

Pension Sector Reforms in India

“By providing financial protection against the major 18th and 19th century risk of dying too soon, life insurance became the biggest financial industry of the century. Providing financial protection against the new risk of not dying soon enough may well become the next century’s major and most profitable financial industry,” said Peter Drucker

Life insurance and pension products are the two important pillars of personal financial planning. Life insurance products mitigate the consequences of premature death while pension products assure a dignified retired life, independent of the dole and charity of others. Excessive longevity results in financial problems that are as serious as premature death. Hence, the level of savings is more important to a retiree than the amount of earnings. The passage of the IRDA Bill led to the liberalization of the Indian insurance industry. But the Government is yet to decide about the pension sector reforms. Only by choosing a suitable pension plan one can dream to retire with silver in the hair and gold in the pocket.

Demographic Transition:

Advanced medical science not only made life expectancy longer but also decreased the fertility rates significantly. Hence, demographic changes are gradually swinging towards a greying population. Globally the average life span has been dramatically increased from 49.5 years in the year 1972 to 63 years today. Demographic projections indicate that by the year 2020, the number of elderly people will break the one billion mark from the present level of 600 million, while in many European and Central Asian countries, they will constitute a reasonable part of the total population. Hence, many countries – developed and developing - are under a potential financial and health crisis, unless they address this issue seriously with innovative and timely action.

Moreover, it is also concerning that the number of “*old-old*” will grow rapidly compared to the number of “*young-old*”. The United Nations projections state that the number of persons in the age group 65 to 84 will grow by three folds to 1.3 billion by the year 2050 while the people in the age group of 85 and above will experience a six folds increase to 175 million and the number of those aged 100 and above will rise by sixteen folds to 202 million! The older people will definitely need higher level of healthcare facilities (about two to three times as much) than the younger ones.

For India, the total population size is assessed to grow by 49 percent between 1991 and 2016 but the number of elderly persons is expected to rise by 107 percent! In other words, demographic projections revealed that the number of persons of old age would be 113 million (8.9 percent of the total population) by 2016 that is expected to go up at a faster pace to 179 million (13.3 percent of the total population) by 2026. As per the UN projection, by 2050, the expected number of elderly Indians will be 314 to 377 million (about 20 to 24 percent of the total population). An Indian aged 60 years is expected to survive another 15 years, which may increase up to 20 years by the year 2020.

The policy makers in many countries are facing harder problems due to the cresting wave of the kids than the financial experts regarding the arrangement of finance for excessive longevity.

Requirements of higher education, late marriage, increasing volume of work pressure and development in medical science are the main reasons for the lower fertility rate. As recently as 1972, a woman gave birth to an average of 5.6 children throughout her life, thereby leading to doubling the world population in every generation. But today, it has been reduced by more than 50 percent. In 61 countries accommodating 44 percent of the Earth's population, fertility rates are now at or below the replacement level.

The combination of lower fertility rate and longer life will result in a higher share of the elderly in the total population in the coming years, thereby raising the expected ratio of elder persons to the actively working population by 15 to 40 percent. A good number of old people will have to depend on less number of working people, which implies the increasingly straining of the family as well as the Government support system. Hence, the dire requirements for the transformation of the pension systems cannot be ruled out, as many households may not be able to bear the increasing burden.

Changes in Social Environment:

Rapid urbanization and economic globalization have significantly influenced the Indian society. Cut-throat competition has become the buzzword of today's life, thereby increasing the demand for specialized professionals like actuaries, accountants, etc. at a substantial pace. Now, everyone is looking for a lucrative career and a better standard of living, by leaving the earlier caste based familial professions. Hence, the mobility of the people has increased immensely due to the drastic changes in the argumenting areas of production to get a better opportunity. In spite of lower fertility rate in the urban areas, the size of the urban population is growing at a higher pace. During the last five decades, the size of the urban population had grown up by five folds from 62.4 million to 285.4 million. Rapid urbanization and the enhanced level of migration are posing serious threats against the existence of our traditional joint family system. Since ancient times, the joint family system provided a suitable umbrella to manage the personal risks like premature death as well as excessive longevity. But the extent of burden on the joint family system will increase to such a level that it may not be able to cope up with the future developments e.g. the combination of enhanced life span along with exponentially increasing medical expenses supported by decreasing number of working people.

Table No. 1 Incremental Urban Population

Year	1951	1961	1971	1981	1991	2001
Urban Population (in million)	62.4	78.9	109.1	159.5	217.6	285.4
Urban Population as percentage of total population	17.3	18	19.9	23.3	25.7	27.78
Decadal Growth %)	41.4	26.4	38.2	46.1	36.4	31.2

(Source: www.indiaonline.com)

Diminishing capacity of the Government:

In many countries, the Government employees enjoy defined and indexed pension benefits that are non-contributory in nature. These benefits are provided from the state's exchequer through Pay-As-You-Go schemes. But many studies revealed that the volume of expenses against the payment of pensions is growing at a faster pace than that of the taxes and duties. The present

value of the dollar cost of the age wave has been worked out to be \$64 trillion. These contingent liabilities range from a low of 113 percent of GDP in the US to as high as 242 percent in Italy. Since no Government pre-funds these liabilities, future taxpayers will be required to bear these burdens.

In this context, India is sitting on a veritable tinderbox. Her pension expenses are increasing at 20 percent whereas the growth rate for the revenues is 14 percent implying that the pension spending of the Government will exceed the revenue receipt in future. Following the implementation of the Fifth Pay Commission Report, Tata Economic Consultancy Services studied the rising number of pensioners and the relevant expenses of the Union Government. Even with conservative assumptions, they were concerned that the expenses to be Rs.27,183 Crore by the year 2015. However, the pension liabilities to the ex-defence personnel, state Government employees and the impact of the implementation of the Fifth Pay Commission Recommendation were not considered for that projection. The present value of the pension liability of the Union and the State Governments is about Rs.5 trillion. It will definitely increase owing to the incremental benefits supported by the increasing life expectancy. Such unproductive expenditures will cause serious strain on the state exchequer. Therefore, even the Government may fail to withstand the cyclonic spending pressure of the coming age wave.

Table No.2 Pension expenses of the Government (in Rs. crore):

Year	Central Government	All State Governments	Total
1998-99	10,057	16,166.30	26,223.30
1999-00	14,286	22,679.00	36965.00
2000-01	14,379	24,428.40*	38807.40
2000-02	14,628*	26,790.70**	41,418.70
2002-03	15,035**	NA	NA

* Revised Estimates, ** Budgeted Estimate (Source: CMIE; Public Finance; Mar. 2002)

Indian Working Class and their Old Age Income Security:

Since independence, successive Governments adopted the socio-economic policies based on the ideas of the Nehruvian socialism in order to allow the organized sector to dominate the economy. But the stark reality is different. A special group on employment under the planning commission reported that about 92 percent of the working Indians are engaged in the organized sector contributing about 59 percent of the GDP including reasonable export earnings.

Basically Indian economy is an agrarian one. Last census report indicates that our total population size is 1.027 billion, out of which 741.660 million (72.21 percent) people live in the rural areas, while the strength of the working class in India is estimated as 402.512 million where 310.655 million are from the rural areas mostly from the unorganized sector. These working people altogether earned an amount of Rs.20880 billion (GDP at current prices as on FY2001). But the old age income security is given a least priority especially to those from the unorganized sector compared to the organized sector. The following old age income plans are presently available in India:

- Central and State Government Pension Schemes for their respective employees, defence personnel, railway employees, etc.

- Schemes for the Public Sector Insurance Companies
- Schemes for the employees of the Nationalized Banks as per the IBA Guidelines
- Employees' Provident Funds Scheme, 1952 and Employees' Pension Schemes, 1995 which are mandatory for the employees of the organized sector
- Public Provident Fund Scheme 1968 for the old age income security for the workers of the unorganized sector
- Superannuation benefits offered by the corporate houses to their executives
- Money purchase schemes of LIC (as group and individual) and UTI (as individual)
- Social Assistance Program for the Elderly

All the above schemes altogether cover a very small pie of the total number of working Indians from the organized sector and have several pitfalls as follows:

- Tax benefits are offered for making investments. The pension incomes are treated as taxable income while the withdrawals are not taxed
- Contribution levels are one of the highest in the world, thereby leaving a meagre amount of savings for meeting the other contingencies
 - Fund managers are stipulated to follow passive portfolio management strategies with stringent norms, thereby leaving no flexibilities for making suitable risk-return trade-off
 - The government follows Pay-As-You-Go method to meet its pension obligations, neglecting actuarial valuation regarding the adequacy of contributions and sufficiency of returns. Incremental benefits and longer life span may make these schemes a ***financial time bomb***
 - Administration and governance of the funds is very poor in quality while the expenses for the same are one of the highest in the world
 - The level of benefits in most of the cases is lower than the requirements

Pension Market in India:

Severe problems in the form of poverty among the future elderly Indians are not at all far away. These may be further worsened due to the actions of the following three powerful forces:

- Improvements in healthcare systems increased the longevity that implies more old people with longer life span
- Evolution of the nuclear family system and greater mobility of the people lead to the geographical separation of the working successors with that of the old parents
- Better education and health standards are raising new expectations among the elderly

Neither the existing system nor any anti-poverty drive by the Government is enough to solve the old age income security problems. Therefore, the pension plans offer a lucrative business opportunity to many players as it is widely unexploited by till date. The IRDA observed that the Indian Pension Market will grow by leaps and bounds as follows:

Table No.3: Pension Market: A Sizeable Growth

Year	2005	2010	2015	2020	2025
Market Size (Rs. Crore)	116600	156,900	215,400	298,600	406,500

But the other organizations like CMIE and NCEAR projected the above market size as Rs.180,800 Crore by the year 2025. Such a wide gap is due the differences in assumptions made in the areas like, demographic trends, savings rate, etc. Hence a robust and efficient institutional framework is direly required to launch a new age pension system. Such a new system will not only assure old age income security to the elderly Indians but also act as a catalyst for the greater developments of India Inc.

In India, during the past few decades, interest rates were experiencing an upward movement, thereby leading to the preference of the short-term investments in financial institutions, post-offices, banks, etc. Hence, the common people expected the continuation of the same trend. But recently, with the liberalization, an opposite trend has started that reversed the expectation of the masses. The following factors may be considered responsible for the slow growth of the Indian pension market:

- Non-availability of suitable long-term financial instruments, offering reasonable return at an acceptable level of risk. Investments in the equity instruments are not allowed while the debt markets are still underdeveloped. Only in August 2002, the RBI issued 30 years GOI papers for the first time
- High inflation rate could not motivate the people to a reasonable extent to save for the future by sacrificing the present consumption as the purchasing power was eroded rapidly
- Employers were not encouraged to make a significant amount of contribution for the adequate pension benefits of their employees

Proposed System:

Dr. S.A.Dave observed that a regular savings of Rs.3 to Rs.5 per day throughout the working life can rescue an individual from old age poverty, if those funds are invested wisely. He correctly recommended about the future pension system on the basis of the Individual Retirement Accounts (IRA) in the project OASIS report. Here, one is required to hold only one account, irrespective of the number of job changes. The new system consists of the following:

- **Points Of Presence (POPs):**

The place from where one can open the IRA as soon as he starts his working life in any post office or in any bank. All the POPs should be equipped with information technology and telecommunication facilities so that one can access the account from any part of India at any given point of time.

- **Depository Participants (DPs):**

They should be responsible for the centralized record keeping and the individual database management, on being connected with each POP through the centralized depository like NSDL. Lastly DPs should transfer the funds and convey the individual preferences to the respective Fund Managers.

- **Pension Fund Managers (PFMs):**

The total amount of pension corpus is to be handed over to the PFMs who will be responsible to manage the funds as per the preference of each account holder. Moreover, the account holder should have total flexibility to choose the PFM and the DP.

- **Annuity Providers (AP):**

They will be provided the entire amount of accumulated funds to design a suitable annuity plan to meet the income needs of the account holder during the post-retirement days. The pension plans are the anti-thesis of the life insurance products but follow the same mathematical and economic principles in product design. Therefore, the life insurance companies are expected to play an important role as Annuity Providers that is evidenced by the entry of the private life insurers in the pension business. Stringent competition will lead to a better pricing of the products, thereby benefiting the customers to the greatest extent.

The above system will offer every type of flexibility and enormous choices like, opening account, selecting DP, Pension Fund Manager and Annuity Provider as well as the amount to be saved, etc. to the individuals. Competition and technological upgradation will reduce the cost of the administration and management of funds. As investment professionals, the fund managers will maximize the return on investment with active portfolio management. The Government may also channelise the savings easily for building infrastructures, developing debt markets and stabilizing the capital markets. However, the Government should also maintain a strong vigil on the activities of various entities in order to avoid a pension scandal, as we have already experienced the securities scam, CRB fiasco, collapse of the NBFCs, failure of the plantation companies, problems due to the vanishing companies from the stock markets, etc.

Integration of the Financial Markets in India:

To ensure the efficient management of the substantially large volume of funds a vibrant financial system is required. Therefore, complementary reforms in the areas like debt markets, capital markets, disclosure norms, etc. are to be carried out to integrate the operations of these markets. The convergence of the risk-adjusted returns is a necessary precondition for the integration of the financial markets, supported by the existence of a reference rate. A growing integration among the several financial markets is being observed with the financial sector reforms in India that is evidenced by the inter linkages between the turnover and the rates of return.

A reasonable rate of integration is observed among the money market segments i.e. call money, commercial paper (CPs), certificates of deposits (CDs) and the gilt market. The 91 days Treasury bills rate can have the potential to emerge as the reference rate. The equity market remains separated from this integration and the cross-border integration of the forex market is weak except some evidence of covered interest rate parity.

Integration among the various market segments helps in better risk management. Any development in any of the market segments will influence the corresponding development in the other segments, may be with some time lag. Pension plans and Insurance companies will be immensely benefited in product designing, with such integration. Apart from this, it will also

enable them to maintain a reasonable rate of return on their investment. Ultimately, a multi-tier system will emerge to suit the needs and aspirations of the people of any country based on their capacity and the prevailing circumstances.

Investment Avenues:

In any investment game, the fund manager must select the assets in such a way, so as to meet the liabilities properly. But asset-liability mismatch is quite common in the management of the pension and provident funds due to the following reasons:

- The duration of the liabilities may go up to 30 to 40 years while the general tenure of the available assets is 20 years. Only recently, the RBI has come out with 30 year bonds.
- Lack of knowledge of the pension and provident fund managers about the employee demographics, hence they only consider the liability due in terms of number of years.
- In India, presently the provident funds corpus are dealt by the accounting professionals whose knowledge and skills about investment management is significantly little. So, they are neither aware off nor practicing Asset Liability Management (ALM).

Therefore, in today's volatile financial world, a pension fund manager is not only expected to apply ALM but is also required to adopt suitable Risk Management strategies. These will enable him to maximize the returns at an acceptable level of risk. In this context, the Government should come out with comprehensive regulations regarding ALM techniques and risk management strategies for the pension funds as the RBI has directed the banks. However, the following important points are to be considered also:

a) Investment in the Money Market Instruments:

Instead of letting the funds uninvested and lying idle, pension funds should be allowed to invest in the short-term instruments like, commercial paper, certificates of deposit, treasury bills, etc. This will enable them to earn something that is definitely better than nothing and will also reduce the volatility in the money market, prior to the availability of suitable long-term investment opportunity.

b) Long-dated GOI Paper for tenure risk and Asset-Liability Mismatch:

The RBI should introduce 40 year and 50 year Rupee yield-curve through suitable GOI Papers. This will help the pension fund managers to manage the tenure risk while the investors of the projects, especially the infrastructure projects with a very long gestation period, can be able to set the targeted rate of returns.

c) Indexed Bonds:

Investment in the indexed bonds e.g. inflation indexed bonds offers an excellent hedge against inflation risk, thereby leading to a constant real rate of return. But such type of instrument is hardly available in India. Therefore, more instruments should be encouraged for hedging inflation risk and better Asset-Liability Management.

d) Equity Investment:

For the pension plans, equity investments can be considered as one of the best to manage the inflation and tenure risks as well as for ALM. In the USA, instrumentwise returns on investments were analyzed for an investment of US\$1.00 in the year 1926 maturing on 1990 as follows:

Table No.4 Equity Returns: Sweeter than Others?

Instrument	Bills	Government Bonds	Corporate Bonds	S & P 500 Index
Maturity Value	\$10.50	\$18.00	\$27.00	\$515.50

Similar studies in the other countries confirmed it and also established that longer duration equity returns exceeded inflation and was also less volatile in comparison to bonds. Participation of the PFMs in the equity markets will also lead to the following other developments:

- Professionalisation of the Capital Markets
- Enforcement of the Corporate Governance in the Indian companies
- Reduction of the volatility of the Capital Markets

However, the Indian capital markets are not yet developed for allowing the pension funds into the equities due to the following reasons:

- Weak Regulatory environment regarding the safety of the funds
- Inadequate knowledge and skill of the PFMs to deal in the equity markets

e) Infrastructure Development:

India's inadequate infrastructure has long been identified as a serious bottleneck point for the growth of the Indian economy. Earlier, the Government made the budgetary allocation for developing roads, telecom facilities, ports, etc. But today, it also includes the social infrastructure like housing, education, power, healthcare, etc. Investment in these sectors not only enhances the overall growth of the economy but also improves the standard of living of the masses that will be reflected with better labor productivity. The World Bank observed that one percent growth in infrastructure development leads to one percent growth in GDP.

Development of efficient and quality infrastructure services needs huge investments for a long gestation period that may be perfectly synchronized with the maturity of the pension plans. Private participation in infrastructure financing is also necessary in many areas like power, transportation, telecommunications, etc. where the Government can facilitate investments. However, in other areas, the government has to play a significant role to meet the increasing demand e.g. rural infrastructure, urban infrastructure, etc. The following table describes the sectorwise present status and the respective future investment opportunities:

Table No.5 **Infrastructure Sector: Who will finance their upgradation?**

Sub-Sector	Investment Requirement
Power	Additional Generating capacity needs about US\$ 83 billion while the reduction of Transmission and Distribution losses from 40 percent to 15 percent requires about US\$60 billion Major amount is expected from the private sector
Roads	Development Cost are estimated as US\$33.7 billion where the private sector is expected to invest US\$ 8.3 billion to meet the increasing traffic
Ports	Additional capacity needs US\$ 7.3 billion of which 50 percent is expected to be invested by the private sector
Civil Aviation	Modernization and expansion of the airspace needs about US\$ 1.1 billion to meet the increasing passenger traffic and the carriage of the goods
Telecommunications	Additional amount of US\$ 53 billion is required to meet the increasing demand raised by the growth of the Information Technology sector

(Source: Indian Infrastructure – An Overview (Economic Survey 2000-01; Satyanarayana et al., 2001; Investment Opportunities)

Apart from the above, the other areas of infrastructure also need substantial amount of resources. Presently, India needs about 33 million dwelling units in the near future. Increasing population size is seriously threatening our urban and rural infrastructures that are to be modified suitably to suit the incremental requirements. Reasonable investments are necessary to upgrade these areas for meeting the incremental demand. Infrastructure sectors assure regular cash flows for a long period. However, political risk is to be analyzed carefully as any sudden change in Government policies by a significant extent may adversely affect the returns on investment. It will result in substantial frustration among the fund managers and the investors, thereby significantly deviating from the intended objective of old age income security. In this context, the Enron episode cannot be easily forgotten.

Other Requirements:

For the effective implementation of the pension reforms, the following measures are to be taken:

- Protection of the interest of the beneficiaries
- Availability of suitable financial assets that offer reasonable returns at an acceptable level of risk
- Specification of the maximum costs of administration and management of funds
- Enough room for healthy competition among the players at different segments of the market
- Sufficient confidence among the customers for early detection and proper compensation against any fraud
- Advocacy and education about the pension requirements among the common people and policy makers
- Promise for the efficient services and the mechanism for redressal of the grievances at the earliest possible

- Design of suitable tax incentives for the growth and development of the Indian pension market by encouraging the individuals as well as the employers to exploit the opportunity
- Formulation of the investment principles, development of prudential norms regarding the safety of the funds and the profitability of the operations

Conclusion:

The reforms requirements in the Indian pension sector can be compared with the tip of an iceberg. The more it is delayed, the more it will aggravate the problem and the less will be the extent of the benefits that can be reaped. Improper policy formulation, less emphasis on this type of dire need and lack of public awareness may be considered responsible for the present situation. Major part of the working population is left uncovered by the available schemes. Presently, these people maintain a satisfactory standard of living but the absence of any income security may throw them below the poverty line. This threat will ultimately result in the emergence of a large number of sick and old age destitutes in the streets and public places.

Therefore, pension reforms are to be carried out at the earliest. But a lot of ground work has to be done prior to the launch of the pension schemes. An efficient regulator is to be appointed, not only to supervise the activities of the various entities but also to develop the market through healthy competition among the players. Banks and Depositories are to be beefed up to sustain the requisite amount of savings mobilization. Simultaneously, the investors are to be educated properly regarding the changing social and financial scenarios vis-à-vis the needs for old age income security. Better awareness among the common masses and the professional skill of the fund managers will tap a large sum from the Indian middle class. The entrants are expected to exploit the untapped potential through need based products with flexible options. Those funds on proper utilization would go a long way in making India an economic superpower. Increasing level of infrastructure activities will increase domestic consumption thereby, boosting up the economic growth. Better infrastructure will sharpen the competitive edge of India Inc. Moreover, the pension funds will build up a stronger financial system. These will bring better stability in the capital markets by providing long term funds as against the short term funds of the speculators and the foreign institutional investors (FIIs). With the successful passage of the Securitization Bill, pension funds will lead to the development of a stronger bond market. In one hand, it will reduce the possibility of an economic crisis by reducing the chances of foreign exchange and maturity mismatches while on the other hand; an effective yield curve on Rupee for a longer duration will emerge. Only then can it be concluded that the marriage between the requirement of social security and sound business concept is a great success.

References:

1. Project OASIS Report (2000) submitted by Dr. S.A.Dave
2. Pension reform: the role of the private sector by Baman Mehta, www.iinvestors.com, December 1,2000
3. Pension reform and capital market development in India by Jayanath R. Varma, www.iinvestors.com, December 6, 2000
4. Reforms in the Indian Pension Sector and its Implications by Prakash Bhattacharya, Insurance Chronicle, March, 2002

5. Public Finance, CMIE, March, 2002
6. Indian Pension Funds: An Analysis by Prakash Bhattacharya, Insurance Chronicle, June, 2002
7. Old Age Income Security: Indian Perspective by Prakash Bhattacharya, Insurance Chronicle, July, 2002
8. Financial Markets Integration in India and Market Risk: Implications for the Insurance Companies by R. Kannan APRIA, Sixth Annual Conference (21-24th July, 2002, Sanghai, China)
9. Fourth Pillars Pension Funding Concept – Need for and Scope in Indian Emerging Scenario by S. Sitharamu APRIA, Sixth Annual Conference (21-24th July, 2002, Sanghai, China)
10. Pension Reforms in India by H.O. Sonig, APRIA, Sixth Annual Conference (21-24th July, 2002, Sanghai, China)
11. Pension Products: A Marketing Perspective by Prakash Bhattacharya, Insurance Chronicle, October, 2002
12. RBI Bulletin, November, 2002
13. www.censusindia.net
14. www.indiainfoline.com

Contributed by:

Prakash Bhattacharya
Faculty Associate, ICFAI

Brief Particulars about the Author:

Prakash Bhattacharya (b1969) is a B.E. (Mechanical) and Chartered Financial Analyst (CFA). Since last two years, he is working in the Institute of the Chartered Financial Analysts of India (ICFAI) as a Faculty Associate. Owing to his association with ICFAI, he worked for the preparation of the courseware of Certified Risk and Insurance Managers, an insurance course offered by the Institute of Certified Risk and Insurance Managers, an ICFAI affiliate. Apart from these, he also published four articles in the Insurance Chronicle; during the year 2002 related to the Indian Pension Sector – its present status and the reforms requirements.