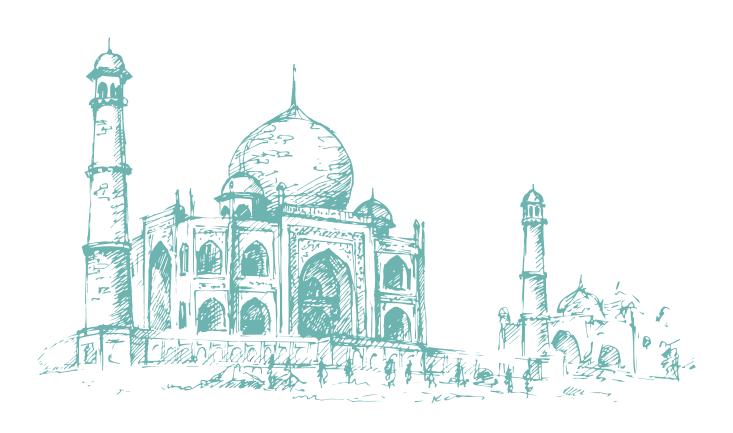


1

TOWARDS COMPREHENSIVE PENSION COVERAGE IN INDIA

DR SHASHANK SAKSENA ADVISER, DEPARTMENT OF ECONOMIC AFFAIRS, MINISTRY OF FINANCE, GOVERNMENT OF INDIA



INTRODUCTION

This chapter reviews the initial conditions that led to major reforms in the pension system in India in the early years of the past decade. It then goes on to show how these reforms have created a very efficient, country-level administration and investment system that delivers best in class costs and returns. This 'unbundled' architecture can be used with multiple, and very different, entry points and product types for different groups in the country. But it is only with the advent of India's national ID (Aadhaar) platform and modern developments in IT and payments systems, that the full potential of the Indian pension system can now finally be seen. The Indian experience shows how with the right combination of ID, IT and sensible design for administration and investment governance and execution, developing (and developed) countries will be able to achieve radically improved chances for expanding coverage to the hard to reach groups and delivering to these groups the kinds of costs and returns typically only available to formal sector salaried individuals in the country.

INITIAL

CONDITIONS AND CONTEXT

Traditionally, the joint family system in India provided some protection against old-age economic crisis and a support network that excluded the need for third-party pension products. The joint family system was supported by the fact that 57% of the population was young and economically active (between age 15 years and 59 years) in 2001 and was required to support only 7.4% of the population aged over 60 years. That said, there were clearly large problems with old-age poverty within this system, and for anyone with difficulties with their family, or a lack of family, the situation was particularly difficult.

With declining fertility, along with increases in life expectancy, the number of older persons in the population was expected to increase by more than double from 71 million in 2001 to 173 million in 2026 - an increase in their share to the total population from 6.9 to 12.4 percent. The proportion of population in the working age group of 15 to 59 years was expected to rise from 57.7% in 2001 to 64.3% in 2026. On the basis of current demographic trends, India will have a larger population of the young and economically active as compared to people in old age until 2050, when the population over age 60 years would increase to about 20 percent. The focus on reaping the benefits of the 'demographic dividend' has pushed to the background the trend of a greying population and the challenges that this could impose.

India's pension system for the elderly is inadequately prepared, both in terms of its coverage and financial sustainability. As is evident from Figure 1.1, the share of the elderly

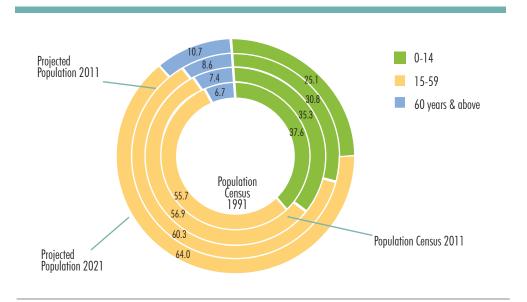
¹ Office of the Registrar General (2006).

² Subaiya, Lekha and Bansod, Dhananjay W. (2011).

population grew from 6.7% in 1991 to 8.6% in 2011 and is projected to rise to 10.7% in 2021.³ The absolute numbers are projected to double from 71 million in 2001 to 143 million by 2021.

Figure 1.1

Age Distribution of Population in India over decades



However, considering that the population of India is large, aging and urbanisation are rapidly changing the total numbers and the dynamics of family support in old age. According to the estimates of the UN Population Division, 21.2% of the Indian population will be above the age of 60 as compared to 60.3% aged between 15 and 59 years by 2050. The overall number of the elderly as a percentage of the population is expected to double within the next 30 years and the rise of nuclear families in urban areas will further strain the family support system. Presently, about one-third of India lives in urban areas, which is set to rise to one-half by 2045 as per the estimates of UN Population Division. It is estimated that about 9 working-age individuals supported each person above the working age (65+ years) in 2001. This is set to reduce to a ratio of 5:1 by 2050. This profound shift in the share of older Indians—taking place in the context of changing family relationships and severely limited old-age income support—brings with it a variety of social, economic, and health care policy challenges. To be sure, many of these problems are the symptoms of success in growth and development in the country – but the pensions and old-age income issue is one in which successes in other elements of development create a stronger demand for improved policies.

³ Central Statistics Office. (2011).

The presence of "myopia" is one of the most convincing rationales for the existence of social security systems. Myopic individuals may not save for their old age, and public pension systems force them to save an appropriate amount. The main finding is that as the number of myopic agents increases, the desirability of social security increases. That workers in India suffer from a classic case of myopia is evident from the findings of the National Income, Savings and Retirement Survey conducted under the Technical Assistance Project Report of Asian Development Bank in 2006, where a large majority of people knew that their family would not support them in old age, but two-thirds of all occupation categories of workers, other than Government employees, were not even thinking about retirement, let alone preparing for it. However, the same survey also indicated that about 20 million individuals in the age group of 30-50 years were willing to sign up for a defined contribution based pension system.

The subsequent Invest India Income and Savings Survey, 2007 indicated that approximately 61 million low-income unorganised workers were interested in saving for retirement, and nearly 25.8 million of them could afford (and were willing) to pay INR 2,300 (USD 51.56) per year for a private contributory pension scheme. It was estimated that the potential for such micro-pension savings in India is approximately INR 201.3 billion (about USD 3 billion) per year.

On the other hand, besides the demographic and sociological change, the pressure on Government finances had been building up rapidly on account of the funding liability of supporting the pay-as-you-go defined benefit pension system for civil servants. Moreover, the pressure on government finances would only increase further if viable old-age income solutions were not developed for other parts of the labour market, since it would be increasingly unacceptable, in a rapidly developing country, to have large segments of the older population facing poverty whilst younger cohorts prospered. Pressure would almost certainly grow for increasing public provision in this scenario.

Considering that ageing populations are driving a growing need for private long-term savings products for retirement, the pension sector is likely to exert an increasing impact on financial markets. Relative to the size of financial markets in many developed countries, aggregate pension fund assets currently represent more than 9% and 12% of equity and bond market capitalisations, respectively. In view of this demographic shift, occupational and personal pension funds (and possibly also funded public schemes) are expected to grow further, inviting greater attention to be paid to these institutions and their market activities.

⁴ Cremer, Helmuth and Pestieau, Pierre (2010).

⁵ Asian Development Bank (2006).

PENSION REFORM CONSIDERATIONS

Given the initial conditions and the constraints of the pension systems, we may examine if the pension system reforms in India are optimum – although some would argue that there are no single best pension systems, but only the best long-term objectives for which the most effective policy solutions are developed.6 Employing the World Bank's multi-pillar pension system model, we may focus on the importance of identifying the core objectives of country pension systems – protection against the risk of poverty in old age and smoothing consumption from one's work life into retirement.⁷ In India, a country-wide social security system that provides a poverty-alleviation floor, or the equivalent of the 'first pillar' contributory social security system as seen in other developed and developing countries, is not adequately provided, although specific social security schemes have been introduced. Formal employer-based pension coverage is about 14% of the working population compared to near universal coverage in countries such as the Netherlands. The remaining 86% of the workforce in the informal sector has been traditionally excluded from such formal pension arrangements. However, while broad-based pension exclusion, ageing and social change were important considerations for introducing pension reform targeting India's informal sector, it was actually the fiscal stress of the DB pension system for civil servants that was the major factor driving pension reforms for Government employees. In the years since the original Budget announcements in 2001-02 to create the 'New Pension System' or (NPS), the underlying logic that led to subsequent budget announcements on a wide range of extensions and changes to the NPS to the present day have all underlined the need for pension reforms for both Central Government and equally for the unorganised sector.

LABOUR MARKET PROFILE AND PENSION COVERAGE

There are three major components of the Indian pension system: the mandatory civil service pension, the mandatory pension and provident programmes administered by the Employees' Provident Fund Organisation (EPFO) and other Statutory Provident Funds Organisations for salaried workers, and voluntary pension schemes (both contributory and non-contributory pension schemes financed out of Government revenues) including those for the unorganised sector. India's total workforce, as per the 66th Round NSSO Survey (2011-12), is about 473 million. Of them, barely 14% of the workforce is covered by a formal pension program. These include central and state government employees, private and public sector salaried workers covered by the EPFO or other statutory provident and pension funds, and a small section of the population that is covered by private pension plans offered by insurance companies.

⁶ Barr, Nicholas and Diamond, Peter. (2010).

Holzmann, Robert, Hinz, Richard Paul and Dorfman, Mark.

Table 1.1

Schemes for old age income security in India

Mandatory			
Programme	Legal Coverage	Effective Coverage	Financing
Employees' Provident Fund	Employees in firms with more than 20 workers	About 8.5% of the labour force	Employer and employee contributions
Employees' Pension Fund	Same as above with some exemptions	About 5% of the labour force	Employer, government contributions
Civil Service Pension Scheme	Civil servants at state and Central level	About 3% of the labour force	State or Central Government budgets
Government Provident Fund	Civil servants at state and Central level	Most civil servants	Employee Contributions
Special Provident funds	Certain occupations and employee's in specified occupations	Around 0.5% of the labour force	Employer and employee contributions
Voluntary, tax-preferred			
Public Provident Fund	All individuals	About 0.7% of the labour force	Contributions
Superannuation plans	All employees	About 0.4% of the labour force	Contributions
Personal pensions	All individuals	About 1% of the labour force	Purchase of annuity- like products
Social Assistance			
State level social Assistance	Varies by state	Varies by state	State budgets
National Social Assistance Programme	Destitute persons over age 60	About 19% of population over 60	Central budget

Notes

- 1. Legal coverage for EPS/EPF extends to 187 types of establishments.
- $2. \ \ \text{Effective EPS coverage refers to a subset of EPF members}.$
- 3. General Provident Fund and defined benefit pension scheme stopped for civil servants with effect from January 1, 2004 and all new employees are covered under the National Pension System (NPS).

Source: World Bank (2001). India-The Challenge of Old Age Income Security. Report No. 22034-IN and Author's calculations.

FINANCIAL INCLUSION

Financial inclusion is a critical part of India's strategy to achieve inclusive and sustainable economic growth. Recognising this, the Government of India launched an ambitious programme of financial inclusion under the Pradhan Mantri Jan Dhan Yojana (PMJDY) that sought to deliver a bank account to each Indian household. This programme was launched in August 2014 and by March 2017, around 281 million bank accounts were opened under this programme. The PMJDY initiative is clearly at the core of India's financial inclusion policy agenda and has been widened to include savings, credit, insurance and pension products under various social security schemes of the Government. The more recent demonetisation drive in India (2016) has further fuelled the use of both banking and digital (cards and mobile-based) payment mechanisms by everyday Indians.

Although India has achieved tremendous growth in access and use of banking and payments infrastructure, the challenge of achieving broad-based pension coverage continues and is compounded by the low level of retirement literacy and low use of formal financial instruments. Despite modest pension coverage however, retirement assets are an important part of the economy. According to the basic statistics for the Indian economy published by the Reserve Bank of India in 2015-16, about 14% of India's total financial assets were in pension and provident fund instruments.

COVERAGE AND COST OF FORMAL FINANCE

Fees and charges are critical components of financial inclusion and play an important role in both financial services access and outcomes. Costs of a pension system are especially important when compounded over a multiple decade savings and pay-out horizon.

A simplified, maximum all-in-cost for a mutual fund product in India is 2.25% of assets and varies between 2.50% to 5% of assets for various retail insurance products. The equivalent fee on assets under the National Pension System (NPS) ranges between 0.025% and 0.138% for different categories of subscribers. The cost of offering pension products under NPS in India is low even when compared to some of the more mature and larger pension systems in OECD countries, although it is slightly higher than the world leading low cost plan which is US Thrift and Savings Plan for Federal workers which has an Annual Management fee between 0.03% and 0.06% (3-6 basis points). However, the cost of India's NPS is well below the costs of comparable systems in several other markets, including Australia and Hong Kong, and many pension plans in the U.K. and Chile. Annuity prices and the costs incurred during the payout phase are equally important and India's experience in this area is discussed ahead.

SALES AND DISTRIBUTION INFRASTRUCTURE

The financial services distribution industry in India is expected to see a rapid growth in the coming years as a high rate of economic growth increases employment and raises incomes, and as India's demographic dividend causes an increase in long-term savings instruments.

Voluntary pension products in India are offered by mutual funds and insurance companies using both tied and third-party distributors. The NPS is distributed through a range of third-party distributors including banks. A number of factors influence the success of a distribution channel for pension products – including trust and public confidence in distributors, quality of customer servicing, convenient access to service points and an efficient, technology-driven process architecture. India already has a significant number of widely distributed physical outlets for financial services distribution including around 170,000 bank branches. By March 2016, this banking outreach was being supported by around 590,000 rural, village-level banking agents (up from 67,694 in March 2010) and over 100,000 bank correspondents (BCs) in urban locations (up from 447 in March 2010).

Traditionally, individual agents have been the major distribution channel for mutual funds and insurance products. As of March 2014, the insurance industry had 2.2 million individual agents and only 689 corporate agents. More recently however, corporate agents, and especially private sector banks, have emerged as a key retail distribution vehicle for both mutual funds and insurance. Mutual funds and insurers have also actively started using the Internet for direct distribution. While roughly 30% of mutual fund and insurance assets have been driven by web-based sales, this channel appears to be more popular with corporate and institutional clients as most retail investors still appear to prefer investing through agents and distributors.⁸

Around 57,000 bank branches and other third-party financial distribution outlets today distribute the NPS. While physical outreach and distribution infrastructure is necessary for increasing pension coverage, it is essential to focus equally on persistency as regular pension contributions are critical for building pension wealth over a multi-decade horizon. It is therefore especially important that pension products be distributed by credible entities who have the ability to handhold subscribers over time and encourage them to stay invested in the pension system even when faced with emergencies and a strong desire to prematurely access pension assets.

The national survey by Asian Development Bank in 2004-05 and the Invest India survey in 2007 clearly indicated that public sector banks and India Post enjoyed hugely higher levels of public confidence than other financial institutions. Financial institutions that enjoy higher levels of public confidence would naturally be the best distributors of pension products. However, in a recent study, Halan and Sane (August 2016)⁹ found that banks often mis-sell insurance products, in line with their economic incentives. This risk of mis-selling can be mitigated by increasing transparency, improving the financial literacy and knowledge of finance consumers, and by training and certification of distributors. PFRDA, India's pension regulator, has started the process of training of pension sector intermediaries through specialised training agencies.

⁸ Ministry of Finance (2015).

⁹ Monika Halan and Renuka Sane (2016).

An important lesson from the Indian experience is that comprehensive participation in pension schemes based on individual contributions depends heavily on intensive communications and marketing, as well as on efficient and consumer-friendly business practices. There is considerable need for improvement in these areas. Recent experience from three pilots funded by the World Bank FIRST Project and managed by pinBox Solutions (described in more detail in Chapter 16) clearly shows how a combination of a robust national ID, a technology-led digital process and third-party service outlets that citizens in India already use for regularly accessing financial or non-financial services can effectively link them to a funded pension system at a modest transaction cost.

LONG-TERM RATES OF RETURN

There is ample global evidence on the existence of an equity risk premium relative to investments in bonds across many countries. Several theories have been offered to explain the often high levels of this equity risk premium. The indications for investment guidelines for pension funds in general terms are clear that asset restrictions skewed in favour of fixed income instruments need to be relaxed and investments in newer financial instruments may be permitted subject to prudential norms. In parallel, newer instruments need to be created also.

Countries that launch private pension systems may often be motivated by a confluence of factors and expect their pension program to address a number of issues including the macroeconomic framework. This is also highlighted in the work for the 'Outcomes Based Assessment Framework' (Price, Ashcroft and Hafeman, 2016). 11 As the authors argue, countries like Chile, Mexico, Poland, Romania and others were motivated by large 'stability creation' returns from investing pension assets in government bonds at the outset. The previously poor macro-economic framework and the associated high returns on government bonds and inflation falls significantly over the first 5 to 10 years as the macro-economic framework improves. This creates large windfall gain from investing in government bonds that should not be ignored. The general diversification advice should therefore be tempered by the potential for this one-off, though critically important fact. After ten years or so, when both bond rates and inflation are at stable long-term levels, there would be a strong case to diversify. In some countries an initially cautious investment strategy may be needed to de-risk pension savings in the initial years so that a new pension system is not fatally harmed by an unpredictable, domestic or global stock market crash. Finally, the relevant stock market into which pension assets are channelled needs to meet core standards for fair dealing.

¹⁰ Damodaran, Aswath (2012); Duarte, Fernando and Rosa, Carlo (2015).

¹¹ Price, William; Ashcroft, John; Hafeman, Michael (2016).

THE EVOLUTION OF INDIA'S **PENSION REFORM**

Recognising the pension coverage gap. India's tax and social security base is low due to a large informal workforce. Further, with a public debt of over 65% of GDP, India does not have the fiscal space to implement a meaningful tax financed pillar-1 social pension scheme that provides effective old age income security to the destitute elderly. One way to cover the unorganised sector under formal pension provision could be to expand the mandatory pension schemes (under second pillar) of the EPFO. But the high number of excluded informal workers imposes limits on the possible coverage that can be achieved through mandatory pension schemes in practical terms as informal sector workers are not registered and cannot be easily found by enforcement activity. Besides the NPS that has become recently available to all citizens, voluntary private pension plans have traditionally been offered by insurance companies and mutual funds. However, the coverage of the population through such plans is quite limited and is estimated at around 2.6 million, although hard numbers on coverage are not readily available.

Designing a comprehensive pension program. In view of inadequate coverage by formal pension schemes, the lack of fiscal space to launch a pay-as-you-go nationwide social security scheme and increasing fiscal stress on account of the traditional DB pension system for Government employees, ¹² the Government of India decided to accept the recommendations of the Project OASIS (Old Age Social and Income Security) Committee in 2000. The OASIS Committee had proposed a new DC pension system based on portable individual pension accounts and administered by an unbundled institutional architecture. This DC pension program would be common for employees of Central and State Governments and autonomous bodies, and also for non-salaried unorganised sector workers.

India's new National Pension System for Civil Servants. The Government of India notified the new defined contribution National Pension System (NPS) on 22nd December 2003. All new entrants to Central Government service, except the Armed Forces, who joined service on or after 01st January 2004, were mandatorily covered by the NPS. The Government constituted an interim regulator, the Interim PFRDA through a Government Resolution in October 2003 as a precursor to a statutory regulator. This Resolution was re-issued on 14th November 2008. The design principles of the NPS include self-sustainability, scalability, individual choice, affordable and easy access, efficiency, competition and sound regulation. PFRDA became the statutory regulator for the pension sector after enactment of the Pension Fund Regulatory and Development Authority Act, 2013. The said Act came in force with effect from 01st February 2014.

A number of studies estimated the implicit pension debt (IPD) of civil services. Gautam Bhardwaj and Surendra A. Dave (Bhardwaj and Dave 2005) estimated the IPD of only Central Civil servants was 64.51% of GDP in 2005. A World Bank Study of 2008 of 5 States revealed that IPD ranged between 41% and 116% of the Gross State Domestic Product (World Bank 2008).

Expanding Voluntary NPS Coverage. Since its launch in 2004, the NPS has been extended also to employees of autonomous bodies and State Governments, as well as to unorganised sector workers. NPS has been adopted resoundingly by twenty-seven State Governments and Union Territories that have notified this new DC pension scheme for their own new employees.

Due to the financial and practical difficulties of extending coverage through the first and second pillar pension arrangements and dwindling family support, voluntary retirement savings are seen as an important policy tool to provide old age income security to the majority of citizens who are employed in the informal sector. The NPS emerged as an important policy tool to achieve a higher coverage of the formal pension system among the informal sector workforce.

To encourage citizens from the unorganised sector to voluntarily use the NPS to save for their retirement, the Government introduced a co-contributory benefit (*Swavalamban*) linked to the National Pension System. Under *Swavalamban*, the government announced a fiscal incentive of INR 1,000 for NPS contributions by low income individuals for a period of 5 years. This co-contribution incentive for NPS was formally launched in September 2010 at Jangipur, a district in West Bengal.

A New Hybrid Scheme for Low Income Earners: In 2015, the Swavalamban benefit was substituted by a hybrid, DB and DC pension scheme, named the *Atal Pension Yojana (APY)*. The experience with NPS and APY over the last few years strongly suggests that fiscal incentives cannot by themselves resolve the voluntary pension coverage challenge. Fiscal measures must be combined with strategies to overcome other key coverage challenges including extensive efforts at promoting the program and increasing awareness and retirement literacy among citizens, increasing convenient and affordable access to the program through a nationwide distribution and marketing network and ensuring tax equivalence with other long-term savings instruments. Nevertheless, by March 2017, over 4.8 million voluntary subscribers had been enrolled under the APY with a corpus contribution of INR 17.51 billion.

Rationale for the un-bundled NPS architecture. Transparent disclosure of returns and investment management fees by pension fund managers (PFMs), subject to a fee cap by a regulator, should presumably allow subscribers to take a rational decision on PFMs and product options. This is however not always the case. Choi, Laibson and Madrian (2006)¹³ examined the approach of Wharton MBA and Harvard students to mutual fund investing. The authors presented their test subjects with four mutual funds that were all substantially similar: tracking the S&P500 Index. They were asked to choose a mutual fund in which to invest USD 10,000, following receipt of standard investment information, for example fund prospectuses. In the control group without fee information, 95% of test subjects did not minimise fees when picking funds, which was the only real differentiator between the funds. In the group with fee information, 85% did not minimise fees. This study also revealed that provision of fee information had only a marginal impact on decisions.

¹³ Choi JJ, Laibson D, Madrian BC (2006).

Furthermore, the group provided with information regarding historical performance, chased historical performance even though these funds had higher fees.

The "unbundled" NPS institutional framework was designed to address such learning from human psychology and behavioural economics that suggest that pricing of financial products is complex, and, even with the best of information, customers of financial products do not always take rational decisions. It was, therefore, decided to keep both product and fund manager choices under NPS simple and finite.¹⁴

The clean answer to the fuzziness around the all-in-cost of a pension system is to allow standardisation of fund management into a group of index funds and publically procure a finite number of pension fund managers through an auction. This has two effects: economies of scale (a small number of very large assets under management) and low investment management fee (since fund managers compete with each other in an auction).

The unbundled institutional architecture of NPS also avoids the oft repeated charge of creating a DC pension system which has high costs, charges and fees leading to a lower pension wealth. An intelligently designed default investment option under NPS, based on a life cycle investment approach for subscribers is one such mechanism to maximise returns for subscribers under the given constraints of low financial literacy. Even when active investment choices are available, this would be the main instrument to be used by subscribers on account of general inertia and low level of financial literacy.

Performance of Different Pension Systems. Since April 2008, the NPS has delivered nominal returns of between 10.5 and 11% on contributions by Central Government employees. In comparison, the Employees' Provident Fund, the mandatory, publicly managed scheme for formal sector salaried workers, has delivered returns ranging between 7 and 12%, and an average return of about 9.9%, between 1975 and 2015. The administered returns under the voluntary Public Provident Fund and the General Provident Fund have ranged between 8 and 12% with an average return of 8.5% between 1983 and 2015. In comparison, the long-term returns on 10 year Government bonds have ranged between 5.4% and 13.7%, with an average return of 8.9%, between 1996 and 2015. Therefore, the net returns under NPS have not been inferior to those achieved under other long-term savings instruments over a long period and even for the comparable period.

DESIGN OF THE PAY-OUT PHASE ANNUITISATION PUZZLE

Individual subscribers in the de-accumulation phase of a pension system have choice. This need not be a binary choice and could instead occupy a continuum from complete

¹⁴ Sunstein, Cass R. and Thaler, Richard H. (2003); Iyengar, Sheena Sethi and Lepper, Mark (2000); Iyengar, Sheena Sethi, Huberman, Gur and Jiang, Wei (2004); Goldreich, David and Hałaburda, Hanna (2011).

discretion to full annuitization. This range, in theory, includes full lump sum withdrawal, systematic withdrawal, various forms of annuities or a combination.

In view of the emerging worldwide trends to move away from DB plans in favour of DC schemes for non-public sector pensions, the decision about an optimal pay-out option becomes increasingly relevant. Countries have approached the issue in varied ways. ¹⁵ While economic theory suggests that rational individuals with no bequest motive should convert all of their retirement wealth into an annuity at retirement, ¹⁶ the evidence on actual consumer behaviour suggests otherwise.

The literature identifies several key factors that influence the rate of annuitization in a country, including competition between annuity providers, especially given the impact of adverse selection; investor psychology; and the underlying public policy regime. Globally, the evidence suggests (as measured by Money's Worth Ratio) that private annuity markets can provide competitively priced annuities to retirees if one calculates competitive prices relative to investment returns from government bonds or a portfolio with some corporate bonds.

Given this, the requirement for mandatory annuitization of 40% of NPS accumulations may be seen as a welfare enhancing measure and Government actions should then be carefully calibrated and designed to support a well-functioning annuity market. The remaining pension wealth may be carefully allocated to other de-accumulation products like systematic (or phased) withdrawal plans and partial withdrawal plans. Subscribers under NPS are permitted to withdraw up to 60% as a lump sum. Such lump sum withdrawals, as well as annuity benefits from NPS are taxed under the EET (exempt-exempt-tax) regime in India.

Insurance firms and annuity providers are regulated by the Insurance Regulatory and Development Authority of India (IRDAI). There are a small number of annuity service providers in India, with Life Insurance Corporation of India (LIC) enjoying about 80% share of the total annuities market. This means that the cohort longevity risk (the systematic trend to live longer for a group of the population) is highly concentrated in a small number of annuity service providers. There is a supervisory question as to whether these annuity service providers have the capacity to absorb the extra risk associated with increased annuity demand. One advantage multi-line insurance companies have in providing annuities is that they also provide life insurance products, so to the extent that annuity pay-outs are higher because people are living longer, the insurance company wins by having lower life insurance pay-outs.

As in many countries, India has seen calls to allow people to take more of their wealth in lump sum and to avoid having to buy 'expensive' annuities (where part of the expense is of course the cost of the guarantee of income until death). Therefore, there are demands that the level of annuitization (mandatory 40% of pension wealth under NPS) needs to

¹⁵ Huitron, Manuel Garcia (2014); Milevsky, Moshe A, (2013).

¹⁶ Yaari, Menachim. (1965); Benartzi, Shlom; Previtero, Alessandro and Thaler, Richard H. (2011).

be re-examined from the perspective of consumption as well as the ability of the financial market to provide such an annuity. This leads to questions such as vesting age, the level of mandatory annuitization, the type of annuity, as well as the design of a programmed withdrawal product.¹⁷

The mandatory annuitization of 40% of the pension wealth and complete lump sum withdrawal of the remaining 60% does not admit the possibility of a systematic withdrawal as a de-accumulation product and, to this extent, there is a need to review and redesign the pay-out phase of the NPS. However, in view of a very strong economic case for annuitization and the level of financial literacy of subscribers, some level of mandatory annuitization may still be retained.

An enabling framework for the pay-out phase of a pension system would include equivalent tax treatment for all long-term savings products, equivalent consumer benefits and protection, and equivalent solvency standards (usually reflected in capital requirements), and in ensuring financial markets (and their regulators) have the tools (inflation indexed bonds or longevity bonds)¹⁸ needed to enable the private sector to offer a range of de-accumulation products including annuities. Tax policy ideally should be neutral toward long term savings products and we may move towards an EET provision for all pension products, which is the emerging international norm, facilitates savings and also helps overcome "myopia".¹⁹

ISSUES WITH A

FRAGMENTED PENSION SECTOR

The pension products being offered by mutual funds, insurance companies and NPS all provide different benefits, have different all-in-costs and are differently regulated. The governance structures for pension funds by different types of entities also differ. Some pension products do not conform to the entire pension cycle of accumulation and deaccumulation with clear and distinct functions of a pension system – such as contributions collection, record-keeping, asset management and payout including annuities. Some pension products allow single contributions (single premium annuity) or only phased withdrawals (under mutual fund pension products).

The regulatory environment for pension products offered by different types of financial firms also differs. For example, pension plans of mutual funds are regulated by the Securities and Exchange Board of India (SEBI) while the IRDAI regulates pension schemes and annuities offered by life insurance companies and the PFRDA regulates NPS. Other statutory pension and provident funds are regulated as per their own legislative provisions. Importantly, each regulator allows regulated entities to levy very different fees and charges for pension products.

¹⁷ Sane, Renuka (2016).

¹⁸ Blake, David., Cairns, Andrew J.G. and Dowd, Kevin (2008).

¹⁹ Cremer, Helmuth and Pestieau, Pierre, (2016).

In view of the above, there is a case for unification of the pension system at the level of players and regulators in the interest of consumers and for collaborative action to rapidly increase coverage under a unified pension system. In view of the direct effect of good governance on the pension wealth (as highlighted in Chapter 17 on governance and investment), we should attempt also to conform to the international best practices on governance of pension systems.

CONCLUSIONS

A recent global review of the policy approach to pension system reform is broadly driven by three changes: a readjustment of objectives (such as a refocus on basic social protection for the vulnerable elderly); evolving reform needs (such as recognising the urgency of addressing the phenomena of demographic changes of population aging and deferred retirement ages); and perceived and actual changes in enabling environments (such as more realistic views about the capacity of funded schemes to manage risks, the achievable rates of return, and the fiscal restrictions to finance transition deficits).²⁰

As India faces rapid demographic and social changes, with limited fiscal space to provide social security on a country-wide basis funded by the Government, the issues of adequacy, sustainability and integrity of India's pension system become very important. The Melbourne Mercer Global Pension Index benchmarks a pension system against other pension systems globally, although some components are difficult to compare across countries. However, it is acknowledged that India does not fare highly on adequacy and financial sustainability scores. Therefore, several challenges remain and need to be overcome to make pension system in India comparable with other developed pension systems.

A more comprehensive set of criteria are used in the Outcomes Based Assessment Framework (Price and others 2016) that includes the core outcomes of coverage, sustainability and adequacy against which to review performance in India and other countries, but also includes efficiency (costs, investment returns and labour market impact) and security (and particularly the role of the regulator and supervisor). Some of these challenges, as also some of the key lessons encapsulated below have been drawn from three recent pilots jointly conducted by The World Bank FIRST Project and pinBox Solutions for expanding voluntary pension coverage in India. It is very likely that several other countries in Asia and Africa may be able to readily relate to both challenges and the lessons learnt from India's recent experiences with the National Pension System.

KEY CHALLENGES

 Creating public awareness and literacy about pensions to remove the classic case of "myopia" and to increase voluntary NPS coverage, especially among unorganised sector workers, who constitute more than three-fourths of the total labour force.

²⁰ Holzmann, Robert (2012).

- Auto enrolment of workers and auto escalation are some approaches to dramatically increase coverage under voluntary NPS, which is based on studies in behavioural economics.²¹
- Preparation of simple and standardised information, retirement literacy and communication tools and ensuring full transparency around fund performance intermediary fees and charges to enable informed investment decisions by NPS subscribers.
- Establishing an efficient, third-party distribution and marketing architecture and an
 incentive-compatible business model to motivate optimum intermediary behaviour for
 increasing coverage of formal pensions without involving conflict of interests.
- 4. Developing newer intermediaries, like retirement advisors, as well as new financial instruments to offer a market-based guarantee mechanisms (through selection of a reference portfolio to minimise the cost of a guarantee).²² New instruments could also include inflation indexed Government bonds, innovative annuity options and structured phased withdrawals under the benefits pay-out phase.
- 5. Unification of regulatory and supervisory capability to develop and regulate the pension system in an efficient manner, and sponsoring research into the behavioural aspects of subscribers to prompt innovative marketing and distribution strategies and to in turn increase coverage.

KEY LESSONS FOR OTHER COUNTRIES

- 1. A fundamental, front-end question that any country planning to launch a national pension system would face, would be around the product and process architecture design and approach. Should one adopt a "bundled" (vertically integrated) or "unbundled" institutional architecture? The Indian experience of handling the political economy of pension reforms and building an unbundled institutional architecture provides some important lessons. India's unbundled approach, with centralised record-keeping and administration, a national-level trust with independent trustees, wholesale asset management by dedicated pension fund management companies, and distribution and services delivery by existing third-party distributions (banks and post offices) helps achieve economies of scale, lowers time-to-market and avoids "regulatory capture" by pension sector intermediaries.
- 2. The NPS design also reiterates the virtues of a limited number of simple product choices and a limited number of pension fund managers (selected through a bidding process). Studies of human psychology and behavioural economics ("Libertarian Paternalism") and the research by Schiller, Fama and Hansen on net returns and minimisation of costs of a pension system reckoned in terms of "charge ratio" and "equivalent asset fee", may be gainfully used to create efficient pension systems, while maximising pension wealth and subscriber welfare.

²¹ Choi, James, Emily Haisley, Jennifer Kurkoski, and Cade Massey (2012).

²² Consiglio, Andrea., Tumminello, Michele and Zenios, Stavros A. (2015).

- 3. An equally important feature of India's NPS is the centralised IT platform that ensures clean and fully reconciled individual pension account balances, facilitates labour portability and reduces the traditional inflexibility in labour market movement. In the long run, this may be growth enhancing considering the increasing informalization of labour.
- 4. Faced with a gigantic coverage gap, it is essential to implement a sustained public awareness campaign using public funds to increase retail knowledge and interest in the pension system, motivate early voluntary coverage and supplement market-based sales and marketing efforts.
- 5. Although fiscal incentives (such as matching government contributions) can play an important role in jump-starting voluntary enrolments, especially by those in the lower end of the income distribution, it is equally important to develop market-based guarantee mechanisms to help minimise the market risk in a DC pension system.

REFERENCES

Asian Development Bank (2006). "Technical Assistance Consultant's Report-Project Number: 36346-01." TA 4226-India: Pension Reforms for the Unorganised Sector. August 2006.

Barr, Nicholas and Diamond, Peter. (2010). "Reforming Pensions: Lessons from Economic Theory and Some Policy Directions." Economica, Fall, 2010.

Benartzi, Shlom; Previtero, Alessandro and Thaler, Richard H. (2011) "Annuitization Puzzles". Journal of Economic Perspectives. Volume 25, Number 4. Fall 2011, pp. 143–164.

Bhardwaj, G., and Dave, S. A. (2005). "Towards Estimating India's Implicit Pension Debt on Account of Civil Service Employees." Invest India Economic Foundation.

Blake, David., Cairns, Andrew J.G. and Dowd, Kevin (2008). "The Birth of the Life Market." Asia-Pacific Journal of Risk and Insurance. Volume 3, Issue 1. October, 2008, pp. 6-36.

Central Statistics Office. (2011). "Situation analysis of the Elderly in India." Central Statistics Office. Ministry of Statistics and Programme Implementation, Government of India and Census 2011.

Choi JJ, Laibson D, Madrian BC (2006). "Why Does the Law of One Price Fail? An Experiment on Index Mutual Funds." NBER Working Paper 12261.

Choi, James, Emily Haisley, Jennifer Kurkoski, and Cade Massey. (2012). "Small Cues Change Savings Choices", NBER Working Paper No. 17843.

Consiglio, Andrea., Tumminello, Michele and Zenios, Stavros A. (2015). "Designing guarantee options in defined contributions pension plans." The Wharton Financial Institutions Center. Working Paper 15-03. February 11, 2015.

Cremer, Helmuth and Pestieau, Pierre (2010). "Myopia, redistribution and pensions." Core Discussion Paper 2010/38. Available at https://www.uclouvain.be/cps/ucl/doc/core/documents/coredp2010_38web.pdf.

Cremer, Helmuth and Pestieau, Pierre. (2016). "Taxing pensions." TSE Working Papers No. 629. March, 2016.

Damodaran, Aswath (2012). "Equity Risk Premiums (ERP): Determinants, Estimation and Implications – The 2012 Edition." Stern School of Business.

Duarte, Fernando and Rosa, Carlo (2015). "The Equity Risk Premium: A Review of Models." Federal Reserve Bank of New York Staff Reports. No. 714. February, 2015.

Goldreich, David and Halaburda, Hanna (2011). "When Smaller Menus Are Better: Variability in Menu-Setting Ability." Available at www.hbs.edu/faculty/Publication%20Files/11-086.pdf

Subaiya, Lekha and Dhananjay W Bansod. 2011. Demographics of Population Ageing in India: Trends and Differentials, BKPAI Working Paper No. 1, United Nations Population Fund (UNFPA), New Delhi.

Holzmann, Robert, Hinz, Richard Paul and Dorfman, Mark. (2008). "Pension Systems and Reform Conceptual Framework." SP Discussion Paper No. 0824. World Bank. June, 2008.

Huitron, Manuel Garcia (2014). "The role of annuities, partial lump-sums and special-purpose withdrawals in pension design." Thesis submitted in partial fulfilment of the requirements for the degree of Master in Economics and Finance of Aging. Tilburg School of Economics and Management.

Iyengar, Sheena Sethi and Lepper, Mark (2000). "When choice is demotivating: Can one desire too much of a good thing?" Journal of Personality and Social Psychology, 76, pp. 995-1006.

Iyengar, Sheena Sethi, Huberman, Gur and Jiang, Wei (2004). "How much choice is too much: determinants of individual contributions in 401(k) retirement plans." In: O.S. Mitchell and S. Utkus, Editors, Pension Design and Structure: New Lessons from Behavioral Finance, Oxford University Press, Oxford, pp. 83-95.

Milevsky, Moshe A, (2013). "Life Annuities: An Optimal Product for Retirement Income." The Research Foundation of CFA Institute.

Ministry of Finance (2015). Report of the Committee to recommend measures for curbing misselling and rationalising distribution incentives in financial products. pp 19.

Monika Halan and Renuka Sane (2016): "Mis-led and Mis-sold: Financial misbehaviour in retail banks?", NSE-IFMR Finance Foundation Financial Deepening and Household Finance Research Initiative. Available online at http://foundation.ifmr.co.in/misled-and-mis-sold-financial-misbehaviour-in-retail-banks/

Office of the Registrar General (2006). "Census of India 2001- Population Projections for India and States 2001-2026." Report of the Technical Group on Population Projections Constituted by the National Commission on Population. May, 2006.

Price, William; Ashcroft, John; Hafeman, Michael (2016). "Outcome Based Assessments for Private Pensions: A Handbook." World Bank, Washington, DC.

Sane, Renuka (2016). Designing the payout phase of the National Pension System. Available at https://ajayshahblog.blogspot.in/2016/12/designing-payout-phase-of-new-pension.html.

Subaiya, Lekha and Bansod, Dhananjay W. (2011). "Demographics of Population Ageing in India." Building knowledge base on Population Ageing in India-Working paper: 1. Institute for Social and Economic Change, Bangalore United Nations Population Fund, New Delhi Institute of Economic Growth, Delhi. December, 2011.

Sunstein, Cass R. and Thaler, Richard H. (2003). "Libertarian Paternalism is Not an Oxymoron". The University of Chicago Law Review. Volume 70, Fall 2003, Number 4.

Yaari, Menachim (1965). "Uncertain Lifetime, Life Insurance, and the Theory of the Consumer." Review of Economic Studies, 32(2), pp. 137–150.

World Bank (2008). Civil service pension liabilities in India: Preliminary estimates for six Indian states. June 27 2008.