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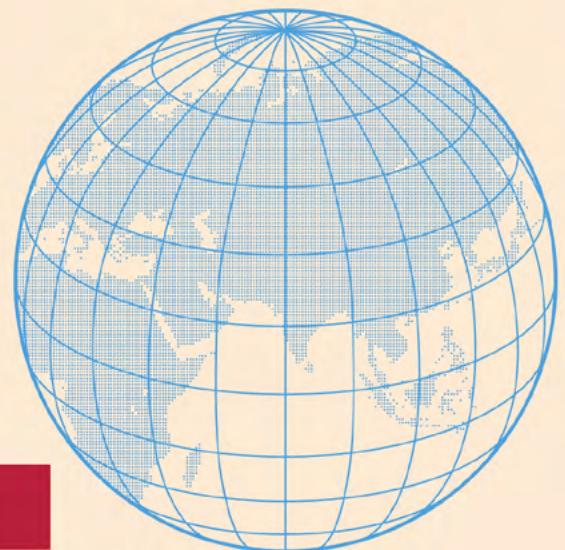
Bridging the Data Gap

The True Fiscal Cost of Public Sector Pay and Pensions in India

Shruti Gupta

Tanvi Vipra

Anoop Singh



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Centre for Social and Economic Progress (CSEP)

CSEP Research Foundation

6, Dr Jose P. Rizal Marg, Chanakyapuri,

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Bridging the Data Gap

The True Fiscal Cost of Public Sector Pay and Pensions in India

Shruti Gupta

Research Associate

Centre for Social and Economic Progress

New Delhi, India

Tanvi Vipra

Former Research Analyst

Centre for Social and Economic Progress

New Delhi, India

Anoop Singh

Distinguished Fellow

Centre for Social and Economic Progress

New Delhi, India

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Abbreviations

AIIMS	All India Institute of Medical Sciences
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AWH	Anganwadi Helper
AWW	Anganwadi Worker
BE	Budget Estimate
CAG	Comptroller and Auditor General of India
CAGR	Compound Annual Growth Rate
CCH	Cook-Cum-Helper
CFI	Consolidated Fund of India
CGA	Controller General of Accounts
CMIE	Centre for Monitoring Indian Economy
CPC	Central Pay Commission
CPSE	Central Public Sector Enterprise
CSS	Centrally Sponsored Scheme
DPE	Department of Public Enterprises
FC	Finance Commission
FRBM	Fiscal Responsibility and Budget Management
FSSAI	Food Safety and Standards Authority of India
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GFSM	Government Finance Statistics Manual
GIA	Grant-In-Aid
GSDP	Gross State Domestic Product
HRMIS	Human Resource Management Information System
ICDS	Integrated Child Development Services

IFIMS	Integrated Financial Management and Information System
IMF	International Monetary Fund
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MOSPI	Ministry of Statistics and Programme Implementation
NHM	National Health Mission
NITI	National Institution for Transforming India
NPS	National Pension System
OECD	Organisation for Economic Co-operation and Development
OPS	Old Pension Scheme
PEFA	Public Expenditure and Financial Accountability
PFM	Public Financial Management
PM-POSHAN	Pradhan Mantri Poshan Shakti Nirman
PSE	Public Sector Enterprise
RBI	Reserve Bank of India
RE	Revised Estimate
SPSE	State Public Sector Enterprise
SSSY	Swatantrata Sainik Samman Yojana
UPS	Unified Pension Scheme

Executive Summary

India's public sector compensation system is characterised by fragmented reporting, incomplete coverage, and inconsistent classification, which leads to a systematic understatement of fiscal commitments. Addressing these gaps is essential for fiscal sustainability, intergovernmental equity, and statistical accuracy for sound policy planning.

This report highlights critical reporting data gaps in government accounts and estimates a more accurate fiscal cost of public sector employment. Definitions of both the public sector and compensation differ widely across institutions, limiting comparability and weakening fiscal analysis. As a result, official statistics systematically understate compensation bills due to structural weaknesses in coverage, classification, and reporting, such as the following:

- **Omission of Key Workers:** Contract workers and scheme-based workers (such as Accredited Social Health Activist [ASHA] and Anganwadi workers) are routinely excluded from government employee bases, meaning their compensation is not reflected under normal salary heads. This creates a structural bias in reported expenditure, particularly as reliance on non-regular workers increases.
- **Fragmented Reporting:** Compensation is often fragmented across different accounts, such as Grants-in-Aid (GIAs) for autonomous bodies, separate defence pay, and distinct railway and post pension accounts. This fragmentation weakens fiscal transparency because no single dataset provides a complete view of compensation obligations.
- **Lack of Standardisation:** Reporting lacks standardisation, especially across states, with differing definitions leading to divergence across multiple official data sources. As a result, inter-state comparisons and aggregation at the general government level are unreliable.

Key Findings

- **Reported Versus Adjusted Fiscal Costs:** When adjusting for these omissions and reporting fragmentation, the actual public sector compensation expenditure is substantially higher than the officially reported numbers.
- **Union Government:** Reported figures suggest that central pay and pension averaged 2.8% of GDP between 2015–2016 and 2020–2021. However, after adjusting for data gaps (like contract worker pay and autonomous institution salaries), the true cost is estimated at 3.8% of GDP. When including Public Sector Enterprise (PSE) employees, this rises further to 4.6% of GDP. This indicates that a significant portion of compensation-related expenditure lies outside standard payroll reporting frameworks.
- **State Governments:** In 2022–2023, reported figures showed states spending 2.5% of the national GDP on salaries. Adjusted figures, which include GIA sal-

aries, scheme worker honorariums, and PSE salaries, place this at 4.1% of GDP. For specific states like Maharashtra, the adjusted pay is nearly triple the reported amount. This highlights wide variation in reporting practices and underscores the scale of underestimation at the subnational level. These adjustments do not reflect new spending, but a more complete measurement of existing obligations.

Policy Recommendations

To address these weaknesses in Public Financial Management (PFM), the 8th Central Pay Commission (CPC) should move beyond its traditional role of pay revision and prioritise a reform-oriented framework for improving the measurement, classification, and transparency of public sector compensation.

This includes the following:

- **Comprehensive Coverage:** Align disclosure with international standards such as the International Monetary Fund (IMF)'s Government Finance Statistics Manual (GFSM) 2014 to include all contracts, schemes, and PSE workers.
- **Standardised Definitions and Classification:** Uniformly codify salary and compensation across accounting frameworks to ensure comparability across states, levels of government, and over time.
- **Integrated Data Systems:** Link personnel and payroll databases with treasury systems to enable real-time tracking of compensation expenditure and improve the assessment of workforce size, fiscal commitments, and long-term liabilities.
- **Improved Pension Transparency:** Publish medium- to long-term actuarial projections to better assess fiscal risks across all categories of pension liabilities.
- **Meaningful Breakdown of Compensation Data:** Headline compensation figures should be accompanied by detailed and standardised disaggregation across workforce categories, sectors, and levels of government.

Together, these reforms would enable the creation of a unified public sector compensation framework, improving fiscal transparency, strengthening intergovernmental comparability, and supporting better policy decisions.

Without a comprehensive and transparent accounting of compensation obligations, fiscal policy risks are being systematically misaligned—overestimating fiscal space while underestimating long-term commitments. Strengthening compensation measurement is therefore essential for sustaining public investment in infrastructure, climate transition, and human capital.

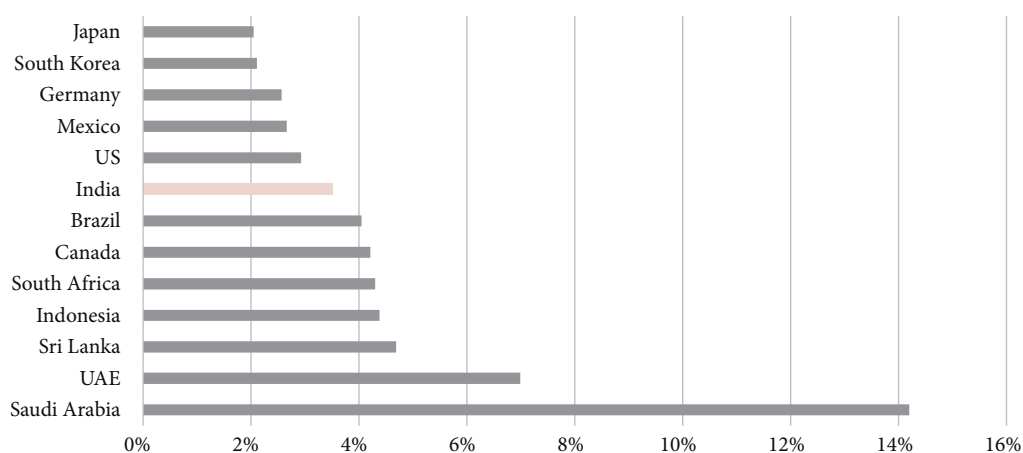
1. Context

The existence of a public sector is often justified by the need to achieve a basic level of economic organisation, the establishment of a form of government that upholds economic and social rights, and the provision of services such as defence, health, and education. International benchmarks (World Bank, n.d.) reflect India's public sector compensation at about 3.5% of GDP. Compared to other countries, India appears to occupy a middle position in reported public sector compensation.

Figure 1 suggests that India's compensation is lower than that of emerging economies such as Brazil and South Africa, but higher than that of advanced economies such as Japan and Germany. However, these comparisons are misleading because they rely on India's reported data that systematically exclude large segments of India's public workforce and compensation. Countries such as Brazil and South Africa report broader coverage—including subnational entities, contract-based workers, and quasi-public employees—while India's lower reported ratios partly reflect narrower coverage rather than lower fiscal commitments. As a result, India's true public sector compensation burden is likely significantly higher than reflected in official statistics.

World Bank data suggest that India's expenditure on compensation of government employees as a percentage of GDP is roughly equivalent to that of the US and Brazil (Figure 1). It appears lower than the expenditure incurred by advanced economies such as Japan and Germany. Relying on such comparisons to get a broad sense of where we stand may be useful; however, making direct comparisons might be misleading if we are to make macro-fiscal assessments and projections. In Figure 1, for most countries, central government finance data have been consolidated into one account, but for others, only budgetary central government accounts are available. These may not include social security contributions and other components.

Figure 1: Cross-Country Data on Compensation of Employees as a Percentage of Gross Domestic Product (2022)



Source: World Bank, *Compensation of Employees (Current Local Currency Units) (n.d.)*.

While the headline question is how much India spends on compensation, the more fundamental issue is how public sector compensation is defined, classified, and measured, since these determine whether fiscal costs are fully captured or systematically understated.

Without comprehensive measurement, even basic questions remain difficult to answer: How large is the public workforce? How is it distributed across sectors and levels of government? What is the true cost of service delivery?

Moreover, performance measurement in the public sector is inherently complex. Unlike private sector firms, where outcomes can be linked to profitability, government objectives are multi-dimensional. They encompass service delivery, equity, and social outcomes. This makes it difficult to design simple and uniform performance metrics across sectors.

The GFSM 2014 by the IMF defines compensation as the total remuneration, in cash or in kind, payable to an individual in an employer–employee relationship (IMF, 2014). This definition is comprehensive and designed to capture the full economic cost of public employment. Apart from basic wages and salaries, it includes allowances, bonuses, commissions, gratuities, employers’ social contributions, subsidised meals and parking, childcare, and, bonus shares, as per Government Finance Statistics (GFS) code 21. Crucially, this includes both direct and indirect compensation, irrespective of how it is budgeted or administered.

Beyond how compensation is defined, the scope of the public sector also matters. World Bank (2025) defines the public sector as comprising central government, including defence, sub-national governments, local municipalities, and PSEs. This definition aligns with international statistical standards used for cross-country comparison. Within this framework, all forms of employment (permanent, contractual, temporary, and outsourced) are included. Accordingly, public sector compensation encompasses all remuneration paid to workers across these entities, regardless of employment status or mode of engagement.

India’s reporting framework deviates from these international standards in both coverage and classification, leading to systematic gaps in the measurement of public sector compensation.

In this report, we define public sector compensation as (i) the pay and pension of the central and state government workers, (ii) the pay of workers in autonomous institutions, and (iii) the pay of central and state public sector enterprises. This also includes scheme-based workers such as ASHA and Anganwadi workers, outsourced and contractual staff engaged through third-party arrangements, and workers in state-aided institutions and local bodies, and implicit compensation components embedded in subsidies or honoraria. In particular, the growing reliance on contractual, scheme-based, and outsourced workers—who are often excluded from formal payroll systems—has widened India’s gap between reported and actual compensation.

Compensation expenditure typically accounts for a significant portion of government spending and is sticky in nature. This makes it a central determinant of fiscal rigidity. Owing to its large fiscal impact, wage bill management requires robust and transparent planning. Lack of transparency in data leads to systematic understatement of the true fiscal burden. This phenomenon is not unique to India. Many economies understate public sector compensation by excluding certain components or workers from official reporting (World Bank, 2021). These include benefits or payments which serve as compensation but are recorded outside the payroll systems. In Indonesia, such non-salary honoraria were estimated to be a third of the total compensation bill (World Bank, 2021). This affects transparency and constrains the ability of governments to allocate resources towards capital formation, climate transition, and productivity-enhancing investments. This is a concern that is particularly relevant for India given its rising development and climate financing needs.

Data are also often fragmented across different levels of government, which further contribute to opacity. International standards emphasise the need for unified payroll systems to overcome such challenges. The combined Union and state accounts of India exhibit multiple data gaps, including omissions, inconsistencies, and incomplete disclosure of data. The problem is more pronounced at the sub-national level owing to variations in disclosure practices. The Comptroller and Auditor General of India (CAG)'s State Finances Report highlighted this variation when it pointed out that states classify expenditure at the object-head level (the lowest level of accounting) differently. In an important reform dated November 2025, the CAG directed states to adopt uniform object-head classification from 2027–2028 onwards to improve comparability and transparency. Such fragmentation prevents the construction of a unified compensation account and weakens fiscal oversight across levels of government. It also limits the ability of institutions such as Finance Commissions and Pay Commissions to make fully informed recommendations.

This report, fourth in the Data Gaps series, is an attempt to bridge the existing data gaps in the pay- and pension-related expenditure of India's public sector. It has two primary objectives. First, it highlights specific gaps in how India reports and accounts for pay and pension data of the public sector. Second, it seeks to estimate public sector compensation after adjusting for these gaps, thereby providing a more accurate assessment of the fiscal burden.

This paper is organised as follows. Section 1 provides the context and explains the relevance of accurately measuring public sector pay and pension expenditure in light of emerging fiscal challenges. Section 2 examines the reported pay and pension data for the Union and state governments and highlights long-term trends. Section 3 identifies the key data gaps in public sector compensation reporting and presents adjusted estimates of the fiscal burden. Section 4 outlines recommendations to improve the measurement, classification, and reporting of public sector compensation. Section 5 concludes the paper.

1.1 Relevance

This assessment is particularly timely for two reasons. First, the central government has notified the 8th CPC to revise the pay scales of central government employees. This will be among the most significant fiscal policy decisions of the decade. An accurate assessment of the 8th CPC's fiscal impact—both at the Union and state levels—requires comprehensive and reliable data on public sector compensation.

Box 1: Central Pay Commission

The CPC is an executive body mandated to review the structure of pay, allowances, pensions, and service conditions of central government employees. This commission is constituted approximately every 10 years. While CPC recommendations formally apply only to the Union government, states typically align their own pay revisions with them, amplifying the fiscal impact across the general government. Several states also set up their own state pay commissions, which conduct similar functions, transmitting and institutionalising CPC-driven pay revisions across the federal system.

However, in the absence of a comprehensive and unified accounting of public sector compensation, the fiscal implications of Pay Commission awards are systematically underestimated. This weakens fiscal planning, obscures medium-term expenditure commitments, and limits the ability of policymakers to assess trade-offs between wages and developmental spending.

Second, several states have reverted to or are considering a shift back to defined benefit-based pension systems (Old Pension Scheme [OPS]). In response to concerns over rising fiscal risks, the central government introduced the Unified Pension Scheme (UPS) in April 2025. The UPS introduces a conditional assured payout along with higher government contributions, thereby increasing explicit and contingent fiscal liabilities. Assessing the fiscal implications of such reforms critically depends on transparent and comprehensive pension data.

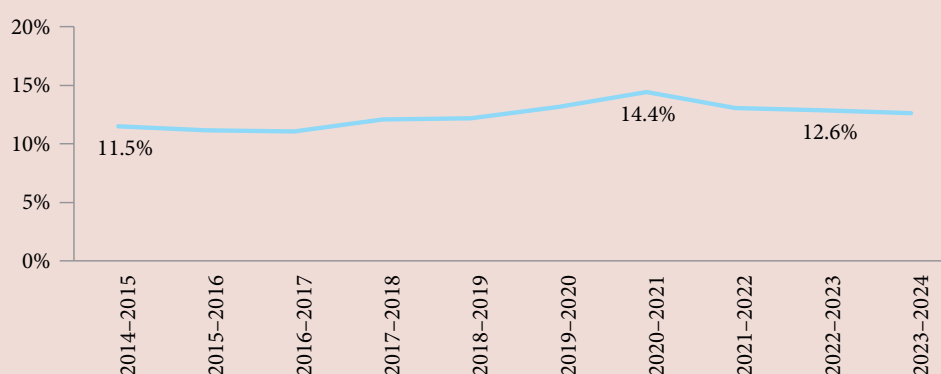
Box 2: Impact of Pension Systems on State Finances

The Reserve Bank of India (RBI) Report on State Finances estimates that a return to the OPS could increase pension liabilities by up to 4.5 times relative to the National Pension System (NPS). The additional burden is expected to reach 0.9% of GDP annually by 2060 (RBI, 2023).

The UPS, introduced by the Ministry of Finance, incorporates features of both the OPS and the NPS. By combining features of OPS and NPS, the UPS creates new fiscal risks through partially guaranteed benefits. While an internal committee has suggested that the scheme may be fiscally manageable, such assessments remain difficult to validate in the absence of transparent actuarial projections. Note that the committee report has not been made public, but committee members have made these observations in public comments. This further underscores the need for transparent and publicly available fiscal analysis.

Figure 2 shows that the pension expenditure of states on an aggregate level has increased from 11% of their revenue receipts in 2014–2015 to 13% of their revenue receipts in 2023–2024.

Figure 2: Aggregate Pension Expenditure of States as a Percentage of Their Revenue Receipts



Source: Handbook of Statistics on Indian States, Reserve Bank of India (various issues between 2014 and 2024).

These developments significantly amplify the fiscal risks associated with already large and rigid pension expenditures. Even based on reported data, compensation expenditure accounted for about 25% of the Union's revenue receipts in 2023–2024. Similarly, 31% of states' revenue receipts were spent on salaries and pensions as per the reported data. For several states, this ratio is even higher. Once off-budget and unrecorded components of compensation are considered, the true fiscal burden is likely significantly higher, implying even tighter constraints on fiscal space. Despite being understated, these committed expenditure items take up a large part of government resources, constraining the fiscal space available for discretionary and

development-related spending. The CAG reported that the committed expenditure of states has gone up two and a half times in 2022–2023 as compared to 2013–2014. Of this, salary is the largest component, followed by pensions and interest payments (CAG, 2025).

Despite significant fiscal outlays, India performs poorly in terms of pension coverage and adequacy. It ranked among the lowest in 52 countries in the Global Pension Index 2025 by Mercer CFA Institute. Pension support in India remains largely limited to formal public sector employees, with limited coverage for the broader workforce. Countries that rank better, like Chile and Mexico, offer a universal old-age social pension, while Canada and New Zealand have a universal flat-rate pension (CFA Institute, 2025). This highlights a dual imbalance in India's system: high fiscal spending alongside limited coverage.

Box 3: Interplay of Pay Commission and Finance Commission Recommendations

Periodic Pay Commission awards typically result in sharp increases in salary expenditures, creating significant fiscal pressures at both the Union and state levels. The 7th CPC, whose recommendations are currently in force, had estimated that its recommendations would have a financial impact to the tune of Rs 1.02 lakh crore. Panda et al. (2019) noted that the fiscal impact of the 7th CPC showed that, for 16 states, the fiscal deficit was expected to rise by about 1.31% of gross state domestic product (GSDP). Subsequent shocks, such as COVID-19, further exacerbated fiscal pressures.

The Finance Commission typically internalises Pay Commission-induced expenditure shocks while determining fiscal transfers and revenue-sharing arrangements. Successive Finance Commissions have generally recommended revenue deficit grants to help states manage rising committed expenditures, particularly salaries. The 16th Finance Commission has discontinued these grants by highlighting that states have rarely been able to overcome their revenue deficits despite the grants being in place for several years now. This marks a significant shift in the fiscal framework facing states.

In this context, incomplete and inconsistent reporting of pay and pension data undermines both the Pay Commission and the Finance Commission processes. Without a reliable estimate of compensation expenditures, fiscal transfers, deficit projections, and sustainability assessments are systematically miscalibrated.

Without evaluating the efficacy of these grants, this report highlights how improved transparency in pay and pension data will strengthen fiscal decision-making. At a minimum, it enables more informed policy decisions regarding compensation, fiscal transfers, pension reforms, and fiscal sustainability.

This makes it imperative that the 8th Pay Commission moves beyond periodic pay revision to address foundational issues in compensation measurement, classification, and fiscal transparency—thereby aligning India’s public finance framework with international best practice.

2. Examining the Reported Numbers

The Union government reports data on pay, allowances, and pensions for selected categories of employees. These data are often distributed across various budget and non-budget documents (Figure 3). This fragmentation complicates efforts to construct a comprehensive and comparable compensation account for the general government.

- At the Union level, pay and allowances data are provided for the following categories of employees: (i) permanent civilian employees in the central civil ministries, (ii) army, navy, and air force personnel, (iii) civilians in the army, navy, and air force, and (iv) R&D service personnel in the Ministry of Defence. Importantly, this excludes several categories of workers associated with public service delivery, including contractual, outsourced, and scheme-based personnel. Over the past two decades, the expenditure on these employees has grown at a compound annual growth rate (CAGR) of 11%. During this period, the Union’s expenditure on pay has averaged 14% of its revenue expenditure, with a peak of 17% in 2018–2019. However, this ratio reflects only the reported payroll and excludes compensation paid through grants, schemes, and contractual arrangements.
- Pension data at the Union level cover permanent civilian employees as well as defence employees. Pension expenditure refers to superannuation and retirement allowances, family pension, gratuities, commuted value of pension, leave encashment, etc. This has grown at a CAGR of 14% over the past two decades. Reported data suggest that pension expenditure has risen from an average of 5% of revenue expenditure between 2004–2005 and 2012–2013, to an average of 7% between 2013–2014 and 2023–2024. This upward trend reflects both demographic pressures and past pay revisions, but still understates total pension liabilities due to incomplete coverage and lack of actuarial reporting.

State governments report their salary expenditure in their Fiscal Responsibility and Budget Management (FRBM) documents. It is typically reported as a single line item, as prescribed by the relevant rules. This high-level aggregation obscures the composition of compensation and limits analytical depth. Further details on salary and pension expenditure are provided in the states’ finance account reports released by the CAG and its decadal State Finance Report.

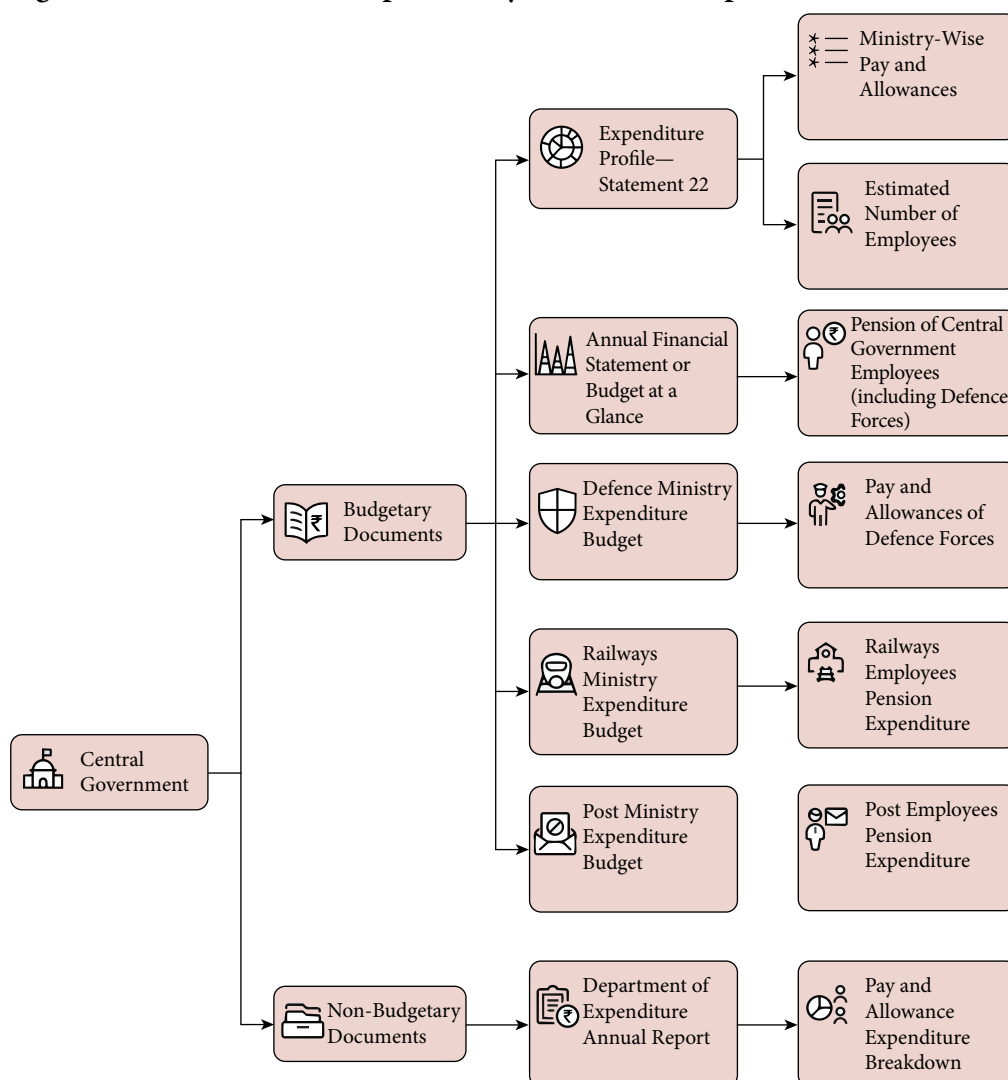
- ***Pay and allowances data reported by states:*** There is substantial variation in the pay data reported in the state budgets, by the RBI and the CAG (see Section 3.3), reflecting differences in classification, coverage, and accounting practices.

Therefore, this report relies on the data provided by the CAG for ‘reported’ pay and pension figures. While CAG data are audited and relatively more reliable, they still reflect underlying limitations in reporting frameworks. The “Salaries/Payroll” data provided by the CAG includes the salaries of permanent employees of the state governments and the arrear payments. However, it does not fully capture compensation paid through grants, schemes, or outsourced arrangements. Salary expenditure of states has grown at 12% CAGR between 2013–2014 and 2023–2024.

- ***Pension data reported by states:*** Pension is reported by the states as per the classification recommended by the CAG. This report relies on the pension data provided by the CAG in its decadal report on State Finances. It contains pension expenditure incurred on retiring Government personnel and does not include pension of State-aided educational institutions and local bodies. This exclusion is significant, given the size of quasi-government and aided institutional employment in many states. Pension expenditure of states has grown at 12% CAGR between 2013–2014 and 2023–2024.

Taken together, these reporting practices reveal a consistent pattern: both Union and state data capture only a subset of public sector compensation as defined under international standards such as the IMF’s GFSM 2014. Large segments of compensation—particularly those associated with non-regular workers, off-budget payments, and institutionally fragmented spending—remain outside the reported aggregates.

As such, there are significant divergences between reported compensation data in India and internationally accepted definitions of public sector compensation. We discuss these gaps in the next section. As shown in the next section, these gaps result in a systematic understatement of the fiscal burden associated with public sector compensation.

Figure 3: Data Sources for Reported Pay and Pension Expenditure of the Union

Source: Authors' compilation.

2.1 Long-Term Trends of Reported Numbers

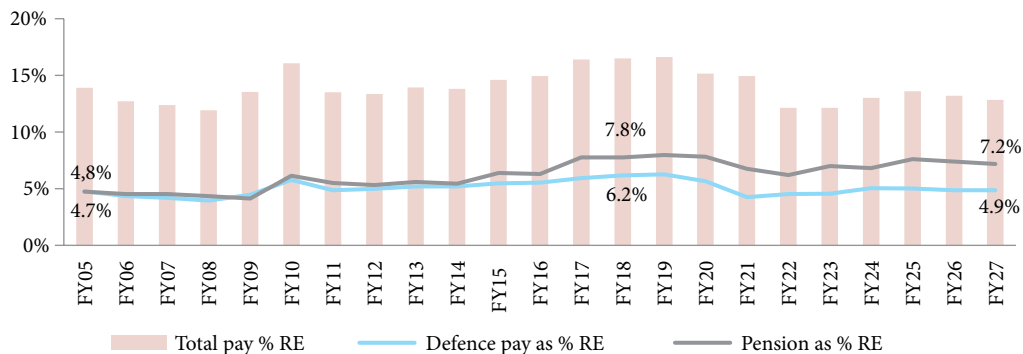
This section examines long-term trends in reported pay and pension expenditure for permanent employees of central and state governments. It is important to note that these trends reflect reported data and therefore understate full compensation expenditure.

Pay and Pension Expenditure of Central Government Employees

Over the past 23 years, the central government's expenditure on pay (salaries and allowances) of its employees has averaged 14% of its revenue expenditure. Pay of defence personnel accounts for about 5% of the revenue expenditure (Figure 4). It

has broadly remained flat between 2004–2005 and 2026–2027, suggesting structural rigidity in wage expenditure over time. Pension expenditure has risen since 2004–2005, from 5% of revenue expenditure to 7% in 2026–2027. This increase reflects a combination of factors, including Pay Commission revisions, increased longevity, and the growing stock of retirees under defined benefit schemes.

Figure 4: Pay and Pension of Central Government Employees as a Percentage of Revenue Expenditure

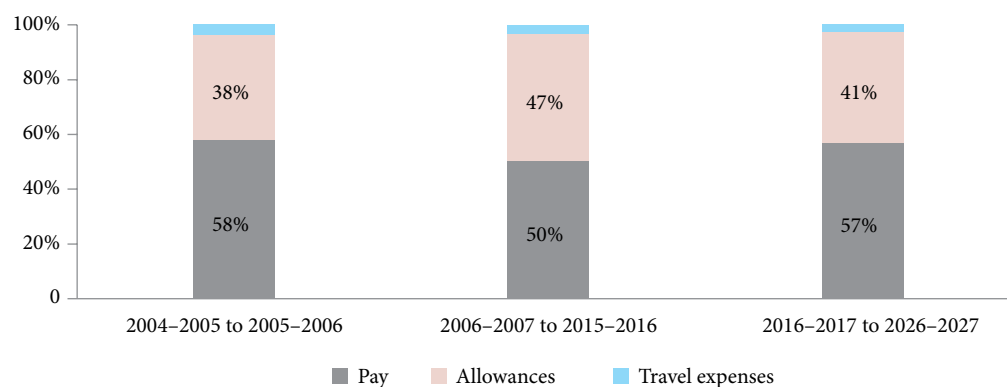


Source: Union Budget Documents (2006–2026).

Note: Total pay includes civilian pay (salaries + allowances) and defence pay (salaries + allowances).

Despite appearing moderate as a share of revenue expenditure, these figures do not fully reflect the fiscal rigidity associated with compensation spending. A significant portion of total compensation is embedded in allowances, off-budget expenditures, and non-regular employment arrangements that are not captured in headline figures.

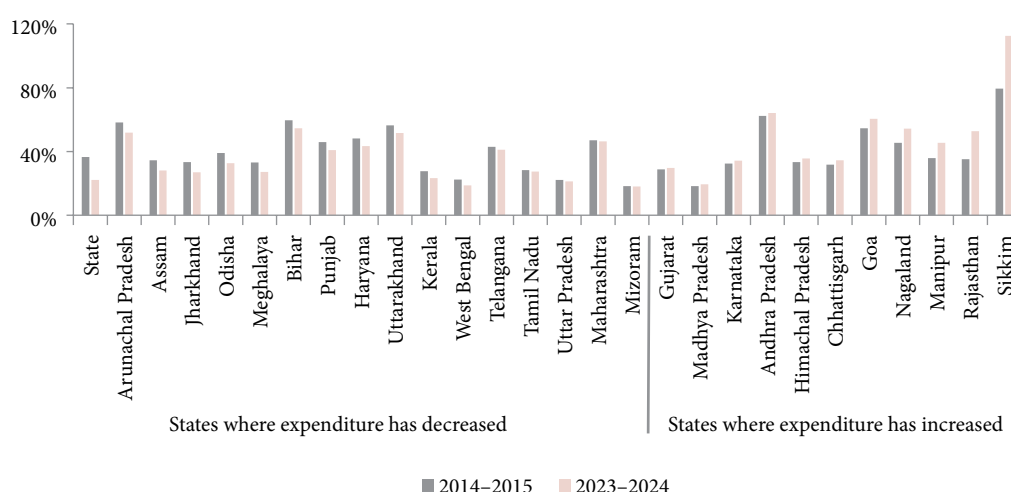
Pay expenditure includes both salary and allowance components. The IMF has noted that an excessive reliance on non-salary components makes the compensation system less transparent. For India, the central government provides a breakdown of pay and allowances for only civilian employees. Between 2004–2005 and 2026–2027, allowances have accounted for 43% of the total pay of civilian employees. Note that while the 7th CPC (2016–2017 to 2026–2027) had rationalised several allowances, their share has risen in recent years (Figure 5). This trend raises concerns about transparency, as non-salary components are harder to standardise and compare across jurisdictions.

Figure 5: Composition of Pay Expenditure of Civilian Central Government Employees

Source: Union Budget Documents (2004–2005 to 2026–2027).

Pay and Pension Expenditure of State Government Employees

Pay and pension data for state governments are compiled by the CAG in its decadal reports. This data is available from 2013–2014 onwards. As a percentage of revenue expenditure, the aggregate salary expenditure of all states has reduced from 22% in 2013–2014 to 18% in 2023–2024. At face value, this suggests an improvement in fiscal space. However, this decline may partly reflect classification shifts in the composition of employment, such as increased reliance on contractual and scheme-based workers, rather than a genuine reduction in the compensation burden.

Figure 6: Compensation as a Percentage of Revenue Receipts

Source: Comptroller and Auditor General of India Decadal Reports (2022–2023; 2023–2024).

Note: Compensation expenditure as a percentage of revenue receipts for Gujarat has remained the same in 2023–2024 as in 2014–2015.

For most states, compensation expenditure in proportion to revenue receipts has decreased over a ten-year period (Figure 6). Nagaland, Manipur, Rajasthan, Sikkim, and Tripura are the only states where compensation expenditure has significantly risen during this period. These variations highlight the heterogeneity across states in fiscal pressures and workforce structures.

Overall, while reported data provide useful insights into trends in pay and pension expenditure, they offer only a partial view of the true fiscal burden. The combination of incomplete coverage, inconsistent classification, and fragmented reporting results in a systematic understatement of compensation costs. This has important implications for fiscal sustainability assessments, intergovernmental transfers, and the design of future Pay Commission recommendations.

3. Data Gaps—What is Missing From the Discussions

The existence of data gaps in pay and pension coverage limits the ability to assess important questions relating to the size and efficiency of the government and the public sector, including the true size of the public workforce, fiscal sustainability, and efficiency of public spending. These gaps exist in the accounts of both the central government and various state governments and, as explained in Section 3.4 below, adjusted estimates suggest that actual compensation levels may be significantly higher than reported figures.

International experience, including the IMF, the World Bank, and the Organisation for Economic Co-operation and Development (OECD), shows that data gaps in public sector compensation typically arise from three structural weaknesses: incomplete coverage of the workforce (for example, exclusion of contract or temporary workers), fragmentation of payroll and pension reporting across institutions, and the absence of integrated human resource management information systems (HRMIS).

These issues are particularly important in federal systems, where fragmentation across levels of government further complicates measurement. As a result, official estimates of public sector compensation in India are systematically biased downward.

3.1 Nature of Data Gaps

In the Indian context, these data gaps reflect structural features of PFM, including fragmented budgeting, the growing use of non-regular employment, the absence of integrated workforce databases, and reporting practices that allow governments to expand employment through off-budget means without reflecting the full fiscal cost in headline indicators. The following subsections examine how these challenges manifest in India's reporting systems.

Our analysis reveals that the centre's reporting of pay and pension data is relatively more standardised and streamlined than that of state governments. However,

significant gaps remain at the Union level. At the state level, variation in definitions, accounting practices, and disclosure standards leads to substantial inconsistencies. This makes aggregation and comparison across states inherently unreliable. This divergence is a central constraint in constructing a consolidated general government compensation account for India.

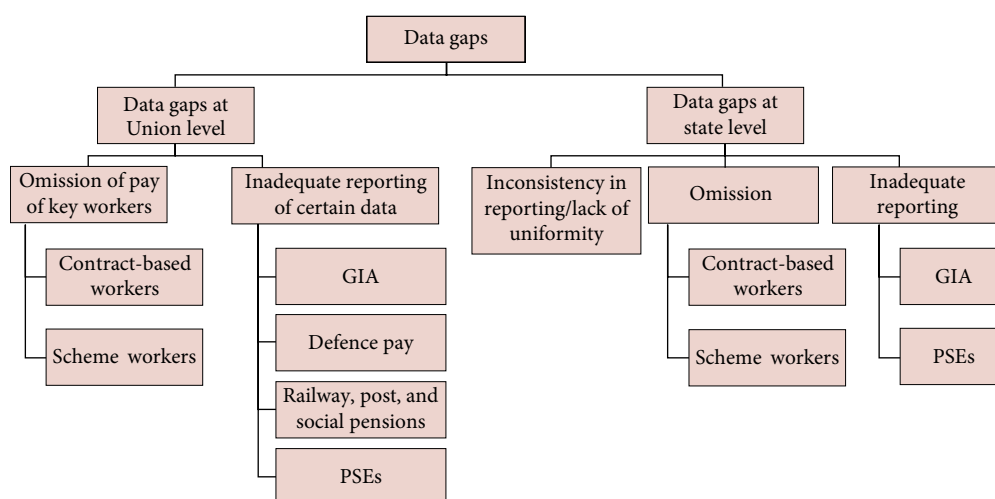
From an analytical standpoint, to calculate public sector compensation, salary or salary-equivalent expenditure incurred on governments' non-permanent staff and compensation to PSE employees should be added to the reported numbers. Similarly, salary grants provided to autonomous institutions such as the Indian Institutes of Management and the Sports Authority of India are presented in a separate statement in the Union budget, which must also be accounted for since they represent core service delivery functions.

The absence of a dedicated major head for salary expenditure, comparable to the pension head (2071), results in salary-related spending being dispersed across multiple accounting heads. In contrast, pensions are clearly identifiable under major Head 2071, highlighting an asymmetry in accounting design. While it is true that a major head represents functional expenditure, creating a major head for salary expenditure will only make the accounting clearer.

This fragmentation prevents the construction of a unified compensation account even where data exists. This is a core weakness in India's Chart of Accounts.

Figure 7 below provides a schematic representation of these gaps, illustrating how reported data diverges from a comprehensive measure of public sector compensation.

Figure 7: Pay- and Pension-Related Data Gaps



Note: Data gaps for compensation expenditure also exist at the third level of government. Reserve Bank of India has recently started providing data related to local bodies. So far, compensation data for 232 Municipal Corporations are available for five years (Figure 9). Since the availability itself is so sparse, identifying types of data gaps becomes difficult.

GIA = grant-in-aid; PSE = public sector enterprise.

From an analytical perspective, these gaps can be grouped into two categories: (i) omission of entire categories of workers and compensation, and (ii) fragmentation of reporting across institutions and accounting heads. Both lead to incomplete aggregation, but fragmentation additionally weakens fiscal control and accountability.

3.2 Union Data Gaps

Data gaps in Union-level reporting arise from both omissions and fragmentation across compensation components. For instance, no information on the pay of contract and scheme-based workers is available. The pay of defence personnel and workers in autonomous bodies is reported separately and must be added to the overall salary bill. Similarly, the pensions provided to workers in the Railways and Posts are also reported separately, which need to be added to the overall pension expenditure. Pensions provided to vulnerable populations for social security are also calculated and included in our estimations of the public sector compensation, as they constitute a part of the social pension. OECD (2024) highlights the importance of limiting pay fragmentation and ensuring that compensation components are consistently recorded to support accountability and workforce management. These gaps systematically exclude categories of workers and expenditures that have grown rapidly over time, particularly those associated with service delivery and administrative outsourcing.

Omission of Pay of Key Workers

(i) Contract-Based Workers

Governments are increasingly relying on contract workers to perform a wide range of functions. This shift reflects both hiring constraints and efforts to manage headline fiscal indicators. The contracts can be direct or through third-party agencies and are often excluded from the government employee base. As a result, the compensation paid to them is not reflected under the usual salary heads. However, the tasks performed by such workers are perennial in nature and crucial to the functioning of the governments. In many cases, these workers substitute for regular staff rather than complement them. These can include a range of work like maintenance, data entry, and at times high-skilled consultancy jobs. To comprehensively assess the Union's compensation bill, the pay of all types of workers must be accounted for, irrespective of the type of contract issued.

The World Bank (2021) public sector employee assessment framework notes that all permanent and contract workers must be covered. The increasing reliance on contractual employment is not unique to India. Governments across both advanced and developing economies have expanded the use of contract and outsourced labour in response to hiring constraints and fiscal pressures. However, international experience shows that such arrangements often fall outside standard payroll reporting

systems, which can obscure the true size of the public workforce and the fiscal cost of compensation. Failure to do so undermines cross-country comparability and fiscal transparency. As governments substitute permanent employees with contractual arrangements, reported compensation ratios may appear stable or declining even as underlying fiscal commitments increase.

The Ministry of Labour and Employment reports partial data sporadically. For instance, the number of contract workers engaged in the central government was provided for six non-continuous years (Table 1).

This discontinuity of data prevents a meaningful evaluation of trends over time. For instance, it is not possible to evaluate whether the government's reliance on contract labour has changed. This prevents understanding shifts in fiscal and administrative capabilities, as well as the strategy of governments.

The limited data lack granularity since no Ministry- and grade-wise breakdown is available. While the data show a fall in the number of contract workers engaged between 2015–2016 and 2019, without a longer trend or breakdown of the data, it is not possible to assess trends in labour substitution, cost efficiency, or fiscal sustainability.

Table 1: Number of Contract Workers Registered Under the Contract Labour (R&A) Act, 1970

2013– 2014	2014– 2015	2015– 2016	2016– 2017	2017– 2018	2018– 2019	2019	2020	2021
17,50,145	17,47,985	18,45,872	NA	NA	NA	13,64,377	13,24,874	24,30,989

Source: Lok Sabha Question No. 2806 (March, 2022) and No. 1357 (July, 2016).

Note: The reporting years of the data across the two sources differ, i.e., the initial three figures are reported for financial years, and the latter figures are reported for calendar years. In Table 7, the reporting is assumed to be for financial year periods only, for convenience of calculations. NA = not available.

Additionally, information on the cost of engaging these workers, i.e., their salary expenditure, is not provided. The fiscal burden can be significant on the Consolidated Fund of India (CFI). The Methodology sub-section (Section 3.4) deals with the estimation of contract workers and their corresponding salary expenditure at the Union level. It estimates an expenditure of at least Rs 14,000 crore annually on contract worker pay in recent years.

This creates a perverse incentive structure: governments can expand service delivery through contractual arrangements without a commensurate increase in reported compensation ratios. As a result, fiscal indicators may suggest stability even when underlying wage commitments are rising.

(ii) Scheme Workers

The government engages many workers to implement its social development schemes such as the National Health Mission (NHM), Integrated Child Development Services (ICDS), and Pradhan Mantri Poshan Shakti Nirman (PM-POSHAN). These workers are central to frontline service delivery in health, nutrition, and education. However, these scheme-based workers are considered ‘volunteers’ and are therefore paid an honorarium for their services. As their work has become perennial, there have been several demands to make these workers part of the government’s workforce. Without getting into that aspect, a case can certainly be made that the honorarium paid to these workers must be included in the government’s compensation, as it represents recurring payments for essential service delivery in exchange for labour. Since the government does not regularly report on the strength and the honorarium of these workers, estimations have to be made to arrive at the expenditure incurred on scheme-workers. In international accounting frameworks, including the IMF’s GFS framework, such programmes are often treated as part of government compensation when they involve direct labour payments.

The other type of scheme workers whose pay must be accounted for are those who are provided with work through employment guarantee schemes. The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is the largest employment guarantee scheme¹ in India and provides work to about 12 crore workers (Ministry of Rural Development, n.d.). The rationale of the scheme is that it provides employment to those citizens who cannot find work in the private sector, and the government foots the bill for their wages. The expenditure incurred on this scheme is large and is typically accounted for as ‘scheme expenditure’. World Bank (2025) highlights the need for a thorough understanding of the full composition of workforce when conducting public wage bill analysis. It explicitly broadens the definition of public employment contracts beyond permanent staff to encompass temporary employees and other labor arrangements. Integrating public employment schemes into formal workforce calculations is consistent with international budgetary practices. For example, South Africa’s runs an Expanded Public Works Programme, a state sponsored employment initiative that is structurally equivalent MGNREGA. The National Treasury’s Estimates of National Expenditure note this expenditure under public works and infrastructure, along with compensation to employees. This demonstrates that treating state-funded, wage-based employment programs as a component of the broader public wage bill is a recognised framework.

While MNREGA expenditure is classified as scheme expenditure, the nature of the scheme, in that the beneficiaries are workers who carry out manual labour in exchange for a wage, is representative of a wage paid by the government. The classification of these payments as ‘honorarium’ rather than wages creates an

¹ This has now been renamed as Viksit Bharat Guarantee for Rozgar and Ajeevika Mission (Gramin) (VB-G-RAM-G).

accounting distinction without an economic difference. Excluding such expenditures from compensation aggregates understates the role of the state as an employer of last resort and distorts cross-country comparisons where similar programmes are treated as wage expenditure.

Fragmented Reporting

Fragmentation is not only a presentation problem; it weakens accountability, as no single institution has a complete view of compensation expenditure. As such, it complicates fiscal risk assessment, as liabilities are spread across multiple institutional channels. This complicates the audit, reduces transparency in budget execution, and limits the effectiveness of expenditure control mechanisms. The Public Expenditure and Financial Accountability (PEFA) framework highlights the importance of integrating payroll and personnel records and ensuring timely reconciliation and audit trails—especially where multiple entities and payment channels exist (PEFA, 2016).

(i) Grants-in-Aid

The government normally carries out its functions through Ministries or Departments. At times, it sets up autonomous bodies or parastatals to provide services it otherwise would have provided on its own. For instance, the All India Institute of Medical Sciences (AIIMS) is an autonomous institution established to develop patterns of teaching in medical education in the country. Similarly, the Food Safety and Standards Authority of India (FSSAI) has been created to lay down science-based standards for food items. These institutes are provided with grants by the central government for their functioning. The grants are categorised as salary and non-salary. In 2024–2025, the central government transferred Rs 59,462 crore as salary grants to 358 autonomous institutions (Ministry of Finance, 2024).

These grants are not included in the central government's salary expenditure. It is argued that this expenditure must be reflected in the centre's salary bill for two reasons: (i) the salary expenditure is incurred from the CFI, and (ii) the institutes are carrying out functions that may have otherwise been conducted by Ministries or government departments. However, separate bodies are created for administrative efficiency.

International best practice treats such expenditures as part of general government compensation, irrespective of institutional form, when they are financed from public resources and support public service delivery.

(ii) Defence Pay

The central government reports pay data for the defence forces separately. In 2023–2024, the central government paid Rs 1.76 lakh crore as defence salaries and allowances, which is about 36% of the central government's total reported pay. Since defence personnel form part of the central government's workforce, the expenditure

incurred on their salaries must be included in the centre's compensation to arrive at a true estimate.

Further, the central government had introduced the Agnipath Scheme (Press Information Bureau, 2022), which restructures defence recruitments and engages *Agniveers* as a separate rank for four years. While the government makes partial contributions to a corpus, its pension burden is expected to significantly ease. To compare the expenditure incurred on the pay of Agniveers and other existing forces, expenditure on their pay and allowances must be reported separately.

(iii) Railways, Posts, and Social Pensions

Railways and Posts Pension

The pension of central government employees, including defence personnel, is shown under the account head of '2071' in the Finance Accounts of the central government. This is as per the major head prescribed by the Controller General of Accounts (CGA). However, the pension of two Ministries, i.e., Railways and Posts, is reported separately in the accounts. This is because the pension expenditure is first transferred to a pension fund operated in the public account. This renders the '2071' head incomplete, and the railway and post pension have to be separately added to arrive at the true pension expenditure.

Social Pension

The government often provides a pension to vulnerable sections of the population as they get older. This fulfils a social function and is not often counted as pension expenditure per se. However, it is pension expenditure in that it smooths the consumption curve of the beneficiary over their lifetime. Essentially, these schemes fall under income support for the old and the marginalised. The following pension schemes are included in social pension: (i) National Social Assistance Programme, (ii) pensions under social security schemes, (iii) Swatantrata Sainik Samman Yojana (SSSY), and (iv) social security for labour.

The separation of these components from headline pension figures weakens the analytical usefulness of the '2071' head and necessitates reconstruction for meaningful fiscal assessment.

(iv) Central Public Sector Enterprise Employees

The government establishes public sector enterprises to work in certain strategic areas and contribute significantly to the nation's growth and development. PSEs continue to play an important role in employment generation and capability-building across sectors. To fully understand the extent of salary-related expenditure in the public sector ecosystem, it is therefore essential to consider the compensation of employees in public sector undertakings, public sector banks, and other public financial institutions, not only those on government payrolls. Panda et al. (2019) noted that the pay structure of PSEs should also be reviewed to understand best

practices to enhance productivity and accountability. Currently, the pay of PSE employees is reported by the Department of Public Enterprises under the Ministry of Finance. It includes the salaries of employees in central public sector enterprises (CPSEs). However, it does not provide salary data for public sector banks. Different PSEs also have different performance-related pay and allowance parameters, which cannot be uniformly reported.

To make any meaningful assessments regarding productivity and accountability, the required data must be made available in a uniform, centralised, and consolidated format without losing granularity. Exclusion of these employees understates the broader public sector wage bill and weakens productivity analysis.

3.3 States' Data Gaps

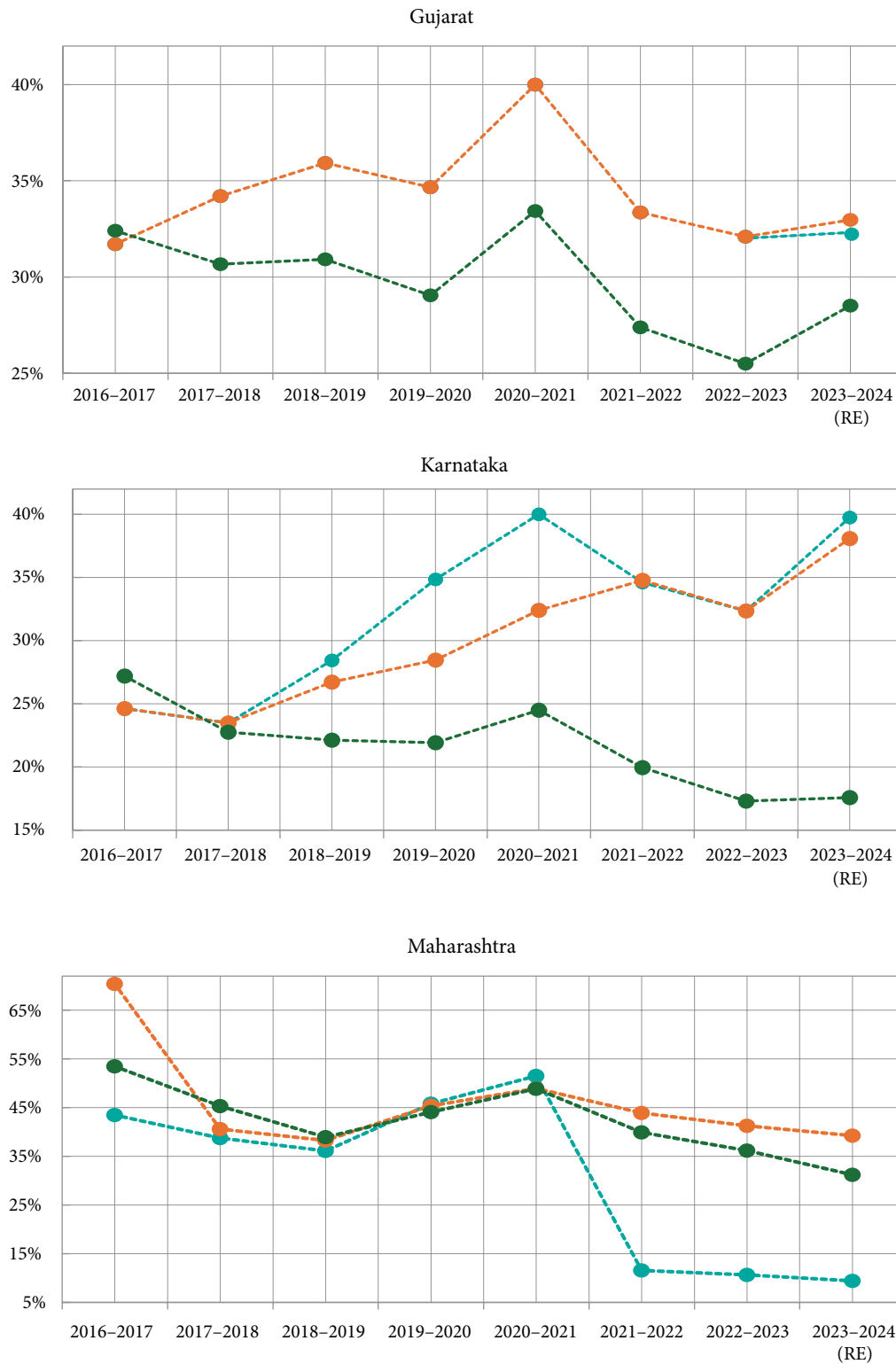
Lack of Standardisation

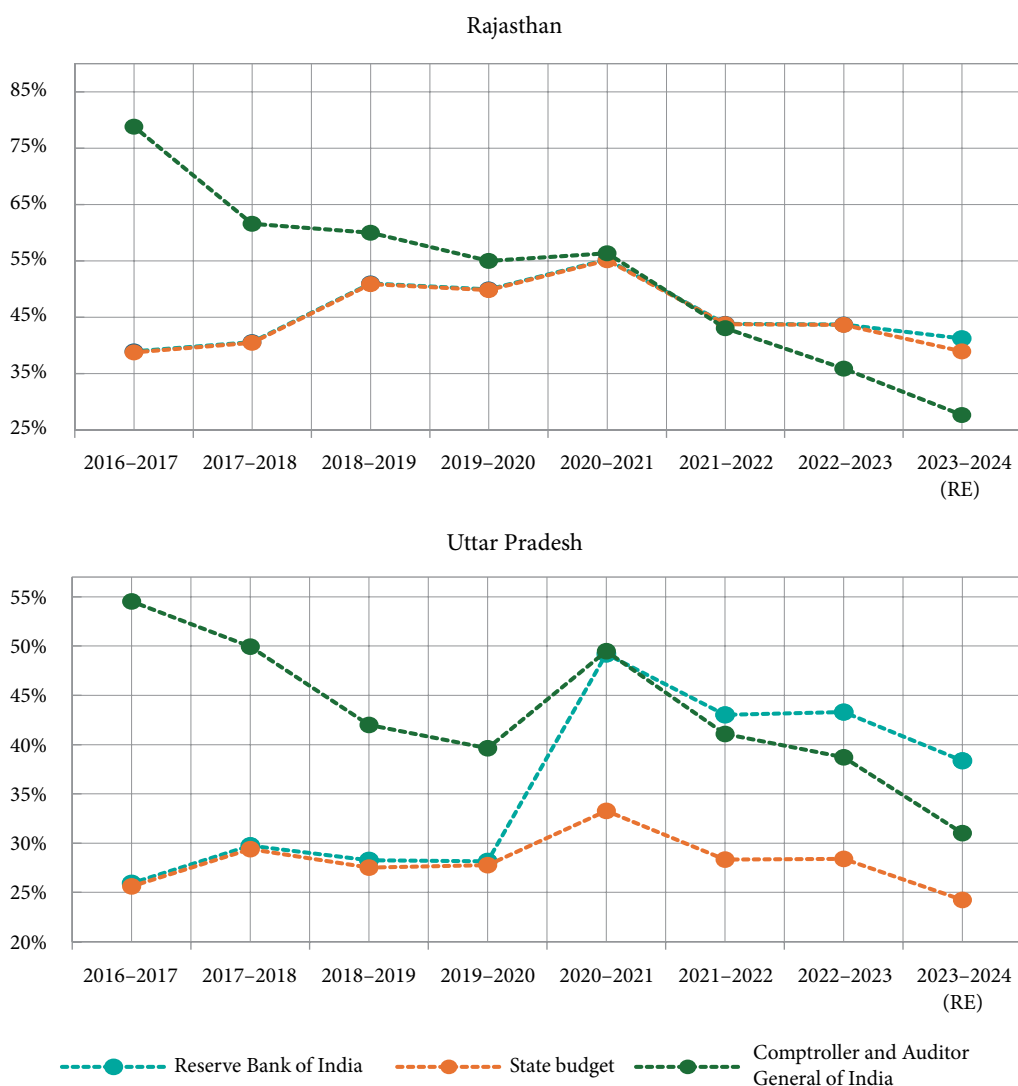
At the state level, data gaps are more severe due to institutional fragmentation. A key challenge in analysing pay and pension expenditure of states is the significant inconsistency in reporting across states and institutions, which makes the data difficult to compare. Institutions such as the CAG, RBI, and state finance departments publish varying estimates of salary expenditure for the same state and year because there is no commonly accepted definition of what constitutes “salary”, nor is there uniformity in reporting formats. Much of the reporting continues to rely on a single line item for salaries, with limited detail on the underlying components, leading to discrepancies across datasets. As a result, what is labelled as ‘salary’ across states may not represent comparable economic concepts, undermining both horizontal comparisons and FC assessments.

The comparison across the three data sources—the CAG state finances decadal report 2023–2024, the RBI’s State Finances database, and the state budget documents—shows significant inconsistencies in how pay and pension expenditure are recorded and reported. We have included expenditure on salaries as well as grant-in-aid salaries when considering CAG data. Figure 8 represents the wide variations in the salary and pension data from three official sources as a percentage of states’ revenue receipts. These variations highlight methodological and definitional differences. As a result, the same state’s expenditure burden on salaries and pensions can appear understated or inflated depending on the source, making interstate comparison difficult.

The wide variations in the data reflect differences in coverage and scope by different institutions. The CAG figures, despite being inclusive of GIA salaries, are still lower than the other two sources, reflecting a definitional difference in what is considered the employee base and salary. While Gujarat largely follows a similar trend across the CAG, the RBI, and the state budget, the remaining states show a massive divergence. In the case of Uttar Pradesh, the RBI data matches the CAG data for some years and the state budget data for other years.

Figure 8: Differences in the Reported Pay of Selected States Across Different Institutions





Source: Comptroller and Auditor General of India, Reserve Bank of India, and State Budget Documents (2017-2018 to 2023-2024).

Coverage gaps further complicate the picture. Some states include salaries paid to municipal corporations, panchayats, zilla parishads, and state-owned enterprises. As a result, even when comparable line-items exist, the underlying workforce represented in the data may differ, making direct comparison unreliable. This lack of comparability undermines inter-state fiscal analysis, including assessments of horizontal equity and expenditure needs. It also weakens the evidentiary basis for Finance Commission transfers and fiscal rule design.

Omission

Like the Union government, state governments also do not maintain pay data for certain types of workers in their budget documents. Pay data for contract workers,

scheme-based workers, workers in autonomous bodies, and employees of SPSEs is not regularly reported. While some states may disclose this data occasionally, such reporting is neither regular nor consistent. The omission of these categories is particularly significant given the increasing reliance of states on non-regular employment arrangements to manage fiscal constraints.

(i) Contract Workers

Like the centre, the states also lack a comprehensive accounting of their contractual workforce. As discussed, the calculation of public sector compensation requires the inclusion of contract worker pay. Contractual expenses find mention in Statement 4B of CAG's Finance Accounts for some states. The remuneration for outsourced staff is often routed through generic object heads like 'professional services', 'contractual payments', and 'outsourcing', which effectively mask routine manpower costs. The data, however, are inconsistently available, both across states and years. This makes it almost impossible to compile a complete and accurate long-term state-wise expenditure for contractual staff. Table 2 presents the contractual pay expenses of three states.

Table 2: Contract Pay Expenses (in Rs crore)

	2017– 2018	2018– 2019	2019– 2020	2020– 2021	2021– 2022	2022– 2023	2023– 2024
Maharashtra	153	169	187	512	1,289	1,488	NA
Karnataka	457	885	1,136	1,328	1,717	1,775	1,805
Rajasthan	341	426	474	540	684	867	1,125

Source: Comptroller and Auditor General of India Finance Accounts (2018–2019 to 2025–2026).

Note: NA = not available.

In the absence of systematic information on the strength of states' workforce, wage expenditure cannot be meaningfully analysed. The existing reportage is insufficient for capturing the scale of contractual employment. Some states have taken steps to bring transparency to the reporting of the strength of their workforce. Uttar Pradesh, which has outsourced 11 lakh employees across 93 departments, approved the establishment of the Uttar Pradesh Outsource Service Corporation Limited in September 2025 to bring transparency and accountability in outsourcing (Rai, 2025). Telangana, similarly, has stressed the need to update its Integrated Financial Management and Information System (IFIMS) to include the cadre strength of permanent employees and contract workers within a stipulated time (Rajeev, 2025). The rapid increase in contractual expenditure in states such as Karnataka and Maharashtra suggests a structural shift in employment practices. Without complete workforce data, contractual pay data remains omitted from public sector compensation.

(ii) Scheme Workers

States engage with scheme-based workers both through centrally sponsored schemes (CSS) and through state-specific programmes. Similar to the centre, such incentives and payouts by the states are generally kept outside the salary calculations. In the case of states, we have accounted for Anganwadi workers under ICDS, ASHA workers, auxiliary nurses, and midwives under NHM, and cook-cum helpers (CCH) under PM-POSHAN. As with the Union government, treating these payments as non-salary expenditure obscures their true fiscal and economic nature.

Fragmented Reporting

(i) Grant-in-Aid Salary

Similar to the Union, grant-in-aid salaries are provided by the states to autonomous institutions and higher education institutions. Some grants also go towards local bodies. Since 2025, the CAG has verified and compiled grant-in-aid salary data for states. For states like Gujarat, Maharashtra, and Bihar, the total expenditure on salaries stood at nearly 50% of their revenue expenditure when GIA salaries were included. Of this, GIA salaries alone account for roughly 10–15%. Since this money is taken out of the consolidated fund of the states to be paid as salaries, it must be included in the compensation expenditure. Failure to consolidate these expenditures results in systematic underestimation of compensation and weakens accountability for public spending.

(ii) Public Sector Enterprises

At the Union level, the Department of Public Enterprises (DPE) under the Ministry of Finance publishes an annual report that details the sector-, industry-, and PSE-wise expenditure on multiple heads, including compensation to employees.

However, this level of aggregation is not done at the state level. States must follow in the footsteps of the centre to provide a sense of aggregate spending on public enterprises. Budgetary support, loan waivers, and bailouts are regularly offered to SPSEs, so it is even more crucial that the expenditure be reviewed. Centre for Monitoring Indian Economy's (CMIE) Prowess dx database is used to get the data on compensation to employees in state public sector enterprises (SPSEs) (see Table 3).

Table 3: Annual Expenditure on Compensation to Employees for State Public Sector Enterprises (in Rs crore)

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023
Compensation to employees	63,900	64,083	73,676	84,631	98,515	1,02,439	1,02,930	1,06,694	1,13,125
No. of SPSEs	395	424	416	417	405	395	368	343	284

Source: Centre for Monitoring Indian Economy Prowess dx.

Note: The number of SPSEs for which compensation data is available varies each year as shown in the table.
SPSE = state public sector enterprise.

Box 4: Data on Pay of Local Body Workers

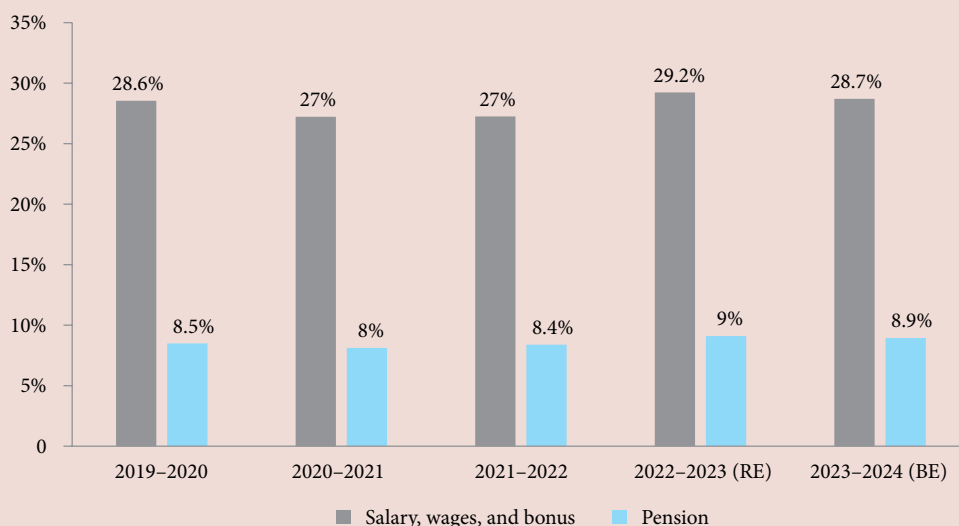
Absence of comprehensive data on local body employment represents one of the largest remaining blind spots in India's public sector compensation framework.

General government, as defined by the IMF, refers to the three tiers of government, i.e., the Union, states, and local bodies. The adjusted pay figures constructed for all states (see Table 5) only partially include the pay of local body workers. Local bodies may include municipal corporations, municipal councils, town committees, panchayats, zilla parishads, etc. Their pay is partially captured through the grants-in-aid salary component, which includes salary grants paid to autonomous institutions such as universities, as well as local bodies.

However, local bodies also deploy their own resources, primarily collected through user charges or property taxes, to finance their own expenditure. RBI provides salary and pension data for 232 of 269 Municipal Corporations. This information cannot be directly added to the adjusted pay and pension figures for two reasons. First, it does not include rural local bodies, as well as other urban local bodies like Municipal Councils, Nagar Panchayats, etc. Second, a breakdown of grant-in-aid salaries provided by states is not available for deduction, which will lead to double-counting.

Table A-3 in the Appendix provides state-wise data on the salary and pension of Municipal Corporations.

Figure 9: Salary and Pension for 232 Municipal Corporations as a Percentage of Revenue Expenditure



Source: Reserve Bank of India Report on Municipal Finances (2024); authors' calculations.

3.4 Adjusted Pay and Pension

Centre's Adjusted Pay and Pension

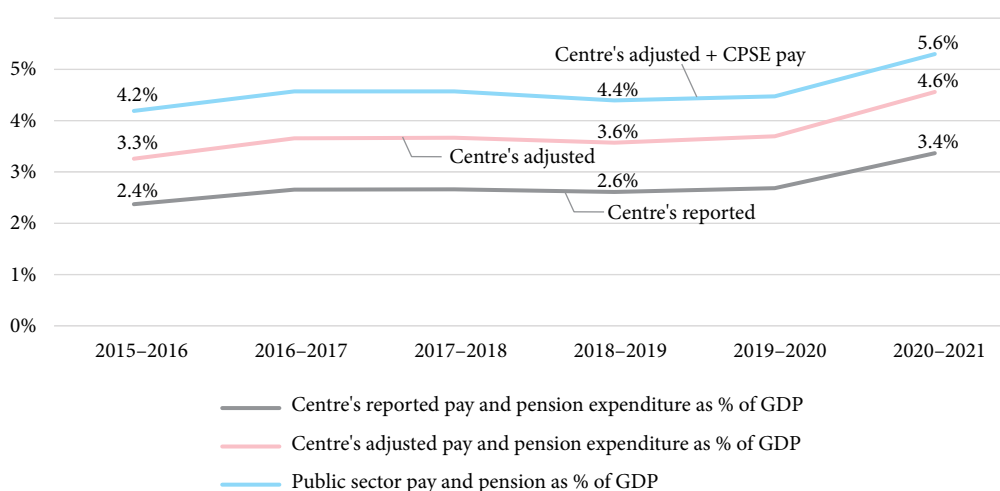
Adjusting for the identified gaps provides a more realistic estimate of India's public sector compensation burden. Once the data gaps discussed above are accounted for, the centre's compensation bill amounts to an average of 3.8% of GDP for the period 2015–2016 to 2020–2021. If only the reported numbers are to be considered (which do not account for items such as contract worker expenditure and pay of PSE workers), the average expenditure on pay and pension amounts to 2.8% of GDP. This implies that official figures may understate the Union's compensation burden by nearly half.

Figure 10 shows the difference between the central government's reported and adjusted expenditure for pay and pensions. Table 4 provides a breakdown of components considered for constructing the adjusted pay and pension numbers. It should be noted that the following are only conservative estimates of each line item to prevent overestimation.

Salaries of CPSE employees have also been included in the adjusted bill. Note that this only includes the salaries paid to PSE employees and does not include pensions. Further, it does not include salaries paid to the employees of nationalised banks. Upon inclusion of PSE employees, the adjusted compensation for the period 2015–2016 to 2020–2021 rises to 4.6% of GDP.

The Methodology sub-section below details how the adjusted pay is estimated.

Figure 10: Expenditure on Pay and Pension as a Percentage of Gross Domestic Product



Source: Union Budget Documents, Controller General of Accounts, Department of Personnel and Training (2016–2017 to 2025–2026), and authors' calculations.

Table 4: Adjusted Pay and Pension Expenditure of the Central Government

	2015– 2016	2016– 2017	2017– 2018	2018– 2019	2019– 2020	2020– 2021
Reported expenditure items						
Pay	2,29,819	2,77,344	3,09,770	3,33,610	3,55,797	4,60,663
Pension	96,771	1,31,401	1,45,745	1,60,211	1,83,955	2,08,473
Subtotal (A)	3,26,590	4,08,745	4,55,515	4,93,822	5,39,752	6,69,136
Centre's reported pay and pension expenditure as % of GDP	2.4%	2.7%	2.7%	2.6%	2.7%	3.4%
Estimated/adjusted expenditure items						
Adjusted Pay	80,113	99,173	110,996	119,473	136,336	165,097
<i>of which</i>						
Pay of contract workers	6,911	14,716	15,257	13,877	14,302	14,302*
Grant-in-aid salaries	26,536	30,438	35,572	37,378	43,183	42,331
Honorarium of scheme workers	18,660	17,858	18,792	21,856	25,086	25,086*
MGNREGS salary payouts	28,006	36,161	41,375	46,361	53,765	83,378
Adjusted Pension	42,226	54,918	60,517	62,217	67,460	70,965
<i>of which</i>						
Posts pension	5,408	7,547	8,511	8,706	9,419	9,760
Railway pension	31,921	42,249	47,503	49,239	53,057	52,630
Social pension**	4,897	5,122	4,502	4,272	4,984	8,575
Centre's adjusted pay and pension expenditure	4,48,928	5,62,837	6,27,028	6,74,931	7,42,967	8,98,861
Centre's adjusted pay and pension expenditure as % of GDP	3.3%	3.7%	3.7%	3.6%	3.7%	4.6%

Source: Authors' calculations based on Union budget documents, Controller General of Accounts, Department of Personnel, and Ministry of Statistics and Programme Implementation data.

Note: The above table shows lower-bound estimates for contract and scheme workers. Therefore, the total adjusted compensation could be higher.

*Honorarium and contract pay details were unavailable for 2020–2021; therefore, the estimates for 2019–2020 have been used for 2020–2021.

** Social pension includes pensions paid under social security schemes.

GIA = grant-in-aid; MGNREGS = Mahatma Gandhi National Rural Employment Guarantee Scheme.

States' Adjusted Pay (2022–2023)

Reported numbers are riddled with multiple issues of undercounting by some states, overcounting by others, and a mismatch of data across different official sources. We have estimated the adjusted pay and pension figures for states for the year 2022–2023 to illustrate the gap. For all states combined, the adjusted pay data reveal that salary expenditure is much higher than previously estimated. We have relied on

Finance Account data released by the CAG, and some components of adjusted pay are constructed based on sparsely available data from various official sources.

For the calculation of honoraria, we consider Anganwadi workers (AWW), Anganwadi helpers (AWH), CCH, and ASHA workers. The expenditure is calculated using the active number of workers and the honorarium to them as reported in parliamentary discussions.

Reported figures indicate that all states combined spent Rs 6.7 lakh crore on salaries in 2022–2023, which accounts for 2.5% of GDP. Once we adjust for the pay of employees in autonomous institutions (GIA salaries), the honorarium paid to scheme workers, and the wages paid to temporary workers, pay expenditure rises to Rs 10 lakh crore, accounting for 3.7% of GDP. Accounting for the salaries of public sector employees increases the compensation expenditure of state governments to 4.1% of GDP.

Table 5: Reported Versus Adjusted Pay for All States in 2022–2023 (in Rs crore and as a Percentage of Gross Domestic Product)

Reported Pay	Items that have been adjusted (B)			Adjusted Pay	SPSE salaries	Public sector Pay
(A)	GIA Salaries	Honorarium	Wages to temporary workers	(A+B)	(C)	(A+ B+C)
6,65,354	2,92,114	18,552	24,473	10,00,493	1,13,125	11,13,618
(2.5%)				(3.7%)		(4.1%)

Source: Lok Sabha (2017, 2024a, 2024b); authors' calculations.

Note: Honorarium includes Anganwadi workers/helpers, ASHA workers, and cook-cum-helpers under Pradhan Mantri Poshan Shakti Nirman.

ASHA = Accredited Social Health Activist; GIA = grant-in-aid; SPSE = state public sector enterprise.

As limited data are available on the expenditure incurred on contract workers, we examine the effect for only a few states, i.e., Maharashtra, Uttar Pradesh, Rajasthan, and Karnataka.

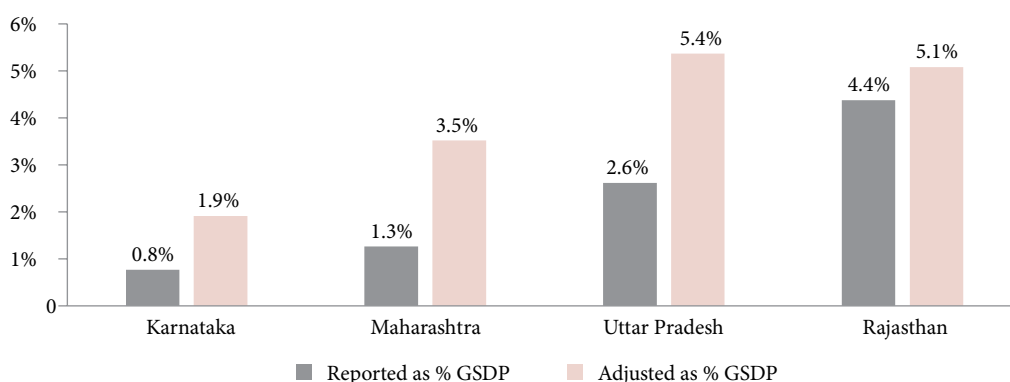
Table 6: Adjusted Pay Including Contract Workers for Selected States for 2022–2023 (in Rs crore and as a Percentage of Gross State Domestic Product)

State	Reported Pay (A)	Items that have been adjusted (B)				Adjusted Pay (A+B)
		Grant-in-aid salaries	Honorarium	Pay of Contract workers	Wages to temporary workers	
Maharashtra	45,953 (1%)	76,234	1,299	1,488	3,222	1,24,974 (3%)
Uttar Pradesh	60,061 (3%)	58,408	1,177	892	2,719	1,20,538 (5%)
Rajasthan	59,378 (4%)	7,468	676	867	539	68,928 (5%)
Karnataka	17,817 (1%)	23,162	1,448	1,775	144	44,346 (2%)

Source: Comptroller and Auditor General of India State Finance Accounts and State Finances (2023–2024); authors' calculations.

Note: Figures in brackets indicate percentage of gross state domestic product.

Once contract workers' pay is adjusted for, there is a significant difference in the compensation of the three states. Pay as a percentage of the GSDP rises by 2 percentage points for Uttar Pradesh and Maharashtra, and 1 percentage point for Rajasthan. Given the size of these economies, this is a significant increase. The differences depicted in Figure 11 reflect divergent reporting practices and budget structures across the four states, rather than being a direct comparison of their actual fiscal realities.

Figure 11: Reported Versus Adjusted Pay as a Percentage of Gross State Domestic Product for 2022–2023 for Selected States

Source: Comptroller and Auditor General of India, State Finance Accounts and State Finances (2023–2024); authors' calculations.

Methodology

Estimating the Pay of Contract Workers

The expenditure incurred on the pay of contract workers is estimated by multiplying the total number of contract workers by the average wage of a contract worker. However, since the central government does not report the number or the average wage, both must be estimated.

Expenditure on contract workers = Strength × Average annual wage

Estimating the Strength of Contract Workers in the Central Workforce:

- The central government had reported the total number of contract workers engaged at the centre for select years (see Table 7). However, a continuous time series is not available.
- To estimate the number of contract workers for the missing years between 2004–2005 and 2025–2026, the ratio of contract workers to permanent workers is used. For example, in 2013–2014, the central government had more than 33.3 lakh permanent employees and 17.5 lakh contract workers, implying that contract workers constituted 53% of the permanent workforce. Our approach assumes stability in the composition of the workforce unless otherwise determinable.

Table 7: Number of Contract Workers Engaged at the Centre as Reported by the Central Government

Year	Number of contract workers	Total permanent government employees ²	Share of contract work in the permanent workforce
2013–2014	17,50,145	33,28,027	53%
2014–2015	17,47,985	33,05,646	53%
2015–2016	18,45,872	32,84,714	56%
2016–2017	NA	32,52,796	-
2017–2018	NA	32,38,397	-
2018–2019	13,64,377	32,62,908	42%
2019–2020	13,24,874	32,71,113	41%
2020–2021	24,30,989	31,80,400	76%

Source: Lok Sabha Unstarred Question No. 2806, March 2022; Union Budget Documents.

Note: The data for 2018–2019 onward actually refers to the calendar years 2019, 2020, and 2021. For convenience of calculations, it has been fitted to a financial year.

NA = not available.

² This does not include defence personnel.

- Between 2013–2014 and 2019–2020, the share of contract workers relative to permanent workers ranged from 41% to 56%. Since it averages to 50%, a factor of 0.5 is used to estimate the number of contract workers for the years remaining between 2004–2005 and 2017–2018.
- For 2020–2021, the reported ratio rises to 0.76. This factor is applied to the years after 2020–2021, aligned with the reported proportion for that year. RE = revised estimate; BE = budget estimate.

Table A–2 in the Appendix provides the estimated number of contract workers engaged at the centre from 2004–2005 until 2025–2026. The average wage data are not available for years beyond 2019–2020.

Estimating Average Annual Pay of a Contract Worker

Government jobs are primarily split across Groups A to D based on skill and pay difference. As per the 7th CPC report, government departments outsourced tasks of a routine nature like housekeeping, driving, maintenance, data entry, etc. These tasks are carried out by Group C or D level of workers, suggesting that work at this level is largely contracted out. This is further validated by the fact that the relative share of sanctioned posts of Group C and D employees has consistently declined between 2005–2006 and 2020–2021, while that of Group A and Group B has risen. While the absolute number of posts has risen with time, the rise in Group A and Group B posts is higher than that of Group C and D.

Table 8: Group-Wise Share in Total Sanctioned Posts (in Percentage)

Year	A	B (G)	B (NG)	C+D
2005–2009	2.6%	2.3%	2.4%	92.7%
2010–2014	2.8%	2.7%	4.1%	90.4%
2015–2021	3.3%	3.2%	5.8%	87.7%

Source: Annual Report on Pay and Allowances, Department of Expenditure (2005–2022); authors' calculations.

Note: G refers to gazetted posts and NG refers to non-gazetted posts. Since 2010, based on the 6th Pay Commission's recommendations, Group D posts are categorised as Group C and are shown as a single category.

- On this basis, contract workers are assumed to be predominantly engaged in jobs at the skill and pay level of Group C and D workers. This approach abstracts from higher-skill contractual jobs that may be contracted out to capture the dominant nature of contract jobs. Wages for such contract workers are governed by the Minimum Wages Act, 1948 (Lok Sabha, 2021).
- For such roles, the actual compensation is expected to be close to the statutory minimum wage. While the minimum wage differs state-wise, the Labour Bureau reports the central average minimum wage across all scheduled employments. The lower bound of the minimum wage is used as the proxy for average wage paid to contract workers (Labour Bureau, 2020). Table 9 shows the expenditure incurred by the central government on engaging contract workers.

Table 9: Summary Table of Annual Estimates for Number and Wage of Contract Workers

Year	Estimated number of contract workers	Estimated wage rate (in Rs)	Estimated expenditure on contract workers' wages (in Rs crore)
2007–2008	16,08,626	24,336	3,915
2008–2009	16,05,112	34,036	5,463
2009–2010	16,12,243	39,044	6,295
2010–2011	15,93,777	42,588	6,788
2011–2012	15,76,468	46,326	7,303
2012–2013	16,58,443	51,561	8,551
2013–2014	17,50,145	55,140	9,650
2014–2015	17,47,985	59,105	10,332
2015–2016	18,45,872	37,440	6,911
2016–2017	16,26,398	90,480	14,716
2017–2018	16,19,199	94,224	15,257
2018–2019	13,64,377	1,01,712	13,877
2019–2020	13,24,874	1,07,952	14,302

Source: Parliament Questions, Labour Bureau (2008 to 2026); authors' calculations.

Estimating the Pay of Scheme Workers

The pay of scheme workers includes the pay of (i) ASHA workers, (ii) Anganwadi workers and helpers, (iii) CCH for mid-day meals, (iv) auxiliary nurse midwives (ANMs), and (v) MGNREGS workers.

The first four types of workers are community workers—their estimated pay expenditure calculation is based on their strength and average pay. The strength of these workers is sporadically reported by the respective Ministries in response to questions in Parliament. The monthly incentives are notified whenever there is an increment. We have restricted the estimation to the years 2015–2016 to 2019–2020 owing to the availability of limited data.

Scheme-Wise Breakdown of Estimates

Anganwadi Workers and Helpers Under the Integrated Child Development Services

- A study of the ICDS by the NITI Aayog suggested that in 2019–2020, 34% of the ICDS budget was spent by the central government on honorarium (Institute of Economic Growth, 2020).
- Using this as a stable factor, we calculate the honorarium for the missing years.
- Thus, between 2015–2016 and 2019–2020, the centre is estimated to have spent on average Rs 5,500 crore annually on the honorarium of AWWs and AWHs.

Table 10: Estimated Honorarium Paid to Anganwadi Workers and Helpers (in Rs crore)

Year	ICDS central budget	Honorarium for AWWs
2015–2016	15,433	5,247
2016–2017	14,433	4,907
2017–2018	15,155	5,153
2018–2019	16,815	5,717
2019–2020	19,834	6,757

Source: Union Budget Documents and NITI Aayog (2016–2026); authors' calculations.

Note: ICDS = Integrated Child Development Services; AWW = Anganwadi worker.

Accredited Social Health Activist Workers Under the National Health Mission

- The number of workers is as reported in the NHM's report on annual ASHA update (National Health Systems Resource Centre, 2021).
- The pay is the sum of the honorarium and incentives paid by the centre.
- Between 2015–2016 and 2019–2020, the centre, on average, spent Rs 2,000 crore on honoraria of ASHA workers, at the least.

Table 11: Estimated Honorarium Paid to Accredited Social Health Activist Workers (in Rs crore)

Year	Strength	Monthly honorarium (including incentives)	Estimated annual expenditure on honorarium (Rs crore)
2015–2016	8,94,022	1,500	1,609
2016–2017	9,16,438	1,500	1,650
2017–2018	9,38,054	1,500	1,688
2018–2019	9,66,625	2,500	2,900
2019–2020	9,68,483	2,500	2,905

Source: Annual ASHA Update, Press Information Bureau, Ministry of Health and Family Welfare; Lok Sabha Starred Question No. 12, February 2024; ASHA Incentives - National Health Mission; authors' calculations.

Cook-cum-Helpers Under Pradhan Mantri Poshan Shakti Nirman

- The Ministry of Human Resource Development reported the strength of CCH for the year 2015–2016. The strength is estimated to have increased by 10% each year, as per the trend reflected in the previous years (Table 12).

- The scheme guidelines prescribe that a monthly honorarium of Rs 1,000 must be paid to these volunteers for 10 months, the cost of which will be shared³ between the centre and states in a 60:40 ratio. Therefore, the annual honorarium is estimated to be Rs 6,000 from the centre's exchequer.
- The annual expenditure on such workers increased from about Rs 1,500 crore to about Rs 2,200 crore.

Table 12: Estimated Honorarium Paid to Cook-cum-Helpers Under Pradhan Mantri Poshan Shakti Nirman (in Rs crore)

Year	Estimated Strength	Estimated annual honorarium (in Rs)	Estimated annual expenditure on honorarium (in Rs crore)
2015–2016	25,52,563	6,000	1,532
2016–2017	28,07,819	6,000	1,685
2017–2018	30,88,601	6,000	1,853
2018–2019	33,97,461	6,000	2,038
2019–2020	37,37,207	6,000	2,242

Source: Unstarred Question No. 5961, Lok Sabha, Ministry of Human Resource Development, April 2017; authors' calculations.

Auxiliary Nurses and Midwives Under the National Health Mission

- For the years 2017–2018 to 2019–2020, expenditure incurred on ANMs is reported in the detailed demand for grants of the Ministry of Health. The expenditure grew at an average rate of 5%. It is categorised as “Grants-in-aid: General”. This is separate from the GIA salary expenditure reported by the centre.
- The estimates for 2015–2016 and 2016–2017 are calculated assuming a 5% average growth rate in the total expenditure. It must be noted that the actual data could vary, and this is only used as a proxy to construct an estimate.

Table 13: Estimated Honorarium Paid to Auxiliary Nurses and Midwives and Lady Health Visitors Under the National Health Mission (in Rs crore)

Year	2015–2016*	2016–2017*	2017–2018	2018–2019	2019–2020
Expenditure	86	91	95	103	104

Source: Detailed Demand for Grants, Ministry of Health and Family Welfare (2016–2022); authors' calculations.

Note: *The amount for these years is calculated based on the trend of the next three years.

³ For hilly and northeastern states, the ratio is 90:10; however, a uniform ratio of 60:40 is assumed for all states as a breakdown of strength is not available.

MGNREGS

The pay of MGNREGS workers is estimated using data from the MGNREGA dashboard (Mahatma Gandhi National Rural Employment Guarantee Act, n.d.), which suggests that about 75% of the total scheme expenditure goes towards the payment of wages. The same factor is used here.

The total expenditure across schemes and the wage expenditure on MGNREGS is given in Table 14. On average, the centre spent Rs 20,450 crore on the honorarium of scheme-based workers, and Rs 41,134 crore on wages of MGNREGS workers between 2015–2016 and 2019–2020.

Table 14: Expenditure Incurred on the Honorarium of Scheme-Based Workers Under Various Schemes (in Rs crore)

Year	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
Central share of honorarium paid to scheme workers	18,660	17,858	18,792	21,856	25,086
Central share of wages paid to MGNREGS workers	28,006	36,161	41,375	46,361	53,765

Source: Authors' calculations.

Note: This includes the honorarium of ASHA workers, Anganwadi workers and helpers, ANMs, and cook-cum-helpers.

ASHA = Accredited Social Health Activist; ANM = Auxiliary Nurse Midwife; MGNREGS = Mahatma Gandhi National Rural Employment Guarantee Scheme.

Fiscal Implications

Union: Pay and pension expenditure, as reported by the Union, accounted for 2.8% of GDP between 2015–2016 and 2020–2021. Adjusting the figures to include the pay of contract workers, scheme workers, workers of autonomous institutions, public sector enterprises and the pension of the Department of Railways and post employees increases that share to 4.6% of GDP.

The reported pay and pension data did not account for nearly 30% of the adjusted data on average between these years. On average, reported data suggests that salaries accounted for 22% of revenue receipts. Adjusted data reveals this number to be closer to 30%.

After accounting for adjusted pension and interest payments, the committed expenditure of the Union government reaches 82% of revenue receipts. This leaves very little room to conduct any other type of expenditure, necessitating the

government to finance its other expenditures through borrowing. While most economies rely on borrowings to finance their capital expenditure, relying on debt for revenue expenditure imposes a high fiscal risk.

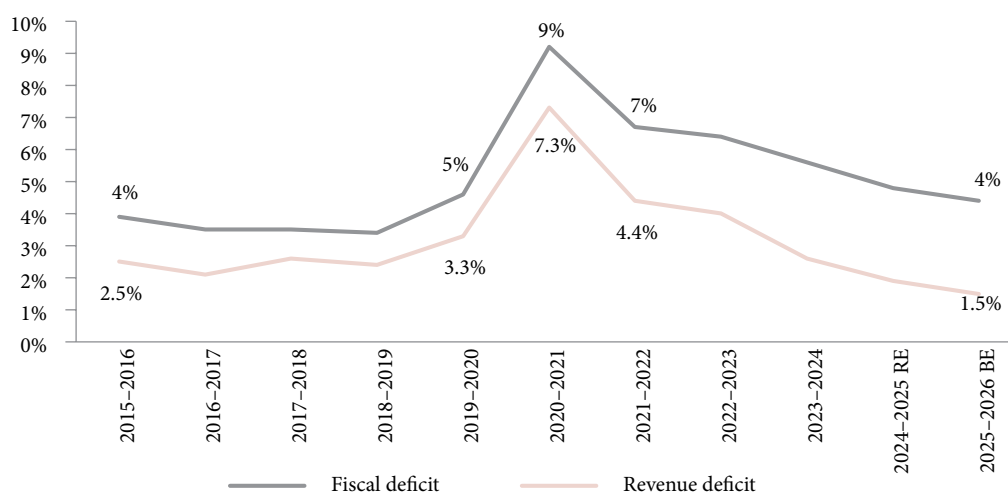
Figure 12: Union's Pay and Pension Expenditure as a Percentage of Revenue Receipts



Source: Union Budget Documents (2017–2018 to 2022–2023); authors' calculations.

While it is true that the central government is on a fiscal consolidation path, persistent revenue deficits pose increased fiscal pressure. Accurate and transparent accounting of expenditures and revenues to understand the nature of expenditure is the first step towards understanding what is causing high deficits.

Figure 13: Union Government's Fiscal Indicators (as a Percentage of Gross Domestic Product)

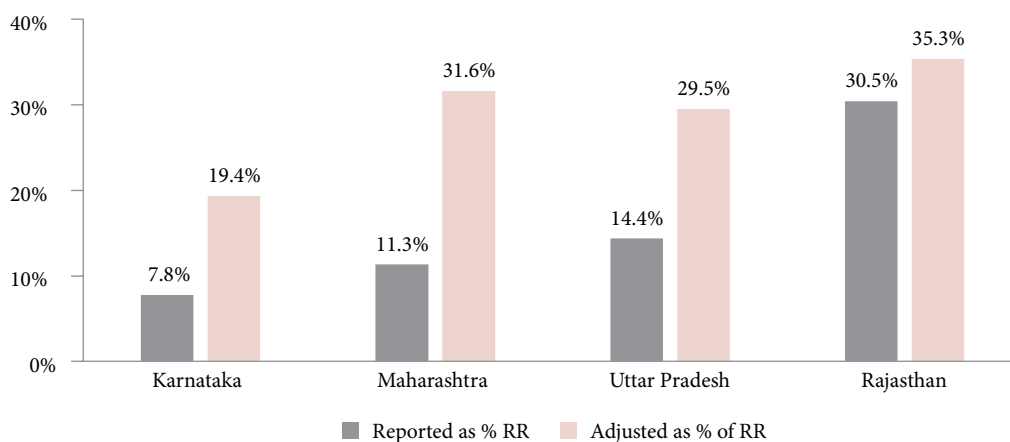


Source: Union Budget Documents (2016–2017 to 2026–2027).

States: Pay and pension expenditure, as reported by state governments, accounted for 2.5% of GDP in 2022–2023. Adjusting the figures to include the pay of employees in autonomous institutions (GIA salaries), honorarium paid to scheme workers, and salaries of public sector employees increases that share to 4.1% of GDP.

This gap is even more pronounced in individual states where contract worker data is available. In Karnataka, adjusted pay is 2.5 times the reported figures. In Maharashtra, the increase is nearly triple, while in Uttar Pradesh, adjusted pay is double the reported amount.

Figure 14: States' Reported vs Adjusted Pay as a Percentage of Revenue Receipts, 2022–2023



Source: Comptroller and Auditor General of India Decadal Report, Finance Accounts, and State Budget Documents (2022–2023 to 2025–2026).

The data also reveal systematic issues in how different states report salary expenditure. This makes interstate comparisons unreliable and obscures the true fiscal position of individual states.

Public sector compensation obligations are among the most persistent and difficult-to-adjust components of government expenditure. Unlike many other types of spending, compensation commitments are embedded in administrative structures and legal frameworks, making them relatively inflexible in the short run. International experience shows that when compensation growth outpaces revenue growth, governments can face rising fiscal pressures that are difficult to reverse. Salary increases resulting from periodic pay revisions often lead to permanent increases in expenditure, while pension obligations accumulate over time as a result of demographic changes and longer life expectancy. Once these commitments are made, fiscal consolidation becomes more challenging without broader structural reforms.

Incomplete reporting of compensation can therefore obscure important fiscal risks. When certain categories of workers—such as contract employees, scheme

workers, or employees of autonomous institutions—are not fully reflected in official compensation statistics, governments may underestimate the long-term cost of maintaining the public workforce. Accurate and transparent accounting of pay expenditure is the first step towards understanding what is causing high deficits and fiscal stress in state finances. Without knowing the true cost of the workforce, states cannot make informed decisions about fiscal consolidation or sustainable development priorities.

Taken together, these gaps imply that India's reported compensation statistics capture only a subset of the true public sector compensation bill. The combination of omission, fragmentation, and inconsistent classification leads to a systematic understatement of fiscal commitments. Correcting these gaps is central to improving fiscal transparency, strengthening expenditure management, and informing future CPC and FC decisions.

4. Recommendations and Way Forward

The analysis in this report shows the extent of data gaps in the measurement of public sector compensation. They reflect deeper institutional weaknesses in public financial management, workforce governance, and fiscal transparency. The gap in reported and adjusted estimates of public sector compensation is as high as 3% of GDP, which demonstrates that these are not marginal discrepancies, but systemic measurement failures.

In addition to incremental improvements in reporting, a comprehensive framework that uniformly defines and accurately measures public sector compensation across all levels of government is required. International evidence reinforces this conclusion. Cross-country research by the World Bank shows that effective management of public sector compensation depends on three interrelated elements: the size and structure of the wage bill, the quality of personnel management systems, and the availability of integrated personnel and payroll databases. Weaknesses in any of these areas lead to distorted compensation structures, inefficient workforce allocation, and incomplete fiscal reporting. These findings underscore that compensation measurement is not only an accounting issue but a central component of public sector governance.

In this context, the reforms proposed in this report—expanding coverage, standardising definitions, integrating data systems, and improving transparency—should be seen as foundational. By creating a unified and reliable compensation framework, they enable a future transition towards more evidence-based workforce management and, where appropriate, carefully designed performance-linked systems.

Addressing structural issues requires a shift towards an integrated and comprehensive framework for measuring public sector compensation, aligned with international standards such as the IMF's GFSM 2014. In this context, the 8th CPC should be viewed

as a key institutional opportunity to modernise India's compensation accounting framework. The following reforms to strengthen the measurement, classification, and transparency of public sector compensation should be prioritised.

Recommendation 1: Comprehensive Coverage of Public Sector Compensation

All public sector workers, whether they are permanent, contractual, scheme-based 'volunteers', or working in autonomous and public sector enterprises (including nationalised banks and other public non-banking financial institutions), must be systematically included in compensation reporting. This should include the pay and pension (wherever applicable).

Rationale

Categorising different types of workers and excluding their compensation from the reported compensation is a structural bias in the current reporting system, where reliance on contract and scheme-based workers suppresses reported compensation without reducing actual fiscal commitments. Understanding the actual fiscal commitment is key to managing public funds.

Integrated reporting systems are increasingly being used globally to improve workforce planning, fiscal forecasting, and transparency in compensation reporting. In a federal country like India, coordination between the Union and states will be essential to ensure that workforce data are comparable across jurisdictions.

Operational Elements

Integrated personnel and payroll databases covering all categories of workers across ministries, autonomous institutions, and public sector enterprises must be established. Coverage must also be aligned with international standards such as GFSM 2014, which requires comprehensive coverage of all employees engaged in public service delivery.

The Labour Bureau under the Ministry of Labour and Employment may be competent to report on the comprehensive data. The Statistics Wing of the Ministry of Statistics and Programme Implementation is also suitably empowered to fix these data gaps.

The Union government must report pension expenditure of Railway and Post employees under the '2071' code created by the CGA. It is presently reported in the Finance Accounts.

Such integration should be anchored in digital public infrastructure, linking personnel records with payroll and treasury systems. This would enable real-time tracking of workforce size and compensation costs, improve fiscal forecasting, and strengthen accountability across levels of government.

Recommendation 2: Standardised Definitions and Classification

There must be standardised definitions of pay and pension that make numbers reported by governments across different levels comparable, as well as numbers reported by different institutions, such as the CAG, RBI, and respective government budgets, comparable. This is especially important when comparing data across state governments.

Rationale

Differences in definitions and accounting practices undermine comparability, aggregation, and fiscal analysis across jurisdictions.

Operational Elements

The Union government can define a salary figure aligned with the definition provided under the GFSM, i.e., basic wage and salary, including allowances, bonuses, commissions, gratuities, employers' social contributions, subsidised meals, childcare and bonus shares.

Salary expenditure should be codified as a major or minor head. The CGA codifies various expenditure and receipt items, allowing the states and the centre to record their transactions uniformly. Most transactions, such as pension expenditure, expenditure on building a national highway or social security, receipts earned from excise duty or the Goods and Services Tax, are presently codified. However, salary expenditure is not, which makes reporting inconsistent across governments and across years. It should be noted that having a specified head for salary does not replace the necessity to have comprehensive data on its composition. Disaggregated data that detail the elements of salary are equally and simultaneously important, as discussed in our fourth recommendation.

Note that the CAG, in its office memorandum, dated November 11 2025, advised revision of object heads. Object class I (Compensation to Employees) comprises several object heads like salaries, wages, allowances, rewards, training expenses, etc. Once a uniform definition is adopted by the Union and states, the CGA and CAG must codify it in accounting standards. This would enable the creation of a unified compensation account and address the issue of fragmented reporting. This would help in standardising the treatment of honoraria, grants-in-aid, salaries, and outsourced payments.

Recommendation 3: Integrated Personnel and Payroll Data Systems

Governments should develop integrated personnel and payroll databases linking workforce data with financial systems. This is to enable real-time tracking of compensation expenditure, and improve the assessment of workforce size, fiscal

commitments, and long-term liabilities. Such systems should ensure interoperability across Union, state, and local levels, and include both regular and non-regular workers. Beyond strengthening fiscal transparency, integrated data systems would also create the analytical foundation for assessing workforce deployment, service delivery outcomes, productivity, and value for money in public spending, as digital analytics and emerging artificial intelligence tools increasingly make such analysis feasible.

Rationale

Fragmented data systems prevent accurate estimation of workforce size, compensation costs, and fiscal risks, while also limiting governments' ability to assess workforce effectiveness and service delivery outcomes.

Operational Elements

- Link HRMIS with treasury and payroll systems.
- Enable real-time tracking of workforce size and compensation expenditure.
- Ensure interoperability across Union, state, and local levels.
- Include both regular and non-regular workers in workforce databases.
- Support analytical use of workforce data for fiscal planning and performance assessment.

Recommendation 4: Granular and Meaningful Breakdown of Compensation Data

Headline compensation figures should be accompanied by detailed and standardised disaggregation across workforce categories, sectors, and levels of government.

Rationale

Aggregate figures alone are insufficient to assess workforce composition, productivity, and fiscal rigidities. Without granular breakdowns, it is not possible to analyse hiring patterns, substitution between permanent and contractual staff, or sectoral allocation of public employment.

Operational Elements

The Department of Expenditure under the Ministry of Finance releases an Annual Report on the Pay and Allowances of central civilian employees, which provides a Ministry-wise and component-wise breakdown of pay data. It also provides a group-wise breakdown of the number of employees. This reporting framework provides an important starting point and should be expanded by including the following:

- Classification by employment type (permanent, contractual, scheme-based).
- Disaggregation by sector (health, education, administration, etc.).

- Reporting by level of government and institutional category.
- Functional and grade-wise workforce data.

Recommendation 5: Strengthened Pension Transparency and Fiscal Risk Disclosure

Pension reporting should be expanded to include full coverage of liabilities along with medium- to long-term actuarial projections under different scenarios, including transitions between defined benefit and defined contribution systems.

Rationale

A lack of an actuarial approach to pension liabilities risks creating large and unrecorded fiscal obligations that may constrain future public spending. This is particularly true in the context of shifts towards defined-benefit systems and hybrid schemes.

Operational Elements

- Publish comprehensive pension liabilities across all schemes.
- Provide medium-to-long-term actuarial projections under different policy scenarios.
- Include contingent liabilities from new pension frameworks such as the UPS.
- Integrate pension reporting into medium-term fiscal frameworks.

5. Conclusion

This report shows that the key issue in assessing India's public sector compensation is not simply its size, but the way it is measured. Official estimates of pay and pension expenditure systematically understate the true fiscal burden due to fragmented reporting, incomplete coverage, and inconsistencies in classification across institutions and levels of government. As a result, the public sector compensation bill appears more contained than it actually is.

These measurement gaps have important policy consequences. Understated compensation costs distort fiscal planning, weaken the assessment of medium-term sustainability, and complicate intergovernmental comparisons. They also affect the allocation of public resources by overstating the fiscal space available for capital expenditure, climate transition, and social sector investments. At the state level, inconsistent reporting further obscures the distribution of fiscal pressures, limiting the effectiveness of FC transfers and other equalisation mechanisms.

Frameworks such as the IMF's GFSM 2014 and World Bank assessments of public workforce management emphasise comprehensive coverage of all public sector workers, consistent classification of compensation components, and integration of personnel, payroll, and fiscal data systems (World Bank, 2021). India's current reporting framework falls short in capturing non-regular workers, autonomous institutions, and off-budget compensation flows.

The 8th CPC presents a critical opportunity to address these structural weaknesses. Moving beyond periodic pay revision, it can help establish a framework that aligns with international standards, improves fiscal risk assessment, and strengthens the analytical basis of public expenditure decisions. Such reforms are essential to enable a more credible and sustainable fiscal strategy in an era of rising development and climate-related spending needs.

References

- CFA Institute. (2025). *Mercer CFA Institute global pension index 2025*. https://rpc.cfainstitute.org/sites/default/files/docs/research-reports/global-pension-index-2025_main-report_final.pdf
- Comptroller and Auditor General of India (2025). *State finances 2022-23: Decadal analysis*. <https://cag.gov.in/uploads/media/State-Finances-publication-2025-Eng-068cd6d9be8e383-84855402.pdf>
- Comptroller and Auditor General of India. (2025). *State finances 2023–2024: Decadal analysis*. <https://cag.gov.in/uploads/media/State-Finances-2023-24-30-12-25-069550a999e5002-23252834.pdf>
- Institute of Economic Growth. (2020). *Evaluation of ICDS scheme of India*. NITI Aayog, Government of India. <https://www.niti.gov.in/sites/default/files/2023-03/Evaluation%20of%20ICDS%20Scheme%20of%20India.pdf>
- International Monetary Fund. (2014). *Government finance statistics manual 2014*. <https://www.imf.org/external/pubs/ft/gfs/manual/2014/gfsfinal.pdf>
- Invest India & Government of Rajasthan. (2009). *Draft report submitted to the 13th Finance Commission: Building employee and pensioner databases and MIS for effective fiscal planning by state governments*. <https://fincomindia.nic.in/asset/doc/commission-reports/13th-FC/reports/report31.pdf>
- Labour Bureau. (2020). *Report on the working of the Minimum Wages Act, 1948 for the year 2020*. Ministry of Labour and Employment, Government of India. https://labourbureau.gov.in/uploads/pdf/Minimum-Wages-Act-Report_-2020.pdf
- Lok Sabha. (2017, April 10). *Unstarred question no. 5961: NGOs involved in Mid-Day Meal Scheme*. Ministry of Human Resource Development. <https://sansad.in/getFile/loksabhaquestions/annex/11/AU5961.pdf?source=pqals>
- Lok Sabha. (2021, August 4). *Unstarred question no. 1357: Vacancies in central government departments*. Ministry of Personnel, Public Grievances and Pensions. <https://sansad.in/getFile/loksabhaquestions/annex/9/AU1357.pdf?source=pqals>
- Lok Sabha. (2022, March 21). *Unstarred question no. 2806: Employees appointed on contract basis*. Ministry of Labour and Employment, Government of India. <https://sansad.in/getFile/loksabhaquestions/annex/178/AU2806.pdf?source=pqals>
- Lok Sabha. (2024a, February 2). *Starred question no. 12: ASHA workers*. Ministry of Health and Family Welfare, Government of India. <https://sansad.in/getFile/loksabhaquestions/annex/1715/AS12.pdf?source=pqals>
- Lok Sabha. (2024b, August 8). *Unstarred question no. 2308: Continuing of nutrition in affected schools*. Ministry of Education. https://sansad.in/getFile/loksabhaquestions/annex/185/AU2308_WjEw4I.pdf?source=pqals
- Mahatma Gandhi National Rural Employment Guarantee Act. (n.d.). *Financial statement*. Ministry of Rural Development, Government of India. Retrieved June 15, 2026, from https://mnregaweb4.nic.in/netnrega/Citizen_html/financialstatement.aspx?lflag=eng&fin_year=2024-2025&source=national&labels=labels&Digest=O57D2k1AxQj89t4Y5xNiBg
- Ministry of Finance. (2024). *Statement 23, Budget provisions under 'Grants-in-aid salaries', (Budget 2024–2025)*. Government of India. <https://www.indiabudget.gov.in/doc/eb/stat23.pdf>
- Ministry of Rural Development. (n.d.). *MGNREGA at a glance*. Government of India. Retrieved March 27, 2026, from https://nreganarep.nic.in/netnrega/nrega_ataglance/At_a_glance.aspx

- National Health Systems Resource Centre. (2021). *Annual ASHA update 2020–2021*. Ministry of Health and Family Welfare, Government of India. <https://nhsrcindia.org/sites/default/files/2022-07/Annual%20ASHA%20Update%202020-21.pdf>
- National Health Mission. *ASHA incentives*. https://nhm.gov.in/New-Update-2023-24/ASHA/Orders_and_guidelines/ASHA-INCENTIVES.pdf
- National Treasury, Republic of South Africa. (2025). *Estimates of National Expenditure*. <https://www.treasury.gov.za/documents/National%20Budget/2025May/ene/FullENE.pdf>
- Organisation for Economic Co-operation and Development. (2024). *Salary systems in public administration and their reforms* (OECD Public Governance Reviews). <https://doi.org/10.1787/8f08a005-en>
- Panda, M., Joe, W., Dasgupta, P., & Kumar, A. (2019). *Pay commission: Fiscal implications*. Institute of Economic Growth. <https://fincomindia.nic.in/asset/doc/commission-reports/15th-FC/reports/studies/Pay%20Commissions%20Fiscal%20Implications.pdf>
- Press Information Bureau (2018, September 19). *Cabinet approves ASHA benefit package*. (n.d.). https://www.pib.gov.in/Pressreleaseshare.aspx?PRID=1546619*=3&lang=2
- Press Information Bureau. (2022, June 14). *In a transformative reform, Cabinet clears 'AGNIPATH' scheme for recruitment of youth in the Armed Forces* [Press release]. Government of India. <https://www.pib.gov.in/PressReleseDetailm.aspx?PRID=1833765>
- Public Expenditure and Financial Accountability (PEFA) Secretariat. (2016). *Framework for assessing public financial management (2nd ed.)*. <https://www.pefa.org/resources/pefa-2016-framework>
- Rai, S. (2025, September 2). UP govt to set up corporation to streamline hiring of outsourced staff. *The Indian Express*. <https://indianexpress.com/article/cities/lucknow/up-govt-corporation-streamline-hiring-outsourced-staff-10226361/>
- Rajeev, M. (2025, October 19). Govt. takes serious view of uncertainty on number of employees in departments and allied institutions. *The Hindu*. <https://www.thehindu.com/news/national/telangana/govt-takes-serious-view-of-uncertainty-on-number-of-employees-in-departments-and-allied-institutions/article70182229.ece>
- Reserve Bank of India. (2023). *State finances: A study of budgets of 2023–2024*. <https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/0STATEFINANCES202324E45F66372EEC4743AE4E9BE-D92EB85FF.PDF>
- Reserve Bank of India. (2024). *Report on municipal finances*. <https://rbi.org.in/Scripts/AnnualPublications.aspx?head=Report%20on%20Municipal%20Finances>
- 7th Central Pay Commission. (2015). *Report of the Seventh Central Pay Commission*. Ministry of Finance, Government of India. https://doe.gov.in/files/cenetr-al-pay_document/7cpc_report_eng.pdf
- World Bank. (2021). *Public sector employment and compensation: An assessment framework*. <https://documents1.worldbank.org/curated/en/324801640074379484/pdf/Public-Sector-Employment-and-Compensation-An-Assessment-Framework.pdf>
- World Bank. (2025). *PFR fundamentals: Public wage bill analysis*. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099062325190034662>
- World Bank. (2026). *Public workforce performance and prosperity*. <http://hdl.handle.net/10986/44321>
- World Bank. (n.d.). *Compensation of employees (current LCU)*. World Bank Open Data. Retrieved June 15, 2026, from <https://data.worldbank.org/indicator/GC.XPN.COMP.CN>

Appendix

Table A-1: Types of Data Gaps

Data Gap		Extent of Data Gap (in Rs crore)		Description of data gap	
		Union (2020–2021)	All States (2022–2023)	Union	State
Omission	Contract Workers	14,302	24,473	Regular, comprehensive and comparable data on contract workers (pay and strength) is not maintained.	
	Scheme workers	25,086	18,552	Honoraria paid to scheme workers such as ASHA/Anganwadi workers and cook-cum-helpers are counted as “programme cost”, not wage, and hence not reported as salary expenditure.	Honoraria payments are shown under “Transfers”, “Subsidies”, or as “Programme Cost” instead of pay. Only a few states report honoraria payments to scheme workers separately.
	MGNREGS beneficiaries	83,378	Not Applicable	Salary payouts made to MGNREGS workers are not reported explicitly on scheme portals.	
	Defence—Agnipath Salaries	Not Available	Not Applicable	Salaries of defence personnel hired under the Agnipath scheme are not reported separately.	Not applicable.
Lack of standardisation		Not quantifiable	Not quantifiable	No standardised expenditure head for Salaries exists in the accounting framework.	Data across CAG, RBI, and state budgets varies widely since there is no uniform definition followed by states. This renders the data incomparable.
		62,390	Not quantifiable	The standard expenditure head of pension (MH 2071) does not include pension of post and railway employees.	

Data Gap		Extent of Data Gap (in Rs crore)		Description of data gap	
		Union (2020–2021)	All States (2022–2023)	Union	State
Lack of granularity		Not quantifiable	Not quantifiable	Pay and Allowances report by the Department of Expenditure does not give data breakdowns like group-wise salary expenditure, more so in recent years.	Only a few states provide a breakdown of salary components like DA, arrears, allowances, etc, that too not consistently. This renders the data incomparable.
Fragmented Reporting	Defence Salaries	1,31,473	Not Applicable	Defence salaries are reported separately in the Ministry of Defence expenditure budget, not in Statement 22 (Statement of Salary).	Not applicable.
	Autonomous Bodies	42,331	2,92,114	GIA paid for salaries of the employees of autonomous bodies is published in a separate statement (Statement 23).	GIA salaries are reported by CAG in Statement 4 (Expenditure by Nature), but not added to the consolidated salary figure in the budgets
	PSEs	1,47,127	1,13,125	Consolidated data on pay and pension of public sector banks is not available.	Consolidated data on pay and pension of state PSE employees is not available, unlike for the CPSEs.

Source: Authors' compilation.

Note: Agnipath scheme began in 2022–2023; data for state PSEs include about 300 SPSEs only; data for central PSEs do not include nationalised banks, banking institutions, and insurance companies.

PSE = public sector enterprise; SPSE = state public sector enterprise; CPSE = central public sector enterprise; GIA = grant-in-aid; MGNREGS = Mahatma Gandhi National Rural Employment Guarantee Scheme; CAG = Comptroller and Auditor General of India; RBI = Reserve Bank of India; MH = major head; DA = dearness allowance; ASHA = Accredited Social Health Activist.

Table A-2: Estimates on the Number of Contract Workers Engaged by the Central Government

Year	Permanent government employees (A)	Factor (B)	Estimated number of contract workers (A × B)	Average monthly wage rate (in Rs) (D)	Average annual wage rate (D × 12)	Estimated annual expenditure on contract workers' wages (in Rs crore)
2004–2005	32,74,145	0.50	16,37,073	NA	NA	NA
2005–2006	32,30,130	0.50	16,15,065	NA	NA	NA
2006–2007	32,19,930	0.50	16,09,965	NA	NA	NA
2007–2008	32,17,252	0.50	16,08,626	2,028	24,336	3,915
2008–2009	32,10,223	0.50	16,05,112	2,836	34,036	5,463
2009–2010	32,24,486	0.50	16,12,243	3,254	39,044	6,295
2010–2011	31,87,553	0.50	15,93,777	3,549	42,588	6,788
2011–2012	31,52,936	0.50	15,76,468	3,860	46,326	7,303
2012–2013	33,16,886	0.50	16,58,443	4,297	51,561	8,551
2013–2014	33,28,027	0.53	17,50,145	4,595	55,140	9,650
2014–2015	33,05,646	0.53	17,47,985	4,925	59,105	10,332
2015–2016	32,84,714	0.56	18,45,872	3,120	37,440	6,911
2016–2017	32,52,796	0.50	16,26,398	7,540	90,480	14,716
2017–2018	32,38,397	0.50	16,19,199	7,852	94,224	15,257
2018–2019	32,62,908	0.42	13,64,377	8,476	1,01,712	13,877
2019–2020	32,71,113	0.41	13,24,874	8,996	1,07,952	14,302
2020–2021	31,80,400	0.76	24,30,989	NA	NA	NA
2021–2022	31,69,038	0.76	24,08,469	NA	NA	NA
2022–2023	31,67,143	0.76	24,07,029	NA	NA	NA
2023–2024	33,06,394	0.76	25,12,859	NA	NA	NA
2024–2025 (RE)	36,57,674	0.76	27,79,832	NA	NA	NA
2025–2026 (BE)	36,97,416	0.76	28,10,036	NA	NA	NA

Source: Lok Sabha Unstarred Question No. 2806, March 2022, Reports on Minimum Wages Act, Labour Bureau (2005–2020); Union Budget Documents (2005–2026); authors' calculations.

Note: Between 2013–2014 and 2019–2020, the share of contract workers relative to permanent workers ranged from 41% to 56%. Since it averages to 50%, a factor of 0.5 is used to estimate the number of contract workers for the years remaining between 2004–2005 and 2017–2018. For 2020–2021, the reported ratio rises to 0.76. This factor is applied to the years after 2020–2021, aligned with the reported proportion for that year. RE = revised estimate; BE = budget estimate; NA = not available.

Table A-3: State-Wise Pay and Pension of 232 Municipal Corporations (in Rs crore)

State / UT	2019-2020	2020-2021	2021-2022	2022-2023 (RE)	2023-2024 (BE)
Andhra Pradesh	405	351	376	481	947
Arunachal Pradesh	2	3	2	-	-
Assam	57	62	71	-	-
Bihar	386	384	463	498	858
Chhattisgarh	405	422	405	436	567
Delhi	9,011	8,650	9,165	12,063	13,091
Goa	28	30	32	36	44
Gujarat	3,306	3,522	3,647	4,659	5,109
Haryana	732	765	850	970	1,131
Himachal Pradesh	70	71	70	91	113
Jammu & Kashmir	100	101	107	173	167
Jharkhand	91	82	96	129	174
Karnataka	1,305	1,046	1,236	1,076	1,465
Kerala	353	367	454	442	519
Madhya Pradesh	1,481	1,489	1,567	1,731	1,921
Maharashtra	12,652	12,776	15,288	16,281	17,900
Manipur	5	5	8	-	-
Mizoram	7	8	9	10	12
Odisha	269	247	220	269	346
Punjab	819	804	935	1,143	1,158
Rajasthan	875	922	1,091	1,361	1,445
Sikkim	6	6	7	9	11
Tamil Nadu	2,899	2,868	2,971	3,366	3,668
Telangana	1,197	1,222	1,471	1,623	1,613
Tripura	45	51	60	64	70
Uttar Pradesh	2,455	2,481	2,809	3,039	3,665
Uttarakhand	205	203	211	227	247
West Bengal	247	264	280	265	211
Total	39,410	39,202	43,902	50,443	56,450

Source: Reserve Bank of India Report on Municipal Finances (2024); authors' calculations.

Note: Pay refers to salary, wages, and allowances. "-" indicates unavailability of data.

RE = revised estimate; BE = budget estimate; UT = union territory.

About the authors



Shruti Gupta is a Research Associate in the Fiscal Governance team within the Growth, Finance, and Development vertical. She holds a Master's degree in Economics from Ashoka University. Her research focuses on Public Finance Management, with a particular emphasis on addressing fiscal challenges in India.



Tanvi Vipra was a Former Research Analyst at CSEP. She is experienced in working on fiscal, climate, energy, and agricultural issues. Previously, she has worked at PRS Legislative Research and the Institute for Governance and Sustainable Development, assisting legislators and bureaucrats with policy questions. Her interest lies in building people-centric, economically sustainable policies.

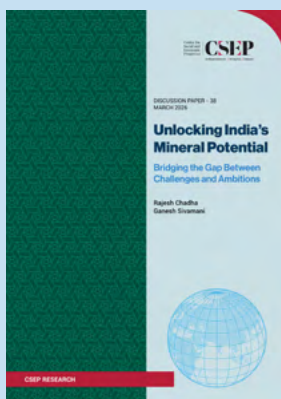
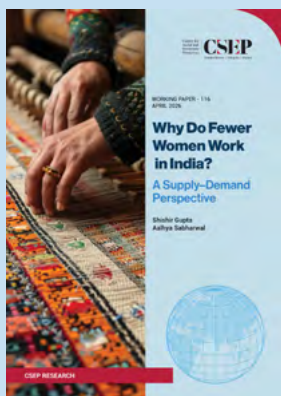
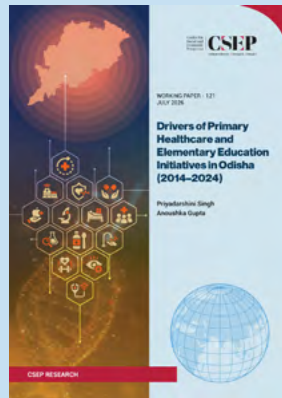
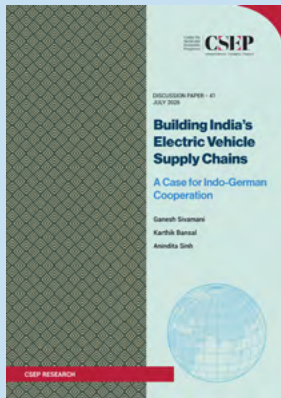


Anoop Singh is Distinguished Fellow at NITI Aayog, Government of India. He is also Distinguished Fellow at the Centre for Social and Economic Progress (CSEP), New Delhi. He has recently been Member, 15th Finance Commission of India, in the rank of Union Minister of State, a constitutional body that recommended tax sharing and grant transfers between the Union and the States for the period 2021-2026.

Before that he has been Adjunct Professor at Georgetown University; Managing Director and Head of Asia Pacific Global Regulatory and Strategy Policy, JP Morgan; and Member of the Working Party of the Robert Triffin International (RTI) on the reform of the international monetary system. At the International Monetary Fund, he was Director of the Asia and Pacific Department; Director of the Western Hemisphere Department; and Director of Special Operations.

He holds degrees from the universities of Bombay, Cambridge, and the London School of Economics. His additional work experience includes being Special Advisor to the Governor of the Reserve Bank of India. His recent publications include *Asia and the Changing Global Economy* (2022).

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