



पेंशन निधि विनियामक और विकास प्राधिकरण
PENSION FUND REGULATORY AND DEVELOPMENT AUTHORITY



International Research Conference on Pension (IRCP 2025)	Date: 03 rd and 4 th April 2025 Venue: Leaders Lounge, Bharat Mandapam, New Delhi
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Records of discussion-IRCP-2025

The Pension Fund Regulatory and Development Authority (PFRDA), in association with the Indian Institute of Management Ahmedabad (IIMA), convened the 1st International Research Conference on Pension (IRCP) 2025 on April 3rd and 4th, 2025, at Bharat Mandapam, New Delhi.

The International Research Conference served as a Maha Kumbha – a confluence of ideas – bringing together economists, policymakers, industry specialists and academicians from across four continents, including the United States, South Africa, Nigeria, the United Kingdom, Singapore, Nepal and Bhutan. The conference also elicited interest from the audience in fostering collaboration within the SAARC region. Panelists drew extensively from global best practices across jurisdictions and regulatory frameworks.

Inaugural Session

The conference commenced with an inaugural session that set the tone for the deliberations to follow.

Highlighting a big change in India's demographic landscape, necessitating urgent and inclusive pension reforms to secure a dignified future for its aging population, **Shri Pankaj Chaudhary, Minister of State for Finance** in his key note stated that India's demographic landscape is on the profound shift in the coming decades. By 2050, one in five Indians will be over 60 and by 2047, the elderly will outnumber children. With 19 percent of the population projected to be elderly by mid-century – predominantly women – securing 'Pension for All' through inclusive pension schemes is not merely a goal, but a vital need for the country. In this direction schemes like APY, NPS, NPS vatsalya and now UPS are evidence of GOI's commitment to ensuring Financial inclusion and security. PFRDA's role in orderly growth of pension sector, making it more transparent and effective through digitization is commendable.

Shri Nagaraju Maddirala, Secretary, Department of Financial Services, in his address, highlighted that India's pension framework stands at a pivotal moment of transformation and through the launch of the Unified Pension System and efforts to broaden coverage, we are creating a robust foundation for secure retirement. UPS provides an assured pension of 50 per cent of the average basic pay drawn over the last 12 months prior to superannuation. India's pension assets, constituting roughly 17 percent of GDP, fall far short of the OECD

average, where they typically exceed 80 percent, revealing a stark disparity in retirement readiness.

Dr. Deepak Mohanty, Chairperson of PFRDA, while welcoming distinguished guests, global thought leaders and industry stakeholders, stated that the conference was a culmination of our collective vision to foster a vibrant ecosystem of knowledge and innovation in the pension sector. The National Pension System (NPS) has become a cornerstone of India's pension sector, fostering financial security for millions, with an accumulated corpus of ₹14.4 lakh crore and 8.4 crore subscribers under NPS and Atal Pension Yojana (APY). He stated that the conference aims to develop inclusive pension solutions for gig, platform and informal workers leveraging India's tech advancements, strengthen "pay-as-you-go" pension systems through fully funded models like the Unified Pension Scheme (UPS), utilize AI to enhance accessibility and transparency in pension management..

Dr. Manoj Anand, Whole-Time Member (Finance), PFRDA, in his welcome address, placed particular emphasis on the need to develop pension schemes for the informal sector, especially in light of the expanding gig economy. He also elaborated on the key features of the recently announced and implemented Unified Pension Scheme.

Professor Bharat Bhaskar expressed satisfaction that the Atal Pension Yojana (APY) has successfully leveraged the India Stack and the JAM Trinity to overcome the barriers posed by informality, thereby reaching over six crore subscribers in the past nine years. However, he pointed out that 70% of the elderly population remains dependent on others for daily sustenance and 78% still lack any form of pension coverage, reinforcing the urgent need to develop a vibrant and inclusive pension system.

THEME 1- PENSION FOR FUTURE - BUILDING RESILIENT OLD AGE INCOME SECURITY

PANELISTS:

- Dr. Soumya Kanti Ghosh, Member, 16th Finance Commission and Group Chief Economic Advisor, State Bank of India – *Moderator*
- Ms. Astrid Ludin, Deputy Commissioner, FSCA, South Africa
- Ms. Omolola Oloworaran, Director General, PENCOM, Nigeria
- Mr. William Price, CEO, D3P Global
- Dr. Deepak Mohanty, Chairperson, PFRDA

The discussion featured diverse panelists from the UK, Nigeria, South Africa and India. While India and Nigeria are grappling with high informality and low coverage, South Africa has higher coverage but faces lower economic growth, high unemployment and low savings. The role of auto-enrollment in the UK in scaling up pension coverage was particularly notable.

Key discussion points included:

- There is a need to balance adequacy with flexibility, especially for people with lower disposable incomes who may occasionally need to dip into their pension savings, leading to leakages. Accordingly, South Africa has a two-pot system and Nigeria has two portions. NPS allows partial withdrawal and has a Tier II account, whereas APY does not have this feature. APY subscribers rely on linked bank accounts. Structured mandates through such mechanisms provide flexibility while preserving savings.
- Systematic investment is a highly structured product, which can sometimes create challenges for workers in the unorganised sector. Hence, the importance of flexible contribution options was emphasised.
- The growing gig economy is attracting global policy attention, with gig workers being included in pension systems through platforms and apps in the UK, Singapore and Europe.
- Migrant workers, numbering 81 million globally and remitting nearly USD 1 trillion to support 800 million family members, often lack pension benefits. It was suggested that NPS could be integrated with systems in the UAE and other countries, so returning workers could transfer funds into pension schemes like NPS. Greater flexibility could also be offered to OCIs.
- A well-designed system can overcome many challenges. For example, NPS is employment- and status-neutral and allows account continuity, enabling seamless accumulation over a lifetime. It is also a family-oriented product, covering children and providing payouts to spouses.
- India's low per capita income of USD 2,500 presents a challenge for building an adequate pension system. The effectiveness of tax incentives in this context was discussed. Alternatives like co-contribution (Mexico), clearly defined benefits (APY-India) and linking contributions to health insurance (Indonesia) were explored.
- The collective bargaining power of pension funds could be used to obtain health insurance for subscribers.
- The absence of annuities during the payout phase (as in Australia) may result in longevity risk or living poor and dying rich. Stepped-up payouts at age 75 could help. Payouts should also support families.
- While Defined Benefit (DB) and Defined Contribution (DC) systems are typically viewed as alternatives, both may coexist. A DB scheme fully backed by assets could be viable. However, DB alone may not work for individuals with interrupted careers—such as women or migrant labourers—as DB schemes often require a minimum number of service years to qualify for payouts.
- Return maximization is crucial for maintaining adequate funding in DB schemes. Economic factors such as interest rate fluctuations also affect funding. Annual funding is important to keep such schemes viable, which has implications for both the APY and UPS schemes. Transparency is key to avoiding adequacy shocks.
- Pension products are no longer 30–35-year commitments but now span 50–60 years, requiring long-term investment strategies.
- Lessons from gaming apps may be studied to improve onboarding processes.
- A regulatory sandbox is a vital tool for fostering innovation. Creating an enabling environment to test innovations could offer better solutions.

THEME 2 - GLOBAL LESSONS ON NEW AND INNOVATIVE INVESTMENT PRACTICES IN THE PENSION INDUSTRY

PANELISTS

- Prof. Abhiman Das, IIM Ahmedabad – *Moderator*
- Mr. Brian M. Miller, CFA, CFP® – Vanguard, Head of Target Date Fund Product Management
- Dr. Paul Yu, Director (Policy and Regulation), Mandatory Provident Fund Schemes Authority, Hong Kong SAR, China
- Mr. William Price, CEO, D3P Global
- Prof. Prachi Mishra, Director and Head, Ashoka Isaac Center for Public Policy
- Mr. R. Mark Davis, CFA – Senior Financial Sector Specialist, WBG
- Mr. Tushar Arora, Senior Financial Sector Specialist, WBG

Extensive discussion took place on target date funds, which have been developed following OECD research. Target date funds simplify investment choices for less engaged investors. They reduce volatility and bring stability to portfolios. A number of countries such as Mexico, Colombia, Brazil and Australia have adopted them and around USD 4 trillion is globally invested in target date funds. Key discussion points included:

- India has four life cycle funds based on the same principle of decreasing risk appetite with increasing age and among these, the balanced life cycle fund has been introduced recently.
- One of the key strategies suggested was the combination of target date funds with automatic enrolment and a focus on addressing decumulation needs.
- Borrowing against pension funds was also proposed.
- It was noted that regulators may need to open up markets and avoid over-focusing on short-term volatility.
- Pension funds, being patient capital, are well-suited for infrastructure investments.
- Mexico was cited as an example where innovative instruments like CKDs have been introduced by CONSAR.
- Namibia has created SPV trusts for infrastructure funding, managed by independent managers. Currently, only 1.75% of the funds are required to be invested in these SPVs. PFRDA has also permitted investment in REITs and InvITs, although supply remains limited.

THEME 3 – PENSION FORUM FOR REGULATORY COORDINATION AND DEVELOPMENT OF PENSION PRODUCTS

PANELISTS:

- Dr. M. S. Sahoo, Former Chairperson, IBBI – *Moderator*
- Mr. Pankaj Sharma, Joint Secretary, DFS
- Mr. Ramesh Krishnamurthi, CEO, EPFO
- Mr. Amarjeet Singh, Whole Time Member, SEBI
- Mr. Rajay Kumar Sinha, Whole Time Member, IRDAI
- Dr. Manoj Anand, Whole Time Member (Finance), PFRDA

Key Discussion Points:

- A long-term vision was clearly laid out, projecting an astounding ₹1000 trillion of investible pension funds by 2047, 50 crore pension accounts and pension assets comprising 30% of GDP. With such resources, new avenues for investment would be required.
- The universe of existing asset classes like equity and corporate bonds may need to be expanded.
- Innovation in financial instruments would be necessary – such as climate finance, inflation-indexed bonds, hybrids and hedging instruments.
- Going beyond domestic markets was suggested.
- Direct investment in infrastructure was emphasized.
- There was a consensus that the appetite for infrastructure investment would be substantial, offering opportunities for pension funds. However, pension funds must build the capacity for primary market investments.
- More choice should be given to subscribers.

The Pension Forum:

- The pension sector involves multiple regulators and administrators, warranting a single platform for a focused and coordinated approach.
- With the enactment of the Code on Social Security, 2020, there is a legislative mandate to cover the informal sector, including gig and platform workers. How this universal coverage will be implemented remains to be seen.
- Establishing a Pension Forum could help deliver a seamless customer experience across various pension products and services, akin to ULI and Jan Samarth platforms.
- Taxation across different pension products varies and needs harmonization.
- EPFO, IRDAI, PFRDA and SEBI could collaborate to establish an auto-enrolment program.
- Financial instrument providers, such as SEBI-regulated entities, could collaborate with the pension industry to co-develop innovative instruments.
- Subscribers should be allowed more asset allocation choices across schemes.
- Lessons can be drawn from global best practices, such as Canadian pension funds directly investing in infrastructure.
- There is a need to develop public infrastructure for financial literacy.
- A robust governance system that ensures interoperability among pension schemes is essential.

Lessons from the Mutual Fund Industry:

- Leveraging digital infrastructure.
- Expanding beyond major cities, first to the top 15 and then to 30 cities.
- Building financial literacy and mandating a 2 bps contribution of AUM toward investor education.
- Launching awareness campaigns similar to “Mutual Funds Sahi Hai” for pension products.
- Driving product innovation through initiatives like “Chhoti SIP.”

Key Issues in Annuity Market Development:

- Product innovation, such as qualified longevity contracts.
- Designing products with no survival benefit to improve viability – though previously controversial, this idea is gaining acceptance.
- Exploring “Home for Pension,” a reverse mortgage concept. While currently being explored by banks, it hasn’t seen wide adoption. Since it involves longevity risk, it may require attention from the insurance sector.
- Positioning pension as part of inheritance planning, involving intergenerational wealth transfer.
- Developing collective security mechanisms, such as sector-based pooling funded by employers and employees.
- Exploring products with inherent inflation hedges, such as gold and real estate.
- Strong Asset-Liability Management (ALM) practices are necessary to manage duration gaps and interest rate risks.

THEME 4 - FOSTERING FINANCIAL LITERACY FOR SUSTAINABLE RETIREMENT PLANNING

PANELISTS:

- Ms. Mamta Shankar, Whole Time Member (Economics), PFRDA- Moderator:
- Prof. Simrit Kaur, Principal, Shri Ram College of Commerce
- Dr. Arvind Sahay, Director, Management Development Institute, Gurgaon
- Dr. Pawan Kumar Singh, Director, IIM Tiruchirappalli
- Dr. Ashok Banerjee, Director, IIM Udaipur
- Dr. Bhimaraya Metri, Director, IIM Nagpur
- Shri S. Karthikeyan, Director, Department of Financial Services, Ministry of Finance, Government of India

Key Discussion Points:

- The session underscored the pressing need to elevate financial literacy to enhance retirement planning across India, with the ambitious goal of achieving "Pension for all by 2047." The PFRDA Act 2013 and the organization's investment charter were cited, reinforcing the commitment to subscriber education, protection and training. The session detailed the organization's ongoing efforts to promote contributory pensions through a combination of online and offline training initiatives, active engagement with intermediaries (Points of Presence) and the deployment of diverse communication strategies, including social media, print media and television commercials
- A central concern was the significantly low pension coverage, coupled with a widespread lack of awareness regarding key pension products like the National Pension System (NPS) and the Atal Pension Yojana (APY). The discussions emphasized the criticality of long-term financial planning to ensure economic security in retirement.
- The importance of addressing demographic shifts, gender disparities and the current low penetration of pension schemes was highlighted.
- A key focus was the pivotal role of educational institutions in integrating financial literacy into the curriculum at various levels. The Principal of SRCC emphasized the

challenges of low financial inclusion and literacy, the skewed distribution of literacy and the necessity to address disparities both between and within groups. The need to introduce financial literacy as a value-added course within the National Education Policy framework and to provide students with the flexibility to attend classes across different colleges was highlighted, along with college-level initiatives such as financial literacy societies and virtual trading platforms.

- Representatives from IIM Nagpur and IIM Tiruchirappalli discussed integrating financial literacy into professional degree programs and the importance of training HR departments. IIM Udaipur's representative spoke about subscriber inertia in making pension fund choices and the need for education on asset allocation, introducing the concept of "financial sensationalism" versus "financial literacy."
 - The Management Development Institute (MDI) Gurgaon, emphasized applying behavioral psychology and neuroscience to promote long-term savings, including the concept of hyperbolic discounting.
 - The representative from DFS stressed the need to scale up financial literacy and proposed a differentiated strategy for promoting the pension sector- for regular salaried employees, innovative pension products, for self-employed and casual laborers etc. The speaker emphasized the need for greater involvement of the government and regulators in the process of promoting financial and pension literacy along with the establishment of a National Mission on Pension. The speaker further proposed that the Pension Fund Regulatory and Development Authority (PFRDA) should take a leading role in steering financial literacy initiatives, given its focus on the pension sector.
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THEME 5 - PENSION FUND INVESTMENTS WITH A FOCUS ON RISK AND RETURN

PANELISTS:

- Prof. V. Ravi Anshuman, IIM Bangalore - *Moderator*
- Prof. S.V.D. Nageswara Rao, Head, School of Management, IIT Bombay
- Prof. Rupamanjari Sinha Ray, Management Development Institute, Gurgaon
- Mr. Vivek Iyer, Partner and Financial Services Risk Leader, Grant Thornton Bharat LLP

Key Discussion Points:

- Pension funds have a fiduciary responsibility towards subscribers; therefore, the safety and inflation protection of pension assets is crucial. Equity typically outperforms inflation in the long run. However, the increased frequency of black swan events and interest rate fluctuations pose significant risks to equity performance. As such, alternative investments are becoming increasingly important.
- Diversification and periodic reallocation of assets for duration management were highlighted as key strategies to address the impact of monetary policy.
- A forward-looking (rather than purely backward-looking) approach to risk management would help create a more resilient system.

Liquidity Risk Management:

- Leveraging AI and ML tools for risk prediction was suggested.
- Pension funds often favor large-cap investments for liquidity purposes, but can consider increasing exposure to mid-cap and small-cap funds.
- Allowing investments by FPIs or FIIs can enhance market liquidity.
- Liquidity monitoring should go beyond benchmarks to provide a more comprehensive risk assessment.

Risk Compliance and Use of Technology:

- There is a need to shift from a checklist-based approach to risk-based supervision. This will require the development of robust data pools. However, models must be designed to prevent manipulation by regulated entities.
- While technology is critical, it is not a solution to all challenges. The moral conscience of the board must ultimately guide pension fund management.
- Although machine learning is currently used mainly for routine tasks, there is considerable potential for its application in areas such as customized portfolio construction.
- The lack of data availability to academia remains a key challenge, limiting ML development and data training.

Climate Finance / Sustainability:

- Pension funds are exposed to long-term ESG risks, which include reputational, regulatory, legal, physical and transition risks. These risks need to be proactively mitigated.
- Integrating ESG considerations into investment strategies helps reduce exposure to such risks. High ESG disclosure scores can indicate safer investment opportunities for pension funds.
- While ESG portfolios in the US are perceived as more volatile, the opposite trend has been observed in India.

Development of AIFs such as REITs and InVITs:

- Deregulation in the infrastructure sector could foster market development. Excessive regulation delays projects and affects returns. Reference was made to the deregulation focus in the Government of India's 2025-26 Budget Speech.
- Regulatory stability and swift dispute resolution mechanisms are critical for the development of infrastructure investment instruments.
- Challenges in AIF investments include mark-to-market valuation and lack of liquidity.

Academic Contributions: Presentation of Selected Papers

The response to call for papers has been overwhelming :120 research papers from 210 authors. Following two-stage double blind review process, eight papers were shortlisted for Conference Paper Presentation and 23 papers were shortlisted for Conference Poster Presentation. The papers examined a number of relevant issues such as the reasons for lower retirement preparation; how to make communication strategy more effective; relationship between education, employment status and financial security; how wages and market performance determine replacement rate; appropriate product design to inculcate savings habit; optimal withdrawal rates; and impact of pension wealth on economic growth. Other critical issues, including coverage and adequacy, sustainable financing, gender equality and financial literacy, remain equally pertinent for the pension sector.

S No.	Discussants	Research Paper title and Author(s)	Paper Highlights	Discussant remarks & comments
1	1. Prof. Neerav Nagar, IIM Ahmedabad-Chair 2. Mr. Ashok Kumar Soni, ED, PFRDA 3. Mr. Rahul Ravindran, ED, PFRDA	Analyzing the Effect of Socioeconomic Factors on Pension Scheme Adoption and Financial Security in Retirement: A Regression Approach Authors- Rahul Chauhan, Aalap Patel and Bhoomi Patel	The study found that education and employment significantly impact pension adoption and financial security, thus suggesting the need of targeted interventions.	The study's conclusions and sample size and generalizability of the study considering that the sample had been collected from various cities of Gujarat only.
2		The Great Indian Pension Debate Authors- Shweta Kalla Baxi, Sarthak Gaurav and Usha Ananthakumar	The study compared the Indian government pension schemes (NPS, OPS & UPS) and found defined benefit plans offer higher benefits but strain finances more than defined contribution plans.	Cost benefit analysis of various pension schemes from an investor's perspective and suggesting the Government of a better design of the pension system.
3		Retirement planning: Understanding the impact of uncertainty and behavioral biases Authors- Pankhuri Sinha and Lokanandha Reddy Irala	The study found that uncertainty, procrastination and overconfidence hinder retirement preparation, while financial advice can improve it as the population ages.	Sample size and sample composition. Also, it was suggested to include questions to assess objective behavior data like actual saving and

				investment questions, in the questionnaire.
4		On Safe Withdrawal Rate in the Indian Context under National Pension System Author- Pushpinder Singh	The study analyzing retirement withdrawals in Indian context, suggests reliable rate of 3%, while stating a higher success probability with a 4-4.1% withdrawal rate along with 40-70% equity allocation over 30 years.	Suggestion to increase the depth of the literature review with addition of recent papers and to make the algorithms more interesting.
5	1. Prof. M P Ram Mohan, IIM Ahmedabad – Chair 2. Prof. Amit Mookerjee, Delhi Technological University	Strategies for Expanding Coverage, Improving Product Diversity and Ensuring Adequate Retirement Security A Focus on the National Pension System NPS – Authors- Pankaj Saggi and Hitesh Bhatia	The study centered on the National Pension System, highlights the need to expand Corporate-NPS coverage for private sector workers through strategic partnerships and awareness.	Misleading paper title and lack of core central hypothesis.
6	3. Mr. Venkateswarlu Peri, Executive Director, PFRDA 4. Mr. Akhilesh Kumar, Executive Director, PFRDA	Unlocking APY's Potential: How Early Enrollment Secures Retirement Authors- Ranjan Paul and Bhartendu Singh	The study, in context of APY, reveals an inverted U-shaped enrollment by age and with late joiners facing possible losses due to inflation and inflexibility.	Apart from age, highlight the factors which contributed towards enrollment decision of subscribers and further improve on the analysis and conclusions.
7		Balancing Acts: Safe Withdrawal Rates in the Indian Context Authors- Rajan Raju and Ravi	The India centric study indicates a safer retirement withdrawal range of 3.0%-3.5%, as the common 4% rule is	Explore the possibility of empirically exploring the possibility of looking out for a

		Saraogi	unsuitable. While higher equity allocations could boost withdrawals, they significantly elevate portfolio risk. The study also emphasizes gold's role in diversifying investment portfolios for retirement.	fully secure safe withdrawal rate, considering the longevity and risk of rising health care expenses, especially in the Indian context.
8		Analysis of Pension Funds on Economic Development in India and Brazil – Authors- Subham Saha and Chayan Ganguly	A 15-year analysis of India and Brazil reveals pension fund returns and market volatility are linked. India's VIX positively correlates with some scheme returns, while AUM is tied to stock market cap and inflation (negatively in Brazil).	Suggestions to improve the paper comprising furthering the research to include more qualitative analysis, inclusion of other risk assessment tools and working out the implications of the study that GDP and AUM growth are no linked.