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Pension Fund Investment in India: Trends, Challenges, and Outlook

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Abstract

Social security schemes reforms have taken its crucial position in most of major policy issues for both developed and developing countries. The researchers and policy makers are critically evaluating and debating on appropriate mechanism to handle the complex issues related to aging population, lack of retirement funds, coverage of unorganized sector and asset liability management and so on. Pension reforms, have therefore become a crux for policy makers, investors and even market analysts. In most of the countries, pension funds are large investors especially in long-term capital contribution for infrastructure and other project developments. Research studies have highlighted on significant contributory force of pension funds on capital market development, which in turn contributes for overall economic development and new investment products. India's pension business has immense potential to grow due to the fact that a large segment of its population has no access to a retirement fund. It has attracted wide attention across the global due to the reforms undertaken by Government of India in 2004 – by shifting from Defined Benefit (DB) to Defined Contribution (DC) scheme except for Defense services. Pension fund management is one of the crucial and complex processes which have a great effect on the financial market of any country. The effective and efficient investment mechanism of pension fund showcases the appropriate return on investment and it can be channelized for the beneficiaries. The present paper is an attempt of understanding the Pre and Post 2004 - Pension fund investment mechanism through detailed investigation of transition process of DB to DC method with empirical evidence on effect of pension fund investment on capital markets and *channelization of fund for economic growth in the country. Further, the New NPS fund management and its issues have been discussed and possible measures are worked out on the same.*

Key words: Pension fund investment, Capital market, NPS, Defined benefit, Defined contribution

Introduction

India has the second largest population of older 60+ persons in the world constituting around 8 percent (census of India 2011) of the total population of the country. There is drastic increase in both rural and urban elderly population constituting around 8.1 percent and 7.9 percent respectively. According to OECD report, five countries are expected to have more than 50 million elderly populations by 2050; three would be from Asia – Pacific region viz., China – 437 million, India – 324 million and Indonesia – 70 million. One-fifth of the rise in India's 60+ population projected between 2000 and 2050 is due to rising life expectancy during that period; the corresponding figure for China is one-seventh[1]. By 2024, India is expected join the global phase of aged society[2]. Old age financial assistant and healthcare are in focal priority of developmental needs of increasing elderly population. Basically, old age income security revolves around three core objectives i.e., generation of long term savings, which stimulate the development of capital markets and economic growth, redistribution and insurance[3]. Any long term saving needs be backed with astounding investment mechanism for its effective real-time return (inflation adjusted) and curtailing risk in global market volatilities. An Investment can be recognized as a commitment of money to purchase financial instruments or other assets in order to gain profitable returns in form of interest, dividend, and income or capital appreciation of the value of instruments.

Fundamental challenges of ageing population and financing are associated with underfunded pension and social safety net obligations. Several factors have contributed for Pension Reform in India 2004. One of the contributing factor was non-sustainability of pension system (before 2004) was accentuated by sharp increase in financial burden on the Government and the other employers on account of pension liabilities[4]. Increasing burden of ageing requires tactical investment strategies especially for retirement planning and vigorous policy framework to cover its heterogeneous population. Movement of Define

Benefit to Defined Contribution pension scheme have not only brought lot of appreciation, but also backed up with critical apprehensions in its overall implementation process. Against this background, the structure of this paper is as follows- Section-I highlighting on transformational phase of pension system in India; Section-II provides view of present pension structure and portfolio investment pattern; Section-III Challenges of DC collection and payout phases and Section-IV detailed discussion on policy level changes.

Objective and Methodology:

a. Understand the implication of DB to DC scheme movement and its effect on capital market.

b. Investment pattern and distribution of risk both under DB and DC schemes.

c. Challenges in NPS implementation and suggesting possible solutions.

Present paper is designed with the baseline of secondary data base, reviews were undertaken to understand the opportunity and simultaneously repercussions of DC pension structure – with under developed capital market operations. SBI pension fund and PFRDA investment guidelines have been used as supporting documents.

Defined Benefit to Defined Contribution pension system:

As stated earlier, increasing life expectancies and infertility among women are burdening employer-sponsored pensions and social security systems around the world. In India, Governments' pension liabilities have drastically increased over the past decades and unfortunately only 13 percent of the workforce is covered by one or more old age financial schemes. The total pension liability on account of the Central Government employees itself has risen from 0.6 percent of GDP (at constant price) in 1993- 94 to 1.66 percent of GDP (at constant price) in 2002- 2003. For the State Governments, the compound annual growth rate in pension expenditure during the period 1995- 96 to 2000-01 was 27.1 percent[4]. To balance this situation, India followed with rest of the countries in opting for Chilean model of pension provision by shifting retirement schemes from traditional defined benefit (DB) pension schemes over the individual –retirement account or defined contribution (DC) pension scheme. Even the seminal 1994 World Bank publication that proposed a multi-pillar pension scheme with a significant shift from publicly managed, unfunded defined benefit (DB) schemes to privately managed, fully funded defined contribution (DC) schemes (World Bank 1994); and general enthusiasm and optimism for more market and financial intermediation instead of public intervention[5]. Under DB Scheme, retirement income is predetermined and is usually based on a formula involving retiree number of years of service and total earnings. Participates or employees don't have any active role either in the post retirement income or investment of the funds. However, DC pension scheme individuals are given a flexibility of saving and asset allocation for enhancing their investment for post retirement spending- but their retirement income is neither fixed nor any guaranteed amount[6] are assured to contributors. Real-time return is completely based on the investment mechanism and total assets accumulated by individual retirement account at the time of retirement phase.

The official reports of OASIS, IRDA and Bhattacharya committee insisted on transforming Indian Pension System from defined benefit to fully unfounded defined contribution system. The committee has also suggested investment norms and accordingly proposed investment in government paper would vary from 25% to 50%, Corporate Assets 30% to 25%, and in domestic equity 10% to 50% depending on the nature of the scheme. They also proposed investment in International Equity[7]. Transferring main parts of retirement income provisions from the public sector to the private sector was- (i) to address fiscal unsustainability and projected further population aging and (ii) to accelerate financial market development was expected to trigger higher economic growth to co-finance some of the transition costs.

Pension structure mechanism in India

The history of the Indian pension system dates back to the colonial period of British-India. The Royal Commission on Civil Establishments, in 1881, first awarded pension benefits to the government employees. The Government of India Acts of 1919 and 1935 made further provisions. Post independence, several provident funds and pension schemes were set up to extend coverage among both public sector and private sector workers. Present situation of increasing population ageing, signified by rising old-age dependency ratios and increasing

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life expectancy (with considerable uncertainty) at age 60, suggest a need to devote greater resources for the elderly in India[8]. However, this will require well structured Multi-pension structure mechanism covering all segments of population across the nation.

A report published by the City of London Corporation has broadly classified Indian pension system into four segments:

- *The National Social Assistance Programme (NSAP).* A limited ―first pillar, the central government has launched poverty alleviation programmes aimed at the aged under this umbrella scheme. It's a pay-as-you-go plan (an unfunded scheme, with current revenue receipts used for paying out retirement benefits). Under the scheme, the government pays out Rs 200- Rs.1000 every month to 15.7 million poor citizens aged 65 and above. Some state governments make a matching contribution.
- *The Employees Provident Fund Organisation (EPFO).* The Employees Provident Fund, India's largest defined contribution and publicly managed plan, is an example of the typical Pillar–II arrangement. Employees in the organised sector are required to participate in provident funds and pension plans administered by EPFO. According to City report: ―These include a defined-contribution provident fund and a defined-benefit pension plan that cover only 14% of the workforce (59 million workers as of March 2010). Included in this ambit are about 2,750 private trusts approved by the EPFO that offer similar programmes in private companies with 4.9 million members and assets of Rs 100,500 crore ($20.4 billion).
- *Private pensions and annuities.* Regulated by the insurance regulator (IRDA), these are various schemes administered by life insurance companies. In 2010, IRDA directed all insurance companies, which had launched unit-linked pension plans, to provide a guaranteed return indexed to interest rates.
- *The National Pension System (NPS).*All government employees have to enroll under this new, mandatory, defined contribution plan. However, it is optional for private sector workers. The scheme has a unique architecture – it allows investors

portability and the ability to select the fund manager as well as the investment strategy.

Pension fund investment pattern

Pension Fund Regulatory and Development Authority (PFRDA) as regulatory body of pension system in India have suggested investment guidelines for the New Pension System for all its citizens of residing in India. Pension Funds will be managed under 3 separate schemes, each investing in different asset class- depending upon risk taking capacity of individuals.

- *Asset class E (equity market instruments)* – The investment by an NPS participant in this asset class would be subject to a cap of 50%. This asset class will be invested in index funds that replicate the portfolio of either BSE Sensitive index or NSE Nifty 50 index. Index Fund Schemes invest in securities in the same weightage comprising of an index. However, the amount of funds invested in that asset class can differ from the specified cap by no more than 5% for purposes of portfolio balancing.
- *Asset class G (Government Securities)* – This asset class will be invested in central government bonds and state government bonds.
- *Asset class C (credit risk bearing fixed income instruments)* – This asset class contains bonds issued by any entity other than Central and State Government. This asset class will be invested in liquid funds of Mutual Funds, credit rated debt securities.

When NPS investor are unable to decide on class of asset investment, pension system provide them an 'Auto choice' for allocation of funds across various asset class depending upon age criteria and risk exposure. For example:

Age	Asset Class E (in %)	Asset Class C (in %)	Asset Class G (%)
Up to 35 years	50	30	20
36 years	48	29	23
37 years	46	28	26
38 years	44	27	29
39 years	42	26	32
40 years	40	25	35

It can be noted here that, as age of the participants' increases –there is corresponding changes in the portfolio arrangements. Asset Class E will be compressed and Class G asset will be increased as movement of age(reduction in risky assets and shift to risk free asset portfolio).

Distribution of Risk:

Traditional investment mechanism mainly exercised in optimizing risk-adjusted returns conducted by the pension fund manager with often a rather loose view on liabilities. Under modern world, investment resembles an optimization exercise under multiple often conflicting constraints formulated by different stakeholders. The 'perfect pension storm' at the turn of the century with simultaneously falling equity prices and bond yields challenged the wisdom of the conventional investment strategies and risk management techniques of pension funds[9].

Risk	Defined Benefit	Defined Contribution
Inflation	Govt./EPFO/Employer	Individual
Longevity	Govt./EPFO/Employer	Individual
Investment return	Govt./EPFO/Employer	Individual
Interest rate	Govt./EPFO/Employer	Individual
Recession	Partly shared	Partly shared
Extended illness	Partly shared	Partly shared

(Source: Pension Reforms in India-Ramesh Gupta)

DC pension schemes re-distributes the risk to the investors/participants, unlike defined contribution (DC) pension funds, which re-distribute these risks to their participants, defined benefit (DB) pension funds, which give the employee the security of a pre-defined pension benefit, perform their task of providing safe pension benefits by assuming and retaining risk. DB pension funds are complex risk-sharing institutions, as they may subsequently re-distribute risk between the different groups of stakeholders. Risk needs a well managed mechanism. But managing risk is not equivalent to avoiding or mitigating risk.

Pension fund and Capital market developments:

Pension reform is a logical catalyst for increasing local institutional investment and asset diversification, which results in improved allocations on financial savings and instruments [10]. Pension fund management has a significant impact on the countries domestic capital market & channelization of financial resources for industrial developmental activities, which is proven by the experiences of social security system of other countries. Next to the insurance companies, pension funds hold an important role in the development of capital market by comparison to the other categories of institutional investors such as investment banks or commercial banks. This is because pension fund liabilities are payable on a long-term that assumes, they can finance the economy on a long term[11]. Further, Assets allocation is primarily responsible for any pension funds long-term investment performance[12].

In post financial market crisis, the key challenge for any pension systems over the medium and long-term was dealing with the implications of growing population ageing, the design of the payout phase of pensions in particular, the type of products to channel assets accumulated in defined contribution pension plans, as well to examine the role that well developed financial markets can play in providing adequate private pensions[13]. Looking up history of investment norms is quite old in India, as it still not opened itself to equity or derivatives or even international asset portfolio diversifications, which will yield higher return (indexation benefit) considering inflationary situations. In India, not only is it abysmally low but it has even dropped from low rates or even negative returns (especially in government securities or fixed income investments), under the clutches of policies- which insist on safety and risk mitigations. In the classic risk return trade-off mechanism, design of the mandated investment norms- has least tolerance for risk, but a high tolerance level for low returns. In a nutshell, channelizing the accumulated pension funds towards capital market enhances industrial and economy growth.

NPS- Investment trends

After the OASIS committee report, National Pension System (NPS) was originally introduced to the Central Government employees in January 2004 and subsequently it was extended to even private sector employee in May 2009. PFRDA Annual Report 2013 showcases, the total corpus under NPS have reached to Rs. 32.567 Crore, which is still 5 percent of total assets managed by Indian Mutual Fund Industry. Table 1 provides the details of NPS subscribers and corpus fund collected. Private sector participation is still very low, as compared with Central and State Government subscribers.

Table (1) NPS subscribers and corpus fund

Employer/Sector	No. of subscribers (as on March 2014)	Corpus under NPS (as on March 2014) (Rs. In Crore)
Central Government	13,46,862	23,745
State Government	19,58,378	18,912
Private sector	3,32,693	2,811
NPS- Lite	26,14,611	810
Total	**62,52,544**	**46,269**

(Source : Compiled from PFRDA database)

Table (2) Performance of NPS Schemes

Scheme	Returns (%) 31st March 2012	Returns (%) 31st March 2013
Central Government	5.76	12.39
State Government	6.58	13.00
Scheme E	-7.42	8.38
Scheme C	10.96	14.19
Scheme G	5.47	13.52
NPS (Lite)	9.03	13.40

(Source: Compiled from PFRDA and AMC database)

According PFRDA report, NPS aggressive equity investors have tremendously gained from the market movement in 2013-14, but the government fund workers have got the worst hit- both central and state government schemes NPS return averaged near to 5.3 percent and 4.96 percent respectively. There was an unexpected turmoil in government bonds yields- which rose sharply in 2013, resulting in significant marked-to-market losses on the long-term bonds in the portfolios of NPS funds. However, if bonds are hold till maturity, loss may be recouped in long term.

Challenges ahead:

One of the major challenges for PFRDA will be providing adequate real –time retirement income for individual subscribers of NPS. Public sector pension schemes involve 'policy risk' – Government may not be able to accommodate the required pension outlays leading to delay pension payments or defaults in some cases (Ashraf Imam 2011). In developing country like India, resources are devoted to social protection have opportunity costs, the needs of groups other than the elderly in society and other needs, such as health, education and infrastructure, have to be traded off against allocation for retirement[15]. Multiple investment portfolios (conservative, balanced, growth), contributors may choose explicitly the level of investment risk exposure [16]rather than return criterion. Privatization of pension schemes for the citizens will not reduce intermediary cost and agency risk- in which agency problems could surface at any levels. There are many decisions where the fund manager could choose to act in ways which are not in the best interest of the investor. It is difficult to track for an investor, or for a trustee, to closely monitor the fund manager performances and ensure that these decisions are being made in his best interest[17] of enhancing the returns and minimizing risk from its portfolio diversifications. Handling lower future real rates of returns of funded schemes as well as unfunded schemes[18] with conflicting views will make the situation still worst to handle.

As observed in Table (1) the scope of NPS private depends on relative attractive towards new financial product for retirement planning. In India, majority of saving are skewed towards acquisition of land, small savings (post office or NSS/NSC), real estate or valuable metals like gold and silver. Retirement schemes failed to reach mass, because of its complexity and lack of awareness among both organized and unorganized sector workers[19]. Building a pension system lies in low administrative costs, nationwide collection system, and adequate simplicity for participation by millions of people with highly limited financial sophistication[20] which can increase the capital market vibrancy and contributes for economic development.

Discussion

A sound pension planning can be achieved only through continuous, uninterrupted accumulation and effective fund management. Defined Contribution pension system has criticality of investment risk. The participants in a DC pension system are not guaranteed about the value of pension assets at term end, and hence the stream of annuities, faced upon retirement. This exposure to uncertainty returns added with inflationary conditions, reduces the welfare of risk-averse workers[21]. As compared to developed countries, India is a relatively young emerging country and its capital market has not achieved required maturity yet. To encourage private investors, tax incentives play a role in motivating the employees to investor towards retirement schemes. Currently, contributions to the NPS are tax exempt, while benefits are taxed. For increasing the coverage of private participates for different savings products, some sort of tax treatment need to be levied. This will not only attracts existing private employees, but also set a rhythm for prospective participates.

The basic motivation for equity investment by pension fund investors is on the 'equity premium', it provides a powerful justification particularly when considering the long time horizons faced in pension investment[22]which entirely based on volatility and growth pattern of stock market index. Further, contribution funds invested nearly in the assets of government securities i.e., guilt or treasury bills (with fixed rate of interest and low risk profile) may not a feasible investment strategies , as it forgoes trading opportunities which normally benefits both investor and pension fund managers in accumulation long- term retirement funds. Pension fund manager not only focusing on only standard asset categories for investment- needs to look options of multiple/ alternative asset classes such as private equity, hedge funds, commodity, infrastructure, currencies and emerging market debts[23] for taking opportunity of risk-return trade off in long term . Further, pension outlays can be lowered by reducing the replacement rates, that is, the ratio of pensions to wages, or by moving toward less generous pension indexation formulas that give less weight to wages and more weight to inflation, raising the retirement age in line with life expectancy, and rationalizing disability, survivors' benefit, etc.[24]. To increase robustness of the investment, appropriate system needs to in place restricting participates from frequent fund withdrawalwhich can say in the capital market operations by routing through funds in uplifting infrastructure and other developmental activities.

Under Defined-benefit pension schemes as well as annuity providers run the risk that the net present value of their pension promises and annuity payments will turn out higher than expected, as they will have to pay out a periodic sum of income that will last for an uncertain life span. Decline of the baby boom generation may slightly affect potential retirement incomes in both DB and DC pensions depending on the downward adjustment of assets values[25]. Longevity may forces individual to reduce their present consumption pattern and look out annuity plans. Under the DC pension plans, contributors have to counterbalance the effects of longer life expectancy by increasing saving or working longer than retirement age for compensating unrealistic market returns on their investments. For this situation, real principal guarantee strategy can be opted, under which participants are guaranteed their lifetime contributions into the DC account adjusted for inflation[26] contributing directly into fund accumulation.

Financial illiteracy is widespread in both well-developed and rapidly shifting markets. Women are less financially literate than men, the young and the old are less financially literate than the middle-aged, and more educated people are more financially knowledgeable[27]. In India challenges of creating an inclusive, affordable and fair pension system is immense, but as the experiences internationally shows, it is still possible. The concept of universal social security system is prevailing in most of developed nations, is unorganized in India. Increased savings pattern, growing life expectancy and government initiatives like pension reforms, new pension products, diversification in investment pattern etc., are making prospective opportunities for investors who are focusing on pension businesses and old age security. Extra benefits at the time of maturity, risk profile of the scheme of investment, balance investment portfolio, guaranteed return along with track records of fund performance[28] can enhance the participation of prospective investors for long term retirement planning. From a policy perspective, the most attractive strategy appears to be one where individuals make choices about the three fundamental facets of the old age planning are– (a) the contribution rate (b) the equity exposure and (c) the guarantee structure desired – and the individual pays the full price of purchasing the guarantee from private markets[29] a sustainable framework can be implemented with well developed capital market and flexibility in pension fund portfolio asset diversification both domestic and international markets.

Conclusion

India has a tremendous opportunity of demographic profile and potential market to develop the pension sector as a significant component of its overall financial sector, and secure opportunities to turn the expertise to its economic advantage through the export of pension-related services[30]. A larger number of older and retired people, in the absence of a dependable pension system, will pose a danger to the old age income security in the country and put enormous pressure on the government of the day to re-route expenditure earmarked for public goods and services towards providing for health and pension spending. This will inevitably cause a drain on the state of the fiscal and, subsequently, on the economy. Trend forced towards mandated participation, contributions coupled with tax incentives and guaranteed real time return on retirement savings can hold DC pension system in long term. Voluntary nature of NPS add along poor financial literacy and attitude of the household towards financial savings, risk and retirement planning – have greatest challenge to be achieved by PFRDA and other financial institutions. Today, creating awareness and gaining the confidence especially among unorganized sector will be a single most important challenge to be faced by policymakers.

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