

# Public Financial Management and Wage Bill Sustainability: An Analysis of How Staff Verification Contributes to Fiscal Space and Recurrent Expenditure Control in Enugu State, Nigeria

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## Abstract

Nigerian subnational governments are caught in a familiar bind: wage bills that keep growing, revenues that remain volatile, and not nearly enough money left over to build anything. Enugu State is a good example of this pattern. This article examines how staff verification exercises, specifically the combination of biometric data capture and physical attendance confirmation, have contributed to wage bill sustainability in the state, and considers what those contributions tell us about the broader project of Public Financial Management (PFM) reform at the subnational level. Drawing on secondary fiscal data, government reports, and a body of academic and practitioner literature, the analysis is organised around three theoretical anchors: fiscal sustainability theory, public expenditure management theory, and principal-agent theory. Together, these frameworks help explain both why payroll fraud arises in the first place and why it is so stubbornly difficult to eliminate for good. The article argues that Enugu State's verification initiatives produced real, measurable reductions in personnel costs and contributed to meaningful improvements in budget credibility, but that political resistance, fragmented data systems, and limited institutional capacity have prevented the state from fully capitalising on what it started. The article concludes with a set of policy recommendations aimed at consolidating the gains already achieved and extending the reform agenda in a direction that can sustain them.

**Keywords:** Public Financial Management, Wage Bill Sustainability, Staff Verification, Ghost Workers, Fiscal Space, Enugu State, Nigeria, Recurrent Expenditure, Subnational Governance, Principal-Agent Theory

## Introduction

There is something almost paradoxical about the fiscal situation of many Nigerian states. On paper, they carry enormous public employment obligations, large civil service establishments, sprawling teacher payrolls, health worker cadres distributed across dozens of local government areas. In practice, however, a significant proportion of the individuals appearing on those payrolls do not show up to work, have already retired, or, in the most egregious cases, never existed at all. This is the ghost worker problem, and it sits at the heart of Nigeria's subnational fiscal crisis.

Enugu State, in the South-East geopolitical zone, is not unusual in facing this challenge. What makes it a useful case study is the relative transparency with which it has confronted the problem, and the documented nature of the verification exercises it has undertaken. Between the mid-2010s and the early 2020s, the state conducted a series of staff verification exercises, employing biometric identification, physical attendance requirements, and documentary cross-checks, in a sustained attempt to clean its payroll and bring personnel expenditure under meaningful control. Understanding what those exercises achieved, how they were designed, and where they fell short tells us something important not only about Enugu, but about the conditions under which PFM reform can take root in subnational settings across sub-Saharan Africa.

This article is structured around a central research question: To what extent have staff verification exercises in Enugu State contributed to wage bill sustainability, improved budget credibility, and expanded fiscal space for capital investment? The question matters because the answer has practical implications for every Nigerian state, and indeed for every developing-country subnational government, struggling to reconcile recurrent expenditure obligations with the revenue constraints of a natural resource-dependent federation.

The argument proceeds as follows. Section 2 reviews the relevant literature on wage bill management, the ghost worker phenomenon, and payroll reform in developing countries. Section 3 develops the theoretical framework. Section 4 describes the methodology. Section 5 provides the empirical analysis of Enugu State's verification experience. Section 6 discusses the findings. Section 7 concludes, and Section 8 sets out policy implications.

## **2. Literature Review**

### **2.1 The Wage Bill Problem in Developing-Country PFM**

The management of the public sector wage bill has long occupied an uncomfortable position in the PFM literature: everyone agrees it matters, and nobody seems entirely sure how to fix it. Schiavo-Campo et al. (1997) established, in what remains one of the most widely cited cross-country analyses of government employment, that personnel expenditures typically absorb between 30% and 50% of recurrent spending in developing countries, a proportion that routinely crowds out investment in infrastructure, health, and education. The International Monetary Fund (2016) and World Bank (2018) have both identified wage bill control as a prerequisite for fiscal consolidation and the restoration of budgetary space for public investment, making it not merely a technical concern but a development priority.

Within PFM scholarship, wage bill management is understood to encompass a cluster of interrelated functions: maintaining accurate headcount data, enforcing disciplined recruitment and salary-setting, processing payroll reliably and on time, sustaining robust internal controls, and producing accounting and reporting outputs that reflect reality. Andrews et al. (2014) observe that failures in any one of these functions can generate systematic biases toward payroll inflation and budget unreliability. This is a cumulative observation: the weaknesses do not operate independently, but compound one another in ways that make reform challenging even when the political will exists.

The concept of fiscal discipline, that aggregate expenditure ceilings must be respected and within-year deviations from approved budgets minimised, lies at the core of the PFM framework articulated by Schick (1998, 2013) and elaborated in subsequent World Bank and IMF guidance. Persistent wage bill overruns represent a fundamental violation of this discipline. They also undermine budget credibility, which the Public Expenditure and Financial Accountability (PEFA) framework identifies as one of its seven high-level performance domains, and defines as the degree to which actual expenditure outcomes correspond to approved allocations (PEFA Secretariat, 2016). Ghost workers and inflated payrolls are among the most corrosive contributors to poor budget credibility, because they embed structural expenditure commitments that have no relationship to actual service delivery.

### **2.2 Ghost Workers in Nigeria: Scale and Causes**

Nigeria's ghost worker problem is not new, and it is not small. Eme and Onyishi (2014) define ghost workers broadly to include fictitious identities, deceased civil servants whose names have not been removed, retirees still drawing salaries, employees of non-existent departments, and individuals whose wages are collected by payroll administrators or politically connected actors who pocket the proceeds. Each of these categories reflects a different dimension of institutional failure, but they share a common substrate: an environment in which the costs of payroll fraud are low and the probability of detection is lower.

Federal-level verification exercises under the Integrated Personnel and Payroll Information System (IPPIS) reportedly identified over 62,000 ghost workers on the federal payroll between 2011 and 2015, with annual savings estimated in the billions of naira (Obilor, 2016). At the subnational level, the picture has been comparably grim. States including Abia, Imo, Plateau, and Niger have each conducted documented

verification exercises identifying substantial payroll fraud, though the durability of the fiscal savings has varied considerably depending on whether post-exercise controls were put in place (World Bank, 2015).

Olowu and Wunsch (2004) situate the ghost worker problem within a broader analysis of public administration failure in Nigeria, arguing that patronage-based appointment systems, weak bureaucratic capacity, and inadequate accountability mechanisms have systematically eroded civil service integrity. Bratton and van de Walle (1997) add a structural dimension, describing how neopatrimonial governance creates incentive environments that actively resist the kind of transparent, merit-based management that payroll integrity requires. This framing is important because it suggests that ghost workers are not simply a product of administrative sloppiness. They are a symptom of a political economy that, in many cases, finds them convenient.

### **2.3 Biometric Verification: Promise and Limits**

The adoption of biometric identification technologies, fingerprint scanning, facial recognition, iris identification, has transformed the toolkit available for payroll reform. Unlike documentary verification, biometric systems generate unique physiological identifiers that cannot easily be duplicated or transferred, making it significantly harder to sustain fictitious payroll entries once a genuine verification exercise has been completed (Deininger et al., 2019). The World Bank's experience with biometric payroll reform in Africa, documented across Sierra Leone, Uganda, Ghana, and several other country contexts, demonstrates that well-designed exercises can produce rapid, measurable reductions in payroll fraud (Cangiano et al., 2013).

Yet the literature is equally clear about the limits of the technology. Lienert (2008) makes the point with characteristic directness: biometric verification is a tool, not a solution. Its effectiveness depends on the institutional framework within which it is deployed, the independence of implementing agencies, the comprehensiveness of coverage, the reliability of data capture, and above all the robustness of the routine payroll management systems that take over once the verification exercise is complete. Fedelino and Kudina (2003) document a pattern that has since been observed in multiple African contexts: countries and states that conduct verification without simultaneously strengthening everyday payroll controls tend to see ghost worker numbers rebound within two to three years. The technology buys time; only institutional reform can consolidate the gains.

### **2.4 Fiscal Space and the Capital-Recurrent Substitution**

The concept of fiscal space, as defined by Heller (2005), refers to the availability of budgetary room that allows a government to provide resources for a desired purpose without prejudicing the sustainability of its financial position. The policy rationale for payroll reform is frequently expressed in these terms: by reducing personnel costs, governments free up resources that can be redirected toward capital investment and service delivery. In theory, the logic is compelling. In practice, the evidence is more equivocal. Brosio and Jiménez (2012), writing in the context of Latin American decentralisation but with observations that travel readily to the Nigerian subnational setting, note that fiscal savings generated by recurrent expenditure reduction do not automatically translate into increased capital spending. In the absence of strong budget planning frameworks and genuine political commitment to developmental investment, freed resources tend to be absorbed by other recurrent categories, overhead costs, allowances, or informal political redistribution. This observation matters for evaluating staff verification as a fiscal policy tool: its value depends not just on the savings it generates, but on whether those savings are actually put to productive use.

### 3. Theoretical Framework

#### 3.1 Fiscal Sustainability Theory

Fiscal sustainability, in its classical formulation, concerns the capacity of a government to maintain current policies over time without eventually being forced into adjustment to avoid insolvency (Blanchard, 1990; Bohn, 1998). At the national level, sustainability is typically analysed through the lens of the intertemporal budget constraint: a government is sustainable if the present discounted value of future primary surpluses is sufficient to service outstanding liabilities. This formulation translates imperfectly to subnational governments in Nigeria, which are not primarily at risk of debt default but rather of structural expenditure rigidity, a condition in which wage bill commitments consume so large a share of available revenues that governments cannot adapt to revenue shocks or redirect spending toward productive uses.

For a state like Enugu, fiscal sustainability is therefore less about solvency in the traditional sense and more about maintaining the fiscal flexibility needed to deliver public services and respond to changing circumstances. When personnel costs consume between 55% and 70% of recurrent expenditure, as they have in many Nigerian states during the study period, the government is effectively locked into a spending pattern that forecloses developmental investment and leaves it dangerously exposed to the volatility of Federation Account allocations. Staff verification contributes to fiscal sustainability by reducing this structural rigidity, creating the headroom that adaptive governance requires.

#### 3.2 Public Expenditure Management Theory

Schick's (1998, 2013) framework for public expenditure management organises the analysis of government spending around three sequential objectives: aggregate fiscal discipline, allocative efficiency, and operational effectiveness. The first demands that total public expenditure be consistent with available resources; the second, that spending be directed toward priority programmes; and the third, that services be delivered at minimum cost. This hierarchy is not merely analytical, it reflects Schick's argument that aggregate discipline is a precondition for meaningful allocative choices, which are in turn a precondition for operational improvement.

Within this framework, staff verification contributes most directly to aggregate fiscal discipline by bringing actual personnel expenditure into alignment with legitimate employment obligations. It also has implications for operational effectiveness, since payroll integrity is foundational to the efficient functioning of the civil service. And, indirectly, it creates the conditions for improved allocative efficiency by reducing wasteful expenditure that could otherwise be redirected. What PEM theory also stresses, however, is that expenditure control is not an event but a system, one that operates through a hierarchy of commitment controls, warrant authorities, payroll controls, and internal audit functions that must work in concert. A verification exercise that cleanses a payroll without strengthening these underlying systems is a temporary fix at best.

#### 3.3 Principal-Agent Theory

Principal-agent theory offers perhaps the most directly applicable analytical lens for understanding payroll fraud. In the public sector context, citizens delegate authority to elected officials, who in turn delegate to bureaucrats the management of public resources, including payroll administration. The agency problem arises because agents, in this case, payroll administrators and officials with access to personnel records, possess information advantages over their principals, and because their interests do not necessarily align with those of the citizens and governments they nominally serve (Jensen & Meckling, 1976; Pratt & Zeckhauser, 1985).

Ghost workers are a textbook example of principal-agent failure: payroll administrators exploit informational asymmetry to extract rents from the public purse, confident that the principal's monitoring capacity is insufficient to detect the fraud. Staff verification can be understood as a mechanism for reducing this asymmetry, independently verifying the existence, identity, and employment status of every payroll entrant, thereby closing the information gap that fraudulent actors depend on. But principal-agent

theory also carries a sobering prediction: agents adapt. If the underlying incentive structure is unchanged, if the penalties for fraud remain low, audit capacity remains weak, and political pressure against enforcement remains strong, agents will find new ways to circumvent monitoring mechanisms. The implication for reform design is clear: verification exercises must be accompanied by structural changes to the incentive environment, not just improvements to the information environment.

#### 4. Methodology

This article employs a qualitative case study methodology, supplemented by secondary quantitative data analysis, to examine the fiscal implications of staff verification in Enugu State. The choice of methodology reflects the nature of the research question, the institutional complexity of the phenomenon under study, and the data environment in which the analysis must operate.

A case study approach is appropriate here for several interconnected reasons. First, the relationship between a specific institutional intervention, staff verification, and a broader fiscal outcome, wage bill sustainability, is not easily captured through cross-sectional regression analysis, which would require comparable, reliable data from a sample of subnational governments that simply does not exist in the Nigerian context. Second, the institutional and political dynamics that shape the design and effectiveness of verification exercises are inherently contextual, and a case study approach allows for the kind of granular, contextually sensitive analysis that those dynamics require. Third, the case study format permits the integration of multiple data sources, fiscal reports, policy documents, legislative records, secondary literature, and grey literature from development organisations, in a way that enriches the analysis without pretending to a false precision.

Primary data sources include the Enugu State Auditor-General's annual reports for the period 2015 to 2022, the state's Annual Budget and Appropriation Laws, reports from the Enugu State Office of the Accountant-General, and publicly available documentation from the state's payroll reform initiatives. Secondary sources include IMF and World Bank fiscal assessments of Nigeria's subnational sector, academic literature on PFM reform in Nigeria and sub-Saharan Africa, and grey literature from development finance institutions and civil society organisations engaged in fiscal transparency work.

The empirical analysis proceeds in three stages. The first establishes the pre-verification fiscal context, documenting the scale of the wage bill problem and the pressures bearing on Enugu State in the years leading up to the verification exercises. The second analyses the design and implementation of the verification initiatives themselves, focusing on mechanisms, institutional actors, and reported outcomes. The third assesses the fiscal implications, examining changes in personnel expenditure, budget credibility indicators, and the composition of public spending over the study period.

Several important limitations must be acknowledged. Official fiscal data from Nigerian subnational governments is frequently incomplete, inconsistently presented, and subject to retrospective revision. This makes precise quantitative assessment difficult and requires the analyst to work with ranges and estimates rather than definitive figures. The absence of a credible counterfactual, an estimate of what expenditure trajectories would have been without the verification exercises, limits causal inference. These constraints are acknowledged throughout the analysis, and the conclusions drawn are appropriately qualified.

## 5. Empirical Analysis

### 5.1 The Fiscal Context: A Wage Bill Under Pressure

To understand what staff verification was trying to fix in Enugu State, it helps to appreciate the fiscal pressures the state was operating under in the years before the major verification exercises were undertaken. Like most Nigerian states, Enugu's recurrent expenditure consistently outpaced its capital spending throughout the 2010s, a pattern that is economically suboptimal but politically entrenched. Personnel costs, encompassing salaries, wages, and allowances for civil servants, teachers, health workers, and political appointees, routinely accounted for between 55% and 70% of total recurrent expenditure. In some years, actual personnel spending exceeded budgeted figures by margins of 10% to 25%, a gap that is both a symptom of weak payroll controls and a direct cause of budget credibility problems.

The fiscal pressure intensified sharply during the oil price crash of 2015 and 2016. Federation Account allocations fell steeply, and Enugu, along with a majority of Nigerian states, found itself unable to meet its salary obligations without Federal Government support. The bailout programme introduced during this period was a stark illustration of just how exposed states had become to revenue volatility, and how little fiscal buffer existed to absorb the shock. The structural cause was not hard to identify: years of accumulated payroll inflation, combined with a recurrent expenditure envelope that had grown largely without reference to what the state could realistically afford, had left the fiscal position dangerously exposed.

The ghost worker dimension of this problem is difficult to quantify with precision, in part because the documentation is incomplete and in part because there are obvious political incentives on the part of various actors to understate the scale of the fraud. What the available evidence suggests, however, is that payroll inflation had accumulated over many years through a combination of mechanisms: politically motivated appointments formalised on the payroll without corresponding service delivery roles; the retention of deceased and retired employees through the neglect or deliberate manipulation of personnel records; and the exploitation of fragmented, poorly integrated payroll registers maintained by different agencies with varying degrees of rigour. The state's civil service structure, central ministries, extra-ministerial departments, a large teacher payroll, and a significant health worker cadre, created multiple registers that, taken together, provided fertile ground for fraudulent entries that were difficult to detect and easy to sustain.

### 5.2 Designing the Verification: What Was Done and How

Enugu State's staff verification efforts have been conducted in phases rather than as a single comprehensive exercise, reflecting both the institutional complexity of the state's employment landscape and the political and logistical challenges that any serious verification exercise must navigate. The most significant and well-documented phase was initiated in 2017, building on earlier, more limited headcount exercises that had identified the problem without fully addressing it.

The 2017 exercise was coordinated by the Office of the Head of Civil Service, with technical support from the Office of the Accountant-General and, in certain phases, external consultants engaged by the state. The design drew on the Federal Government's IPPIS model, adapting it to the state's institutional context. Each employee was required to present themselves in person at a designated verification centre and produce specified documentary evidence, appointment letters, confirmation of appointment, staff identification, and where available, a national identity card. Biometric data, including fingerprints and facial photographs, were captured for each verified employee and uploaded to a central personnel management system.

The physical attendance requirement was the exercise's most important design feature from a payroll-cleaning perspective. By requiring personal presence rather than allowing proxy representation, the exercise addressed the ghost worker problem at its most fundamental level: individuals who could not present themselves could not be verified and would, in principle, be removed from the payroll. The documentary verification requirement added a second layer of control, enabling cross-referencing against

establishment registers and salary histories to identify anomalies, sudden additions to the payroll, individuals appearing under multiple employment categories, or records inconsistent with known appointment procedures. Checks were also conducted against pension records to identify retired employees drawing both pension and salary entitlements.

In practice, implementation was messier than the design intended, as tends to be the case with verification exercises of this scale. Mobilising large numbers of employees, particularly teachers and health workers dispersed across urban and rural communities in all seventeen local government areas, created significant logistical challenges. The verification timeline had to be extended multiple times to accommodate late arrivals, connectivity problems at remote centres, and the need to make special provision for employees on legitimate leave, secondment, or study abroad. IT infrastructure limitations affected the reliability of biometric capture at some locations. And, perhaps most consequentially, political pressure from civil service unions concerned about employment security, and from actors with direct interests in maintaining inflated payrolls, created resistance that required active management at the executive level throughout the exercise.

### **5.3 Fiscal Outcomes: What Changed After Verification**

The immediate fiscal impact of the 2017 verification exercise, as documented in subsequent state budget publications and audit reports, was a meaningful reduction in personnel expenditure. The precise scale of ghost worker removal has been reported with some variation across official documents, a common feature of Nigerian subnational fiscal reporting, where figures are revised as verification data is processed and administrative follow-up is conducted. Conservative estimates drawn from the available documentation suggest that between 2,500 and 4,000 ghost workers were identified and removed in the initial phase of the exercise, generating estimated annual savings in personnel costs of between ₦2 billion and ₦4 billion, depending on the salary grades of the removed entries and the comprehensiveness of the exercise.

These are significant numbers in absolute terms. As a proportion of total personnel expenditure, however, they represent a more modest reduction, available budget execution data suggests a decrease in personnel costs of approximately 8% to 15% in the two years following the verification exercise. This range is consistent with the outcomes of comparable exercises in other Nigerian states and broadly in line with what the literature on biometric payroll reform in sub-Saharan Africa would predict (Cangiano et al., 2013; World Bank, 2015). The reduction was more pronounced in the education and health sectors, which carry the largest and most geographically dispersed workforces, than in central ministries, reflecting both where the concentration of ghost workers was highest and where verification efforts were most intensive.

The impact on budget credibility was also measurable. The persistent positive variance between budgeted and actual personnel expenditure, actual routinely exceeding budget in the pre-verification period, narrowed noticeably following the exercise. This improvement in budget-to-actual alignment is encouraging, though it should be interpreted carefully: part of the improvement reflects the lower nominal level of personnel expenditure following ghost worker removal rather than a genuine improvement in forecasting methodology. True and durable improvement in budget credibility requires that the cleaner payroll register be maintained over time, which in turn depends on the strength of post-verification payroll controls.

### **5.4 Fiscal Space: Did the Savings Get Used Well?**

One of the central claims made by proponents of payroll reform, in Enugu and elsewhere, is that reducing personnel costs creates fiscal space that can be redirected toward capital investment. The evidence from Enugu State during the post-verification period is encouraging in some respects and sobering in others. Budget allocation data for the years 2018 to 2021 shows a modest improvement in the ratio of capital to recurrent expenditure compared with the pre-verification baseline. Several infrastructure initiatives, road rehabilitation works and school construction projects, among others, were explicitly cited in official state communications as beneficiaries of the freed fiscal resources. In this sense, the claim that verification created fiscal space is supported by the evidence.

However, the capital expenditure gains were far from proportional to the personnel cost savings. A significant share of the payroll savings appears to have been absorbed by increases in overhead expenditure, a pattern documented in multiple other Nigerian states following similar exercises (Brosio & Jiménez, 2012; World Bank, 2015). Revenue volatility during this period, particularly further fluctuations in Federation Account allocations, offset some of the gains at the aggregate level, leaving the net fiscal position less improved than the verification savings would suggest in isolation. And the structural political economy of budget allocation in the state, in which recurrent expenditure categories are politically sticky in a way that capital investment is not, limited the degree to which freed resources actually flowed toward developmental spending. The verification exercise created potential fiscal space; whether that potential was fully realised is a more ambiguous question.

### **5.5 Institutional Reforms: Building for the Long Term**

The most important question about any payroll verification exercise is not what it achieved immediately, but what institutional foundations it laid for sustaining those achievements over time. On this dimension, Enugu State's record is a story of genuine progress tempered by incomplete follow-through.

The most significant institutional development following the 2017 exercise was the introduction of a biometric-linked payroll management system, which ties salary processing to regular biometric authentication. This system, progressively rolled out across state ministries and agencies, represents a structural departure from the manual payroll registers it was designed to replace. In principle, it makes it far more difficult to reinstate ghost workers or introduce new fictitious entries, because salary payment is conditional on periodic physical identity confirmation rather than merely the presence of a name in a register.

Complementary reforms included the strengthening of the Human Resource Management Information System (HRMIS) to enable real-time tracking of employment status changes, appointments, retirements, deaths, dismissals, with those changes directly triggering payroll updates. An inter-agency data verification protocol was also established, requiring the Office of the Accountant-General to cross-check payroll additions against appointment records from the Head of Civil Service. And the internal audit function was strengthened in mandate, with periodic payroll audits incorporated into the annual audit work plan.

These are meaningful reforms. But they are also incomplete ones. The biometric payroll system has not yet achieved full coverage across all categories of state employees, leaving casual and contract workers, among the most vulnerable categories for payroll manipulation, outside the formal verification framework. The HRMIS, while technically operational, has not been fully integrated with all payroll registers in all agencies. Power supply and internet connectivity constraints have affected the reliability of biometric authentication requirements in some locations. And the internal audit function, while mandated to conduct regular payroll audits, faces capacity constraints that limit the frequency and depth of its work in practice. The institutional architecture is stronger than it was; it is not yet as strong as it needs to be.

## **6. Discussion**

### **6.1 What the Verification Achieved, and What It Did Not**

The Enugu State experience validates the proposition that staff verification exercises can make a meaningful contribution to fiscal sustainability through wage bill reduction and improved payroll integrity. The removal of thousands of ghost workers from the payroll produced real fiscal savings, narrowed the gap between budgeted and actual personnel expenditure, and generated some additional space for capital investment. These are not trivial achievements in a fiscal environment as constrained as Enugu's.

At the same time, the evidence suggests that the exercise fell short of its potential in several important respects. The savings generated, while significant in absolute terms, represented a modest reduction as a share of total personnel expenditure, implying that the verification exercise, however well-designed, did not reach the full depth of the problem. The translation of savings into capital investment was incomplete

and partially offset by increases in other recurrent categories. And the institutional reforms undertaken, while genuine, remain fragile and unfinished.

Viewed through the lens of Schick's (1998, 2013) PEM framework, the verification exercise contributed meaningfully to aggregate fiscal discipline, its most direct contribution, while its implications for allocative efficiency and operational effectiveness were more limited and contingent. This is not a failure of the exercise so much as a reflection of the bounded scope of what verification alone can achieve. PEM theory is clear that aggregate discipline, while necessary, is not sufficient for improved fiscal governance: it must be accompanied by progress on allocation and operational quality, which requires a broader reform agenda than payroll cleaning alone.

## **6.2 The Political Economy of Resistance**

Principal-agent theory predicts, and the Enugu experience confirms, that payroll reform will encounter resistance from those whose rents it threatens. The resistance documented during the 2017 exercise, from civil service unions, from political actors, from payroll administrators, was not incidental to the process but structural to it. It reflected the predictable response of agents whose informational advantages and extraction opportunities were being directly challenged by an enhanced monitoring mechanism.

What is perhaps more striking is the form that resistance took. It was rarely overt or confrontational. More often, it manifested as administrative delay, logistical obstruction, incomplete data submission, and a quiet reassertion of informal norms once the immediate pressure of the verification exercise had passed. This pattern is consistent with Bratton and van de Walle's (1997) analysis of how neopatrimonial systems absorb reform pressures without fundamentally changing the underlying logic of governance. The implication for reform design is uncomfortable but important: verification exercises that are not accompanied by deeper changes to the incentive environment, clearer penalties for fraud, stronger political commitment to enforcement, genuinely independent audit capacity, will tend to produce temporary rather than durable results.

## **6.3 Data Fragmentation as a Structural Constraint**

One of the most consistently limiting factors in the Enugu State verification experience, and, by extension, in Nigerian subnational payroll reform more broadly, is the fragmentation of personnel data across multiple registers maintained by different agencies with different systems, different levels of capacity, and different incentive structures. The absence of a single, authoritative employee database is not merely a technical inconvenience; it is a governance vulnerability. Ghost workers persist, in large part, because fragmented data systems make them hard to find. And they re-emerge after verification exercises, in large part, because fragmented systems make them easy to reintroduce.

This data fragmentation reflects institutional design choices that have, at various points, served the interests of actors who benefit from payroll opacity. Addressing it requires not just technical integration, building a unified HRMIS and connecting it to a single centralised payroll, but political will to override the departmental and agency interests that have historically resisted centralisation. This is, frankly, a harder problem than biometric verification, because it touches the structural foundations of how patronage and administrative power are exercised.

## **6.4 Comparative Perspective: Enugu in a Wider Frame**

The Enugu experience is not unique. The pattern of significant immediate savings followed by incomplete institutional consolidation and gradual re-inflation of costs has been documented across multiple sub-Saharan African contexts, from Sierra Leone's post-conflict payroll reform to Ghana's biometric initiatives (Fayomi, 2015; World Bank, 2015). What these cases share is not a failure of the verification technology or even, necessarily, a failure of political will in the initial reform phase, but a failure to sustain the institutional intensity required to prevent regression. Verification exercises are, by their nature, events. Payroll integrity is, by its nature, a condition that must be continuously maintained. The gap between the two is where reform efforts most commonly lose ground.

Comparative evidence also highlights the importance of integrating payroll reform with civil service reform more broadly, merit-based recruitment, transparent and competitive salary structures, effective performance management, and genuine disciplinary processes. States and countries that have treated verification as a standalone technical exercise, disconnected from the broader question of how the civil service is governed, have consistently failed to achieve durable improvements in payroll integrity. This observation applies with particular force to Enugu, where the verification exercises have been framed primarily as fiscal management interventions rather than as components of a comprehensive civil service reform agenda.

## 7. Conclusion

Staff verification exercises, when well designed and seriously implemented, can do something real and important: they can identify who is actually on a government's payroll, remove those who should not be there, and produce the accurate personnel data without which credible budgeting is impossible. Enugu State's verification experience demonstrates this. The exercises conducted from 2017 onward generated genuine fiscal savings, narrowed the gap between budgeted and actual personnel expenditure, and provided the institutional trigger for a set of payroll management reforms that have, if incompletely, strengthened the state's fiscal management architecture.

But the experience also demonstrates, with equal clarity, that verification is a necessary rather than sufficient condition for sustained wage bill sustainability. The fiscal gains achieved through payroll cleaning have been partially offset by absorption into other recurrent categories, by revenue volatility, and by the gradual reassertion of informal administrative practices that verification disrupted but did not eliminate. The institutional reforms introduced in the exercise's wake are real but unfinished. And the political economy of civil service management in the state, shaped by patronage relationships, weak accountability mechanisms, and the interests of actors who benefit from opacity, continues to exert a gravitational pull against the direction that effective reform requires.

The theoretical frameworks brought to bear in this analysis converge on a shared conclusion: durable payroll reform requires not just better technology or stronger monitoring, but changes to the incentive environment in which payroll administrators and political actors operate. Biometric systems, integrated information platforms, and strengthened audit functions are tools in service of that goal. They are not substitutes for the political and institutional transformation that ultimately determines whether reform sticks.

For Enugu State, the path forward involves consolidating and completing the institutional reforms already begun, particularly the full operationalisation of the integrated HRMIS, the extension of biometric authentication to all employee categories, and the strengthening of independent audit capacity. For Nigeria's subnational sector more broadly, the Enugu experience offers both a demonstration that meaningful payroll reform is achievable at the state level, and a cautionary note about the conditions that need to be in place if the achievement is to last.

## 8. Policy Implications

The findings of this analysis give rise to several actionable policy implications, directed at Enugu State specifically and at Nigerian subnational governments more broadly.

First, staff verification should be regularised rather than treated as a periodic special exercise. Annual or biennial payroll audits combining biometric authentication with documentary cross-checking should become a standard feature of the state's PFM calendar. Regularity signals that monitoring is not episodic but continuous, which changes the risk calculus for those tempted to exploit payroll systems.

Second, the institutional architecture supporting payroll integrity must be completed. This means achieving full operationalisation of an integrated HRMIS covering all categories of state employee, including casual, contract, and project-based workers, directly linked to a centralised payroll system such that employment status changes are automatically reflected in salary processing without requiring

separate administrative action. The current fragmentation of payroll registers must be decisively addressed, even where doing so requires overriding departmental resistance.

Third, the internal audit and accountability functions must be genuinely strengthened, in resources and independence, not just in mandate. The Auditor-General's office should have the capacity to conduct regular, unannounced payroll audits and to report findings publicly to the state legislature and, in appropriate form, to civil society. External accountability actors, legislators, civil society organisations, the media, should have access to the kind of aggregated payroll data that enables independent scrutiny without compromising individual privacy.

Fourth, the fiscal savings generated by payroll reform should be explicitly earmarked, through formal budget policy commitments, for capital expenditure priorities identified in the state's medium-term development plan. Without such commitment devices, the political economy of budget allocation will tend to absorb freed resources into recurrent categories. This earmarking should be transparent and subject to legislative oversight.

Fifth, payroll reform should be embedded within a broader civil service reform agenda that addresses the structural conditions creating the incentive environment for fraud. This means merit-based recruitment and promotion, transparent salary structures, functional performance management, and credible disciplinary processes for payroll-related misconduct. Technical solutions cannot substitute for these institutional foundations.

Finally, the Federal Government and development partners have a role to play. Coordinated technical and financial support for subnational payroll reform, learning from the design of IPPIS but adapting it to state-level institutional realities, would accelerate progress across the federation. The fiscal sustainability of state governments is not merely a subnational concern; it is a condition of macroeconomic stability and of Nigeria's long-term development trajectory.

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