 2001-02; during the same periods, the ratio of pension payments to States' own revenue receipts rose at a faster rate from 3.4 per cent to 17.2 per cent (Para 5.36, 5.41).

12. The rapid increase in States' pension outgo could be attributable to a number of factors which, *inter alia*, include expansion in the number of State Government employees during the earlier decades; extension of pension facilities to employees of various non-Government institutions (GIAs and LBs); impact of various pay revisions; introduction of wage indexation, and significant improvement in life expectancy (Para 5.37).

13. In the absence of requisite details for actuarial estimation of future pension liabilities, the Group made an attempt to make projections of pension payments based on historical growth rates. Assuming that the pension payments of the States would grow at the historical average growth rate, pension payments alone would pre-empt about 20.1 per cent of the total revenue receipts of States and as high as about 30.3 per cent of their own revenue receipts in 2010-11(Para 5.51).

14. The Group took note of the fast deterioration of State finances in recent years, especially in the second half of 1990s. In a few States, the committed expenditure on interest, salary and pension together has already exceeded their total revenue receipts. In this context, the Group came to the conclusion that continuation of the existing pension scheme without any modification would be unsustainable and would imply further deterioration of the States' financial position (Para 5.57 and 5.59).

15. Looking purely from the angle of fiscal sustainability of the States and the magnitude of the problem, structural alteration in the existing pension scheme would appear to be necessary (Para 5.61).

16. Since the positive fiscal impact of the structural changes, as applicable to new recruits, will be felt only after a long gap of around 35 to 40 years, this measure alone may not provide any immediate financial/fiscal relief to the State Governments. The magnitude of the problem, therefore, necessitates some parametric changes involving trimming of pension and other retirement benefits for the existing employees as well as for pensioners (Para 5.61).

17. The Group took note of the pros and cons of both the defined benefit (DB) and the defined contribution (DC) Schemes. The advantage of the DB scheme is that it is simple in administering and can provide a secure and predictable source of revenue to the pensioners, while the employer bears the risk. In comparison, a DC scheme offers more flexible and portable retirement benefits to the participants. Under this, the benefit totally depends upon the employer's and employees' contribution and the returns thereon, while the investment risk is borne by the employees. While a pure DB or PAYG system would put pressure on the Government finances, a DC scheme with no predetermined benefits would make the pensioners susceptible to financial insecurity. The Group recognises the fact that pension is both a reward for past service as well as a social requirement. The design of any pension scheme would, therefore, has to balance between retirement benefit of the employees and the financial burden on the State Governments (Para 5.62-5.65).

18. The Group recognised the fiscal implications of pension reforms in the transition period as the State Governments would need to provide for pension for the existing employees as well as to contribute towards to the Pension Funds for the new employees. Hence, even though pension reforms would yield positive results in the long-run, fiscal consolidation measures aimed at short-term and medium-term improvement seem inevitable (Para 5.76).

19. The pension benefits are generally indexed to prices or to wages or to both. Indexation is an implicit insurance against future unexpected changes in inflation and income levels. While examining the indexation formula, the Group noted that many countries have already done away with the wage indexation and adopted the less generous price indexation (Para 5.82).

20. The Group reviewed the existing commutation formula as well as the provisions regarding restoration of commuted portion of pension. The present commutation table in most of the States is based on the assumptions pertaining to interest rates and life expectancy prevailing during the Seventies. (Para 5.85).

21. Given the current fiscal situation of States, setting up of a 'Pension Fund' that would entirely meet the existing pension liability would not only be difficult, but also impossible. Nevertheless, even a small initiative at the States' level in this direction will be a major breakthrough in the right direction (Para 5.91).

22. A complex issue associated with the pension reforms of the State Governments relates to the burden arising from pensionary obligations to the employees of grant-in-aid (GIA) institutions and Local Bodies (LBs). When compared with the State Government employees, employees of GIA institutions and LBs have certain advantages (e.g., non-transferability) which are not available to Government employees. Furthermore, the original terms and conditions of employment and perks are different for the employees of State Government and others. As the employees of these bodies are generally not

appointed by the State Governments, State Governments are not legally obliged to accept any financial obligation on them (Para 5.93-5.95).

23. The Group realised that verification of the number of pensioners is not made on a regular basis in some States. With the result, there are instances of the existence of inflated numbers of pensioners in many States (Para 5.96).

24. Most of the State Governments do not have any proper arrangement in place to collect and monitor the information/data relating to pensioners. Detailed information on employees and pensioners would be useful to the State Governments in undertaking actuarial assessment of future pension liabilities (Para 5.97).

25. The Group is of the view that pension reform measures at the States' level should be pragmatic, their implementation should be based on mutual trust and consultation, and the approach should be gradualist (Para 6.1).

26. Considering the vast diversity among the States, the Group felt that a set of alternative measures would ideally give wider options to the States with regard to the choice of schemes and their implementation (Para 6.5).

27. Looking purely from the angle of fiscal sustainability of the States and the magnitude of the problem, the Group feels that while structural changes are necessary for new employees, parametric changes are unavoidable for the existing employees as well as pensioners (Para 6.6).

Group's Recommendations:

28. The Group recommends the introduction of contributory pension scheme/s for the new employees of the State Governments in place of the existing non-contributory defined benefit pension scheme (Para 6.9).

29. The Group recommends alternative pension models for the State Governments as under:

- (a) A pure Defined Contribution(DC) scheme in which the new employees and the State Governments each would contribute 10 per cent of the basic pay and dearness allowance to an individual account. The contributions will be vested in a Fund which will be invested, in accordance with specified guidelines and the employee at the time of retirement will get an amount which will be the aggregate total of the employee's contribution, Government's (employer's) contribution and the earnings (on Investment made by the Fund) attributed to the employee's Account (Para 6.10).
- (b) The State Governments which feel that some appropriate defined benefit should be provided to their new employees from a social security perspective, could adopt a Defined Contribution

-Defined Benefit (DC-DB) scheme. This would be a contributory scheme with guarantee of an appropriate level of pension fixed by individual State Governments. The rate of contribution by the employees and the State Governments could be determined on the basis of actuarial calculations (Para 6.11).

- (c) Under the third option, a two Tier scheme could be introduced for the new employees. The defined benefit in the first Tier of DC-DB scheme could, however, be reduced from the present level of 50 per cent to an appropriate level of say 30 per cent of the average pay of the last 36 months. This could be supplemented by a mandatory Defined Contribution (DC) scheme, wherein both the employees and the State Governments make contributions. The pure DC component could, at the option of the State Government, be merged with tier-II of the proposed Central Government Pension Scheme, which is open to State Governments as well (Para 6.12).

30. The contributions under the proposed scheme/s and also the earnings from the Pension Funds may be granted Income Tax exemption (Para 6.13).

31. The proposed new pension scheme/s should be made mandatory for all new employees of the State Governments and the date of its applicability may be decided by the respective State Governments (Para 6.14).

32. The State Governments may explore all the possibilities of extending the new scheme even to the existing employees, on an optional basis. In respect of States where pay, pension and interest burden have exceeded 90 per cent of State's total revenue receipts, there may be no alternative but to make the new contributory scheme obligatory for even existing employees with less than 10 years of service [minimum eligibility period for earning superannuation pension] (Para 6.14).

33. In order to have some immediate and medium-term effect on State finances, the Group feels that a few parametric changes in the current pension scheme for both the existing employees and pensioners become inevitable (Para 6.15).

34. The Group recommends immediate withdrawal of fixing the pension on the basis of only last one month's pay, wherever it exists now. Further, the basic pension may be determined on the basis of the average pay for a longer period, say for 36 months (Para 6.16).

35. In the case of employees taking voluntary early retirement, the practice of adding 5 years on a notional basis while calculating the basic pension may be done away with. (Para 6.17).

36. The Group recommends continuation of the present practice of price indexation, while doing away with wage indexation facility, wherever it exists (Para 6.18).

37. There should be regular mutual consultation between the Central Government and the State Governments on the issue of increase in the rates of Dearness Allowance (Para 6.19).

38. The maximum permissible commutation amount should be brought down from 40 per cent of Basic Pension to 33 1/3 per cent (1/3rd) [Para 6.20].
39. The present Discount rate used while calculating Commutation Factor could be enhanced and could be linked to the rate of return on General Provident Fund (Para 6.21).
40. The State Governments may uniformly adopt restoration of commuted portion of pension after a period of 15 years (Para 6.22).
41. With regard to the Family Pension, the number of years for extending enhanced family pension could be brought down from the present maximum period of 7 years to 5 years or until the pensioner would have attained the age of 63 years, whichever is earlier (Para 6.23).
42. The pension burden relating to the employees of grant-in-aid institutions (GIA) / Local Bodies (LBs) to be recruited in future should be shifted to the respective institutions/bodies (Para 6.24).
43. Even in the case of existing employees of GIA institutions/ LBs, the State Governments may explore the possibility of collecting contributions from the employees as well as the institutions concerned towards the pension liability (Para 6.25).
44. The GIA institutions and LBs should consider having their own pension scheme/s of a contributory type, depending upon their own financial position or join the Central Government pension scheme (open to informal sector employees/ self-employed) or any other schemes managed by public or private Pension Funds (Para 6.26).
45. In order to at least partially meet the pension burden of the existing employees and pensioners, there is a need for setting up a "Dedicated Pension Fund". In this connection, the State Governments may examine the feasibility of the following options:
- (a) levying a Cess on /collecting contributions from all the existing employees (including employees of GIA institutions and LBs so long as their pension liability is borne by the State Government) [Para 6.27 (a)].
 - (b) retaining a portion of increased salary and dearness allowance (DA) arising from the revisions in salary and DA [Para 6.27 (b)] .
 - (c) taking steps to augment the Fund corpus from their own contributions or exploring the possibility of augmenting this Fund through any other available means [Para 6.27 (c)].
46. The Group favours reduction in the leave encashment period in a phased manner, with advance intimation to all concerned. For instance, the State Governments may announce that the maximum permissible encashment period at the time of retirement would be reduced by one month after one year, two months after two years, and so on. Through this gradual process, the leave encashment facility could be limited to 120 days over a period of six years (Para 6.28).

47. The "Pension Fund" to be created under the proposed revised schemes should be kept completely outside the States' Consolidated Fund and the Public Account (Para 6.31).
48. The individual State Governments should consider having their own separate Pension Funds or Joint Pension Funds for a group of States. The smaller States could either have a Joint Pension Fund or may consider joining the proposed tier-II of the Central Government pension scheme (Para 6.32).
49. The Group recommends that annual actuarial evaluation of the Pension Funds may be adopted by the States. (Para 6.33).
50. There could be several Pension Fund managers for each Fund, subject to the guidelines of the Pension Fund Regulatory and Development Authority (PFRDA) [Para 6.34].
51. In case of a pure DC scheme, a small portion of the earnings from the Pension Fund may be kept in a separate Fund which could be used during periods when the earnings are below a bench mark level (Para 6.35).
52. In respect of a pure DC scheme and DC component of a 2 Tier scheme, the State Governments may consider providing investment options to their employees, similar to those available to the Central Government employees (Para 6.37).
53. In respect of a DC-DB Scheme or DC-DB component of a 2 Tier Scheme, the investment pattern suggested at Annex. VIII which tries to satisfy the twin principles of safety and return could be adopted. It should be ensured that the returns from the investments are adequate to meet the committed pension liabilities to avoid long-term mis-match between the returns and the payments under the defined benefits (Para 6.38 and 6.39).
54. The Pension Funds should have a simple, standardised quarterly reporting format for furnishing their performance details (Para 6.40).
55. There should be comprehensive system of periodic verification of the records of pensioners by all the State Governments (Para 6.41).
56. While introducing various parametric changes, the State Governments may simultaneously take appropriate measures to improve the medical facilities available to the pensioners (Para 6.42).
57. With the introduction of new pension scheme/s, contributions towards Provident Fund should be on a 'voluntary' basis only. If any State adopts the model of a 2 Tier scheme with a second DC Tier, the GPF scheme could be merged in the second DC Tier (Para 6.43).
58. The State Governments should put in place proper arrangements (including computerisation) to collect, update, and monitor comprehensive information/data relating to pensioners and employees without further delay (Para 6.44).

59. The State Governments should undertake comprehensive actuarial estimation of future pension liabilities periodically (Para 6.45).

60. The Group suggests that the recommendations may be implemented with the involvement of all the stakeholders (Para 6.46).

61. The contents of the Report may be given wide publicity and the Report be placed in the public domain. The Reserve Bank of India may forward copies of the Report to all the State Governments for consideration and implementation at their end. The Report may also be forwarded to the Government of India for consideration (Para 6.47).

CHAPTER 1: INTRODUCTION

Background

1.1 The pension systems, both for Civil Servants and other citizens, as evolved over the years have begun to show signs of financial stress in many countries, including India. Since the pension benefits of Government employees are usually paid from the general revenue of the Governments, the steep rise in such liabilities adversely affect the fiscal soundness of the Government entities. In India too, the increasing pension liabilities of the Central and State Governments have emerged as a major area of concern, especially in the wake of fiscal deterioration in recent years.

1.2 The problems confronted by various countries on account of increasing pension liabilities are not uniform, even though the ultimate goals of pension reforms are generally the same, viz., to optimise the fiscal burden of pension payments for ensuring sustainability, and to create an environment in which promised old-age benefits are made more affordable, efficient, and equitable. Apprehensions about fiscal sustainability (in the case of public pension schemes) and actual or prospective retirement system insolvency (in the case of private pension schemes) have prompted many Governments to restructure their national retirement programmes. The pension reforms in different countries have taken a variety of forms such as parametric changes in retirement ages, contribution rules, benefit rates, full or partial prefunding, *etc.* or major reforms through restructuring the pension scheme in its entirety.

1.3 The urgency for civil service pension reforms in India has been taken seriously only very recently, while reform measures had been initiated in many other countries much earlier. The Government of India have recently taken certain initiatives for reforming the pension scheme applicable to the Central Government employees. In the Union Budget for 2001-02, the then Finance Minister announced a new pension scheme based on defined contribution for new recruits entering Government service after October 1, 2001. In order to review the then existing pension scheme and to provide a road map for the next steps to be taken, the Government of India constituted a High Level Expert Group on New Pension System in June 2001, which submitted its Report in February 2002. Subsequently, the Central Government announced a new pension scheme, which will apply only to new entrants to the Central Government service and exclude the armed forces. The new system will also be available on a voluntary basis to all persons including self-employed professionals and others in the organised sectors. The new pension system, when introduced, will be based on defined contribution shared equally between the Government and the employees in the case of Government employees. However, there will be no contribution from the Government in respect of individuals who are not Government employees. The contributions and investment returns would be deposited in a non-withdrawable pension tier-I account. In addition to the above pension account, each individual may

also have a voluntary tier-II withdrawable account at his/her option. This option is given as GPF is proposed to be withdrawn for new recruits in Central Government service. Government will make no contribution into this account. The scheme will be portable, allowing transfer of the benefits in case of change of employment. An independent Pension Fund Regulatory and Development Authority (PFRDA) will regulate and develop the pension market.

1.4 The growing pension liabilities of the State Governments have also been receiving increasing attention from the policy makers, especially in the context of fiscal deterioration of the States. The aggregate pension payments of State Governments have increased significantly from Rs.3,131 crore in 1990-91 to Rs.7,813 crore in 1995-96 and further to Rs.28,197 crore in 2001-02. The ratio of States pension payments to their revenue expenditure has grown up from 4.4 per cent in 1990-91 to around 9.0 per cent in 2001-02. Similarly, the

share of State pension payments to their revenue receipts witnessed a sharp rise from 4.7 per cent to 11.0 per cent during the respective periods. As percentage to States' own revenue receipts, their pension payments rose from 7.9 per cent in 1990-91 to 17.2 per cent in 2001-02. Pension payments as percentage of GDP have also increased from 0.6 per cent in 1990-91 to 1.2 per cent in 2001-02.

Constitution of the Group

1.5 The issue of growing pension liabilities of the States came up for discussion during the Conference of State Finance Secretaries held in the Reserve Bank of India in January 2003. Recognising the fiscal implications of increasing pension liabilities of the State Governments, a comprehensive examination of all the issues relating to States' pension liabilities was considered crucial. Accordingly, in February 2003, the Reserve Bank of India constituted a Group to Study Pension Liabilities of the State Governments with the following members:

1.	Shri B.K.Bhattacharya, Former Chief Secretary, Government of Karnataka.	Chairman
2.	Shri H.S.Das, Finance Commissioner and Secretary, Government of Assam.	Member
3.	Shri A.K.Vijayavargiya Additional Chief Secretary, Government of Chhattisgarh.	Member
4.	Shri S.K.Sood,* Finance Commissioner cum Secretary, Government of Himachal Pradesh.	Member
5.	Shri B.K. Das, Principal Finance Secretary, Government of Karnataka.	Member
6.	Shri Debasish Gupta, Finance Commissioner cum Secretary, Government of Jharkhand.	Member
7.	Shri A.K.D. Jadhav, Principal Finance Secretary, Government of Maharashtra.	Member
8.	Shri M.D. Kaurani, Additional Chief Secretary, Government of Rajasthan.	Member
9.	Shri Samar Ghosh, Principal Finance Secretary, Government of West Bengal.	Member

* Consequent upon transfer of Shri S.K. Sood, Shri P.I. Suvrathan, Shri Sood's successor in office and presently Additional Secretary, Department of Administrative Reforms and Public Grievances, Government of India, attended the meetings as an invitee.

10.	Smt. Ganga Murthy,** Director (PP), Department of Pensions and Pensioners' Welfare, Government of India, New Delhi.	Member
11.	Nominee from the Life Insurance Corporation of India.***	Member
12.	Dr. M. Govinda Rao, Director, National Institute of Public Finance and Policy, New Delhi.	Member
13.	Dr. Urjit R. Patel, Executive Vice- President, Infrastructure Development Finance Company Ltd, Mumbai.	Member
14.	Dr. Susan Thomas, Assistant Professor, Indira Gandhi Institute of Development Research, Mumbai.	Member
15.	Shri M.R. Nair, Adviser, Department of Economic Analysis and Policy, Reserve Bank of India, Mumbai.	Convenor

**** Since transferred from the post. The sixth meeting of the Group was attended by Shri P.C. Mohanti, Director (PP), Department of Pensions and Pensioners' Welfare, Government of India, as an invitee.**

***** Initially, Shri N.S. Sastry, Appointed Actuary, LIC was nominated. Subsequently, Shri G.N. Agarwal, Chief- in- Charge (Actuary), was nominated as a member from LIC.**

1.6 In addition, the following persons were invited to the deliberations of the Group as Special Invitees.

1. Dr. R. Bannerji, Joint Secretary, Department of Expenditure, Govt. of India, New Delhi;
2. Dr. N.J. Kurian, Adviser, Planning Commission, Govt. of India, New Delhi; and
3. Smt Usha Thorat, Chief-General Manager-in-Charge, (since promoted as Executive Director) Internal Debt Management Department, Reserve Bank of India, Mumbai.

Terms of Reference

1.7 The terms of reference of the Group were the following:

- i) To study the existing pension scheme as prevailing in the States;

- ii) To review the trends in the pension payments of the State Governments and their fiscal implications;
- iii) To broadly assess the future liabilities of existing pension schemes of the State Governments;
- iv) To examine cross-country practices concerning pension reforms/ schemes and the funding arrangements thereof;
- v) To examine the feasibility of introducing necessary modifications in the existing pension schemes with a view to reduce the fiscal burden in future; and
- vi) To suggest appropriate mechanisms regarding funding arrangements to be put in place for enabling the States to meet their growing pension liabilities.

The Memorandum issued by the Reserve Bank of India constituting the Group is at **Annex I.**

1.8 As per the Memorandum, the Report of the Group was expected to be ready by end-August 2003. Since the Finance Secretaries of the States, who are majority members of the Group, were busy in view of the Budget session, it was possible to hold the first meeting of the Group only in April 2003. Given the complex nature of the problem and the need for detailed deliberations on various aspects of pension reforms, the Group obtained from the Reserve Bank of India extension of its term till the end of October 2003. The Division of State and Local Finances (DSLRF), Department of Economic Analysis and Policy (DEAP), Reserve Bank of India, Mumbai functioned as the Secretariat to the Group.

Broad Approach of the Group

1.9 In formulating the recommendations, the Group adopted a multiple approach of soliciting views/information through detailed questionnaire; direct contacts and discussions; and holding a series of meetings of the members. Initially, detailed questionnaire seeking information on existing pension scheme in State Governments, demographic and other details of State Government employees and pensioners, trends in pension payments, estimated future pension obligations, States' views on and envisaged measures for pension reforms, *etc.*, were prepared and circulated among the State Governments (**Annex. II**). Even though the responses from the States were partial, the Group could get many insights from the same. The Group held six meetings at the Reserve Bank of India, Mumbai on April 10, 2003, May 27, 2003,

July 3, 2003, August 12, 2003, September 9, and 26, 2003. In order to ascertain the views of State Governments, a small team comprising the Chairman and few members visited certain selected States such as Kerala, Andhra Pradesh, West Bengal, Orissa, Haryana, Punjab, and Uttar Pradesh and held discussions with the State Government officials concerned. During the visits, the Group had also the benefit of interaction with the Hon. Finance Ministers of Kerala, West Bengal, Orissa, Punjab, and Haryana. From these discussions, the Group could get first hand information on the views of both the political leadership as well as the officials in the States.

Outline of the Report

1.10 The Report is presented in six Chapters, including this introductory Chapter which deals with the background and rationale for setting up the Group, composition, terms of reference, *etc.* Chapter 2 focuses on theoretical issues and alternative approaches to pension schemes. Chapter 3 provides a historical background regarding evolution of social security in India in the global setting with particular reference to social security pension. Chapter 4 sketches the cross-country details of civil service pension reforms in recent years. Chapter 5 is devoted to identifying the important issues relating to the pension systems of the States which call for reforms. It also presents details of the existing pension schemes for State Government employees, trends in pension payments and their impact on States' fiscal position. The Group's recommendations are presented in Chapter 6.

Acknowledgements

1.11 The members of the Group wish to place on record their great appreciation of the keen interest shown by the Reserve Bank of India in constituting the Group and extending fine hospitality all along. In particular, the members are grateful to Dr. Rakesh Mohan, Deputy Governor, Reserve Bank of India for taking the lead in the formation of the Group and also for sharing his valuable thoughts on various aspects of pension reforms. The members of the Group are thankful to all the State Governments for extending full co-operation in providing valuable information and other inputs on pension related matters. These details were quite informative and helpful in formulating the overall approach of the Group. The members are indeed grateful to the Hon. Finance Ministers of Kerala, West Bengal, Orissa, Punjab and Haryana for sparing their valuable time and sharing with us their thoughts

on this complex issue from various contours. The Finance Secretaries and other senior officers of these States as also of Andhra Pradesh and Uttar Pradesh deserve special thanks for interacting with the Group. The members of the Group thankfully acknowledge the valuable support received from the special invitees, viz., Dr. R. Bannerji, Department of Expenditure, Govt. of India; Dr. N.J. Kurian, Planning Commission, Govt. of India; and Smt Usha Thorat, Reserve Bank of India. The Group would like to place on record its deep appreciation of the invaluable services rendered by the officials of the Reserve Bank of India (**listed in Annex. III**) who undertook the arduous task of providing necessary inputs to the Group at all stages and doing extensive drafting of the Report based on the deliberations of the Group. Our special thanks go to Dr. B. N. Anantha Swamy who coordinated the work in the Secretariat.

CHAPTER 2: THEORETICAL ISSUES AND ALTERNATIVE APPROACHES TO PENSION SCHEMES

I : Theoretical Background of Social Security Schemes

2.1 It may be mentioned at the outset that the Group is concerned with the problems of pension at the level of State Governments in India. In the global context, civil service pension forms only a small segment of the social security pension scheme. The issues and concerns relating to civil service pension schemes also differ vastly from the universal social security scheme in several aspects. For instance, while poverty elimination may be an important aspect of universal social security scheme, it may not be so in the context of civil service pension schemes. While various aspects of civil service pension schemes have been discussed in the subsequent Chapters, the focus of this Chapter is on the general social security schemes. In evaluating various theories of social security schemes, it may be kept in mind that these theories have evolved mostly on the basis of the experience of the developed world and may not necessarily have a direct relationship with the Indian situation. But, acquaintance with these theories helps in building a wider understanding of the issues involved in devising social security schemes.

2.2 Issues as to why the social security schemes are necessary, why do they exist and what purpose do they serve, have been drawing considerable attention of the academicians and the policy makers since long. A number of theories have been propounded which sought to

explain the social, economic and political forces behind the genesis of a variety of social security programmes. It may, however, be mentioned that the various theoretical expositions regarding the social security scheme, as detailed below, suggest that the theoretical debate is inconclusive and continues to engage the attention of the academicians and policy makers.

Optimal Redistribution Theory

2.3 This theory is based on the idea that the market is unable to distribute wealth of the economy properly and alleviate poverty among the elderly. Therefore, Governments need to intervene by devising a social security scheme, which influences transfer of resources from younger generation to the older generation. This theory is found to be inadequate as it is unable to explain as to why individuals who earn more are able to get higher benefits under the social security scheme if the objective is to alleviate poverty and to achieve optimal redistribution. Moreover, the antipoverty goal of the programme cannot explain its growth, its variation across countries, and its sisi as compared to other welfare programmes.

Social Security as Means of Risk Sharing

2.4 Various studies have attempted to explain the growth of social security schemes on the basis of risk sharing (Fundenberg and Tirole, 1991; Merton, 1983). As per this theory, social security is an agreement made by individuals with

each other against future uncertainty about the labour productivity. Under this system, the benefits would vary across the individuals according to the premia paid by each person. Thus, the social security interpreted in this fashion could explain as to why those who earned more during their working years, pay more taxes and enjoy higher benefits.

Social Security to Enhance Efficiency through Induced Retirement

2.5 According to this school of thought, social-security is designed as a way to induce the elderly to retire because aggregate GDP is larger if the elderly don't work than if they do (Sala-I-Martin, 1996). This argument suggests that human capital tends to depreciate with age so the elderly tend to have less than average human capital. Following Lucas's model of economic development, each individual's productivity depends positively on his own capital and on the average human capital in the economy. Hence, the elderly have a negative impact on the productivity of the young. The young, therefore, have the incentive to induce the elderly to seek retirement.

Social Security as Retirement Insurance

2.6 According to the U.S. House Ways and Means Committee, social security is to replace income that is lost to a family through the retirement, death or disability of a worker who has earned the protection against these 'risks' (U.S. House Ways and Means Committee, 1996, Section1, pp.5). Accumulating savings when one is young is a way to "insure" against inability to earn income when one is old. Another possibility

is the purchase of some kind of insurance. As there is a possibility of adverse selection since people have information about their health and their ability to earn as they grow old, only those people with a large probability of becoming disabled may subscribe to private insurance programme. It may, therefore, be optimal for the government to step in and introduce a mandatory insurance programme which resembles a social security system.

Social Security as a Sign of the State's Paternalism

2.7 According to this theory, many individuals will not save enough for retirement if left to their own devices. This could be because of lack of information necessary to make an informed judgment about their post-retirement needs. It could also be due to the inability to make effective decisions about long-term issues, because of the unwillingness to accept the inevitability of aging. Finally, it could be because of a failure to give sufficient weight to the future when making decisions. The resulting inadequacy in private savings for retirement can be taken care of by a paternalistic Government through a forced saving programme such as the social security (P.A. Diamond, 1977).

Social Security as a Cure for Excessive Saving/ Capital Over-Accumulation

2.8 According to this, an unfunded social retirement system could 'cure' the problem of capital over-accumulation by diminishing the incentives to save: taxes from the young were to be transferred to the retirees. The young would save less because they expect that they

too will be beneficiaries of transfers at a later age. Literature indicate that the U.S. social security system was conceived in the 1930s, during the Great Depression, as a means to reduce national savings in order to stimulate consumption and thereby increase the level of aggregate demand (Sargent, 1998). However, it could be added that the literature on impact of social security on the savings is inconclusive (Aaron, 1982). According to the life-cycle model, a system of Pay-As-You-Go (PAYG) scheme would reduce savings. On the other hand, Barro's formulation of the multigenerational model indicated that social security, in principle, should have no effect on savings.

Social Security as a Longevity Insurance

2.9 This argument based on the uncertainty about the length of life (Kotlikoff and Spivak, 1981) suggests that risk averse older individuals might be willing to give up as much as one-half of their resources in order to gain access to an actuarially fair annuity.

II. Major Characteristic Features of Pension Schemes

Definitional Issues

2.10 Pension has been acknowledged to be an important constituent of the broader concept of social security. Even though defining the concept of pension or delineating the objective of the pension is not an easy task, it would still be possible to identify a few generally acceptable characteristic features. It is widely considered that pension schemes are retirement income contracts between the employee and employer

and represent the benefit payable, either as a lumpsum amount or in the form of annuities, by an employer to an employee, for the service rendered. Pensions are also viewed as means of transferring purchasing power from the working phase to the retirement phase of the life cycle (Algoed and Spinnewyn, 2000). The Supreme Court of India, in a judgment in the case of D.S.Nakara and Others vs. Union of India, defined pension as 'a term applied to periodic money payments to a person who retires at a certain age considered age of disability; payments usually continue for the rest of the natural life of the recipient' (1982).

Objectives

2.11 The objectives of Pension systems are broadly classified into three. These are: poverty relief, consumption smoothing and insurance in respect of longevity (Barr, 2000). According to the Asian Development Bank (ADB), old age pensions are designed to meet the requirements of an individual when, due to ageing, his/her capacity for work declines to the point where he/she is unable to be self-sufficient (ADB, 2001).

Alternative Schemes and Their Features Voluntary vs Mandatory Schemes

2.12 Voluntary schemes are personal saving plans and employer-sponsored occupational pension plans. If the objectives of the schemes are to provide accommodation of diverse tastes, lighten the administrative burden on Government, and have the lowest evasion and disincentive costs, then voluntary schemes are the best options. Voluntary schemes, however, suffer from

certain disadvantages such as inability to fill up the gaps in the insurance market; failure to eliminate poverty among the old; and presence of hidden, probably regressive, tax costs.

2.13 Mandatory schemes with broad coverage are preferred if the objectives are to have a wider coverage, prevent people from becoming a burden on the Government, and redistribute income to the old who are long-term poor. Mandatory schemes have certain administrative disadvantages as they require extensive Government management or regulation which may strain the resources of many developing countries. They also involve high administrative costs in relation to per capita income and total contributions in low-income countries. Hence, they should be introduced and expanded cautiously, after analysing the long-term impact on costs, benefits, and their distribution within and across generations (World Bank, 1994).

Saving (Income Smoothing/Vertical Equity) vs Redistribution (Adequacy)

2.14 In a pension system that emphasises saving or income smoothing, people shift their income over their lifetime, cutting down on their present consumption, in order to increase future consumption. The lifetime expected value of benefits and contributions would be equal for each individual. In other words, there is a direct link between benefits and contributions.

Under this system, benefits are directly contingent on contributions. Therefore, it discourages evasion and disincentive effects on labour; it reduces political pressure for designing features that lead to inefficient, inequitable outcomes. It,

however, fails to alleviate poverty among old people who did not have sufficient resources to save or reliable financial institutions in which to place their savings.

2.15 In a system that emphasises redistribution, the expected lifetime benefit received by one group is greater than its lifetime contributions as compared with another group resulting in a shift in income across groups. Hence, link between benefits and contributions is weak and sometimes absent. If the objective of a pension scheme is redistribution, then taxing and transferring income should be done with great care since it can distort incomes and encourage evasion. Moreover, poorly targeted transfers can be perverse. In considering whether to emphasise the saving or redistributive aspect of pension systems, countries should evaluate the relative positions of the old and the other groups in their income distribution. Policymakers must also decide whether the saving and redistributive objectives can be achieved through one unified programme or through separate financing and managerial arrangements (World Bank, 1994).

Defined Benefit, Defined Contribution and Notional Defined Contribution

2.16 In a defined benefit (DB) pension scheme, the benefit formula determines the level of benefits to the individuals. This formula is defined in advance and is a function of both years of service and wage history (Bodie, Marcus and Merton, 1985). The rest of the society bears the risk of economic failure or an increase in life expectancy. Protecting the old people from these risks, because their ability to adjust and recover

from these risks is less than their younger counterparts, is considered as one of the big advantages of DB plans.

2.17 While certain risks are borne by the society at large, there are other types of risks which the workers continue to bear in DB plans. Firstly, since their pensions typically depend on their wages in the last few months/years of employment, a sluggish wage increase towards the end of the career may reduce the pension amount commensurately. Secondly, in occupational DB plans, workers bear the risk that they may lose their pensions because of employer insolvency or worker mobility. In public DB plans, workers bear the risk that the taxing ability of the Government may decline or the political regime may change and the new Government may repudiate the pension arrangements made by a previous Government.

2.18 There is an important distinction between the pension plan and the pension fund with DB schemes. The plan is the contractual arrangement setting out the rights and obligations of all parties; the fund is a separate pool of assets set aside to provide collateral for the promised benefits. If the DB plan has no separate fund, the plan is said to be unfunded. If, on the other hand, there is a separate fund with assets less than the present value of the promised benefits, the plan is underfunded. If the plan's assets have a market value that exceeds the present value of the plan's liabilities, it is overfunded. (World Bank, 1994; Gillion, 1998; The New Palgrave Dictionary on Money and Finance, 1992).

2.19 In a defined contribution (DC) scheme, annual contributions are defined in advance, but the benefits depend on the return on investments and the length of contribution. There is considerable uncertainty about future rates of return, the duration of working and retirement periods, and, therefore, about future annual benefits. To a large extent, investment returns depend on the economic health of the country and that of other countries in the case of foreign investments. DC schemes generally link more closely the benefits to contributions than DB schemes, although this may not always be the case. There are, quite often, features incorporated in DC schemes which break the connection between contributions and benefits (capital market returns). These features include guaranteed minimum benefits, rate of return guarantees and benefits based on rates of return fixed by the pension fund, which are often lower but less variable than market rates of return. Thus, social insurance features in both DB and DC schemes weaken the link between benefits and contributions, but serve to reduce the risk faced by retirees. DC schemes may, sometimes, have high administrative costs. They are also subjected to capital market risks on account balances and interest rate risks on monthly benefits when they are annuitised. (World Bank, 1994; Gillion, 1998).

2.20 The structure of a notional defined contribution (NDC) scheme is very similar to a DC scheme: a notional account is accumulated during the working life based on contributions, both by the employee and the employer, and the (notional) interest obtained on them which, at

retirement, can be converted into a pension by means of an annuity. The main difference is that the interest rate applied is not the market rate of interest but some other indicator, such as the rate of growth of GDP, or the rate of growth of wages. The scheme is generally mandatory and managed by the Government. The NDC schemes have a number of advantages. Firstly, as benefits are related to contributions paid, they avoid the problems associated with a DB formula and enhance "actuarial fairness". Secondly, the accumulation of entitlement is transparent and easily comprehensible. Thirdly, the system lends itself to a more flexible approach to the age at which the accumulated account is transformed into pension. Fourthly, the cost of improvement in life expectancy can be passed on to participants through the factor for converting accumulated amounts in individual accounts into pension. Finally, by maintaining the PAYG financing, NDCs avoid the transition costs incurred by a shift to funding. (Gillion ,1998; Daykin, 2001; World Bank, 2002)

2.21 The NDC scheme, however, suffers from certain disadvantages as well, in view of the uncertainties and long periods involved. At retirement, the longevity risk would be borne by the individual contributors/beneficiaries since the value of the annuity would be calculated over the then expected lifetime of the pensioners. Other risks, such as those related to economic progress, or those demographic risks arising from previous increases in birth rates, would be borne by contributors and involve some adjustment of contribution rates as the scheme progresses. It

would also be necessary to provide a minimum pension for those whose lifetime earnings were insufficient to provide a basic, anti-poverty income in old age (Gillion, 1998).

Funded vs Pay-as-You Go

2.22 Pension plans can be fully (or partially) funded or financed on a pay-as-you-go (PAYG) basis. Under a PAYG scheme, the contributions of / taxes on the current generation of workers pay the pensions of current pensioners and thus, such schemes involve a direct transfer of resources from the current workforce to those in receipt of pensions. A plan's current revenues cover its current obligation, and there is no stock of savings to pay future pensions. A low ratio of retirees to workers (the old age dependency ratio) and a high rate of productivity and real wages allow high benefits or low contributions. High dependency ratio and high unemployment rates could make unfunded schemes increasingly unviable unless real pension costs can be significantly contained. Further, contributions to the PAYG system also earn a return which comprises the growth rate of the population and the growth rate of wages. PAYG has the cost advantage or higher rate of return in the long run if the earnings growth rate plus the labour force growth rate exceed the interest rate (World Bank, 1994; Samuelson ,1958 and Aaron, 1966 in Algoed and Spinnewyn, 1999). But, if the rate of earnings growth plus labour force growth rate falls below the interest rate, the long run cost advantage and the higher rate of return goes to fully funded schemes.

2.23 In a fully funded scheme, pension payments are made from a Fund, that is, an accumulation of financial assets built up over a period of years from the contributions from members. Under this, aggregate contributions plus investment returns are sufficient at any time to cover the present value of the entire stream of future obligations. DC plans are, by definition fully funded, since people's entitlements are from the proceeds of their individual accounts. DB plans can also be fully funded. But, the concept of full funding is ambiguous in DB schemes (whether public or private) because of uncertainties about the future rate of return, longevity of pensioners, and age-earnings profiles. A DB plan that appear to be fully funded might not be so under conditions of lower than expected returns, higher than expected life expectancy or early retirement.

2.24 In the early years of an old age support programme when the system dependency rate is very low due to a lower proportion of eligible beneficiaries, PAYG will always appear cheaper than a fully funded plan. But, as the system matures and the proportion of beneficiaries rises, this temporary advantage disappears. PAYG will continue to have a cost advantage or higher rate of return in the long run if the earnings growth rate plus the labour force growth rate exceed the interest rate. In this case, PAYG could make all generations better off as each generation would get back a higher present value of pensions than it paid in as contributions. But if the rate of earnings growth plus labour force growth falls below the rate of interest, a fully

funded programme would have the long-run advantage in costs and returns. In the absence of rapid growth in population and earnings, the financing method chosen affects the distribution of lifetime income across generations (World Bank, 1994).

Public Funds vs Private Funds

2.25 The choice between public and private management of pension funds is determined by the relative merits in achieving income redistribution and efficiency in the management of funds. There are views that public funds are better suited to achieve income redistribution, prevent market failures, reduce operating costs and increase paternalism. The requirement of public funds to invest in Government/quasi-Government securities, if issued at below market interest rates, could, however, yield negative returns at times of inflation and impose a hidden tax on the contributors. This is because the funds earn less than they would have in the open market and may, therefore, charge higher contribution rates or dispense lower benefits. The impact of publicly managed pension funds on the level and pattern of investment depends on how the Government responds to the availability of cheap resources. If access to pension funds does not alter the Government's spending and tax policy, then there is an increase in private sector investment because bond buyers who would have otherwise bought Government bonds would shift their resources to the private sector; Government bonds being subscribed by the public pension funds (at lower interest rates). If, on the other hand, the Government is induced to spend more

because of access to cheaper funds, it may crowd out private investment. Moreover, since borrowing from pension funds is less transparent than that from the open market, the impact of expenditures and trade offs may not be explicit. Investing part of the assets of the public pension funds in private sector will be effective only if one can ensure that fund managers are governed by economic and not political considerations (World Bank, 1994).

2.26 Private pension funds have greater incentive to allocate capital to those assets which would give the best risk/return combination irrespective of whether these are issued by the Government or the private sector. However, private pension funds which only invest in Government bonds provide no budgetary gain, do not channel resources into productive sectors and incur considerable extra administrative costs (Barr, 2002). A prerequisite for such private pension funds to succeed is the existence of well-developed financial markets as well as adequate public and Government understanding and trust in them. Insufficient information with the individuals/employers about the efficiency of the fund managers could lead to adverse selection. Such funds also need to be subjected to Government regulation, but the Government may lack the expertise to regulate these institutions. Further, the administrative/marketing costs of private funds may be high, effectively reducing the returns that they may be earning. This is of major concern for small pension funds since there is a fixed cost to running individual accounts. A contra argument in this case is that

public funds have less incentive for cost efficiency than private funds.

III. Three Pillar Approach of Pension System

2.27 Pension schemes across the countries can be categorised into three pillars based on the need they address and the funding nature. Each of these pillars has some combination of the five features (*viz.*, voluntary vs mandatory; savings vs redistribution; DB, DC and NDC; funded vs PAYG; and private vs publicly managed) discussed earlier. These pillars are:

- **Pillar I:** Basic pension (Old Age Pension) - characterised by redistribution, PAYG, mandatory, defined benefit and collective risk - e.g. public pension plans.
- **Pillar II:** Compulsory Superannuation (Forced/contractual savings) - characterised by vertical equity (income smoothing), funding, mandatory, defined contribution and individual risk - e.g. occupational pension plans.
- **Pillar III:** Voluntary Superannuation (voluntary savings) - characterised by voluntary, income smoothing, funding and individual risk - eg. personal pension plans and additional contributions made by individuals to occupational scheme.

2.28 The first pillar schemes which are mandatory and redistributive, offer defined benefits that are largely financed on a PAYG

basis, and are publicly managed. These schemes pay a benefit after a fixed number of years. Most of these schemes will have no form of funding while some will rely on partial funding. First pillar pension schemes can only be sustainable over the longer period if the system "dependency ratio", that is the ratio of pensioners to contributors, is such that current contributors can afford to pay social insurance contributions at a level that will support current pension expenditure. The system dependency ratio, sometimes referred to as the "support ratio", tends to understate the extent of the sustainability problem. Sustainability problem can also arise if the working population keeps declining because of pursuit of higher education, unemployment and early retirements. An increase in life expectancy due to better health care and living conditions further compounds the problems for both the public and private pension schemes. Reforms need to be undertaken in order to remedy the situation in the short and longer term. These include parametric changes such as increasing the retirement age, reducing the value of pensions, increasing contributions, lengthening the contributory period required to gain entitlement to a full pension, changing the rules on indexation, and making it more difficult to retire early with a pension.

2.29 Second pillar pension schemes or defined contribution schemes, in which contributions are placed in individual or group funds, could be managed either by private sector pension companies or by the public sector, usually as provident funds. They do not bring about a redistribution of income, but smoothen

consumption over each individual's life span. They can help develop capital markets of the economy. The major features of Pillar I and Pillar II schemes are summarised in Box 2.1.

2.30 Third pillar schemes are those that comprise voluntary personal pensions which are encouraged through tax concessions. They are defined contributions, generally non-redistributive and fully funded. These pension schemes are intended to increase the range of individual choice. In the absence of any guarantee, workers can also suffer losses caused by business failures or fraudulent behaviour on the part of the employers. Charges by fund managers may also be high and, if kept low by law, may lead to a compromise in service.

2.31 The three pillars can be complementary to each other. While some countries avail of only one or two of the pillars (either Pillars I and III or Pillars II and III), there are several advantages of adopting multipillar system (ADB, 2001). Fox and Palmer (2001) who studied the pension reform and related developments during the nineties in both the developed and developing countries observed that, although there is a definite tendency towards schemes incorporating funded component, State managed first pillar schemes augmented by contribution related components would continue to stay. During the nineties, countries have adopted various innovative ideas for creating sustainable mandatory public pension system. Country experiences show that it is not necessary to go from unfunded PAYG DB system to funded, individual account DC system to create

Box 2.1: Features of Pillar I and Pillar II

Pillar I - Pay-as-you-Go - Public and Mandatory

1. Positive impact on poverty through income transfer to poorer workers.
2. Funded from employee and employer contributions.
3. Pensions paid from current contributions.
4. Corrects personal myopia about survival in old age.
5. Permits integrated contributions covering all social insurance benefits.
6. Works well when economy is growing.
7. Works well when contributors well outnumber current pensioners.
8. Can be subject to political risk leading to reduced entitlement.

Pillar II - Funded Pillar

1. Does not transfer resources to poorer workers.
2. Contributions collected by Government and transferred to private fund managers.
3. Assets owned by individual contributors and invested in financial markets..
4. Annuities and/or lump sums paid at retirement from the returns on such investments.
5. Encourages personal responsibility.
6. Assists in the growth of capital markets.
7. Not directly subject to demographics.
8. Possible to diversify risks.
9. May need a Government minimum pension guarantee, which may have high cost to the Government in case of a recession in the capital market.
10. Administrative charges of private fund managers may be high.
11. Requires a strict regulatory regime.

sustainability in the public provision of mandatory old age pensions. In fact, combining a PAYG first pillar with a second pillar scheme of funded individual accounts has been the most popular. This has emerged in diverse countries such as Sweden in OECD, Hungary, Latvia and Poland in transition economies, Hongkong in Asia, and Argentina, Peru and Uruguay in Latin America. With a view to reduce the size of DB schemes,

countries have mostly effected parametric changes such as increasing the number of years required for full benefit and introduction of life expectancy factor into the DB formula. The countries which desire to maintain larger first pillar have preferred NDC schemes. This provides direct link between contribution and benefits and account for life expectancy at the benefit pay out phase.

IV. Attendant Risks and Their Effect on Pension Schemes

2.32 Planning for old age involves enormous uncertainties about the health of the individuals, the industries and the economy as a whole, which impact on the viability of people's plans for their old age. The basic question that arises in this context relates to who should bear these long-

term risks, and how should they be shared between the old and the rest of the society. The major risk factors that would affect the viability of the pension scheme could be grouped into macroeconomic shocks, demographic shocks, political risks, management risks, investment risks, and market risks. The implications of these risks vary from scheme to scheme (Box 2.2).

Box 2.2: Alternative Risks and their Effect on Pension Schemes

Macroeconomic shocks: These can be classified into output and inflationary shocks. Output shock affects all pension schemes; it shrinks the contribution base of a PAYG scheme and reduces the value of financial assets of the funded schemes. Where the shock is inflationary, there is little or no effect on PAYG pensions if they are price indexed. Defined contribution schemes can absorb inflationary shocks during the accumulation phase (period in which contributions and investments are accruing to the pension funds) and withdrawal phase (at the time of retirement, to purchase annuity) at given rate of anticipated inflation. Private defined benefit schemes are more vulnerable to inflationary shocks. A complete solution, particularly in countries with underdeveloped financial institutions, is for the Government to share the burden by issuing indexed bonds. This introduces unfunded element into the scheme with the associated problems.

Demographic shocks: These affect PAYG schemes through a shrinkage in contribution base due to a reduction in working population. In a funded scheme, the shock operates through inflation in the goods market and/or through deflation of the financial assets in pension funds.

Political risks: All pension systems depend critically on effective Government. For publicly managed funds, political risk and investment risk may be intertwined as the Government may intervene to limit investment options and returns.

Management risks: These are risks arising from incompetency or fraudulent behaviour of the managers of pension funds. These can be reduced by strengthening the regulatory and supervisory framework.

Investment risks: Pension funds also face the risk of differential pension portfolio performance. With defined-benefit schemes, these risks fall on the industry and hence can be shared broadly across the industry's current workers, shareholders and customers, or spread across past or future generations of its workers. The inability of workers to evaluate the competence of investment companies and the possibility of outright fraud further increase investment risk.

Investment risks, however, can be limited up to a point. This can be done by reducing the costs (by collecting contribution through pay roll taxes and limiting the advertising costs), simplifying the procedures for running the fund and, allowing flexibility over the timing of conversion from lumpsum to annuity. These measures can only limit the risk but cannot eliminate it.

Annuities market risks: In a defined contribution scheme, even the returns on safe assets such as long-term Government bonds vary substantially depending upon whether the interest rates were low or high at the time

Contd....

Conclud.

of retirement. Lower interest rates lead to lower annuities during the lifetime of the pensioner. The problem is further compounded by the fact that the annuity markets are thin in most countries. Thus opportunity of economies of scale is largely lost leading to high transaction costs and lower value of annuity irrespective of interest rate fluctuations.

Longevity risks: This is uncorrelated across individuals. These risks are minimised by pooling across the largest number of people since the average outcome for the group is much more certain than the experience of any particular individual.

Disability risks: This risk is subject to moral hazard problems, which should be limited to keep costs down.

Sources:

1. Barr, Nicholas (2000) : "Reforming Pensions: Myths, Truths and Policy Choices", *IMF Working Paper* No. 139, August.
2. World Bank (1994) : "Averting the Old Age Crisis - Policies to Protect the Old and Promote Growth", Oxford University Press.

V. Governance and Regulatory Issues in Pension Funds

2.33 Governance relates to issues of control over funds exerted by beneficiaries and/or liability holders under a normal legal system, while regulation relates to issues of control over funds exerted by supervisory agency nominated by the Government for specific oversight of the sector in question (Davis, 2001). Governance and regulation are mutually reinforcing and not independent. The essential ingredients for effective governance are availability of quality information, performance measurement and control over administrative costs. Information disclosure should ideally include investments, charges, returns, individual balances and actuarial projections. Performance measurement involves the calculation of both returns and risks on a portfolio during the period by an independent body and is essential in personal funds to enable individuals to make an informed choice and exit, if necessary. Corporate

governance is a means to ensure that the management of companies in which funds are invested do not act contrary to investors interest.

2.34 The financial security of the savings instruments and policies offered by institutional investors and the solvency of those companies are important objectives of regulations. In the case of defined-benefit pension plans, the security of the schemes is ensured by: (i) requiring that the guaranteeing institution be adequately capitalised so that it can honour potential claims (prudential regulation), (ii) defining certain basic rights of beneficiaries such as maximum vesting periods and portability of accrued pension rights (protective regulation). In defined-contribution plans, the main target is ensuring a high level of investor protection through control of the financial security of the accumulated assets (prudential rules) and the dissemination of relevant information (OECD, 2000).

2.35 Regulation is particularly essential for decentralised private funds. However, a country which is unable to manage well an unfunded or funded public pension system, because of administrative inefficiency, shortage of skilled personnel or political interference would most likely be unable to regulate and supervise a private pension system, be it mandatory or voluntary (Vittas, 1993). In this context, the role of the pension regulator essentially encompasses managing the institutional structure of the sector; overseeing information disclosure; ensuring that records are maintained on contributions and rights to benefits; reviewing collection of investment and cost data; and enforcing laws on pension reserves, management and benefits. Other regulatory measures relating to fund management and governance include separation of custody of securities, capital requirements for asset managers, loss sharing for managers, restrictions on commissions, separation of fund from company in occupational funds, accounting standards and rules relating to authorisation, and merger and closure of funds (Davis, 2001).

VI. Administrative Costs and Their Impact on Pension Schemes

2.36 Administrative costs of pension funds reduce the realised investment returns and thereby lower the pension in the case of defined contribution funds and increase the cost to the sponsor for defined benefit. The differences in costs can be offset or compounded by the investment performance. It needs to be recognised that measuring costs of financial

services is complex, especially for long-term products such as pensions and life insurance. The most common measure used in this respect is the "reduction in yield" method. Under this, all the charges over the lifetime of a sample pension policy are added together and expressed as a percentage of assets. An alternative approach, called "reduction in premium", measures charges as a proportion of contributions. In other words, charges over a lifetime of investment are calculated as a proportion of the balance accumulated at retirement. Countries with funded pension plans have adopted various strategies for regulating pension charges. While some countries have no restrictions, others have some sort of regulation of charges: Box 2.3 summarises some of the important strategies adopted by various countries to regulate pension charges.

Administrative Costs - Publicly vs Privately Managed Funds

2.37 It is rather difficult to compare the relative costs of private and public fund managers. There are various implicit costs which publicly managed funds may omit because the infrastructure is available at free of cost or at below market rates. Public agency, for instance, may not pay for premises and obtain mail or telephone services at a subsidised rate. Private agency, on the other hand, would charge all the costs for the infrastructure. Further, private funds incur costs in evaluating alternative investments such as debt, equity or Government securities. But, public agency which primarily invests in Government security would not incur such costs (World Bank, 1994).

Box 2.3: Select Strategies for Regulating Pension Charges

1. **Partial ceiling on charges :** Charges may be levied both on contributions as well as assets; but only asset-based charges are capped while the charges on contributions are uncapped. Funds are, however, not permitted to adjust their fund size or the value of contributions. They may, instead, offer loyalty discounts.
2. **Variable ceiling on charges:** Different ceilings are set for different institutions. Ceilings for mutual funds are set lower so as to enable them to recover their fixed costs but necessitating a reduction in their marketing costs. Emerging markets and smaller companies who are more expensive to manage are, however, allowed to have a higher charge limit.
3. **Fixed ceiling charges:** Charges are a fixed percentage of contribution and investment return. Generally, these charges are fixed at very low levels, necessitating substantial consolidation to remain viable.
4. **Competitive bidding-single portfolio:** The rights to manage the public pension funds are auctioned internationally. The successful bidders have a fixed tenure after which the auction may again be thrown open.

Source: Administrative Charges - Options and Arguments for controlling fees for funded pensions, Background Readings, World Bank Pension Primer, March 2002.

Issues relating to Choice of Charges

Charges on Contributions Vs Charges on Assets

2.38 A single proportion charge on assets or contributions means that relative costs of choosing a provider do not vary with earnings or contributions. The policy maker has to decide on whether the charges will be on contributions or on the assets. Four features of the two charges are important to make this choice:

Time profile of charge revenues: Fees on contributions generate more up-front revenues than fees on assets. This allows providers to cover their start-up costs more quickly and thereby encouraging more entrants and boosting competition.

Incidence of levies across different types of customers: If costs per member are fixed, charges on assets redistribute across generations from people with larger funds (older workers) to people with smaller

ones (young workers). Contribution based charges, on the other hand, redistribute across income groups from people with high levels of contributions (typically higher earners) to people with lower levels of contributions.

Withdrawal from the scheme: Under a contribution-based charges system, pension providers would have to bear the cost of administering the fund even after some of them stop contributing due to loss of job, withdrawal from workforce, *etc.* Asset-based fees would, however, ensure a continuing flow of revenues from non-contributors; this would, however, mean that the burden of charges falls more on those who withdraw early.

Effect on returns: A charge on assets encourages providers to maximise assets, both by attracting funds from other providers and, more importantly, by

maximising investment returns. A charge on contributions does not have such incentives.

Other Issues

Ceiling on charges: A Government which goes in for a ceiling on charges should be careful not to set it too high, which will render it ineffectual, nor too low, which will restrict competition and choice. Ceilings often become de facto minimum charge as well as the legal maximum.

Treatment of low income earners: Regulating charge structures so as to protect the low-income earners is a common practice adopted by most countries. Limiting fees to proportional charges (either on assets or contributions) means that there are no fixed charges, which fall disproportionately on the low-paid. Another option is to exempt low paid workers from the requirement to contribute to a funded pension or to allow them to opt out. A third approach is to cross-subsidise low-paid workers accounts directly through redistribution from the high-paid to the low-paid workers.

(Non) existence of economies of scale: Currently available evidence is inconclusive with regard to the idea that highly centralised approach to managing pension funds reduces costs significantly. Potential gains may have to be weighed against cost of competition, which could, in the medium term, spur innovation and reduce costs (World Bank, 2002).

Constraining portfolios: In defined contribution schemes, it is prudent for people to shift from a high risk-high return equity dominated portfolio

when young, to less risky investment closer to retirement. This would optimise the returns for the individual. Apportioning individual pension contributions and transferring investments across funds would, however, come at a higher cost. Provision of information on different investment choices would also add to the administrative costs. Hence, if costs are to be reduced, then choices may have to be limited.

2.39 It is recognised that measuring the impact of charges on pension funds is very complicated. The minimum Government policy should, therefore, be a requirement for funds to disclose charges in a standard format. This will enable consumers to make informed judgments. The Government may also levy charges in addition to (not a part of) the mandatory contributions. This would increase consumer awareness and encourage more competition, because charges reduce current net income rather than future pension benefits.

2.40 While country experiences show that funds with higher charges perform better, the out-performance is insufficient to offset the higher burden on typical pension policies. Consolidation of the pension fund industry and the development and maturation of the pension funds may exert a downward pressure on costs over time. Analysts like Heller (1998) and Orszag and Stiglitz (1999) advocate a well-designed public defined benefit plan as a means to achieve reduction in costs. This may, however, have to be weighed against the experience of public funds delivering poor returns. Finally, a reduction in administrative costs can enhance the benefits obtained from any

pension scheme; a more important issue, however, is to maximise the returns without undue increase in risks. In this context, the behaviour of the assets in the portfolio of the fund manager will determine the level of returns as examined in Section VII.

VII. Investment Pattern of Pension Funds

2.41 Under funded DB schemes, performance of the fund does not affect the value of the pension received by the member as it is based on some pre-determined formula with respect to last salary drawn and years of service. However, investment performance of the fund is very important as it can have a profound effect on the costs incurred by the sponsor of the scheme. Thus, the managers of the DB scheme should not only use the techniques of asset-liability management, but also try to maximise their returns.

2.42 Under DC schemes, as pension outgo depends on the returns generated by the fund, concerns of the managers should generally be to maximise risk adjusted returns on their assets. Managers of the schemes have to gauge the members' degree of risk tolerance which would decide the asset allocation or investment pattern

across broad asset categories such as equities, bonds, and property. Members with low risk aversion would induce the fund managers to invest more in equities or unit-linked schemes which have a high weighting in equities. On the other hand, high risk aversion behaviour of the members would require fund managers to predominantly invest in deposit administration schemes.

2.43 Performance of the pension fund managers broadly depends upon two factors: (a) the strategic asset allocation decided on the basis of the advice of their actuaries based on the liability structure, and the selection of securities and market timings, and (b) active fund management through tactical asset allocation. The international experience, however, shows that active fund management does not yield higher return than the market index. Therefore, it is generally recommended that strategic asset allocation should be made in equity index funds which track the market index. Generally, the managers of the funded DB schemes use the techniques to match their asset-liabilities, while the managers of DC schemes attempt to maximise risk adjusted returns on their assets.

CHAPTER 3: EVOLUTION OF SOCIAL SECURITY IN INDIA IN THE GLOBAL SETTING WITH PARTICULAR REFERENCE TO CIVIL SERVICE PENSION

I. Evolution of the Social Security System in the Global Setting

Social Security

3.1 The social security benefits provided by various countries, by and large, reflect the differences in the levels of development; historical experiences; political philosophies; and the cultural diversities of these countries concerning the roles and responsibilities of the individuals, families, employers, capital markets, and the

Governments. At present, social security programmes are provided by at least 172 countries (US SSA 1999). In general, there are seven ways by which mandatory old-age benefits are provided by various countries (Box 3.1). Though large differences in the features of social security programmes are found within each region of the world, there are general similarities as to the programme type among the countries within the regions.

Box 3.1: Alternative Approaches to Social Security: Cross-Country Experience

1. A large majority of countries provide old-age benefits through a **defined benefit social security system** based on principles of social insurance. Most of the countries of the OECD have such programmes.
2. An increasing number of countries provide benefits through a mandatory individual account **defined contribution programme**. A number of countries in Latin America adopted these programmes during the 1990s.
3. A number of countries which were formerly British colonies have provident funds. These provident funds are national mandatory savings plans that generally pay benefits in a single payment, known as lump sum benefits.
4. **Notional account plans** are relatively new and recently adopted by Sweden and Poland, where each worker has an individual account but the accounts are not funded. The return that is credited to each worker's account takes into consideration current and prospective demographic and productivity change.
5. Some countries give workers the option of contributing to a state-run plan or contributing to a private-sector managed plan. This approach is often called **contracting out**, and is used by the United Kingdom, Japan and some countries in Latin America.
6. Some countries **mandate employer-provided pension plans**, an approach used by Australia and Switzerland. These mandated plans can either be defined benefit or defined contribution plans. In Switzerland, cash balance plans are commonly used, which are a hybrid plan combining features of both defined benefit and defined contribution plans.
7. Some countries have **quasi-mandating of employer-provided plans**, where the mandate is not a legal requirement imposed by the State but is the result of a contractual agreement between labor unions and employers that covers most workers in the country. The Netherlands and Sweden are examples of this approach.

Countries, such as Sweden and Poland, combine two or sometimes three of these approaches.

Source: Turner John (2001), "Social Security Reform Around The World", Public Policy Institute, AARP.

3.2 Social security as a system evolved first in the Western countries in response to the socio-political consciousness developed during the industrial revolution. The two models under which most prevalent social security systems can be classified are the German model (Bismarckian model or social security /social market economy model) and the British model (Beveridgean model or the Basic-income model). The Bismarckian model focused on maintenance of living standard and the benefits were earnings-related, whereas the Beveridgean model guaranteed only a subsistence income to all older people at a flat, universal rate. Countries like Italy, France, and Japan followed the Bismarckian model based on contributory social insurance, while Australia, Switzerland and the Scandinavian countries followed the Beveridgean model. Since the 1970s, there has, however, been greater convergence in the social security policy. While Bismarckian countries have introduced poverty prevention measures, Beveridgean countries have extended coverage of occupational pensions, which are earnings related (Armingeon, Bertozzi and Bonoli, 1999).

Civil Service Pension

3.3 Civil service pension systems had evolved in various countries much before the establishment of formal social security systems covering substantial proportions of the population. The United Kingdom (UK) is considered as one of the pioneers in the establishment of formal pension system dating back to 1375. In the early days, pension was paid in UK from the salary of the successor to

an office. The 1810 Act, however, provided that pension would be non-contributory and paid directly out of Public Funds. The Superannuation Act of 1834 extended non-contributory pensions to the entire civil service in UK. The Superannuation Act of 1859, which replaced the earlier Act, contained many features similar to the current pension system in UK and Ireland. The precursors to the German pension system were the provision of allowances to widows of civil servants since the middle of 18th century and the provisions for invalid soldiers financed initially through deductions from pay, but subsequently through state contributions. The costs of civil service pension system in Germany were completely taken over by the State after Bismarck created a social security system for workers. In France, the Law of 1953 provided that pensions were to be financed through the Budget. In the United States (US), pension was first given in 1862 to compensate disabled war veterans. This was later expanded to cover qualified Union Army veterans and their families. The Civil Service Retirement Act, 1920 covering many Government employees in the U.S., preceded the Social Security Act of 1935. In Mexico, after its independence from Spain in 1821, one of the first acts passed by the new Government was to grant pensions to officials in the executive, judiciary and treasury offices. Social security became compulsory in Mexico since December 31, 1942. In New Zealand, the civil service pension system, which originated in the opening legislation of the nation's parliament in 1856, was initially non-contributory in nature, paid by the tax payer. The first contributory

scheme with a contribution determined pension was introduced in 1886. By 1893, the Government started topping up inadequate pensions. With the introduction of the means-tested old-age pension in 1898, and the coincident major expansion in the public sector, separate contributory funds with benefit-determined pensions were established in New Zealand for police, railway workers, teachers and the civil service(Country wise details are given in Annex).

3.4 Cross country experience shows that civil service pension systems predated formal social security systems in most countries. In many countries including Germany, the US and Mexico, civil service pension systems had their origins from pension systems applicable to war veterans. In the UK, pension was initially considered as ex-gratia with the civil servants having no statutory right, while in other countries like Germany, France and Mexico, pension was conferred as a legal right from the inception of the system. In Netherlands, civil service pension was initially perceived as an act of kindness but soon became a right and a perk of the office. In most countries, including the UK, Germany and New Zealand, civil service pension started as a contributory system, but over the years, the Governments took over the entire liability of paying pension out of Public Funds. With the increasing pension liabilities, most of countries have introduced or are in the process of introducing reforms in their pension systems, which also includes setting up of contributory funds. Details of cross-country experiences in pension reforms are covered in Chapter 4.

II. Evolution of Social Security System in India

3.5 Available evidence suggests that the origin of social security in India dates back to third century B.C. Different social assistance institutions and welfare centres were established in the ancient Indian society, which were concerned with the relief and alleviation of sickness, poverty and distress. The King or Emperor and the well-to-do sections of the society used to provide charity to the poor and the needy. In *Sukraniti*¹, it was mentioned that the King should grant half the wages to a worker who had passed forty years in service and was not able to perform normal duties on account of old age. In fact, social securities provided through the institutions of self sufficient village economies, the caste system, the joint family system and institutionalised charity were considered to be the basis of modern social assistance system in India (Sharma,1976).

3.6 As in the case of most of the developing countries, modern India also does not have a universal social security system to protect the elderly against economic deprivation. Perhaps, higher levels of poverty and unemployment act as deterrents to institute a pay-roll tax financed state pension arrangement for each and every citizen attaining old age. Instead, India has adopted a social insurance policy that largely hinges on financing through employer and employee participation and restricting the coverage to the organised sector workers. The existing social security schemes in India can be classified into three categories. The upper tier

¹ An Ancient Indian treatise on statecraft.

consists of statutory pension schemes and provident funds for the organised sector employees; the middle tier comprises of voluntary retirement saving schemes for the self-employed and unorganised sector workers; while the lower tier consists of targeted means tested social assistance schemes and welfare funds for the poor.

3.7 Major retirement schemes in India include provident fund, gratuity and pension schemes, which are basically administered for the benefit of the organised sector² which represents less than 10 per cent of the work force. The first two schemes provide lump sum retirement benefits, while the last one makes payment in the form of monthly pension. These schemes are characterised by the following common features, *i.e.* they are mandatory, occupation based, earnings related, and have embedded insurance cover against disability and death. Provident fund is a defined-contribution and fully funded benefit programme providing lump sum benefit at the time of retirement. In addition to the provident fund, workers in both public and private sectors in the organised sector receive a second tier of lump sum retirement benefit known as gratuity. It is paid to the workers who fulfill certain eligibility conditions like a minimum qualifying service period of five years. The cost of gratuity is entirely borne by the employer. A scheme of monthly pension is operated through the

Employees' Pension Scheme which not only provides pension benefits but also survivor and disability benefits. The scheme is funded by contributions from the employer and the Central Government.

A. Social Security Schemes for the Organised Sector

3.8 For most employers, the provision of social security is legally underpinned by the Employees' Provident Funds and Miscellaneous Provisions (EPFMP) Act, 1952. At present, the following three schemes, statutorily set up under EMFMP Act, 1952, form the basis of the social security system in India:

Employees' Provident Fund Scheme (EPFS), 1952

3.9 This is the largest and most important fully funded defined contribution plan. Participation in the scheme is mandatory for private and public enterprises in 177 specified industries/classes of establishments that employ more than 20 persons. Participation is voluntary for establishments employing less than 20 persons. The system covers those employees whose initial basic pay and dearness allowance were up to a maximum of Rs.6,500. Workers whose wages later exceed this threshold are required to contribute only on the first Rs.6,500, but may voluntarily contribute amounts in excess of this standard. With few exceptions, employees are required to contribute every month, 12 per

² The important Parliamentary laws concerning social security to the employees in the organised sector are Workers Compensation Act 1923; Employees' State Insurance Act 1948; Employees' Provident Funds Act, 1952 (amended in 1995 as Employees' Provident Funds and Miscellaneous Provisions Act, 1952) ; and the Payment of Gratuity Act 1971.

cent of covered wage (basic wages, dearness allowance and retaining allowance, if any) and employers, 3.67 per cent³. The basic mode of operation of the scheme requires that contributions are credited to personal accounts of the members and the benefits available in old age depend on the contributions together with the interest. The scheme aims at making some provision for the future of the covered employees after they retire and also for their dependants in case a worker meets an early death. Apart from the terminal benefits, advances (or withdrawals) for financing life insurance policies, acquiring dwelling house or site, repayment of housing loans, meeting medical expenses, marriage and higher education and overcoming temporary unemployment and distress due to natural calamities can also be provided. A member is entitled for full and final settlement of claim under any one of the following conditions:

- (i) retirement from service after attaining the age of 55 years
- (ii) permanent and total incapacity for work
- (iii) termination of service on a voluntary scheme or on retrenchment
- (iv) On cessation of membership under certain other circumstances

3.10 Contributions to the EPF go into a fund managed by the Employees' Provident Fund

Organisation (EPFO). The employers can seek an exemption to manage their own funds, as long as they meet regulatory requirements enforced by the EPFO. Funds accrued to the EPF are required to be invested in Government and Government-guaranteed securities, or securities issued by public enterprises or state-owned banks in accordance with the investment pattern laid down by the Government of India from time to time.

Employees' Deposit Linked Insurance Scheme (EDLIS), 1976

3.11 The scheme applies to employees of all factories and other establishments to which the Employees' Provident Fund and Miscellaneous Provisions Act, 1952 applies. It requires contribution both by employers and the Central Government at the rate of 0.5 per cent, and 0.25 per cent respectively, of the pay of employees. Under the scheme, as amended in June, 1996, on the death of a member while in service, the claimant will be paid an additional amount equal to the average balance in the Provident fund of the deceased during the preceding 12 months, but restricted to Rs.60,000⁴. To get this benefit, the covered employee should have put in at least 5 years at the time of death.

Employees' Pension Scheme (EPS) 1995

3.12 EPS is the newest scheme established in India as a replacement for the Employees' Family

³ 3.67 per cent is part of the employers' contribution of 12 per cent towards the employees' retirement benefits under EPFMP Act; the balance 8.33 per cent goes to finance employees' pension payment under the Employees' Pension Scheme (EPS).

⁴ It is paid in full up to Rs.35,000. Where it exceeds Rs.35,000, the insurance cover is Rs.35,000 plus 25% of the amount in excess of Rs.35,000 subject to a maximum of Rs.60,000.

Pension Scheme (FPS), which had provided survivor benefits. The scheme is funded by the employers and the Central Government with contributions of 8.33 per cent and 1.16 per cent, respectively. At the inception of the Employees' Pension Scheme, the net assets of the Family Pension Schemes 1971 vested in and stood transferred to the Employees' Pension Fund. The new scheme addresses three types of contingencies: death during service, superannuation, and permanent disability. The EPS provides pension benefits that are calculated on the basis of a worker's average salary in the 12 months preceding retirement, and a multiplicative factor calculated as years of service divided by seventy. The employees who have more than 20 years of service or have reached the retirement age of 58 years of age get credit for two additional years of service. The ceiling on pensionable salary is Rs.6500. The scheme does not provide for any formal inflation indexation. The Central Government, however, may alter the rate of contribution payable under the scheme or the scale of benefit admissible under this scheme or the period for which such benefit may be given, based on the valuations

done by the valuer appointed by it. Although the rate of contribution has not been altered so far, biennial actuarial valuations have increased the pension benefits by 17 ½ per cent since the inception of the scheme in 1995. The EPS permits commutation of pensions up to one third of pension benefits at retirement and the commuted value will be 100 times the commuted pension. The reduced pension, after commutation, will be paid for lifetime. An employee can opt for early pension on cessation of employment, provided he has completed 50 years of age. The amount of pension shall be reduced at the rate of 3 per cent for every year the age falls short of 58 years. Widow pension, payable on death of the covered employee during service, is equal to the employee's monthly pension. In case of death of the employee after vesting of pension, the amount of widow pension is 50 per cent of the employee's monthly pension subject to a minimum of Rs.450 per month. In case the employee leaves behind any child less than 25 years of age, children pension is payable up to two children at a time and is equal to 25 per cent of the widow pension. The following are the types of pensions available under EPS:

	Eligibility	Type of Pension
1	On attaining the age of 58 years whether in service or not	Superannuation Pension
2	On attaining the age of 50 years but below 58 years and left service	Reduced Pension
3	Left service on account of total and permanent disablement	Disablement Pension
4	On death of the member	Widow-Children Pension
5	On the death of the parents or on remarriage of the spouse, after the death of the member	Orphan Pension
6	On the death of the member and in the absence of spouse and eligible children below 25 years on the date of death of the member	Nominee Pension

3.13 The financial sustainability of the EPS in the long run is a debated issue. The World Bank [World Bank (2001)] has studied the current funding position of the EPS using its Pension Reform Option Simulation Toolkit (PROST) model to project expenditures and revenues through 2080 under various scenarios. The study predicts that in a baseline scenario where there is no indexation of pension for inflation, net inflows into the fund are positive through 2035, but negative thereafter. Further, with no provision for inflation cover, a pensioner's purchasing power would be reduced by half by the year of death, assuming an average retirement of 17 years and inflation of 4 per cent per annum. A second scenario, where the pensioners' real incomes are maintained through periodical inflation indexation, would result in the appearance of deficits as early as 2016 and reserves would be depleted a decade later. Under a third scenario, where there is an expansion of coverage (defined as a percentage of the labour force participating in the schemes), the emergence of cash flow deficits could be postponed by fifteen years but an increasing pension debt would be passed on to future generations and deficits in later stages would be even larger. Contextually, as cited in an IMF study (Gillingham and Kanda, 2001), the cash-flow deficit in the EPS will grow to almost 1 per cent of GDP over the next several decades. With a retirement age of 58, 33 years of service, a life expectancy at retirement of 17.2 years, a contribution of 8.33 per cent and inflation of 3 per cent, the implicit real rate of return on contributions necessary to fund pensions

"abstracting from survivor and disability benefits and any indexation for inflation is 4.5 per cent." This rate of return is well beyond the feasible return under the current restrictive investment regulations. The survivor and disability benefits and any *ad hoc* indexation of benefits simply increase the imbalance. In a similar study, Patel (1997) indicated that as the system matures, increasing obligations will have to be met from the exchequer, contribution rates of the employees need to be raised and a reduction in benefits needs to be contemplated. According to him, this is a distinct possibility given the very gradual increase in formal sector employment and the consequent effect on enrolment and contributors into the pension schemes.

Other Schemes

Special Provident Funds

3.14 There are some mandatory provident funds linked to specific occupations or States, such as the Coal Miners Provident Fund (1948), the Assam Tea Plantation Provident Fund (1955), the Jammu and Kashmir Provident Fund (1961), and the Seamens' Fund (1966). Although managed by different trusts and fund managers, they all generally follow the same investment and return rules as those funds regulated by EPFO.

Voluntary programmes

3.15 There are a number of voluntary group pension plans. These pension schemes are either privately run by managers appointed by employers or run by the Life Insurance Corporation (LIC) and other private life insurance companies. With the opening up of

the insurance sector to private participation, the Insurance Regulatory and Development Authority (IRDA), based on the recommendations of the Shinkar Committee, is in the process of formulating a simple standard pension plan for all life insurance companies to offer to the public. Individual life insurance companies can offer additional features to the IRDA Standard Pension Plan as optional extras to be paid for separately. These can include a life cover as per terms and conditions outlined in the IRDA Plan.

Social Security Schemes for the Informal Sector

3.16 There are no mandatory retirement-saving programmes for the self-employed or for workers in the informal and unorganised sectors of the economy. Although these workers are not eligible to join the EPF even on a voluntary basis, they can join the Public Provident Fund (PPF) administered by the Government of India. Organised sector employees can also subscribe to these schemes to augment their retirement savings. Members of the PPF can contribute between Rs.100 and Rs.70,000 per fiscal year into their PPF accounts which mature in 15 years, extendable by 5 years at a time, at the option of the account holder. Partial withdrawals are permitted after five years.

3.17 Workers in the unorganised and informal sectors can participate in the pension plans offered by the Life Insurance Corporation of India or other life insurance companies.

3.18 For people in the lower end of the economic strata, there are several central as well as state Government-run means-tested, social assistance programmes and welfare funds⁵. Even though the criteria of eligibility varies, the destitute, the poverty stricken, and the infirm aged 60 years and above are generally provided pension at rates ranging between Rs.30 and Rs.100 per month. However, the combined coverage of these social assistance schemes is insignificant and covers around 8 per cent of the total elderly population. In an effort to widen the reach of the social safety net for the aged poor, the Central Government, introduced a more comprehensive old age poverty alleviation programme called the National Old Age Pension (NOAP) in 1995 under the aegis of the National Social Assistance Programme (NSAP). The scheme aims to provide monthly pension to thirty per cent of the poorest elderly. States also operate similar schemes and supplement the initiative of the Central Government.

3.19 In 1998, the Ministry of Social Justice and Empowerment set up an eight member Committee under Project OASIS (Old Age Social and Income Security) to examine policy issues relating to old age income security in India. The Report of the Committee, submitted in 2000, recommended that the existing scheme be augmented by a system based on Individual Retirement Accounts (IRAs), which would be unique to an individual and remain unchanged with employment. These accounts would be

⁵ For instance, in Kerala, more than 30 categories of workers in the unorganised sector such as coir workers, cashew workers, head load workers, building and construction workers are covered under the Welfare Fund Acts and provided with social security and welfare benefits.

operated through myriad points of presence (POPs), which would be located all over India and would include post office, bank branches, *etc.* A centralised depository would be established, which would pool the funds received from POPs and pass them on to the relevant Pension Fund Managers (PFMs). The PFMs would run one scheme each in the three styles - "Safe Income", "Balanced Income" and "Growth". The employee would be required to contribute a minimum contribution of Rs.500 per annum into the IRA. Contributions would be tax exempt up to Rs.60, 000. On retirement, an IRA account-holder would be required to use a portion of the accumulated balance, also called the minimum mandatory annuitisation level, to buy annuities from annuity providers and derive sustained benefits. The design of the pension system would also include a Self Regulatory Organisation (SRO) to oversee the entire system.

3.20 According to Gillingham and Kanda (2001), the OASIS Report is optimistic regarding the return on funds. A real rate of return of 6 per cent assumed in the report is unrealistic unless the fund invests all its assets in equities, which would, however, expose the pension fund to enormous risks. Their study also expressed doubts about keeping the cost estimate of fund balances at 0.25 per cent as assumed in the Report, given the complexity of the scheme, which combines "points of presence", a depository, and private pension fund managers. Moreover, the OASIS proposals include two rate-of-return guarantees; one to be given by the fund managers to the participants opting for the safe investment option and the other by the Government, (who in turn

can purchase the insurance from insurance companies) for the nominal value of contributions for long-term participants (ten years or more). The study indicated that the first guarantee is equivalent to an embedded insurance option, which would raise the cost to the investor and the second guarantee would be of little value under even a modest inflation.

III. Evolution of Civil Service Pension System in India

Origin of Civil Service Pensions in India

3.21 The history of a formal civil service pension system in India can be traced back to the colonial period of British-India. The first awarded pension benefits to the Government employees were given by the Royal Commission on Civil Establishments in 1881 (Goswami, 2001). Members of the Indian Civil Service were to contribute 4 per cent of their salary. Apart from a pension, the civil servants were also entitled to a family pension under the Indian Civil Service Family Pension rules. These rules applied to all European and Anglo-Indian members of the service and also to some Indian members. Every member to whom these rules applied made contributions, which were credited to the revenues of India and the pensions and other benefits payable under these rules were debited as a charge upon those revenues. The pensions and other benefits payable under these rules were divided into two portions *viz.*, those met from contributions of subscribers and those met from public funds. An account was maintained of all contributions received and all disbursements made therefrom together with an account of interest on the balance calculated at the rate of 4

per cent per annum. The contributions on behalf of a son were payable until he attained the age of 24 and on behalf of a daughter until her marriage. Moreover, every subscriber, on marriage, had to pay, in addition to monthly contributions, the donations laid down by the rules.

3.22 On the recommendations of the Royal Commission presided by Lord Islington, the 4 per cent contribution that the employee had to make to earn the pension was stopped in 1920 and the Government undertook to provide the full expenditure of the pensionary charge. At the same time, an ICS Provident Fund [an ICS (Non-European) Fund for Indian civil servants] was started for which the minimum contribution was 4 per cent and the maximum 12.5 per cent.

3.23 The representatives of the civil service argued their case for an increase in the rate of pension before the Royal Commission of 1924 (Lee Commission). Apart from recommending an increase in pension, the Commission recommended that if and when the work for which a civilian had been recruited was transferred, it should be optional for that employee to retire on a proportionate pension. Further, Provident Fund was suggested as an alternative to pension system for all future recruits. Also, the Indian civil servant could, under certain conditions, commute for a lump payment not more than half of any pension which was statutorily granted.

3.24 The Government of India Acts of 1919 and 1935 made further provisions. Due to the changed conditions of service brought about by the passage of the Government of India Act, 1919, provisions were made for retiring those

members of the civil service who joined the service before January 1, 1920 and were not permanently employed under the Government of India, at any time, at their option, on a pension proportionate to their length of service. It was not necessary for the civil servant to serve the full term of twenty-five years in order to earn pension. The Government of India Act, 1935 also protected the rights and privileges of the members of the civil services (Srivastava, 1966). These schemes were later consolidated and expanded to provide retirement benefits to the entire public sector working population.

Modern Civil Service Retirement Programmes

3.25 At present, all classes of civil servants (both Union and State Government employees) enjoy fully protected social security. The civil servants participate in a pension plan, a provident fund, an insurance plan, and mandated gratuity pay, as described below. Various types of Government pension schemes are set out in Box 3.2.

Civil Service Pension System

3.26 The civil service pension system (CSPS) covers the entire gamut of the salaried workforce in Central and State governments and Union territory administrations. Within the Central Government, pension schemes are organised by occupation, with separate schemes - which have somewhat different rules of eligibility - for railways, telecommunications, defense, and other Central Government employees. These benefit programmes are typically run on a pay-as-you-go (PAYG), defined-benefit basis. The schemes are non-contributory, *i.e.* the workers do not contribute during their working lives. Instead,

Box 3.2: Types of Civil Service Pensions in India

- (i) **Superannuation Pension:** A Government servant who retires on attaining the age of compulsory retirement is granted this pension (Rule 35).
- (ii) **Retiring Pension:** A Government servant who retires or is retired prior to the age of compulsory retirement or under FR 56 or Article 459 of civil service rules (CSR) and also one who opts for voluntary retirement on being declared surplus, are granted this pension (Rule 36).
- (iii) **Invalid Pension:** A Government servant who is retired from service on account of any bodily or mental infirmity, which permanently incapacitates him/her for the service, is eligible for Invalid Pension, which is granted only on the recommendation of a Medical Board constituted for the purpose (Rule 38).
- (iv) **Compensation Pension:** A Government servant who is discharged from service owing to the abolition of his/her permanent post is granted this pension (Rule 39).
- (v) **Compulsory Retirement Pension:** A Government servant who is retired compulsorily from service as a measure of penalty is granted this pension. An authority can sanction him/her either pension or gratuity or both at a rate not less than 2/3rd and not more than full compensation pension or gratuity or both (Rule 40).
- (vi) **Compassionate Allowance:** A Government servant who is dismissed or removed from service by the Competent Authority, and if the case deserves special consideration, is granted this allowance. Such allowance shall not exceed 2/3rd of pension or gratuity or both which would have been admissible to him/her had he/she retired on compensation pension (Rule 41).
- (vii) **Pension on absorption in or under a Corporation/Company/Body:** A Government servant who has been permitted to be absorbed in or under a corporation, company or body substantially owned or controlled by the Central Government/State Government in or under a body controlled or financed by Central Government/State Government is allowed this benefit.
- (viii) **Family Pension:** Family pension is payable to the widow/widower or to an eligible family member from the date following the date of death of the Government servant while in service or after retirement. Family pension is payable after a minimum of one year of continuous service. However, it is payable even before completion of one year if the deceased Government servant had been medically examined and declared fit by the appropriate Medical Authority for Government service. The rate of family pension is 30 per cent of last drawn pay at the time of death/retirement subject to a minimum of Rs.1,275 and maximum of Rs.9,000. In case of an employee dying in harness or after retirement, family pension is paid at enhanced rates, equivalent to full pension, for a period of 7 years or 67 years of age, whichever is earlier.

Source: Report of High Level Expert Group on New Pension System, Govt. of India, 2002

they forego the employer's contribution into their provident fund account. The entire pension expenditure is charged to the annual revenue expenditure account of the Government.

3.27 The CSPS pays a retirement benefit at age 60 (for Central Government employees) that is based on years of service and average salary in the last ten months of service. For State

Government employees, the retirement age generally varies between 58 years and 60 years⁶. The minimum eligibility period for receipt of pensions is 20 years qualifying service. However, this condition of eligibility is 10 years in respect of Central/State Government servants entitled to superannuation pension under the respective service rules. Pension is calculated with reference to average emoluments, *i.e.* the average basic pay drawn by the Government servant during the last ten months of his service⁷. Full pension at 50 per cent of the average emoluments is payable for 33 years of qualifying service. For qualifying service less than 33 years, proportionate pension is payable. The minimum pension/family pension payable is Rs.1,275 per month. The maximum limit on pension is Rs.15,000 per month and on family pension it is restricted to Rs.9,000 per month⁸. Certain States have set lower limits for maximum pension/family pension payable.

3.28 The pension is indexed and adjustments to dearness allowance are made at half yearly intervals. A civil servant has the option to commute a portion of his/her basic pension, not exceeding 40 per cent, into a lump sum payment, with effect from January 1, 1999⁹. Certain State Governments limit the

commutation amount to one-third of the basic pension. No medical examination is required if the option is exercised within one year of retirement. If the option is exercised after the expiry of one year, he/she will have to undergo medical examination by the specified competent authority. The monthly pension will stand reduced by the portion commuted and the commuted portion will be restored on the expiry of 15 years from the date of receipt of the commuted value of pension¹⁰.

3.29 While all State Government employees are entitled to pensionary benefits, most States also extend such benefits to employees in grants-in-aid educational institutions; urban local bodies such as municipalities; panchayat raj institutions, *etc.* In the case of these institutions, there is, however, no uniformity among the States in respect of collections of contributions or in the payment of the quantum of pension. In a few States, the Government collect some contribution from these institutions, while in others no contribution is collected. The benefits also vary from State to State. Some States pay pension to the employees of these institutions on par with the Government servants and others provide a lower amount as pension.

⁶ In most cases, the retirement age of Class IV employees is 60 years and for others it is 58 years. In the State of Kerala, the retirement age of employees is 55 years.

⁷ For some States, pension is calculated with reference to the last drawn pay.

⁸ This may undergo changes on the basis of the recommendations of the Pay Commissions appointed every 10 years/5 years, as the case may be.

⁹ Lump sum amount payable is calculated with reference to the Commutation Table constructed on an actuarial basis in accordance with the following formula: $CVP = 40\% \text{ of monthly pension} \times \text{Commutation factor} \times 12$. Where CVP is the Commuted Value of Pension and the commutation factor is fixed with reference to age next birthday on the date on which commutation becomes absolute.

¹⁰ Dearness Allowance, however, will continue to be calculated on the basis of the original pension (*i.e.* without reduction of commuted portion).

Other Non-Pensionary Civil-Service Benefits

3.30 Public employees, in addition to their pension benefits, are also covered under the General Provident Fund (GPF) scheme. The GPF is a non-contributory programme where only employees themselves contribute a minimum of six per cent of their monthly earnings. The accumulation under the GPF, together with the interest thereon, are returned to the employee at the time of retirement. Other non-pensionary benefits like gratuity and leave encashment also accrue to Government servants on retirement. Employees of the Central Government and certain State Governments are also provided insurance cover up to a certain limit in the event of death prior to retirement. A nominal premium is collected from the monthly salary of the employee for this purpose.

3.31 Three types of gratuity are available to Government employees depending on the period of service *i.e.*, retirement gratuity, death gratuity and service gratuity. Retirement Gratuity, which is a one time lump sum benefit requires a minimum of 5 years qualifying service and eligibility to receive service gratuity/pension¹¹. There is no minimum limit for the amount of gratuity but the maximum retirement gratuity payable is 16 ½ times the emoluments plus DA limited to Rs.3.5 lakh. Death gratuity is a one-time lump sum benefit payable to the widow/widower or the nominee of a permanent or a

quasi-permanent or a temporary government servant including CPF beneficiaries dying in harness. There is no stipulation regarding minimum length of service rendered by the deceased employee. Service Gratuity is paid to a retiring government servant if the total qualifying service is less than 10 years¹². There is no minimum or maximum monetary limit on the quantum. This one time lump sum payment is distinct from and is paid over and above the retirement gratuity.

3.32 Under the Central Government Employees Group Insurance Scheme (CGEGIS), employees pay a small monthly premium determined according to civil-service rank. It provides a survivor benefit equal to a multiple of the monthly premium in the event a worker dies prior to retirement. Otherwise, it provides a lump-sum payment equal to the accumulated premiums. Some State Governments also provide survivor benefits to employees dying in harness. For example, under the Tamil Nadu Government Servant Family Security Scheme which is compulsory for all employees who have a family, the employee contributes Rs.20 per month and in the event of the death of the employee, a sum of Rs.1 lakh after deduction of any advance towards funeral expenses is paid to the nominee.

3.33 The recent initiatives in civil service pension reforms in India are discussed in Chapter 5.

¹¹ Gratuity is calculated at the rate of 1/4th of a month's emoluments plus dearness allowance drawn before retirement for each completed six monthly period of qualifying service.

¹² Admissible amount is half month's emoluments plus DA last drawn for each completed six monthly period of qualifying service.

CHAPTER 4: CIVIL SERVICE PENSION REFORMS: CROSS-COUNTRY EXPERIENCE

I. Introduction

4.1 Historically, the State in pursuit of its objectives to function as a model employer was the first to assume responsibility for supporting its employees and their survivors in their old age. Accordingly, in many countries, pension arrangements for civil servants predate the establishment of similar schemes for private sector workers. Over the years, various models of pension systems were developed throughout the world for providing old age, invalidity and survivor's pensions to civil servants. One underlying commonality, however, was that pension benefits in the Government sector were generally treated as a form of reward for long service. The prospect of receiving an adequate pension upon retirement was traditionally viewed as an inherent attraction of employment in the civil services. Over the years, the pension liabilities have increased sharply mainly due to demographic factors. Populations are aging rapidly due to rising life expectancies and declining fertility rates. According to a World Bank study, the proportion of the world population over 60 years will almost double from 9 per cent to 16 per cent over the next 35 years (Schwartz and Kunt, 1999). As increasing pension liabilities of civil servants are usually paid from the general revenues, the steep rise in such liabilities will have adverse effect on the fiscal soundness of the Government entities.

II. Civil Service Pension Reforms Around the World - An Overview

4.2 Efforts to reform the pension system by several countries around the world have intensified during the past 25 years or so. For historical and other reasons, the pension schemes for civil service employees in different countries vary considerably, though the underlying factors which prompted the initiatives towards pension reforms were by and large similar. The civil service pension payments are linked to some reference wage, either terminal or the average wage, which varies across countries. Similarly, replacement rate for full pension also varies from country to country. In a few countries, lowest paid employees are allowed higher replacement rate. Likewise, some countries have provision for guaranteed minimum pension amount. The civil servants are also provided with cost of living adjustments automatically or on an *ad hoc* basis to keep pace either with inflation or rising wage levels. In some countries, civil servants are also allowed commutation facility under which they are allowed to surrender a portion of their pension benefit and in turn receive a lump sum amount.

4.3 In most of the industrialised countries, the retirement pensions for civil servants continued as separate schemes even after the introduction of broad based national social insurance schemes. Since World War II, maintenance of separate schemes for public service employees has, however

been increasingly criticised, particularly in countries where there are high proportions of civil servants in the workforce. With the development of social security systems based on the principles of universality and equity, justification for the existence of separate schemes for civil servants becomes more and more difficult. Reflecting this, in countries such as Argentina, Peru, and East European countries, there is complete integration of the civil service pension plan with the national social insurance plan. In a number of developed countries, such as United Kingdom, United States of America, Japan, Canada, Sweden, *etc.*, though the civil service pension system is operated by the States like other occupational plan in the private sector, there is a tendency to align the civil service schemes with the national social insurance plan. In a majority of the countries, however, civil services pension scheme is still kept separate. Out of 128 countries surveyed by the World Bank, in 46 countries civil service schemes have been integrated, while in 82 countries the schemes are separate.

4.4 Traditionally, retirement benefits for civil servants have been provided through defined benefit (DB) plans. In a number of countries, defined contribution (DC) plans are also being offered along with DB plans to complement / supplement flat rate schemes. Recently, some countries have adopted multi-pillar approach and offer civil servants a choice of pension coverage using the DB, DC and combination thereof, for more comprehensive retirement benefit.

4.5 Pension systems in some countries take the form of a three-tier system. Under this, the

first tier represents the universal statutory basic state pension system; the second tier, the supplementary occupational pension system; and the third tier, the personal pension insurance and other savings. In all the West European countries, the social security system provides for a statutory basic pension. The expenditure towards the same is financed on a year-by-year basis through budgetary provisions by means of contributions or taxes or what is known as pay-as-you-go (PAYG) system. In some countries such as France, the supplementary occupation pension is also financed by a PAYG system with compulsory participation above a certain level of earnings. In Spain and Italy, there are virtually no supplementary systems. In many other countries, such as Germany, Netherlands and United Kingdom, occupational systems are financed by various forms of pre-funding. With regard to participation, civil servants in some countries like Germany and France have their own occupational pension system, and are excluded from the basic State pension system. In the United Kingdom, civil servants can opt for systems other than the civil service system.

4.6 In many countries, financing of civil service pension is primarily dependent on payroll taxes that are shared by the employee and the State as an employer, with the Government covering any shortfall out of general revenues. The majority of public service pension schemes appear to be financed on the unfunded PAYG principle, where current pension payments are financed by current receipts. No capital is set aside or accumulated to meet future pension expenditure and all the proceeds are merged into

the State budget with no specific allocation in the budget for financing of pensions. Although there are instances of funded schemes with a portion of their revenue derived from investment income, the shortfalls that arise between receipts and payments are met by general Government revenue. The fiscal implications of financing pensions through budgetary provisions are crucial regardless of whether they are funded systems or unfunded PAYG systems.

4.7 In the context of growing pension liabilities, several countries have initiated modifications in the civil service pension schemes. Many countries have taken measures to reduce the pension liabilities by introducing higher retirement ages and or longer service periods; increasing required employee contribution rates; lowering rates of benefit accrual; and changing the post retirement indexation policy. Illustratively, South Korea has increased the employee share of contribution, shifted from wage to price indexation, and reduced the benefit levels to new employees. Italy also shifted from wage to price indexation and introduced limitations on early retirement. Brazil, Greece and Portugal have also reduced the benefit accrual rates. A number of countries have also realised the need to achieve some level of advance funding of benefit obligations.

4.8 The potential reform options in respect of pension are generally classified into two principal categories, *viz.*, minor adjustments (parametric changes) and major reforms (structural changes). Minor adjustments are changes made to the existing public schemes

primarily to delay fiscal problems, but sometimes to correct existing inequities. These can take different forms. Governments can either alter the eligibility criteria for receiving pensions, or the contribution structure, or the benefit structure, or the administration of the scheme, or do a combination of several adjustments. Major reforms are those which substantively change the system of pension provision from DB to DC, or *vice versa*, or from PAYG to full funding, or *vice versa*. Starting up a new system is also classified as a major reform since it is a substantive change from the earlier one. Substantive PAYG reforms with new mandatory defined contribution components are also included as major reforms. Reforms in the civil service pension schemes in most of the industrial countries have been of minor types.

4.9 Pension reforms being undertaken by various countries follow different forms. The multi-pillar system adopted in several countries consists of an unfunded mandatory pillar, a funded mandatory pillar, and a voluntary private pillar. The design of the pillars has varied across the countries. There are, however, three major types of pension reforms across the world. At the one end of the spectrum is the Latin American (individual account) model, with only one DC pillar established by Chile in 1980 and now followed by Argentina, Mexico, Peru, Bolivia and Uruguay. The second one is the OECD (employer sponsored) model adopted by Australia, Switzerland, Denmark, and the United Kingdom. A key feature of this model is that the employer and/or union trustees choose the

investment manager for the company or occupational group as a whole. The third one is the notional defined contribution (NDC) system (details in paras 2.20 and 2.21), which originated in Sweden and was adopted in Italy, Latvia and Poland.

III. Cross-Country Experience

The United States of America

4.10 The Civil Service Retirement System (CSRS) was started in USA in 1920 - much before the launch of the social security system in 1937. In 1983, the CSRS was closed to new employees and all new employees were put on a new system called the Federal Employees Retirement System (FERS). The members of the old system CSRS were given the option of switching to the new system. However, only a very small proportion of members (2.8 per cent) opted to join the new system.

4.11 The CSRS allows employees with 30 years of service to retire at the age of 55 with unreduced benefits, while under the FERS, employees may retire with reduced benefits at age 55 or 57 (depending on whether they are born before or after 1970), with 10 years of service. Most employees with CSRS either do not have 30 years of service at that age or elect not to retire when first eligible. The average CSRS retirement age is 61.5. The CSRS provides a price indexed retirement benefit. It was found that upper income federal workers had better inflation indexation of retirement benefits than was available for private workers, while low income federal workers had worse inflation

protection than what was provided to lower income workers through social security.

4.12 FERS provides for a three-tier retirement plan consisting of the social security, a DB plan and the Thrift Savings Plan (TSP), which is a DC plan. FERS provides retirement income comparable to that provided by large employers in the private sector. Under the FERS, federal employees, in addition to the full social security contribution, also contribute to the DB plan. They have the option of making tax deferred contributions to the TSP, and a portion is matched by the Government. While the accumulated funds in the Basic FERS plan, CSRS, and social security are all invested in Treasury securities, the Thrift Plan has several funds in which the participants may invest.

4.13 The TSP is administered by an independent government agency known as the Federal Retirement Thrift Investment Board, which is charged with operating the Plan prudently and solely in the interest of the participants and their beneficiaries. The administrative expenses are roughly one per cent of contributions. Administrative expenses are prorated across all invested assets so that the pattern redistributes income from workers with large accounts to those with small accounts.

4.14 The CSRS plan has accrual rates of 1.5 to 2 per cent per year of service (increasing with years of service), while the FERS plan has the accrual rates of 1.0 to 1.1 per cent per year of service. FERS retirees receive full inflation protection for their social security benefits. While

the pensioners under FERS receive full inflation protection for their social security benefits, for the DB plan (2nd tier), the inflation protection is lower than that under the CSRS plan. The FERS system provides better portability of benefits than the CSRS.

4.15 The reforms in the US civil service pension system have achieved the following objectives: it brought the newly recruited civil servants under the social security system; it has resulted in a retirement system which is more comparable with those for the private sector workers; it raised the minimum retirement age by two years; it partially privatised the Federal Government retirement by instituting a funded DC plan with some private sector investment; and it has also improved the portability for Federal Government employees.

4.16 According to the ATR policy briefs April 2002, the states in USA have now begun to shift public employer pensions towards DC plans as shown below. Moreover, recent federal legislation has substantially expanded the contribution limits for DC plans.

- Three States, Michigan, Nebraska, and West Virginia have or are phasing in a system based on a DC plan only;
- Six States, Florida, Montana, New Jersey, North Dakota, Ohio and South Carolina have or are phasing in a system allowing state employees and/or school teachers the freedom to choose to substitute a DC plan in place of the old DB plan;

- Three States, Washington, Indiana and Oregon have hybrid DB/DC plans;
--Another 20 States offer small groups of their workers a DC plan in place of the traditional DB plan;
- In all, forty-eight States allow workers to choose a supplemental DC plan in addition to the main DB or DC plan; and
- Overall, forty-nine States offer at least some workers some DC plan.

The United Kingdom

4.17 Civil servants in the United Kingdom are entitled to the State Retirement Pension. It is a basic flat-rate pension, subject to contributions received. On top of that, the main part of the pension provision is by means of a supplementary occupational pension scheme, *viz.* the Principal Civil Service Pension Scheme (PCSPS). In general terms, the PCSPS applies to Crown servants employed in the central departments of the State. Employees in other parts of the public service, such as teachers, armed forces personnel, staff in the fire, police and health service, and staff in local authorities are covered by separate occupational pension schemes.

4.18 Membership of the PCSPS is not compulsory. Staff may opt for membership of the State Earnings-Related Pension Scheme (SERPS), or for a Personal Pension, operated by the life insurance offices. Both the options are, in principle, career earnings related schemes - the Personal Pension being based on the

contributions made and the investment returns achieved on the accumulated funds.

4.19 Membership of the PCSPS applies from commencement of employment in the civil service. No minimum length of service is required where the person retires at, or after, the retirement age. Retirement age for the purposes of entitlement to full PCSPS benefits is 60. Pension is earned at the rate of 1.25 per cent for each year, or part year of the pensionable service up to a maximum of 40 years. At this stage, pension will be 50 per cent of the final salary. Where the employee retires at age 65, the maximum is 45 years and the pension level 56.25 per cent. There is no minimum amount of pension prescribed, except that it cannot be less than that which would have been due under the SERPS. In addition, a tax-free lump sum benefit is paid to the employees on retirement. The lump sum is calculated as three times the annual old-age pension. With few exceptions, all service time in the civil service is taken into account for pensionable years and there is no restriction for part-time service. Service reckoning may be increased, at full cost to the individual, by the purchase of added pensionable years. Service years may also be increased by the individual giving up pension benefits earned in a previous employment in return for a transfer payment to the PCSPS.

4.20 All retirement pension benefits are fully inflation protected. They are revised each year in line with the Retail Prices Index. Cost of pension provision forms part of the overall remuneration package of employees. There is a

direct employee contribution of 1.5 per cent of pay mainly in respect of dependants' benefits. Employing departments pay a contribution representing the notional employer charge for a funded PCSPS. The basic State Retirement Pension is payable from age 65 for men and 60 for women. The state pension age is, however, to be equalised at age 65 for both men and women by 2020.

France

4.21 The civil servants - and military officers - are covered by a special pension scheme called le Code des Pensions Civiles et Militaires de retraite (CPCM). Public employees without civil servant status are covered by a special supplementary scheme, IRCANTEC, which is very similar to the arrangements in the private sector, AGIRC and ARRCO. Both public sector schemes are compulsory within their respective range. These are financed on a PAYG basis. In France, it takes a civil servant 15 years of service, at the latest by retirement age, before he is qualified for CPCM old-age pension benefits. There is no time requirement for invalidity pension. If the civil servant does not satisfy the said requirement, he/she is covered by the State Basic Pension Scheme and the supplementary IRCANTEC. The general retirement age is 60, but it is possible to stay in service until the age of 65.

4.22 The calculation basis of the pension benefit is the final salary, *i.e.* the basic salary grade and step, excluding bonuses and other individual indemnities, that has been continuously paid for at least six months for the employment

in question before its termination. On an average, bonuses and indemnities represent 20 per cent of the total remuneration. The CPCM pension is earned at the rate of 2 per cent of final salary per service year up to a maximum of 37.5 years. That makes a full pension benefit of 75 per cent of final salary. In some cases, due to family situation or nature of service, bonuses are given in the form of extra years that raises the pension to a maximum of 80 per cent. It is not possible to take earlier employments covered by other pension schemes into account, with some exceptions regarding the public sector. It is also not possible to make a transfer of pension rights into the CPCM scheme. Since the CPCM scheme is a basic scheme, it contains conditions for a minimum pension. If the employee has served for 25 years or more, the benefit is set at FF 64,000 per year. If the service time is 15-25 years, the minimum benefit is equal to 4 per cent of this amount per service year.

4.23 Civil servants are entitled to invalidity pensions by the CPCM scheme, regardless of age and years of service. The benefit is calculated in the same way as the old-age pension, which means that only years of effective service are considered. If the invalidity is the result of a service activity, a life annuity is paid out. The CPCM pension scheme provides survivor's pension to widows/widowers, when married at least two years prior to the end of service or having a child between them, and to children up to the age 21.

4.24 If the civil servant leaves service before he has served for 15 years, his pension rights

will be calculated according to the state basic scheme and transferred to the IRCANTEC. If he has served for 15 years and leaves before retirement age, he will be entitled to a deferred pension to be paid from the age of 60.

4.25 According to the current thinking, the requirement of 37.5 years to qualify for a full 75 per cent pension may probably be raised to 40 years. Other than this, no major changes are foreseen in the near future. The attempts by the Government to cut the public service and social insurance benefits have met with strong protests from the government employees.

Denmark

4.26 In Denmark, a distinction can be made between the development of pensions for servants employed by the Central Government (the State) and the servants employed by the Local Governments (the municipalities, in Danish: kommuner). While pensions for public servants employed by the State are financed on a PAYG basis, most municipalities pay a percentage of the public servant's salary to an insurance company, KP (Kommunernes Pensionsforsikring, in English: The Municipalities' Pension Insurance), which is jointly owned by the municipalities and by the professional association, which includes the employees in the municipalities. In return, this insurance company has taken over the responsibility for the payment of pensions. KP was established when it turned out that many municipalities had not set aside adequate reserves to meet future pension payments. KP operates under the Danish law on Insurance Business and is thus fully funded.

4.27 For public employees who come under collective wage agreements, the government pays a contribution to a separate pension fund which manages the funds. In this case, the pension benefit received by the member is calculated on the basis of past contributions with the addition of the return of the pension saving. The scheme has become increasingly popular among public employees and this has led to a considerable build up of pension funds. A number of reasons may explain why it was decided to transfer the responsibility for pensions to separate fully-funded schemes rather than continuing with financing out of public budgets. Most importantly, pension contributions were seen as less transparent and thus politically more acceptable way of granting increases in the compensation of public employees. In addition, funded pension schemes have benefited from considerable tax advantages, the contributions being tax deductible while the tax rate on the return in the pension funds is lower than the tax rate for non-pension saving.

Chile

4.28 In 1924, Chile became the first country in the Western Hemisphere to introduce a State-run retirement system for the entire population. A separate fund was created in 1925 for public sector workers and journalists. Soon, those State-run collective capitalisation funds evolved into a PAYG system in which the benefits of retirees were paid from the contributions of active workers. In addition, special-interest legislation led to the creation of more than 100 different pension

regimes with widely different benefits that were not related to the level of contributions and different retirement ages for different groups of workers.

4.29 The pension reform of 1980s in Chile created a new system known as the 'AFP system'¹³ which completely replaced its Government run PAYG social security system with an investment-based private system of individual retirement accounts. The new pension system also gives the workers, covered by the scheme, the right to choose between different pension providers and between different forms of payout after their retirement. Workers who were already in the labour force before January 1983 had the option of staying in the old, Government-run system or moving to the new system. Workers who have moved received from the Government, 'recognition bonds' that acknowledged the contributions they had already made to the old system; and those who stayed in the Government-run system had their pension rights guaranteed under the new law.

4.30 The most fundamental characteristics of the Chilean system are: (i) contributions are capitalised in individual (personal) accounts (the rate of contribution is defined in the law as a proportion of the wage), (ii) the value of old-age pensions depends on the balance accumulated in the personal account of each worker, (iii) disability and survivorship pensions are "defined benefits" with a value proportional to the taxable wage of the member, (iv) the

¹³ "AFP" is the abbreviation of "Administradoras de Fondos de Pensiones" (Pension Fund Management Companies).

worker is free to choose among different registered, single-purpose, pension management institutions (the AFPs), (v) AFPs are private and competitive firms whose purpose is to invest the funds in the capital market on behalf of its members, (vi) at retirement, the worker can choose among three different ways in which he can receive the pension, (vii) and the State plays mainly a "subsidiary role", manifested in its responsibility to regulate and supervise the system, finance minimum pensions, and provide certain guarantees.

4.31 The good performance during the first year in operation has lent credibility to this innovative reform and stimulated interest in the system. It remains consistent with the market-oriented economic development models that prevail in most parts of the world, after the collapse of the Soviet Union, and enjoys the support of various multilateral financial institutions. In fact, the Chilean reform has been an important reference for reforms in many other countries, which shared the characteristics and problems of the traditional pension system of Chile. Thus, based on Chilean model, eight Latin American countries (Perú, in 1992; Colombia and Argentina, in 1993; Uruguay, in 1995; Mexico, Bolivia and El Salvador in 1996; Nicaragua in 2000 and Dominican Republic in 2001) have undertaken reforms, which include components of individual capitalisation and private management.

4.32 Notwithstanding its success, the Chilean system has received many criticisms such as high administrative costs, lack of portfolio choice, and the high number of switchovers from one

fund to another, inability to provide enough incentives to cover low-income employees, *etc.* Also, in an individual account based pure DC system, the employees are exposed to the risk of volatility in the market prices of the investment assets, and the system may not provide security in old age. The extent of this risk can be reduced by using a mixture of DB and DC plans, and that is the rationale for a multi-pillar system.

Brazil

4.33 There are a multitude of PAYG pension schemes applying to civil servants in Brazil. Other than at the federal level, each of the 27 states has its own pension system. As a rule, municipalities follow the general regime, although some (often larger ones) have their own special schemes, which differ slightly from each other in terms of contribution rates. However, in almost all cases, they are considerably more liberal than the general scheme. About half of the federal payroll is now spent on pensions. In 1998, about three-quarters of the total pension deficit were concentrated in the five States (São Paulo, Minas Gerais, Rio de Janeiro, Rio Grande do Sul and Paraná).

4.34 The growing pressure of civil servants' pensions on payroll expenditures has led the Government to propose a series of reforms to Congress, some of which involved changes in the Constitution. Reforms, partly approved in 1998-99, eliminated some abuses and inequities but have not significantly changed the benefit formula, for workers hired before their

implementation. The main reform measures were:

1. Institution of a minimum retirement age, starting at 53 years for men and 48 years for women. Through a transitional formula linked to the years of contribution prior to the approval of reform, this minimum retirement age will increase effectively to 60 and 55 years respectively. New entrants will automatically be subject to the higher minimum retirement age.
2. Requirement that workers contribute for at least ten years to a public sector pension scheme before drawing retirement benefits. The scope for early retirement before having made 35 years of contribution for men and 30 for women (including previous contributions to the general scheme) has been limited for current workers and abolished for new entrants.
3. Abolition of favourable special regimes for certain categories of civil servants, such as university teachers, judges, financial controllers and members of Congress.
4. Institution of a ceiling on pension benefits, equal to the civil servant's last salary. This measure eliminated loopholes that allowed some civil servants to incorporate non-wage advantages to their pension benefits, which in practice meant that their

pensions could be higher than their last salary.

4.35 Of the original reform proposals not approved by Congress, the most significant were the capping of benefits to 70 per cent of the last basic salary, the immediate application of the higher minimum retirement age of 60 for men and 55 for women to all civil servants rather than to new entrants only, and the linkage between wages and pensions. Congress had approved the institution of pension contributions by retired civil servants and an increase in pension contributions by current civil servants; but this has been declared unconstitutional by the supreme court.

4.36 Attempts towards reforming public sector pension schemes in Brazil have encountered significant legal and political obstacles. Reforms approved by the Congress in 1998 fell significantly short of original proposals by the Executive. Although some tightening of eligibility requirements was approved and the worst abuses curtailed, most measures will apply only to civil servants joining the system after implementation of the reforms. Moreover, entitlements have not been significantly changed. With the result, very little progress has been made towards the financial and actuarial balance of the various public sector pension schemes.

4.37 Faced with tight budgets, the State governments in Brazil have taken a series of initiatives to reform their civil servants' pension systems. The most common reform has been to create a pre-funded component to guarantee existing benefits. These funds have usually been

financed by privatisation receipts and/or increased contribution rates. Bahia, Pernambuco, Paraná and Rio de Janeiro have been among the most advanced in that regard. But, these pre-funded systems are unlikely to prove actuarially balanced. As such, they merely provide a temporary relief to State Governments' accounts, rather than a permanent solution to their growing pension liabilities. The World Bank estimates that even Paraná's well-funded security (second) pillar may be depleted in 20 to 30 years depending on assumptions over wage growth and rates of return (Bonturi, 2002). Consequently, the main challenges for reform still lie ahead.

Japan

4.38 Of all the industrialised countries, Japan has the largest and the fastest growing group of aged population. The Japanese public pension system, which is basically financed on a PAYG basis, *i.e.* current workers pay for current retirees, faces severe financial pressures. Therefore, redesigning the pension arrangements has become a major issue at the top of the political reform agenda.

4.39 The Japanese pension system is multi-tiered and includes a number of public, occupational and personal pension schemes. The main public scheme consists of two tiers. The first tier is the National Pension (NP), which covers the entire population between the ages of 20 and 59 years. The flat-rate pension is financed by contributions (which are included in employees' and employers' contributions to earnings-related programs) and State subsidy (1/3 of benefits plus administrative cost). The

eligibility age is 65 for both males and females. Eligibility requirement for full pension is 40 years of contribution.

4.40 The second tier, which covers most employees, provides earnings-related benefits. The earnings-related pension is financed by contributions (insured person: 8.675% of earnings; employer; same as for insured persons), but the cost of administration is covered by State subsidy. There is a maximum limit of earnings in calculating contributions and benefits of 5,90,000 yen a month. The eligibility age is 60 for males and females (in the year 2018: 65 for all). Eligibility requirement for full benefit is 25 years of coverage. The pension scheme is partially funded with accumulated assets equalling five years' expenditures. Members are either insured in the Employees Pension Insurance (EPI) or in one of a number of mutual aid associations.

4.41 In Japan, the pension reform policy of 2000 strives to secure financial sustainability through a number of parametric reform measures such as the curtailment of earnings-related benefits, an increase in the entitlement age and changes in the system of indexing benefits. The 2000 reform package will slash current pension benefits by about 20% by fiscal 2025. On the other hand, a shift to a (partially) capital-funded system is yet not a part of the official reform strategy. The basic pension paid by the National Pension Insurance is the main tool of income redistribution in Japan. According to the latest reform, the Government's share of contributions to the National Pension Insurance will rise from the current one-third to one-half by 2004. The

official reform strategy adopted by the Government is designed to offset benefit cuts in public pension schemes through the promotion of occupational pension plans. The Government hopes that changes in the regulatory and financial framework will make defined benefit occupational plans more attractive. The Government also plans to introduce DC plans. However, the Government does not plan to make occupational or personal provisions mandatory. The 2000 reform stipulates that basic pension benefits will no longer be indexed to wages.

Singapore

4.42 Singapore's social security system is a mandatory, publicly managed, defined contribution (DC) type based on individual accounts. The main vehicle of the system is the CPF, managed by the CPF Board, which is a statutory authority under the Ministry of Labour. The members of the CPF Board are drawn from employers, unions, Government, and professional experts.

4.43 A non-contributory pension scheme for Government employees operates in Singapore. However, in 1973 and 1987 conversion exercises, existing pensionable employees were given a choice to shift to the Central Provident Fund (CPF) scheme. At present, new officers in the designated pensionable services (Administrative Service, Senior Police, and Intelligence Service), and political appointees are allowed to join the pension scheme.

4.44 In line with the ambitious goals reflected in a variety of schemes, the contribution rates from

the employers and employees have been increased significantly. Thus, the nominal total contribution rate of 10 per cent (5 per cent from employees and 5 per cent from employers) at the inception of the CPF was raised in a series of steps to 50 per cent by July 1984. As a measure to combat the 1985-86 recession, via a significant reduction in the total wage cost of enterprises across the board, the rate was reduced to 35 per cent. Once the recession ended, a gradual restoration of the rate was put in place. It was only in July 1994 that the then goal of long-term rate of 40 per cent, with equal contribution rates from the employers and the employees, was realised. Following the East Asian financial crisis, there was a sharp reduction in the CPF contribution rate from 40 per cent to 30 per cent from January 1, 1999. However, with economic recovery, the employer's CPF contribution rate was partially restored by 2 percentage points in April 2000 and another 4 percentage points in January 2001, bringing the current CPF contribution rate to 36 per cent (20 per cent by the employee and 16 per cent by the employer).

4.45 Singapore's CPF scheme has often been considered as successful in achieving a number of socio-economic development objectives. CPF is more like a retirement benefit scheme as it also incorporates housing, health care, and tertiary education financing components. To accommodate all these, the contribution rates were increased significantly. Notwithstanding high contribution rates and rapid economic and wage growth, the average balances of the CPF members have remained rather low mainly due

to extensive pre-retirement withdrawals, particularly for housing, and on extremely low real rates of return credited to members' accounts. Thus, the system, despite having many strengths, has some shortcomings.

South Korea

4.46 In South Korea, the Government Civil Servant Pension System was established in 1960. This system is based on the Government Civil Servant Pension Act, designed to guarantee pensions to civil servants on retirement and to their surviving dependents in case of death. The system also provides compensation to civil servants and to their family for injury, disease, physical and mental disability, or death sustained while in duty.

4.47 The Ministry of Government Administration and Home Affairs (MOGAHA) in South Korea is responsible for the management and operation of the pension system. In order to effectively carry out the pension services and manage the pension fund, the Public Official Pension Management Corporation was established under the auspices of the MOGAHA. In order to reduce the pension outgo, the retirement age was raised from 60 to 65 as of 2003, the pension payout was lowered to 60 per cent of an employee's average salary, the employees share of the contributions was raised, the indexation was shifted from wage to price, and the benefit levels for new employees were reduced.

IV. Tax Treatment of Pensions

4.48 In a transition from a PAYG system to a funded pension scheme, it is essential to provide

incentives for employees proposed to be covered under the new scheme, particularly when the earlier scheme extended pensionary benefits with no contribution. Providing tax relief to contributions constitutes an important incentive in creating an environment for the acceptance of the scheme. However, a generous tax treatment may be costly in terms of revenue foregone and may also lead to undesirable distributional consequences.

4.49 It is theoretically possible to visualise tax relief at the following three transaction points: (i) when the individual makes a contribution to the pension fund; (ii) when income is earned from investment by the fund; and (iii) when the individual on retirement receives the benefit in the form of a pension.

4.50 Different permutations and combinations of the above three points at which tax can be levied lead to eight basic tax combinations. However, pension literature recognises four generally adopted regimes, as given below:

1. Exemption on contribution, exemption on fund return and tax on pension (EET);
2. Tax on saving income with exemption on fund return and exemption on pension (TEE);
3. Contribution from taxed income, tax on fund return and exemption on pension (TTE); and
4. Exemption on contribution, tax on earnings from fund and on pension (ETT).

4.51 The tax treatment of pensions in OECD countries at three stages identified earlier is

examined in a World Bank paper. In most countries - exceptions include Australia, Iceland and Japan - contributions to a pension scheme are made out of pre-tax income or attract a tax rebate. The extent of this deductibility is limited in most countries. At the second point, *i.e.*, on investment returns accruing in the pension fund, in most countries, they are tax-free, although Australia and Sweden apply a special tax rate (15 and 10 per cent, respectively) which are lower than marginal income tax rates to pension fund investment returns. Denmark taxes only real investment returns, in line with the 'pure' comprehensive income tax. However, the tax treatment of withdrawals from the fund, either as an annuity or a lump sum, varies considerably. Many countries extract some tax at this point, although there are often tax concessions available. Australia, Ireland, Japan and the United Kingdom, for example, allow withdrawal of a tax-free lump sum from the fund. In most countries, withdrawals from the fund before retirement age are not permissible, although in some, such as Austria and the United States, this is possible subject to a tax penalty.

4.52 With efforts towards tax harmonisation in the European Union, a large majority of countries have the EET system. Denmark, Italy and Sweden have the ETT system, while Germany and Luxembourg operate a TEE system. Germany also applies the EET system in certain cases. But even among EET States there are significant differences in the level of tax deductibility of contributions to pension schemes. Such differences reflect not merely the individual

preferences of countries in the design of their tax rules but also more fundamental choices in the structure of their systems of pension provision, in particular the relative size of first and second pillar schemes.

4.53 In countries which have recently moved, or are proposing to move, towards a funded pension system, tax treatments are different from country to country. In majority of Latin American countries, tax treatment is of the traditional expenditure tax kind (EET). The only exception is Peru, which has a pre-paid expenditure tax (TEE). Hungary and Poland have both adopted the expenditure tax for their new mandatory pension funds. Poland operates a pre-paid expenditure tax régime for voluntary pension contributions. Hungary gives a much more generous treatment: exempting investment returns and pensions in payment as well as giving a tax credit on contributions which exceeds even the highest tax rate. The Czech Republic taxes its voluntary funds in a similar way, matching contributions up to a limit.

4.54 The expenditure-tax system, which taxes pensions once, either when contributions are made or when benefits are withdrawn, is found to be a preferred way of taxing pensions in many countries. It has less distortionary impact and is also easy to administer.

V. General Characteristics of Civil Service Pension Reform Measures

4.55 An examination of the pension systems for civil servants in different countries shows that there is no uniform pattern of pension scheme

for the civil services across the countries. Depending upon the historical background and socio-economic and political considerations, various countries have adopted different combinations of reform measures. It is, however, found that the reform measures designed to manage civil services pension do not differ markedly from the measures to reform the national pension system. The amendments or modifications to the civil service pension schemes generally take the following forms:

- (i) Reducing pension liability through parametric changes: The measures taken in this regard relate to enhancing the retirement age or prescribing longer service requirements, increasing employee contribution, lowering rates of benefit accruals, and changing post retirement indexation policy, *i.e.*, from wage to price indexation.
- (ii) Gradually shifting towards some form of advance funding of benefit obligations or cost sharing with employees: This may take the form of employees' contribution, systematic contribution by the Government, establishing reserves so that investment earnings will reduce the ultimate cost of the scheme.
- (iii) Designing systems that allow greater pension portability: As countries develop socially and economically, what used to be reward for long service becomes a barrier to labour mobility, prohibiting the flexibility to

attract new entrants, which is crucial for the modernisation of the sector. Integration of civil service pension schemes with national social insurance plan benefits occurs at varying degrees in different countries.

- (iv) Harmonising compensation components (cash payments and fringe benefits) to attract, retain, and motivate civil servants.

4.56 The country experiences reveal that the financial stresses faced by civil service pension schemes are quite similar around the world. Since most of the pension bills are paid or supplemented by Government revenues, restoration of fiscal balance calls for some form of advance funding, at least partially. This may take the form of systematic contributions by employees and Governments and/or establishing reserves. In a recent World Bank survey, 14 out of 82 civil service pension schemes now have either partial or full funding, and 23 out of 82 schemes require some level of employees' contributions. Also, a few countries are in the process of designing schemes which require civil servants to start contributing to their pension benefits.

4.57 While majority of publicly mandated pension schemes are financed on a PAYG basis, several countries have initiated steps towards partial or full funding of pension liabilities, by setting up pension funds. A large number of public Pension Funds have accumulated significant reserves. According to some estimates, the stock of pension assets, including voluntary pensions, is now as much as 50 per cent of world

GDP. In this context, efficient management of these funds is crucial both - to the pension systems and to the concerned economies. Sustainability of pension schemes in such cases depends upon the performance and administration of these funds.

4.58 There are several important issues pertaining to public pension fund management. These relate to: (i) governance of the fund, (ii) objectives of pre-funding, (iii) investment policy and process, (iv) reporting and disclosure, and (v) investment returns and volatility.

4.59 Based on the evidence collected on the performance of publicly managed pension funds, it has been argued that: (i) funds are often used to achieve objectives other than providing pension, (ii) tend to earn poor rate of return relative to relevant indices. It has also been found that the returns on pension funds are especially dismal in countries with poor governance.

4.60 Since 1997, five OECD countries have undertaken initiatives with regard to pension fund management. The initiatives taken by the five OECD countries with regard to pension fund

management are briefly discussed in the Annex. While Canada, Japan and Sweden have reformed their existing pre-funding arrangements, New Zealand and Ireland have taken initiatives for building up pension reserves. A review of the reform initiatives undertaken in these countries bring out the following: (i) explicit funding target and mechanisms to trigger action in the case of deviation from this objective (adequate pre-funding to meet pension obligations), (ii) commercial investment policy flowing from the targets and explicitly aimed at maximising risk adjusted returns for members, (iii) professional boards selected through a process that maintains an arms length relationship with government officials, (iv) prohibition on social investment criteria, (v) significant share of investment done through external managers selected and retained by explicit and objective criterion, (vi) avoidance of strict portfolio limits especially on foreign investments, and (vii) high standards of reporting and disclosure including annual, independent audits, performance reviews and codes of conduct for Board members, all available to the public.

CHAPTER 5: ISSUES IN PENSION REFORMS OF STATE GOVERNMENT EMPLOYEES

5.1 The foregoing Chapters which deal with the theory and practice of Civil Service Pension schemes, as also their global evolution with particular reference to India, set out a clear perspective for a better understanding of the complex issues involved in the pension schemes of State Government employees in India. Set against such backdrop, this Chapter, while attempting to analyse the various contours of the State Government employees pension scheme in India, flags certain important issues which need immediate resolution.

5.2 The fiscal stress emanating from the increasing pension liabilities of the Central and State Government employees has emerged as a major area of concern, especially after the decision taken by the Governments pursuant to the recommendations of the Fifth Central Pay Commission. While the need for initiating appropriate measures to tackle this situation has been recognised at various levels, moves for major policy initiatives have so far been confined only to Central Government pension scheme. In order to facilitate formulation of appropriate arrangements concerning pension reforms at the State level, the Group undertook a detailed review of the existing pension scheme in the States as also other retirement facilities available to State Government employees. Keeping in view the mandate of the Group, efforts have been made to examine the fiscal implications of the existing pension scheme as also the likely pension

outgo in the near term. The issues emerging from the detailed review have been highlighted in this Chapter.

I. Existing Pension Schemes in the States

5.3 In order to facilitate a comprehensive review of the existing pension scheme in different States, the Group requested all the State Governments through detailed questionnaire/proforma to furnish details of the existing pension scheme as also other retirement benefits available to the State Government employees. The requisite details were furnished by thirteen States. It has been observed from the replies that, even though most of the States have many common features in their existing pension schemes, there are some variations with regard to certain aspects. Broad details of the pension facilities and other retirement benefits available to the State Government employees are as under:

Pension

5.4 State Government employees are entitled for a variety of pension schemes such as compensation pension, invalid pension, superannuation pension, and retiring pension. While a few States (such as Himachal Pradesh and Tripura) follow the Central Civil Service Pension Rules, 1972, others (such as Punjab and Tamil Nadu) follow their own Pension Rules. There is also a provision for family pension which is payable to the widow/widower or to an eligible family member from the date following

the date of death of an employee, while in service or after retirement. Family pension is payable after a minimum of one year of continuous service. It is also payable even before the completion of one year if an employee has been medically examined and declared fit by the appropriate medical authority for an employment.

Coverage

5.5 In all the States, pension schemes cover all State Government employees. With regard to the employees of grant-in-aid institutions (GIA) the pension schemes differ across the States. With regard to GIA institutions, which are mostly educational institutions, grants were initially given by many State Governments to meet the gap between their receipts and expenditure. However, over the years, many State Governments have accepted the entire burden relating to both the salary and pension expenditure of such institutions. In Punjab, pension scheme differs from institution to institution and the Government has not made it binding on any institution, nor has made any commitment in this regard. Likewise, in Andhra Pradesh, there are divergences in the pension practices in different regions. In some regions of the State, there are provisions for contributions by the concerned institutions towards pension payments, although contributions thus received are far below the level of pension outgo. In such cases, the gap between pension contribution and pension benefit is met by the State Government. In Rajasthan, the GIA educational institutions do not have pension scheme for their employees, except the universities. The GIA educational institutions

have Contributory Provident Fund Scheme. In Himachal Pradesh, the State Government has frozen the financial support to institutions at levels prevailing in 2001-02, except for the State Electricity Board (SEB) and Himachal Road Transport Corporation (HRTC) who fulfill mandated social obligation. It is important to note that pension burden on account of GIA institutions and Local Bodies (LBs) is quite high in some States. For example, in West Bengal, the number of pensioners belonging to direct State Government employment is more or less the same as that belonging to GIA institutions and LBs.

5.6 With regard to pension payments of LBs, divergent practices were noticed even within the States. For example, in Karnataka, while major urban bodies provide for the pension of their employees, in Maharashtra, pension facilities are extended to Zilla Parishads and the recognised and aided educational institutions including agricultural universities. In Haryana, the pension burden of employees of LBs is met through a Pension Fund created for the purpose.

5.7 With regard to pension payments of Panchayat Raj Institutions (PRIs), the practice also differs across States. In Karnataka, in case of smaller local bodies, pension burden is borne by the State Government.

5.8 Pension schemes in respect of State Electricity Boards (SEBs) and State Road Transport Corporation (SRTC) also show considerable variations across the States. While the pension burden of employees of these organisations is borne by the State Governments

in some States, there are also instances where it is met by the concerned institutions themselves.

Eligibility

5.9 As in the case of Central Government employees, the minimum eligibility period for receipt of pension on retirement, other than voluntary retirement, is 10 years of service for State Government employees. In the case of voluntary retirement, minimum service period is 20 years. The length of service is calculated on the basis of completed six monthly periods. Fraction of a year equal to three months or above is treated as a completed six monthly periods. The maximum period of service that is taken into account for calculation of pension is 33 years.

Computation

5.10 Generally, basic pension amount is calculated with reference to average basic pay drawn by the Government employees during the last 10 months of service. However, in a few States like Orissa, the basic pension is computed on the basis of the last pay drawn by an employee. Full pension at 50 per cent of the average pay is payable for those employees who have 33 years of qualifying service. For those employees who have not completed 33 years of service, the basic pension is calculated on a proportionate basis. In most of the States, there is a provision of adding 5 years while working out the basic pension pay in the case of employees seeking early retirement prior to the age of their retirement, provided they are left with 5 years of service. However, the total number of years shall not exceed 33 years for the purpose of calculation of pension. In the case

of family pension, the rate of family pension is 30 per cent of the last drawn pay at the time of retirement or death.

Quantum

5.11 In general, the minimum pension/family pension payable is Rs.1,275 p.m. The maximum limit on pension is Rs.12,250 p.m and on family pension it is restricted to Rs.7,350 p.m. There are, however, instances of minor variations. For example, in Tripura, the minimum pension is Rs.1,300 p.m, while the maximum pension is Rs. 11,200 p.m.

Dearness Relief on Pension/ Family Pension

5.12 Most of the States follow the DA formula as per the Central Government pattern. Dearness relief on pension/family pension is revised twice a year, *i.e.* on 1st January and 1st July. Most of the States have revised their pay scales following the announcement of decision of the Central Government on the recommendations of the Fifth Central Pay Commission. While most of the States follow full wage indexation for the pensioners, Kerala Government has not adopted full wage indexation.

5.13 With regard to revision of DA, while most States adopt the revision within 2-3 months of the changes in the Central DA, some States adopt the DA revisions as and when their resource position permits. In all the responding States, the DA formula remains the same for both the employees and pensioners. In all the States, excepting Kerala, the age of retirement is 58 years for Groups A, B, C and 60 years for Group D employees. In Kerala, the age of retirement is 55 years.

Commutation of Pension

5.14 A pensioner has the option to commute a portion of his/her pension, not exceeding 40 per cent of basic pension, into a lumpsum payment. Some State Governments, however, limit the commutation amount to one-third of the basic pension. Lumpsum amount payable is calculated with reference to the commutation table constructed on an actuarial basis. The monthly pension will stand reduced by the portion commuted and the commuted portion will be restored on the expiry of 15 years from the date of receipt of the commuted value of pension. However, in Orissa, restoration of the commuted portion is allowed after 12 years. In Rajasthan and Assam, restoration of the commuted portion is allowed after 14 years. Dearness relief on pension, however, will continue to be calculated on the basis of the original pension, *i.e.* without reduction of commuted portion.

Gratuity

5.15 Depending on the period of service, three types of gratuity are available to State Government employees: (i) retirement gratuity,

(ii) death gratuity, and (iii) service gratuity. All types of gratuity are calculated on the basis of basic pay and service period.

Retirement Gratuity

5.16 A minimum of 5 years qualifying service and eligibility to receive service gratuity/pension is essential to get this one time lumpsum benefit. Retirement gratuity is calculated at the rate of one fourth of the last basic pay for each completed six monthly period of qualifying service.

Death Gratuity

5.17 This is one time lumpsum benefit payable to the nominee of the deceased employee. Broadly, details of death gratuity entitlement are as under:

5.18 As per available information, Retirement Gratuity and Death Gratuity are subject to a ceiling which varies across the States from Rs. 2.5 lakhs to 3.5 lakhs.

Service Gratuity

5.19 An employee is entitled to receive gratuity (and not pension), if total-qualifying services is less than 10 years. Admissible amount

Entitlement of Death Gratuity

Sr.No.	Qualifying Service	Rate
1	Less than one year	Twice the last basic pay plus Dearness Allowance.
2	One year or more but less than 5 years	Six times of the last basic pay plus Dearness Allowance.
3	Five years or more but less than 12 years	Twelve times of the last basic pay plus Dearness Allowance.
4	Twenty years or more	Half of basic pay plus Dearness Allowance for every completed six monthly period of qualifying service subject to a maximum of 33 times of basic pay plus Dearness Allowance.

Note: In some States, amount of Death Gratuity is calculated on the basis of basic pay only.

is half-month basic pay for each completed six monthly period of qualifying service. There is no maximum or minimum monetary limit on the quantum. This one time lumpsum payment is paid over and above the retirement gratuity.

Non-Pensionary Benefits

5.20 On retirement, certain additional non-pensionary benefits such as leave encashment, Government Employees Insurance Schemes, *etc.*, are also available to the employees. Besides, the individual's accumulation to the Provident Fund, along with interest thereon is payable. It is mandatory for the Government servant to subscribe a certain (6 per cent) portion of his/her emoluments towards the General Provident Fund. The Government, from time to time, notifies the interest on this accumulation. In most of the State Governments, employees are entitled to leave encashment up to a maximum of 300 days. A few States also offer retirement fare concession for travels to home address.

II. Existing Pension Scheme for Central Government Employees and Recent Reform Measures

5.21 The Group took note of the fact that most of the State Governments generally follow the existing pension scheme of the Government of India. Similarly, various other superannuation facilities provided by the State Governments have been more or less on the pattern followed by the Government of India. Considering the near uniformity in the pension scheme of Central and State Governments employees, the Group felt that a brief review of the existing pension scheme

for Central Government employees and the recent initiatives taken by the Government of India for modifying the existing scheme would be in order.

5.22 At present, the Central Government employees are eligible for: (i) pension, (ii) commutation of pension, and (iii) gratuity. In addition, they are also entitled for certain non-pensionary benefits. Details of the superannuation benefits available to the Central Government employees are as under:

Eligibility

5.23 The minimum eligibility period for receipt of pension is 20 years of qualifying service. However, this condition of eligibility is 10 years in respect of Central Government employees retiring in accordance with the rules and entitled to superannuation pension. Family pension is payable to the spouse in the event of death of the employee after one year of completion of service or even before one year if the employee had been declared medically fit at the time of entry into Government service. Pension is calculated with reference to the average basic pay drawn by the Government servant during the last ten months of his/her service. Full pension at 50 per cent of the average basic pay is payable for 33 years of qualifying service. For qualifying service of less than 33 years, proportionate pension is payable. The minimum pension/family pension payable is Rs. 1,275 per month. The maximum limit on pension is Rs. 15,000 per month and for family pension, this limit is Rs. 9,000 per month.

Commutation

5.24 Employees have the option to commute a portion of pension, not exceeding 40 per cent,

into a lump sum payment. The monthly pension will stand reduced by the portion commuted and the commuted portion will be restored on the completion of 15 years from the date of receipt of the commuted value of pension. Dearness relief, however, will continue to be calculated on the basis of the original pension.

Gratuity

5.25 The Central Government employees are entitled for three types of gratuity depending upon the period of service, viz., (i) retirement gratuity, (ii) death gratuity, and (iii) service gratuity. All three types of gratuity are based on basic pay and Dearness Allowance. While minimum qualifying service for receiving retirement gratuity is 5 years, maximum payable amount is Rs. 3.5 lakh. Death gratuity is a one time lump sum benefit payable to the widow/widower or nominee of an employee. There is no stipulation in regard to any minimum length of service rendered by the deceased employee. A retiring employee is entitled to receive gratuity if total qualifying service is less than 10 years. For non-pensionable Central Government employees, the Contributory Provident Fund scheme is applicable. Under this scheme, the employee contributes 10 per cent of the basic pay and a matching contribution is made by the Government.

5.26 Further, other non-pensionary benefits like leave encashment and Central Government Employees Insurance Scheme are available to the Central government employees. Besides, contribution to GPF along with interest is available as it is mandatory to subscribe 6 per cent of the emoluments towards GPF.

Recommendations of the High Level Expert Group on New Pension Scheme

5.27 The Union Finance Minister in the Budget speech for 2001-02, envisaged a new pension scheme based on defined contribution for new recruits entering Government service after October 1, 2001. In order to review the existing pension scheme and to provide a road map for the next steps to be taken, the Government of India constituted a High Level Expert Group on New Pension System in June 2001 (Chairman: Shri B.K. Bhattacharya). The Group, after detailed examination of all the issues, felt that an unfunded Defined Benefits (DB), Pay As You Go (PAYG) scheme or a pure Defined Contribution (DC) scheme would not be suitable and, therefore, recommended a hybrid DB/DC scheme to meet the requirements of Central civil servants. The Group recommended a two-tier scheme where the first tier was intended to act as a social security scheme with mandatory contribution of 10 per cent each on the basic pay and DA by the employees and Government and the second tier for promoting personal savings. While the Group did not recommend any limit for employees in the case of second tier, a cap of 5 per cent of pay plus DA was recommended in the case of matching contribution by the Government. Contribution under the second tier would be portable and tax exempt within the overall ceilings prescribed by the Government on approved saving schemes. Further, in the case of second tier, the amount on retirement could be either taken as a lump sum or converted into annuities at the choice of the individual. The Group also recommended that

the contribution to the second tier would be invested in separate funds with the fund managers investing the contributions as per more liberalised investment guidelines.

5.28 The first tier would be a Defined Benefit at 50 per cent of the average emoluments over the last 36 months. The minimum qualifying service will be 20 years and full pension will be payable on superannuation for qualifying service of 33 years. A second exit point can be provided at any age after 50 years, but in such cases, full pension or proportionate pension will be payable only from the date of superannuation. However, at the option of the Government servant, a further reduced amount actuarially calculated could be paid from the date of retirement. The Group also recommended a minimum and a maximum pension. Commutation of pension, its restoration and family pension were recommended in the new scheme. The recommended scheme envisaged indexation of inflation up to 5 per cent and did not provide for any wage indexation. Furthermore, the Group recommended the new scheme only to the applicability of the new entrants to the civil service.

5.29 The Group while recommending establishment of three separate Pension Funds for Railways, Defence and other Civil ministries, also recommended investment policies, institutional, and managerial arrangements, *etc.* As per the recommendations, the Investment Committee would consist of Trustees with expertise in financial and actuarial matters as

well as representatives from the Government and the employees. The Group recommended periodic actuarial valuation of the Fund, so that regular parametric changes (in benefits, contribution rate etc) could be undertaken to ensure actuarial viability of the Fund (Balances, Asset and Liability). The Committee would formulate the details of investment policy subject to the overall guidelines laid down by the Government and the Board of Trustees, oversee its implementation and monitor the Fund's performance. The investment pattern would satisfy the twin principles of safety and return. The first tier was expected to be fully funded scheme, the funds being managed by Professional Fund Managers subject to supervision of Investment Committee of Board of Trustees, Board itself and a Pension Development and Regulatory Authority (PDRA). The contribution from the second tier would have a separate institutional structure and will be based on investment guidelines that might be more liberal than what was laid down for the first tier. Subsequently, based on the experience gained, individuals might be permitted to exercise their choice of type of fund in which funds can be invested. The Group recommended constitution of a Pension Development and Regulatory Authority for the pension sector in the country. The Group noted that over a period of time, with the growth in the private pension funds and Government pension fund, there would be a need to regulate this growing segment. In this context, the Group suggested the constitution of an independent Pension Regulatory Authority.

New Pension Scheme of the Government of India

5.30 The Government approved recently the proposal to implement the budget announcement of 2003-04 relating to introducing a new restructured defined contributory pension system¹⁴ for new entrants to Central Government service, except to Armed Forces, in the first stage, replacing the existing system of defined benefit pension system. The new pension system would be based on defined contributions (DC), and would be mandatory for new recruits to the Central Government service, except to Armed Forces. The monthly contribution would be 10 per cent of their salary and dearness allowance to be paid by the employee and matched by the Central Government. The contributions and the investment returns would be deposited in a non-withdrawable tier-I account. The existing provisions of defined benefit pension and GPF would not be available to the new recruits in the Central Government service.

5.31 In addition to the above pension account, each individual may also have a voluntary tier-II withdrawable account at his option. This option is given as GPF is proposed to be withdrawn for new recruits in Central Government service. Government will make no contribution into this account.

5.32 As per the new regulations, pension contributions and accumulation would be accorded tax preference up to a certain limit,

but benefits would be taxed as normal income. Individuals can normally exit at or after age 60 years for tier I of the pension system. At exit, the individual would be mandatorily required to invest 40 per cent of pension wealth to purchase an annuity. The individual would receive a lump-sum of remaining pension wealth, which he would be free to utilise.

5.33 An independent Pension Fund Regulatory and Development Authority (PFRDA) will regulate and develop the pension market. PFRDA will develop its own funding stream based on user charges.

5.34 There will be different investment choices such as option A, B and C. The option A would imply predominant investment in fixed income instruments and some investment in equity. Option B will imply greater investment in equity. Option C will imply almost equal investment in fixed income and equity. Pension fund managers would be free to make investment in international markets subject to regulatory restrictions and oversight in this regard. It is proposed to evaluate market mechanisms (without any contingent liability) through which certain investment protection guarantees can be offered for the different schemes.

5.35 The new pension system will have a central record keeping and accounting (CRA) infrastructure, several pension fund managers (PFMs) to offer three categories of schemes viz., option A, B and C.

¹⁴ This section is based on press release by the Ministry of Finance, Government of India.

III. Pension Payments of the State

Governments: Past Trends and Projections

Past Trends: (1980-2002)

5.36 In accordance with the Terms of Reference, the Group undertook a review of the trends in pension payments of State Governments and their fiscal implications. During the period 1980-2002, pension payments of the State Governments have shown a sharp rise at a compound rate of 23.6 per cent from Rs. 268 crore in 1979-80 to Rs. 28,197 crore in 2001-02 (Statement 1). While the aggregate pension payments during the Eighties grew at a compound rate of 25.2 per cent, there was some deceleration during the first-half of the Nineties when the growth rate was 19.4 per cent. There was, however, a sharp rise in pension payments during the second-half of the Nineties (growth rate of 29.8 per cent).

5.37 The steep increase in States' pension outgo could, *inter alia*, be attributed to significant expansion in the number of State Government employees during the earlier decades; extension of pension facilities to employees of various non-Government institutions (Grant-in-aid institutions, Local Bodies, *etc.*); impact of various pay revisions; implementation of the Central Government's decision on recommendations of Fifth Central Pay Commission by the States (with or without any modifications); periodic DA increases; and significant improvement in life expectancy.

5.38 State-wise trends in pension payments showed that the growth rate widely varied across the States. During the period 1980 to 2002, the

annual average growth rate of pension payments ranged between 20.3 per cent (Karnataka) and 33.3 per cent (Meghalaya). During the Eighties, 9 States recorded a compound growth rate in pension payments exceeding 30 per cent. In the second-half of Nineties, as many as 15 States had a growth rate exceeding 30 per cent. However, there was some improvement in 2001-02 when only one State witnessed a growth rate of more than 30 per cent, while in the case of 13 States, the growth rate was below 10 per cent (Table 1).

5.39 As the States' ability to meet the growing pension liabilities largely depends on their success in measures for revenue augmentation and containment of revenue expenditure, an examination of the trends in States' revenue receipts and expenditure would be in order. The growth in total revenue receipts of the States during the period 1980-2002 at 14.3 per cent was much lower than the growth in pension payments (23.6 per cent). While pension payments were rising even during the Eighties and the first-half of the Nineties, pressure on State finances on account of this was not acutely felt, in view of the reasonably good growth performance of the total and own revenue

Table 1: Distribution of States according to Growth Rate in Pension Payments

Per cent	(No. of States)				
	1980-81 to 89-90	1990-91 to 94-95	1995-96 to 1999-2000	2000-01*	2001-02
Above 30	9	4	15	6	1
20-30	15	8	8	6	3
10-20	—	12	2	2	8
Less than 10	1	1	—	11	13

* The three new States, viz., Chhattisgarh, Jharkhand and Uttaranchal are not included in the Table.

receipts of the States (Table 2). Moreover, there was a deceleration in total revenue expenditure of the States from 22.1 per cent during first half of Eighties to 16.4 per cent during the first-half of the Nineties. There was, in fact, a noticeable improvement in the State finances during the first half of Nineties when the revenue receipts were buoyant (showing a rise of 16.7 per cent in total revenue and 17.2 per cent in own revenue) and rate of growth of pension payments and total revenue expenditure were decelerating (26.4 per cent to 19.4 per cent in case of pension and 22.1 per cent to 16.4 per cent in respect of revenue expenditure). There was a significant reversal of this trend during the second-half of Nineties when growth in pension payments almost touched 30 per cent. As against this, growth in the States' total revenue showed a sharp deceleration from 16.7 per cent during 1990-95 to 11.1 per cent in the second half of Nineties.

5.40 The increasing pension liabilities of the States pre-empted a large share of their revenue receipts over the review period. The Group

Table 2: Growth in Pension Payments, Revenue Receipts and Expenditure of State Governments

(Per cent)

Sr. No.	Period	Pensions Payments	Total Revenue	States' Own Revenue	Revenue Expenditure
1	1980-85	26.4	15.0	15.6	22.1
2	1985-90	24.0	15.6	15.8	16.3
	Change (2-1)	-2.4	0.6	0.2	-5.8
3	1990-95	19.4	16.7	17.2	16.4
4	1995-00	29.8	11.1	11.3	15.2
	Change (4-3)	10.4	-5.6	-5.9	-1.2
5	2000-01	12.2	14.8	12.8	11.7
6	2001-02	10.8	7.4	9.7	8.0
	1980-2002	23.6	14.3	14.6	16.0

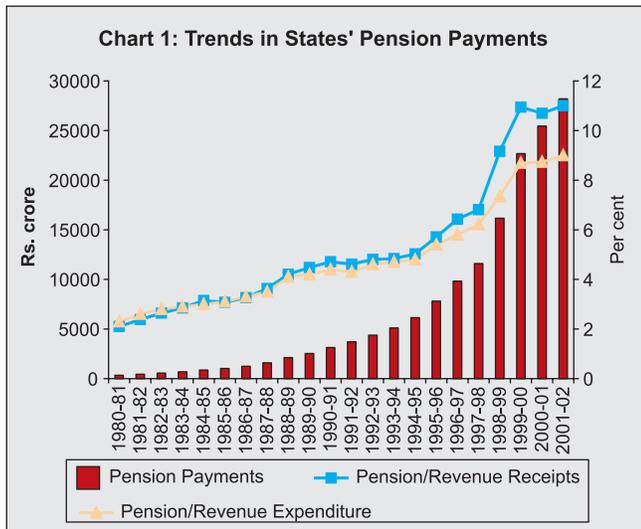
noted that, in a few States, the committed expenditure on interest, salary and pension together has already exceeded their total revenue receipts. This, naturally would have put constraints on the States' ability to undertake developmental activities. The share of developmental expenditure in the total expenditure of the States had declined over the years from 69.5 per cent in 1990-91 to 57.4 per cent in 2001-02.

5.41 With a faster growth in pension payments as compared to the revenue receipts of the States, their pension payments as percentage of revenue receipts rose continuously from 2.1 per cent in 1980-81 to 4.5 per cent in 1989-90 and further to 10.9 per cent in 1999-2000. This ratio, however, showed a marginal decline in 2000-01 to 10.7 per cent, though it again rose to 11.0 per cent in 2001-02 (Table 3, Statement 2). Similarly, ratio of pension payments to States' own revenue receipts also rose by nearly four times from 3.4 per cent in 1980-81 to 17.2 per cent in 2001-02. The share of pension payments in revenue expenditure also rose from 2.3 per cent in 1980-81 to 9.0 per cent in 2001-02 (Table 3 and Graph 1).

Table 3: Pension Payments as a percentage of Revenue Receipts and Expenditure of State Governments

(Per cent)

Sr. No.	Year	Total Revenue	Own Revenue	Revenue Expenditure
1	1980-81	2.1	3.4	2.3
2	1989-90	4.5	7.2	4.2
3	1995-96	5.7	9.0	5.4
4	1999-00	10.9	17.1	8.7
5	2000-01	10.7	17.0	8.7
6	2001-02	11.0	17.2	9.0



5.42 The distribution of States according to the ratio of pension payments to total revenue receipts of States reveals certain interesting findings. During 1980-81, such ratio was below 6 per cent for all the States. Majority of the States had a ratio of less than 2 per cent (Table 4). By the year 2001-02, the position, however, deteriorated to such an extent that in 13 States, the ratio of pension payments to revenue receipts was more than 10 per cent. There were only two States with ratio below 2 per cent.

Table 4: Distribution of States According to Ratio of Pension Payments to Total Revenue Receipts

Per cent	(No. of States)					
	1980-81	1990-91	1995-96	1999-00	2000-01*	2001-02
Above 20	—	—	—	1	1	1
15-20	—	—	—	3	1	3
10-15	—	1	1	9	10	9
8-10	—	—	1	3	5	8
6-8	—	5	5	3	3	2
4-6	2	4	8	3	4	3
2-4	5	10	7	2	1	-
Below 2	15	5	3	1	2	2

* Due to the non-availability of data, the State of Jharkhand is not included here.

5.43 Similarly, there was sharp deterioration in the ratio of pension payments to States' own revenue receipts (Table 5, Statement 3). In 1980-81, in the case of 17 States, such ratio was below 4 per cent. Only 2 States had a ratio exceeding 6 per cent in that year. As against this, by 2001-02, as many as 12 States had a ratio of more than 25 per cent. Of these States, four north eastern States had a ratio exceeding 50 per cent.

5.44 It is important to note that inter-State variation in pension burden became more pronounced over the years (Table 6). During 1980-81, the ratio of pension payments to revenue receipts varied from less than one per cent (Nagaland and Sikkim) to 5.5 per cent (Kerala). By 2001-02, such variation sharply rose from 1.0 per cent (Uttaranchal) to 20.3 per cent (Kerala).

5.45 During the first half of Nineties, the average ratio of Pension payments to total revenue receipts of the States was 4.8 per cent for all States, while it sharply varied from State to State, viz. 0.9 per cent for Sikkim, 6.7 per cent for Andhra Pradesh, and 11.9 per cent for

Table 5: Distribution of States According to Ratio of Pension Payments to States' Own Revenue Receipts

Per cent	(No. of States)					
	1980-81	1990-91	1995-96	1999-2000	2000-01*	2001-02
Above 50	—	—	1	3	5	5
25-50	—	1	2	9	8	7
10-25	—	6	12	10	8	12
8-10	—	7	3	—	2	1
6-8	2	6	3	2	1	1
4-6	3	3	1	—	1	—
2-4	13	5	2	—	1	1
Below 2	4	—	1	1	1	1

* Due to the non-availability of data, the State of Jharkhand is not included here.

Kerala. In the second half of the Nineties, while this ratio rose to 7.8 per cent in the case of all States, State-wise position indicated wide variation from 0.7 per cent for Sikkim, 10.8 per cent for Tamil Nadu, and 15.4 per cent for Kerala (Table 6; Graph 2).

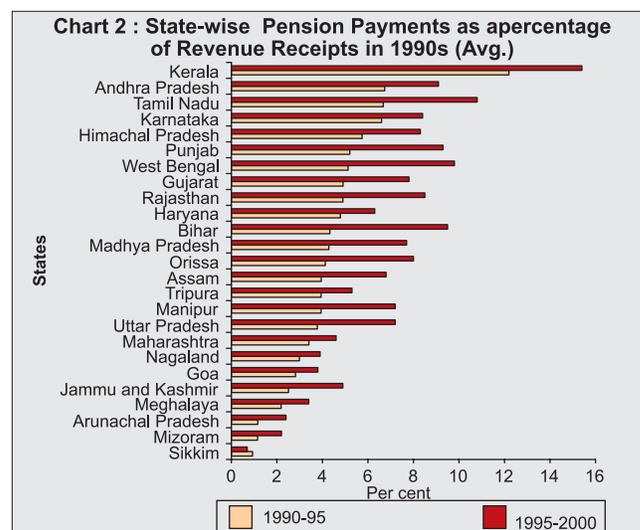
Table 6: State-wise Pension Payments as a percentage of Revenue Receipts

States	1980-90	1990-95	1995-00	2000-01	2001-02
1	2	3	4	5	6
Andhra Pradesh	4.1	6.7	9.1	12.2	10.6
Arunachal Pradesh	0.7	1.2	2.4	4.9	5.1
Assam	1.5	3.9	6.8	11.9	12.3
Bihar	2.4	4.3	9.5	14.5	17.4
Chhattisgarh	—	—	—	*	10.4 **
Goa	2.4	2.8	3.8	5.8	6.2
Gujarat	3.3	4.9	7.8	9.1	9.4
Haryana	2.5	3.5	6.3	8.7	8.6
Himachal Pradesh	2.4	5.7	8.3	12.8	11.9
Jammu and Kashmir	2.6	2.5	4.9	8.3	8.3
Jharkhand	—	—	—	*	8.5 **
Karnataka	6.0	6.6	8.4	10.7	10.7
Kerala	8.5	11.9	15.4	22.1	20.3
Madhya Pradesh	2.3	4.3	7.7	7.0	9.0
Maharashtra	2.6	3.3	4.6	7.2	8.6
Manipur	1.5	3.9	7.2	12.2	11.9
Meghalaya	0.9	2.2	3.4	4.9	5.2
Mizoram	0.6	1.1	2.2	4.8	4.6
Nagaland	0.7	3.0	3.9	6.2	6.2
Orissa	2.3	4.1	8.0	12.1	14.2
Punjab	3.6	5.2	9.3	11.9	11.6
Rajasthan	3.8	4.5	8.5	13.6	13.9
Sikkim	0.5	0.9	0.7	2.1	1.2
Tamil Nadu	3.8	6.6	10.8	16.0	16.2
Tripura	1.6	3.9	5.3	9.0	9.4
Uttaranchal	—	—	—	*	1.0 **
Uttar Pradesh	2.0	3.4	7.2	8.7	9.3
West Bengal	2.9	5.1	9.8	13.3	15.5
All States	3.2	4.8	7.8	10.7	11.0

* As three new States were created on different dates during 2000-01, the figures for the financial year are not given.

** Indicates treasury outgo. Pension liabilities of employees retired before creation of States are divided between successor States by Accountant General. Hence, the actual pension payments are higher.

Source: Various issues of the Article on State Finances, Reserve Bank of India.



5.46 The observed ratio was much higher when pension payments were expressed as percentage of State's own revenue receipts. Such ratio went up from 8 per cent in the first half of the nineties to 12.4 per cent in the second half of the nineties. State-wise position, however, indicated wide variations with high ratios observed for the North eastern States. In 2001-02, pension payments alone pre-empted as high as 17.2 per cent of States' own revenue receipts (Table 7).

Projections of Pension Payments: 2002-2011

5.47 The Memorandum indicated that the Group may make an attempt to assess the future pension liabilities of the State Governments. In order to facilitate an actuarial¹⁵ estimation of the future pension liabilities, the Group requested all the State Governments to furnish the various details, including data on age-wise and category-wise particulars of both the pensioners and the employees. The responses received from the States were, however, grossly inadequate to attempt an actuarial estimation of future pension

¹⁵ For details on application of actuarial mathematics, please see Annex. VII.

Table 7: State-wise Pension Payments as a percentage of States' own Revenue Receipts

States	1980-90	1990-95	1995-00	2000-01	2001-02
1	2	3	4	5	6
Andhra Pradesh	6.1	10.5	14.5	17.9	14.1
Arunachal Pradesh	5.7	8.9	28.8	56.3	35.7
Assam	3.9	11.9	21.8	34.7	34.8
Bihar	5.3	10.7	24.2	44.0	63.5
Chhattisgarh				*	16.8 **
Goa	4.3	4.4	4.5	6.6	6.8
Gujarat	4.4	6.1	9.7	11.6	11.5
Haryana	3.2	4.3	7.5	9.9	9.9
Himachal Pradesh	8.1	20.3	24.8	43.2	39.8
Jammu and Kashmir	8.4	15.1	31.6	45.5	49.2
Jharkhand				*	17.1 **
Karnataka	8.3	9.0	11.4	14.8	15.0
Kerala	12.6	17.8	21.4	29.6	28.4
Madhya Pradesh	3.8	7.4	12.7	13.1	16.0
Maharashtra	3.2	4.2	5.5	8.4	10.0
Manipur	17.9	44.3	88.0	140.1	173.6
Meghalaya	5.7	13.8	19.3	26.8	15.8
Mizoram	13.2	13.5	32.5	72.3	61.8
Nagaland	6.7	32.8	50.0	87.5	87.4
Orissa	5.7	10.3	18.6	29.0	31.8
Punjab	4.5	6.5	11.0	14.3	13.3
Rajasthan	6.5	8.0	13.8	24.2	23.5
Sikkim	2.4	4.1	0.9	5.2	1.8
Tamil Nadu	5.6	9.5	14.5	20.9	20.9
Tripura	15.3	43.4	51.3	67.2	68.3
Uttaranchal				*	2.5 **
Uttar Pradesh	4.0	7.2	14.1	16.7	16.4
West Bengal	5.0	9.0	17.4	27.2	31.0
All States	5.2	8.0	12.4	17.0	17.2

* As three new States were created on different dates during 2000-01, the figures for the financial year are not given.

** Indicates treasury outgo. Pension liabilities of employees retired before creation of States are divided between successor States by Accountant General. Hence, the actual pension payments are higher.

Source : Various issues of the Article on State Finances, Reserve Bank of India.

liabilities. The Group understood that data on age-profile of employees and pensioners have not been maintained by the State Governments. Only two States (West Bengal and Orissa) could provide age-wise details of both the employees and pensioners.

5.48 In the absence of requisite details for actuarial estimation of future pension liabilities, the Group made an attempt to collect from the State Governments projections of pension payments in their respective States. The Group had requested all the State Governments to provide projections of their pension payments. In response, only 7 States furnished their projections of pension payments for the period 2002-03 to 2010-11. As per the data provided by the States, the projected pension payments in respect of the 7 responding States would go up from Rs. 8,886 crore in 2002-03 to Rs.18,634 crore by 2010-11. The compound growth in projected pension payments, based on the data reported by the responding States, ranged from 5.5 per cent to 13.2 per cent. For all the reporting States, it averaged 9.7 per cent. It was observed that the projections were not based on actuarial calculation. Further, assumptions concerning projections varied across States. While in the case of Assam, the projections were based on average growth rate in last three years, in the case of Maharashtra, projections assumed a growth of 10 per cent. Other States have not furnished details on the methodology used in the pension projections. In view of above, the projected pension payments were not considered realistic.

5.49 The Group, therefore, favours the projection made on the basis of historical growth rates, even if they are likely to be on the higher side. Accordingly, if the pension payments rise at the historical compound growth rate of 23.5 per cent observed during the period 1980-81 to 1995-96, consolidated pension payments of the

State Governments would rise to as high as around Rs.1,88,000 crore in 2010-11 (Table 8). Even if we apply a longer period growth rate of 23.6 per cent (1980-81 to 2001-02), the projected pension liabilities would, more or less, remain the same (Rs. 1,89,000 crore).

5.50 It may be noted that the rate of inflation has decelerated in recent years. The average rate of inflation (CPI-Industrial Workers) for the period 1980 to 2002 was about 9 per cent. In 2001-02, the inflation rate was lower at 4.3 per cent. Assuming that the present low inflationary situation continues in future, the same would lead to lower pension outgo mainly on account of dearness allowance. Thus, other things being same, the projected increase in pension payments could be somewhat lower than that shown in Table 8.

5.51 In order to assess the likely fiscal implications of increasing pension payments, the States' revenue receipts (total revenue receipts and States' own revenue receipts) were also

projected on the basis of the historical growth rates recorded during the period 1980-81 to 1995-96. While the total revenue receipts recorded a growth of 15.5 per cent during the above period, States' own revenue receipts rose by 15.9 per cent. Thus, if pension payments and revenue receipts (both total and States' own) grow at their historical growth rates, the ratio of pension payments to revenue receipts of the States would show a significant rise in the period ahead. While pension payments would pre-empt about 20.1 per cent of the total revenue receipts of the States in 2010-11, the pre-emption would be as high as about 30.3 per cent of the States' own revenue receipts. On the basis of historical growth rates for a longer period (1980-81 to 2001-02), it is observed that total revenue receipts would record a growth of 14.3 per cent, while States' own revenue receipts would rise by 14.6 per cent. Accordingly, pension payments would pre-empt about 22.3 per cent of the total revenue receipts of the States in 2010-11; the pre-emption would be much higher at 33.8 per cent of the States' own revenue receipts.

Table 8 : Projected Pension Payments of State Governments (2010-11)

Year	Projected pension payments based on historical growth rates		
	Pension Payments (Rs. crore)	As percentage of Total Revenue Receipts	As percentage of States' Own Revenue Receipts
2001-02 (Actuals)	28,197	11.0	17.2
2010-11 (Projected)	1,88,000 *	20.1 *	30.3 *
	1,89,000 **	22.3 **	33.8 **

* Based on the historical growth rate of 23.5 per cent in pension payments during the period 1980-81 to 1995-96. Projected growth rate in total revenue and States' own revenue receipts are based on their historical growth rate at 15.5 per cent and 15.9 per cent, respectively during the period 1980-81 to 1995-96.

** Based on the historical growth rate of 23.6 per cent in pension payments during the period 1980-81 to 2001-02. Projected growth rate in total revenue and States' own revenue receipts are based on their historical growth rate at 14.3 per cent and 14.6 per cent, respectively during the period 1980-81 to 2001-02.

IV. General Response from the States on the need for Pension Reforms

5.52 The very fact that the initiative for constituting this Group emanated from the decision taken in one of the Conferences of State Finance Secretaries held in the Reserve Bank of India is a clear reflection of the concern of the State Governments regarding the mounting pension liabilities which further contribute to the already deteriorating fiscal situation of the States. Recognising the seriousness of the States'

concern, the Group, through a detailed questionnaire, sought the specific views of the State Governments regarding the pension burden of the States as also their suggestions regarding appropriate reform measures.

5.53 In order to solicit the views of a few States which are not represented in the Group, as also to obtain a feedback from the political leadership in the States, a small team led by the Chairman visited seven States, viz., Kerala, Andhra Pradesh, West Bengal, Orissa, Punjab, Haryana, and Uttar Pradesh. The team held discussions with the senior officials of these States and the Finance Ministers of Kerala, West Bengal, Orissa, Punjab and Haryana Governments.

5.54 The feedback revealed that all the State Governments are seriously concerned about the fiscal implications of growing pension burden. There has also been unanimity regarding the need for arresting the trend, though no clear cut and uniform suggestions were forthcoming. While many States have envisaged certain measures to address the issue, no final decision has yet been made by most of the States. Some of the State Governments indicated that they would like to wait for finalisation of the Central Government's new pension scheme. Generally, for the existing employees, the States Governments would like to continue with the existing pension scheme, even though some States have expressed their willingness to go in for some parametric changes even for existing employees. A number of States are in favour of introducing contributory pension scheme for

the newly recruited employees. In the case of a few other States, the preference is for a new pension scheme based on defined contribution modeled on the Government of India pattern. At least one State was in favour of assuring an appropriate pension level even for employees covered by a contributory scheme. One of the Finance Secretaries explained his personal concern about the impact of a pure 'Defined Contribution Scheme' on the honesty and integrity of civil servants. Officers of Finance Department of another State expressed a bit of curiosity about devising a D.C scheme with some element of defined benefit (subject to parametric changes by regular actuarial valuation). There have also been views that the new contributory pension scheme may also be extended, on an optional basis, or even on a compulsory basis, to certain sectors of existing employees, say those with a total service of less than ten years.

5.55 With regard to grant-in-aid (GIA) institutions, the States, in general, favoured gradual passing on the pension burden from the State exchequer (wherever applicable) to the respective institutions. Wherever possible, this could also be made applicable even for existing employees of the GIA institutions in a gradual manner.

V. Issues in Pension Reforms of State Government Employees

5.56 The Group took note of the differences in the issues concerning pension reforms at the Centre and the State level. In the case of State Governments, in addition to their own employees, many State Governments meet the pension

expenditure relating to the employees of GIA institutions and Local Bodies. In some States, the number of employees of GIA institutions and Local Bodies is significantly high. Further, there are significant inter-State differences relating to pension payments. Therefore, more than one approach to address pension issues at the States' level seem to be inevitable.

5.57 The Group took note of the fast deterioration of State finances in recent years, especially in the second half of 1990s. With increasing pre-emption of revenue receipts for meeting certain committed expenditure items like salaries, pension and interest payments, the States are finding it difficult to undertake any developmental activities. As mentioned earlier, pension payments account for over 10 per cent of the total revenue receipts of State Governments and it is likely that they would go up significantly in the future. While there is an urgent need for measures to augment revenue receipts, simultaneous expenditure containment assumes critical importance so that the problem of mounting unfunded pension liabilities could be bridled, if not stopped in the near term. Thus, considering from all the contours, restoration of fiscal stability would require drastic reforms on the pension front. The Group noted that, in some States, the total expenditure on salary, interest and pension payments has already exceeded the total revenue receipts of the State Governments. It is important to note that a significantly high proportion of the gross fiscal deficit (GFD) has resulted from the revenue deficit. The revenue deficit as a percentage of GFD of the States rose from 28.3 per cent in

1990-91 to nearly 60 per cent in 2001-02. High and rising revenue component in the GFD implies continued and increasing use of borrowed resources to meet the revenue expenditure. While the States have taken/envisaged several measures to address the issue from a medium term perspective, the issue of deterioration in State finances remains an area of concern.

5.58 Against the backdrop of the mounting pension liabilities and the deteriorating financial position of the States, the Group's deliberations on the issues concerning reform options in designing an appropriate pension scheme for the State Government employees *inter alia* covered: (i) need for introducing structural changes from the present non-contributory PAYG defined benefit scheme to a pure defined contribution or a hybrid scheme, (ii) coverage, (iii) investment pattern, (iv) nature and management of pension funds, (iv) institutional, governance and regulatory issues, and (v) need for various parametric changes such as changes in the basis of calculation, indexation formula, commutation, family pension, age of retirement; leave encashment, *etc.*

Structural Changes versus Parametric Changes

5.59 On detailed examination of the complex features associated with the existing pension schemes of State Government employees and after detailed deliberations, the Group came to the conclusion that continuation of the existing pension scheme without any modification would be unsustainable and would imply further deterioration of the States' financial position.

5.60 Two broad options available for pension reforms in the States could be either structural or parametric changes in the existing pension system. Structural reform approach involves major changes in the existing pension scheme such as inclusion of DC element in the DB pension system, or a full-scale replacement of the DB approach with a DC system. Parametric reforms, on the other hand, refer to minor changes in the characteristics of the existing pension system such as the retirement age, pension benefits, indexation formulae, commutation formula, partial pre-funding of pension liability, *etc.*

5.61 Looking purely from the angle of fiscal sustainability of the States and the magnitude of the problem, structural alteration in the existing pension scheme would appear to be necessary. However, from a pragmatic angle, the Group feels that major changes in the existing pension scheme may not be possible and feasible for the existing employees in view of the legal implications and socio-political considerations. Since the positive fiscal impact of the structural changes, as applicable to new recruits, will be felt only after a long gap of around 35 to 40 years (or a little earlier if employees with less than 10 years of service could be brought under any modified scheme), this measure alone may not provide any immediate financial/fiscal relief to the State Governments. The magnitude of the problem, therefore, necessitates some parametric changes involving trimming of pension and other retirement benefits, wherever possible and feasible, for the existing employees as well as for pensioners.

Defined Benefit (DB) versus Defined Contribution (DC) and Hybrid Schemes

5.62 Having recognised the need for introducing structural changes in the existing pension scheme, the Group considered various options which, *inter-alia*, include a pure DC Scheme or a hybrid Scheme. The Group took note of the pros and cons of both the DB and the DC Schemes.

5.63 Comprehensive details of the pros and cons of DB/DC schemes are given in Chapter 2. The advantage of the DB scheme is that it is simple in administering and can provide a secure and predictable source of revenue to the pensioners. The beneficiary receives the amount promised in the scheme and the employer bears the risk. In comparison, a DC scheme offers more flexible and portable retirement benefits to the participants. Under this, the benefit totally depends upon the employees' contribution and the returns thereon. In the case of a DC scheme, the investment risk is borne by the employees.

5.64 Shifting from a pure DB scheme, as it now exists in the States, to a DC scheme would facilitate reduction in the fiscal costs associated with the DB scheme. In the case of a pure DC Scheme, the Government's liability is confined to its periodic contribution to the pension fund. As such, the fiscal implications are not open-ended. The liability of the Government ends once the employee retires. Factors such as demographic developments, price increases, wage rise, *etc.* taking place after an employee's retirement also would not have any implications on the level of contribution by the Government.

5.65 Both these schemes (DB or DC) would face a demographic risk when the proportion of pensioners relative to active workers increases. While the success of the DB scheme would largely depend on the growth of the economy and on the labour market and political risks, that of DC scheme would depend on the investment performance and attractive investment returns. While a pure DB or PAYG system would put pressure on the Government finances, a DC scheme with no predetermined benefits would make the pensioners susceptible to financial insecurity. In the case of an unalloyed DC pension scheme, the benefit would solely depend upon the performance of the fund. Therefore, phases of business cycle would have a significant impact on the pensioner's income. During boom periods, earnings will be more and vice versa. This would lead to enormous uncertainty and may not suit those who are primarily interested in having a regular and steady income stream during the retired life.

5.66 The Group recognises the fact that pension is both a reward for past service as well as a social requirement and there is no formal post-retirement income support system for Government employees other than pension. The design of any pension scheme would, therefore, has to balance between retirement benefit of the employees and the financial burden on the State Governments. In this connection, the Group took note of the Supreme Court verdict in 1982 in respect of a writ petition filed by D.S. Nakra vs. the Union of India. The Supreme Court ruled that pension is not only compensation for loyal service rendered in the past, but has also a

broader significance in that it is a measure of socio-economic justice which provides economic security in the fall of life when physical and mental prowess is ebbing corresponding to aging process and, therefore, one is required to fall back on savings. The apex court observed that : (i) pension is neither a bounty nor a matter of grace depending upon the sweet will of the employer and that it creates a vested right, (ii) pension is not an ex-gratia payment but is a payment for the past service rendered, and (iii) it is a social welfare measure rendering socio-economic justice to those who in the hayday of their life have toiled ceaselessly for the employer on an assurance that in their old age they would not be left in the lurch.

5.67 Keeping in view the complex nature of issues involved as detailed above, any recommended arrangement would need to take into consideration the needs of the employees in their old age as also financial burden of the State Governments. Given the present fiscal stress faced by the State Governments, they may not be able to continue with the existing non-contributory defined benefit pension scheme for long. Hence, modifications become unavoidable as detailed in Chapter 6.

Coverage of the Pension Scheme

5.68 With regard to coverage, one crucial issue is whether any modified scheme should be applicable only to new employees or also to certain categories of the existing employees. The Group held detailed deliberations on this issue keeping in view the various legal and fiscal implications. While framing any new rule or

amendments to the pension rules, it should be borne in mind that the Supreme Court's observations and directions are not breached. However, the seriousness of the emerging fiscal implications of continuing with the existing schemes may prompt some of the States to explore the possibility of extending any modified pension scheme to some of the existing employees also (say, those with less than ten years of service). It should be possible for the individual State Governments to defend such apparently stringent measures in Courts of law, if State's financial position is properly explained to the Courts and a case is made out that a State Government can not function only for the welfare of the Government servants and the Government has a lot of responsibility for public welfare, which can not be met by only borrowed funds.

Pension Fund and Investment Pattern

5.69 The Group noted that majority of the publicly mandated pension schemes are still financed on a PAYG basis. However, in recent years, several countries have initiated steps towards partial or full funding of pension liabilities, by setting up dedicated "Pension Funds". Any DC pension scheme for the State Government employees - whether pure DC or a hybrid scheme- would require setting up of a "Pension Fund" out of the contributions made by the employees and the State Governments. In this connection, the Group examined the details of the proposed Pension Fund under the new pension scheme announced by the Government of India for its employees and took note of the calculations by the Government of

India regarding expected benefit from 10 per cent contribution from the Government employees and a matching contribution from the Centre. The Group views that any Fund created out of the contributions should be used only for meeting pension liabilities, and not for financing the budget deficit of the State Governments.

5.70 It would be important to pay due attention to the likelihood of mis-match between assets and liabilities. Extreme vigilance would be necessary to ensure that the assets created out of contributions are adequate to meet the defined minimum pension liabilities. The High Level Expert Group on New Pension Scheme for Central Government employees, after examining the issue, had observed that, in order to avoid the mis-match, the differential between wage increase and return on investment should be at least 2 per cent. If the fund fails to earn the requisite return, it would become necessary either to increase the rate of contribution or to reduce the level of guaranteed benefit. If not, the shortfall in payment of pension liabilities will have to be financed with budgetary support, which may ultimately prove unsustainable.

5.71 As any contributory pension scheme for State Government employees would generate large sized Pension Funds, the issue of appropriate investment policies assumes critical importance. The Group had the opportunity of studying the recommended arrangements for the Central Pension Fund by the Expert Group on New Pension System for the Central Government employees, investment guidelines relating to the Employees' Provident Fund in India, and also the

new guidelines for investment relating to Central Government Pension Fund.

5.72 As per the recent Central Government announcement, there will be different investment choices such as option A, B, and C. Option A would imply predominant investment in fixed income instruments and some investment in equity. Option B will imply greater investment in equity. Option C will imply almost equal investment in fixed income and equity. Pension fund managers would be free to make investment in international markets subject to regulatory restrictions and oversight in this regard. It is proposed to evaluate market mechanisms (without any contingent liability) through which certain investment protection guarantees can be offered for the different schemes.

Management of Pension Funds

5.73 There are several important issues pertaining to the management of public Pension Funds. These relate to: (i) governance of the fund, (ii) objectives of pre-funding, (iii) investment policy and process, (iv) reporting and disclosure, and (v) investment returns and volatility. Sustainability of pension schemes run with Pension Funds solely depends upon the efficient management of these Funds.

5.74 A number of studies on the performance of publicly managed pension funds suggest that: (i) funds have been often used to achieve objectives other than providing pension, (ii) funds tend to earn poor rate of return relative to relevant indices. It has also been found that the returns on pension funds are especially dismal in countries with poor governance.

5.75 A key issue in pension fund management is to ensure that the fund is solely used to meet only the pension obligations and not for any other purpose. It is, therefore, necessary to ensure that the funds are invested in a manner that would maximise returns and at the same time, guarantee the safety of investments. In order to ensure that any Pension Fund created out of the contributions from the employers (Governments) and employees to meet the pension liabilities is not utilised for the budgetary operations, it is necessary that such Fund should not form a part of the States' Consolidated Fund and should also be kept outside the Public Account. The Group also took note of the advantages of having larger funds and multiple fund managers which would enable scale economies in fund management as also enhance competitive environment.

Transition Costs

5.76 The Group had detailed deliberations on the fiscal implications of pension reforms in the transition period. The reform process could be a gradual transition under which only new recruits would be required to join the modified scheme or a sudden transition that would require all current and future beneficiaries to shift to the new system. As discussed earlier, a sudden transition is not possible and a gradual reform process seems to be the only feasible policy option available to the State Governments. In a gradual transition, under which only new entrants would be switched to the new system, it would take a long period, say around 40 years, before the reforms yield positive results. A number of States expressed the view that, in the initial years

of transition, the State Governments would be required to provide for pension in respect of the existing employees as well as to contribute towards the Pension Funds of the new employees. This would put additional stress on the States' finances. Hence, even though pension reforms would yield positive results in the long-run, fiscal consolidation measures aimed at short-term and medium-term improvement seem inevitable.

5.77 In this context, the Group noted with concern the widening revenue gap of the State Governments. An assessment of the revenue budgets of the State Governments shows that though there has been some marginal improvement in States' own tax receipts, realisations from non-tax revenues do not seem to be encouraging. The tax-GDP ratios in the case of some States have almost stagnated; while in some cases the ratios have declined over the years. Given the rigidities in the States' expenditure pattern, it is important that States may take appropriate urgent measures to augment their revenue receipts. At the same time, efforts should be made to contain all categories of non-developmental expenditure.

Institutional, Governance, and Regulatory Issues

5.78 The fundamental role of a pension system is to collect funds from the participants and undertake prudent investments so as to achieve the twin objectives of safety and maximisation of return. Regulation and supervision of Pension Funds are central to the building up of public confidence. If an unalloyed DC scheme is adopted, the entire investment risk will have to

be borne by the employees and they will not be assured of any minimum pension amount. It is in this context that proper fund management which focuses on return and governance issues gain importance. This calls for a flexible governing process to allow for proper functioning of Board of Trustees, pension fund managers and for development of legal structure, reporting and disclosure norms, performance benchmark and evaluation, and asset management. This requires adherence of certain governance rules concerning composition of Board of Trustees, actuarial valuation, reporting and disclosure norms, performance rules for fund managers, penalties for non-performance, investment regulations, provision for external audit and appointment of external actuaries, restrictions on fees, *etc.* In this context, the Group took note of the proposed setting up of the Pension Fund Regulatory and Development Authority (PFRDA) by the Government of India.

Parametric Changes

5.79 The Group feels that the positive fiscal impact of the structural modifications as suggested earlier for new employees will be visible only after a long gap of three decades. It is, therefore, imperative that parametric changes resulting in trimming of the benefits to the existing employees/pensioners are also introduced simultaneously so that the fiscal stress could at least be contained, if not reduced. Thus, in order to have some immediate and medium-term effect, the Group feels that a few parametric changes in the current pension scheme for both the existing employees and pensioners become

inevitable. In the opinion of the Group, there is enough scope to trim the pension outgo on account of State Government employees through parametric changes in the existing pension scheme, as discussed below:

Basis for Calculation

5.80 Presently, in most of the States, the basic pension is calculated on the basis of the average of last 10 months' pay drawn by an employee. In some States, it is based on the last pay drawn. The Group feels that the last pay concept is often misused as it leads to hasty promotion just prior to retirement to get higher pension benefits. Further, there is no uniformity in the formula for determining the pension amount across countries. While in some countries it is last three years, there are also instances of taking average pay for longer periods.

5.81 The Group also deliberated on the need for addition of 5 years while calculating the pension benefit in the case of employees seeking voluntary retirement. There does not seem to be any economic logic in favour of addition of 5 years while determining the pension benefit. In the case of voluntary early retirement, there could be a view that the pension benefit could be less than proportionate as pension would be drawn for a longer period.

Indexation Formula

5.82 The pension benefits are generally indexed to prices or to wages or to both. Indexation is an implicit insurance against future unexpected

changes in inflation and income levels. The most common liability-reducing reform in many countries has been to change or modify the indexation formula. While examining the indexation formula, the Group reviewed the recent trends in other countries. Many countries have already done away with the wage indexation and adopted the less generous price indexation.

5.83 The Group noted that, following the implementation of the recommendations of the Fifth Central Pay Commission, the present pension scheme for State Government employees provides for both price indexation and wage indexation. Thus, it provides insurance against inflation and also ensures increase in pension as and when there is revision in the salaries of existing employees.

5.84 The Group had the benefit of the findings of a recent World Bank study¹⁶, which made few interesting observations. According to the study, around 93 per cent of the civil service in India comprises of Class III and Class IV employees for both Government of India and State Governments. Trends in wage bill in respect of a sample of States show that the wage bill increased on an average by nearly one per cent of State GDP between 1996-97 and 1998-99. Based on the National Sample Survey data, the Report observes that wages for selected categories of civil service staff are consistently higher than those earned by those employed in the private sector. The ratio of average wages in the public and private sector which was 1.92 in 1993-94 rose to 2.33 in 1999-2000. This suggests that vast

¹⁶ 'India: Sustaining Reform, Reducing Poverty', A World Bank Development Policy Review, Report No. 25797, July 14, 2003.

majority of Government employees are already well compensated compared to other employees.

Commutation Formula/ Restoration Period

5.85 The Group reviewed the existing commutation formula as well as the provisions regarding restoration of commuted portion of pension. The present commutation table in most of the States is based on the assumptions pertaining to interest rates and life expectancy prevailing during the Seventies. The Group feels that the present discount rate used in the calculation of commutation value is too low. In view of its lumpiness, the commutation payment puts pressure on the State finances. Furthermore, employees at the time of their retirement are entitled for various facilities such as leave encashment, gratuity, GPF, *etc.* In addition, the commuted value also forms part of tax free income, while the pension amount is taxable.

5.86 At present, in most of the States, commuted portion is restored after 15 years. Regarding restoration of the commutation facility, the Expenditure Reforms Commission recommended that : (i) if full pension is restored 15 years after commutation (or some other specified period), then the period for calculating the commutation value (or purchase value) should be restricted only to 15 years (or some other period); and (ii) the rate of discount adopted for calculating the commutation value should reflect the current rate of Government borrowing and not 4.75 per cent fixed several decades ago when the rate of Government borrowing was low. The second alternative according to the Commission was to withdraw the facility of restoration of full

pension 15 years after commutation. However, after examining the issue, the Commission finally favoured the first option as it thought that it would be difficult to withdraw the facility of restoration of full pension after 15 years.

5.87 The Group also noted that the facility of restoration of commuted portion of the pension was not available till 1985. This was introduced following the Supreme Court judgement in 1986.

Family Pension

5.88 The Group deliberated on the existing family pension scheme. Presently, in most of the States, the dependents of the pensioners are entitled for family pension. Under the family pension rules, in the event of the death of a pensioner, there is a provision for enhanced family pension at the rate of 50 per cent of last pay or twice the normal family pension, whichever is less, for a period of 7 years or until the year when the pensioner would have attained the age of 65 years, whichever is earlier. Notwithstanding the humanitarian considerations behind the rationale of family pension, it needs to be mentioned that the size of the family would get reduced after the death of the pensioner. Thus, there would be a reduction in the total number of persons depending on the pension amount.

Leave Encashment

5.89 With regard to leave encashment, members felt that leave facility has been provided to enable employees to relax at least one month in a year. Thus, provision for encashment of leave goes against this spirit.

Age of Retirement

5.90 At present, in almost all the States, except in Kerala, the age of retirement is 58 years for categories 'A' to 'C' and 60 years for category 'D'. The Group examined the pros and cons of increasing the age of retirement. This proposal has grave consequences from the point of view of employment opportunities for the youth. Moreover, outgo on account of new employment will be much lower than that on the extended employees. However, the argument in favour of extending the retirement age is that any rise in the age of retirement would automatically lead to postponement of all the lumpsum payments relating to retirement such as gratuity, leave encashment, provident fund, etc.

Possibility of Pre-Funding the Existing DB Scheme

5.91 As indicated elsewhere in this Chapter, large scale recruitment during the past decades as also demographic developments point to an alarming situation of the likely future pension liabilities. States like Andhra Pradesh and Chhattisgarh have already proposed initiatives towards creation of separate Pension Funds through annual contributions. In this context, the Group deliberated on the pros and cons of creation of separate 'Pension Fund' for the existing employees and pensioners of State Governments. Given the current fiscal situation of States where bulk of the borrowings are diverted for meeting the revenue deficit, setting up of a 'Pension Fund' that would entirely meet the existing pension liability would not only be difficult, but also impossible. Nevertheless, even a small initiative

at the States' level in this direction will be a major breakthrough in the right direction.

5.92 The Group also considered certain suggestions for augmenting the dedicated pension fund. The State Governments may explore the possibility of levying a Cess on all existing employees (including employees of GIA institutions and LBs). This, would, however, require consultations with all concerned and particularly with the employees' associations. The quantum of annual contribution to the Fund could be such that it covers at least the annual incremental pension payments. The Group noted the impact of periodic pay revisions on the pension outgo. The Group feels that there is a need to reduce the likely pension burden that may result from future pay revisions. In this context, the Group feels that there could be negotiations with the employees' associations at the time of future pay revisions for retaining a portion of the increased salary due to revisions. This could be kept in a "Dedicated Fund". In addition, a part of the periodic DA increase released to the employees could also be credited to the Fund. The earnings from the Fund could be used to meet the future increase in the pension payments.

Treatment of Existing Employees of Grant-in-aid Institutions / Local Bodies

5.93 A complex issue associated with the pension reforms of the State Governments relates to the burden arising from pensionary obligations to the employees of grant-in-aid (GIA) institutions and Local Bodies (LBs). The Group understood that in several States, the State Governments have accepted the pension liabilities

of not only their own employees, but also of several other GIA institutions as well as LBs. The pension burden on account of these categories form a significant proportion of the total pension payments of many State Governments. With a view to augment educational facilities, several educational institutions were set up earlier with commitment of aid by the State Governments. Subsequently, the Governments also accepted the pension obligations of the employees of these institutions. The Group took note of the divergent practices concerning pension provisions prevailing in different States. In many States, the number of employees of GIA institutions and LBs more or less match that of Government employees proper.

5.94 The Group held detailed discussions regarding the existing practice of providing pensionary benefits to the employees of GIA institutions and LBs. In this context, the Group strongly feels the need to make a distinction between State Governments' own employees and those of GIA institutions and LBs. As the employees of these bodies are generally not appointed by the State Governments, State Governments are not legally obliged to accept any financial obligation on them, whether it is for salary payment or for pension payment.

5.95 When compared with the State Government employees, employees of GIA institutions and LBs have certain advantages (e.g., non-transferability), which are not available to Government employees. Furthermore, the original terms and conditions of employment and perks are different for the employees of State

Government and others. Additional factors which need consideration are the Government's financial capacity, difference in the role of Government vis-à-vis the two categories of employees (in respect of Government employees, Government is direct employer; in respect of GIA employees, Government only provides Grants to the Principal employer), *etc.*

Other Issues

5.96 The Group realised that in some States, verification of the number of pensioners is not made on a regular basis. With the result, there are instances of the existence of inflated numbers of pensioners in many States. This practice is often aided by the existing arrangements by which pension payments are made through a variety of agencies such as the Treasuries and the banks.

5.97 As highlighted elsewhere in the Report, almost all the State Governments do not have any proper arrangements in place to collect and monitor the data relating to pensioners. Inadequate availability of data at the States' level has constrained the Group from properly assessing the future pension liabilities of the States. Detailed information on employees and pensioners would be useful to the State Governments in undertaking actuarial assessment of future pension liabilities. It is, therefore, important that the State Governments put in place appropriate mechanism to strengthen their existing data base on employees and pensioners and periodically update and verify such data. Computerisation of all relevant records could be of great help in this regard.

CHAPTER 6: RECOMMENDATIONS

6.1 As could be seen from the foregoing Chapters, the issues involved in pension reforms have been globally recognised as very critical and complex. The position is no way less complicated in India, especially in respect of pension reforms at the State level. Though global efforts to reform civil service pension have intensified during the past 25 years or so, the Group realises that the reform measures have remained incomplete, but the process is on going in many countries mainly due to the sensitive nature of the issues from the socio-political, economic and legal angles. Taking note of these developments, the Group is of the view that reform measures should be pragmatic, their implementation should be based on mutual trust and consultation, and the approach should be gradualistic. Therefore, the Group, while formulating the recommendations, recognised the following important issues :

6.2 First, the fiscal stress emanating from the increasing pension liabilities of the State Government employees has emerged as a major area of concern. As detailed elsewhere in the Report, expenditure on account of pension liabilities alone accounts for more than 25 per cent of the own receipts of as many as 12 States during 2001-02. It is disquieting to note that, in a few States, expenditure on salaries, pension and interest payments alone exceed their total revenue receipts. It needs to be realised that this situation cannot sustain for long.

6.3 Secondly, on a comparative basis, the economic status of Government employees in

India is much better than a large section the majority of the populace, who suffer from poverty, financial insecurity, lack of adequate education and health facilities, *etc.* Thus, even on equity considerations, Government employees (and others enjoying similar retirement benefits at the cost of the Government) may have to take greater responsibility in future to take care of their post retirement needs.

6.4 Thirdly, the Group feels that expenditure compression, especially of items such as salaries and pensionary benefits, cannot be considered as panacea for fiscal consolidation. Over the years, the resource mobilisation efforts by many of the State Governments were inadequate as could be seen from the stagnant or declining tax-SDP ratio of these States. It would, therefore, be in the best interest of the States that serious efforts are initiated to augment their resources. Perhaps, increasing resources at the disposal of the States could mitigate, to some extent, the compulsions for drastic pruning down of social security benefits like pension payments.

6.5 Fourthly, considering the vast diversity among the States regarding their socio-economic development levels; extent of fiscal stress; differences in approaches in extending retirement benefits to employees of local bodies, grant-in-aid institutions, autonomous boards and corporations, etc, a uniform reform measure, as applicable to all the States, may not be feasible. Moreover, the existing system of pension payments is not uniform among all the States

with respect to coverage of pension, features of pension payments, *etc.* The Group is, therefore, of the view that ideally a set of alternative measures would give wider options to the States with regard to the choice of schemes and their implementation.

6.6 Finally, looking purely from the angle of fiscal sustainability of the States and the magnitude of the problem, the Group feels that while structural reforms are necessary for new employees, parametric changes are unavoidable for the existing employees as well as pensioners. The recommendations of the Group, as detailed in the subsequent paragraphs, are largely influenced by the realities as listed above.

6.7 The Group, after extensive study and detailed deliberations on the complex issues associated with the existing pension systems in the States, unanimously came to the conclusion that the schemes in the present form are no more fiscally sustainable. The feedback received from the States also reflected their serious concern and revealed the need for change. The Group, while formulating the recommendations, not only recognised the fiscal imperatives of the States, but also kept in view the socio-economic and legal considerations behind the well established retirement benefit schemes. The crucial features of the new pension scheme applicable to fresh recruits in civilian services recently finalised by the Government of India have also been borne in mind by the Group.

6.8 The Group recognises that the design of any pension scheme would need to strike a balance between the post-retirement needs of the

employees and the capacity of the State Governments to bear the financial burden of retirement benefit schemes. Keeping in view the differences in the socio-economic conditions across the States, the Group feels that no single pension model would meet the requirements of all the States. Accordingly, the Group intends to provide a few options to the State Governments and leave it to the States to choose the one, which suits them the most. In this context, the Group recommends alternative pension models for the State Governments as under:

I. Proposed Structural Changes (Contributory Scheme/s)

6.9 Having recognised the fiscal imperatives of the States, the Group concluded that the existing non-contributory unfunded Defined Benefit (DB) Scheme followed by the State Governments is fiscally not sustainable any more. However, withdrawal of the same from all the existing employees/pensioners may not be possible and feasible due to various administrative and legal reasons. Following the applicability of the new pension scheme of the Central Government only to new employees in civil (non-defense) services, the Group feels that structural modifications as indicated below may be compulsorily made applicable to the new employees who enter State Government service after a date specified by the respective State Governments. Accordingly, the Group recommends the introduction of contributory pension scheme/s for the State Government employees in place of the existing non-contributory defined benefit pension scheme. The

suggested modification is primarily guided by the long-term fiscal interest of the States. Having recognised the need for introducing contributory scheme/s, the Group considered various options which include a pure Defined Contribution Scheme, a Hybrid (DC-DB) Scheme, and a Two-Tier Scheme (*i.e.*, a DC-DB Scheme plus a second tier of DC Scheme).

6.10 One option recommended by the Group relates to the introduction of a pure Defined Contribution (DC) scheme in which the new employees of the State Governments would contribute 10 per cent of their basic pay and dearness allowance to an individual account. The State Government would make a matching 10 per cent contribution to the account. The contributions from the employees and the State Governments concerned will be vested in a Fund which will be invested, in accordance with specified guidelines and the employee at the time of retirement will get an amount which will be the aggregate of the employee's contribution, Government's (employer's) contribution and the earnings (on Investment made by the Fund) attributed to the employee's Account. This amount could be either fully annuitised or payment could be made partly in the form of an Annuity and partly in lump-sum. While suggesting the contribution rate at 10 per cent, the members of the Group are guided by the new pension scheme for the Government of India employees.

6.11 The second option is that if the State Governments feel that some appropriate defined benefit should be provided to their new

employees from a social security perspective, such States could adopt a Defined Contribution-Defined Benefit (DC-DB) scheme. This would be a contributory scheme with guarantee of an appropriate level of pension, which could be linked with emoluments (averaged over a period) at the time of superannuation / retirement of employees. Under this scheme, defined pension benefit could be fixed by individual State Governments at an appropriate level. It could be 50 per cent of last 36 months pay or any other percentage of average pay as deemed appropriate by the respective State Governments. Under the scheme, the employees could contribute a certain percentage of their basic pay and dearness allowance (10 per cent of pay plus DA) with a matching contribution from the State Governments, subject to certain assumptions regarding rate of growth of salaries, return on Investment, etc, for paying pension of 50 per cent of average pay of last 36 months. The rate of contribution by the employees and the State Governments could be determined on the basis of actuarial calculations, assuming the defined benefit level offered by the State Governments. The shortfall, if any, between the returns on the contribution and the defined pension payment has to be met by the State Governments. This contingent liability of the State Governments could be minimised by providing for a triennial actuarial review of the scheme by at least two actuaries and adjusting the benefit and contribution rate periodically.

6.12 Under the third option, a two Tier scheme could be introduced. The State

Governments may continue a defined benefit scheme with a defined contribution for its new employees. The defined benefit in the first Tier of DC-DB scheme could, however, be reduced from the present level of 50 per cent to an appropriate level of say 30 per cent of the average pay of the last 36 months. For financing the scheme, an actuarially computed contribution rate [say 6 per cent of pay plus DA by employees and the State Governments (employer) each] could be stipulated. This could be supplemented by a mandatory Defined Contribution (DC) scheme, wherein both the employees and the State Governments make contributions. While the employees' contribution could be minimum 2 per cent with no upper limit, the State Government's (employer's) contribution could be on a matching basis subject to a ceiling of 4 per cent of pay plus DA. The pure DC component could, at the option of the State Government, be merged with tier-II of the proposed Central Government Pension Scheme, which is open to State Governments as well. Introduction of this two Tier scheme is likely to result in less cash flow from the Government Treasury during the transition phases and is likely to be more appropriate for States suffering from severe fiscal stress. States opting for the second alternative (single tier DC-DB scheme) or the third alternative (a two Tier or Double pillar scheme of a DC-DB scheme with low rate of guaranteed pension plus a mandatory DC Tier), could think of incorporating an appropriate level of Family Pension which would be actuarially computed to ensure financial viability of the Fund.

Extension of Tax benefits

6.13 Recognising the need for encouraging the employees to join the modified scheme/s as also for promoting savings, the Group recommends that contributions under the proposed scheme/s and also the earnings from the Pension Funds may be granted Income Tax exemption. Under the new pension scheme announced by the Government of India, pension contribution and accumulations would be accorded tax preferences up to a certain limit, though the benefits would be taxed as normal income.

Coverage under the proposed scheme/s

6.14 The Group recommends that the proposed new pension scheme/s should be made mandatory for all new employees of the State Governments and the date of its applicability may be decided by the respective State Governments. In fact, the interaction with some State Governments encourages the Group to suggest possible extension of the new scheme/s at least to the existing employees with limited years of service. In view of the original terms and conditions of appointment of the existing employees, it may be difficult for all the State Governments to compulsorily impose the new scheme/s on them. The Group, however, suggests that the State Governments may explore all the possibilities of extending the same even to the existing employees, on an optional basis. The Group also feels that in respect of States where Pay, Pension and Interest Burden have exceeded 90 per cent of State's total revenue, there may be no alternative but to make the new contributory scheme obligatory for even existing employees

with less than 10 years of service. Such States may take appropriate legal advice and extend the new scheme to all the existing employees with less than 10 years of service (minimum eligibility period for earning superannuation pension).

II. Proposed Parametric Changes

6.15 In order to have some immediate and medium-term effect on State finances, the Group feels that a few parametric changes in the current pension scheme for both the existing employees and pensioners are inevitable. In the opinion of the Group, there is enough scope to trim the pension outgo on account of State Government employees through the following parametric changes in the existing pension scheme.

Basis of Calculation of Pension

6.16 Presently, in most of the States, basic pension is calculated on the basis of average of last 10 months pay drawn by an employee, while in some States, it is based on the pay drawn on the last month of service. The Group feels that if the pension is fixed on the basis of the last month's pay, there could be ample scope for misusing the system through hasty promotions just prior to the retirement to get higher pensionary benefits. The Group, therefore, recommends immediate withdrawal of fixing the pension on the basis of only last one month's pay, wherever it exists now. Further, the basic pension may be determined on the basis of the average pay for a longer period, say for 36 months. In fact, globally, the practice is to follow a larger period concept. The Group suggests that the proposal could be uniformly adopted by all the State Governments.

6.17 According to the Group, there does not seem to be any rationale for notional addition of 5 years for determining the pension benefit in the case of employees opting for voluntary retirement and who are left with 5 years of remaining service. Generally, the employees who seek voluntary retirement are able to avail of the pension benefit for a longer period than those who retire at the age of superannuation. For instance, if an employee joining the State Government service at the age of 20 seeks voluntary retirement at the age of 40, he would be drawing pension for 38 years, assuming a life expectancy of 78 years. Thus, for a service period of 20 years, he would draw pension for 38 years. In comparison, an employee who retires at the superannuation age of 58 years after completing a service period of 36 years, would be drawing the pension for only 20 years. Moreover, many of the employees who avail of voluntary retirement may also be gainfully employed elsewhere. Further, in most such cases, consequential vacancy is filled up by the Government which results in the Government paying salary to one person, in addition to paying pension for a longer period for an employee choosing early retirement. In view of these, the Group recommends that, in the case of voluntary early retirement, the practice of adding 5 years while calculating the basic pension may be done away with. Further, there is a case for providing less than proportionate pension in the case of such employees who seek voluntary retirement, as they would be drawing pension for a longer period. Logically, such persons, seeking voluntary early retirement, should be entitled to

proportionate pension (depending upon number of years of service) from the normal age of superannuation, *i.e.*, 58/60 years. If they want pension from the date of early retirement, the quantum of pension should be reduced appropriately (depending upon age at retirement and other relevant factors). When the Government introduces VRS for such employees / categories of employees where there is redundancy and no filling up of vacancies consequent on an employee going out under VRS, Government may formulate appropriate VRS packages.

Indexation

6.18 The pension benefits of State Government employees are generally indexed to wages as well as prices. Studies have shown that, on an average, about 90 per cent of Government employees in India (mainly in Group 'D' and Group 'C' categories) earn more than their counterparts in the private sector. Such Government employees are in a better position to save for their future when compared to the average employees in a large number of private organisations, specially those working in informal/ tiny sector, Small and Medium Enterprises/ service sector organisations, *etc.* Hence, it would be quite fair and equitable to sanction to the Government employees an earnings related pension, which is price indexed, but not wage indexed. Furthermore, in a number of countries, the trend is to move from wage indexation to price indexation. The Group after examining the various issues, feels that there is no justification for providing the benefits of both

wage and price indexation to the State Government pensioners, especially in view of the current fiscal stress faced by the State Governments. The Group recommends continuation of the present practice of price indexation (subject to the recommendation in the following paragraph), while doing away with wage indexation facility (*i.e.*, increasing basic pension as and when salary structure is raised upward consequent on Pay Commission's award), wherever it exists.

6.19 The Group noted that the unilateral announcement of release of dearness allowances to the Central Government employees and pensioners have contributed to the rapid increase in total pension payments at State Government level as well. Whenever, the Central Government announces DA increases for its employees/pensioners, there would be pressure on State Governments to implement the same for their employees/pensioners. In view of the increasing burden on the State Governments on account of revision in the dearness allowance, the Group suggests that there should be regular mutual consultations between the Central Government and the State Governments on this issue before announcing increase in the rates of Dearness Allowance.

Commutation Formula/Restoration Period

6.20 The Group noted that the State Government employees are at present entitled to a number of retirement benefits in the form of lump-sum benefits, such as gratuity, provident fund, Leave encashment, *etc.* In view of the fact that several lump-sum payments are already being

made to the retiring State Government employees, the Group felt that maximum permissible commutation amount could be brought down from 40 per cent of basic pension to 33 1/3 per cent (1/3rd) as it existed prior to the implementation of the fifth Central Pay Commission's Report.

6.21 The Group reviewed the existing commutation formula as well as the provisions regarding restoration of commuted portion of pension. The Group noted that the existing commutation factor is based on the calculations done way back in the 1970s reckoning the then prevailing interest rate (discount rate) and life expectancy. In order to make the commutation factor more realistic and relevant to the present circumstances, the Group feels that there is a case for revising upwards the present discount rate of 4.75 used by most of the States for working out the commutation factor. Accordingly, the Group recommends that the present discount rate could be enhanced and could be linked to the rate of return on General Provident Fund.

6.22 With regard to the restoration of the commuted portion, the Group understood that the system of restoration of commutation after 15 years was given effect from 1985 based on a Supreme Court Judgement. Most of the States allow restoration of full pension after a period of 15 years. However, in some States like Assam, Rajasthan, and Orissa, restoration of commuted portion is permitted even before completion of 15 years. Taking into account the improvement in life expectancy and the fiscal stress of the

States, the Group recommends that State Governments may uniformly adopt restoration of commuted portion of pension after a period of 15 years.

Family Pension

6.23 Presently, under the family pension rules, in the event of the death of a pensioner, there is a provision for enhanced family pension at the rate of 50 per cent of last pay or twice the normal family pension, whichever is less, for a period of 7 years or until the year when the pensioner would have attained the age of 65 years, whichever is earlier. Taking in to account the twin considerations of sympathy for the dependents as also the current fiscal stress faced by the States, the Group recommends only a minor modification that the number of years for extending enhanced family pension could be brought down from the present maximum period of 7 years to 5 years or until the pensioner would have attained the age of 63 years, whichever is earlier.

Pension Benefits to Employees of Grant-in-aid Institutions/ Local Bodies

6.24 A complex issue associated with the pension reforms of the State Governments relates to the burden arising from pension obligations to the employees of grant-in-aid (GIA) institutions and Local Bodies (LBs). The Group observed that there is at present no uniformity in the provision of pension facility to such employees among the States as well as between regions in some States. The Group feels that it is necessary to make a distinction

between State Governments' own employees and those of GIA institutions and LBs. The employees of these bodies are often not appointed by the State Governments and their service conditions are different from those of Government employees. The State Governments are not statutorily bound to accept any financial obligation relating to them, whether it is for salary payment or for pension payment. The Group therefore, suggests that, in view of the fiscal implications, the concerned institutions (whether grant-in-aid institutions or Local Bodies) should be made liable to meet the pension obligations towards their employees. The Group, therefore, recommends shifting of the pension burden relating to the employees of grant-in-aid institutions/ Local Bodies to be recruited in future to the respective GIA institutions/ LBs.

6.25 Even in the case of existing employees of GIA institutions/ Local Bodies, the State Governments may explore the possibility of collecting contributions from the employees as well as concerned institutions towards the pension liability. The objective should be to pass on the pension burden eventually to the respective institutions.

6.26 The GIA institutions and LBs, in turn, should consider having their own pension scheme/ s of a contributory type, depending upon their own financial position or join the Central Government pension scheme (open to informal sector employees/ self-employed) or any other schemes managed by the public or private Pension Funds.

Pre-funding (partial or full) the Existing DB Scheme

6.27 The Group feels that, in order to at least partially meet the pension burden of the existing employees and pensioners, there is a need for setting up a dedicated "Pension Fund", which would be in addition to the proposed Pension Fund designed for new employees. To start with, the size of the Fund could be small, and it could be increased over the years, as the fiscal situation of the States gets under control. Such partial pre-funding would make the State Governments aware of unfunded pension liability and it would also sensitise the Government employees about the actual cost of providing pension by the State Government to its employees. The Group suggests that the State Governments may examine the feasibility of the following options in this regard:

- (a) The State Governments may consider the possibility of levying a Cess on / collecting contribution from all existing employees (including employees of GIA institutions and LBs so long as their pension liability is borne by the State Governments). This could be undertaken in consultation with all concerned and particularly with the employees' associations. Regarding the quantum of annual contribution to the Fund, the objective should ideally be to cover at least the annual incremental pension payments out of the earnings of the Fund created with such contributions. Such an initiative would

provide some relief to the financially strained exchequers of the State Governments.

- (b) Having noted the impact of pay revisions on the pension outgo, the Group feels that it is absolutely necessary to reduce the likely pension burden on account of future pay revisions. In this context, the Group suggests that a portion of the increased salary due to revisions could be retained and kept in the "Dedicated Fund" suggested above, and the earnings from which could be used to meet the future increase in the pension payments. Implementation of this suggestion would, however, require negotiations with the employees' associations at the time of pay revision. A portion of the periodic increase in Dearness Allowance could also be credited to the Pension Fund.
- (c) In addition to the suggestions at (a) and (b) above, the Group recommends that the State Governments may also take steps to augment the "Dedicated Fund" from their own contributions to the extent possible. Each State may also independently explore the possibility of augmenting this Fund through any other available means.

Leave Encashment

6.28 Over the years, the facility of leave encashment at the time of retirement has significantly improved. At present, State

Government employees are generally entitled for encashing 10 months of their accumulated earned leave at the time of retirement. With regard to leave encashment, the Group feels that leave facility has been provided to enable employees to relax for at least one month in a year. Thus, provision for encashment of leave goes against this spirit. The Group, therefore, favours reduction in the encashment period in a phased manner, with advance intimation to all concerned. For instance, the State Governments may announce that the maximum permissible encashment period at the time of retirement would be reduced by one month after one year, two months after two years and so on. Through this gradual process, the leave encashment facility could be limited to 120 days over a period of six years. The long-term objective should be to do away with the concept of encashment of leave, both for Government employees during their period of service as well as for retiring Government employees to bring about uniformity in approach.

Age of Retirement

6.29 The Group examined the issue of enhancing the retirement age of State Government employees. An increase in the age of retirement would enable the State Governments to temporarily postpone all pension related payments such as gratuity, leave encashment, commutation amount, *etc.* till the employees reach the revised retirement age. However, the Government would be required to pay full salary to the employee, whose retirement age is enhanced. The salary will be higher than

the salary of the new recruits appointed to fill in the vacancies which would have arisen if the person had retired under the existing rule regarding age of retirement. The Group after examining the pros and cons of increasing the age of retirement concluded that there is no clear indication of any possible net gain from the enhancement in the retirement age, except that it may raise some socio-economic issues like problems of unemployment of educated youth, *etc.* Hence, the Group does not intend to make any recommendation in this regard.

III. Proposed Pension Funds

6.30 The proposed new pension scheme/s for the new employees of State Governments require setting up of "Pension Funds" out of the contributions by employees and the State Governments. Accordingly, the Group recommends the setting up of "Pension Funds" to meet the future pension liabilities of the new employees of State Governments.

6.31 The Pension Funds created out of the contributions should be strictly used only for meeting the pension liabilities, and not for financing the budget deficit of the State Governments. In order to ensure utilisation of Pension Funds and the returns thereon only for pension purposes, the Group recommends that the Fund should be kept completely outside the States' Consolidated Fund and the Public Account.

6.32 The individual State Governments should consider having their own Separate Funds or joint Funds for a group of States, which could be created by the States concerned through mutual

consultations. As far as smaller States are concerned, it would be difficult to have separate Funds in view of the high cost of management. The Group, therefore, recommends Joint Pension Funds for the smaller States. Alternatively, the State Governments concerned may consider joining the proposed tier-II of the Central Government pension scheme.

6.33 In order to ensure that the assets created out of contributions are adequate to meet the pension liabilities (in case of any Defined Benefit element in the new scheme), the Group recommends that annual actuarial evaluation of the Pension Funds may be adopted by the States. There should also be a Triennial review of such evaluation by a Panel of at least two Actuaries and the benefit and contribution rates could be adjusted once in three years, based upon such actuarial review by a Panel of Actuaries.

6.34 As the proposed pension scheme for State Government employees would generate large sized Pension Funds, the issue of appropriate investment policies assumes critical importance. As pension is the most important source of post retirement income, safety of and return from the investments is a critical issue. Hence, the selection of Pension Fund managers and the stipulations for investment need to be handled carefully. The Group also feels that competitive environment would facilitate efficient management of Pension Funds and competitive pressure would enhance efficiency and return to the investor. In view of this, the Group recommends that there could be several Pension Fund managers for each Fund. This should,

however, be subject to the guidelines of the Pension Fund Regulatory and Development Authority (PFRDA) to be set up by the Government of India.

6.35 The Group recognises that phases of business cycle could create volatility in earnings from the Pension Funds. This is specially relevant in case of a Defined Contribution Scheme. With the result, the return from the Fund would, to a significant extent, depend upon the period of entry and exit from the Fund. For instance, if a person enters the Fund during boom period and exits during trough, earnings would then be relatively low and vice versa. To smoothen the earnings, the Group suggests that the entire return from the Fund need not be distributed among the contributors. Illustratively, while 90 per cent of the earnings may be distributed, 10 per cent may be retained and kept in a separate Fund which could be used during periods when the earnings are below a bench mark level. This would enable the participants to have a steady income flow from the Fund.

6.36 While no detailed calculations regarding comparative risk and return under alternative investment plans were made, the Group took note of the investment pattern suggested by the High Level Expert Group on new pension system for Central Government employees as also the investment choices announced by the Central Government under the new pension scheme for its employees.

6.37 The new DC pension scheme for Central Government employees provides for different investment choices such as options "A", "B" and

"C". Option "A" would imply predominant investment in fixed income instruments and some investment in equity. Option "B" would imply greater investment in equity. Option "C" would imply almost equal investment in fixed income and equity. The Group recommends that the State Governments may also consider providing similar options to their employees in case of a pure DC Scheme or DC component of a 2 Tier Scheme.

6.38 In respect of a DC-DB Scheme or DC-DB component of a 2 Tier Scheme, the investment pattern suggested at Annex. VIII which tries to satisfy the twin principles of safety and return, could be adopted.

6.39 It may, however, be emphasised that the suggested investment pattern is only indicative and should be modified/finalised by the State Governments in accordance with the guidelines of PFRDA and the Ministry of Finance, Government of India. Within these guidelines, the Fund has to ensure that the returns from the Pension Fund investments are adequate to meet the committed pension liabilities of the State Governments so that there would not be any long-term mis-match between the returns and the payments under the defined benefits. Any short-term mis-match will have to be corrected through the triennial review mechanism.

6.40 A critical issue is the need to have proper reporting and disclosure norms to enable regular assessment of the Fund's financial performance. The Pension Funds would need to have a simple, standardised quarterly reporting format for furnishing their performance details. In this regard, the Group recommends that the reporting

system that will be adopted in the case of the new pension scheme of the Central Government may be suitably utilised. This would facilitate the participants to exercise "switch options", in case some Pension Fund managers fail to meet the subscribers' expectations.

IV. Other Recommendations

6.41 The Group's discussions with some of the State Governments revealed that there were stray instances of the existence of inflated number of pensioners. The main reason for the same could, probably, be the absence of periodic and strict verification of the records of all the State Government pensioners. In order to address this issue, the Group recommends that a comprehensive system of periodic verification of the records of pensioners could be adopted by all the State Governments without any further delay.

6.42 The Group noted that the availability of appropriate and reliable medical facilities to the pensioners is an important issue at old age. Therefore, while introducing various parametric changes as suggested by the Group, the State Governments may simultaneously take appropriate measures to improve the medical facilities available to the pensioners. It would be possible to extend such facilities at nominal fees under the various medical insurance schemes available at present. Such a gesture on the part of the State Governments would greatly help to dilute the resistance for accepting reduced pension payments.

6.43 The Group also discussed the prospects of continuing with the existing compulsory non-contributory Provident Funds, once the proposed

schemes are introduced for new employees. The Group felt that continuation of the compulsory Provident Funds, in addition to the contribution towards Pension Funds, would imply additional financial burden to the employees. Therefore, the Group recommends that, with the introduction of the new pension scheme/s, contribution towards Provident Fund should be made on a 'voluntary' basis only. If any State adopts the model of a 2-Tier Scheme with a second DC Tier, the GPF Scheme could be merged in the second DC Tier.

6.44 As explained elsewhere in the Report, most of the State Governments do not have adequate data relating to their employees or pensioners. In fact, due to the absence of such information, the Group could not undertake any realistic and accurate projection of the future pension liabilities of the State Governments. The maintenance of comprehensive information/data including age-wise, category-wise composition of both the employees and pensioners, average pay scale, *etc.*, assumes critical importance in this regard. Accordingly, the Group strongly recommends that the State Governments should put in place proper arrangements (including computerisation) to collect, update, and monitor comprehensive information/ data relating to pensioners and employees without further delay.

6.45 Once the information/data as suggested above are ready, the State Governments should undertake comprehensive actuarial estimation of future pension liabilities periodically. Such an exercise should take into account the likely pension liabilities relating to the existing

employees as well as pensioners. This would not only enable the States to regularly assess the impact of growing pension liabilities on their fiscal situation, but also facilitate them to take appropriate measures including those relating to revisions in the contribution/benefit rate, pre-funding, investment pattern, *etc.*, that would be required to meet the future pension liabilities.

6.46 The members of the Group are aware that the suggested pension reforms, both structural and parametric, are likely to have wide ramifications on both social and economic fronts. The Group, therefore, suggests that the

recommendations may be implemented with the involvement of all the stakeholders.

6.47 In view of the need to sensitise the State Governments, employees, pensioners and the general public regarding the imperatives for undertaking pension reforms, the Group recommends that the contents of the Report should be given wide publicity and the Report be placed in the public domain. The Reserve Bank of India may forward copies of the Report to all the State Governments for consideration and implementation at their end. The Report may also be forwarded to the Government of India for consideration.



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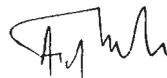
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Statement 1 : Pension Payments of State Governments

(Rs. crore)

States	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
1	2	3	4	5	6	7	8	9	10	11
1. Andhra Pradesh	40	47	52	75	120	120	106	133	213	241
2. Arunachal Pradesh	—	—	—	—	—	—	1	2	2	3
3. Assam	7	4	4	4	8	13	17	23	30	40
4. Bihar	10	17	27	35	44	57	50	60	111	204
5. Chhattisgarh	—	—	—	—	—	—	—	—	—	—
6. Goa	—	—	—	—	—	—	3	4	6	7
7. Gujarat	22	29	40	38	50	63	78	97	162	173
8. Haryana	6	9	12	16	20	21	28	47	46	66
9. Himachal Pradesh	4	5	9	7	11	13	18	27	9	5
10. Jammu and Kashmir	6	7	9	10	12	15	16	20	28	31
11. Jharkhand	—	—	—	—	—	—	—	—	—	—
12. Karnataka	44	65	77	99	109	113	102	161	211	241
13. Kerala	33	45	55	78	84	112	173	184	188	213
14. Madhya Pradesh	16	20	23	30	38	52	61	83	119	135
15. Maharashtra	35	47	58	58	83	99	144	184	248	244
16. Manipur	1	1	2	2	3	3	4	5	5	6
17. Meghalaya	1	0	1	1	1	2	2	2	3	4
18. Mizoram	—	—	—	—	—	1	0	2	2	3
19. Nagaland	0	1	1	1	1	2	2	3	2	3
20. Orissa	9	8	12	16	19	20	30	37	56	69
21. Punjab	9	16	20	33	28	35	67	65	74	92
22. Rajasthan	24	26	32	40	66	61	56	75	101	114
23. Sikkim	0	0	0	0	0	1	0	1	1	1
24. Tamil Nadu	29	35	45	55	68	87	123	156	192	272
25. Tripura	1	1	1	2	2	3	4	6	9	15
26. Uttaranchal	—	—	—	—	—	—	—	—	—	—
27. Uttar Pradesh	24	29	39	47	53	77	93	121	158	181
28. West Bengal	18	27	37	38	44	57	69	101	144	167
Total	339	440	559	684	863	1027	1248	1598	2121	2532

* The data from 1980-81 to 1990-91 includes a marginal share of miscellaneous general services.

Statement 1 : Pension Payments of State Governments (Concl.)

(Rs. crore)

States	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02
1	12	13	14	15	16	17	18	19	20	21	22	23
1. Andhra Pradesh	330	411	444	510	746	893	1004	1139	1373	1657	2378	2321
2. Arunachal Pradesh	4	4	6	7	8	10	12	17	32	39	48	54
3. Assam	49	83	105	134	162	180	214	248	303	518	673	731
4. Bihar	187	224	243	260	320	556	702	756	1024	1424	1646	1780
5. Chhattisgarh	—	—	—	—	—	—	—	—	—	—	*	457 **
6. Goa	8	9	11	13	15	20	24	30	63	68	86	116
7. Gujarat	204	233	261	298	381	458	609	762	1237	1507	1439	1502
8. Haryana	71	84	107	120	138	166	244	258	531	587	571	657
9. Himachal Pradesh	46	52	62	77	83	103	127	165	222	445	391	443
10. Jammu and Kashmir	41	44	47	50	55	68	105	162	374	413	449	570
11. Jharkhand	—	—	—	—	—	—	—	—	—	—	*	519 **
12. Karnataka	269	297	349	410	470	559	716	809	972	1539	1583	1641
13. Kerala	294	339	372	465	565	717	754	913	1154	1808	1930	1838
14. Madhya Pradesh	169	216	255	330	385	528	682	753	1143	1196	963	1011
15. Maharashtra	286	322	368	433	489	604	790	919	953	1590	2122	2589
16. Manipur	9	25	18	21	26	32	47	54	54	145	127	140
17. Meghalaya	6	7	9	12	14	16	21	22	35	40	55	58
18. Mizoram	4	4	5	7	8	10	15	16	17	25	40	40
19. Nagaland	7	10	9	30	29	30	32	34	40	53	88	88
20. Orissa	75	95	122	146	165	194	253	317	475	688	832	1003
21. Punjab	127	143	157	191	218	280	348	434	719	1140	1117	1035
22. Rajasthan	157	180	206	260	300	374	490	596	879	1337	1693	1685
23. Sikkim	1	2	2	3	3	4	5	6	15	16	18	21
24. Tamil Nadu	348	401	472	540	636	787	1070	1287	1691	2688	2927	3050
25. Tripura	18	20	22	29	31	36	45	58	69	111	148	175
26. Uttaranchal	—	—	—	—	—	—	—	—	—	—	*	26 **
27. Uttar Pradesh	236	293	474	426	498	723	894	1054	1776	2061	2163	2392
28. West Bengal	184	218	253	338	401	466	625	791	1012	1582	1937	2254
Total	3131	3716	4379	5107	6146	7813	9827	11599	16166	22679	25453	28196

* As these three new States were created on different dates during 2000-01; the figures for the financial year are not given.

** Indicates treasury outgo. Pension liabilities of employees retired before creation of these States are divided between successor States by the Accountant General. Hence, the actual pension payments are higher.

Source: Various issues of the Article on State Finances, Reserve Bank of India.

Statement 2 : Pension Payments as a Percentage of Revenue Receipts of State Governments

(Per cent)

States	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
1	2	3	4	5	6	7	8	9	10	11
1. Andhra Pradesh	3.2	3.2	3.2	3.8	5.2	4.3	3.5	3.8	5.0	5.4
2. Arunachal Pradesh	—	—	—	—	—	—	0.5	0.6	0.6	1.0
3. Assam	1.3	1.0	1.0	0.8	1.1	1.4	1.4	1.8	2.2	2.6
4. Bihar	1.0	1.5	2.1	2.3	2.5	2.4	1.9	2.1	3.2	5.2
5. Chhattisgarh	—	—	—	—	—	—	—	—	—	—
6. Goa	—	—	—	—	—	—	1.6	2.5	2.6	3.0
7. Gujarat	2.2	2.5	3.0	2.4	2.8	3.3	3.6	3.5	5.0	4.8
8. Haryana	1.2	1.8	2.0	2.3	2.5	2.2	2.5	3.6	3.2	4.1
9. Himachal Pradesh	1.3	2.0	3.2	2.1	2.9	2.5	3.4	4.1	1.3	0.7
10. Jammu and Kashmir	2.3	2.3	2.6	2.6	2.7	2.5	2.3	2.7	3.1	3.2
11. Jharkhand	—	—	—	—	—	—	—	—	—	—
12. Karnataka	4.6	5.6	6.0	6.7	6.3	5.6	4.5	6.3	7.1	7.2
13. Kerala	5.1	5.3	6.8	8.3	7.5	8.2	11.5	11.6	9.9	10.4
14. Madhya Pradesh	1.4	1.5	1.5	1.7	2.1	2.4	2.4	2.8	3.4	3.5
15. Maharashtra	1.7	2.0	2.1	1.8	2.3	2.4	2.9	3.3	3.9	3.2
16. Manipur	0.5	1.2	1.7	1.4	1.9	1.4	1.7	1.7	1.5	1.8
17. Meghalaya	1.0	0.4	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.5
18. Mizoram	—	—	—	—	—	0.5	0.1	0.8	0.8	0.9
19. Nagaland	0.3	0.7	0.8	0.7	0.6	0.6	0.6	0.9	0.6	1.0
20. Orissa	1.4	1.3	1.5	2.0	2.3	2.2	2.4	2.8	3.6	4.0
21. Punjab	1.6	2.4	2.5	3.7	3.0	3.0	5.2	4.6	4.6	5.1
22. Rajasthan	3.3	3.1	3.2	3.5	5.4	4.1	3.1	3.4	4.3	4.3
23. Sikkim	0.4	0.3	0.2	0.3	0.4	0.7	0.4	0.6	0.7	1.1
24. Tamil Nadu	2.3	2.4	2.7	2.8	3.0	3.3	4.3	5.1	5.5	6.4
25. Tripura	0.8	1.2	1.1	1.1	1.2	1.1	1.5	1.8	2.2	3.6
26. Uttaranchal	—	—	—	—	—	—	—	—	—	—
27. Uttar Pradesh	1.2	1.3	1.5	1.8	1.7	2.0	2.2	2.3	2.8	2.7
28. West Bengal	1.6	2.2	2.7	2.5	2.5	2.4	2.8	3.5	4.3	4.8
All States	2.1	2.4	2.6	2.9	3.1	3.1	3.3	3.6	4.2	4.5

Statement 2 : Pension Payments as a Percentage of Revenue Receipts of State Governments (Concl.)

(Per cent)

States	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02
1	12	13	14	15	16	17	18	19	20	21	22	23
1. Andhra Pradesh	6.2	6.5	6.3	6.2	8.5	9.0	9.0	8.2	9.6	9.9	12.2	10.6
2. Arunachal Pradesh	1.2	0.9	1.3	1.2	1.3	1.4	1.4	2.0	3.4	3.8	4.9	5.1
3. Assam	2.8	3.4	4.0	4.0	5.5	5.3	5.5	5.7	6.7	10.7	11.9	12.3
4. Bihar	4.3	4.6	4.1	3.9	4.7	7.5	8.7	8.7	11.0	11.3	14.5	17.4
5. Chhattisgarh	—	—	—	—	—	—	—	—	—	—	*	10.4 **
6. Goa	2.9	2.8	2.8	2.7	2.8	2.4	3.0	2.7	5.5	5.6	5.8	6.2
7. Gujarat	6.0	5.0	4.4	4.2	4.9	5.4	6.3	6.9	9.7	10.8	9.1	9.4
8. Haryana	3.7	3.7	4.5	3.5	2.3	3.3	4.0	4.4	9.7	10.2	8.7	8.6
9. Himachal Pradesh	5.7	5.2	5.9	5.2	6.4	5.9	6.4	7.6	9.6	12.0	12.8	11.9
10. Jammu and Kashmir	3.5	2.7	2.3	2.3	1.8	2.1	2.8	3.8	8.3	7.5	8.3	8.3
11. Jharkhand	—	—	—	—	—	—	—	—	—	—	*	8.5 **
12. Karnataka	6.9	6.2	6.4	6.5	6.7	6.5	7.4	7.6	8.7	11.9	10.7	10.7
13. Kerala	12.2	11.9	11.2	11.8	12.1	13.2	12.3	12.8	16.0	22.8	22.1	20.3
14. Madhya Pradesh	3.7	4.0	4.0	4.7	5.1	6.1	6.8	6.7	10.1	9.1	7.0	9.0
15. Maharashtra	3.3	3.3	3.4	3.3	3.2	3.6	4.1	4.5	4.4	6.3	7.2	8.6
16. Manipur	2.4	5.6	3.8	3.7	4.3	4.7	5.8	6.2	6.0	13.6	12.2	11.9
17. Meghalaya	1.8	1.9	2.2	2.5	2.6	2.3	2.8	3.2	4.3	4.3	4.9	5.2
18. Mizoram	0.8	1.1	1.2	1.3	1.4	1.7	2.2	2.3	2.3	2.6	4.8	4.6
19. Nagaland	1.8	2.0	1.8	4.8	4.6	3.8	3.7	3.4	3.9	4.7	6.2	6.2
20. Orissa	3.4	3.9	4.2	4.5	4.6	5.0	5.9	6.8	10.4	11.7	12.1	14.2
21. Punjab	6.4	3.8	5.6	5.8	4.1	5.4	6.3	6.8	12.5	15.3	11.9	11.6
22. Rajasthan	4.3	4.4	4.2	4.7	4.7	4.9	6.5	7.1	10.3	13.7	13.6	13.9
23. Sikkim	0.9	1.0	0.9	1.3	0.6	0.4	0.4	0.4	1.0	1.1	2.1	1.2
24. Tamil Nadu	6.8	5.9	6.7	6.7	6.9	7.4	8.9	9.5	11.9	16.5	16.0	16.2
25. Tripura	3.7	3.6	3.7	4.5	4.2	3.8	4.4	5.4	5.5	7.7	9.0	9.4
26. Uttaranchal	—	—	—	—	—	—	—	—	—	—	*	1.0**
27. Uttar Pradesh	2.8	3.0	4.1	3.5	3.7	4.8	5.6	6.0	10.2	9.6	8.7	9.3
28. West Bengal	4.5	4.7	4.8	5.7	5.8	6.3	7.6	8.8	10.8	15.5	13.3	15.5
All States	4.7	4.6	4.8	4.8	5.0	5.7	6.4	6.8	9.2	10.9	10.7	11.0

* As these three new States were created on different dates during 2000-01; the figures for the financial year are not given.

** Indicates treasury outgo. Pension liabilities of employees retired before creation of these States are divided between successor States by the Accountant General. Hence, the actual pension payments are higher.

Source: Various issues of the Article on State Finances, Reserve Bank of India.

STATEMENT 3 : PENSION PAYMENTS AS A PERCENTAGE OF OWN REVENUE RECEIPTS OF STATE GOVERNMENTS

(Per cent)

States	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
1	2	3	4	5	6	7	8	9	10	11
1 Andhra Pradesh	5.0	4.9	4.9	5.9	7.8	6.6	5.4	5.7	7.2	7.8
2 Arunachal Pradesh	—	—	—	—	—	—	2.3	6.7	6.0	7.9
3 Assam	2.0	2.6	2.4	2.1	2.9	4.1	3.3	5.6	6.5	7.3
4 Bihar	2.8	3.4	4.7	5.2	5.5	5.3	4.2	4.5	6.6	10.7
5 Chhattisgarh	—	—	—	—	—	—	—	—	—	—
6 Goa	—	—	—	—	—	—	2.8	4.5	4.8	5.0
7 Gujarat	3.1	3.4	4.0	3.2	3.8	4.5	4.3	4.9	6.6	5.8
8 Haryana	1.6	2.2	2.5	3.0	3.2	2.7	3.3	4.5	4.0	4.9
9 Himachal Pradesh	2.9	6.5	10.0	6.6	10.5	9.5	12.5	15.4	5.0	2.4
10 Jammu and Kashmir	5.1	4.9	6.9	7.4	8.6	8.3	8.2	8.5	11.7	14.0
11 Jharkhand	—	—	—	—	—	—	—	—	—	—
12 Karnataka	6.5	7.6	8.2	9.2	8.7	7.9	6.3	8.7	9.8	9.9
13 Kerala	7.5	7.4	10.0	12.8	11.1	12.8	17.7	16.5	15.0	15.1
14 Madhya Pradesh	2.5	2.4	2.5	2.7	3.4	4.0	4.1	4.7	5.8	5.7
15 Maharashtra	2.2	2.5	2.6	2.3	3.0	2.9	3.7	4.2	5.0	4.1
16 Manipur	1.6	18.2	27.7	21.1	28.0	18.1	16.9	15.7	13.4	17.8
17 Meghalaya	3.2	2.3	5.0	5.7	5.4	6.6	6.3	6.9	7.0	8.8
18 Mizoram	—	—	—	—	—	11.0	7.0	10.5	20.5	16.8
19 Nagaland	0.8	6.0	7.2	5.3	6.0	8.4	6.4	10.5	5.9	10.5
20 Orissa	3.4	3.0	4.3	4.8	5.3	4.9	6.0	6.8	8.9	9.5
21 Punjab	2.0	3.0	3.1	4.7	3.8	4.1	6.7	5.7	5.9	6.3
22 Rajasthan	5.7	5.4	5.2	5.7	8.6	7.1	5.9	6.5	8.1	7.4
23 Sikkim	1.9	1.5	1.1	1.5	1.9	3.6	2.3	2.5	2.9	4.5
24 Tamil Nadu	3.4	3.6	3.8	4.1	4.5	4.9	6.1	7.6	8.3	9.4
25 Tripura	2.8	8.5	7.8	7.8	12.6	12.2	15.2	19.5	25.4	41.0
26 Uttaranchal	—	—	—	—	—	—	—	—	—	—
27 Uttar Pradesh	2.7	2.6	3.0	3.3	3.5	4.2	4.6	4.6	5.7	5.5
28 West Bengal	2.6	3.6	4.6	4.1	4.0	4.3	5.0	6.2	7.5	7.8
All States	3.4	3.8	4.3	4.6	5.1	5.2	5.5	6.1	7.1	7.2

STATEMENT 3 : PENSION PAYMENTS AS A PERCENTAGE OF OWN REVENUE RECEIPTS OF STATE GOVERNMENTS (Concl'd.)

(Rs. crore)

States	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02
1	12	13	14	15	16	17	18	19	20	21	22	23
1 Andhra Pradesh	9.6	10.2	9.9	9.8	13.0	15.6	15.4	12.8	14.0	14.5	17.9	14.1
2 Arunachal Pradesh	9.7	7.4	10.8	7.3	9.2	11.6	15.9	26.3	41.9	48.2	56.3	35.7
3 Assam	7.0	10.8	10.7	13.9	16.8	17.4	19.6	19.6	21.1	31.0	34.7	34.8
4 Bihar	9.8	12.1	10.4	9.9	11.4	19.2	21.2	27.2	26.8	26.4	44.0	63.5
5 Chhattisgarh	—	—	—	—	—	—	—	—	—	—	*	16.8 **
6 Goa	5.4	4.5	4.4	3.9	4.0	2.9	3.7	3.1	6.3	6.2	6.6	6.8
7 Gujarat	7.3	5.8	5.6	5.6	6.1	6.6	8.0	8.7	11.9	13.6	11.6	11.5
8 Haryana	4.5	4.5	5.6	4.1	2.6	3.8	4.6	5.2	11.4	12.3	9.9	9.9
9 Himachal Pradesh	21.0	19.3	21.5	20.4	19.3	22.5	22.6	23.7	28.6	26.5	43.2	39.8
10 Jammu and Kashmir	17.5	15.5	14.6	14.0	13.7	15.3	23.6	25.3	52.0	42.0	45.5	49.2
11 Jharkhand	—	—	—	—	—	—	—	—	—	—	*	17.1 **
12 Karnataka	9.4	8.4	8.9	9.0	9.2	8.6	10.1	10.5	11.6	16.5	14.8	15.0
13 Kerala	19.0	17.8	17.2	17.4	17.7	18.3	17.1	18.1	22.2	31.6	29.6	28.4
14 Madhya Pradesh	6.5	6.9	6.7	8.1	8.6	10.0	11.2	11.4	16.6	14.5	13.1	16.0
15 Maharashtra	4.1	4.2	4.3	4.3	4.0	4.4	5.1	5.3	5.4	7.5	8.4	10.0
16 Manipur	22.8	69.8	48.4	46.0	34.7	44.0	63.4	70.6	86.3	175.6	140.1	173.6
17 Meghalaya	11.7	11.5	15.1	16.2	14.5	11.9	16.4	21.3	25.4	21.4	26.8	15.8
18 Mizoram	2.6	12.6	14.1	18.3	19.7	20.1	27.4	30.2	37.4	47.3	72.3	61.8
19 Nagaland	16.7	21.4	21.1	71.5	33.3	54.7	44.1	42.6	50.4	57.9	87.5	87.4
20 Orissa	8.6	10.1	10.6	11.4	10.6	11.1	13.9	16.1	23.2	28.4	29.0	31.8
21 Punjab	8.2	4.5	7.5	7.5	4.7	6.3	7.4	8.0	15.1	18.1	14.3	13.3
22 Rajasthan	7.7	7.9	7.5	8.3	8.3	7.5	10.9	12.0	16.6	21.9	24.2	23.5
23 Sikkim	3.7	4.5	4.6	6.9	0.9	0.6	0.6	0.6	1.4	1.5	5.2	1.8
24 Tamil Nadu	9.9	8.3	9.9	9.8	9.6	9.8	12.1	13.1	15.7	21.9	20.9	20.9
25 Tripura	41.7	43.3	40.6	46.1	45.3	41.6	44.3	54.6	53.6	62.4	67.2	68.3
26 Uttaranchal	—	—	—	—	—	—	—	—	—	—	*	2.5 **
27 Uttar Pradesh	6.0	6.4	8.9	7.3	7.4	9.2	11.7	12.7	18.9	18.1	16.7	16.4
28 West Bengal	7.8	8.1	8.9	10.5	9.9	10.4	13.4	15.9	19.6	27.8	27.2	31.0
All States	7.9	7.7	8.3	8.2	7.9	9.0	10.4	11.0	14.3	17.1	17.0	17.2

* As these three new States were created on different dates during 2000-01; the figures for the financial year are not given.

** Indicates treasury outgo. Pension liabilities of employees retired before creation of these States are divided between successor States by the Accountant General. Hence, the actual pension payments are higher.

Note : The States' own revenue receipts comprises States' own tax receipts and States' own non-tax receipts.

Source : Various issues of the Article on State Finances, Reserve Bank of India.



राकेश मोहन
उप गवर्नर
Rakesh Mohan
Deputy Governor

Annex. 1: Office Memorandum

ANNEX. I

भारतीय रिज़र्व बैंक
केन्द्रीय कार्यालय
शहीद भगतसिंह मार्ग
मुम्बई - 400 001 भारत
Reserve Bank of India
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Office Memorandum

February 15, 2003

Group to Study the Pension Liabilities Of the State Governments

The issue of ever increasing pension liabilities of the State Governments has assumed critical importance in recent years, especially in the context of the fiscal deterioration of the States. In the Eleventh Conference of the State Finance Secretaries held in the Reserve Bank on January 9, 2003, it was felt that a detailed examination of the issues relating to States increasing pension liabilities could facilitate the States to initiate appropriate measures in this regard Accordingly, it has been decided to constitute a Group with the following members to examine the various issues relating to the growing pension liabilities of the State Governments and to make suitable recommendation.

1.	Shri B. K. Bhattacharya, Former Chief Secretary Government of Karnataka.	Chairman
2.	Shri H. S. Das, Commissioner and Secretary (Finance), Government of Assam.	Member
3.	Shri A. K. Vijayavargiya, Additional Chief Secretary, Government of Chhattisgarh.	Member
4.	Shri S. K. Sood, Finance Commissioner cum Secretary, Government of Himachal Pradesh.	Member
5.	Shri B. K. Das, Principal Finance Secretary, Government of Karnataka.	Member
6.	Shri Debasish Gupta, Finance Commissioner cum Secretary, Government of Jharkhand.	Member

7.	Shri A. K. D. Jadhav, Principal Finance Secretary, Government of Maharashtra.	Member
8.	Shri M. D. Kaurani, Additional Chief Secretary, Government of Rajasthan.	Member
9.	Shri Samar Ghosh, Principal Finance Secretary, Government of West Bengal.	Member
10.	Smt. Ganga Murthy, Director (PP), Department of Pensions and Pensioners' Welfare, Ministry of Personnel, Public Grievances and Pensions, Government of India.	Member
11.	Nominee from the Life Insurance Corporation of India	Member
12.	Dr. M. Govinda Rao, Director, National Institute of Public Finance and Policy, New Delhi.	Member
13.	Dr. Urjit R. Patel, Executive Vice President, Infrastructure Development Finance Company Ltd, Mumbai.	Member
14.	Dr. Susan Thomas, Assistant Professor, Indira Gandhi Institute of Development Research, Mumbai.	Member
15.	M. R. Nair, Adviser, Department of Economic Analysis and policy, Reserve Bank of India.	Convenor

The following persons, as also any other expert in the field, may also be invited to the deliberations of the Group as Special Invitees,

1. Dr. R. Bannerji, Joint Secretary, Department of Expenditure, Govt. of India.
2. Dr. N. J. Kurian, Adviser, Planning Commission, Govt. of India.
3. Smt. Usha Thorat, CGM-in-Charge, Internal Debt Management Cell, Reserve Bank of India.

The terms of reference of the Group are as under.

- i) To study the existing pension scheme as prevailing in the States :
- ii) To review the trends in the pension payments of the State Governments and their fiscal implications;
- iii) To broadly assess the future liabilities of the existing pension schemes of the State Governments;
- iv) To examine cross-country practices concerning pension reforms/ schemes and the funding arrangements thereof;
- v) To examine the feasibility of introducing necessary modifications in the existing pension schemes with a view to reduce the fiscal burden in future, and;
- vi) To suggest appropriate mechanisms regarding funding arrangements to be put in place for enabling the States to meet their growing pension liabilities.

The Group shall submit the report by end-August 2003.

The Division of State and Local Finances, Department of Economic Analysis and Policy, Reserve Bank of India would function as the Secretariat to the Group.



(Rakesh Mohan)
Deputy Governor

Annex. II A: Details sought from the State Governments Regarding the Existing Pension Scheme

A. General

Name of the State:

Name of contact official (for future reference)

B. Present/Prevalent Pension Scheme

a) Details

1. Please furnish details of the existing pension scheme, including age of retirement, prevailing in your State.
2. Whether pension facilities are available to all the grant in aid institutions such as educational institutions *etc.*, and urban and local government institutions such as corporations, municipalities, panchayati raj institutions, *etc.*
3. If so, whether scheme allows same facilities to the above categories.
4. Whether the State has fully implemented the pay scales applicable to Central Government employees, based on the Fifth Pay Commission Report.
5. (a) If yes, from which year this was implemented.
(b) If not, details of the State Pay Scales may please be furnished.
6. Whether there is provision for adding a fixed number of years to qualifying service for calculation of pension in

case of voluntary retirement by government servants. If so, please provide details.

7. Whether there is full wage indexation, *i.e.*, whenever pay scales of the employees are revised, pension is also revised accordingly.

b) DA formula

1. What is the DA formula - whether it follows the Central Government?
2. Whether revisions in the DA are made immediately following the changes in the Central DA for its pensioners.
3. If not, with what time lag.
4. Is the DA formula for pensioners the same as for employees?

c) Commutation, gratuity and leave encashment

1. Please state whether the employees are entitled for commutation facility.
2. If yes, furnish the details of the commutation formula currently followed including number of years required for restoration of full pension.
3. Please give details of Death cum Gratuity benefit scheme
4. Please give details of leave encashment facility at the time of retirement.

C. Demographic and other Details of State Government Employees and Pensioners

1. Please provide age-wise and category-wise details of the State Government pensioners in the State at present (Format in Table 1).

The age-wise break-up of pensioners should be given as follows: 60-65 yrs., 65-70 yrs., 70-75 yrs, above 75 years. Information may be furnished separately for State Government employees and employees of grant-in-aid institutions and local bodies (urban and rural).

2. Please provide age-wise and category-wise details of the State Government employees and employees of grant-in-aid institutions and local bodies (urban and rural) at present (Format in Table 2). *Information may be furnished separately for State Government employees and employees of grant-in-aid institutions and local bodies (urban and rural).*

The age-wise break-up should be given as follows: up to 30 yrs., 30-40 yrs., 40-50 yrs, 50-55 yrs, 55 yrs - superannuation.

D. Trends in Pension Payments and Estimated Future Pension Obligations

1. Please furnish information on pension payments category-wise for the period 1990-91 to 2001-02 (Format in Table 3). *Information may be furnished*

separately for State Government employees and employees of grant-in-aid institutions and local bodies (urban and rural).

2. Please furnish information on estimated pension payments, category-wise, in the next ten years, *i.e.*, 2002-03 to 2012-13. (Format in Table 4). *Information may be furnished separately for State Government employees and employees of grant-in-aid institutions and local bodies (urban and rural).*
3. Please provide number and ratios of pensioners to actual employees during the period 1990-91 to 2001-02.
4. Please provide amount and ratios of pension payments to wages and salaries during the 1990-91 to 2001-02.

E. Issues and Envisaged Measures relating to Pension Reforms

1. Do you think that pension liabilities would put severe pressure on the State finances?
2. Have you contemplated any change in the existing pension scheme?
3. If yes, please provide details of the same.
4. What are your views on instituting a contributory pension scheme?
5. Whether the State is in favour of adopting a defined contributory pension scheme as envisaged by the Government of India

[Defined Contribution Scheme: A pension plan in which the individual makes contributions over the length of his service and the benefit receivable by him is dependant on the balance in his account at the time of his retirement. The balance includes his contribution and the yield earned on the investment of his contributions].

- Whether the State is in favour of a hybrid pension scheme, which combines the features of a defined contribution and defined benefit scheme, with some minimum pension amount to all the employees and provision for higher pension based on contributions by the employees.

[Defined Benefit Scheme: A pension plan in which the benefit to which an employee is eligible is based on a defined benefit formula which may have as its parameters a flat rate per year of service or a percentage of salary or a percentage of salary times the years of service].

- Whether, in your view, the state would need to create a pension fund to meet the growing pension liabilities.
- If yes, what should be the quantum of annual contributions to the same?
- Whether the same should be linked to the pension liabilities of the State or to the revenue receipts of the State.

Table 1: Age-wise/ Category-wise details of State Government Pensioners

(No. of pensioners)

Category/ Age	60-65 years	65-70 years	70-75 years	75 years and above
A				
B				
C				
D				

Note: Information may be furnished separately for State Government employees and employees of grant-in-aid institutions and local bodies.

Table 2: Age-wise/ Category-wise details of State Government employees

(No. of employees)

Grade/ Age	30-40 year	40-50 years	50-55 years	55 -60 years
A				
B				
C				
D				

Note: Information may be furnished separately for State Government employees and employees of grant-in-aid institutions and local bodies.

Table 3: Category-wise details of Pension Payments

(Rs. crore)

Year/ Category	A	B	C	D	Total
1990-91					
1991-92					
1992-93					
1993-94					
1994-95					
1995-96					
1996-97					
1997-98					
1999-2000					
2000-01					
2001-02					

Note: Information may be furnished separately for State Government employees and employees of grant-in-aid institutions and Local bodies.

Table 4: Category-wise details of Estimated Future Pension Payments

(Rs. crore)

Year/ Category	A	B	C	D	Total
2002-03					
2003-04					
2004-05					
2005-06					
2006-07					
2007-08					
2008-09					
2009-10					
2010-11					
2011-12					

Note: Information may be furnished separately for State Government employees and employees of grant-in-aid institutions and local bodies.

Annex. II B : States' Views on Pension Reforms: Details Sought

A. PENSION SCHEME

1. Whether the Group's recommendations should focus on developing a single model for pension reforms or suggest alternative models out of which a State Government may choose a model which it considers practical or feasible.
2. If it is to be single model should it be 'Defined Contribution (DC) model' as announced by Government of India or a DC model with some modifications (e.g. a minimum pension guarantee of 33 1/3 % or 40 % or 50 % of average of last 12/24/36 months pay) or any other model.
3. If contributory pension fund is introduced based on matching contribution by States, whether the states would be in a position to meet additional expenditure in view of their present fiscal situation?
4. Should the Committee recommend bringing in younger existing employees (those with less than 10 years of service who have not yet become eligible for receiving pension) within the purview of the new "D. C." or any other form of contributory or funded pension system? What will be the implications of such a provision.

B. PENSION FUND

5. Whether States should set up their own pension funds or join the pension fund created by the Centre? Whether it is possible for a few States to join together and create a common fund.
6. Whether there should be a single pension fund manager or multiple fund managers?
7. What should be the criterion for selecting pension fund managers?
8. Whether pension funds should be permitted to invest in State Government's own securities: if yes, whether there should be any ceiling?
9. Whether pension funds should be allowed to invest in equity or equity linked funds. If yes, what should be the ceiling on such investment?
10. Should the alternative of keeping Pension Funds in Public Account (Personal Deposit Accounts) in the Treasury be considered a desirable alternative.

C. PENSION FOR EMPLOYEES OF GRANTS-IN-AID INSTITUTIONS/ LOCAL BODIES

11. Many State Governments have large number of pensioners who are: (a) past employees of Grant-in-Aid Institutions, (b) employees of Local Bodies e.g. municipalities, Corporations, District/ Taluka/Block/Village Panchayats, *etc.*

12. Is it possible to recommend rationalisation of future benefits to existing pensioners belonging to such categories ?
13. When existing employees belonging to Grant-in-Aid Institutions, Local Bodies, *etc.* become Pensioners in future, can they be treated separately (with different Pension Benefit formulae) from pensioners who were direct government servants. Can State Governments start collecting pension contribution from Grant-in-Aid Institutions/Local Bodies on behalf of such employees.
14. What should be the recommendations regarding new employees in these categories. If they should be brought under a 'Defined Contribution' System, who should pay employer's contribution on their behalf. Should they be allowed to join State Government's Pension Fund for their own employees or should they be asked to join 2nd Tier of the Central Government's Pension Fund.

D. MISCELLANEOUS

15. Whether Committee should suggest enhancement of age of retirement/ adoption of uniform age of retirement by all the States.
16. Whether one time lumpsum payment say, 100 per cent commuted value for the existing employees can be considered as an alternative for the

- existing Scheme? Should it be given as an option or could it be imposed upon the existing employees. What are the pros and cons of such a decision.
17. Analysis of existing Commutation Formula, Discount Factor, *etc.* Committee's views on modification of the Commutation Formula, restoration of Commuted Pension, *etc.*
18. Family Pension: What should be the Committee's recommendations regarding Family Pension Scheme, or (any alternative scheme to take care of the contingencies of death of an employee while in service) for existing employees/New Employees.
19. Committee's views on existing benefits under "DCRG", Encashment of Leave on retirement, proposed benefits under these heads for existing employees/New Recruits.
20. Other points to be considered, e.g. provision for adding certain number of years in case of voluntary retirement after 15/20 years of service, age at which pension should be payable on voluntary retirement, *etc.*
21. Future of existing compulsory Non-Contributory Provident Fund/Insurance, Schemes *etc.*, once DC scheme (in pure or modified form) is introduced for New Employees. Its implications for State Finances.
22. Any other point on which Committee should make recommendations.

Annex. II C : Additional Information sought from States

1. The system of providing pension to employees of urban and rural local bodies/ Grants-in-Aid institutions/organisations, like State Electricity Boards and Road Transport Corporation, *etc.*
2. Number of: (i) Government employees; (ii) employees of urban and rural local bodies; (iii) employees of Grant-in-Aid Institutions (schools, colleges, etc); (iv) employees of Road Transport Corporation; and (v) employees of State Electricity Boards.
3. Annual wages and salaries paid/payable to each of the five categories mentioned at (b), *i.e.*, Government servants, employees of urban and rural local bodies, Grant-in-Aid Institutions, State Electricity Boards and Road Transport Corporation, (for past 10 years and forecast for the next 10 years).
4. Pension payments for each of the five categories mentioned at (b) above for past 10 years and forecast for the next 10 years.

Annex. III : List of Officials of the Reserve Bank of India associated with the Work of the Group

Sr. No.	Name	Designation	Department
1	Dr. B.N. Anantha Swamy	Director	DEAP
2	Shri S. M. Pillai	Director	DEAP
3	Shri K. U. B. Rao	Director	DEAP
4	Shri D.P. Rath	Director	DEAP
5	Smt. R. Kausaliya	Assistant Adviser	DEAP
6	Shri Rajan Goyal	Assistant Adviser	DEAP
7	Smt. Deepa Raj	Assistant Adviser	DEAP
8	Smt. Anupam Prakash	Research Officer	DEAP
9	Shri Rajmal	Research Officer	DEAP
10	Shri. Rudra Sensarma	Research Officer	DEAP
11	Smt. Mumtaz Sayed	Assistant Manager	DEAP
12	Smt. V.V. Shinde	Private Secretary	DEAP
13	Smt.M.V. Kulkarni	Economic Assistant	DEAP
14	Kum. G.F. Colabawalla	Economic Assistant	DEAP
15	Smt.M.L. Mirchandani	Stenographer	DEAP
16	Shri S.R. Ghanshani	Clerk Gr.1	DEAP
17	Shri P.P. Joshi	Clerk Gr.1	DEAP

DEAP: Department of Economic Analysis and Policy

Annex. IV: Alternative Financing and Managerial Arrangements for Old Age Security

	Formal			Informal
Characteristics	Public plans	Occupational plans	Personal savings	Extended family
Voluntary or mandatory	Mandatory	Voluntary or mandatory	Voluntary or mandatory	Social sanctions
Redistribution	Yes	Yes	Minor	Family
Benefits closely linked to contributions	No	Mixed	Yes	Within family
Defined benefits or defined contributions	Defined benefits	Mixed	Defined contributions	NA
Type of risk	Political	Job mobility, company insolvency	Investment	Joint family risk
Pay-as-you-go or fully funded	Pay-as-you-go	Mixed	Fully funded	Mixed
Public or private management	Public	Private	Public or private	Private
Examples	Eastern Europe, Latin America, OECD countries	Australia, Brazil, France, Netherlands, South Africa, Switzerland	Mandatory: Chile, Malaysia, Singapore. Voluntary: United Kingdom, United States.	Most of Africa and Asia

NA - Not applicable

Source: World Bank, 'Averting the Old Age Crisis', a World Bank Policy Research Report.

Annex. V : Evolution of Civil Service Pensions in Selected Countries

The United Kingdom could be considered as one of the pioneers in the establishment of formal pension system dating back to 1375 (Blake, 1997). In the early days, pension was paid from the salary of the successor to an office. In 1712, a Superannuation Fund was established to provide pensions for London-based customs and excise officers. By 1725, this fund was in debit because the contribution was fixed on a "pay as you go" (PAYG) basis and took no account of the possibility of future increases in the ratio of pensioners to those at work. The Government was required to make up for shortfalls from public money. In 1810, an Act of the Parliament provided that pension scheme would be non-contributory and pensions were to be paid directly out of public funds. This Act also fixed the retirement age at 60 years and laid down a scale of pensions related to final salary. However, the first Act devoted exclusively to pensions was the Superannuation Act of 1834. Although this Act extended non-contributory pensions to the whole of civil service, it provided that pensions were ex-gratia and did not involve any statutory right of the civil servant. It was entirely within the discretion of the Treasury to grant pension, to withhold it or to vary its amount. This Act was subsequently replaced by the Superannuation Act of 1859 which contained many features similar to the present day system in U.K. and Ireland.

Elsewhere in the Western World, pension plans emerged as tools of social insurance for

the aged and the invalid, during the latter half of eighteenth century and early nineteenth century. For instance, the foundations of the German pension system were laid in Austria during 1781 and in Bavaria during 1805, when the *ad hominem* discretionary award of a pension by the ruler was replaced by a system giving officials a legal right to a pension at the end of their service. Essentially, the pension was a reward for long and loyal service and the amount of the pension depended on the length of service. There were, however, two early precursors to the modern system in Germany. First, allowances for widows of clergymen/clerics were granted since the 16th century by private societies of clergymen (*Pfarrwitwenkassen*). These were financed by annual deductions from clerical salaries. This system was extended for widows of civil servants since the middle of the 18th century. The second precursor was the provision made for invalid soldiers financed through deductions from pay and, after the beginning of the 18th century, through state contributions. After Bismarck created a social insurance system for workers, financed by salary deductions, employer contributions and state subsidy, the costs of the civil service pension system were completely taken over by the state. In 1887, *Pensionregulativ* (old age benefits regulation) was introduced which linked the level of payment to the period of service. It also introduced a *Karenzzeit* (minimal period an officer has to be employed in order to be entitled to any benefits).

This regulation, introduced initially for the lower grade civil servants in the state railway system, became the model for all civil servants as set out in the Bavarian Civil Servants Act of 1909 (Wunder, 2000; Amedick, 2000).

The French public servants' pension system has its origins in the Law of 1853, This Law provided for the following: (i) French civil servants are vested with a true right to a pension (ii) pension schemes should be financed through the budget and (iii) all officials should benefit from the same pension scheme. Although being the only text of general coverage, applicable to all civil servants for a whole century, the 1853 Law failed to solve the difficult problem of the financial balance of pension schemes, the morally sensitive problem of the rights of widows and orphans, and the length of service required to receive full pension (Drago / de Forges, 2000).

The contemporary civil service pension system in place in the Netherlands has its roots in the 1814 -1922 period. In 1814, the newly independent Dutch government decided to follow the principle of civil service pensions as had been designed during the years of the Batavian Republic and the French presence. After much legislative trial and error, the evolutionary process of pension system culminated in the Pension Act of 1922. This act provided a unified pension system for all public employees. The civil servant's pension which was initially perceived as an act of kindness became a right, or, in more straightforward terms, a perk of the office (Blanck, and Song,2002)

The United States instituted a pension policy in 1862, with the immediate objective of compensating disabled veterans injured during the war. This was later expanded to cover qualified Union Army Veterans and their families (Refer 9). In 1920, the Civil Service Retirement Act was passed which provided for many government employees. (Refer 10). Prior to its enactment, as recorded by Pfiffner, "departments were burdened with older workers, some of whom had to be brought to the office in wheel chairs" (Srivastava,1966). The Social Security Act of 1935 provided a wider coverage of Old Age Assistance and Old Age Survivors Insurance. The Federal Government employees were, however, not covered by the social security system till 1983. The Social Security Amendments of 1983 brought all new federal civilian employees hired after December 1983 into the social security system (Turner and Rajnes 1999).

Mexico has a long history of pension for its civil servants. The military enjoyed pension benefits called *montepío militar* ever since the Spaniards conquered Mexico. After Mexico gained independence from Spain in 1821, one of the first acts of the new government was to grant pension to officials in the executive, judiciary and treasury offices. These benefits (for the military and the bureaucrats) were, however, confined to the white minority of the population. The people of native origin and mixed race who formed the vast majority, remained outside the system. While labour movements demanded retirement pension, among other things, it was not until 1917 that a new constitution legalising labour rights was

enacted. Between 1924-28, the coverage of the old age insurance of federal employees and military was expanded. By law, social security became compulsory in Mexico on December 31, 1942 (Sinha, 2002).

The civil services pension system in New Zealand had its origins in the opening legislation of the nation's Parliament in 1856, when three members of the old Executive Council were granted pensions which were non-contributory in nature and paid by the taxpayer. By 1858, this was extended to long-serving employees in order to secure the best for the public service. The first

contributory scheme was introduced in 1886, with an eventual contribution-determined pension. By 1893, the government started topping up inadequate pensions. Following the introduction of the means-tested old-age pension in 1898 and coincident with the major expansion in the public sector, separate contributory funds with benefit-determined pensions were established for police, railway workers, teachers and the civil service. These were altered from time to time, from 1908 to 1992, when the unified Government Superannuation Fund was established (Atkinson, 2002).

Annex. VI : Pension Fund Management Reforms in Select OECD Countries

(i) Canada

Canadian Pension Plan (CPP) was founded in 1966 as PAYG scheme, indexed to inflation. The scheme requires mandatory contribution by all employees and employers. Federal and provincial Governments have no liability towards Canada Pension Plan. Governments, however, make matching contributions like other employees. Due to demographic developments, the ratio of number of employees to pensioners is expected to decline sharply in future.

In Canada, in order to ensure long term financial soundness of the existing Canadian Pension Plan (CPP), a number of measures have been taken, which include: (i) increasing current contribution rate from 6 per cent to 9.9 per cent by 2003, and (ii) creation of independent corporation to manage reserves. As a part of the reform process, the CPP Investment Board was created in 1998, which functions as a Corporation. During the last three decades, CPP reserves were invested in the provincial government securities, where the yields were below market rates. With a view to enhancing the return, CPP funds have been allowed to be invested in capital market. In addition, investment in foreign equity has also been permitted. The limit on foreign equity exposure is 20 per cent

of the total. This, would however be raised to 30 per cent later.

The Governance model initiated in Canada envisages independence from political and government influence. At the same time, it provides for rigorous public reporting and accountability. The CPP is required to disclose quarterly financial results. Appointment of board of directors is done by the Federal Finance Minister and Provincial Finance Ministers from among the candidates recommended by the Nominating Committee. Boards consist of financial specialists, actuaries, economists, investment specialists, business leaders and corporate governors. CPP is not required to buy government bonds or make loans to state owned firms. Similarly, it is not required to follow a social investment policy or support other public policy objectives. Thus, CPP, which initially invested only in government bonds, subsequently diversified into public and private equities and then to real return assets such as real estate, natural resources, infrastructure, *etc.*

(ii) Ireland

In 2001, a new National Pension Reserve Fund was set up in Ireland which also covers public employees. By the end of 2001, the fund accounted for 5.3 per cent

of GDP. The Fund is controlled by a Commission which is independent of the Government. The Fund has a mandate to maximise returns subject to a prudent level of risk. The National Treasury Management Agency was designated as manager for the first ten years. They, in turn, contract out to private asset managers. As per the investment policy adopted by the Commission, domestic bond investment is not permitted.

(iii) Japan

Major reforms were introduced in Japan's pension system in 1995 and 2000 with a view to reducing the benefit levels. Despite this, demographic developments and reliance on public pensions implied one of the largest unfunded pension liabilities in the world. With a view to ensure a sustainable pension scheme, a new pension legislation was passed in Japan in 2000 which became effective in April 2001. The reform measures included reduction in the accrual rate, increase in normal retirement age, and switchover from wage to price indexation.

The reform also included changes in the management of public pension reserves. Earlier, bulk of the pension reserves was borrowed by the central government in the form of non-marketable government bonds. A small portion was invested in the capital market. Changes in the pension fund management were introduced in 1986. As a result, funds invested in non-government

loans rose to 20 per cent in 1986 from only one per cent in 1986. Further, changes were introduced in 2001. A new governance arrangement was created in 2001. As a part of the new investment policy, several restrictions and transitional arrangements were adopted. As per the same, holdings in domestic bonds must be greater than foreign bonds, and foreign equities should be less than two-thirds of the domestic equity investment. In addition, holdings of foreign stock must be greater than foreign bonds.

(iv) New Zealand

In New Zealand, the pension scheme provides for universal flat benefit financed by general revenue. Keeping in view the likely increase in the pension expenditure, the Government undertook pre-funding the pension scheme in 2001 under the Superannuation Act of 2001. The Act provides for partial funding target through annual contribution from the budget and setting up of New Zealand Superannuation Fund (NZSF). The aim is to ensure that the Fund would meet the costs of pensions over the next 40 years. Further, withdrawals from the Fund are not allowed till 2020. The governance of the NZSF is entrusted to a public Corporation (Guardians of New Zealand Superannuation Fund), run by a Board, which is responsible for investing the funds on a prudent commercial basis. The investment policy should adhere to three standards; (a) best

practice portfolio management, (b) maximising return without undue risk to the Fund as a whole, and (c) avoiding prejudice to New Zealand's reputation as a responsible member of the world community.

(v) Sweden

Prior to reforms introduced in 2001, there were five pension funds. The statutory restrictions prohibited investment in equity in three funds and limited investment in foreign securities to less than 10 per cent of assets in all five funds. The pension fund reforms introduced in 2001 allowed for conversion of existing five funds into four new funds. The reform measures aimed at maximising return subject to stated risk tolerances. The investment policy provides

for 30 per cent minimum required allocation to fixed income instruments with high ratings and 40 per cent foreign currency exposure rule for investment outside Sweden. In addition, up to five per cent of the fund can be invested in unlisted securities. Management of the fund should not be guided by industrial or economic policy goal. With a view to preventing the funds from becoming excessively large players and thereby assuming ownership of firms, each fund is allowed to have a maximum of two per cent of the market value of a Swedish firm. The law also places a limit of 10 per cent in the voting rights of listed companies and 30 per cent in the case of unlisted venture capital funds. The funds should bring out annual and semi-annual reports.

Annex. VII : Application of Actuarial Mathematics¹⁷

A. The financing of social security pensions

When a pension scheme is set up, a major question is its method of financing, *i.e.* the arrangement according to which resources are to be raised to meet the expenditure on benefits as well as administration of it. The problem of financing a social security pension scheme can be regarded as essentially that of fixing the initial and future contribution rates at levels considered affordable by the respective contributing parties while, at the same time, tailoring the accumulation of the reserves to the projected investment needs and absorptive capacity of the economy. The future course of a scheme is determined in the first instance by demographic and economic characterisation of the population initially covered, as well as such factors which will be experienced by the scheme over its lifetime. These include, the rate of interest (δ), the rate of growth of new entrants (ρ), the rate of escalation of insured salaries (γ), the rate of pension indexation (β), the (age-specific) mortality rates, invalidity and other decrements (μ_x^d, μ_x^i), and the rate of inflation (θ). Under normal circumstances, the following relationship is assumed to hold: $\gamma \geq \beta \geq \theta$.

The ratio of the number of pensioners to the active population - referred to as the aged dependency ratio - will increase from zero, initially rather rapidly but then more slowly until it reaches a constant level. At that stage, a scheme is said to have attained demographic maturity. Expenditure

function will increase, from zero at the outset, but the rate of increase will eventually slow down and reach a steady pace ($= \rho + \gamma$). In the initial stages of a new pension scheme administration expenditure may predominate, but as the scheme matures, its importance relative to the expenditure on benefits will fall considerably. Administrative expenditure, in the long run, can be regarded as roughly proportional to benefit expenditure or, alternatively, as approximately linearly related to both benefit expenditure and insured salaries. In either case, the total expenditure function will bear a relationship, similar to that of the benefit expenditure function, to the insured salary function. Any financial system essentially aims at achieving equilibrium between income and outgo of the scheme through the contribution rate function and the reserve function, the latter representing the excess of inflow over outflow.

There can be different ways of financing a pension scheme that has 'defined benefits' (*i.e.* where the benefit formula is specified and the financing arrangements are determined as the amounts needed to finance the benefits).

- The pay-as-you-go (PAYG) financial system requires contributions such that inflows and outflows into the scheme match (*i.e.* zero reserve) at every period. In other words, contributions exactly balance expenditures in selected time intervals (e.g. annually).

¹⁷ Extracts from the Book: "Actuarial Mathematics Of Social Security Pensions", by Subramaniam Iyer, ILO, Geneva, 1999.

- The general average premium (GAP) system is based on the concept of a constant contribution rate applicable throughout the subsequent lifetime of the pension scheme.
- In the autonomous funding system (AFS), initial population and new entrants constitute separate autonomous risk pools, and the respective average premiums are applied as contribution rate. The contribution rate function is the weighted average of the average premium of the initial population and the average premium of the new entrants, the weights being the respective insured salary functions, at a particular point of time, of the initial population and the new entrants. A higher reserve will be generated than under the GAP.
- The terminal funding system (TFS) involves each pension being capitalised at the time it is awarded. In other words, contributions exactly balance capital value of new pension awards in selected time intervals (e.g. annually), *i.e.* full pre-funding at the time of award.
- There can be a whole series of intermediate financial systems, between the PAYG and GAP systems, generated by dividing the time span of a pension scheme into successive intervals of limited duration and determining a level

contribution rate for each interval such that the reserve function satisfies a given condition over the interval.

- The scaled premium system (SPS) is characterised by steadily increasing level contribution rates in successive control periods and a non-decreasing reserve fund.

From the point of view of the funding level, the PAYG system is at the lower extremity of the range of the practicable financial systems for a pension scheme. It involves an almost continuous increase in the contribution rate. Moreover, the contribution rate will reach a relatively very high level when the scheme attains financial maturity. Finally, practically no reserve will accumulate. The GAP system has the advantage of a perpetually level contribution rate, but this means that a relatively high rate will need to be applied right at the outset. From the point of funding level, it is customary to regard the GAP system as the upper extreme of financial systems applicable to social security pension schemes. Thus the system will lead to the accumulation of a substantial reserve. The TFS has the property that the reserve is adequate to cover the future cost of all pensions already awarded, although this may not be a requirement for social security pension financing. This system of successive control

periods provides a balance between the contrary characteristics of the PAYG and the GAP systems.

A pension scheme is said to be fully funded if the accumulated reserve at least equals the value of all accrued benefits. However all financial systems employed in the area of social security pension financing are only partially funded.

B. The funding of occupational pensions

Occupational pension schemes are sponsored by individual employers or set up through negotiations by trade unions with several employers (multi-employer plans). The basic characteristics of occupational pension schemes, as far as retirement benefits are concerned, are not very different from those of social security pension schemes. Unlike social security schemes, an occupational pension scheme aims to achieve financial equilibrium on a closed fund basis, meaning only the existing membership (and not the future entrants) will be taken into account. In the context of these schemes, the assets are assumed to be separate from that of the sponsor and held in trust on behalf of the members. Here the funding methods are referred to as actuarial cost methods.

The actuarial cost methods can be divided into two groups: individual cost methods and aggregate cost methods. In the former, first the total results for individuals are obtained which is then summed up to obtain the results for the aggregate - these address the financial equilibrium of new entrants and then consider adjustments

required to achieve close-fund equilibrium of the initial population. Contribution paid over a new entrant generation's active lifetime should, by retirement age, accumulate to the capital value of pensions of those attaining that age. Aggregate cost methods determine the time related contribution rate function (the level rate which would ensure the close-fund financial equilibrium of the scheme taking into account the accumulated reserve) for the entire group together on a collective basis.

The methods can be further divided into accrued benefit methods and entry age methods. Accrued benefit cost methods fund in each time interval the portion of the ultimate pension benefit earned that interval. This leads to reserve fund equal to the probable present value of the portion of ultimate benefit accrued up to that age. Age-related contribution rate is determined such that for new entrants, age-related reserve fund equals accrued benefits based on current service and current or projected salary, allowing for pension indexation. Initial accrued liability is funded separately (e.g. through uniform payments spread over active lifetime of the youngest initial entrant). Entry age methods seek to establish a level contribution rate or amount in function of the entry age. For new entrants, benefit is funded through level contribution rate over active lifetime. Initial accrued liability is funded as for accrued benefit method. Occupational pension schemes are considerably more pre-funded than social security pension schemes.

C. Defined Contribution Schemes

So far as 'defined contribution' schemes are concerned, the sequence of designing benefits and

then contributions is reversed. Thus the rate of contribution is fixed in advance, and the benefit becomes the dependent variable. The benefit is determined, apart from the contributions themselves, by the interest or investment return credited to the individual accounts, while the successive contributions are determined by the member's salary progression. There is substantial difference of opinion among experts in regard to the relative advantages and disadvantages of defined contribution and defined benefit schemes. A compromise solution would consist in having both types of scheme simultaneously, in complementary tiers. A social security pension reform could therefore involve the transformation, either partly or fully, of an existing scheme in either direction.

D. The projection technique for actuarial valuations

Actuarial valuations of social security pension schemes are generally statutory requirements at prescribed intervals. In addition, interim internal valuations may sometimes be performed. The main purpose of periodic valuation of an ongoing scheme is to test its long-term solvency, that is to assess whether under the existing financing arrangements benefits can be paid and reserve funds maintained at the required levels. In this regard, particular importance is attached to changes in income and expenditure projections in successive valuations, which may signal the need to change the financing arrangements.

E. Methodologies for pension scheme projections

There are different methodologies for social security pension scheme projections. These are:

actuarial methods, econometric methods and mixed methods. While econometric methods are in effect extrapolations of past trends using regression techniques, actuarial methods involve successive iterations of projection formulae. The population is divided into subgroups (active insured persons, retirees, invalids, widows/widowers, orphans) and transition probabilities of moving from one status to another are estimated on the basis of actual data. Then the transition probabilities are applied to the demographic data (estimates of the number of people in each subgroup) and successive iterations generate the projections. In case of financial data, e.g. estimates of the total annual insured salary bill and total annual amounts of the different categories of pensions in force, these aggregates are obtained by applying the appropriate per capita average amounts (of salaries or of pensions, as the case may be) to each individual element of the demographic projections and then summing. The average amounts are computed year by year in parallel with the progress of the corresponding demographic projection.

The Present Value Technique

This method is more suited for the valuation of occupational pension schemes which are generally fully funded. It involves computation of the probable present values of the future insured salaries of one cohort of insured persons at a time, and of the pension benefits payable to the members of the cohort and to their survivors. The present values are calculated using suitable assumptions on interest rates and corresponding discounting factors.

Annex. VIII : Investment Pattern for Central Government Pension Fund as suggested by the High Level Expert Group on New Pension System

<p>1. Central Government securities as defined in Section 2 of the Public Debt Act, 1944 (18 of 1944); and/or units of such Mutual Funds which have been set up as dedicated Funds for investment in Government securities and which have been approved by the Securities and Exchange Board of India.</p>	<p>Percentage amount to be invested not less than 25 per cent.</p>
<p>2. Government securities as defined in Section 2 of the Public Debt Act, 1944 (18 of 1944) created and issued by any State Government; and/or units of such Mutual Funds which have been set up as dedicated Funds for investment in Government securities and which have been approved by the Securities and Exchange Board of India; and/or any other negotiable securities the principal whereof and interest whereon is fully and unconditionally guaranteed by the Central Government.</p>	<p>Percentage amount to be invested not less than 15 per cent.</p>
<p>3 (a) Bonds/Securities/Certificates of Deposit of financial institutions regulated under Banking Regulation Act or IRDA Act; and (b) Bonds/Securities/Certificates of deposits issued by public financial institutions as specified under Section 4A(1) of the Companies Act, 1956.</p>	<p>Percentage amount to be invested not more than 40 per cent.</p>
<p>4. Bonds/debt Securities of Companies registered under the Companies Act, 1956 and with rating by a SEBI approved credit rating agency, of at least investment grade in the previous three years, plus equities/Index Funds.</p>	<p>Percentage amount to be invested not more than 20 per cent of which investment in equities shall not exceed 10 per cent.</p>