

Defined Benefit Versus Defined Contribution Pension Systems in India: Comparative Evidence From EPS 1995, NPS, and International Pension Reform Experiences

*Ashish Honrao¹, Akruti Bose²

¹Research Scholar, JSPM University, Pune, Maharashtra, India;

²Assistant Professor, JSPM University, Pune, Maharashtra, India.

Corresponding author:

DOI: <https://doi.org/10.51583/IJLTEMAS.2026.150900012>

Received: 16 September 2026; Accepted: 21 September 2026; Published: 30 September 2026

ABSTRACT

India's retirement-income security architecture has undergone a fundamental structural transition over the past three decades, shifting from a defined-benefit (DB) logic centred on the Employees' Pension Scheme, 1995 (EPS-1995) toward a defined-contribution (DC) logic anchored in the National Pension System (NPS, introduced 2004), and, most recently, toward an explicitly hybrid design under the Unified Pension Scheme (UPS, 2025). This paper undertakes a secondary-data comparative analysis of defined-benefit and defined-contribution pension architecture in India, situating EPS-1995, NPS and UPS within the World Bank's multi-pillar pension taxonomy and against international pension-reform experience drawn from Chile, Sweden, the United Kingdom, Australia, and Central Europe. Drawing on EPFO and PFRDA administrative releases, OECD Pensions at a Glance indicators, and the academic and policy literature on pension privatization and its reversal, the paper finds that EPS-1995 exhibits classic vulnerabilities of an underfunded DB scheme – a recorded actuarial deficit, a wage ceiling and minimum pension that have lagged wage growth, and costly ex post corrections such as the 2022 Supreme Court higher-pension judgment – while the NPS, though fiscally robust and portable, leaves market, inflation and longevity risk almost entirely with the individual subscriber. International evidence, including Chile's 2025 reintroduction of an employer-financed defined-benefit layer into a pure-DC system and the politically costly reversal of mandatory private accounts in Hungary and Poland, suggests that durable old-age income security in India is unlikely to rest on a binary DB-versus-DC choice but on a deliberately layered, multi-pillar design. The paper closes with policy implications for EPFO, PFRDA and India's wider pension ecosystem.

Keywords: Defined Benefit Pension; Defined Contribution Pension; Employees' Pension Scheme 1995; National Pension System; Unified Pension Scheme.

INTRODUCTION

Pension systems are based on Public Finance, Labour Economics and Intergenerational Responsibility Policies. As a country's population ages and more workers enter the formal employment sector, the type of pension system adopted to ensure financial security in old age becomes increasingly important. This system can be a Defined Benefit (DB) based on government or employer guarantees, or a Defined Contribution (DC) based on the individual's own contributions and risks. This choice has a direct impact on the country's fiscal sustainability, retirement adequacy and the well-being of older citizens. The pension system in India is a clear example of this change. Over the past three decades, India has started with the Old Pension Scheme (OPS), an unfunded and fully Defined Benefit scheme for government employees. Then, a hybrid scheme called Employees' Pension Scheme, 1995 (EPS-1995) was launched for the organised private sector. Later, in 2004, the Defined Contribution based National Pension System (NPS) was launched. Over time, this scheme was opened up to state governments, the corporate sector and later to all citizens. Then, in 2025, a

clearly hybrid Unified Pension Scheme (UPS) was launched for central government employees. Very few large economies in the world have had the experience of implementing so many different types of pension schemes simultaneously in a span of just a generation.

This series of changes is not just an administrative reform, but also a symbol of the ongoing policy debate on who should bear the various financial risks of old age. These risks include Investment Risk, Inflation Risk, Longevity Risk and Political Risk arising from unfunded promises. EPS-1995 is a scheme that collects a fixed employer contribution and provides pension according to a defined formula. However, as per the valuation on 31 March 2019, the scheme was found to have an actuarial deficit. This deficit is being met through special budgetary support from the government instead of being met through internal reforms in the scheme (Ministry of Labour & Employment & Employees' Provident Fund Organisation, 2025). In contrast, National Pension System (NPS) is a fully funded scheme. Therefore, there is no actuarial deficit in this scheme. However, most of the risks like market fluctuations, inflation and increasing life expectancy fall directly on the member. Therefore, whether there will be sufficient income after retirement or not depends on the regular contributions of the member, market conditions and the still developing annuity market in India. The Unified Pension Scheme (UPS), launched in 2025, has provided a guaranteed assured pension linked to salary along with the NPS Individual Account system. This scheme is applicable to the employees of the central government who accept it. This shows that neither the Defined Benefit system alone nor the Defined Contribution system alone has been completely successful in fulfilling both the objectives of Fiscal Sustainability and Income Security. Therefore, UPS can be seen as an attempt to strike a balance between these two methods (Pension Fund Regulatory and Development Authority, 2025).

India's experience is not occurring in isolation. Globally, the wave of pension privatisation that began with Chile's 1981 shift to mandatory individual accounts inspired a generation of defined-contribution reforms across Latin America, Central and Eastern Europe, and parts of Asia. Three decades on, however, the global picture is considerably more ambiguous than the original reform consensus implied. Chile itself enacted, in 2025, the most significant change to its pension system since 1981 reintroducing an employer-financed, partially defined-benefit social-insurance layer atop its individual accounts (Lockton, 2025). Hungary and Poland, having partially privatised their public pension systems in the late 1990s, reversed course within little more than a decade, redirecting privately accumulated balances back into public pay-as-you-go finances once the 2008 global financial crisis exposed the fiscal cost of running both systems simultaneously (Fultz, 2012). Sweden, for its part, never adopted pure individual-account DC but instead engineered a structurally distinct third way the notional defined contribution (NDC) system that preserves pay-as-you-go financing while making individual entitlements strictly contribution-linked, with an automatic stabiliser to protect long-run solvency (Auerbach & Lee, 2006). Meanwhile, mature DC systems in Australia and the United Kingdom continue to expand coverage through compulsion and behavioural defaults respectively, even as both grapple with whether their contribution rates are adequate to deliver a comfortable retirement (Australian Taxation Office, 2026; The Investors Centre, 2026).

This paper undertakes a secondary-data comparative analysis of defined-benefit and defined-contribution pension architecture in India specifically EPS-1995, the NPS, and the UPS read against this wider international reform experience. The analysis is organised around five objectives: first, to compare the design, financing, and risk allocation of India's three principal pension instruments using the most recently available administrative data; second, to situate this architecture within the World Bank's multi-pillar pension taxonomy, which remains a standard analytical lens for comparative pension-system design (Holzmann & Hinz, 2005); third, to draw structured lessons from international DB, DC, NDC, and hybrid reform trajectories, with particular attention to cases of reform reversal; fourth, to assess, as far as secondary data permit, the trade-offs between fiscal sustainability, benefit adequacy, and coverage that these design choices imply for India; and fifth, to translate this comparative evidence into specific, actionable policy implications for the Employees' Provident Fund Organisation (EPFO), the Pension Fund Regulatory and Development Authority (PFRDA), and India's wider social-security policy community.

The remainder of the paper proceeds as follows. Section II reviews the conceptual and India-specific literature on defined-benefit and defined-contribution pension design. Section III sets out the theoretical

framework life cycle, social-insurance, risk-allocation, and multi-pillar perspectives that organises the subsequent comparison. Section IV describes the secondary-data methodology and its limitations. Section V examines EPS-1995, the NPS, and the UPS in detail. Section VI reviews five international cases Chile, Sweden, Australia, the United Kingdom, and the Hungary-Poland reversal experience. Section VII synthesises the comparative evidence along five analytical dimensions. Section VIII derives policy implications for India, and Section IX concludes.

LITERATURE REVIEW

The literature on defined-benefit versus defined-contribution pension design is large and spans economics, public policy, and social-security law. Three broad strands are relevant here: the conceptual literature on risk allocation under DB and DC design; the India-specific literature on the EPS-1995/NPS transition; and the international comparative literature on pension privatisation and its reversal.

Conceptual Literature on DB and DC Design

At the most general level, a defined-benefit scheme fixes the benefit formula typically a function of final or average salary and years of service and leaves the sponsor (employer or state) to bear the residual risk of meeting that promise, whatever investment returns, inflation, or longevity outcomes turn out to be. A defined-contribution scheme inverts this allocation: the contribution rate is fixed, contributions are invested in an individual account, and the eventual benefit and all the risk of getting their rests with the member. This basic distinction, formalised in the social-insurance and pension-finance literature, underlies the World Bank's influential multi-pillar framework, which recommends layering non-contributory, mandatory-DB-style, mandatory-DC, and voluntary pillars rather than relying on any single design (Holzmann & Hinz, 2005). The same literature has, since the 2008 financial crisis, increasingly emphasised that pure DC architecture, while fiscally transparent, can leave individuals exposed to sequencing risk (poor market returns concentrated near retirement) and to thin annuity markets at the point of decumulation concerns that motivated the design of hybrid and notional-account alternatives such as Sweden's NDC system (Auerbach & Lee, 2006).

India-Specific Literature

The Indian literature on this transition has grown rapidly alongside the policy debate itself. Several recent studies trace the political economy of the 2004 shift from the unfunded Old Pension Scheme to the NPS for new government recruits, and the subsequent reversal by a number of state governments including Rajasthan, Chhattisgarh, and Jharkhand that readopted the OPS for their own employees between 2022 and 2023, citing inadequate NPS payouts relative to the OPS's salary-linked guarantee ("The Conundrum of the Pension System in India," 2023). This literature frames the state-level NPS-to-OPS reversals, and the subsequent national introduction of the UPS in 2025, as evidence that the original NPS design underweighted the political economy of benefit adequacy relative to fiscal sustainability. A separate strand of Indian literature, closer to the concerns of pension-adequacy and quality-of-life research, has begun to examine welfare outcomes for retirees under different scheme types; comparative work on retired public- and private-sector employees in Kerala, India ("Mental Well-Being and the Quality of Life," 2024), has found measurable differences in self-reported wellbeing between cohorts covered by more secure, salary-linked arrangements and those reliant on market-linked, contributory schemes a finding consistent with the broader hypothesis that pension architecture has measurable downstream effects on financial security, healthcare affordability, and social wellbeing in old age, beyond its narrower fiscal-sustainability implications.

International Comparative Literature

The international literature offers two distinct sub-traditions relevant to this paper. The first is the World Bank-anchored multi-pillar literature itself, which has evolved considerably since its original three-pillar formulation in 1994 toward the broader five-pillar taxonomy used in this paper, partly in response to

criticism that the original model over-weighted mandatory individual accounts relative to redistributive and voluntary elements (Holzmann & Hinz, 2005). The second is the more recent literature on pension privatisation reversal, prompted by the post-2008 experience of Hungary, Poland, Argentina, Bolivia, and Kazakhstan, each of which scaled back or eliminated mandatory private DC accounts that had been carved out of pre-existing public DB systems (Naczyk & Domonkos, 2016; Fultz, 2012). This literature is particularly relevant to India because it identifies a specific structural vulnerability the fiscal “double payment” problem of financing legacy DB pensioners while simultaneously diverting current contributions into new individual accounts that is conceptually distinct from, and in some respects more severe than, the adequacy concerns more commonly raised against DC schemes.

Research Gap

Notwithstanding this substantial literature, comparatively little published work integrates India's most recent institutional innovation the 2025 Unified Pension Scheme into the wider international debate on DB, DC, NDC, and hybrid design using contemporaneous administrative data. Much of the existing India-specific literature pre-dates the UPS, the 2025 Chilean reform, and the latest edition of the OECD's Pensions at a Glance series. This paper addresses that gap by assembling and triangulating the most current available secondary data across these sources.

THEORETICAL FRAMEWORK

This paper draws on four complementary theoretical perspectives to organise its comparative analysis: the life-cycle hypothesis; social-insurance (welfare-state) theory; risk-allocation theory; and the World Bank's multi-pillar pension taxonomy.

Life-Cycle Hypothesis

According to the Life-Cycle Hypothesis of Consumption and Saving, a rational individual tries to maintain a balance of expenditure (Consumption Smoothing) during his working life and after retirement. That is, instead of spending the same amount of income at each stage, expenditure is planned throughout his life. From this perspective, Mandatory Pension Contributions is considered an effective solution to this problem. If saving is left entirely to the individual's will, many people do not save enough for retirement. The reasons behind this may be myopia, liquidity constraints or limited financial literacy. Especially if there are still 30 to 40 years left until retirement, many people neglect to save for it. Defined Benefit (DB) and Defined Contribution (DC) both pension plans help in maintaining a balance of expenditure throughout life. However, their working methods are different. DB scheme promises to provide a certain amount of pre-retirement income (Replacement of Pre-retirement Income) as a pension. Whereas DC scheme requires saving a certain amount. However, the actual amount of pension that a person will get after retirement depends on the accumulated capital and the market conditions at that time.

Social-Insurance and Welfare-State Theory

Another important approach to studying pension systems is to understand the difference between the Bismarckian and Beveridgean traditions. In the Bismarckian model, pension benefits are closely linked to an individual's contribution history and earnings. That is, the more contributions an individual has made, the more likely they are to receive benefits. In contrast, the Beveridgean model provides a pension to all citizens at the same or fixed rate. These schemes often have no or minimal contribution requirements. The main objective of such schemes is to reduce poverty in old age. Most of the advanced pension systems in the world adopt a combination of both approaches. For example, Sweden's Guarantee Pension and United Kingdom's new State Pension are examples of the Beveridgean model, as they provide a minimum level of financial security for all. On the other hand, the salary-linked formula in EPS-1995 as well as the earnings-based and contribution-based benefits in NDC and AFP systems are considered examples of Bismarckian approaches (OECD, 2023a; The Investors Centre, 2026). The pension system in India has historically been predominantly Bismarckian. Schemes like EPS-1995 and NPS-Government are based on contributions from

employees in the organised sector. In contrast, the Beveridgean form of minimum social security available to the entire population is relatively limited. This issue is discussed in more detail in Section VII.

Risk-Allocation Theory

A third lens, more specific to pension economics, treats the central design question as one of risk allocation. Three principal risks attach to any retirement-income promise: investment risk (the risk that accumulated assets underperform); longevity risk (the risk that an individual, or a cohort, lives longer than actuarially anticipated); and inflation risk (the risk that nominal benefits fail to keep pace with the cost of living). Defined-benefit schemes pool these risks across the sponsor's entire membership and, where the sponsor is a government, across generations of taxpayers; defined-contribution schemes assign all three risks to the individual member, with the exception of whatever risk-pooling occurs at the point of annuitisation. This theoretical distinction explains, in a single stroke, both why EPS-1995 can run an actuarial deficit (it has pooled risk that it has not adequately priced or funded) and why the NPS cannot (it has eliminated pooled risk by construction, at the cost of leaving the individual exposed). Hybrid designs the UPS, Chile's post-2025 system, and Sweden's NDC represent different attempts to recapture some of the pooling benefits of DB design without re-creating an unfunded sponsor liability.

The World Bank Multi-Pillar Framework

The fourth and most directly applied lens is the World Bank's multi-pillar pension taxonomy, which decomposes old-age income support into five complementary pillars: a non-contributory “zero pillar” providing a social-pension floor; a mandatory, earnings-linked “first pillar,” typically DB or PAYG in character; a mandatory, funded “second pillar” of individual DC accounts; a voluntary, funded “third pillar”; and an informal “fourth pillar” of family and community support (Holzmann & Hinz, 2005). The framework's central analytical claim and the one most relevant to this paper is that well-designed pension systems are multi-pillar by construction, deliberately combining redistributive, earnings-linked, and funded elements rather than relying on any single pillar to deliver both adequacy and sustainability. Figure 2 (Section V) maps this five-pillar taxonomy explicitly onto India's current institutional architecture, providing the organising structure for the comparative analysis that follows.

Taken together, these four perspectives generate a specific set of empirical questions that structure the remainder of the paper: How completely does each Indian scheme smooth life-cycle consumption? How are Bismarckian (contribution-linked) and Beveridgean (floor) elements balanced? Who bears investment, longevity, and inflation risk, and is that risk adequately priced or funded? And how complete, relative to international comparators, is India's pillar architecture?

METHODOLOGY

This paper adopts a secondary-data, structured comparative case study methodology. No primary survey, experimental, or structural equation data were collected or modelled for this study; the analysis instead synthesises and triangulates publicly available administrative, regulatory, and academic secondary sources, in line with standard practice in comparative public-policy research where the unit of analysis is the design and performance of national institutions rather than individual respondents.

Data Sources

Four categories of secondary data were used. First, Indian administrative and regulatory sources, including EPFO and Ministry of Labour and Employment press releases and Parliamentary replies on EPS-1995's actuarial status and the implementation of the Supreme Court's November 2022 higher-pension judgment (Ministry of Labour & Employment & Employees' Provident Fund Organisation, 2025; Business Standard, 2025); PFRDA and NPS Trust data on subscriber numbers, assets under management, and scheme returns (Ministry of Finance & Pension Fund Regulatory and Development Authority, 2025); and official documentation on the Unified Pension Scheme published by PFRDA and the Department of Financial Services (Pension Fund Regulatory and Development Authority, 2025). Second, international regulatory and

statistical sources, including the OECD's biennial Pensions at a Glance series (OECD, 2025; OECD, 2023b); the UK Pensions Regulator's annual occupational defined-benefit landscape report (The Pensions Regulator [UK], 2025); the UK Department for Work and Pensions' workplace pension participation statistics (Department for Work and Pensions [UK], 2025); the Australian Taxation Office's superannuation guarantee documentation (Australian Taxation Office, 2026); and Chilean government and international law-firm regulatory briefings on Law No. 21,735 (DLA Piper, 2025; Lockton, 2025). Third, peer-reviewed and working-paper academic literature on notional defined contribution design (Auerbach & Lee, 2006), the political economy of pension privatisation reversal in Hungary and Poland (Naczyk & Domonkos, 2016; Fultz, 2012), and India's own OPS-to-NPS-to-UPS transition ("The Conundrum of the Pension System in India," 2023). Fourth, International Labour Organization and Government of India social-protection coverage statistics, used to contextualise the scale of India's informal-sector pension coverage gap (International Labour Organization, 2025; Ministry of Labour & Employment, 2025).

Comparative Framework

Each scheme or system reviewed in Sections V and VI is compared along eight common dimensions, selected for their availability across jurisdictions and their direct relevance to the theoretical framework in Section III: (i) scheme type (DB, DC, NDC, or hybrid); (ii) funding mechanism (pay-as-you-go, funded, or mixed); (iii) mandatory contribution architecture (employee, employer, and/or government shares); (iv) benefit formula or accumulation mechanism; (v) principal risk-bearer; (vi) fiscal sustainability indicator (e.g., actuarial deficit, funding ratio, or automatic stabiliser); (vii) non-contributory floor, where one exists; and (viii) the direction and content of the most recent major reform. These dimensions are tabulated in Tables I and II and visualised in Figures 1 and 2.

LIMITATIONS

Three limitations should be noted. First, the secondary data used here are necessarily of variable vintage: most Indian figures are drawn from financial year 2024-25 or calendar year 2025-26 releases, while some international reform schedules (notably Chile's, which phases in fully only by 2033 or 2035) describe a trajectory not yet fully realised at the time of writing. Where this matters, the paper makes the phase-in status explicit rather than treating legislated end-states as current fact. Second, cross-country comparison of contribution rates and replacement rates is constrained by differing wage bases, ceiling structures, tax treatments, and demographic profiles; the comparisons in Section VII are therefore presented as structurally indicative rather than strictly equivalent. Third, this paper does not itself generate primary, India-specific estimates of pension adequacy or welfare outcomes; such estimates—for instance, survey-based assessments of financial independence, healthcare affordability, and social wellbeing among EPS-1995 beneficiaries—are properly the subject of dedicated primary empirical research, and the secondary-data synthesis offered here is intended to provide comparative institutional context for, rather than a substitute for, that research.

India's Pension Architecture: EPS-1995, NPS, and UPS

EPS-1995 Design, Financing, and Current Status

The Employees' Pension Scheme, 1995 was notified on 16 November 1995 under the Employees' Provident Funds and Miscellaneous Provisions Act, 1952, and applies to establishments registered with the EPFO. Structurally, EPS-1995 is best described as a defined-contribution-financed, defined-benefit-formula scheme a description EPFO itself uses in official communication (Business Standard, 2025). Of the employer's statutory 12 percent contribution on wages, 8.33 percent is diverted to the pension fund rather than to the member's own provident-fund account; the employee's full 12 percent contribution continues to flow to the provident fund and not to EPS. The Central Government supplements this with a budgetary contribution of 1.16 percent of wages, capped at a wage ceiling of ₹15,000 per month (Ministry of Labour & Employment & Employees' Provident Fund Organisation, 2025). The combined pension-specific contribution rate is therefore approximately 9.49 percent of (ceiling-capped) wages markedly lower than the

contribution rates supporting any of the comparator systems examined in Section VI (Figure 1).

Pension benefits under EPS-1995 are calculated using a standard formula: monthly pension equals pensionable salary multiplied by pensionable service, divided by 70, where pensionable salary is the average of basic pay and dearness allowance over the 60 months preceding exit (Ministry of Labour & Employment & Employees' Provident Fund Organisation, 2025). Members become eligible after ten years of contributory service, with normal pension payable from age 58 (a reduced early pension is available from age 50). A statutory minimum pension of ₹1,000 per month applies regardless of contribution history; this floor has not been revised since 2014, despite repeated demands from pensioner associations and trade unions, and remains unchanged as of the Ministry of Labour and Employment's most recent (July 2025) parliamentary reply (Ministry of Labour & Employment & Employees' Provident Fund Organisation, 2025).

$$\text{Monthly Pension} = (\text{Pensionable Salary} \times \text{Pensionable Service}) / 70 \quad (1)$$

The biggest structural weakness of the EPS-1995 scheme is that the Wage Ceiling and Minimum Pension in this scheme have not been revised in line with the wage increases. On the other hand, the promise of providing benefits under this scheme is maintained as per a defined formula. Therefore, it is becoming difficult to fulfill this promise based on the actual contribution received by the scheme. EPFO has clarified that there is an actuarial deficit in the EPS-1995 fund as per the Actuarial Valuation as on 31 March 2019. This information is considered to be the most recent official valuation available till mid-2026 (Ministry of Labour & Employment & Employees' Provident Fund Organisation, 2025). No reduction in pension benefits has been made or contribution of members has been increased to make up for this deficit. Instead, additional and discretionary budgetary funds have been made available in addition to the statutory 1.16 percent contribution from the government (Ministry of Labour & Employment & Employees' Provident Fund Organisation, 2025). This arrangement effectively maintains the minimum pension guarantee in the EPS-1995 scheme. However, this requires relying on additional financial assistance from the government from time to time, rather than using the automatic financial balancing mechanism of the scheme. In contrast, the Swedish NDC System has a formula-based stabilization mechanism (Section VI.B).

The Supreme Court's judgment on 4 November 2022 on "Higher Pension" made it clear how costly and complex it is to rectify the mismatch between the Wage Ceiling and actual wages in EPS-1995 at a later stage. As per this judgment, eligible members and pensioners were given the option to contribute towards their pension based on their uncapped wages instead of the statutory wage ceiling. Following this judgment, EPFO received 17.49 lakh Joint Option Applications by the revised deadline of 11 July 2023. Out of this, employers sent around 15.24 lakh applications to EPFO by 31 January 2025. As on November 24, 2025, EPFO stated that it had processed around 99 percent of the applications. In this process, Demand Letters were sent to over 4.27 lakh applicants for payment of Additional Contribution. Out of these, around 2.33 lakh applicants paid the amount demanded or accepted the revised terms. Also, around 1.25 lakh Pension Payment Orders (PPOs) were issued to applicants who retired under the revised Higher Pension rules (Business Standard, 2025). The entire process took several years and lakhs of applications had to be examined and processed at the administrative level. The fact that such a huge amount of administrative work had to be done for just one retrospective amendment is a clear indication of the huge structural and administrative cost of a Defined Benefit (DB) scheme if the discrepancy between the salary ceiling and actual pay persists for a long time.

Recognising this, EPFO has reportedly placed under review, as part of a broader set of proposals informally referred to as "EPFO 3.0," an increase in the pensionable wage ceiling from ₹15,000 to ₹25,000 per month a change that would raise the employer's monthly EPS contribution per member from approximately ₹1,250 to approximately ₹2,083 alongside potential increases to the ₹1,000 minimum pension to figures variously reported between ₹2,000 and ₹7,500 (Bajaj Finserv, 2025). As of mid-2026, these remain proposals under review by the Ministry of Labour and Employment rather than notified policy, and this paper treats them accordingly as evidence of acknowledged structural strain rather than as enacted reform.

NPS Design, Financing, and Growth Trajectory

The National Pension System was introduced on 1 January 2004 as a mandatory, individual-account defined-contribution scheme for new recruits to central government service, replacing the unfunded Old Pension Scheme for this cohort. It was extended to state government employees shortly, thereafter, opened to all citizens on a voluntary basis in 2009, and extended to corporate-sector employees in 2011. More recent extensions include NPS Vatsalya, a sub-scheme for minors launched in September 2024, which had attracted over one lakh subscribers within months of launch, and the Multiple Scheme Framework (MSF) launched on 1 October 2025, which permits Pension Fund managers to offer differentiated, theme-based investment schemes including options with up to 100 percent equity allocation within the same Permanent Retirement Account Number (PRAN) (Ministry of Finance & Pension Fund Regulatory and Development Authority, 2025; Upstox, 2026).

Each NPS account is invested across up to four asset classes Equity (Scheme E), Corporate Bonds (Scheme C), Government Securities (Scheme G), and Alternative Investments (Scheme A) with the subscriber choosing either an active allocation across these classes or a default lifecycle-based allocation; PFRDA's March 2025 master circular consolidated the previously separate "Active Choice" and "Auto Choice" terminology under a unified "Common Schemes" framework (Ministry of Finance & Pension Fund Regulatory and Development Authority, 2025). For central government employees prior to the UPS option, the mandatory contribution structure is 10 percent of basic pay and dearness allowance from the employee, matched by a 14 percent contribution from the government itself an increase from the original 10 percent employer contribution implemented in 2019 (Pension Fund Regulatory and Development Authority, 2025). Scheme-level returns vary by pension fund manager and asset class, but indicative since-inception compound annual growth rates reported by major pension funds cluster around the low double digits for equity-oriented schemes and the high single digits for government-securities and corporate-bond schemes (Protean eGov Technologies, 2025) returns that are, by construction, market-determined and carry no guaranteed floor.

The scale of the NPS has grown rapidly. Total subscribers across all categories central and state government, corporate, all-citizen, and Vatsalya reached approximately 165 lakhs by end-March 2025, with private-sector enrolment alone adding more than 12 lakh new subscribers during financial year 2024-25 (Ministry of Finance & Pension Fund Regulatory and Development Authority, 2025). Combined assets under management for the NPS and the Atal Pension Yojana (APY a flat-benefit micro-pension scheme aimed at unorganised-sector workers, discussed further below) grew by 23 percent during financial year 2024-25 to approximately ₹14.43 lakh crore by end-March 2025 (Figure 4) (Ministry of Finance & Pension Fund Regulatory and Development Authority, 2025). The APY itself, structurally a separate but PFRDA-administered scheme offering a fixed monthly pension of ₹1,000 to ₹5,000 chosen at enrolment, had crossed nine crore gross enrolments by May 2026, continuing a multi-year trend of more than ten million new enrolments annually (Upstox, 2026).

Recent regulatory changes have shown that the National Pension System (NPS) is becoming more efficient and evolving. At the same time, it is also being continuously recalibrated according to the changing needs. Under the Multiple Scheme Framework launched in October 2025, Assets Under Management (AUM) worth around ₹145 crore was recorded in just four months. Also, more than 1.5 lakh accounts were opened under this new system till February 2026 (Upstox, 2026). In addition, Pension Fund Regulatory and Development Authority (PFRDA) also revised Investment Management Fee from April 2026. As per the recommendations of a committee headed by former SEBI Chairman, Slab-based Fee Structure was implemented in which Assets Under Management (AUM) would increase while the management fee would decrease (Angel One, 2026). The rules for decumulation after retirement were also significantly changed between October and December 2025. As per these amendments, Non-Government Subscribers were allowed to withdraw 80 percent of their accumulated corpus at the time of retirement in a lump-sum. The remaining 20 percent is now mandatory to be used for purchasing an annuity. Earlier, this division was 60 percent lump sum and 40 percent annuity. However, the previous 60/40 arrangement has been retained for Government Sector Subscribers (ClearTax, 2026).

National Pension System (NPS) is designed in such a way that there is no Actuarial Deficit in this scheme.

Because in this scheme, the pension amount is based on the contributions made by the member and the investment returns received on it. Therefore, there is no promise of paying a fixed pension in the future (Defined Promise) in this scheme. This is considered to be the biggest fiscal strength of NPS compared to EPS-1995. However, the biggest limitation of NPS is that almost the entire burden of Investment Risk, Inflation Risk and Longevity Risk arising from taking Annuity at the time of retirement has to be borne by the member. There is no separate scheme-level mechanism for risk pooling or for protecting members retiring in adverse market conditions. This problem is compounded by the fact that the Annuity Market in India is still relatively small. The number of options and service providers available for the funds that a member has to use for annuity (Mandatorily Annuitized Share) at the time of retirement is limited. In contrast, the annuity market in countries like the United Kingdom (Section VI.D) is more developed and comprehensive. This provides more options and better facilities to members there.

UPS the 2025 Hybrid Course-Correction

The Unified Pension Scheme (UPS) is considered to be the most important reform in the pension policy of India after the launch of the National Pension System (NPS). The scheme emerged out of political and fiscal pressure created after the state governments started re-implementing the Old Pension Scheme (OPS). During the period of 2022-2023, Rajasthan, Chhattisgarh and Jharkhand announced to re-implement the salary-linked pension system like OPS for their government employees. The opinion of these states was that the pension available under NPS was less than expected and the fixed and assured pension like OPS was more secure ("The Conundrum of the Pension System in India," 2023). These decisions also continuously increased the pressure on the central government. Because the central government employees were still under NPS. Therefore, there was a need to create a system that would provide some level of pension assurance to employees, similar to the OPS, while maintaining the contribution-based and funded financial discipline of NPS. Unified Pension Scheme (UPS) was launched to fulfill the same need.

Unified Pension Scheme (UPS) was approved by the Union Cabinet on 24 August 2024. The scheme was subsequently implemented from 1 April 2025 (Pension Fund Regulatory and Development Authority, 2025). However, UPS is not a completely new statutory pension scheme. It is an option made available to central government employees within the existing National Pension System (NPS) architecture (Pension Fund Regulatory and Development Authority, 2025). In terms of structure, UPS is clearly a hybrid scheme. In this scheme, Defined Contribution (DC) based funded system along with Defined Benefit (DB) system has been provided with "Assured Pension" i.e. a guaranteed fixed pension. Therefore, UPS combines the features of both DB and DC pension systems. The assured pension equals 50 percent of the average basic pay (plus dearness allowance) drawn over the 12 months preceding superannuation, for employees with at least 25 years of qualifying service, with proportionately reduced benefits for service between 10 and 25 years, and a statutory minimum pension of ₹10,000 per month for any employee completing at least 10 years of qualifying service (Canara HSBC Life Insurance Company, 2026; TaxBuddy, 2025). A family pension equal to 60 percent of the assured pension is payable to the spouse on the pensioner's death, with dearness-relief indexation linked to the All-India Consumer Price Index for Industrial Workers, and a lump-sum payment at superannuation calculated as one-tenth of monthly emoluments for every six months of completed service payable in addition to, and without reducing, the assured pension itself.

Financing reflects this hybrid design. Employees contribute 10 percent of basic pay and dearness allowance unchanged from the NPS but the government's contribution rises to 18.5 percent, split between a 10 percent matching contribution credited to the employee's own Individual Corpus (the same PRAN-based account used under the NPS) and an additional 8.5 percent directed to a centrally pooled "Pool Corpus" explicitly designed to backstop the assured-pension guarantee should an individual's own accumulated corpus and investment performance fall short of what is needed to fund it (Pension Fund Regulatory and Development Authority, 2025; TaxBuddy, 2025). This 18.5 percent total government contribution is higher than the 14 percent payable under the NPS for the same cohort, and is, notably, comparable in magnitude to Sweden's total mandatory NDC-plus-FDC contribution rate of 18.5 percent and to Chile's post-2025-reform combined rate at full phase-in (Section VI; Figure 1; Table II). The choice to move from NPS to UPS is irrevocable once exercised, and new recruits joining central government service on or after 1 April 2025 are

automatically enrolled in the UPS rather than the NPS, while existing employees were given until 30 November 2025 (following an earlier extension from 30 September 2025) to exercise a one-time, one-way option (Pension Fund Regulatory and Development Authority, 2025; TaxBuddy, 2025).

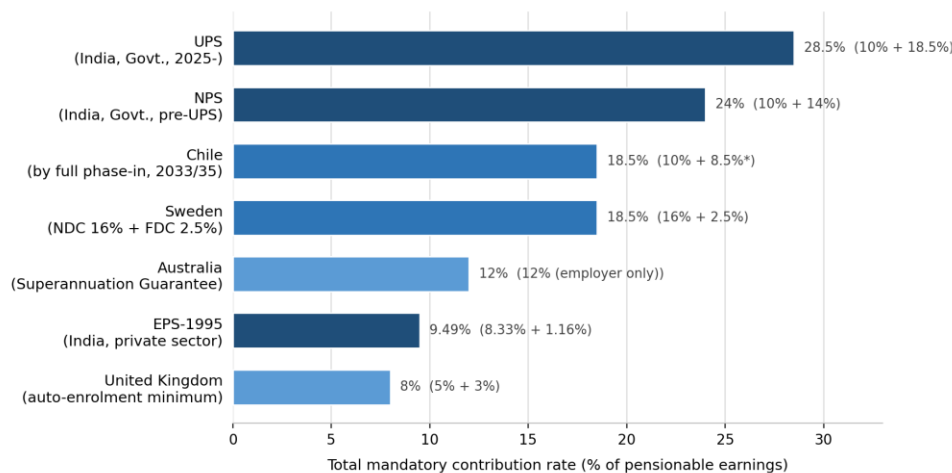
The UPS's significance for this paper's comparative argument is twofold. First, it constitutes a domestically generated, real-time instance of exactly the kind of hybridisation that this paper's international comparison (Section VI) shows occurring elsewhere most strikingly in Chile's 2025 reform suggesting convergent rather than idiosyncratic pressure toward multi-pillar, risk-shared design. Second, and more critically, the UPS's benefits remain confined to a relatively narrow population of central government employees, estimated at upwards of 23 lakh individuals (StudyIQ, 2025), leaving the design question of how to extend comparable security to India's much larger organised- and unorganised-private-sector workforce covered, if at all, by the considerably less generous EPS-1995 and APY substantially unresolved. This tension between an improving but narrow institutional core and a still-largely-uncovered workforce periphery is developed further in Section VII.

Table I Comparative Design Features: Eps-1995, Nps (Government, Pre-Ups), And Ups

Feature	EPS-1995	NPS (Government, pre-UPS)	UPS (2025–)
Year introduced	1995	2004	2025 (from 1 Apr. 2025)
Scheme type	Hybrid: DC-financed, DB-formula (“DC-DB scheme”)	Pure defined contribution (funded, individual account)	Hybrid: DC individual corpus + DB-style assured pension
Coverage	Organised/private-sector EPFO members	Central/State Govt. employees (mandatory for new recruits since 2004)	Central Govt. employees who opt in or join after 1 Apr. 2025
Employee contribution	0% direct to EPS (12% of wages routed to EPF instead)	10% of basic pay + DA	10% of basic pay + DA
Employer/Govt. contribution	8.33% (employer) + 1.16% (Centre), on wage ceiling ₹15,000	14% of basic pay + DA	18.5% of basic pay + DA (10% matching + 8.5% to Pool Corpus)
Benefit formula	(Pensionable salary × Pensionable service) / 70	Market-linked corpus; partial mandatory annuitisation at exit	50% of average basic pay (last 12 months) for ≥25 yrs service; min. ₹10,000/month for ≥10 yrs
Risk bearer	Government (de jure), under-funded since FY2018-19 valuation	Individual subscriber (market, longevity, inflation risk)	Shared: Government (assured pension) + individual (investment choice)
Funding status	Actuarial deficit since 31 Mar. 2019 valuation; minimum pension funded via budgetary support	Fully funded; no deficit by construction	Funded; Pool Corpus designed to backstop the assured-pension guarantee
Minimum guarantee	₹1,000/month (unchanged since 2014)	None (market-determined)	₹10,000/month (≥10 yrs service)
Portability	Limited (EPF/EPS-specific, employer-linked)	High (PRAN portable across employers/sectors)	High within Central Govt. service; UPS choice itself is irrevocable

Source: compiled by the author from EPFO, Ministry of Labour and Employment, and PFRDA documentation cited in Section V.

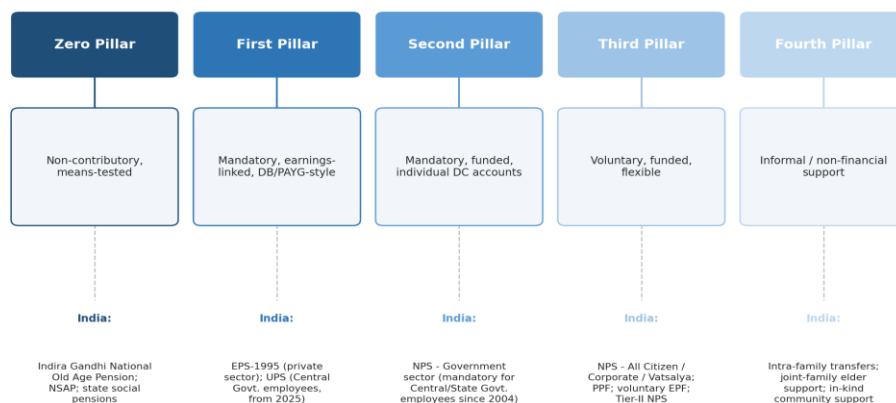
Figure 1. Mandatory Pension Contribution Architecture: India and Comparator Systems



* Chile: employer contribution rises gradually from 1.0% (Aug. 2025) to 8.5% by 2033 (or 2035) under Law No. 21,735; employee AFP contribution of 10% pre-dates the reform. EPS-1995 employee contribution (12% of wages) flows to the EPF, not to the pension fund. Sources: EPFO/PIB (2025); PFRDA UPS FAQ (2025); DLA Piper/Alessandri Chile reform briefs (2025); OECD Sweden Country Note (2023); Australian Taxation Office (2025); UK Pensions Policy Institute (2024).

Fig.1. Mandatory pension contribution architecture: India and comparator systems. Sources: EPFO/PIB; PFRDA UPS documentation; Chile and Sweden regulatory briefings; ATO; UK Pensions Policy Institute.

Figure 4. The World Bank Multi-Pillar Pension Framework Mapped onto India's Architecture



Source: framework adapted from Holzmann & Hinz, Old-Age Income Support in the Twenty-First Century, World Bank (2005); India mapping based on EPFO, PFRDA and Ministry of Finance programme documentation (2024-2026).

Fig.2. The World Bank multi-pillar pension framework mapped onto India's architecture. Source: framework adapted from Holzmann and Hinz (2005); India mapping based on EPFO, PFRDA, and Ministry of Finance documentation.

International Pension Reform Experience

ACHile from Pioneer of Privatisation to Mixed System (2025 Reform)

Chile holds a unique position in the global pension-reform literature as the first country to replace a public, pay-as-you-go defined-benefit system with mandatory individual retirement accounts, in 1981 (Kritzer, 2008). For over four decades, the Chilean model administered through privately managed Pension Fund Administrators (AFPs) served as the template most frequently cited by proponents of DC-based reform internationally, including in shaping early World Bank pension-reform advocacy.

The Chilean model's adequacy limitations, however, became increasingly well documented over time. Research conducted by Chile's own pension regulator in the mid-2000s estimated an average replacement

rate of approximately 44 percent for retirees under the individual-account system well below the roughly 70 percent replacement-rate aspiration underlying the system's original design with sharply unequal outcomes by gender and education: projected replacement rates for women with only elementary education were estimated at around 11 percent, against approximately 110 percent for men with university-level education, reflecting both the gender pay and labour-force-participation gap and the absence of any risk-pooling or redistributive mechanism within the pure individual-account design (Kritzer, 2008).

These accumulated concerns culminated in Law No. 21,735, approved by the Chilean Congress on 29 January 2025 and published in the Official Gazette on 26 March 2025 the most far-reaching reform to the Chilean pension system since 1981 (Government of Chile, 2025; DLA Piper, 2025). The reform's centrepiece is the introduction, for the first time, of a mandatory employer contribution, phased in gradually from 1.0 percent of taxable income in August 2025 to 8.5 percent by 2033 (with a possible two-year extension to 2035 depending on fiscal-sustainability assessments by Chile's Autonomous Fiscal Council) (DLA Piper, 2025; Alessandri Attorneys at Law, 2025). At full phase-in, this employer contribution is allocated across three purposes: approximately 4.5 percentage points to the worker's own individual AFP account (strengthening the funded, individual-account pillar); roughly 1.5 percentage points to a transitional “Contribution with Protected Returns” mechanism; and the remainder to a newly created Autonomous Pension Protection Fund (FAPP) and an associated Social Security Pension Insurance, which together finance new redistributive and defined-benefit-style elements, including a per-year-of-contribution bonus and explicit compensation for the gender pension gap (Lockton, 2025; DLA Piper, 2025). The reform simultaneously raises the non-contributory Universal Guaranteed Pension (PGU) from approximately CLP 214,000–224,000 to CLP 250,000, phased in by pensioner age between September 2025 and September 2027, replaces the previous five-tier (A–E) voluntary fund-choice structure with mandatory generational, target-date-style funds from April 2027, and introduces a competitive-tendering mechanism under which 10 percent of AFP-managed accounts are reassigned every two years to the lowest-commission provider (Alessandri Attorneys at Law, 2025; Lockton, 2025).

For the purposes of this paper's comparative argument, the Chilean reform is significant less for its technical detail than for what it represents structurally: the pioneer of pure individual-account DC pension design has now formally reintroduced an employer-financed, partially defined-benefit, redistributive layer atop that design, explicitly to correct adequacy and gender-equity shortfalls that the original 1981 architecture could not address on its own. This is direct, contemporary evidence from the system most often cited as the global exemplar of DC reform that mature pure-DC architecture tends, over a sufficiently long horizon, toward the kind of hybridisation that India's own EPS-1995-to-UPS trajectory has arrived at independently, albeit via a very different starting point and political process.

Sweden Notional Defined Contribution as a Structural Third Way

Sweden's pension system offers a structurally distinct alternative to both the traditional DB and the Chilean-style individual-account DC models: the notional defined contribution (NDC) approach. Legislated in 1994 and implemented from 1999, Sweden's reform replaced its previous flat-rate-plus-earnings-related DB system with an income pension based on notional accounts individual records of contributions and an imputed (notional) rate of return, settled only at retirement through conversion into an annuity, but financed throughout on a pay-as-you-go basis rather than through pre-funded individual investment (Weaver, 2005).

Of a total mandatory pension contribution rate of 18.5 percent of pensionable earnings, 16 percentage points are credited to the NDC notional accounts and 2.5 percentage points are directed to a smaller, genuinely funded individual-account tier the Premium Pension (also referred to as FDC, funded defined contribution) (Weaver, 2005). A separate, non-contributory Guarantee Pension, financed from general government revenue and income-tested against other pension income, provides an income floor for individuals with low lifetime earnings; for a single pensioner, the full guarantee benefit was equivalent to approximately 24 percent of gross average earnings as of the OECD's most recent country-level reporting (OECD, 2023a).

The most important technical feature of the Swedish pension system is the Automatic Balance Mechanism

(ABM). This mechanism is of particular importance when considering the issues related to the sustainability of the EPS-1995 in India. The ABM is an Automatic Stabiliser. It is often referred to as a "Brake". Under this mechanism, when the total liabilities of the pension system exceed the available assets, the Notional Accounts and the rate of increase in pensions in payment are automatically adjusted. This does not require new legislation or a separate administrative decision by the government (Auerbach & Lee, 2006). The main purpose of this mechanism is to avoid the government having to repeatedly make benefit cuts or politically difficult decisions to increase contributions in the event of fiscal stress. That is, the entire system automatically maintains financial balance according to pre-planned rules (Auerbach & Lee, 2006). In contrast, there is no such automatic balancing mechanism in EPS-1995. Therefore, the government has to provide discretionary budgetary top-ups from time to time to maintain the statutory minimum pension even after the actuarial deficit has been recorded in this scheme. Therefore, in EPS-1995, instead of a rule-based mechanism, it has to rely on special government intervention to resolve financial problems.

Therefore, the importance of the NDC model in the context of this research lies in its Structural features rather than its precise implementation. This model shows that it is possible to maintain the Pay-as-you-go Financing and Intergenerational Risk Pooling arrangements of traditional Defined Benefit (DB) schemes. At the same time, in this model, each member's pension benefits (Benefit Entitlements) are clearly and transparently linked to their actual contributions (Contribution) like in a Defined Contribution (DC) account. Therefore, it is easy to understand how the member's benefits are determined according to his contributions. In addition, in the NDC model, the Automatic, Formula-based correction mechanism required to maintain fiscal balance (Fiscal Correction) is included in the design of the scheme from the beginning. Therefore, the government does not need to take an independent decision (Discretion) every time financial difficulties arise. The entire system automatically makes the necessary changes according to certain rules. It can be assumed that if Hungary and Poland had included similar automatic economic stabilization features in their Second-Pillar Privatization reforms (Section VI.E), those reforms would have been more durable.

Australia Employer-Funded Compulsory DC at Scale

Australia's Superannuation Guarantee (SG) represents the most fully realised example, among this paper's comparators, of compulsory, employer-funded defined-contribution pension provision operating at full national scale without an accompanying mandatory employee contribution. Under the Superannuation Guarantee (Administration) Act 1992, employers are required to contribute a legislated minimum percentage of an employee's ordinary time earnings into a fund of the employee's choosing; this rate has risen in a series of legislated 0.5-percentage-point annual increments from 9.5 percent in 2021 to its final legislated level of 12 percent with effect from 1 July 2025 (AustralianSuper, 2026; Australian Taxation Office, 2026). No further increases are scheduled under current law, and the increase represents the completion of a reform path first announced more than a decade earlier specifically to bolster national retirement savings and reduce long-run reliance on the means-tested, general-revenue-financed Age Pension (AustralianSuper, 2026).

Unlike the NPS or EPS-1995, the SG carries no mandatory employee contribution; voluntary additional contributions most commonly through tax-advantaged salary-sacrifice arrangements are common but discretionary and are capped by an annual concessional-contribution limit (set at A\$30,000 for the 2025-26 financial year) (Australian Taxation Office, 2026). A further reform, "Payday Super," scheduled to commence from 1 July 2026, will require employers to remit superannuation contributions each payday rather than quarterly, addressing a long-standing compliance gap under which contributions were sometimes paid late or not at all (Australian Taxation Office, 2026).

Australia's means-tested, non-contributory Age Pension continues to function as the country's zero-pillar floor beneath compulsory superannuation, broadly consistent with the World Bank taxonomy applied throughout this paper. This layered design notwithstanding, OECD data place Australia among a small cluster of OECD countries alongside Estonia, Ireland, Japan, Korea, Lithuania, and Poland whose projected net replacement rate from mandatory pension schemes alone falls below 35 percent for a full-career average earner, reflecting the system's deliberate reliance on the means-tested floor and voluntary

contributions, rather than the mandatory employer contribution alone, to complete the adequacy picture for most retirees (OECD, 2023b; OECD, 2025).

For India, the Australian case demonstrates the practical feasibility of building very large-scale, high-coverage compulsory DC provision through an employer-only contribution mechanism a design feature shared, in modified form, by EPS-1995's employer-and-government-financed (rather than employee-financed) contribution structure. It also illustrates, however, that even a mature, well-regulated, employer-funded compulsory DC system does not, on its own, guarantee adequacy; adequacy in the Australian model is a deliberately engineered function of the whole pillar structure compulsory DC, voluntary top-ups, and the means-tested floor together rather than of the mandatory contribution rate in isolation.

United Kingdom Auto-Enrolment Success, DB Closure, and the Adequacy Gap

The United Kingdom offers two contrasting and simultaneously unfolding pension-policy narratives: the rapid, behaviourally engineered success of workplace auto-enrolment in expanding defined-contribution coverage, and the steady, largely unplanned decline of occupational defined-benefit provision in the private sector.

Automatic enrolment, introduced from October 2012, requires employers to default eligible workers into a qualifying workplace pension scheme, with a statutory minimum total contribution of 8 percent of a band of “qualifying earnings,” of which at least 3 percentage points must come from the employer, with the employee (inclusive of tax relief) making up the remainder (Department for Work and Pensions [UK], 2025). The policy's effect on participation has been described, with little exaggeration, as transformative: private-sector pension participation among eligible employees rose from 42 percent in 2012, immediately before auto-enrolment, to 86 percent by 2023, with opt-out rates remaining consistently low at around 10 percent (Department for Work and Pensions [UK], 2025). By February 2026, a cumulative 11.4 million workers had been automatically enrolled who would not otherwise have been saving, out of a total of more than 2.69 million employers having completed compliance declarations since the policy's introduction (The Investors Centre, 2026). Total annual workplace pension savings reached approximately £149.7 billion in 2024, a real-terms increase of roughly £49.1 billion compared with 2012 (The Investors Centre, 2026).

While Defined Contribution (DC)-based schemes are expanding, the number of Occupational Defined Benefit (DB) and Hybrid Pension Schemes in the United Kingdom (UK) has been steadily declining for several years. According to The Pensions Regulator's most recent 2025 Annual Landscape Report, 74 per cent of private sector DB and Hybrid schemes have been closed for new service or future accrual. In 2024, this figure was 73 per cent. Also, only around 160 schemes remain that still allow new joiners and provide ongoing accrual for them (The Pensions Regulator [UK], 2025). According to the same report, Assets Under Management (AUM) of private sector Defined Benefit (DB) schemes was around £1,400.8 billion, the asset mix of these schemes has changed significantly since 2012. 69 percent of the funds are now invested in Bonds, while Equities (Shares) have decreased to 18 percent (The Pensions Regulator [UK], 2025). This change is due to Funding and De-risking policies imposed on trustees of Defined Benefit (DB) schemes under the United Kingdom pension regulations. These policies are intended to make pension funds more secure and reduce future financial risks (The Pensions Regulator [UK], 2025). Notwithstanding this ongoing closure trend, the stock of legacy DB promises remains large in income terms: roughly 95 percent of private pension payments accessed for the first time in the 2024-25 financial year were still DB- or annuity-based, even as the proportion of first-time pension access taken as a DC lump sum has risen from 37 percent in 2016-17 to 48 percent in 2024-25, reflecting the gradual generational handover from DB to DC as the dominant form of private retirement income (The Investors Centre, 2026; Department for Work and Pensions [UK], 2025).

Underneath both the expanding DC layer and the contracting DB stock sits a flat-rate, state-financed first pillar: the new State Pension, indexed under the “triple lock” mechanism (the higher of average earnings growth, price inflation, or 2.5 percent), which rose by 4.1 percent to £230.25 per week (£11,973 per year) for the 2025-26 financial year (The Investors Centre, 2026). Despite this combination of an expanding,

behaviourally engineered DC pillar and a protected state floor, UK analysts continue to estimate that a substantial share of the working-age population on one widely cited estimate, around 43 percent (14.6 million people) remains on track to under-save relative to standard target replacement-rate benchmarks, a gap attributed less to participation (which auto-enrolment has largely solved) than to the adequacy of the statutory 8 percent minimum contribution rate itself (The Investors Centre, 2026).

The UK case offers two distinct lessons for India. First, auto-enrolment demonstrates the power of behavioural defaults in expanding voluntary or quasi-voluntary pension coverage at low fiscal cost directly relevant to the underdevelopment of India's own third (voluntary) pillar, discussed in Section VII. Second, and more cautionary, it demonstrates that solving the participation problem through defaults does not automatically solve the adequacy problem; without a sufficiently generous mandatory contribution rate, default-driven DC coverage can expand headline participation statistics while leaving underlying retirement-income adequacy largely unresolved.

Hungary and Poland the Limits of Mandatory Private DC: A Cautionary Tale

Hungary and Poland are the countries that have been the most studied in international research on pension reform. Both countries are seen as important cautionary cases because their experience clearly shows how fiscal problems in pension systems can arise. In these countries, when introducing the Mandatory Second-Pillar Defined Contribution (DC) system, the necessary funds were not raised by creating new revenue sources. Instead, some of the contributions received for the already existing Pay-as-you-go Defined Benefit (DB) scheme were diverted to the Second-Pillar DC scheme. This left the pre-committed pension liabilities on the Pay-as-you-go DB scheme intact, but the contributions available to meet them were reduced. As a result, the fiscal pressure on the system increased and its long-term fiscal sustainability was weakened. The experience of Hungary and Poland therefore shows that diverting contributions from existing Defined Benefit (DB) schemes, without providing the necessary funding from new sources when introducing a new Defined Contribution (DC) system, can have serious financial consequences for the pension system.

Hungary and Poland both partially privatised their public pension systems in the period 1997-1998. During that period, the Multi-Pillar Pension Model proposed by the World Bank had an impact on pension reforms in many countries in Central and Eastern Europe. It was against this backdrop that both countries adopted this reform (Fultz, 2012). According to this reform, a certain share of mandatory social insurance contributions (Mandatory Social Insurance Contributions) was diverted from the existing Public Pay-As-You-Go (PAYG) system and deposited into individual Defined Contribution (DC) accounts managed by private institutions (Fultz, 2012). For almost ten years, Hungary and Poland operated similar Second Pillar Pension Systems. The design and contribution share of the schemes in both countries were also largely similar. The global financial crisis of 2008 and the subsequent weakening of the fiscal position of both Hungary and Poland exposed a significant structural problem in the pension system. In this system, the government had a legal and political obligation to pay full pensions to existing pensioners under the Public Pay-As-You-Go (PAYG) scheme. However, at the same time, an increasing proportion of current contributions from current employees was being diverted to Individual Defined Contribution (DC) accounts, reducing the funds available for the PAYG scheme. This situation is referred to in the literature as the "Fiscal Double Payment Problem" (Fultz, 2012; Naczyk & Domonkos, 2016). That is, the government had to simultaneously meet the pension obligations under the old PAYG scheme and provide funds for the new DC scheme.

Hungary responded to this problem in the most concrete way. In 2010–2011, the government effectively nationalised the Second Pillar Pension System. Under this, funds accumulated in private accounts were transferred back to the public pension system (Peterson Institute for International Economics, 2018; Naczyk & Domonkos, 2016). This decision did not directly end the government's explicit fiscal liability. Instead, it was transformed into an implicit fiscal liability (Peterson Institute for International Economics, 2018; Naczyk & Domonkos, 2016). During the same period, Argentina (2008), Bolivia (2010) and Kazakhstan (2013–2014) also decided to make major changes to their private pension systems and return them to the public system (Naczyk & Domonkos, 2016). Poland's response was more gradual and politically contested.

In early 2011, the Polish government reduced the share of contributions diverted to the second pillar from 7.3 percent to 2.3 percent of gross wages, simultaneously raising public PAYG contributions by a corresponding amount, in the face of an organised counter-mobilisation by Poland's pension-fund industry, which characterised the change as a “nationalisation” of pension accounts (Naczyk & Domonkos, 2016). By late 2013, the same government extended the reversal further. The literature attributes the comparatively greater resilience of Poland's second pillar, relative to Hungary's, partly to the higher domestic-equity content of Polish pension funds' portfolios, which gave domestic capital-market and business constituencies a stronger stake in defending the second pillar's survival than was the case in Hungary (Naczyk & Domonkos, 2016).

The structural lesson for India is precise and important. The NPS, unlike the Hungarian and Polish second pillars, was introduced from 2004 as an entirely new, forward-looking scheme applicable to new government recruits, rather than as a carve-out of contributions previously committed to funding an existing PAYG liability; it has not, therefore, generated the specific “double payment” fiscal dynamic that drove the Central European reversals. EPS-1995, by contrast, already exhibits a related if less acute version of this vulnerability: its actuarial deficit reflects exactly the kind of under-funded, sponsor-borne liability that a carve-out design would compound rather than resolve. Any future Indian pension reform that proposes diverting existing EPS-1995 or EPFO contribution streams into new individual accounts, rather than applying changes prospectively to new entrants as the NPS did, should therefore be actuarially stress-tested against the specific transition-cost and reversal risk that the Hungarian and Polish experience demonstrates can otherwise overwhelm even a well-intentioned reform within a single decade.

Table 2: International Comparator Pension Systems At A Glance

System type	Mixed: individual AFP accounts + new Social Security Pension Insurance (DB-style) from 2025	NDC (notional, PAYG) + small funded FDC (Premium Pension)	Auto-enrolment workplace DC + flat-rate State Pension	Compulsory employer-funded DC (Superannuation) + means-tested Age Pension
Total mandatory contribution	≈18.5% at full phase-in (2033/35): 10% employee (AFP) + 8.5% employer (phased)	18.5% (16% NDC + 2.5% FDC)	8% minimum of qualifying earnings (5% employee + 3% employer)	12% employer-only (from 1 Jul. 2025)
Funding mechanism	Funded (AFP) + new PAYG-style social-insurance fund (FAPP)	PAYG (notional accounts) + funded (Premium Pension)	Funded (DC) + PAYG (State Pension)	Funded (DC) + general-revenue (Age Pension)
Recent major reform	Law 21,735 (Jan./Mar. 2025): employer contribution phase-in; generational target-date funds from 2027; biennial low-cost tendering	1994 legislated / 1999 implemented NDC reform; Automatic Balance Mechanism (2001–)	Auto-enrolment (2012); DB funding-code reform (2024); 74% of private DB schemes closed to accrual (2025)	SG rate raised in steps to 12% (2025); “Payday Super” from 2026
Non-contributory floor	Universal Guaranteed Pension (PGU), raised to CLP 250,000 by 2027 (phased by age)	Guarantee Pension (≈24% of average earnings for single pensioner)	New State Pension (£230.25/week, 2025-26, triple-lock indexed)	Means-tested Age Pension

Source: compiled by the author from sources cited in Section VI.

Comparative Analysis: Situating India in the Global DB-DC Landscape

The preceding sections permit a structured, five-dimension comparison of India's pension architecture against the international evidence assembled in Section VI: contribution architecture, risk allocation, benefit adequacy, coverage, and fiscal sustainability.

Contribution Architecture

Figure 1 compares three major pension schemes in India and four international pension systems on the basis of Mandatory Contribution Ratio, i.e., as a percentage of Pensionable Earnings. An important point emerges from this comparison. In India's Unified Pension Scheme (UPS), the mandatory contribution is 28.5, with 10 percent contributed by the employee and 18.5 percent by the government. Similarly, in NPS, which was previously UPS for central government employees, the employee contributes 10 percent and the employer contributes 14 percent, with 24 contributed. Both these contribution ratios are much higher than in the other countries in the comparison. For example, Sweden has a total NDC + FDC system of 18.5 percent, Chile has around 18.5 percent after reforms, Australia has 12 percent only employer contribution under Superannuation Guarantee, while United Kingdom has a minimum 8 percent mandatory contribution under Auto-Enrolment.

In contrast, EPS-1995 is in the weakest position. For this scheme, only 9.49 percent contribution is levied towards pension and that too based on a maximum wage ceiling of ₹15,000 per month. Therefore, EPS-1995 has the least efficient financing structure compared to the Defined Benefit (DB) or Hybrid schemes included in this study. Not only this, but its contribution rate is also not much higher than the minimum contribution of Defined Contribution (DC) scheme in United Kingdom. This single comparison explains why an actuarial deficit arose in EPS-1995, while the more generously funded UPS and NPS-Government do not. The main reason behind this is not only the design philosophy of the schemes, but also the Financing Adequacy available for those schemes.

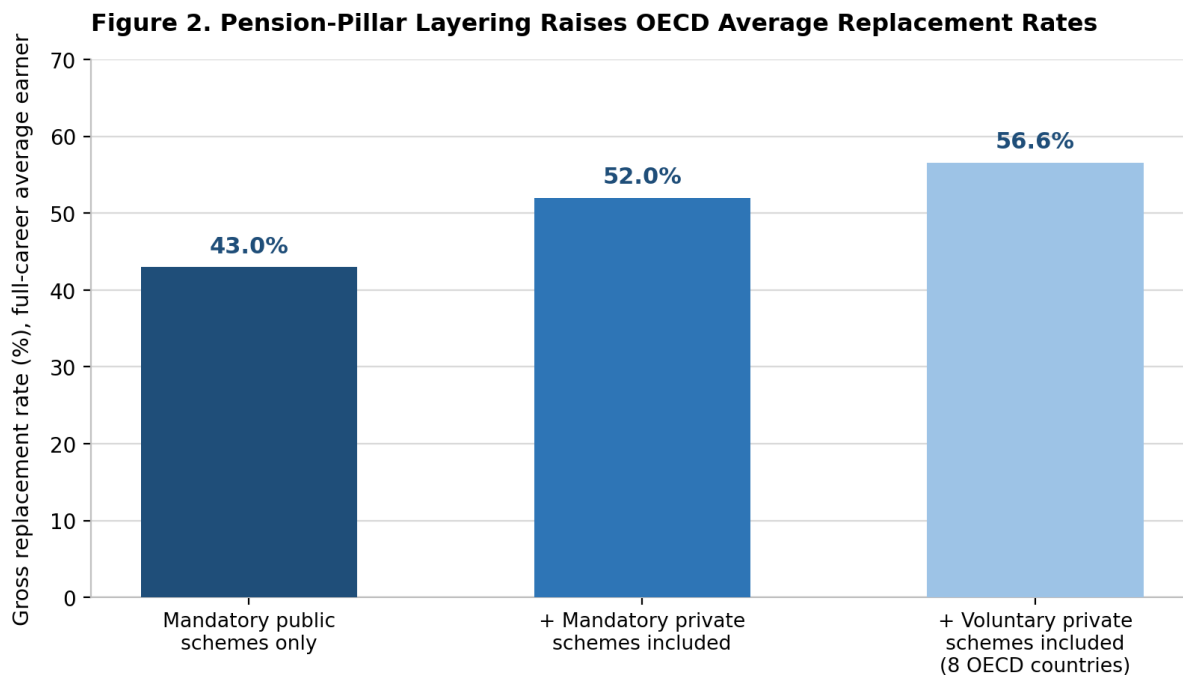
Risk Allocation

The systems examined sit at materially different points on the risk-allocation spectrum set out in Section III.C. EPS-1995 nominally pools investment, longevity, and inflation risk onto its sponsor (ultimately, the Government of India, via budgetary top-ups), but does so without full funding, producing a recorded deficit rather than a stable risk pool. The NPS transfers essentially all of these risks to the individual subscriber, in exchange for full funding and the elimination of deficit risk by construction. The UPS, Chile's post-2025 system, and Sweden's NDC system each represent different hybrid compromises: the UPS by layering an assured, pooled benefit atop an individually owned, funded corpus explicitly backstopped by a pooled reserve; Chile by reintroducing employer-financed, partially pooled benefits atop pre-existing individual accounts; and Sweden by retaining pay-as-you-go pooling within a notional-account structure with an automatic, formula-based stabiliser. The UK and Australian systems, by comparison, remain predominantly individual-risk-bearing DC arrangements, with risk-pooling confined to their respective non-contributory or means-tested floors.

Benefit Adequacy

Figure 3 illustrates the OECD's empirical finding that layering moving from mandatory-public-only provision (a 43.0 percent average gross replacement rate across the OECD) to mandatory-public-plus-private provision (52.0 percent) to a fuller multi-pillar architecture including voluntary private pensions (56.6 percent, across the eight OECD countries where voluntary coverage is broad) meaningfully raises average pension adequacy (OECD, 2025). India's institutional architecture corresponds most closely, at present, to something close to the leftmost end of this layering spectrum: its mandatory first- and second-pillar provision (EPS-1995, NPS-Government, UPS) is comparatively well developed for the organised and government sectors specifically, but its voluntary third pillar NPS-All-Citizen, NPS-Corporate, the Public

Provident Fund, and voluntary EPF contributions remains comparatively underdeveloped relative to the mandatory pillars, and no single, methodologically robust, cohort-level replacement-rate estimate for India's NPS population has yet matured given the scheme's relative youth, its market-linked character, and the still-thin annuity market into which NPS corpuses are converted at retirement. This data gap is itself a finding: unlike the OECD's mature, multi-decade-old comparator systems, India's principal DC scheme has not yet completed a full accumulation-to-decumulation cycle at scale, and adequacy assessment for India's pension reform will, for some years yet, necessarily rely more heavily on contribution-rate and design analysis (as in this paper) than on realised replacement-rate outcomes.



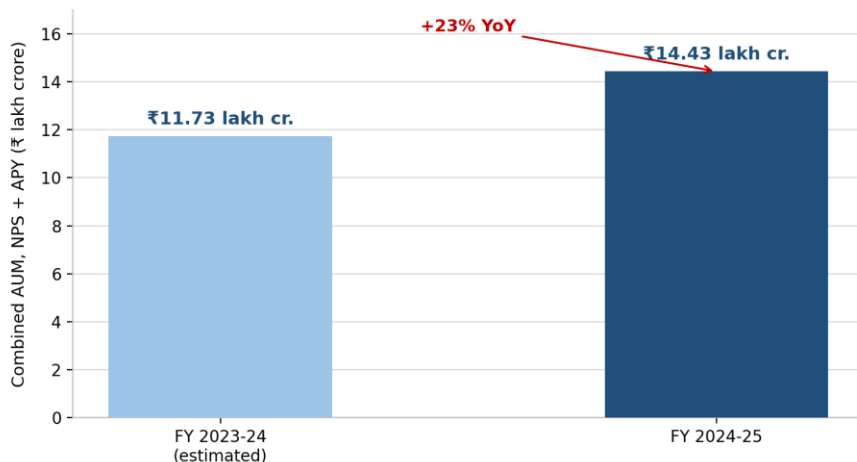
Note: OECD averages for a full-career average-wage earner retiring at the normal pension age. India's NPS/EPF combination corresponds structurally to the leftmost bar (a mandatory, largely DB/DC first-pillar arrangement) with third-pillar (voluntary) coverage still nascent. Source: OECD, Pensions at a Glance 2025, "Gross replacement rates: public vs. private, mandatory vs. voluntary schemes."

Fig. 3. Pension-pillar layering raises OECD average replacement rates. Source: OECD, Pensions at a Glance 2025 (OECD, 2025).

Coverage

Perhaps the most consequential finding of this comparative analysis is that the binary DB-versus-DC design question, however significant for the organised and government workforce, is of limited relevance to the large majority of India's labour force, which currently sits outside any institutional pension pillar altogether. International Labour Organization and Government of India data place the informal share of India's workforce at somewhere between 88 and 92 percent on various recent estimates, with under 20 percent of informal workers reportedly having access to any pension, health insurance, or comparable social-security benefit (International Labour Organization, 2025; ForumIAS, 2025). Official measures of broader social-protection coverage incorporating non-contributory and in-kind schemes alongside pension and provident-fund coverage have risen substantially, from approximately 24 percent to approximately 64 percent of the population on one ILO-aligned metric, and the Ministry of Labour and Employment has reported a still broader figure of around 65 percent of the population covered by at least one social-protection measure when in-kind and state-level schemes are included (International Labour Organization, 2025; Ministry of Labour & Employment, 2025). Even on these more expansive measures, however, a substantial share of India's workforce and elderly population remains without institutional old-age income support beyond the Atal Pension Yojana's flat, modest micro-pension or non-contributory state social pensions. Relative to this coverage gap, the marginal welfare difference between, say, a marginally more generous EPS-1995 formula and a marginally higher-yielding NPS scheme is almost certainly second-order.

Figure 3. Growth in Combined NPS and Atal Pension Yojana Assets Under Management



Note: FY2023-24 AUM is derived by deflating the reported FY2024-25 AUM by the officially stated 23% year-on-year growth rate; it is not an independently published PFRDA figure. Total NPS subscribers reached 165 lakh and cumulative APY enrolment crossed 76 million by end-March 2025. Source: PFRDA / Ministry of Finance (PIB), "New Private Subscribers under NPS Cross 12 Lakh during 2024-25," 2025.

Fig. 4. Growth in combined NPS and Atal Pension Yojana assets under management. Source: PFRDA / Ministry of Finance (Ministry of Finance & Pension Fund Regulatory and Development Authority, 2025).

Fiscal Sustainability

Finally, the systems compared here differ sharply in how they manage long-run fiscal sustainability. EPS-1995 relies on discretionary, year-by-year government budgetary support to cover the gap between its statutory promises and its contribution base a mechanism that is fiscally costly, administratively opaque, and, as the multi-year higher-pension implementation episode demonstrates, slow to correct once misalignment has set in. The NPS and UPS's individual-corpus components are sustainable by construction, since benefits cannot exceed funded contributions and returns; the UPS's pooled assured-pension component, however, introduces a fresh, smaller-scale version of the same sustainability question that EPS-1995 already faces, contingent on whether the Pool Corpus's 8.5 percent government contribution proves sufficient to fund the assured-pension guarantee over time a question that, given the scheme's 2025 launch, cannot yet be answered empirically. Chile's FAPP and Sweden's Automatic Balance Mechanism each represent more institutionally explicit attempts to pre-fund or automatically stabilise comparable pooled liabilities than anything currently built into EPS-1995 or the UPS's Pool Corpus design. Table V summarises the lessons most directly transferable to India from this five-dimension comparison.

Table 3: Selected Quantitative Indicators India's Pension Ecosystem (2025-26)

EPS-1995 minimum monthly pension	₹1,000	Unchanged since 2014; reaffirmed Jul. 2025 (Ministry of Labour & Employment & Employees' Provident Fund Organisation, 2025)
EPS-1995 statutory wage ceiling	₹15,000/month (₹25,000 proposed)	2025-26; proposal pending (Bajaj Finserv, 2025)
EPS-1995 actuarial valuation showing deficit	As on 31 March 2019	Most recently cited valuation (Ministry of Labour & Employment & Employees' Provident Fund Organisation, 2025)
Higher-pension applications (SC judgment, Nov. 2022) processed	≈99% of 17.49 lakh applications	As of 24 Nov. 2025 (Business Standard, 2025)

Total NPS subscribers (all categories)	≈165 lakh	End-March 2025 (Ministry of Finance & Pension Fund Regulatory and Development Authority, 2025)
NPS private-sector subscriber additions, FY2024-25	>12 lakh	FY2024-25 (Ministry of Finance & Pension Fund Regulatory and Development Authority, 2025)
Combined NPS + APY AUM	₹14.43 lakh crore (+23% YoY)	End-March 2025 (Ministry of Finance & Pension Fund Regulatory and Development Authority, 2025)
APY cumulative gross enrolment	>9 crore	May 2026 (Upstox, 2026)
UPS minimum monthly pension	₹10,000 (≥10 yrs service)	From 1 Apr. 2025 (Canara HSBC Life Insurance Company, 2026)
UPS government contribution rate	18.5% of basic pay + DA	From 1 Apr. 2025 (Pension Fund Regulatory and Development Authority, 2025)

Source: compiled by the author from sources cited in Sections V and VII.

Table 4: OECD Net Replacement Rates Selected Benchmarks (2025)

OECD average, full-career average earner	63.2%	Mandatory schemes, normal retirement age (OECD, 2025)
OECD average, low earner (50% of average wage)	75.2%	Progressivity built into most OECD systems (OECD, 2025)
OECD average, high earner (200% of average wage)	52.9%	(OECD, 2025)
Netherlands (high-end exemplar)	≈96%	Among the highest in the OECD (OECD, 2025)
Australia / Ireland / Lithuania (low-end cluster)	<35%	Reflects reliance on means-tested floor + voluntary pillar (OECD, 2023b)

Source: OECD, Pensions at a Glance 2023 and 2025 (OECD, 2025; OECD, 2023b).

Synthesis: Lessons Transferable to India

Table 5: Lessons From International Experience Transferable To India

Chile (2025 reform)	Employer-financed DB-style layer added atop pure DC	Pure individual-account DC architecture eventually requires a solidarity/DB layer for adequacy and gender equity
Sweden (NDC)	Automatic Balance Mechanism stabilises PAYG finances without discretionary reform	Built-in fiscal stabilisers reduce reliance on ad hoc government bailouts (cf. EPS-1995's budgetary top-ups)

United Kingdom (auto-enrolment)	Default enrolment dramatically raises participation	Behavioural defaults/nudges could expand India's voluntary (third) pillar coverage
Australia (Superannuation)	Employer-only compulsory DC at scale, paired with means-tested floor	Demonstrates feasibility of high-coverage compulsory DC, but adequacy still depends on the floor + voluntary pillar
Hungary & Poland (2008-2011)	Reversal/nationalisation of mandatory private DC carve-outs amid fiscal crisis	Diverting existing PAYG contributions into new mandatory individual accounts creates transition-cost and reversal risk; new-entrant-only design (as NPS used) is structurally safer

Source: compiled by the author from Section VI.

Policy Implications for India

Drawing directly on the five-dimension comparison in Section VII, this section sets out seven specific, evidence-grounded policy implications for EPFO, PFRDA, and India's wider pension-policy community.

- 1) Resolve EPS-1995's wage-ceiling and minimum-pension stagnation through automatic, formula-based indexation rather than discretionary revision.** The pending EPFO 3.0 proposal to raise the pensionable wage ceiling from ₹15,000 to ₹25,000 per month merits expedited actuarial costing, but a one-off increase will recreate the same stagnation problem within a decade unless it is paired with a recurring indexation rule for instance, periodic adjustment to a defined fraction of average organised-sector wage growth rather than left to the ad hoc, multi-year political process that has governed both the wage ceiling and the ₹1,000 minimum pension since 2014.
- 2) Consider a Sweden-style automatic stabiliser for EPS-1995's pooled liability.** Rather than continuing to rely on discretionary annual budgetary top-ups to cover the scheme's recorded actuarial deficit, EPFO could explore a formula-based mechanism analogous to Sweden's Automatic Balance Mechanism that adjusts indexation or, within statutory limits, contribution parameters automatically when the scheme's liabilities exceed its asset base, improving transparency and reducing the scheme's exposure to the political cycle.
- 3) Deliberately build out India's underdeveloped third (voluntary) pillar.** Figure 3 shows that the Voluntary Pillar of pension schemes plays a significant role in overall pension adequacy. These schemes, especially in developed and mature pension systems, provide stronger financial security after retirement. In India, the Multiple Scheme Framework launched by PFRDA and the Lump-sum Withdrawal Flexibility reforms introduced in 2025 are certainly positive steps. These reforms have made NPS more flexible and attractive to members. However, the Auto-Enrolment experience in United Kingdom (Section VI.D) shows that it is more effective to automatically enroll people in a scheme from the beginning (Behavioural Defaults) rather than waiting for them to opt-in. Therefore, to increase participation in NPS-All Citizen and NPS-Corporate schemes, it will not be enough to simply introduce new schemes or products (Product Innovation). Instead, a behavioral system like Auto-Enrolment as in the United Kingdom can be a more effective solution.
- 4) Treat the UPS as a template for, rather than an exception within, India's broader pension architecture.** Figure 3 shows that the Voluntary Pillar of pension schemes plays a significant role in overall pension adequacy. These schemes, especially in developed and mature pension systems, provide stronger financial security after retirement. In India, the Multiple Scheme Framework launched by PFRDA and the Lump-sum Withdrawal Flexibility reforms introduced in 2025 are certainly positive steps. These reforms have made NPS more flexible and attractive to members. However, the Auto-Enrolment experience in United Kingdom (Section VI.D) shows that it is more effective to automatically enroll people in a scheme from the beginning (Behavioural Defaults) rather than waiting

for them to opt-in. Therefore, to increase participation in NPS-All Citizen and NPS-Corporate schemes, it will not be enough to simply introduce new schemes or products (Product Innovation). Instead, a behavioral system like Auto-Enrolment as in the United Kingdom can be a more effective solution.

- 5) **Prioritise informal-sector coverage expansion as the highest-leverage near-term reform.** A large portion of the Indian workforce is still not covered by any of the pension schemes like EPFO, NPS and UPS (Section VII.D). Therefore, expansion and more effective implementation of Atal Pension Yojana (APY) will be more important for the overall financial security of the country's elderly in the next decade. For this, it is necessary to integrate Atal Pension Yojana more effectively with e-Shram, the registration system for informal workers. This will make it easier to enroll in the scheme, reduce enrollment friction and enable better targeting of the scheme to the right beneficiaries. In contrast, further reforming the design of Defined Benefit (DB) and Defined Contribution (DC) schemes for the already relatively well-protected organised sector and government employees is likely to be relatively less important for the country's overall elderly welfare. Therefore, the biggest policy priority for India in the coming decade is to expand schemes like Atal Pension Yojana to bring more workers in the unorganised sector under the ambit of pension protection.
- 6) **Stress-test any future reform that diverts existing contribution streams against Central European reversal risk.** The Hungarian and Polish experience (Section VI.E) demonstrates that mandatory second pillar carve-outs financed by diverting contributions away from an existing, pre-committed PAYG liability carry a specific, empirically documented fiscal “double payment” risk that can force reversal within a single decade of adverse macroeconomic conditions. Future Indian reforms should, wherever possible, follow the NPS's original new-entrant-only design principle rather than retroactively redirecting EPS-1995 or EPFO contribution streams.
- 7) **Strengthen the annuity and decumulation market alongside the now well-developed accumulation phase.** The NPS's accumulation-phase infrastructure subscriber onboarding, asset management, and now the Multiple Scheme Framework has matured considerably, but the depth, competitiveness, and product diversity of India's annuity market at the point of decumulation remain comparatively underdeveloped relative to mature DC markets such as the United Kingdom's. Regulatory attention from PFRDA and the Insurance Regulatory and Development Authority of India to annuity-product innovation, pricing transparency, and consumer protection is likely to matter as much for ultimate retirement-income adequacy as further accumulation-phase reform.

CONCLUSION

This paper set out to compare defined-benefit and defined-contribution pension architecture in India EPS-1995, the NPS, and the 2025 Unified Pension Scheme against international pension-reform experience, using exclusively secondary administrative, regulatory, and academic data. Five findings emerge with reasonable confidence from this comparative exercise.

First, India is not making, and has arguably never made, a single, final choice between defined-benefit and defined-contribution design; it is running a live, multi-track institutional experiment, with EPS-1995 (a legacy hybrid in fiscal distress), the NPS (a mature, fiscally robust DC core), the UPS (a 2025 hybrid course-correction), and the Atal Pension Yojana (a flat-rate DC micro-pension for informal workers) operating simultaneously and, in important respects, in tension with one another.

Second, this multi-track experimentation mirrors, often with roughly a decade's lag, comparable reform and counter-reform dynamics visible internationally: Chile's 2025 partial re-socialisation of its pioneering individual-account system, Sweden's earlier NDC innovation, the United Kingdom's simultaneous auto-enrolment expansion and DB-scheme contraction, Australia's mature employer-funded compulsory DC model, and the Hungarian and Polish reversal of mandatory private accounts each illustrate, from different starting points, the same underlying difficulty: no single architectural model has yet durably reconciled

fiscal sustainability with benefit adequacy on its own.

Third, the weight of the comparative evidence assembled in this paper favours deliberate, multi-pillar design over any binary DB-versus-DC choice a well-funded and, ideally, automatically stabilised first pillar; a well-regulated, adequately annuitised second pillar; a deliberately incentivised (rather than purely voluntary) third pillar; and explicit institutional attention to the population currently outside any pillar altogether.

Fourth, and specifically for India, the coverage dimension is at least as consequential as the design-architecture dimension examined in most of this paper. The DB-versus-DC debate, however important for the organised and government workforce, does not reach the substantial majority of India's labour force that remains informally employed and largely outside institutional old-age income support.

Fifth, this paper's secondary-data, comparative-institutional approach is necessarily complementary to, rather than a substitute for, primary empirical research on pension adequacy and welfare outcomes. The international and administrative evidence assembled here establishes the comparative institutional context what each scheme promises, how it is financed, and how comparable systems elsewhere have evolved but it cannot, on its own, establish how India's EPS-1995 and NPS beneficiaries actually experience financial security, healthcare affordability, or social wellbeing in retirement. Dedicated primary survey- and structural-equation-based research into these welfare dimensions, of the kind increasingly being undertaken in India's own pension-adequacy literature, remains essential to closing that gap, and the institutional and comparative findings offered here are intended to provide context for, and to be read alongside, exactly that kind of primary empirical work.

India's pension reform trajectory over the next decade will likely continue to be shaped by the same tension this paper has traced from EPS-1995 through the NPS to the UPS: the search for an architecture that is simultaneously fiscally sustainable, individually adequate, and increasingly, the evidence suggests genuinely universal in its coverage.

Acknowledgements

The authors thank JSPM University, Pune, India for institutional support during the preparation of this manuscript.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Institutional Review Board Statement

Not applicable. This study did not involve human participants, human data, or animal subjects, and relied exclusively on publicly available secondary administrative, regulatory, and academic sources cited throughout the manuscript.

Data Availability Statement

This study is based entirely on secondary data drawn from publicly available sources, including official publications of the Employees' Provident Fund Organisation (EPFO), the Pension Fund Regulatory and Development Authority (PFRDA), the Organisation for Economic Co-operation and Development (OECD), and other government, regulatory, and academic sources cited in the References section. No new primary data were generated or analysed during this study.

Conflict of Interest Statement

The authors declare no conflict of interest.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

Use of generative AI or writing assistance: The authors used AI-assisted writing support for language refinement and document preparation; all analysis, interpretation, and final content were reviewed and approved by the authors.

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