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प्रमाणन

पेंशन बुलेटिन प्रत्येक महीने नीति अनुसंधान, मार्केट वॉच और सिस्टमिक रिस्क विभाग द्वारा, पेंशन बुलेटिन संपादकीय समिति के निर्देशन में जारी किया जाता है। समिति और पीएफआरडीए व्याख्याओं और प्रकट किए गए मतों के लिए उत्तरदायी नहीं हैं। लेखों के मामले में, जिम्मेदारी लेखक की होती है, न कि पीएफआरडीए की। टिप्पणियां और अवलोकन कृपया विभाग को market.watch@pfrda.org.in पर अग्रेषित किए जा सकते हैं।

@कॉपीराइट: पेंशन फंड नियामक और विकास प्राधिकरण (पीएफआरडीए).

Glossary

AA	Account Aggregators
AIF	Alternative Investment Fund
DPDP Act	Digital Personal Data Protection Act, 2023
APY	Atal Pension Yojana
ASP	Annuity Service Provider
AUM	Assets Under Management
CAGR	Compound Annual Growth Rate
CDC	Collective Defined Contribution
CDD	Client Due Diligence
CFT	Combating the Financing of Terrorism
CIP	Customer Identification Procedures
CKYCR	Central KYC Records Registry
CPFB	Central Provident Fund Board
CRA	Central Recordkeeping Agency
CPI	Consumer Price Index
DC	Defined Contribution
Debt-VRR	Debt Voluntary Retention Route
DIIs	Domestic Institutional Investor(s)
E	Equity and Related Instruments
EPF	Employees' Provident Fund
EPFO	Employees' Provident Fund Organization
ETF	Exchange-Traded Fund
EU	European Union
FAR	Fully Accessible Route
FBIL	Financial Benchmarks India Pvt. Ltd.
FII/FPI	Foreign Institutional Investors/Foreign Portfolio Investors
FIP	Financial Information Providers
FIU	Financial Information Users
FSDC	Financial Stability and Development Council

G	Government Bonds and Related Instruments
G-sec	Government securities
GBP	Pound Sterling
GDP	Gross Domestic Product
GST	Goods and Services Tax
GSTN	Goods and Services Tax Network
IGB	Indian Government Bonds
INR	Indian Rupee
IIP	Index of Industrial Production
IRDAI	Insurance Regulatory and Development Authority of India
IT Act	Information Technology Act, 2000
JSPF	Jointly Sponsored Pension Plans
KYC	Know Your Customer
LTCG	Long Term Capital Gain
MEPP	Multi-Employer Pension Plans
NBFC	Non-Banking Financial Company
NDC	Notional Defined Contribution
NPA	Normal Pension Age
NPS	National Pension System
OECD	Organization for Economic Cooperation and Development
PIPE	Private Investment in Public Equity
PoP	Points of Presence
RBI	Reserve Bank of India
REER	Real Effective Exchange Rate
REIT	Real Estate Investment Trust
STCG	Short Term Capital Gain
TFR	Total Fertility Rate
USD	United States Dollar
UNFPA	United Nations Population Fund
VCF	Venture Capital Fund
WPI	Wholesale Price Index

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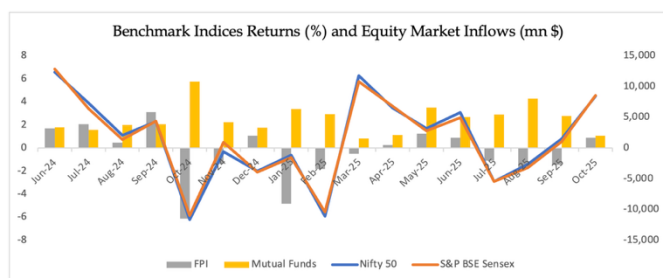
Section 1/खंड 1

Economy/ अर्थव्यवस्था

Indian Economy

**The data used in this section has been taken from CMIE's Economic Outlook and MOSPI.*

Equity Market



In October 2025, NSE Nifty 50 index rose to around 25,722 from 24,611 level in the previous month, rising by 4.5 per cent (MoM) in October 2025. S&P BSE Sensex returns gained by 4.6 per cent in October.

Midcaps and smallcaps outperformed largecaps overall for the second consecutive month in October 2025. Nifty Midcap 100 rose by 5.8 per cent, while Nifty Smallcap 100 rose by 4.7 per cent.

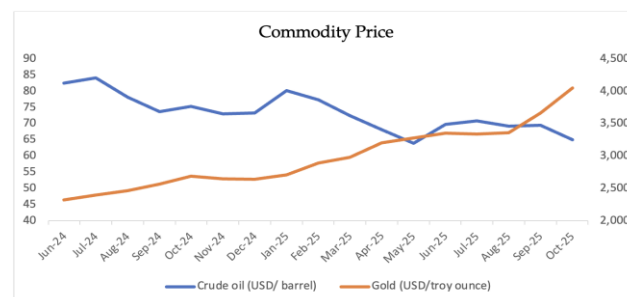
The price-to-earnings (P/E) ratio of the Nifty 50 and BSE Sensex was at a four-month high and The P/E ratio of Nifty 50 rose to 22.6 times, while the P/E ratio of BSE Sensex rose to 23.1 times in October 2025.

Institutional Investment

Foreign portfolio investment (FPI) recorded inflows of USD 1.67 billion in the equity market in October 2025, making it the first monthly inflow in the equity segment on a net basis. FPIs had recorded outflows in the preceding three consecutive months. FPIs pulled out USD 8.7 billion from the Indian equity market between July-September 2025. Meanwhile, the domestic debt segment continued to record inflows for the fourth consecutive month. In total, in October 2025, foreign investors were net buyers in the Indian capital market at USD 4 billion. In the preceding three months, foreign investors had taken out USD 4.4 billion from the Indian capital market.

Domestic Institutional Investors (DIIs) continued to remain net investors in the equity market in October 2025. DIIs invested USD 6 billion in the domestic equity market in October lower than the USD 7.4 billion invested in the previous month.

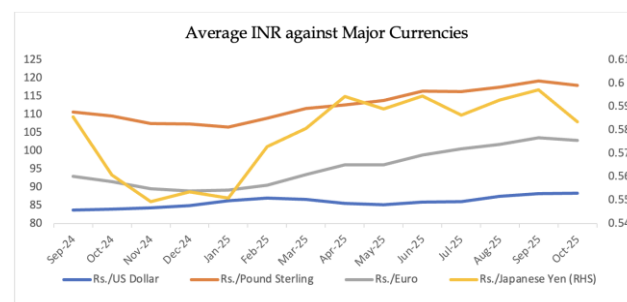
Commodity Market



In October 2025, price of gold in London Bullion rose to average at an all-time high of USD 4,053 per troy ounce from USD 3,665 per troy ounce in the previous month. This was an increase of 10.6 per cent from the previous month. This was the third consecutive month to record an increase in gold price.

Crude oil price eased significantly in October 2025. On a monthly basis, the price of Indian basket of crude oil declined to average at USD 65.1 per barrel in October 2025 from USD 69.6 per barrel in the previous month. This was a steep decline of 6.5 per cent.

Currency Market

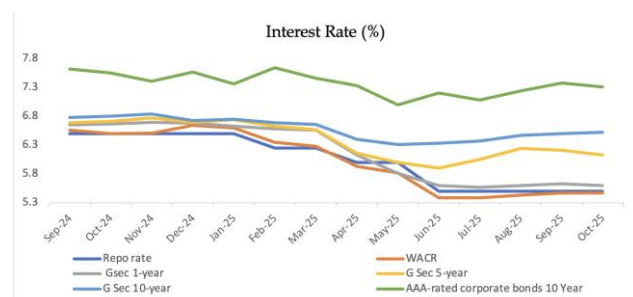


Despite strong FPI inflows in the Indian capital market, INR continued to weaken against the USD in October 2025. The Indian Rupee (INR) depreciated against the US Dollar (USD) to an average of Rs.88.42 per USD in October from Rs.88.32 per USD in the previous month, a depreciation of 0.11 per cent. This was the fifth consecutive month of INR depreciation. The

depreciation in INR in October could be due to strengthening of US Dollar index. In October, the index strengthened by 2.1 per cent.

Meanwhile, INR strengthened against other major currencies. Among other currencies, INR strengthened the most against Japanese Yen (JPY). INR appreciated by 2.4 per cent against JPY to average at Rs.0.58 per JPY in October 2025. INR appreciated by 0.99 per cent to Rs.118.11 per Pound Sterling (GBP). INR appreciated by 0.67 per cent against Euro to average at Rs.102.95 per Euro in October 2025 from Rs.103.64 per Euro in the previous month.

Interest Rate



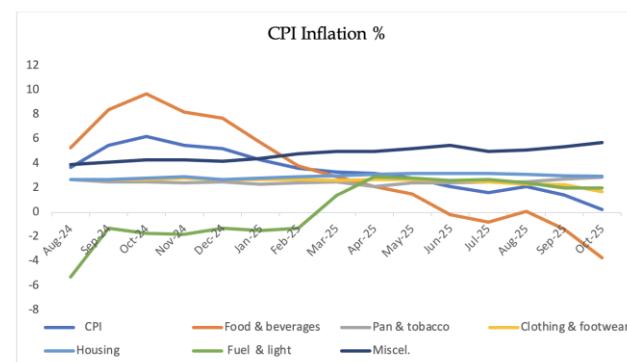
The yield on Government securities (G-secs) of 1-year residual maturity declined by three basis points (bps) to 5.6 per cent in October 2025 from 5.63 per cent in the previous month. The 3-year G-sec declined by six bps to 5.85 per cent in October, while the 5-year G-sec yield fell by eight bps to 6.13 per cent. In contrast, the benchmark 10-year G-sec yield rose to a seven month high to 6.52 per cent in October 2025. This was an increase of two bps from the previous month.

Yields across AAA rated corporate bonds largely softened. The yield on 1-year AAA rated corporate bond declined to 6.63 per cent in October 2025, a decline of five bps from the previous month. The 10-year AAA corporate bond yield eased to 7.3 per cent in October, a decline of eight bps from the previous month.

Consumer Price Index

Retail inflation stumbled to a record low print of 0.25 per cent in October 2025. It was a sharp correction from 1.44 per cent inflation in the previous month. Year-on-year inflation rate based on All India Consumer Food Price Index

(CFPI) for the month of October, 2025 over October, 2024 is -5.02% (Provisional).



The decline in headline inflation and food inflation during the month of October, 2025 is mainly attributed to full month's impact of decline in GST, favorable base effect and to drop in inflation of Oils and fats, Vegetables, Fruits, Egg, Footwear, Cereals and products, Transport and Communication etc. Y-o-Y Index for Food and beverages declined by 3.72 per cent, Pan tobacco & Intoxicant increased by 2.87 per cent, Clothing & Footwear increased by 1.70 per cent, Housing rose by 2.96 per cent and Fuel & Light rose by 1.98 per cent.

Wholesale Price Index

The annual rate of inflation based on Wholesale Price Index (WPI) number is (-) 1.21% (provisional) for the month of October, 2025 (over October, 2024). Negative rate of inflation in October, 2025 is primarily due to decrease in prices of food articles, crude petroleum & natural gas, electricity, mineral oils and manufacture of basic metals etc.

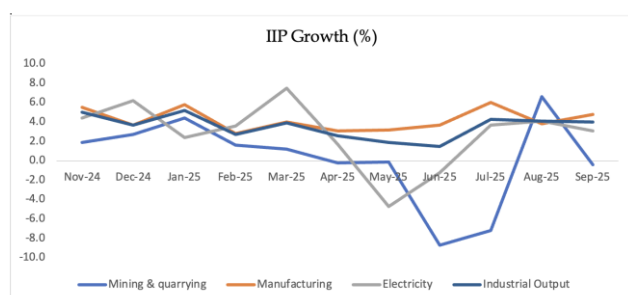
Primary Articles decreased by 0.42 % during the month of October, 2025 due to decline in prices of Crude Petroleum & Natural Gas (-3.13%) and non-food articles (-1.73%) as compared to September, 2025. Fuel & Power increased by 1.12% in October, 2025. Price of electricity (2.89%), mineral oils (0.67%) increased in October, 2025 as compared to September, 2025.

Manufactured Products decreased by (-) 0.07% in October, 2025. Out of the 22 NIC two-digit groups for manufactured products, 7 groups witnessed a decrease in prices, 11 groups

witnessed an increase in prices and 4 groups witnessed no change in prices.

The Food Index consisting of 'Food Articles' from Primary Articles group and 'Food Product' from Manufactured Products group has remain constant. The rate of inflation (Y-o-Y) based on WPI Food Index decreased to (-) 5.04% in October, 2025 from (-) 1.99% in September, 2025.

Index of Industrial Production



India's IIP grew by 4% in September compared to 4.1% in the previous month. The manufacturing and electricity sectors continued to support the overall industrial activity, while mining output contracted.

Manufacturing sector output expanded by 4.8% in September, improving from 3.8% in August. On a year-on-year basis, 13 of the 23 manufacturing subcategories recorded growth. Electricity output eased to 3.1% from 4.1% in August and mining activity contracted by 0.4% compared with 6.6% growth in the previous month. Within the use-based classification, infrastructure and construction goods registered double-digit growth for the third month in a row, rising by 10.5% in September.

Data Table
Economic Indicators

Indicators	Oct-24	Sep-25	Oct-25	YoY change
				(% / bps)
FPI Equity Investments (USD billion)	-11.452	-2.701	1.656	-114.46
Rupees per dollar	84.03	88.32	88.42	-4.39
Rupees per Pound Sterling*	109.65	119.29	118.11	-8.46
Rupees per Euro*	91.57	103.64	102.95	-11.38
Rupees per Japanese Yen*	0.5609	0.5973	0.5836	-0.0227
Crude Oil (USD/Barrel)*	75.3	69.6	65.1	-13.55
Gold (USD/troy ounce)*	2690.1	3665.2	4053.3	50.67
Weighted Average Call rate (%)	6.5	5.47	5.47	-103
Market repo rate (%)	6.5	5.5	5.5	-100
G sec 1-year (%)	6.67	5.63	5.6	-107
G sec 10-year (%)	6.8	6.5	6.52	-28
AAA rated corporate bond 10-year (%)	7.55	7.38	7.31	-24
CPI Inflation (%)	6.2	1.5	0.25	-595
WPI Inflation (%)	2.75	0.13	-1.21	-396
IIP# (%)	3.2	4.1	4	80

* Monthly Average Rate

Figs. For Sept 24, Aug 2025 and Sept 2025, respectively

Section 2/ खंड 2

Management Speaks/ प्रबंधन का वक्तव्य

‘Inflation-linked payouts under NPS in the works’

Excerpts of Chairperson, PFRDA’s interview with Saikat Neogi and Prasanta Sahu of Financial Express published on 13th October 2025

PFRDA Chairman S. Ramann confirms the authority is exploring alternatives to mandatory annuities for NPS, including step-up Systematic Withdrawal Plans (SWPs) and inflation-protected payouts, due to subscriber reluctance. As feedback from National Pension System (NPS) subscribers indicates reluctance to invest in annuities, Pension Fund Regulatory and Development Authority (PFRDA) Chairman Sivasubramanian Ramann says it is looking at alternatives. Assured payouts with inflation protection and step-up systematic withdrawal plans are being vetted, Ramann tells Saikat Neogi and Prasanta Sahu. Edited excerpts.

How are you working to make annuities more appealing?

Our consultation paper proposes diverse pension payment products for NPS subscribers, offering models for wealth maximisation, guaranteed pension and inflation adjustment. The government supports this approach and insights from the Unified Pension Scheme (UPS) have been incorporated to enhance flexibility and subscriber choice in retirement planning. The government’s UPS offers dearness relief in pensions. Similarly, NPS products can be designed for the non-government sector.

Will the move to reduce mandatory annuitisation enable subscribers to efficiently utilise their retirement savings?

The existing rule is at least 40% annuity. World over, annuity is not mandated if your contribution to the pension scheme is not mandated. If you are not mandated to save and it is a voluntary savings scheme, like NPS for non-government people, there is no justification for an annuity to be mandated.

Are you consulting with the ministry to tweak the tax structure as well?

Feedback indicates reluctance to invest in annuities. Tax law states 60% of NPS withdrawals are tax-free and under Section 80CCD5, the 40% annuity portion is not taxed as income. By reducing the annuity portion to 20% of the corpus, subscribers can withdraw an additional 20% corpus with tax implications, taking total withdrawals up to 80%. However, we’ve proposed to the finance ministry replacing part of the annuity with systematic withdrawal plans (SWPs), maintaining the same tax treatment – 20% annuity: 20% SWP without any tax implication. Additionally, we urge reinstating Section 80CCD tax benefits in the new tax regime.

Will the new multi-scheme framework (MSF) for non-government sector subscribers make things complicated?

Current pension schemes are complex, requiring subscribers to choose between active or auto schemes and select a pension fund manager. Active choice is particularly challenging. New schemes under the MSF will offer tailored, personalised retirement solutions for different segments. Previously, PFRDA designed these schemes, but regulators should focus on creating frameworks, not products. Pension funds are now developing these schemes to simplify choices and better meet subscribers’ needs.

Will you let pension funds invest in gold ETFs and expand the equity basket beyond the top 200 firms?

Pension reforms are aligning to allow 100% equity schemes within existing guidelines, though PFRDA hasn’t introduced such a scheme independently. Now, pension funds are developing these schemes. Young subscribers, aged 25-30, can handle the risk of equity market cycles by staying invested for 15-20 years, benefiting from equity’s strong long-term performance. One pension fund is designing a “golden years” scheme for those aged 55-58, allowing those who work past 60, to invest for another 15 years.

Section 3/खंड 3

Articles/लेख

Sequence of Return Risk- A critical factor in Decumulation Phase of Retirement

By Prodeepto Chatterjee, Deputy General Manager, PFRDA. The article is for educational purposes only and should not be construed as investment advice. The views expressed in the article are personal and do not necessarily represent that of the Authority.

Abstract- Sequence risk –also called sequence of returns risk –is a critical factor in retirement planning, especially for those relying on regular withdrawals from their investment portfolios in retirement. Unlike traditional investment risk or average annual return calculations, sequence risk centres on the specific order in which positive and negative market returns occur and how this ordering interacts with withdrawal patterns to dramatically shape financial outcomes. In this comprehensive article, we discuss the mechanics, implications, mathematical foundations, real-life case studies and strategies to mitigate sequence risk.

1. Defining Sequence Risk

Sequence risk refers to the risk that the timing of poor investment returns aligns unfavourably with periods during which withdrawals from an investment portfolio are being made –typically the decumulation phase in retirement. While portfolio returns may average out over two decades, severe losses or downturns early in retirement can significantly compromise the sustainability and longevity of retirement savings.

The mechanics are simple but potent-withdrawals during market downturns "lock in" losses, reducing the principal that can participate in subsequent recoveries. Even if markets later

rebound, the investor has less capital remaining, meaning future upswings yield less in absolute terms, greatly increasing the risk of fund depletion.

2. The Mathematical Foundation

Academic research often models sequence risk using a framework of iterative withdrawals and varying annual rates of return. The withdrawal equation may take the form:

$$K_{i+1} = (K_i - w) \times (1 + r_i)$$

Where:

- K_i = portfolio value at start of year i ,
- w = withdrawal amount,
- r_i = return for year i .

Expanding this formula across a series of years, the end portfolio value depends not only on the average return, but crucially on the order (sequence) of those returns. Academic studies demonstrate that two unlikely sequences (losses early vs. losses late) with the same average return produce vastly different outcomes, especially when withdrawals are made.

3. Case Study

Consider two retirees, Person A and Person B, each beginning retirement with Rs.1.0 Cr (Rs.100 Lakh) in their portfolios and planning to withdraw Rs.4.5 Lakh or 4.5%, annually.

Following are the return assumptions for Person A and B, for a 20-year decumulation period, are as per table below.

Although the average return for the 20-year period is same for both A and B (i.e. 2%), A faces negative returns sequence during initial 4 years, whereas B faces the negative sequence scenario in the last 4 years of his/her retirement withdrawal phase.

Table 1- Return Sequence for Person A and B

Decumulation Year	Return A (%)	Return B (%)
1	-10.00	4.00
2	-8.00	4.00
3	-6.00	4.00
4	-4.00	4.00
5	4.00	4.00
6	4.00	4.00

7	4.00	4.00
8	4.00	4.00
9	4.00	4.00
10	4.00	4.00
11	4.00	4.00
12	4.00	4.00
13	4.00	5.00
14	4.00	5.00
15	4.00	5.00
16	4.00	5.00
17	5.00	-10.00
18	5.00	-8.00
19	5.00	-6.00
20	5.00	-4.00

The withdrawals can be visualized in two forms- *firstly* as fixed withdrawal amount of Rs.4.5 Lakh per annum, irrespective of the rise and/or fall in the portfolio balance or *secondly* as 4.5% of the portfolio balance at the beginning of each year such that the final withdrawal amount goes up or down in line with the value of the corpus balance. We use the equation presented at para 2 to chart out the balance corpus under the various withdrawal scenarios.

Hence, we look the impact of the negative sequence risk for Person A and Person B under these two withdrawal scenarios i.e. Fixed withdrawal vs Variable withdrawal

3.1 Scenario 1- Fixed Withdrawal Scenario

From the Table 2 below, it may be observed that, even if two portfolios experience the exact same set of returns over the same period (meaning the average return is identical), the sequence in which those returns occur can lead to vastly different outcomes.

Table 2- Scenario 1- Fixed Withdrawal

Year	Fixed Withdrawal (Rs)	Balance Corpus Person A (Rs)	Balance Corpus Person B (Rs)
1	450,000	8,595,000	9,932,000
2	450,000	7,493,400	9,861,280
3	450,000	6,620,796	9,787,731
4	450,000	5,923,964	9,711,240
5	450,000	5,692,923	9,631,690
6	450,000	5,452,640	9,548,958
7	450,000	5,202,745	9,462,916
8	450,000	4,942,855	9,373,433
9	450,000	4,672,569	9,280,370

10	450,000	4,391,472	9,183,585
11	450,000	4,099,131	9,082,928
12	450,000	3,795,096	8,978,245
13	450,000	3,478,900	8,954,657
14	450,000	3,150,056	8,929,890
15	450,000	2,808,058	8,903,885
16	450,000	2,452,381	8,876,579
17	450,000	2,102,500	7,583,921
18	450,000	1,735,125	6,563,208
19	450,000	1,349,381	5,746,415
20	450,000	944,350	5,084,558

The same can be visually observed in Chart 1 also. With the black line showing the fixed withdrawal of Rs. 4.50 Lakh per annum, the blue and green bars show the movement of corpus balance post each withdrawal. From the graph it may be observed that the early negative returns for Person A have a deep and lasting impacting on the balance corpus and it erodes at a much faster rate than the balance corpus of Person B.

Poor returns early in the decumulation phase for Person A compound the damage because withdrawing funds from a shrinking portfolio, leaving less capital to benefit from future positive returns and recover. In contrast for Person B, strong returns early on allow the portfolio to grow, creating a larger base that can better withstand later downturns and continued withdrawals.

This risk is distinct from overall market volatility or average returns—it's about the path the returns take. It's a key reason why retirees are often advised to have conservative asset allocations, buffers like cash reserves, or flexible withdrawal strategies to mitigate it.

3.2 Scenario 2- Variable Withdrawal Scenario

As against the Scenario 1, in this one we have variable withdrawals i.e. the variable withdrawal rate remains the same but the amount varies basis the residual corpus.

For eg. for Person A facing a negative return of 10% in the first year, the corpus, post the first withdrawal reduces to Rs.85.95 Lakh as against Person B whose balance gets a decent return of 4% and grows to Rs.99.32 Lakh.

Thus, in the second year's withdrawal Person A receives an amount of Rs.3.87 Lakh and Person B gets a total withdrawal amount of Rs. 4.47 Lakh, although both had the same withdrawal rate of 4.50%.

Table 3 and Chart 2 charts the entire withdrawal journey of Person A and B under these assumptions. We observe that although the ending balance in both the cases is identical i.e. Rs.57.90 Lakh, the total withdrawals for Person B (Rs.82.48 Lakh) are 43% higher than Person A (Rs.57.50 Lakh).

Table 3- Scenario 2- Variable Withdrawal

Year	Withdrawal Person A (Rs)	Balance Corpus Person A (Rs)	Withdrawal Person B (Rs)	Balance Corpus Person B (Rs)
1	450,000	8,595,000	450,000	9,932,000
2	386,775	7,551,567	446,940	9,864,462
3	339,821	6,779,042	443,901	9,797,384
4	305,057	6,215,025	440,882	9,730,762
5	279,676	6,172,763	437,884	9,664,593
6	277,774	6,130,788	434,907	9,598,873
7	275,885	6,089,099	431,949	9,533,601
8	274,009	6,047,693	429,012	9,468,773
9	272,146	6,006,569	426,095	9,404,385
10	270,296	5,965,724	423,197	9,340,435
11	268,458	5,925,157	420,320	9,276,920
12	266,632	5,884,866	417,461	9,213,837
13	264,819	5,844,849	414,623	9,239,175
14	263,018	5,805,104	415,763	9,264,583
15	261,230	5,765,629	416,906	9,290,061
16	259,453	5,726,423	418,053	9,315,608
17	257,689	5,742,171	419,202	8,006,765
18	258,398	5,757,962	360,304	7,034,744
19	259,108	5,773,796	316,563	6,315,090
20	259,821	5,789,674	284,179	5,789,674
Total Withdrawal	5,750,065	-	8,248,142	-

3.3 The Tale of the Two Scenarios

While the ending balance is the same, the *total income withdrawn* over 20 years would differ as:

- For Person A (early losses) withdraws less in early years due to a shrinking portfolio, potentially straining cash flow during tough periods.
- For Person B (early gains) withdraws more overall, benefiting from higher income when the portfolio is larger.

This contrasts with the fixed withdrawal approach, where sequence risk can drastically alter outcomes. Variable strategies like this (e.g., the "4% rule" variants) are often used to mitigate sequence risk by automatically adjusting spending.

With a variable withdrawal strategy, the sequence of returns has *no impact* on the final portfolio balance. This is because the withdrawals scale proportionally with the portfolio size each year, making the overall growth multiplicative and order-independent.

3.4 The Pandemic and Retirement Timing

A striking contemporary example is drawn from the COVID-19 pandemic. Retirees who entered retirement at the start of 2020 faced a sharp equity market crash. For a typical Australian couple with an average \$640,000 portfolio invested in an index fund on January 31, their balance was down to \$467,352 by the end of March – demonstrating a nearly \$180,000 erosion in just two months¹.

Delaying retirement by only one month, or using a lower-risk equity income fund, would have left these retirees tens of thousands ahead – illustrating how seemingly minor timing adjustments can produce enormous differences in outcomes due to sequence risk.

3.5 Practical Considerations and Psychological Impacts

Beyond the mathematics, sequence risk also carries psychological and behavioural impacts.

¹ <https://www.vertium.com.au/post/pandemic-a-case-study-in-sequencing-risk-for-retirees>

Retirees facing significant losses during their first retirement years may experience substantial stress, anxiety and uncertainty. This can ripple through families, sometimes compelling adult children to offer financial support or causing the retiree to restrict spending, with adverse consequences for quality of life and family dynamics.

3.6 Mitigation Strategies

While sequence risk can't be completely eliminated, research and practitioner guidance highlight several ways to minimize its impact:

- **Building a Cash Buffer-** Maintaining a reserve equal to two- or three-years' living expenses in cash or low-volatility assets enables retirees to fund withdrawals without selling low during market downturns. This delay forced liquidations and gives invested capital time to recover.
- **Bucket Strategy for Asset Allocation-** Segmenting the portfolio by time horizon—short-term (cash), medium-term (bonds/conservative assets) and long-term (equities/risk assets)—enables retirees to access funds from less volatile assets during downturns, limiting withdrawal pressure on equities.
- **Flexible Withdrawal Rates-** Adopting adaptive withdrawal approaches (not strictly fixed percentage rules) allows retirees to moderate spending during bear markets while enjoying higher withdrawals in prosperous times, improving portfolio longevity.
- **Diversification-** Ensuring broad exposure to various asset classes (domestic and international equities, bonds, real assets) can smooth out return volatility and reduce the risk of large losses coinciding with withdrawal years.
- **Rising Equity Glide Path-** Some planners advocate for a strategy that starts retirement with lower equity exposure, gradually increasing it over time—a “rising glide path.” This can reduce the risk of early bad

markets depleting portfolios, while maintaining growth potential in later years.

Conclusion

Sequence risk represents one of the most essential, yet underappreciated, hazards in modern retirement planning. Its effects can dwarf those of average performance and its interaction with withdrawal patterns makes it pivotal for anyone concerned with portfolio longevity and retirement income sustainability.

Through informed modelling, strategic planning and adaptive approaches backed by academic research and industry practice, retirees can limit sequence risk and maximize the probability of sustaining their lifestyles throughout retirement.

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Chart 1- Sequence Risk in Fixed Withdrawal Scenario

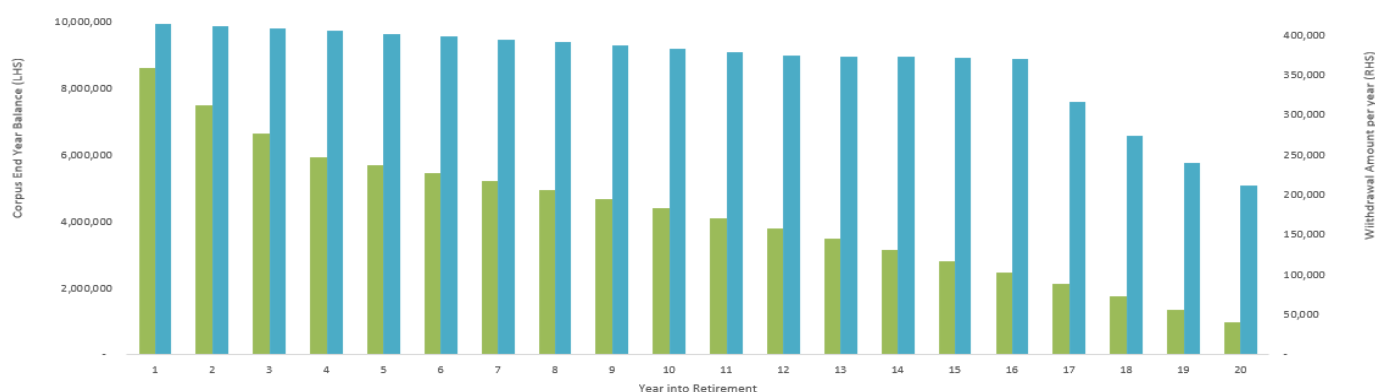
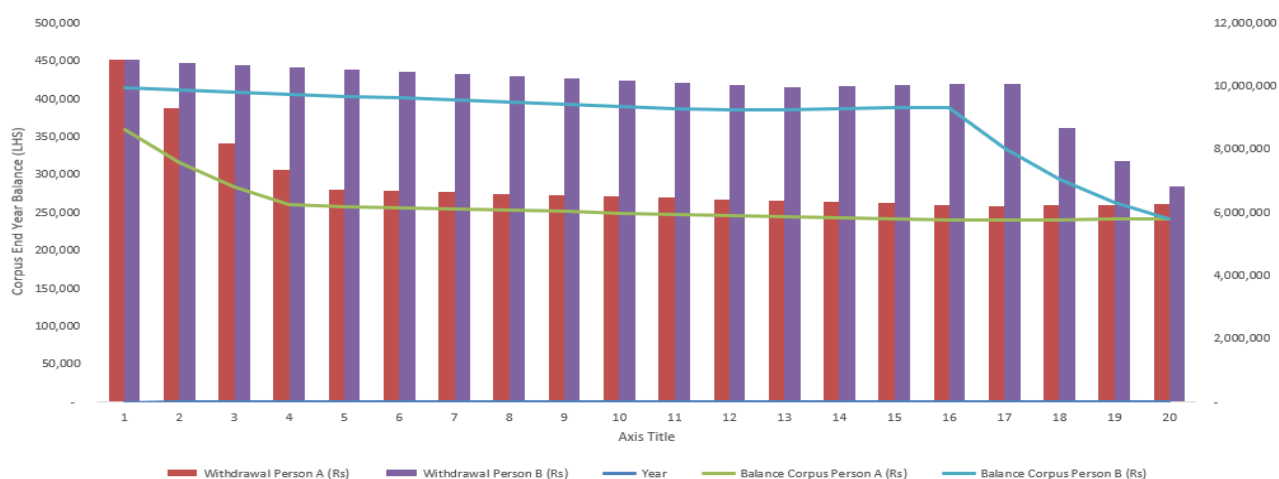


Chart 2- Sequence Risk in Variable Withdrawal Scenario



Batting for the Future: Pension Reforms and India's Retirement Game plan

*By Priyanka Gupta, General Manager, PFRDA.
The views expressed in the article are personal
and do not necessarily represent that of the
Authority.*

Just as cricket leagues have swept across India, from packed stadiums to dusty town grounds, the culture of pension savings must now reach every corner of the country.

Cricket has shown that when people from all backgrounds get a platform, talent thrives. India's pension movement must mirror this by empowering professionals, farmers, entrepreneurs, homemakers and gig workers to secure their futures. The next league we build should be one where financial self-reliance isn't a privilege but a possibility for all, powered by pension solutions as diverse and dynamic as India itself.

India's Pension Revolution

India's pension ecosystem today reflects a steady and disciplined national growth story. As of March 2025, the National Pension System (NPS) and Atal Pension Yojana (APY) together cover 8.39 crore citizens, managing ₹14.36 lakh crore in assets. APY alone has expanded to 6.41 crore subscribers, delivering nearly 9% average annual returns since inception. Each scheme addresses the needs of different demographic and economic groups, creating a balanced and resilient system of long-term savings.

This expanding pool of long-term savings, what economists call "patient capital" is strengthening India's financial architecture. Just as cricket formats have diversified to suit different

viewers, India's pension landscape must also offer varied schemes to match diverse income levels, occupations and risk preferences. Crucially, these offerings rests on the principles of efficiency and transparency. The blend of low costs, clear governance and professional fund management ensures that every rupee invested works harder, gaining momentum year after year and ultimately compounding into lifelong value and security.

Why This Moment Matters

The world is ageing faster than ever. As highlighted in the Economic Survey 2024-25, the World Economic Forum recently recorded a historic milestone: for the first time, people aged 65 and above now outnumber children under five globally. India, by contrast, stands at a sweet spot. With an average age of only 28 and more than 140 crore citizens, we are at the peak of our demographic dividend, but only for the next 25 to 30 years.

To fully capitalise on this window, we must create a culture of retirement savings that is accessible and relevant to everyone. This requires not a single pension product, but a spectrum of pension options: simple for those with modest means, flexible for professionals and scalable for the self-employed. Even a contribution of ₹100 per month can be a starting point, proving that pensions should fit the person, not the other way around.

Reinventing the Game Plan

India's pension system has adapted steadily to meet changing needs, much like cricket's evolution from Tests to T20s. The NPS, launched for central government employees in 2004, was soon adopted by the states and extended to all citizens in 2009. Today, it continues to evolve with new offerings designed for a digital, diverse India.

Two recent initiatives, NPS Vatsalya and the Multiple Scheme Framework (MSF), embody India's commitment to designing multiple pension pathways for a multi-layered society.

NPS Vatsalya: Pensions with a Heart

In Indian homes, financial planning has always been about family and foresight. Parents save not for luxury but for legacy. NPS Vatsalya embodies this very spirit and brings it into the pension space. It allows parents and guardians to open and contribute to NPS accounts for minors, helping children begin their financial journey early with safety, discipline and purpose.

Launched by Finance Minister Smt. Nirmala Sitharaman in September 2024, Vatsalya has already attracted over 1,00,000 subscribers within a year. By encouraging early financial discipline at the household level, Vatsalya supports India's broader objective of providing multiple pension pathways suited to varied family structures and future needs.

Multiple Scheme Framework: Flexibility for the Diverse Workforce

To serve India's increasingly varied workforce, from corporate employees, professionals, self-employed individuals and digital economy (platform-based) workers, the PFRDA introduced the MSF for the non-government sector, effective October 1, 2025.

MSF enhances choice while preserving the hallmark affordability of the NPS, with charges capped at 0.30% of AUM annually. Under this framework, subscribers can hold multiple schemes under a single Permanent Retirement Account Number (PRAN), enabling enhanced diversification and customisation.

A key feature of MSF is the availability of two clearly defined risk variants under each scheme:

- Moderate Risk Variant – designed for balanced investors seeking stability with measured growth.
- High-Risk Variant – allows equity allocation of up to 100%, catering to subscribers with a higher risk appetite and long-term return orientation.

This structure empowers investors to choose their preferred investment “batting style” – whether steady singles through moderate-risk plans or bold sixes through higher equity exposure.

However, greater flexibility also demands disciplined decision-making. Higher equity allowances can amplify **market volatility** and investors must remain mindful of broader retirement risks such as **longevity, inflation and sustainability considerations**. Making choices through a **risk-adjusted, long-term lens** is essential to ensure that enhanced choice translates into real retirement security.

Beyond Retirement: Nation-Building Capital

Pensions are not only about post-retirement comfort, but they are pillars of India's economic stability. Pension funds channel long-term savings into government bonds, corporate debt and equities, fuelling the nation's development. Their steady inflows act like the dependable middle order in cricket, providing consistency even when markets face volatility.

Moreover, pensions are driving deep inclusion. Nearly half of APY subscribers are women and participation among youth aged 18–25 has risen markedly between 2015 and 2025. This widening and more diverse subscriber base is transforming pension savings into a shared act of nation-building.

Planting Seeds for Future Generations

Indian wisdom has long celebrated foresight and selflessness. The *Hitopadesha* tells of an old man planting a mango tree whose fruits he may never taste: “I plant not for myself,” he says, “but for those who come after.” Pension contributions are the modern version of that act. Each rupee invested today strengthens both **personal security** and **public wealth**, funding infrastructure, renewable energy and national growth.

A Nation Ready to Bloom

The vision ahead is clear: **Pension for All**, delivered through options compatible with India's varied aspirations, incomes, capacities and lifestyles. Those who begin early and save consistently will experience the transformative power of compounding, turning small efforts into lifetime independence.

As the nation celebrates its cricketing heroes this season, especially the Indian women's team and

their historic ICC Women's Cricket World Cup 2025 victory, it is also time to recognise another quiet but powerful league of savers, investors and dreamers shaping India's financial future.

Echoing Prime Minister Modi's call to 'Reform, Perform and Transform,' India's pension ecosystem is reforming through diverse schemes, performing through robust inclusion and disciplined growth and transforming the very idea of financial security.

The Winning Run

Let a thousand pensions bloom: vibrant in their diversity, inclusive in their reach, flexible in their design and trusted in their purpose. In this long innings of nation-building, every saver is a player, every contribution a run and every pension a promise fulfilled.

By 2047, when the scoreboard to Viksit Bharat is tallied, may India stand tall not solely as the world's youngest nation, but as its most financially resilient.

The innings has begun.

Now, let's bat for the future!

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Section 4/खंड 4

International Section/ अंतर्राष्ट्रीय खंड

Pension Markets in Focus 2025

The *OECD Pension Markets in Focus 2025* report presents a comprehensive examination of global asset-backed pension systems over the year 2024, analysing the scale, sources and implications of pension asset growth across OECD and non-OECD jurisdictions. The report reveals that pension assets reached an unprecedented peak in 2024, powered primarily by strong investment performance and continued positive net cash flows in most jurisdictions. The key findings of the report across its three analytical pillars are: -

1. Growth in pension assets
2. Investment performance and asset allocation patterns
3. The dynamics of contributions and benefit payments

1. Pension Assets Reached a Record High in 2024

1.1 Widespread Growth Across Jurisdictions

The report documents a landmark achievement wherein assets earmarked for retirement across

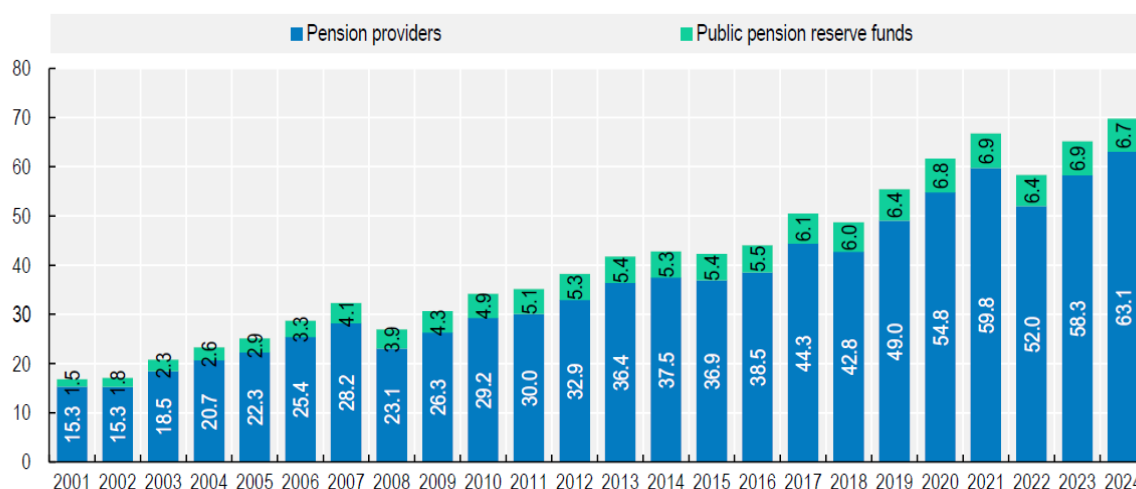
OECD member countries grew by 7.1% in 2024, reaching USD 69.8 trillion, supplemented by USD 6.7 trillion in public pension reserve funds. This surpasses the previous high recorded in 2021 and reflects a broad-based trend across countries.

The fastest asset growth was observed in Türkiye, the Baltic countries and Greece, all posting increases above 20% in nominal local-currency terms. Non-OECD jurisdictions mirrored this pattern, with nearly one-third achieving growth rates above 20%, highlighting the expansion of funded pension structures in emerging markets.

Despite this overall positive picture, a few exceptions exist. For example, Guyana and Peru were among the only countries experiencing declines in assets. Peru's decline was influenced by legislated early withdrawals, while Guyana's resulted from market-specific conditions. Notably, public pension reserve funds generally expanded in 2024, aside from declines in the United Kingdom (-11%) and United States (-3.9%).

Figure 1.1. Assets earmarked for retirement in the OECD, 2001-2024

In USD trillion



Note: For more details, please see the methodological notes in Annex B.

Source: OECD Global Pension Statistics and other sources.

1.2 Regional Variation in Asset Accumulation

The global distribution of pension assets remains uneven. North America overwhelmingly dominates, accounting for more than 70% of global pension assets (USD 48.2 trillion). Europe follows with USD 9.7 trillion, while Asia contributes USD 4.3 trillion, a smaller share relative to its economic weight. Africa continues to exhibit the lowest accumulation levels, though individual African countries such as Namibia and South Africa have comparatively high pension-to-GDP ratios.

1.3 Structural Shifts Away from DB Plans

One of the most persistent trends documented is the long-term decline of defined benefit (DB) plans. In 2024, DB plans constituted 31.9% of total pension assets, down from 39.7% in 2014. The slower growth of DB plans compared to occupational defined contribution (DC) and personal plans highlights a structural shift towards DC-based systems globally.

Countries such as Iceland, Israel and Kenya demonstrated steep declines in DB asset shares, while nations with historically DB-dominated systems such as Ireland, United States, United Kingdom, also continued transitioning toward DC formats. A few countries retain high DB dominance, such as Finland (93.4%), Netherlands (97.5%) and Switzerland (88.8%) at end-2023.

Parallel to this decline, the solvency and funding ratios of DB plans improved significantly, driven partly by rising interest rates and favourable asset performance. For example, the United Kingdom's funding ratio reached 123.1% in 2024 and Finland stood at 130%.

Increased funding levels have catalysed pension risk transfer activities such as buy-ins, buy-outs and longevity swaps, as plan sponsors take advantage of favourable pricing conditions. Countries such as Canada, United Kingdom,

United States and Netherlands saw marked increases in such transactions.

1.4 Consolidation and Scale: Fewer but Larger Providers

The average assets managed per pension provider have grown over the past decade. In regions such as Latin America, this trend is driven by the small number of pension fund administrators paired with large asset pools. Conversely, countries like Türkiye, where pension systems are younger, exhibit lower average assets per provider.

Several OECD countries experienced sector consolidation due to regulatory changes (such as IORP II in Europe), operational efficiencies and enhanced governance standards. Consolidation was especially pronounced in Belgium, Ireland and the United Kingdom, where employers increasingly moved from standalone trusts to master trusts.

2. Investment Gains Drive Asset Expansion in 2024

2.1 Strong Investment Performance Across Most Jurisdictions

Investment returns in 2024 were exceptionally strong. Pension providers recorded:

- 9.1% average nominal return in OECD countries
- 11.7% in non-OECD countries
- 8.5% in public pension reserve funds

Real returns (post-inflation) were also positive in most countries, led by Estonia, Israel, Lithuania and Slovak Republic, where real figures exceeded 10%. Only seven countries experienced negative real returns, largely due to high inflation environments (e.g., Angola and Nigeria) despite nominal gains. Returns in 2024 generally exceeded the longer-term averages over 5, 10, 15 and 20-year horizons in most

reporting jurisdictions, demonstrating a strong cyclical upswing.

2.2 Equity-Heavy Portfolios Outperform

Plans with high equity exposure recorded the strongest gains. For example, pension funds in the Baltic states, Poland, Slovak Republic and Hong Kong, all with significant equity allocations, reported exceptional performance in 2024.

The MSCI World Index's nearly 20% growth in 2024 which was bolstered by technology sector gains, was a principal driver. Equity indices in the United States (+23.8%), Japan (+19.2%) and Germany (+18.8%) significantly boosted global pension fund portfolios.

Conversely, bond portfolios delivered mixed results. Short-duration bonds delivered gains due to falling short-term yields, while long-duration bonds suffered as long-term yields remained high or increased in some markets (e.g., United States, Japan, Europe).

Alternative assets also showed heterogeneous results: -

- Australia experienced losses in unlisted property
- Finland reported low or zero returns on real estate and alternatives
- Sweden's AP2 fund reported 8.9% returns on real assets

2.3 Increasing Diversification and Foreign Investments

Foreign investments played a critical role in enhancing portfolio performance, especially where domestic markets underperformed. Pension providers in Latvia, Netherlands, Slovak Republic, Slovenia and others invested heavily abroad (often above 50% of assets). In Chile, currency depreciation amplified returns on foreign assets.

In Korea, global equity diversification insulated funds from weak local market performance.

2.4 Rise in Equity Allocation in 2024

Across most jurisdictions, the share of assets in equities increased significantly in 2024, reflecting both active portfolio shifts and valuation gains. Notable increases were observed in public pension reserve funds in Australia and New Zealand and among pension providers in Colombia, Estonia, Latvia, Norway and Sweden.

The transition to life-cycle and higher-risk default investment strategies also contributed to the rise wherein the launch of the Balanced Life Cycle Fund by PFRDA, India was also noted.

2.5 Long-Term Trend Towards Higher Risk-Taking

Between 2008 and 2024, average equity allocations in a sample of 14 jurisdictions rose from 19.4% to 29.3%, reflecting sustained long-term shifts toward higher-return asset classes in DC systems. Foreign investment allocations also increased in 21 out of 27 jurisdictions over the past decade, though some countries introduced caps or nudges toward domestic investment to support local capital market development.

3. Positive Net Cash Flows Support Asset Growth

3.1 Net Contributions Exceeded Benefit Payments in Most Jurisdictions

A defining feature of pension system health is the gap between contributions and benefit payments. In 2024, most pension providers reported positive net cash flows, reinforcing asset growth. The strongest positive cash flows relative to starting assets were observed in Georgia, Philippines, Latvia, Lithuania and Korea, particularly in younger or expanding systems where assets relative to GDP are still small.

3.2 Cases of Negative Cash Flow

Some large OECD systems including Australia, Canada, Belgium, Czechia and United Kingdom, reported negative net cash flows as benefit outflows exceeded contributions. However, strong investment gains ensured net asset growth, nonetheless.

The most negative cash flow occurred in Peru (-16.4%), driven by legislated early withdrawals, with investment performance insufficient to compensate (3.7% nominal return). Several public pension reserve funds also experienced negative flows, including those in Sweden and the United States, as reserves were drawn down.

3.3 Growth in Contributions in 2024

Contributions continued to grow in many jurisdictions due to inflation dynamics and in Latvia, Malawi and Romania, where systems mandate participation. The long-term trend shows a steady rise in contribution volumes across most jurisdictions over the past decade, supported by higher participation rates and increased formal sector coverage.

4. Highlights from the Indian Pension Architecture

Although the OECD report covers India as a non-OECD jurisdiction, several India-specific insights emerge relating to asset growth, investment performance, cash flow dynamics and regulatory evolution.

4.1 Asset Growth and System Maturity

India recorded positive asset growth in 2024, reflective of the expansion of the National Pension System and the Atal Pension Yojana. India's growth trajectory is aligned with the broader trend among emerging markets where asset-backed pension systems wherein despite smaller asset bases, experience strong expansion rates.

The Indian pension landscape, dominated by the NPS architecture, is still in a demographic expansion phase, with contributions from

central/state government employees, corporate subscribers and retail participants steadily rising. This aligns with the report's observation that younger systems (such as Philippines) tend to show strong positive cash flows relative to assets.

4.2 Cash Flow Patterns and Contributions

India appears in the group of non-OECD countries that recorded positive net cash flows in 2024, meaning contributions exceeded benefit payments. This is consistent with the structure of NPS, which remains mostly in the accumulation phase for its largest participant groups. The report places India among jurisdictions with rising contributions, linked to expanding subscriber bases.

4.3 Investment Performance

The report lists India among countries with positive nominal investment performance which reflects the global upward trend driven by equity market strength. India's equity markets delivered strong gains in 2024, supported by robust domestic economic performance and factors that positively influenced NPS schemes with higher equity allocations (especially under the Active Choice option).

4.4 Asset Allocation Trends: Higher Risk-Taking within NPS

A major India-specific regulatory development noted in the report is the launch of the Balanced Life Cycle Fund in October 2024, offering members a chance to pursue higher returns through elevated equity exposure with a new glide path.

Conclusion

The *Pension Markets in Focus 2025* report portrays 2024 as a year of robust global pension asset expansion, driven primarily by strong investment performance and supported by positive contributions in most jurisdictions. Defined contribution systems continue to rise in prominence, investment portfolios are gradually

shifting toward higher-return assets such as equities and pension risk transfer markets are deepening in mature DB-oriented systems.

India's developments fit strongly within these global patterns: rising assets, positive cash flows, regulatory innovation and a steady shift toward more diversified and return-seeking investment options.

Section 5/ खंड 5

Did You Know/ क्या आप जानते हैं?

Age-associated Financial Vulnerability (AAFV)

Age-associated financial vulnerability (AAFV) refers to the heightened risk of poor financial decisions, fraud, exploitation, or resource depletion that emerges as people grow older, even when they were financially competent earlier in life. It sits at the intersection of economics, cognitive ageing, social change and institutional design and is rapidly becoming a core concern in ageing societies such as India.

Concept and theoretical foundations

AAFV has been defined in gerontology as a pattern of financial behaviour that places an older adult at substantial risk of significant loss of financial resources, often out of character with earlier life decisions and not fully explained by acute illness or severe dementia. Conceptually, it differs from poverty or lifelong financial exclusion because it focuses on emerging vulnerability in later life, often among those who previously managed reasonably well.

The economic life-cycle hypothesis (LCH), developed by Modigliani and colleagues, provides a baseline framework: individuals seek to smooth consumption over their lifetime, borrowing when young, saving during prime earning years and decumulating wealth in retirement. Empirical work on age-wealth profiles shows that wealth typically peaks in late middle age (around the 50s) and then declines as people run down assets to fund retirement, with the speed and shape of decumulation affected by uncertainty about lifespan, health shocks and liquidity constraints. Within this life-cycle context, AAFV arises when cognitive, emotional, institutional and market frictions disrupt “optimal” decumulation, leading to over-spending, under-insurance, predatory borrowing, or susceptibility to scams.

Drivers: cognitive, emotional and social

Gerontological and neurocognitive research highlights that specific age-related changes in cognition and affect underpin much of AAFV. Executive dysfunction, reduced working memory, slower perceptual speed and acalculia (*difficulty with calculations*) can undermine the capacity to compare products, detect unreasonable charges, or understand compound interest and longevity risk. At the same time, socio-emotional changes such as greater trust in others, desire to avoid conflict, or loneliness may increase openness to persuasive sales tactics or scams.

Importantly, these vulnerabilities can appear well before dementia. Studies of community-dwelling older adults without dementia show that mild cognitive impairment (MCI) and even subtle early memory loss are associated with poorer financial and health-care decision-making, lower financial literacy and greater susceptibility to scams. Neuroimaging work suggests that early changes in brain regions implicated in valuation and social judgement may partially explain why some older adults become vulnerable to financial exploitation years before an Alzheimer’s diagnosis.

From financial capability to vulnerability

Older adults today navigate increasingly complex financial systems involving digital payments, e-commerce, structured products and shifting pension formats. AAFV thus emerges not only from individual decline but also from a widening gap between older cohorts’ financial capability (shaped by experience with simpler, often cash-based systems) and the demands of contemporary markets.

Contemporary work also links digitalisation to AAFV. As banking, pensions and retail move online, older adults with low digital and financial literacy face exclusion or dependence on intermediaries, who may or may not act in their best interest. Studies in emerging markets show that access to e-commerce and digital payment platforms can enhance financial inclusion and help smooth consumption in retirement, but only when accompanied by adequate literacy and consumer protection

frameworks. Without such safeguards, digital environments can amplify exposure to online fraud, phishing and predatory lending. Systematic reviews of “financial fragility” in older adults identify clusters of problems: rising indebtedness in later life, difficulties managing loans and credit cards, anxiety around financial choices and behaviours such as borrowing against housing assets to sustain consumption rather than using them to generate stable income.

Debt-related fragility in old age is particularly concerning. Evidence from high-income countries shows older people increasingly using consumer credit or home-equity-backed loans to maintain living standards, leaving them highly exposed to interest-rate shocks or income loss. Behavioural traits like risk aversion, present bias, limited numeracy, can worsen debt dynamics, feeding stress and negatively affecting health and quality of life. In low- and middle-income settings, where formal credit histories are weaker and informal lending more prevalent, these patterns may be even more opaque and harder to regulate.

Recent empirical literature: scams and exploitation

A substantial body of recent work focuses on fraud and scams as salient manifestations of AAFV. A landmark cohort study of more than 700 older adults found that those with MCI were significantly more susceptible to scams than cognitively normal peers, even after adjusting for age, gender and education. Within the MCI group, lower global cognition and deficits in episodic memory and perceptual speed predicted higher scam vulnerability, indicating that relatively specific cognitive systems play a role.

More recent profiles of financial exploitation in Alzheimer’s disease and related disorders extend this picture. Studies now view vulnerability to scams and suboptimal financial decisions as early behavioural warning signs of future cognitive decline, rather than merely downstream consequences. This reframing has two implications: first, clinicians and families may need to monitor financial behaviours as part

of dementia risk assessment; second, financial regulators and product providers may hold crucial observational data on emerging vulnerability long before clinical contact occurs.

Neuropsychological and psychological research also examines psychosocial contributors. Qualitative and survey-based work highlights the roles of social isolation, bereavement, over-trust in authority figures and fear of losing independence in shaping older adults’ responses to financial offers. These factors can make older adults particularly responsive to emotionally framed appeal like “limited time opportunity”, “helping family”, “protecting your savings”, used in both frauds and aggressive but legal sales practices.

AAFV as a public health and policy issue

Public health scholars increasingly frame AAFV as an emerging population-level issue, not just a private misfortune. Significant late-life financial loss can trigger cascading effects: inability to afford medications or care, nutritional compromise, housing instability and psychological distress, all of which feed into morbidity and mortality. In many settings, older adults also act as financial anchors for extended families; their exploitation or over-indebtedness can therefore transmit shocks intergenerationally.

Policy analyses by international organisations note that population ageing will place pressure on pensions, health systems and long-term care, potentially increasing out-of-pocket burdens and creating more points of contact with complex financial products. As a result, fiscal sustainability debates (pension reform, retirement age, contribution rates) increasingly intersect with micro-level concerns about AAFV, including adequacy of old-age income, design of decumulation options and the regulation of financial advice to retirees.

Indian demographic and institutional context

India is in the midst of a rapid demographic transition. The India Ageing Report 2023 projects that while the overall population will grow by only about 18% between 2022 and 2050, the

number of older persons (60+) will increase by roughly 134%, sharply raising the old-age dependency ratio. Government projections and commentaries suggest that the share of elderly in the population may rise from around 8–9% in 2011 to close to one-fifth by mid-century, implying roughly 300+ million older persons by 2050.

Within this ageing landscape, India's older adults are characterised by low per-capita income, high inequality, a large informal labour share and very limited coverage by earnings-related pensions. Studies using National Sample Survey data indicate that as recently as 2019, only about 14–15% of households reported any formal retirement savings, up only modestly from roughly 11% in 2013, leaving the vast majority reliant on family transfers, casual earnings or social pensions. This structural backdrop makes Indian elders particularly sensitive to shocks such as illness, widowhood, crop failure, or job loss of adult children.

Indian patterns of age-associated vulnerability

Given India's socioeconomic structure, AAFV manifests through somewhat different pathways than in high-income countries. First, there is a strong overlap between lifetime poverty and late-life vulnerability: a large proportion of older Indians, especially women, rural residents and informal workers, enter old age with scant savings, low literacy and limited access to formal finance, making them vulnerable to both everyday deprivation and exploitation. Second, intergenerational co-residence and informal support remain important, but changing family structures, migration and feminisation of widowhood weaken traditional safety nets, increasing the risk of neglect or intra-family financial abuse.

Digitalisation constitutes a third channel. Rapid uptake of digital payments and fintech, including in rural areas, coexists with low financial and digital literacy among older cohorts. Emerging research on e-commerce, financial literacy and elderly pensions in rural contexts suggests that while digitally savvy

elders can use online platforms to diversify income or access better prices, indebted or low-literacy seniors may face tighter intertemporal budget constraints and heightened risk of mis-selling or fraud unless supported by strong literacy programmes and consumer protection.^[13]

Comparative perspective: India and global patterns

Comparative analysis suggests both convergence and divergence between Indian AAFV and global patterns. Convergence arises from universal mechanisms: cognitive ageing, increasing product complexity and the shift from defined-benefit to defined-contribution pension designs, which transfer longevity and investment risk to individuals. Indian retirees engaging with market-linked NPS options, mutual funds or annuities face similar challenges of drawdown strategy, inflation risk and susceptibility to persuasive “high-return” pitches as peers elsewhere

Divergence, however, stems from the sheer scale of informality, the thinness of social insurance and marked gender and regional inequities. International fiscal analyses stress that ageing will strain public finances through pensions and health, but in India much of this burden is currently borne privately by families or through out-of-pocket spending. This means that even modest episodes of exploitation or poor decisions like signing over land, taking high-cost informal loans, investing retirement proceeds in dubious schemes, can have catastrophic welfare consequences.

Policy and research implications

For India, the ageing and pension literature points to several levers. Expanding coverage and adequacy of contributory pensions like NPS and APY, especially among informal and gig workers, can reduce lifetime exposure to AAFV by providing predictable income streams in old age. Strengthening and index-linking social pensions, improving grievance redressal and integrating financial and digital literacy modules into older-adult education and self-help groups

can address both structural and capability deficits.

Research gaps remain substantial: there is limited nationally representative data on cognitive status, detailed financial behaviours and experiences of scams among Indian elders and even less on gender- and caste-differentiated vulnerabilities.

Recognising AAFV as a distinct policy domain implies moving beyond generic “financial literacy for seniors” towards integrated approaches. Public health-oriented frameworks recommend early identification of at-risk older adults (for example, through primary care, social workers or community health volunteers), assessment of financial decision-making capacity and protocols for responding to suspected exploitation, in collaboration with financial institutions. Regulatory agencies can encourage simplified, senior-friendly product design, default options that protect against catastrophic downside (e.g. basic inflation-linked annuitisation) and stricter oversight of advice and sales practices targeting retirees.

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Section 6/ खंड 6

Circulars/Regulations/Guidelines

परिपत्र/विनियम/दिशानिर्देश

Circular No: PFRDA/2025/14/SUP-CG-SG/06	
06 th October 2025	Extension of cut-off date for exercising Option of Unified Pension Scheme (UPS) under NPS by two months i.e., upto 30th November 2025

The Pension Fund Regulatory and Development Authority (PFRDA) issued a circular on 06 October, 2025, announcing the extension of the cut-off date for exercising the option of the **Unified Pension Scheme (UPS)** under the National Pension System (NPS).

Key pointers:

1. **Extended Cut-off Date:** The Central Government of India has extended the cut-off date for exercising the UPS option by two months.
2. **Who is Eligible for the Extension?**

Existing Employees: Central Government employees who are covered under NPS, were in service as of April 1, 2025 and wish to migrate to UPS from NPS.

Past Retirees/Spouses Claiming: A Central Government employee who was covered under NPS and had superannuated, voluntarily retired, or retired under Fundamental Rules 56(j) on or before March 31, 2025.

The **legally wedded spouse** of a subscriber who superannuated or retired and demised before exercising the UPS option.

Circular No: PFRDA/2025/15/SUP-CRA/1	
10 th October 2025	Mandatory Source Nodal Office Authorization for Inter-Sector Shifting (ISS) and Exit Requests for Government Sector Subscribers

The Pension Fund Regulatory and Development Authority (PFRDA) issued a circular on 10th October 2025, which makes the authorization from the source Nodal Office mandatory for certain requests from Government Sector Subscribers under the National Pension System (NPS).

Key pointers:

The PFRDA has decided that Source Nodal Office authorization shall be mandatory in all cases where the relationship between the subscriber and the Government/Government employer ceases.

Other Important Points:

1. **Applicability:** This mandatory requirement applies uniformly across all segments within the Government sector-CG, SG & Government-owned entities registered as corporates.
2. **Requirement for PSU/PSB Corporate Sector:** Points of Presence (PoPs) servicing employees of PSUs, PSBs, or any entity under Government ownership and control (under the NPS Corporate Sector Model) must ensure that any request leading to the cessation of the subscriber-employer relationship is processed **only with due consent from the concerned employer**. This consent must be confirmed by obtaining appropriate documentation/ communication.

Circular No: PFRDA/2025/17/REG-POP/02	
16 th October 2025	Clarification on permitting the Points of Presence for engagement of Non-Individual Intermediaries registered with any financial sector regulator like RBI, IRDAI, SEBI and PFRDA as Pension Agents for distribution of Pension Schemes

The Pension Fund Regulatory and Development Authority (PFRDA) issued a circular on 16th October 2025, provides a clarification regarding the engagement of Non-Individual Intermediaries as Pension Agents for the distribution of pension schemes.

Key pointers:

1. Context: The circular clarifies Clause 3(a) of a previous circular (PFRDA/2025/12/REG-POP/01 dated September 23, 2025). It is now clarified that Points of Presence (POPs) may engage Non-Individual Intermediaries as Pension Agents for the distribution of pension schemes governed under the PFRDA Act, 2013.
2. Eligible Intermediaries- The Non-Individual Intermediaries eligible for engagement must be registered with any financial sector regulator,
3. Conditions for Engagement: The engagement is subject to the following conditions:

Compliance with and as permitted under, the applicable regulations, circulars, guidelines and terms and conditions prescribed by their respective regulators (RBI, IRDAI, SEBI, or PFRDA).

Circular No: PFRDA/2025/18/REG-POP/03	
17 th October 2025	Guidelines on Subscriber Onboarding in National Pension System (NPS) and Revised Subscriber Registration Form (SRF)

The Pension Fund Regulatory and Development Authority (PFRDA) issued a circular on 17th October 2025, which introduces the Multiple Scheme Framework (MSF) for Non-Government Sector (NGS) subscribers under the National Pension System (NPS), effective October 1, 2025.

Key pointers:

Objective: To provide a seamless, inclusive and compliant onboarding process for subscribers under the NPS All-Citizen/Corporate model and other PFRDA schemes.

1. Onboarding Modes: The process is categorized into Digital Mode (online, self-assisted or assisted) and Physical Mode (at PoP branches using the physical SRF-Annexure I).
2. KYC Compliance: All onboarding modes must comply with the Master Circular's KYC/AML/CFT guidelines. KYC can be performed through Face-to-Face or Non-Face-to-Face methods.
3. Digital KYC Acceleration:

CKYC Identifier: Subscribers with a valid 14-digit CKYC identifier can be onboarded seamlessly without submitting additional KYC documents.

Bank CBS: Subscribers without a CKYC identifier but having an operative savings bank account (where the bank is a PoP) can be onboarded by leveraging their existing bank KYC records.

4. Data Upload Requirement: For non-CKYC subscribers, PoPs must capture and upload KYC data to CKYCR within 10 days.

Circular No: PFRDA/2025/19/PDES/02	
29 th October 2025	Inclusion of Platform Service Partner under the National Pension System (NPS) - "NPS e-shramik (Platform Service Partner) Model"

The Pension Fund Regulatory and Development Authority (PFRDA) issued a circular on 29th October 2025, introduces the "NPS e-shramik (Platform Service Partner) Model" to extend the National Pension System (NPS) to individuals, including gig workers, engaged with digital aggregators.

Key pointers:

- Target Group: Platform Service Partners (gig workers) who often lack traditional social security/retirement planning.
- Platform Aggregators (PA): These digital intermediaries are not required to register with PFRDA. They will be assigned a "Platform Aggregator Code".
- Points of Presence (PoPs): PoPs are fully responsible for all regulatory compliance regarding the onboarded partners.
- Contribution Model: Flexible contributions can be made: Jointly (PA + Partner), Partner-only, or PA-only. There are no minimum or maximum thresholds, but a minimum contribution can be fixed (e.g., ₹99)
- Incentive: PFRDA will provide an incentive of up to ₹100 per new account onboarded until March 31, 2026, provided the account remains active for at least one year (contributing ₹1,000). PoPs cannot charge an onboarding fee until the incentive framework is available.
- Portability & Exit: Partners can shift/port their account between Platform Aggregators. Exit and withdrawal rules are governed by the All Citizen Model.

Section 7/ खंड 7

NPS/ APY Statistics/ एनपीएस/ एपीवाई आँकड़े

I. Sector Wise Growth / क्षेत्रवार वृद्धि

Table 1: NPS & APY growth in Subscribers base as on 31st October 2025
३१ अक्टूबर २०२५ तक एनपीएस और एपीवाई के अभिदाताओं की संख्या में वृद्धि

S.N. / क्रम संख्या	Sector / क्षेत्र	No. of Subscribers (in lakh) / अभिदाताओं की संख्या (लाख में)			YoY (%) / वार्षिक वृद्धि (%)	Share (%) / हिस्सेदारी (%)
		31-Oct-24	31-Mar-25	31-Oct-25		
i	CG	26,79,623	27,26,039	27,93,678	4.3	3.1
ii	SG	67,80,644	71,32,145	74,29,274	9.6	8.2
	Sub Total	94,60,267	98,58,184	1,02,22,952	8.1	11.3
iii	Corporate	21,70,791	22,75,356	25,53,078	17.6	2.8
iv	All Citizen	38,77,608	42,65,479	45,96,391	18.5	5.1
v	Vatsalya	61,154	1,07,523	1,47,287	140.8	0.2
	Sub Total	61,09,553	66,48,358	72,96,756	19.4	8.1
vi	NPS Lite	33,44,225	33,50,389	33,48,951	0.1	3.7
vii	APY	6,01,33,228	6,41,34,198	6,95,88,071	15.7	76.9
viii	Grand Total	7,90,47,273	8,39,91,129	9,04,56,730	14.4	100.0

Source: CRAs

Table 2: NPS & APY growth in Contribution as on 31st October 2025
३१ अक्टूबर २०२५ तक एनपीएस और एपीवाई के कॉन्ट्रिब्यूशन में वृद्धि

S.N. / क्रम संख्या	Sector / क्षेत्र	Contribution (Rs. in crore) / योगदान (रु. करोड़ में)			YoY (%) / वार्षिक वृद्धि (%)	Share (%) / हिस्सेदारी (%)
		31-Oct-24	31-Mar-25	31-Oct-25		
(i)	CG	2,44,976.10	2,61,347.65	2,88,084.81	17.6	24.8
(ii)	SG	4,67,290.82	5,05,769.09	5,64,591.59	20.8	48.6
	Sub Total	7,12,266.92	7,67,116.75	8,52,676.40	19.7	73.4
(iii)	Corporate	1,35,599.92	1,52,189.94	1,79,089.81	32.1	15.4
(iv)	All Citizen	58,999.49	66,184.19	71,507.98	21.2	6.2
(v)	Vatsalya	30.09	94.11	193.82	544.2	0.0
(vi)	Tier-II	9,252.51	10,088.45	11,408.15	23.3	1.0
(vii)	TTS	17.85	19.26	19.92	11.6	0.0
	Sub Total	2,03,899.86	2,28,575.96	2,62,219.67	28.6	22.6
(viii)	NPS Lite	3,473.15	3,550.38	3,658.28	5.3	0.3
(ix)	APY*	35,452.91	38,569.70	43,274.66	22.1	3.7
	Grand Total	9,55,092.84	10,37,812.79	11,61,829.01	21.6	100.0

* Fig does not include APY Fund Scheme; Source: CRAs

Table 3: NPS & APY growth in AUM as 31st October 2025

३१ अक्टूबर २०२५ तक एनपीएस और एपीवाई के एयूएम में वृद्धि

S.N. / क्रम संख्या	Sector / क्षेत्र	AUM (Rs. in crore) / एयूएम (रु. करोड़ में)			YoY (%) / वार्षिक वृद्धि (%)	Share (%) / हिस्सेदारी (%)
		31-Oct-24	31-Mar-25	31-Oct-25		
(i)	CG	3,61,215.96	3,84,016.79	4,24,609.81	17.55	26.21
(ii)	SG	6,63,428.91	7,16,724.78	8,01,747.89	20.85	49.48
	Sub Total	10,24,644.87	11,00,741.57	12,26,357.71	19.69	75.69
(iii)	Corporate	1,98,811.89	2,18,550.26	2,58,079.32	29.81	15.93
(iv)	All Citizen	61,515.39	66,336.46	71,113.67	15.60	4.39
(v)	Vatsalya	27.64	92.89	202.19	-	0.01
(vi)	Tier-II	6,517.40	6,901.03	7,915.10	21.45	0.49
(vii)	TTS	19.20	19.90	20.02	4.28	0.00
	Sub Total	2,66,891.53	2,91,900.54	3,37,330.97	26.39	20.82
(viii)	NPS Lite	5,932.39	6,086.39	6,350.90	7.05	0.39
(ix)	APY*	41,306.30	44,780.48	50,241.50	21.63	3.10
	Grand Total	13,38,775.09	14,43,508.98	16,20,281.08	21.03	100.00

* Fig does not include APY Fund Scheme; MSF is included in respective Sector; Source: CRAs.

II. PFM-wise Assets under NPS schemes / पीएफएम के अनुसार एनपीएस योजनाओं के अंतर्गत संपत्तियाँ

Table 4: Pension Fund-wise Assets under Management (in crore) as on 31st October 2025

३१ अक्टूबर २०२५ को पेंशन फंड के अनुसार एयूएम (करोड़ में)

PF	AUM (Rs. In Crore)			Growth (%)		% share
	31-Oct-24	31-Mar-25	31-Oct-25	YOY	Over March 25	
SBI	4,82,894	5,14,752	5,62,568	16.50	9.29	34.69
LIC	3,58,401	3,82,441	4,19,661	17.09	9.73	25.88
UTI	3,36,369	3,59,180	3,97,645	18.22	10.71	24.52
ICICI	39,520	45,455	55,964	41.61	23.12	3.45
Kotak	5,796	6,378	8,181	41.13	28.26	0.50
HDFC	1,02,020	1,15,627	1,46,626	43.72	26.81	9.04
Aditya Birla	2,714	4,025	5,815	114.28	44.47	0.36
Tata	3,800	4,385	4,818	26.81	9.89	0.30
Max Life*	1,351	1,607	-	-	-	-
Axis	5,923	8,854	13,461	127.27	52.03	0.83
DSP	928	2,049	6,833	636.28	233.55	0.42
Total	13,39,716	14,44,753	16,21,573	21.04	12.24	100.00

Source: NPS Trust,



APY Fund Scheme is not included.

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III. Scheme Wise AUM under NPS / एनपीएस के अंतर्गत योजनावार एयूएम

Table 5: Scheme-wise Assets under Management (in Crores) as of 31st October 2025
३१ अक्टूबर २०२५ को योजनावार एयूएम संपत्तियाँ (करोड़ में)

Scheme		AUM (Rs. In Crore)			Growth (%)		% share
		31-Oct-24	31-Mar-25	31-Oct-25	YOY	Over March 25	
CG		3,24,702	3,38,663	3,48,853	7.44	3.01	21.51
SG		6,43,391	6,90,249	7,65,010	18.90	10.83	47.18
Corporate CG		88,637	96,143	97,805	10.34	1.73	6.03
TIER I	A	540	635	905	67.54	42.61	0.06
	E	1,00,295	1,10,012	1,47,061	46.63	33.68	9.07
	C	46,606	54,782	68,611	47.21	25.24	4.23
	G	80,834	95,238	1,14,674	41.86	20.41	7.07
NPS Lite		5,932	6,086	6,351	7.05	4.35	0.39
TIER II	E	3,121	3,255	3,913	25.35	20.20	0.24
	C	1,222	1,296	1,456	19.20	12.40	0.09
	G	2,167	2,347	2,543	17.31	8.31	0.16
	T TS	19	20	20	4.25	0.59	0.00
APY		41,307	44,781	50,242	21.63	12.19	3.10
Tier II Composite		2	2	5	180.42	85.44	0.00
APY Fund Scheme		940	1,242	1,292	37.55	4.03	0.08
UPS CG		-	-	12,709	-	-	0.78
Total Asset		13,39,716	14,44,753	16,21,450	21.03	12.23	100.00

Minor difference in AUM provided in Table 3 is due to difference in the methodology of calculation of PFs and CRA.

IV. PFM-wise Return on NPS Schemes / पीएफएम के अनुसार एनपीएस योजनाओं पर लाभ

Table 6: Returns since inception (in %) as on 31st October 2025
३१ अक्टूबर २०२५ तक आरंभ से लाभ (% में)

Pension Funds→		SBI	LIC	UTI	ICICI	KOTAK	HDFC	Aditya Birla	TATA	Axis	DSP
CG		9.54%	9.40%	9.37%							
SG		9.26%	9.36%	9.34%							
Corporate-CG		9.26%	9.36%								
TIER I	A	9.87%	8.20%	8.83%	8.57%	8.15%	9.66%	7.65%	12.95%	8.96%	6.98%
	E	11.23%	13.36%	12.97%	13.08%	12.62%	15.05%	13.57%	16.77%	14.31%	16.94%
	C	9.55%	9.00%	8.74%	9.53%	9.24%	9.30%	8.45%	7.89%	8.30%	9.01%
	G	8.93%	9.52%	8.19%	8.37%	8.31%	8.77%	7.86%	7.73%	7.83%	8.45%
TIER II	E	11.23%	11.73%	11.89%	11.91%	12.20%	13.69%	13.72%	16.70%	15.12%	15.85%
	C	9.13%	8.57%	8.73%	9.36%	8.62%	8.66%	7.94%	8.10%	7.71%	10.05%
	G	8.95%	9.74%	8.67%	8.45%	8.09%	8.93%	7.33%	7.86%	7.55%	8.20%
	TTS	6.82%	8.12%	7.11%	7.82%	8.29%	7.17%	8.11%	8.88%	6.57%	6.30%



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NPS Swavalamban		9.62%	9.66%	9.62%		9.54%					
APY		8.82%	9.11%	9.08%							
UPS CG		3.66%	1.95%	3.58%							
Tier II Composite		6.76%	6.69%	7.06%							

Source: NPS Trust

