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

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Comments and observations may please be forwarded to the department at market.watch@pfrda.org.in.

Glossary

A	Alternative Investments Funds
APY	Atal Pension Yojana
ASP	Annuity Service Provider
BIRLA	Aditya Birla Sun Life Pension Management Ltd
C	Corporate Debt and Related Instruments
CAGR	Compound Annual Growth Rate
CDC	Collective Defined Contribution
CRA	Central Recordkeeping Agency
CPI	Consumer Price Index
DA	Defined Ambition
DB	Defined Benefit
DC	Defined Contribution
E	Equity and Related Instruments
G	Government Bonds and Related Instruments
GDP	Gross Domestic Product
GST	Goods and Service Tax
GVA	Gross Value Added
HDFC	HDFC Pension Management Company Limited
ICICI	ICICI Prudential Pension Fund Management Company Limited
IRDAI	Insurance Regulatory and Development Authority of India
KOTAK	Kotak Mahindra Pension Fund Limited
LAF	Liquidity Adjustment Facility
LIC	LIC Pension Fund Limited
MAX LIFE	Max Life Pension Fund Management Limited
NDC	Notional Defined Contribution
NPCI	National Payment Corporation of India
NPS	National Pension System
OECD	Organisation for Economic Co-operation and Development
POP	Point of Presence
PF	Pension Fund
SBI	SBI Pension Funds Private Limited
TATA	Tata Pension Management Limited
TBPP	Target Benefit Pension Plan
UTI	UTI Retirement Solutions Limited

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Section 1

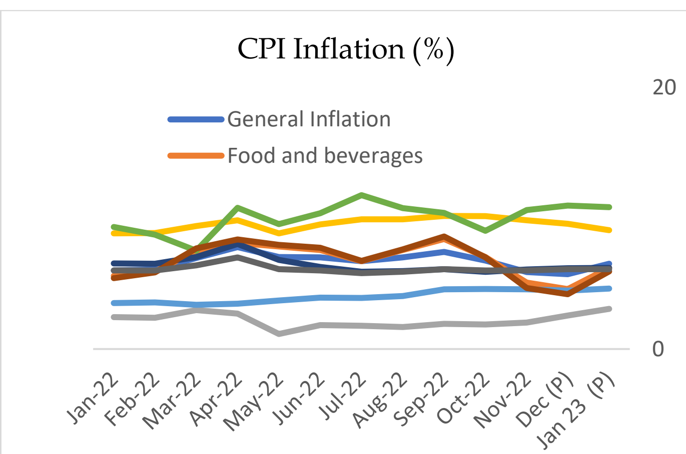
Economy

Indian Economy

Inflation

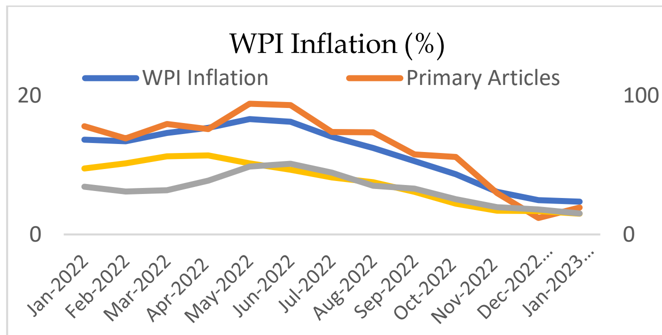
Consumer Price Index

In January '23 CPI inflation increased by 6.52 per cent against December'22 figure of 5.72 per cent, led mainly by a sequential rise of 2.6 per cent in prices of cereals compared to 1.1 percent in December'22 and 2.3 per cent in eggs compared to 4.9 per cent in Dec '22. On the other hand, vegetable prices contracted, to (-)11.7 per cent (yoy) versus (-)15.1 per cent yoy in December. Rural and urban inflation rose sharply by 6.85 per cent and 6 per cent, respectively compared to 6.05 per cent and 5.39 per cent, respectively, in December 2022. Fuel inflation moderated marginally to 10.8 per cent in Jan'23 from 10.9 per cent in Dec'22, on account of fall in Kerosene prices and flat LPG prices. January core inflation (CPI excluding food, fuel, pan, and tobacco) remained elevated and sticky at around 6.1 per cent.



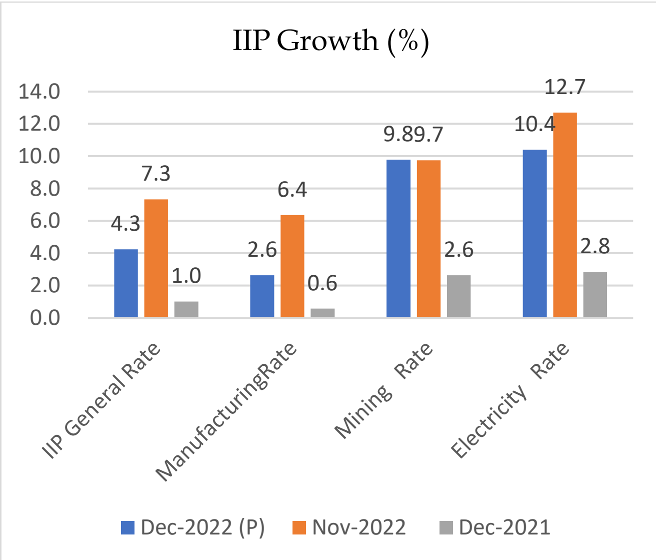
Wholesale Price Inflation

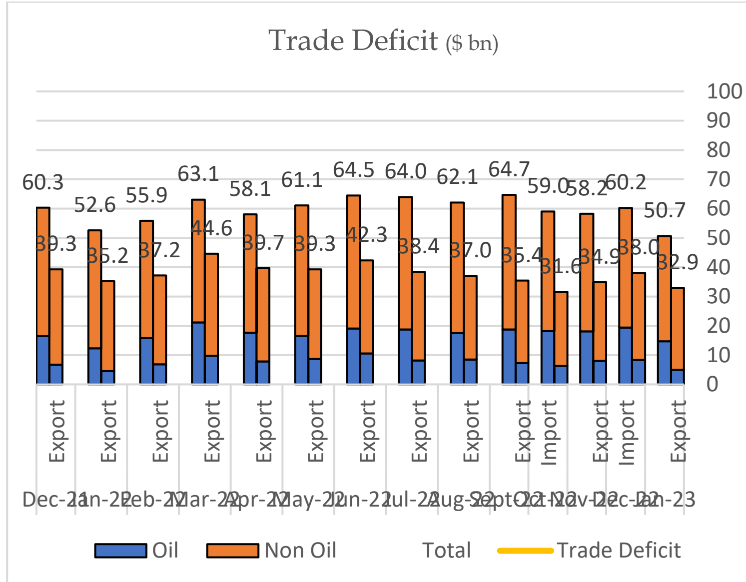
WPI moderated to 2-year low of 4.7 per cent in Jan'23 from 5 per cent in Dec'22. Food inflation last month accelerated to 3-month high of 2.9 per cent from 0.7 per cent in Dec'22. This was led by increase of 13 per cent in prices of food grains in Jan'23 versus 11.6 per cent in Dec'22), fruits increased by 4.1 per cent in Jan'23 versus 1.3 per cent in Dec'22. YoY Prices of milk and spices increased more during Jan '23 compared to Dec'22. However, prices of vegetables fell less sharply by 26.5 percent compared to 36 per cent in Dec '22.



Index of Industrial Production

IIP growth slowed down to 4.3 per cent in Dec'22 from 7.3 per cent in Nov'22. Manufacturing output moderated to 2.6 per cent in Dec'22 from 6.4 per cent in Nov'22. Slowdown in manufacturing output was broad-based with 20 out of the 23 sub-industries under this group showing a deceleration. Within this, production of computers and other electrical fell sharply by 37 per cent versus an increase of 3 per cent in Nov'22. Moderation was also seen in electricity production (10.4 per cent versus 12.7 per cent in Nov'22). Mining production was virtually stagnant at 9.8 per cent (9.7 per cent in Nov'22).



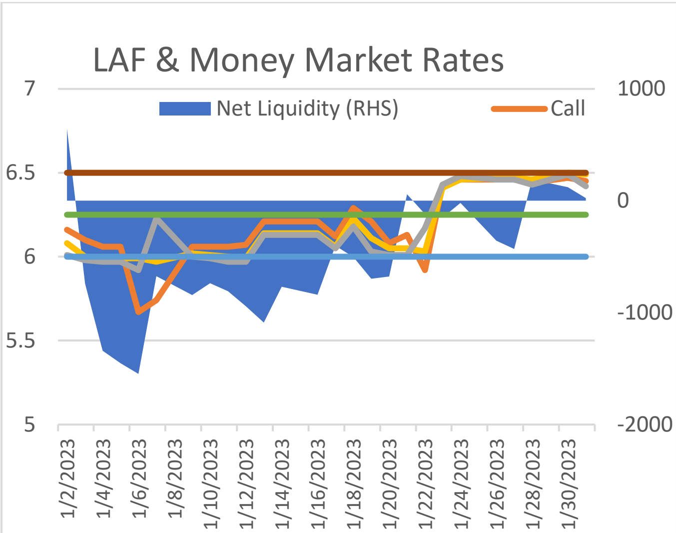


Trade Deficit

India's merchandise trade deficit in January'23 hit its lowest in a year at $17.75 billion, down from $22.14 billion in the previous month. January merchandise exports were $32.91 billion, compared with $38. billion in December, while imports fell to $50.66 billion from $60.2 billion. The trade deficit for April-January widened to $232.95 billion from $153.78 billion a year ago. Among key exports during this period, petroleum products, electronic goods and chemicals continued to be higher than a year ago but weaker global demand resulted in a drop in outbound shipments of cotton, engineering goods, iron ore, and gems and jewellery. Within imports, petroleum and crude products saw the sharpest increase with a more than 53 per cent jump, followed by coal and electronic goods. However, imports of gold were down over 11 per cent.

LAF & Money Market

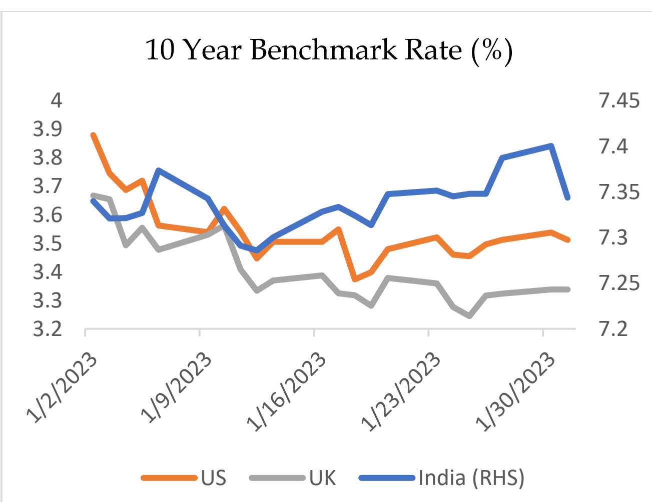
Liquidity in the banking system during the second half of January remained in surplus. The liquidity absorption declined from daily average of Rs 85,825 crore in first half of January to daily average of Rs. 27,174 crores in second half of January. This led to rise in weighted average call rate to 6.30 per cent during the second half of January 2023 from 6.04 per cent in the first half of January. In sync, the weighted average market repo rate rose to 6.28 per cent from 6.03 per cent in the first half of January 2023.



Country	31.12.2022	31.01.2023	change in bps
India	7.34	7.34	0
UK	3.67	3.34	-33
Germany	2.57	2.29	-28
US	3.88	3.51	-37

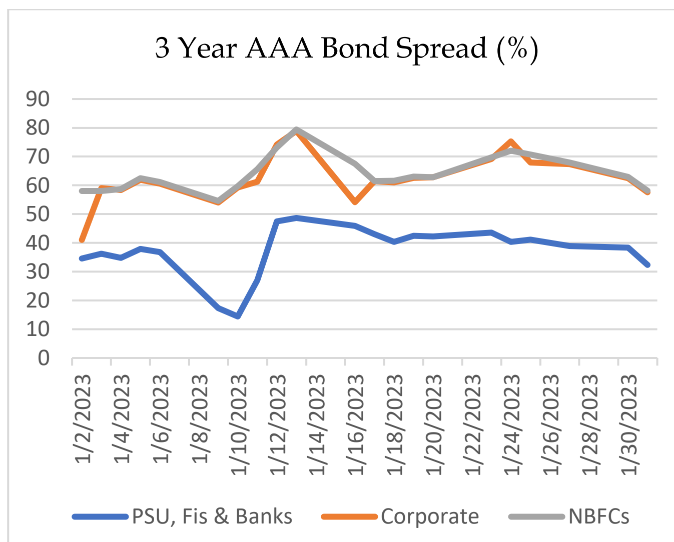
10 Year Benchmark Yield

Bond markets were dictated by movements in the US treasury yields and crude oil prices. Global bond yields came down on expectation that Fed is probably nearing its terminal rate, with softening of inflation. The 10-year US treasury yield fell by 37 bps during the January. Domestically, India's 10Y yield inched up ahead of the Union Budget. However, it closed flat at the end of January.



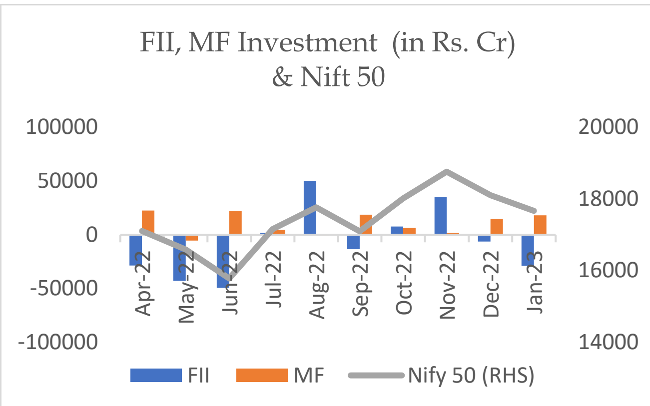
Corporate Bond

During January, the average spread of 3 Year AAA bonds increased over December. The average spread for NBFC increased from 58 bps to 64 bps, for corporate bonds from 57 bps to 62 bps and for PSU, FIs and Banks from 36 bps to 37 bps.



Equity Market

The selling by FIIs continued during January. FIIs net outflow from the equity market during January was Rs. 28,852 crore of which Rs. 13,418 crore was in the second half of the month. During January 2023, there is net inflow of Rs. 17,958 crore by the domestic Mutual Funds. However, net outflow was reflected in equity market which witnessed fall in Nifty 50 and Sensex by 1.64 per cent and 1.18 per cent, respectively during second half of January 2023. During the FY 2022-23, so far, there is net outflow of Rs. 75,207 crores by FIIs. and net inflow of Rs. 1,01,719 crores by the Mutual Funds.



Equity Index	Sensex	Nifty 50	S&P 500	FTSE 100	Dow Jones	Nikkie
30.12.22	60841	18105	3840	7452	33147	26095
31.01.23	59550	17662	4077	7772	34086	27327
Change (%)	-2.1	-2.4	6.2	4.3	2.8	4.7

Foreign Exchange

Global currencies started 2023 on a positive note with Dollar index showing tepid performance and losing by 0.9 per cent during January. Apart from a weaker dollar, improved risk sentiment aided gains in other currencies. Emerging market currencies particularly profited from this. Other major advanced economies' currencies, such as the Euro (EUR), Japanese Yen (JPY) and Pound (GBP) also registered gains against the dollar ranging between 1.7 per cent - 2.8 per cent. In line with other currencies, INR appreciated by 1 per cent in January.

Data Source: Cogencis Information Services Pvt. Ltd.

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Section 2

Management Speaks

Special Address

CII 24th Insurance & Pensions Summit: 20th January, 2023 at Mumbai

Special Address by-
Dr Manoj Anand, WTM (Finance), PFRDA

The objective of any pension scheme is to provide old age income security, and also ensure consumption smoothing over time, and to provide protection against longevity risk. It is all the more important in a scenario when both the old-age dependency ratio and life expectancy at the age of 60 have increased over time. The old age dependency ratio is projected to go up to 23% by 2035 as per the Census of India 2011. The life expectancy at the age of 60 shall be 18.9 in 2030 as per the World Bank database.

There has been a global shift towards fully funded Defined Contribution (DC) pension plans. DC plans which are often occupational in nature involve contributions by employee/employer or both for creating a pension corpus that is utilized to deliver a pension to an employee after superannuation or retirement. The offering of retirement benefits by the employer under DC plan obviates future liabilities of employers and builds sustainability of the scheme/plan.

The amount of Pension is a function of i) amount contributed, ii) periodicity of contribution, iii) returns generated on investments during accumulation phase, iv) type of annuity plan chosen (with or without return of purchase price, joint-life or single life), and v) annuity rates prevalent at the time of superannuation.

Indian Pension Sector:

The Indian pension sector encompasses number of schemes.

PAYG Pension Plan (Pay as you go) for the government employees, who had joined the service before 01.01.2004, popularly known as Old Pension Scheme (OPS).

Occupational Pension Plans like Employees' Provident Fund & Employees' Pension Scheme, Approved Superannuation Funds & Recognized Provident Funds, Special Provident Funds - Coal Miners, Seamen, Assam Tea Plantations, and the National Pension System (NPS) for Central Govt. and State Govt. employees, which started in 2004.

The NPS was subsequently extended to all citizens of the country w.e.f. 1st May, 2009 on a voluntary basis.

Another Pillar of Personal Pension comprises voluntary NPS in both government and non-govt. sector, Public Provident Fund (PPF), Atal Pension Yojana (APY), Mutual Funds Retirement schemes, and Retirement Plans of Insurance companies.

The non-financial pillar of Personal Pension includes the broader context of social policy such as family support, access to healthcare and housing, etc.

The coverage of pension has significantly improved in the organized sector and attempts have also been made to provide pension to the workforce engaged in the informal or unorganized sector through schemes such as Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM) and Pradhan Mantri Laghu Vyapari Maan-Dhan Yojana. The new-age gig and platform workers also need coverage under the occupational pension plan.

According to various estimates, India's pension assets are in the range of 14%-16% of GDP as compared to an average of 66.6% of GDP for OECD Countries. (Denmark – 210.8%, Iceland – 219.1%, Canada – 167.2%, Australia – 148.8%, Sweden – 101.8%, US - 170%, UK - 135%)[1].

National Pension System (NPS) NPS is the best-suited plan for retirement planning and the most viable offering by employers as a retirement benefit scheme to its employees.

The design features of NPS architecture are:

- **Self-sustaining** i.e., Fully Funded scheme (contribution both by employee and employer)
- **Unbundled architecture** (NPS Trust, Pension Funds, Central Record Keeping Agency, Trustee Bank, Custodian of Securities, Nodal Offices, Point of Presence, Annuity Service Providers)
- **Individual choices and flexibility** (Investment Management pattern, choice of Pension Funds) – Life Cycle (LC)-25, LC-50, & LC 75
- **Low intermediation or transaction cost,** efficient processes, minimum Turnaround Times, Portable across employers
- **Disclosures, Transparency:** Mark-to-Market of NPS Portfolio on daily basis
- Pension System is based on **sound and prudent investment regulations** (hedge for credit risk, liquidity risk, and concentration risk)
- **Pension Risk Profile assessment and disclosure** by the Pension Funds

By design, NPS covers the 1st phase of retirement planning or accumulation phase and the 2nd phase of decumulation is complemented by the insurance industry. A minimum of 40% of the NPS corpus has to be necessarily utilized by the subscribers for purchasing an annuity plan from an insurance company, empaneled by PFRDA and regulated by IRDAI.

AUM under National Pension System including Atal Pension Yojana (APY) has reached a level of Rs. 8.53 lakh crore as of 31 December 2022 and the asset class-wise composition was (G-sec and SDL – Rs 4,35,579 crore (51%), Corporate Bonds – Rs 2,32,959 crore (27%), Equity – Rs 144726 crore (17%), REITs/InvITs – Rs 1,087 crore (0.13%), Money Market – Rs 26,273 crore (3%), Cash & Current assets – Rs 12,788 crore (2%)). The AUM under NPS & APY has grown @ 31% (CAGR) and # of Subscribers has grown @ 25% during the last five years period. The AUM is expected to reach a level of Rs 9.25 trillion by 31 March 2023.

Since inception returns are in the range of 9.34% to 9.57% in the CG scheme and 9.24%

[1] For further information, please refer to the OECD Website.

to 9.33% in the SG scheme as at 13 January 2023.

Insurance and Pension are essential for the financial security of individuals and families, as they provide a safety net for unexpected events, and help citizens plan for their retirement. But they also play a larger role in the economy.

Pension and Insurance assets being long-term funds have immense potential for contributing towards the growth of the economy. These assets facilitate in (i) infrastructural funding (18% of the NPS & APY AUM as at 31.12.2022 is invested in the infrastructure sector corporate bond market i.e. Rs 1,53,296 crore), (ii) deepening of the capital markets and (iii) support government borrowings program.

The Bond Portfolio of Pension and Insurance Funds has a long duration on an average vis-à-vis other Investment funds thus contributing to the financial stability of the economy.

Sustainable Investments

With the trends of balancing environmental sustainability with economic growth and ambitions to significantly reduce the carbon intensity of the economy, sustainable finance, and investments have received a lot of priority globally.

Sustainable Investments including ESG investments have grown from 27.9% in 2016 to 35.9% of the total investments in 2020 globally, as per Global Sustainable Investment Review 2020.

Research findings suggest that i) incorporating ESG factors does not mean having to sacrifice return; and ii) ESG factors are material credit risk in fixed-income securities analysis. Going forward, ESG assessment shall be interwoven with a credit risk analysis of corporate bond portfolio (Inderst, G. & Stewart, F., 2018).

India's climate actions have so far been financed domestically and proposed introduction of Sovereign Green Bonds of Rs 16,000 crore, as a part of overall market borrowing program during the current FY 23, is an attempt to garner finances for deployment in public-sector projects to reduce carbon-intensity of the economy.

The long-term Investment Funds including Pension and Insurance Funds can play a major role.

Confluence of Insurance and Pension Industry:

The design of NPS supplements both the pension and the insurance industry in the sense that after the initial accumulation phase of NPS, the role of the insurance industry emerges during the deaccumulation phase. On a conservative basis, based on the existing corpus of those NPS subscribers who are going to retire in the next five years, an amount of Rs 11,000 crores or more will flow to the insurance industry in the form of annuity purchases by them.

The annuitants need to be safeguarded from the effects of rising inflation and there is a need to design inflation-protected annuity plans.

The inputs from Sh. Mono M G Phukon, CGM, and Mr. Pushpinder Singh, AM, PFRDA are thankfully acknowledged.

References

Inderst, G. & Stewart, F. (2018). *Incorporating Environmental, Social and Governance (ESG) factors into Fixed Income Investment*. The World Bank Group, Washington D.C.

OECD (2021). *Pensions at a glance 2021: Country profiles–India*

(*https://www.oecd.org/els/public-pensions/PAG2021-country-profile-India.pdf*)

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Section 3

Papers, Articles & Surveys

Article

Need for Developing an Annuity Market in India

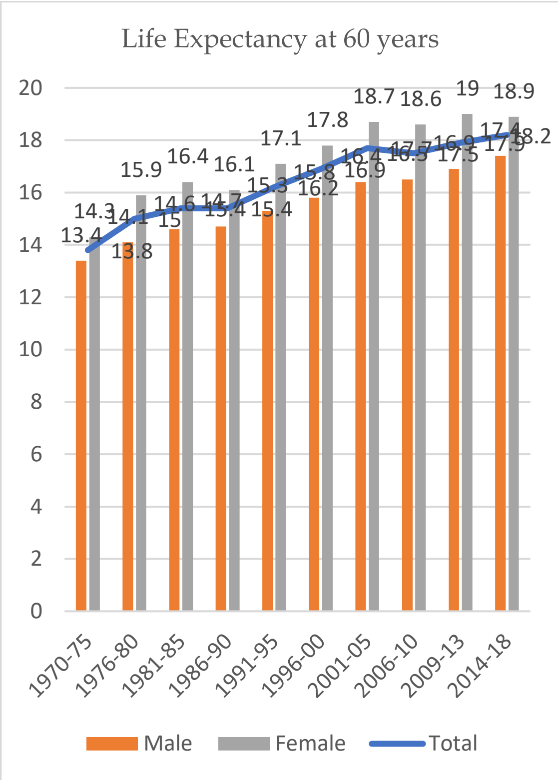
Written by
Ms. Alpana Vats,
General Manager, PFRDA

Since 1900 the global average life expectancy has more than doubled and is now above 70 years. Improvements in life expectancy directly increase the number of people in retirement, ceteris paribus, as people live longer. Additionally, increasing life expectancy also directly raises the amount of savings needed to maintain a certain standard of living at retirement. Ageing will affect the economy as a whole by increasing dependency ratio and lowering potential GDP growth; and by affecting productivity, savings, consumption, interest rates and asset valuations.

The increase in the number of people in retiring relative to the number of people in working age will create serious financial troubles to PAYG-financed pensions (generally public pensions. Thus, public pensions would see the number of people in workforce dwindle relative to those withdrawing benefits, increasing public expenditure on pensions. According to an estimate by OECD, the improvement in life expectancy by 1.2 year per decade can increase pension payout by 2.4% subscribers aged 65 years or more. This has resulted in global phenomena of switching to privately managed DC pension system from erstwhile in vogue DB or PAYG system.

Life expectancy in India

An NSO report titled 'Elderly in India' indicates that life expectancy at 60 years for male has increased from 13.4 years in 1970-75 to 17.4 years in 2014-18 and for female it has increased from 14.3 years to 18.9 years for the same period.



To address the growing burden of pension liabilities and increasing life expectancy, New Pension System (NPS) was introduced in India in 2004. NPS is a funded Defined Contribution (DC) System was made mandatory for employees of Central Government who have joined services on or after 1st January 2004. Subsequently all the State Governments except West Bengal also joined the NPS[2]. This is a Two Tier System – Tier 1 being Contributory, Tax deferred System under which employees contribute 10% of

[2] PFRDA Annual Report - 2021-22

her/his salary, matched by 10%/14 % contribution made by the employer. Additionally, NPS provided the benefit of a withdrawable Tier 2 account as a voluntary savings scheme.

The paradigm shift from DB to DC pension arrangements combined with population ageing brings in additional challenges with respect to saving and investing for retirement. With the increasing life expectancy, people would need to save more and in order to encourage greater savings, financial markets need to be sufficiently developed and structured so that investments can be channelled efficiently to deliver adequate returns.

Distinct phases of NPS- Accumulation and Decumulation

The DC pension system, like NPS, has two distinct phases, i.e. accumulation and decumulation. Accumulation is the phase when an employee/member accumulates savings and creates pension wealth for future. Decumulation is a pay-out phase. Under NPS, accumulation phase is managed through channelling of investments to the pension fund manager empanelled approved by the pension regulator of India- Pension Fund Regulatory and Development Authority (PFRDA). Decumulation phase will be managed by a life insurance company approved by Insurance Regulatory Development Authority of India (IRDAI). This article focuses on the decumulation phase of DC system.

Decumulation or pay out under DC pension system, in general, can be managed through various methods like annuity, lump sum withdrawals, phased withdrawal and/or any combination of them. Most of the countries like Chile, Mexico, Peru which have reformed their pension systems and introduced DC pension opted for Annuitisation. Most of the Latin American countries linked their pension reforms to mandatory Annuitisation. Decumulation in National Pension System (NPS) is mandatorily linked to annuitisation. According to the NPS Provision, any member can exit from NPS at age 60 (Retirement age in India). However, the member has to mandatorily invest at least 40% of his/her pension wealth to purchase an annuity from a life insurance company approved by the IRDAI.

The choice of method would be determined with the need to strike a balance between flexibility and protection from longevity risk and in the context of that country. Life annuities protect from longevity risk, but they are illiquid, and consequently lack the flexibility to address contingencies that people may face at retirement (e.g. need to pay down debt, health care expenses). Programmed withdrawals and lump-sums provide more flexibility in using these balances but do not protect retirees from longevity risk. However,

Annuity Market in India

The annuity market currently offers a limited range of annuity products to individuals. These products are designed to insure against different risks, although virtually all annuities serve the core function of insuring against the risk of outliving one's resources.

In the past three decades many macroeconomic and demographic changes have occurred that have affected the value of retail annuities. The increase in life expectancy and decline in interest rates have potentially reduced the annuity pay-out for the retirees.

With increasing life expectancy and ever-increasing population cohort entering the decumulation phase, the responsibility of supplying the appropriate annuity products to meet the needs of implementation of the mandatory annuitisation would fall on the shoulders of the vibrant and dynamic life insurance market.

The decumulation phase involves investment, as well as longevity challenges, especially if specific patterns of pay-outs such as regular pay-outs of fixed amounts are aimed at. Financial markets are able to offer decumulation products with fixed payment promises to the extent they are able to invest in financial assets that allow them to hedge a considerable part of the risks associated with the payment promises they extend. The exposure to longevity risk and the lack of financial instruments and insufficient quantities of appropriate assets to hedge other risks such as interest rate and inflation risk, partly explain the limited interest of the financial intermediaries in offering annuity products.

The pension AUM of India is estimated to be around 15-16 % of GDP which is way lesser than the developed OECD countries.[3] However, with maturity of NPS and expanding coverage under NPS system, the demand for annuity will see a significant growth and will give boost to annuity business. Presently, there are 24 life insurance companies registered with IRDAI of which, 15 are empanelled with PFRDA to provide annuity services to NPS subscribers during decumulation phase.

Growth in AUM of pension, general annuity and group fund of life insurance companies may be seen in the table below:

(Rs. Lakh Cr)

'16-17	'17-18	'18-19	'19-20	'20-21	'21-22
5.66	6.74	7.74	8.98	10.43	11.66

(Source: Handbook on Indian Insurance Statistics '21-22)

Determinants of Annuity Rate

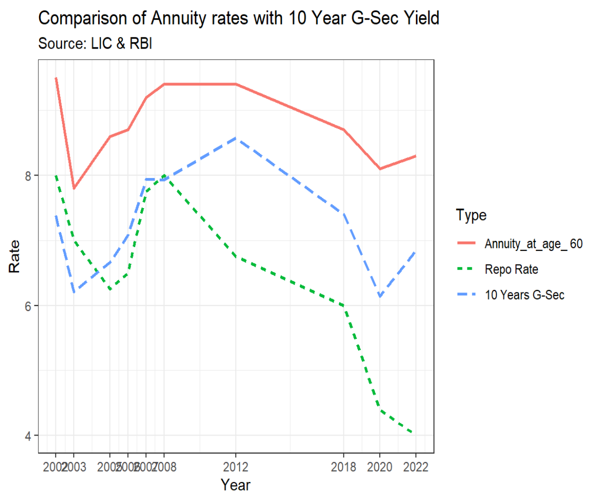
Some of the important factors which determine the annuity rate are discussed below**:**

Age - The Older is the beneficiary/ joint annuity holder, the higher will be the annuity payments (rates) (Life expectancy will be less). (Exhibit 1)

Exhibit 1

[3] Author's calculation

Exhibit 2



Accumulated Corpus - The more is the corpus to be annuitize, the more is the annuity income.

Gender - Women get less money than men of the same age because they are expected to live longer. (Annexure I)

Interest rate - If interest rates are high at the time of purchase of annuity, the annuity payments will be higher than if interest rates were low. (Exhibit 2)

Time duration of guaranteed period - the number of years to receive payments with a term-certain annuity. The shorter the term, the higher the payments. In case of joint life annuity, the payments continue to the spouse and then to the dependent children after death of the member. The longer is the period the payments after death of the original annuitant, the less the spouse gets each month while he/she is alive. (Annexure I)

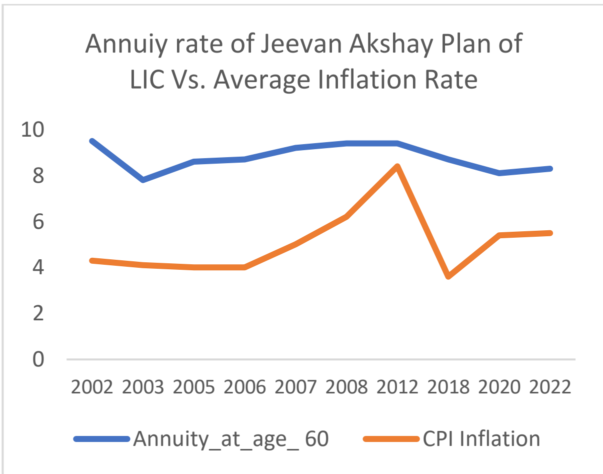
Options added - The highest income payout is with a basic annuity that covers members only. Any option added lowers the amount of annuity payout.

Constraints of Annuity Market

i) Actuarial issues: India is experiencing sustained improvement in longevity, though its rate and extent remains uncertain. Given India's heterogeneity of ethnic and occupational groups, annuity providers may face considerable challenges in pricing different annuity products. Mortality forecast errors may underestimate the average life expectancy of their annuitants and resulting in Insurance companies adding substantial cost loadings to cover these risks, thus decreasing the annuity rate made available to the subscriber.

ii) Inflation risk: Annuity is a long-term product and pay-outs may continue for more than 20 years after retirement. If they are fixed only in nominal rate, inflation may lead to a steady erosion of value. Increasing longevity compounds the cumulative impact of even low inflation rates. Inflation losses are particularly damaging for retirees because they may not be able to make up by increasing their earnings or saving power. Current annuity options in India only partially address inflation risks.

Exhibit 3



iii) Interest rate risk: Annuity rates vary substantially over the interest rate cycle. They are related to the yields on government bonds of the same expected term; and since these yields vary by up to 150-200 basis points over the cycle, annuity rates will vary by the same order of magnitude.

iv) Market Risk and Reinvestment risk: Annuities are long term financial instruments and are consequently subject to higher market risk than short duration products. The most challenging issue for annuity underwriters is to match annuity-related liabilities with an appropriate pool of long-term investments. Since most annuity pay-outs tend to be fixed and guaranteed at purchase, annuity providers invest predominantly in long term corporate bonds and government securities. An adequate float of bonds with maturities of at least 10 years would be necessary to address asset-liability mismatches of annuity issuers in India. Insurance companies that sell life annuities are substantially invested in assets with maturities lower than their future annuity liabilities. As a result, annuity providers may be exposed to reinvestment risk, and are likely to safeguard their position by assigning a higher pricing to annuities.

v) Need for more disclosure about the costing and charges: There is need for more disclosure by the insurance companies regarding costing and charges of annuity product. More transparency and disclosure may encourage competition in the annuity market resulting in lowering in annuity cost and creating value for money for many people.

vi) Financial education and literacy: The need for financial education and retirement planning information for investors as well as pension advisors, distributors and employers is critical. PFRDA and IRDA, in association with employers and insurance companies, must ensure that annuity purchasers have access to information about the benefits and costs of different schemes and providers. Improved financial literacy has been observed to lead to greater participation as well as higher average saving in other countries.

Way Forward

Annuity markets are crucially important, for they play a substantial part in determining the well-being of their members at a time in their lives when their human capital is behind them and income alternatives few. These markets will grow in importance as state-sponsored channels and defined benefit plans reduce in significance and as increasing numbers of workers with individual account arrangements reach and pass their retirement age. To improve the market for annuities which at the moment are the weak tail in DC pension provision in India one key issue is supply of long-term instruments such as indexed bonds that would enable annuity providers to hedge risks (such as inflation, reinvestment and mortality risks). Another key issue would be product innovation in using existing financial instruments and established investment management strategies to help its customers hedge risks such as interest rate risk. The products have to be distributed and marketed through innovative channels, and members have to be made aware of the benefits and annuity choices to available to them. Increasing financial literacy will be critical to improving the coverage and depth for annuity market.

Initial cohort of government employees who became part of Defined Contribution Pension System (DCPS) would be retiring in next 4-5 years, hence the time is ripe for the regulators and government to take proactive steps towards developing annuity market in India.

The author thankfully acknowledges contribution of Sh. Pushpinder Singh in writing this article. The views expressed in the article are of the author and not of PFRDA.

References

Asher Mukul G, Vasudevan Deepa. *Market Structure and Challenges for Annuities in India*, Wharton Pension Research Council Working Papers, 09.01.2010

Blake, D. 1999. *Annuity Markets: Problems and Solutions*. The Geneva Papers on Risk and Insurance. July: pp. 359–375.

Brown, J. 2000. *How Should We Insure Longevity Risk in Pensions and Social Security?* Issue in Brief, Center for Retirement Research, Boston College, Boston, MA, August 2000. No.4.

Christopher O'Brien. *Annuities: a complex market for consumers*, 2013.

James E, Sane R, *Annuity Market in India, What Are the Key Public Policy Issues*, Economic and Political Weekly, 2003, pg. 729-740

NSO, MOSPI, *Elderly in India, 2021*

Poterba, James M, 2001. *Annuity Markets and Retirement Security*, Fiscal Studies (2001) vol. 22, no. 3, pp. 249–270.

Shlomo Benartzi, Alessandro Previtero, and Richard H. Thaler. 2011, *Annutization Puzzles*, Journal of Economic Perspectives—Volume 25, Number 4—Fall 2011—Pages 143–164

Annexure I

I. Annuity Rate at 60 for Male subscriber for the corpus of Rs. 1.00 crore

ASP	Scheme Name				
	With Return of Purchase Price (With ROP)			Without Return of Purchase Price (Without ROP)	
	Annuity for Life	Joint Life Annuity	NPS - Family Income	Annuity for Life	Joint Life Annuity
Aditya Birla Sun Life Insurance Co. Ltd	54,269 (6.78%)	54,506 (6.81%)	54,506 (6.81%)	67,056 (8.38%)	58,213 (7.28%)
Bajaj Allianz Life Insurance Co. Ltd	59,418 (7.13%)	59,099 (7.09%)	55,4635 (6.66%)	68,128 (8.18%)	58,789 (7.05%)
Edelweiss Tokio Life Insurance Co. Ltd	48,176 (5.78%)	46,986 (5.64%)	46,986 (5.64%)	63,894 (7.67%)	54,293 (6.52%)
HDFC Life Insurance Co. Ltd	58,320 (7.0%)	58,080 (6.97%)	49,811 (5.98%)	73,200 (8.78%)	64,640 (7.76%)
ICICI Prudential Life Insurance Co. Ltd	55,725 (6.69%)	55,558 (6.67%)	49,606 (5.95%)	61,868 (7.42%)	53,988 (6.48%)
India First Life Insurance Co. Ltd	Not Available	Not Available	Not Available	Not Available	Not Available
Kotak Mahindra Life Insurance Co. Ltd	Not Available	Not Available	Not Available	Not Available	Not Available
Life Insurance Corporation of India	50,325 (6.04%)	50,240 (6.03%)	50,240 (6.03%)	69,960 (8.40%)	61,375 (7.36%)
MAX Life Insurance Co. Ltd	59,392 (7.13%)	59,384 (7.13%)	59,384 (7.13%)	76,208 (9.14%)	65,968 (7.92%)
PNB Metlife India Insurance Co. Ltd	54,070 (6.49%)	53,999 (6.48%)	Not Applicable	66,643 (8.00%)	60,963 (7.32%)
SBI Life Insurance Co. Ltd	59,452 (7.13%)	58,980 (7.08%)	58,980 (7.08%)	70,086 (8.41%)	63,890 (7.67%)
Shriram Life Insurance Co. Ltd.	58,359 (7.00%)	58,368 (7.00%)	58,359 (7.00%)	77,028 (9.24%)	68,008 (8.16%)
Star Union Dai-ichi Life Insurance Co. Ltd	45,332 (5.44%)	44,932 (5.39%)	44,932 (5.39%)	65,249 (7.83%)	55,794 (6.7%)
TATA AIA Insurance Co. Ltd	58,776 (7.05%)	58,939 (7.07%)	Not Applicable	57,804 (6.94%)	57,429 (6.89%)

(Rates as on 27.02.2023)

II. Annuity Rate at 60 for Female subscriber for the corpus of Rs. 1.00 crore

ASP	Scheme Name				
	With Return of Purchase Price (With ROP)			Without Return of Purchase Price (Without ROP)	
	Annuity for Life	Joint Life Annuity	NPS - Family Income	Annuity for Life	Joint Life Annuity
Aditya Birla Sun Life Insurance Co. Ltd	54,197 (6.77%)	55,035 (6.8%)	55,035 (6.88%)	64,900 (8.11%)	59,668 (7.46%)
Bajaj Allianz Life Insurance Co. Ltd	59,418 (7.13%)	59,099 (7.0%)	55,463 (6.66%)	68,127 (8.18%)	58,788 (7.05%)
Canara HSBC Life Insurance Co. Ltd.	Not Available	Not Available	Not Available	Not Available	Not Available
Edelweiss Tokio Life Insurance Co. Ltd	47,836 (5.74%)	47,071 (5.6%)	47,071 (5.65%)	61,006 (7.32%)	54,293 (6.52%)
HDFC Life Insurance Co. Ltd	58,240 (6.99%)	58,080 (6.97%)	49,811 (5.98%)	70,560 (8.47%)	64,640 (7.76%)
ICICI Prudential Life Insurance Co. Ltd	55,657 (6.68%)	55,566 (6.67%)	49,611 (5.95%)	59,124 (7.09%)	54,081 (6.49%)
IndiaFirst Life Insurance Co. Ltd	50,923 (6.11%)	50,747 (6.09%)	50,747 (6.09%)	65,654 (7.88%)	52,201 (6.26%)
Kotak Mahindra Life Insurance Co. Ltd	57,186 (6.86%)	56,691 (6.8%)	57,186 (6.86%)	72,100 (8.65%)	62,624 (7.51%)
Life Insurance Corporation of India	50,325 (6.04%)	50,240 (6.0%)	50,240 (6.03%)	69,960 (8.40%)	61,375 (7.36%)
MAX Life Insurance Co. Ltd	59,232 (7.11%)	59,400 (7.1%)	59,400 (7.13%)	73,496 (8.82%)	66,064 (7.93%)
PNB Met life India Insurance Co. Ltd	54,070 (6.49%)	54,000 (6.4%)	Not Applicable	66,643 (8.00%)	60,963(7.32%)
SBI Life Insurance Co. Ltd	59,452(7.13%)	58,980 (7.0%)	58,980 (7.08%)	70,086.(8.41%)	63,890(7.67%)
Shriram Life Insurance Co. Ltd.	58,359(7.00%)	58,368 (7.0%)	58,359(7.00%)	77,028 (9.24%)	68,008 (8.16%)
TATA AIA Insurance Co. Ltd	58,612 (7.03%)	58,939 (7.0%)	Not Applicable	Not Applicable	0 (0.00%)

(Rates as on 27.02.2023)

Section 4

Do you Know?

Net Asset Value (NAV)

What is NAV?

NAV is a widely used term for ascertaining value of claim on a Mutual Fund scheme (henceforth mentioned as scheme) asset in Mutual Fund Industry. The NAV is market value of a unit in a pooled-fund scheme managed scheme by an Asset management company (AMC). AMCs are the financial intermediaries that invest funds collected from individuals in a particular scheme. It is calculated on a per unit basis using the market value of net assets (Total asset – liabilities) of the scheme and total units subscribed by the subscribers/investors. The NAV is used to estimate the returns for a period of investment. It also represents the claim of an individual subscriber in the total invested fund in a scheme through the number of units held. The NAV is the value at which a unit is available to be invested/sold and it is calculated on a daily basis.

NAV calculation Methodology

NAV depends on the scheme total assets, fund management and maintenance charges and total units outstanding. The fund management charges are expenses of AMC on account of brokerage fees paid, fund management fee, fee to the recordkeeping agents and distribution channels, etc that are deducted from market value of assets under the scheme with applicable taxes. The total net asset value is the difference between market value of all the securities held by a particular scheme, cash and interest accrued in the portfolio of the scheme and deductions on the account of liabilities (if any).

$$NAV = \frac{Market\ value\ of\ assets - liabilities}{Total\ units\ outstanding}$$

The expenses incurred are deducted from the NAV. Generally, fund management companies notify the expenses incurred in terms of a percentage of the total asset under management. The higher value of expense ratio of fund management companies reduces the NAV and hence returns generated thereon. The calculations are performed at the end of each trading day. The expense ratio is generally published as an annual percentage that is converted on a daily basis to calculate NAV. It is expected that as the AUM increases the expense ratio declines.

How does NAV help in tracking the performance of a fund?

The use of NAV is to track the performance of an investment fund/scheme. For instance, the NAV of a mutual fund is X on January 01^{st}, 2022, and Y on January 01^{st}, 2023. The annual return, i, generated by the mutual fund can be given as:

$$i = \frac{(Y - X)}{X} * 100$$

It helps an investor find the total market value of the investments made in a particular investment fund/scheme. Suppose an investor holds α units in total of a fund (regardless of the date of investment) and the NAV is Y. Then the market value of total holdings of the subscriber is α*Y.

Debt Funds and NAV

The debt funds are the funds that invest in fixed-income securities such as Central Government securities, State Development Loans (SDL), Corporate Bonds, etc. The NAV of a debt fund is the outcome of periodic interest payments, and differences in bond price due to change in the bond yield. Bond may have either a coupon or are zero coupon. Interest payments can be annual, bi-annual, or quarterly and at maturity. Interest payments are adjusted on daily accrual basis in the scheme asset value accordingly.

Section 5

International Studies

Country Profile: CANADA

Old Age Security (OAS) is a well-known program in Canada to provide basic pensions to senior citizens residing in the country. The OAS is augmented by the Canada Pension Plan (CPP) (second pillar) and private savings (third pillar). The OAS and CPP are statutorily backed by Old Age Security Act (1985) and Canada Pension Plan Act respectively.

Table 1: Key Indicators (Source: OECD & The World Bank, 2021)

Pension Asset as % of GDP	166%
Life Expectancy (at birth)	82
Old age Dependency (%)	28%

Old Age Security

- Persons of age 65 and above who meet the requirements related to legal and residential conditions are eligible for the monthly taxable pension.
- The persons receiving OAS pension are eligible for Guaranteed Income Supplement (GIS) if they satisfy low-income conditions.
- The spouse of a citizen receiving an OAS pension is eligible for monthly allowance in case the age is between 60-64 years.
- The pensions are automatically adjusted to a price index.
- The statutory pension is a part of the social security system. The payments for the same are deducted from the salaries of employees and the self-employed pay contributions on a quarterly basis.
- Every citizen, 65 or older, whose total income (including pension) is less than a threshold is also eligible for a Guaranteed Income for Elders (GIE).

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Policy guidance on developing asset-backed Pension Arrangements*

**Excerpts from Pension Outlook, 2022*

This chapter talks about the policy guidance on how best to develop asset-backed pension arrangements with the past experience of OECD member countries to identify the key challenges and considerations ahead of introducing asset-backed arrangements.

1. Following are the matters policymakers need to take into account before introducing asset-backed pension arrangements-

- **Deciding on an institutional and legal structure for asset-backed pension provision-** The experience of OECD countries shows that there is a spectrum of ways in which pension provision is integrated into financial services entities. On one end of the spectrum is a situation where pension provision is simply provided by an existing entity such as a bank, mutual fund, or insurance company. On the other end is a model of pension provision that has no ties to the rest of the financial services industry.
- **Ensuring good governance**- Good governance is the key to ensuring that the assets in the asset-backed pension arrangement are managed carefully and in the interest of beneficiaries. Good governance minimizes agency problems and avoids conflicts of interest to enhance investment performance and benefit security.
- **Managing with the capital market that are incomplete or lack depth, or situations of high inflation** – The experience of OECD countries has shown that introducing assets-backed pension arrangements can come with risks when capital markets are incomplete or lack depth, or in a situation of high inflation. The risk of having few financial instruments for pension providers to invest in due to the limited range of investment vehicles. Such risk leads to a situation where pension providers are unable to diversify their investments. Inflation is another risk that policymakers may wish to account for. One way to help pension providers partially hedge against inflation risk is for government to issue inflation-indexed bonds, shifting the inflation risk onto the issuer.
- **Deciding on the supervisory structure** – Before reforming the asset-backed arrangements, policymakers need to consider what type of entity will supervise the arrangements and how the supervisor will function.
- **Protecting members' retirement savings** – Policymakers need to consider what mechanisms might be needed to protect the assets that underlie asset-backed pension arrangements. Having asset-backed pension arrangements does not immediately imply that members are protected from insolvency risk. To support insolvency legislation, countries can also put in place insolvency insurance regimes.
- **Building support for change** – Important point policymakers need to consider ahead of introducing or expanding asset-backed arrangements is how to build support for change. The experience of OECD countries has shown that failing to build an evidence base for change and obtain consensus from veto groups can be fatal to reform. This is why shiftinpublic opinion in favour of change could start with a process that builds the case for asset-backed

pension system reform, followed by consensus-building efforts.

2. When implementing a reform that introduces or expands an asset-backed pension arrangement, policymakers need to consider how to operationalize the main functions that will underlie new or reformed schemes. This entails defining or revising the new roles and functions that regulators, supervisors, and pension entities will have to assume. Key considerations include:

- Governments might need additional operational capabilities to handle new or reformed asset-backed pension arrangements. They may need to reform or update government agencies' functions by building new operating systems, introducing new practices, training staff, and setting up collaboration mechanisms between different agencies.
- Supervisory authorities may need to revise licensing requirements for pension entities, supervisory powers, and procedures to monitor the activities of providers and resolve problems.
- Policymakers may also need to consider key aspects of account administration, such as contribution collection, record-keeping, and data reporting. Namely, they may wish to reconsider whether such functions should be centralized or done by providers, and what data they need to collect.

3. Strengthening or maintaining an existing asset-backed pension arrangement.

Policymakers find themselves needing to take steps to maintain and strengthen asset-backed pension arrangements, even when those arrangements are set up and implemented well as many issues can arise that prevent them from achieving their objectives.

Policymakers should address governance shortcomings when existing requirements are not enough to forestall governance failures. The main ongoing issues for policymakers have been a lack of governing body skills, poor oversight of outsourced functions, failures to merge or consolidate, conflicts of interest, and a lack of diversity among governing body members. Countries have addressed these different areas of concern by:

- Assessing board performance through self-assessment processes, external expert reviews, or internal governance structures.
- Improving governing body skills through ongoing training programmes and educational campaigns.
- Amending reporting and disclosure requirements to better document outsourced activities, increasing transparency and accountability.
- Requiring or nudging schemes with poor performance to consolidate.
- Clarifying conflict of interest rules through educational support and test cases.
- Requiring better internal controls and independent governing body members to better identify and manage conflicts of interest.
- Encouraging greater diversity among governing bodies.

4. Conclusion

Maintaining asset-backed pension arrangements requires ensuring that people trust pension systems, understand them, and understand what they need to do to secure an adequate retirement income. This has been a challenge in many countries. Asset backed pension arrangements call for resilience and responsiveness to risks. Risks that affect these types of arrangements include investment risk, counterparty risk, liquidity risk, and operational risks. In order to address these risks, countries generally:

- Have in place risk management strategies that include strategies to identify, measure, assess, control and report on risks.
- Have internal control mechanisms, and good information and reporting channels.

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Section 6

Circulars

Circular No. PFRDA/2023/01/Sup-CRA/01

Date of Circular	Subject
January 04, 2023	Online claim Processing by intermediaries using Technology- Aadhaar & VCIP-reg

In line with the technological advancements and for ensuring seamless exit claim processing, it has been decided to allow the intermediaries to use technological intervention by using VCIP as an added due diligence mechanism for verification of the nominee/claimant/legal heir while processing the withdrawal claims in case of death of NPS subscribers.

Circular No. PFRDA/2023/02/SUP- CRA/02

Date of Circular	Subject
January 10, 2023	Empowering APY Subscribers with ease of Aadhaar Seeding - Launch of Seeding Convenience through CRA Portal & Mobile App

The facility of Aadhaar seeding is provided for the benefit of Subscribers through CRA portal and through NPS Mobile app “APY and NPS Lite”. Additionally, APY-SPs can also collect the Aadhaar details from their associated subscribers who are their customers with due consent which would then be shared with CRA for seeding.

Circular No. PFRDA/2023/03/Fintech /01

Date of Circular	Subject
January 12, 2023	Independent Bank Account Verification & Name/PAN Matching for enhanced due diligence using PRAN-PAN- VPA(UPI) using NPCI Framework

PFRDA has enabled robust technological interventions & continuous System level enhancements for discerning outcome through its Central Record Keeping Agencies (CRA) to provide a safe, secure and seamless processing of various Subscribers' service requests.

Circular No. PFRDA/2023/05/REG-POP /02

Date of Circular	**Subject**
January 23, 2023	Guidelines on Know Your Customer / Anti-Money Laundering / Combating the Financing of Terrorism (KYC/AML/CFT)

Entities registered as Point of Presence (PoP) are required to comply with the requirements of Prevention of Money Laundering Act, 2002 as per Regulation 15 of the PFRDA (Point of Presence) Regulations, 2018. These guidelines are issued under the provisions of PML Act and Rules.

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Section 7

Data Center

(NPS & APY Statistics)

I. Sector Wise Growth

The total number of subscribers, contributions, and assets under management for the National Pension System (NPS) and Atal Pension Yojana (APY) as on January 31, 2023, are as under. The below data is a compilation of data from both the CRAs under NPS and APY.

i. **No. of Subscribers:** The number of subscribers in various schemes under the NPS and APY rose to 614.72 lakhs by the end of January 2023 from 495.34 lakh in January 2022 showing a year-on-year (Y-o-Y) growth of 24.10%.

Table 1: NPS & APY growth in Subscribers base as on 31st January 2023

S.N.	Sector	No. of Subscribers (in lakh)			Growth (%)	%
		31-Jan-22	31-Mar-22	31-Jan-23	YOY	Share
A	CG	22.61	22.84	23.66	4.63	3.85
B	SG	55.15	55.77	60.33	9.39	9.81
C	**Sub Total (A+B)**	**77.76**	**78.61**	**83.98**		**13.66**
D	Corporate	13.59	14.04	16.43	20.93	2.67
E	All Citizen	20.38	22.92	27.54	35.13	4.48
F	**Sub Total (D+E)**	**33.97**	**36.96**	**43.97**		**7.15**
G	NPS Lite	41.89	41.87	41.78		6.80
H	APY	341.72	362.77	444.98	30.22	72.39
I	**Grand Total (C+F+G+H)**	**495.34**	**520.21**	**614.72**	**24.10**	**100.00**

ii. **Contribution:** As on 31st January 2023, total contribution for both NPS and APY stood at Rs. 6,60,772 crores showing a Y-o-Y growth of 27.11%.

iii. **Assets under Management:** As on 31st January 2023, total pension assets under management for both NPS and APY stood at Rs. 8,65,029 crores showing a Y-o-Y growth of 22.56%.

Table 2: NPS & APY growth in contribution (Rs. in crore) as on 31st January 2023.

S.N.	Sector	Contribution (Rs. in crore)			Growth(%)	%
		31-Jan-22	31-Mar-22	31-Jan-23	YOY	Share
A	CG	1,45,599	1,50,491	1,77,248	21.74	26.83
B	SG	2,62,978	2,74,950	3,29,815	25.42	49.92
C	**Sub Total (A+B)**	**4,08,577**	**4,25,441**	**5,07,063**		**76.74**
D	Corporate	60,117	66,089	84,275	40.18	12.75
E	All Citizen	30,325	33,347	42,822	41.21	6.48
F	**Sub Total (D+E)**	**90,442**	**99,436**	**1,27,097**		**19.24**
G	NPS Lite	2,977	3,017	3,155	5.98	0.48
H	APY	17,795	18,647	23,407	31.54	3.54
I	**Grand Total (C+F+G+H)**	**5,19,791**	**5,46,541**	**6,60,722**	**27.11**	**100.00**

Table 3: NPS & APY growth in AUM (in crores) as on 31st January 2023.

S.N.	Sector	AUM (Rs. in crore)			Growth (%)	%
		31-Jan-22	31-Mar-22	31-Jan-23	YOY	Share
A	CG	2,12,652	2,18,577	2,50,058	17.59	28.91
B	SG	3,54,922	3,69,427	4,32,655	21.90	50.02
C	**Sub Total (A+B)**	**5,67,574**	**5,88,004**	**6,82,713**		
D	Corporate	83,767	90,633	1,11,944	33.64	12.94
E	All Citizen	29,776	32,346	39,944	34.15	4.62
F	**Sub Total (D+E)**	**1,13,543**	**1,22,979**	**1,51,888**		
G	NPS Lite	4,629	4,687	4,856	4.91	0.56
H	APY	20,060	20,923	25,571	27.47	2.96
I	**Grand Total (C+F+G+H)**	**7,05,806**	**7,36,592**	**8,65,029**	**22.56**	**100.00**

II. State wise data for SG Sector

Table 4: Total subscribers, contribution and AUM (in crores) in State Govt. Sector as on 31st January 2023.

States	No. of Subscribers	Total Contribution (Rs. Cr)	AUM (Rs. Cr)
Andhra Pradesh	2,91,211	12,264.59	17,293.51
Arunachal Pradesh	25,737	1,201.29	1,459.46
Assam	2,26,640	12,165.76	15,628.69
Bihar	2,15,148	12,640.32	16,191.56
Chandigarh	11,425	1,169.68	1,621.41
Chhattisgarh	2,96,453	12,149.88	17,773.44
Goa	35,498	2,734.12	3,674.38
Gujarat	2,32,380	13,922.71	19,065.27
Haryana	1,64,866	11,621.82	15,568.48
Himachal Pradesh	1,18,978	7,612.75	9,242.60
J & K	1,46,815	7,911.33	10,323.39
Jharkhand	1,20,940	8,110.45	11,566.03
Karnataka	2,62,362	16,983.41	23,663.54
Kerala	1,78,089	6,350.42	7,624.56
Ladakh	5,861	332.26	436.62
Madhya Pradesh	4,87,287	19,573.04	36,667.74
Maharashtra	3,16,772	23,918.64	31,426.13
Manipur	48,289	1,861.92	2,506.41
Meghalaya	20,204	789.03	996.20
Mizoram	9,325	494.32	619.65
Nagaland	31,430	1,210.71	1,446.65
Odisha	2,84,342	11,561.29	14,754.78
Puducherry	13,723	1,330.60	1,822.36
Punjab	1,86,199	14,012.23	18,271.35
Rajasthan	5,24,993	28,338.47	40,146.94
Sikkim	23,740	1,066.22	1,396.59
Telangana	1,67,943	9,695.73	13,704.00
Uttaranchal	86,043	7,687.29	10,721.60
Uttar Pradesh	5,53,661	28,836.39	36,981.78
Tamil Nadu	267	42.06	54.64
Tripura	7,005	64.81	70.71
West Bengal	434	57.44	81.85
Total	50,94,060	2,77,710.98	3,82,802.32

III. PFM-wise Assets under NPS schemes

Table 5: Pension Fund-wise Assets under Management (in crores) on 31st January, 2023.

PF	AUM (Rs. In Crore)			Growth (%)		Share (%)
	31-Jan-22	31-Mar-22	31-Jan-23	YOY	Over March 22	
SBI	2,71,877.65	2,82,475.65	3,27,332.41	20.40	15.88	37.84
LIC	2,00,304.55	2,09,386.28	2,44,487.29	22.06	16.76	28.26
UTI	1,94,707.38	2,01,918.52	2,33,004.59	19.67	15.40	26.94
ICICI	10,771.25	11,614.32	15,134.63	40.51	30.31	1.75
Kotak	2,088.24	2,229.93	2,694.87	29.05	20.85	0.31
HDFC	25,542.27	28,413.86	41,451.46	62.29	45.88	4.79
Birla	515.22	555.01	697.43	35.36	25.66	0.08
Tata			55.16	NA	NA	0.01
Max Life			26.26	NA	NA	0.00
Axis			145.77	NA	NA	0.02
Total	**7,05,806.57**	**7,36,593.56**	**8,65,029.86**	**22.56**	**17.44**	**100.00**

Table 6: Scheme-wise Assets under Management (in Crores) as on 31st January 2023

Scheme		AUM (Rs. In Crore)			Growth (%)		Share (%)
		31-Jan-22	31-Mar-22	31-Jan-23	YOY	Over March 22	
CG		2,11,344.27	2,16,883.09	2,44,558.08	15.72	12.76	28.27
SG		3,55,379.41	3,69,743.33	4,31,311.15	21.37	16.65	49.86
Corporate CG		45,048.61	47,343.05	56,472.45	25.36	19.28	6.53
TIER I	A	136.53	162.65	248.88	82.29	53.01	0.03
	E	27,520.25	30,303.86	40,518.48	47.23	33.71	4.68
	C	13,866.01	15,509.97	20,561.29	48.29	32.57	2.38
	G	24,563.35	27,630.39	37,055.06	50.86	34.11	4.28
NPS Lite		4,628.85	4,686.74	4,856.34	4.91	3.62	0.56
TIER II	E	1,352.37	1,424.51	1,645.33	21.66	15.50	0.19
	C	726.91	762.55	848.52	16.73	11.27	0.10
	G	1,174.34	1,214.08	1,372.40	16.87	13.04	0.16
	TTS	5.16	6.74	10.50	103.73	55.73	0.00
APY		20,060.51	20,922.60	25,571.37	27.47	22.22	2.96
Total Asset		**7,05,806.57**	**7,36,593.56**	**8,65,029.86**	**22.56**	**17.44**	**100.00**

IV. PFM-wise Return on NPS Schemes

Table 7: Returns since inception (in %) as on 31st January 2023.

Pension Funds		SBI	LIC	UTI	ICICI	KOTAK	HDFC	BIRLA	TATA	MAX LIFE	AXIS
CG		9.52	9.32	9.28							
SG		9.19	9.27	9.22							
Corporate-CG		9.16	9.27								
TIER I	A	8.72	7.55	6.36	6.88	6.58	8.44	6.18	2.55	-11.99	1.44
	E	10.39	12.27	11.77	11.85	11.33	14.21	11.73	0.47	-5.20	-2.43
	C	9.71	9.15	8.74	9.68	9.36	9.40	8.33	1.44	1.70	1.30
	G	9.03	9.86	8.15	8.42	8.40	9.01	7.58	2.67	2.93	2.08
TIER II	E	10.23	10.27	10.61	10.44	10.78	12.46	11.68	0.26	0.53	-2.24
	C	9.25	8.61	8.78	9.50	8.67	8.63	7.68	2.45	2.14	1.55
	G	9.00	10.10	8.74	8.50	8.16	9.14	6.85	3.08	2.10	1.44
TTS		3.38	5.97	4.14	4.80	6.24	4.40	6.44	2.60	1.78	1.18
NPS Lite		9.63	9.68	9.60		9.43					
APY		8.54	8.86	8.80							

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