Volume : 3 | Issue : 1 | Jan 2014 • ISSN No 2277 - 8160

Research Paper | Finance

A Comparative study on pension benefit of Government Employees in India and Chile

SUKHEN KALI

Assistant Professor, Department of Commerce, Bankura Sammilani College, Bankura, West Bengal

ABSTRACT

In Chile, reform in pension system took place in the early 1981 when the state managed pay-as-you-go system is replaced by a privately-managed fully funded scheme. In this system, benefits are not defined a priory in the fully funded system but instead depend on the result of individual savings and the return on those savings. However, the pension plans for police and armed forces remains unchanged. On the other hand, New Pension System (NPS) was introduced in India for the employees (except the personnel of Armed Forces) of the central government w.e.f 01.01.2004. 26 States and Union Territories are either agreed or already enforce the system. Increasing number of retired personnel and as well as increasing financial burden on the government of paying traditional defined benefit pension force the government to think about the change the system and convert into defined contribution type. In this paper, an attempt has been made to provide a brief idea about the pension benefits provided to the government employees of India and Chile and also compare the pension benefits of these two countries.

KEYWORDS : New Pension System, Pension benefit, defined contribution, defined benefit system

Introduction:

Workers are often concerned about cost of living at their retired life. Among the retirement benefits, pension is the most crucial one. In defined benefit pension system (for the employees who have joined in their service on or before 31st December, 2003), government employees in India are eligible to receive guaranteed pension after the retirement on the basis of their service period and last salary drawn (Basic plus Dearness Allowance) and the employees are not required to contribute any amount to get the facility. In this system, entire payments in respect of the pension are borne by the Government out of the current revenue. But after the introduction of New Pension Scheme (NPS) employees are required to participate in Individual Account based contributory pension system. This system came into force on 1st January, 2004 for all Central Government employees (except the personnel of Armed Forces). On the other hand, Chile was the first country to introduce the Individual Account based contributory pension system in 1981. In this system, pension is not guaranteed but it will be determined on the basis of the accumulated pension wealth of the individual account of the concerned employee at the time of retirement.

Objectives of the Study:

i) Identify the scope, and benefits of the pension system of India & Chile, and
ii) Compare the pension benefits of the Government employees in India & Chile

Main features of the Chilean pension system:

i) Individual Capital Account: Each participant has a separate individual account for depositing his/her contribution and the balance is accumulated including the return on balance. These accounts are administered by the AFPs authorized by the State. The accumulated balance is returned to the participant or to the surviving beneficiaries by way of pension in general. The amount of pension depends on the contribution and the return on the investment.
ii) Private pension fund managers: This individual capitalization system is managed by the private professional, known as pension fund administrators (AFPs) AFPs are public limited companies and the motto of the companies is the management of the pension fund and promote other activities strictly related to the social security. The functions of the AFPs include collection and deposit of the contribution to the individual account of each participant; invest the contribution in consideration of commission fixed by the administrators.
iii) Flexibility in choice of administrators: In the new model of Chilean pension system, workers have the right to choose their own pension fund administrator and also have the right to alter the administrator. The workers are also free to opt in respect of type of pension fund (varies with the degree of risk depending upon the type and mix of investments) in which the investment of the participant is be invested.

Table 1: Chile's pension system at a glance:-

Year of Inception: 1981
Mode of scheme: Mandatory, private
Rate of contribution as a percentage of salary: 10%
Voluntary contribution: Yes
Government contribution: Nil
Additional Savings: upto Basic salary
Fixed commission: Yes
Variable commission on assets under management: Nil
Old-age pension: Yes
Disability and Survivor's pension: Yes
Age of normal retirement: 65 year for men and 60 Years for the women worker
Provision of early retirement: Yes
Provision of Statutory cash reserve: 1% of pension assets held by AFP
Provision of Profitability Fluctuation Reserve: Yes

Main features of the New pension system in India:

i) Defined Contribution Scheme: New Pension Scheme is a defined contribution scheme where the employer's liability is restricted only to the contribution to the fund only. Unlike traditional pension system, employee has to contribute to the pension fund (@10% of the Basic plus Dearness Allowance).
iii) Individual Retirement Account: Contribution of each worker along with the employee's contribution will be credited in the worker's Account and the accumulated amount of the account will be used to purchase annuity at retirement.
iii) Administration of the Fund: The fund will be managed by the professional pension fund managers.
iv) Risk of the scheme: Entire investment risk will be borne by the subscriber. Benefits of two employees of same category & service period may be different on the performance of selected option & pension fund managers.
v) Benefit of General Provident Fund will not be available with the introduction of New Pension System.
vi) Two types of schemes are available. Tier I is non-withdrawable fund upto the age of 60 and the subscriber is required to invest at least 40% of accumulated fund in any annuity plan offered by the life insurance companies. Tier I is compulsory for the employees covered the New Pension Scheme (NPS). Tier II (available for every Indian citizen of an age of 18-55 years) is a withdrawable scheme where the subscriber can draw from the accumulated fund or even quit from the scheme.

Research Design:

Sources of data:

This study is based on the secondary data. The data are collected from the Government Service Rules, Death cum Retirement Rules (DCRB), and National Pension Portals for the retirement benefits of the government employees and also from the Official website of Pension Fund

Regulatory and Development Authority (PFRDA) for the data regarding new pension Scheme which is implemented for the government employees from 1st January, 2004. Data regarding Pay Scale for the period of 01.04.2004 to 31.12.2005 is taken from the civil service pension system (CSPS), 1997 and Pay in Pay Band and Grade Pay attached with the concerned pay in pay band are taken from the civil service pension system (CSPS), 2008 for the rest of the period. In case of Chile, rate of return on the pension funds is collected from "The Chilean Pension System", Chilean Superintendency of AFPs (SAFP) http://www.safp.cl/sischilpen/english.html and SAFP Research Department Working Papers Series: http://www.safp.cl/doctrab/

Sample Design:
As per the Service Rules Government employees are classified into four groups as Group-'A', Group-'B', Group-'C' and Group-'D'.

In this present study, we are trying to compare and analyse the pension benefits between the Government employees of India and Chile belonging to the Group A.

With effect from 1st January, 1996, Government employees have been classified into Group 'A' as follows:

Group-'A'- Employees having a pay or Scale of pay with the maximum above Rs. 10,175 and with effect from 1.1.2006, Pay Band Scale Rs. 9000-40500 with Grade Pay Rs. 4400 or more.

Study Period:
New pension system (NPS) is implemented with effect from 1st January, 2004 for the employees of Central Government and several State Governments also implement the new system as per their date of notification. The relevant data of the pension benefits are collected for the period of 5 accounting years (2004-2005 to 2008-09) i.e. after the introduction of NPS.

Hypothesis:
H_0: There is no significant difference in the pension benefits of the Group A government employees of India and Chile.

H_1: There is significant difference in the pension benefits of the Group A government employees of India and Chile.

Tools for Data Analysis:
For analysis of data, some descriptive statistical methods as mean, standard deviation, coefficient of variation are used. For determining statistical significance of the pension benefits under the Old Pension Scheme and the New Pension Scheme't' statistic is computed as follows:

$t = x_1 - x_2 / S.E. (x_1 - x_2)$

Where, x_1 = mean pension benefit under old pension scheme

X_2 = mean pension benefit of new pension scheme

S.E. $(x_1 - x_2)$ = standard error of $(x_1 - x_2)$

The study is based on the following assumptions:

i) Contribution @ 10% of Basic and Dearness allowance is considered for the contribution to the pension fund. In India, only employer's contribution to the fund is considered.
ii) The employee will retire after completion of 33 years of service. In case of early retirement, he/she is eligible to get full pension after completion of 20 years of service.
iii) The employee will retire after enjoying the 3rd promotion in 8-16-25 year under Career Advancement Scheme.
iv) Salary, terms and conditions of service of the employees of Chile are assumed to be same of the government employees of India.
v) The employee would be able to earn a return on an average of 8% on the amount credited in Individual Retirement Account (IRA) during the service life and also on annuity after retirement.
vi) Accumulated pension wealth of the Individual Retirement Account will be used to purchase annuity to get monthly pension.

Table 2: PENSION BENEFITS UNDER NPS in India, GROUP-A

Service Year	DATE OF JOINING					
	1.4.2004	1.4.2005	1.4.2006	1.4.2007	1.4.2008	Average
20	15973	17167	18261	19394	20581	18275
21	18143	19469	20677	21926	23234	20690
22	20541	22010	23341	24717	26157	23353
23	23187	24812	26277	27790	29373	26288
24	26104	27897	29508	31171	32907	29517
25	29314	31292	33060	34885	36789	33068
26	32876	35055	36995	38996	41083	37001
27	36800	39198	41325	43517	45802	41328
28	41109	43746	46074	48474	50973	46075
29	45836	48732	51280	53904	56636	51278
30	51019	54196	56982	59850	62833	56976
31	56697	60179	63222	66354	69610	63212
32	62912	66725	70048	73465	77017	70033
33	69712	73885	77509	81236	85108	77490

Table 3: PENSION BENEFITS in Chile, GROUP-A

Service Year	DATE OF JOINING					
	1.4.2004	1.4.2005	1.4.2006	1.4.2007	1.4.2008	Average
20	9496	10425	11335	12316	13383	11391
21	11037	12112	13166	14303	15541	13232
22	12804	14050	15271	16590	18026	15348
23	14834	16277	17692	19222	20890	17783
24	17167	18839	20479	22256	24194	20587
25	19848	21786	23690	25755	28010	23818
26	22950	25199	27410	29812	32437	27561
27	26527	29138	31710	34506	37566	31889
28	30651	33686	36679	39937	43508	36892
29	35412	38940	42427	46229	50400	42682
30	40911	45019	49085	53525	58403	49389
31	47272	52058	56805	61996	67707	57168
32	54638	60219	65768	71844	78538	66202
33	63178	69694	76187	83308	91163	76706

Table 4: Calculation of t value

Items	Gr. A
Mean difference	7424.1
Variance	395283315
Standard Error	3757.29
t value	1.976

At 5% level of significance, t = 2.06 for 26 degree of freedom,

Findings and Conclusion:
Table 2 shows the pension benefits of the government employees of Group A in India It is observed from the table that under the new pension scheme has been increased by 4.25 times group A employee in the range of service period of 20 to 33 years. Table 3 shows the pension benefits of the government employees of Group A in Chile and we find that the pension benefit is increased by 6.7 times in the service length of 20-33 years irrespective of the date of joining. It is also observed that average pension benefit in India in case of early retirement (before completion of service period of 33 years) is more than the average pension benefit of Chile and retirement after rendering service of 33 years pension of the two countries are almost equal. However, expected pension of the employees joining the service ion the year 01.04.2004 and 01.04.2005 in India is more than the expected pension of employees in Chile.

Since the t value (1.976) does not exceed the 2.06 at 5% level of significance, we can conclude that there is no significant difference between the pension benefits of Government employees of Group A in India and Chile.

We observed that amount of pension is not guaranteed rather it depends on the pension wealth of the individual retirement account of the employees. As pension is the most important source of income after retirement, security of the pension fund and return from the fund is a critical issue. Hence, the selection of Pension Fund managers and the investment restrictions need to be handled carefully. In Chile, employees are able to get minimum pension if the accumulated pension wealth falls short to accrue the minimum amount after retirement. In India, provision of minimum pension should be inserted in the New Pension System. The reporting system of New Pension System should be transparent and published time to time (quarterly or half yearly) so that the employees may exercise switch options if the Pension Fund managers fail to meet their expectations.

REFERENCES

i) Berstein, S.; G. Larraín; and F. Pino (2005): Chilean Pension Reform: Coverage Facts and Prospects. Paper presented in the 10th LACEA Conference, Paris. | ii) Government of India (2000), The Project Oasis Report submitted by the Expert Committee for Devising a Pension System for India, January. | iii) Government of India (2002), Report of High Level Expert Group on New Pension | System, Volume one: Main Report, February. | iv) Goswami, Ranadev (2001), Indian Pension System: Problems and Prognosis, Paper | presented in the IAA Pensions Seminar,June. | v) OASIS (2000), The Project OASIS Report Part II, Ministry of Social Justice and Empowerment, Government of India, New Delhi. | vi) Patel, Urjit R. (1997), Aspects of Pension Fund Reform: Lessons for India, Economic and Political Weekly, September 20, Vol. 38, pp. 2395-2402. | vii) Pino, F. (2005): Retiros Programados y Nuevas Tablas de Mortalidad. Serie de Notas Técnicas, No 1. Superintendencia de Administradoras de Fondos de Pensiones. | viii) Robert Gillingham & Daniel Kanda, 2001. "Pension Reform in India," IMF Working Papers 01/125, International Monetary Fund. | ix) Rodrigo Acuña R. and Augusto Iglesias P., 'Chile's Pension Reform After 20 Years' | Social Protection Discussion Paper Series No. 0129, Social Protection Unit, Human Development Network, The World Bank. | x). Rodríguez L. Jacobo (1999), 'Chile's Private Pension System at 18: Its Current State and Future Challenges', SSP No. 17, Cato Institute. | xi) Shah, Ajay, (2000), Issues in Pension System Reform in India, Indira Gandhi Institute for Development Research, Mumbai, India | xii) World Bank (2001), India: The Challenge of Old Age Income Security, Report No.22304, April.iv)