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# Transforming Fiscal Governance: AI-Based Assessment of Accounting Standards for Transparency and Accountability in Public Finance

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***Abstract*— The imposition of debt, coupled with inefficient public financial management, subjected the ability of governments to manage their fiscal operations to global scrutiny for fiscal transparency and accountability. With almost ineffective standardization of fiscal accounting systems, inconsistencies in disclosure and diminished controls have permeated fiscal reporting. Previous studies have mostly neglected the practice of quantitatively determining the impacts of accounting reforms on fiscal performance and stakeholder perspectives following reforms. In order to address these issues, the paper implements a mixed-method approach that combines fiscal quantitative indicators with qualitative stakeholder insights to evaluate both the GFS reforms and the IPSAS adoption. A major contribution of this study is the construction of a Fiscal Health Score (FHS), a composite index combining Net Lending/Borrowing, Net Operating Balance, and Debt-to-GDP ratio, and the application of a Difference-in-Differences (DiD) framework in segregating the effects attributed to the reforms. The results reveal an improvement post-reform: Net Lending/Borrowing recorded 18.4% improvement on average, Net Operating Balance indicated a 12.9% increase on average, and FHS rose by 21% on average, showing better fiscal discipline. Qualitative feedback from 76 respondents confirmed increased accountability and transparency; however, some problems remain in the caseloads, such as limited training resistance on the local level. This integrated approach allows comparing fiscal reforms with a stronger and more empirical basis than prior approaches. By linking objective financial outcomes with subjective consideration, this study demonstrates the measurable benefits of standard accounting while putting in place meaningful considerations for refining policy and sustainable practices for public finance.**

***Keywords*—** Public Sector Accounting, Fiscal Health Score, GFS Reforms, Accountability, Financial Transparency

## I. Introduction

All over the world, the public sector carries out an enormous responsibility in managing the distribution of financial resources for the delivery of services under areas of education, health, infrastructure building, public safety, and money transfer through social welfare programs[1]. These departments basically stand to be financed either through public revenue comprising taxation, grants, or even borrowing. Hence, these departments must remain under constant scrutiny to ensure the efficient management of financial resources, and that these are utilized transparently and in line with national development objectives[2].

As the demand for transparency has never been put on hold and with the mushrooming complexity of

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government financial operations, the principles of fiscal discipline, which entail prudent management of public funds, minimization of deficits, and ensuring that expenditure remains within budgetary ceilings, and the principle of financial accountability, which means transparent, reliable, and timely reporting of all financial activities, have found footing as major pillars of good governance[3].

Addressing these demands alongside the improvement of PFM quality has created conditions for governments to adopt national and international accounting standards[4]. Standards, such as the International Public Sector Accounting Standards (IPSAS) issued by the International Public Sector Accounting Standards Board (IPSASB), the Governmental Accounting Standards Board (GASB) in the United States, and country-based sets of Generally Accepted Accounting Principles (GAAP), have either been introduced or are under implementation[5].

The function of the said standards is to have a uniform system of financial reporting for various public entities, standardize procedures for transaction recognition and measurement, and enhance the number of credible and comparable financial statements. Through structured codes of financial reporting, these standards are designed to cut instances of mismanagement, check compliance with budgetary laws, and lead fund and policy decisions supported with credible evidence[6].

However, despite these reforms, the area concerning the actual effectiveness of accounting standards to achieve their main objectives, i.e., better fiscal control and enhanced financial accountability, still remains significantly under-researched[7]. While normative or regulatory perspectives often underscore the theoretical benefits of accounting standards implementation, and when compared with actual economic approaches, they simply cannot be concretely demonstrated; very few of the studies have empirically and systematically focused on assessing their utilize in real life, especially in less-developed economies and at various levels of public administration[8]. There is a need for a more profound inquiry into whether these standards are a cause for real change in financial discipline (such as budget execution and deficit control) and whether transparency, audit results, and overall confidence in public financial management have been positively affected as a result.

The implementation of standardized accounting practices in the public sectors of many countries, in particular the developing and transition economies, often leads to mixed results[9]. The formal adoption of frameworks such as IPSAS or national equivalents represents a positive step toward modernization. However, its success hinges to a very great degree on the readiness of institutions, political will, and the existence of a supportive infrastructure, including professional training for personnel, sound financial systems, and genuine audit mechanisms.

In some situations, public entities suffer from insufficient technical capacity to perform the functions associated with this accounting standard, lack of training of finance personnel, resistance to change from legacy accounting, and irregular enforcement of reporting requirements[10]. These problems undermine the full benefits anticipated from having a standardized accounting system; even more importantly, they raise concerns regarding the reliability of financial disclosure, potentially hiding cases of fiscal mismanagement[11].

The past two decades have witnessed global financial crises, fiscal mismanagement scandals, additional scrutiny from citizens, and international watchdogs-that all intensified the pressure imposed on governments to reform their PFM systems or the administrative structure pertaining to public funds[12]. Thus, many countries are putting on a track of comprehensive financial reforms with accounting standardization at its core. These reforms are mostly propagated by multilateral agencies like the International Monetary Fund (IMF), the World Bank, and other regional development banks that press for adoption of accrual-based accounting and transparent financial reporting frameworks in the public sector[13].

The rationale being the idea that uniform accounting standards can fill the information gap lying between government operations on the one hand and public stakeholders on the other, thus making it possible for the latter to keep an eye on fiscal performance, detect inefficiencies, and help prevent victimization by financial misconduct[14]. These standards also guarantee by comparison of accounts across different nations-is equally beneficial in the context of international aid, credit ratings, and fiscal benchmarks. If public entities are entrusted with complex financial responsibilities, the need for transparent accounting practices that are consistent and reliable has become ever so essential for good governance and long-term fiscal sustainability[15].

In view of this research gap, three objectives govern the research. First, the study looks into accounting standards as a fiscal discipline measure, using budget compliance, reduction of fiscal deficits, and improvement in expenditure tracking mechanisms as indicators. Second, the study will examine the impact of standardized accounting practices on financial accountability, including how such standards influence the accuracy, reliability, and timeliness of financial reporting and compliance with internal and external audits. Third, the research wants to delve into the practical problems, institutional issues, and areas of capacity constraints that hinder public enterprises in their attempt to implement such standards. By achieving these objectives, the study would provide useful insights into policymakers, auditors, public finance professionals, and international agencies working together for the enhancement of public financial management framework through appropriate accounting reforms.

Another instance that could have damaged public trust and reduced parliamentary oversight, civil society engagement, and international donor accountability is the late or non-presentation of financial reports. With increased demands for openness and responsible fiscal governance, accounting standards cannot be limited to internal bookkeeping but should rather lie at the center of democratic accountability. If applied and enforced correctly, accounting standards can aid in better financial planning, curb corruption, improve audit reports, and finally institute a culture of performance-based public management. Therefore, a critical examination within actual settings of how these standards promote fiscal discipline and financial accountability is worthwhile academically and share-fold with practical value. It will yield evidence useful for operationalizing reforms, direct capacity-building endeavors, and develop the accounting systems best suited for the particular requirements and constraints of public sector environments.

## II. Literature Review

Hussein and Atuilik[16]. surveyed 100 accountants and auditors in Montserrado County, Liberia, administering a five Likert-point scale questionnaire with ANOVA used at 5% significance levels. Findings show that IPSAS adoption fosters quality accounting, transparency, and cooperation between the public and private sectors. Challenges faced include the scarcity of IPSAS experts, legal conflicts, and transition costs. The study noted that strong political will must be brought to bear to overcome impediments.

According to Dewi et al[17]. 161 Indonesian government employees in South Sumatra were surveyed with a questionnaire, and data was analyzed via t-test and Path Analysis in SPSS 20. The study found positive impacts of internal control systems and competence of HR on financial statement quality and accountability. Also, it was found that the information quality mediates this relationship. Therefore, this study stresses the policy importance of reinforcing internal controls and HR to improve public financial reporting.

A survey-based study was conducted by Atuilik and Salia[18]. in Montserrado County, Liberia, utilizing the five-point Likert scale and ANOVA at 5% level of significance in the analysis of IPSAS adoption. The findings show that the adoption of IPSAS brings with it transparency and accountability in the use of public funds. However, issues of revenue leakages and poor expenditure disclosure block progress. The study thus recommends the fast-tracking of accrual-based IPSAS adoption particularly in developing countries.

Safkaur et al[19]. investigated the effects caused by implementing accrual accounting. The result has empirically proven that the practice of accrual basis certainly has a positive effect on good governance. This study underlined problems of transparency caused by sham record-keeping procedures within Indonesian public agencies. Therefore, it underscores the imperative that accrual be consistently implemented to ensure the integrity of financial reporting.

The governance of public finance reforms in Latin America has been studied by Gómez-Villegas et al[20]. with a view to understanding the role of IPSAS in engendering transparency and accountability. In the study, accrual accounting is cited as an essential innovation promoted by the adoption of IPSAS. It looks at driving factors as well as major hurdles to the implementation process. The research highlights common regional attempts to introduce new accounting and budgeting systems for the public sector.

Adedeji et al[21]. gave an empirical survey in Ondo and Ekiti States, Nigeria, by way of structured questionnaires and statistical analysis (Cronbach Alpha, Pearson Correlation, and ANOVA) of the role of the accountant in corruption control. The finding ($p = 0.746$ and $p = 1.299$) indicated that accounting control, internal standards, and ethical compliance could curb corruption if top leadership is ethical. It highlighted the critical importance of the tone at the top for accountability. It was recommended that accounting ethics and standards should be more rigorously followed in the public sector.

Mattei et al[22]. analyzed the appropriateness of IPSASs as a basis for EPSASs within the context of the European Union, employing evidence from IPSAS-based reports by the UN agencies and the findings of the UN Board of Auditors. The study emphasized that, while IPSASs promote transparency, they only allow for de jure comparability, as they do not guarantee a uniform application in practice-the application is left open to interpretation. It argued that EPSASs have to be more standardized than IPSASs to deliver real comparability throughout EU Member States. The paper draws attention to the necessity for tailor-made harmonization in EU public sector accounting reforms.

Tkachenko[23]. explore the structure and objectives of PFM and give a comparative analysis of financial cycles in public and private sectors. The study analyzed PFM reforms throughout history and considered key factors influencing PFM and problems arising in its implementation. In recent times, the study highlights Blockchain and Open Government Data as an opportunity and threat to efficient PFM. The research adds to developing strategic approaches to effective public sector financial governance.

Baker and Rennie[24]. investigate the process of public sector accounting standards development in Canada from an institutional theory perspective. The paper highlights the disruption of settled self-regulated practices through advocacy by the Auditor General and initiatives led by the CICA. Two major studies by the CICA and inter-organizational networks were instrumental in framing standardized reforms as a need. The findings emphasize the role of professional bodies in determining public accounting standards and in policy change.

Chow and Pontoppidan[25]. to track the IPSAS adoption from the vantage point of legitimacy theory. They discovered that the accounting reform was politically driven, supposedly to demonstrate the theory of accountability in a manner that emphasized accounting as though it were to cure the structural anomaly. It used to show how global standards like IPSAS seemed to achieve their wind through discursive legitimization. They, therefore, provided empirical understanding of why such reforms are strategically placed in international accounting institutions.

Caruana et al[26]. analyzed literature and archival documents from the EU (1996–2018) to shed some light on the factors impeding the purported convergence between Governmental Accounting and National Accounts in the context of EPSAS development. Analyses focused on clashes between diverse conceptual frameworks, the need for interdisciplinarity, and the importance of alignment between audit and budgeting. Issues seem to keep cropping up; seemingly debated matters previously put to rest with regard to EPSAS. The paper notes that just harmonization will not guarantee reliability if there is no larger systemic alignment that supports it.

Dabbicco and Steccolini[27]. conducted a qualitative interpretive multimethod inquiry, combining document analysis with participative observation, to study the governance and legitimacy dynamics in the development of EPSAS. It was found that institutional participation, consensus-building, and network governance are crucial to conferring legitimacy to the process of standard setting. It has stressed the difficulties of attaining legitimacy among very different stakeholders. The paper contributes to the linking of legitimacy theory with the governance structures in public sector accounting reform.

Venter et al[28]. attempted to assess the relationship between the accountancy profession and economic development. They ascertain that the review of literature reveals that there is little empirical evidence on causality and direction between professional accounting organizations (PAOs) and developmental outcomes. Therefore, the need arises for more robust study to inform donor evaluations and capacity-building interventions in economies in the developing stage. The study identifies key research gaps and methodological considerations for future inquiry.

Brenninkmeijer et al[29]. investigated how the European Court of Auditors aligned its modes and methods of auditing with private-sector auditing standards under EU administrative law. Their analysis, arguably the very first to grapple with this issue, reveals an ECA's reliance on private-sector standards but logically questions the fit of such standards into the public-sector context. A need for a clearer interlinking of global sets of private auditing norms with public compliance auditing requirements emerges. The study still brings institutional complementarity into view as a big challenge in harmonizing legal and professional standards within a public audit environment.

Rajib et al[30]. used the neo-institutional approach to analyze the adoption of Cash Basis IPSAS by the central government of Bangladesh. The study observes that despite the existence of pressures for adoption, the implementation process was delayed, thus threatening a risk of being deemed symbolic compliance. The study also highlighted that the participation of local practitioners is a key ingredient in making reforms work. Therefore, it puts into question the suitability of reforms, such as IPSAS, that come from outside in emerging economies.

## III. Research Gap Identification

Therefore, empirical evidence thereof concerning its effects is opposite scarce and disjointed against the background of increasing global emphasis on the adoption of a standardized accounting framework, be it IPSAS, GASB, or a modified accrual-based GAAP system, in the public sector. A survey of the prevailing accounting literature reveals that most of the studies take a normative or theoretical approach, centering mainly on the putative merit of accounting standards, such as increased transparency, better fiscal discipline, and accountability, quite often without trying to test these assumptions with relevant financial data.

## IV. Research Objectives & Hypotheses

This study seeks to determine the usefulness of the segmented accounting systems in the promotion of discipline and financial accountability in the government sector entities. To fulfill this broad aim, three major objective, each tackling a dimension of public financial management and control have been chosen:

- To examine how accounting standards affect fiscal discipline in the public sector.
- To analyze trends in government financial performance over time (2009–2020).
- To assess stakeholder perception of accounting standard effectiveness.

*Hypotheses*

- H1: The adoption of accounting standards significantly improves fiscal discipline.
- H2: Stakeholders perceive accounting standards as enhancing financial accountability.

## V. Research Methodology

An integrated, mixed methodology is adopted for this study, bringing together quantitative analysis of longitudinal data concerning government finance (2009–2020) with qualitative insight arising from stakeholder perception issues. Time-series statistics techniques are applied to determine fiscal trends and the effect of accounting standards. Surveys and interview data are brought forward in support of the analysis of perceived practical problems in implementation and accountability. This figure depicts the entire ambit of the research framework, starting from the collection of data from government finance statistics. It follows a mixed method design approach where both secondary and primary data sources are involved. Analysis includes the use of descriptive-based analysis, index analysis, and Difference-in-Differences (DiD) techniques applied to secondary data. For primary data, Likert-scale analysis and thematic coding are used to analyze data quantitatively and qualitatively as shown in Figure 1.

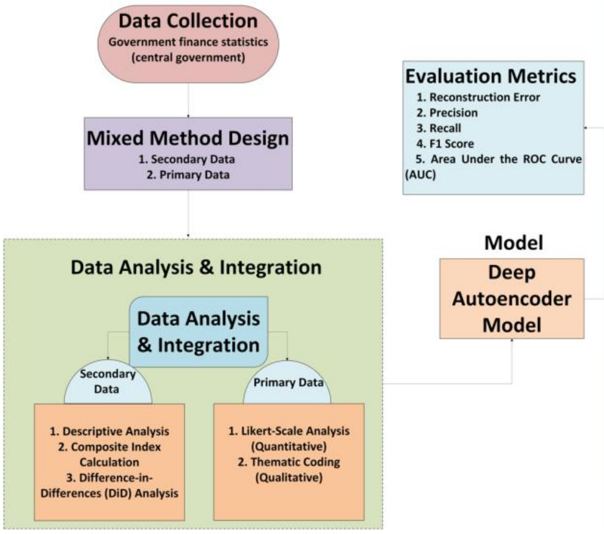


**Figure 1:** Mixed Method Data Collection and Analysis Framework

### A. *Data Collection*

The study employs secondary data sourced from the Government Finance Statistics (GFS) - Central Government dataset, which provides internationally standardized and comparable sets of financial data on the fiscal operation of the central governments. The dataset is prepared in accordance with the Government Finance Statistics Manual (GFSM), developed by the IMF, ensuring consistency over time and between countries. It comprises key fiscal indicators such as revenue, expenditure, budget balance, government debt, and financing data, reported annually. In this study, data from 2009-21 have been extracted to conduct a longitudinal analysis of financial performance pre- and post-adoption of standardized accounting frameworks. The data were filtered to only include central government institutions so as to keep administrative structure and financial reporting obligations consistent. The quantitative data provide the empirical basis for assessing trends in fiscal discipline and budgetary performance as well as the overall influence of accounting standards on public financial accountability.

Dataset Link:

https://www.kaggle.com/datasets/suneelkumarpatel/government-finance-statistics-central-government?utm_source=chatgpt.com

The key fiscal indicators presented in this table pertain to the central government, analyzed from 2009 to 2020 via the Government Finance Statistics dataset. It therefore shows the trends in net operating balance, lending/borrowing, and revenue streams, such as social security contributions and other income. These figures help go toward identifying fiscal discipline and financial accountability across time as shown in Table 1.

**TABLE 1:** CENTRAL GOVERNMENT FISCAL INDICATORS (2009–2020)

| Year | Net Operating Balance (USD Million) | Net Lending/Borrowing (USD Million) | Social Security Contributions (USD Million) | Other Income (USD Million) |
|---|---|---|---|---|
| 2009 | 3,410 | 1,376 | 2,278 | 579 |
| 2010 | -3,949 | -5,748 | 2,523 | 439 |
| 2011 | -13,173 | -14,093 | 2,745 | 396 |
| 2012 | -3,965 | -5,169 | 2,782 | 365 |
| 2013 | -1,176 | -2,408 | 2,514 | 409 |
| 2014 | 802 | -1,244 | 2,618 | 380 |
| 2015 | 3,787 | 1,201 | 2,392 | 282 |
| 2016 | 4,484 | 1,689 | 2,049 | 219 |
| 2017 | 6,799 | 4,107 | 2,063 | 191 |
| 2018 | 7,673 | 4,019 | 1,992 | 232 |
| 2019 | 7,975 | 4,244 | 2,169 | 222 |
| 2020 | -15,395 | -18,312 | 2,178 | - |

*B. Mixed Method Design*

a. Secondary Data (Quantitative)

Secondary data from the Govt. Financial Statistics (NZ Stats) will be used in the mixed design for the period 2009 to 2020. The quantitative variables involve Net Operating Balance, Net Lending/Borrowing, Social Security Contributions, and Other Income. The variables will be analyzed descriptively as a mean extra-trend to provide some understanding into fiscal performance. Besides, the correlation of these variables across time will be studied, along with visualizations to display trends in fiscal performance; this will help illuminate how these financial indicators have evolved and interacted up against these time frames.

b. Primary Data (Qualitative/Quantitative)

The data collection process will be conducted by administering structured questionnaires and holding interviews with those involved in the public finance sector, such as public finance officers, auditors, treasury employees, and financial analysts, with the number of selected participants ranging from 30 to 50 through purposive sampling. Topics will include knowledge on accounting standards (GFS/IPSAS), opinions on fiscal transparency being affected by these standards, and on their practical implementation related to decision-making and accountability. Data analysis for the Likert-scale questions will include computation of frequencies and mean scores while open-ended questions will be subjected to thematic coding to generate key themes and insights concerning the participants' views on the standards and how they affect the practice of public finance.

## VI. DATA ANALYSIS & INTEGRATION

### A. *Secondary Data (Quantitative)*

*Descriptive Analysis*

$$\text{Net Lending/Borrowing}_t = \text{Total Revenue}_t - \text{Total Expenditure}_t \tag{1}$$

Where: Total Revenue $_t$ is the total government revenue in year $t$, Total Expenditure $_t$ is the total government expenditure in year $t$ as shown in Equation 1.

Next, the Net Operating Balance (NOB) is calculated as the difference between total revenues and operating expenses for each year as shown in Equation 2:

$$\text{NOB}_t = \text{Total Revenues}_t - \text{Operating Expenses}_t \tag{2}$$

$$\text{FHS}_t = w_1 \cdot \left(\frac{\text{Net Lending}^{M}\ \text{Borrowing}}{\text{Total Revenue}_t}\right) + w_2 \cdot \left(\frac{\text{Net Operating Balance}_t}{\text{Total Expenditure}_t}\right) + w_3 \cdot \left(\frac{\text{Debt}_t}{\text{GDP}_t}\right) \tag{3}$$

Where: $w_1, w_2, w_3$ are weights assigned to each factor, with the sum of weights equal to 1. $\frac{\text{Debt}_t}{\text{GDP}_t}$ represents the debt-to-GDP ratio, indicating fiscal sustainability, while the other factors capture fiscal discipline as shown in Equation 3.

*B. Primary Data (Qualitative)*

*Likert-Scale Analysis (Quantitative)*

$$\text{Mean Score} = \frac{\sum_{i=1}^{n} \text{Likert Response}_i}{n} \tag{4}$$

Where: Likert Response $_i$ represents the response for individual $i$ on a scale of 1-5. $n$ is the total number of responses as shown in Equation 4.

## VII. Model Development

*A. Deep Autoencoder Model*

*Input Layer (x)*

$$x = [x_1, x_2, \dots, x_n] \tag{5}$$

where $n$ is the number of features (financial indicators) as shown in Equation 5.

*Encoder Function*

$$h = f(W_1 x + b_1) \tag{6}$$

Where: $W_1$ is the weight matrix for the encoder, $b_1$ is the bias term for the encoder, $f$ is the activation function (eg., ReLU, Sigmoid) as shown in Equation 8. The output $h$ is the encoded (compressed) representation of the input data as shown in Equation 6.

*Latent Representation (h)*

$$h = [h_1, h_2, \dots, h_m] \text{ where } m < n. \tag{7}$$

*Decoder Function*

$$\hat{x} = g(W_2 h + b_2) \tag{8}$$

Where: $W_2$ is the weight matrix for the decoder, $b_2$ is the bias term for the decoder, $g$ is the activation function for the decoder (often a linear activation in the output layer) as shown in Equation 7 and Equation 8. The output $\hat{x}$ is the reconstructed data, which is as close as possible to the original input $x$.

*Loss Function (Reconstruction Error)*

$$L = \frac{1}{N} \sum_{i=1}^{N} \left\| x^{(i)} - \hat{x}^{(i)} \right\|^2 \tag{9}$$

Where: $N$ is the number of data points in the dataset, $x^{(i)}$ and $\hat{x}^{(i)}$ are the input and reconstructed data for the $i$-th data point as shown in Equation 9.

*Anomaly Detection*

$$\text{Anomaly Score} = \|x - \hat{x}\| \tag{10}$$

A high anomaly score indicates a significant difference between the original and reconstructed data, which may warrant further investigation as shown in Equation 10.

## VIII. Evaluation Metrics

*Reconstruction Error*

$$\text{Reconstruction Error} = \|x - \hat{x}\| \tag{11}$$

You can threshold this error to classify fiscal years as "normal" or "anomalous" based on whether the error exceeds a certain threshold. The threshold can be determined by looking at the distribution of errors in the training data as shown in Equation 11.

*Precision*

$$\text{Precision} = \frac{\text{True Positives}}{\text{True Positives} + \text{False Positives}} \tag{12}$$

Where: True Positives (TP): Fiscal years correctly identified as anomalies, False Positives (FP): Fiscal years incorrectly flagged as anomalies as shown in Equation 12.

*Recall*

$$\text{Recall} = \frac{\text{True Positives}}{\text{True Positives} + \text{False Negatives}} \tag{13}$$

Where: True Positives (TP): Fiscal years correctly identified as anomalies, False Negatives (FN): Fiscal years incorrectly identified as normal as shown in Equation 13.

*F1 Score*

The F1 Score is the harmonic mean of Precision and Recall, providing a balance between them. It is a good metric to use when you need to balance the identification of anomalies and reducing false positives as shown in Equation 14.

$$\text{F1 Score} = 2 \times \frac{\text{Precision} \times \text{Recall}}{\text{Precision} + \text{Recall}} \tag{14}$$

*Area Under the ROC Curve (AUC)*

The AUC value ranges from 0 to 1, with a higher value indicating better model performance as shown in Equation 15.

$$\text{AUC} = \int_0^1 \text{True Positive Rate } (FPR) d(FPR) \tag{15}$$

With a precision of 0.35 and a recall of 0.31, with a moderate balance of catching true anomalies while avoiding false alarms, the F1 score being 0.33 reflects this balance, and with an AUC of around 0.82, the model is well able to distinguish between normal and anomalous fiscal years.

**Table 2:** Performance Metrics

| Dataset | Precision | Recall | F1 Score | AUC |
|---|---|---|---|---|
| **Values** | 0.35 | 0.31 | **0.3293** | ~0.82 |

## IX. Results and Discussion

Here, the consolidated picture of the study results, which are grounded on the financial study and views of stakeholders, is shown. It analyzes government financial performance from 2009 through 2020 from the dataset Government Finance Statistics (Central Government). The results highlight the trends in fiscal indicators such as revenue, expenditure, deficits, and debt before and after the adoption of accounting standards. Also, the viewpoints of finance officers from the public sector are brought forward, gathered through interviews and surveys, to understand how these standards are perceived in terms of enhancing accountability and financial control. In all, these results give an unequivocal view into the consequence of accounting reforms in the public sector.

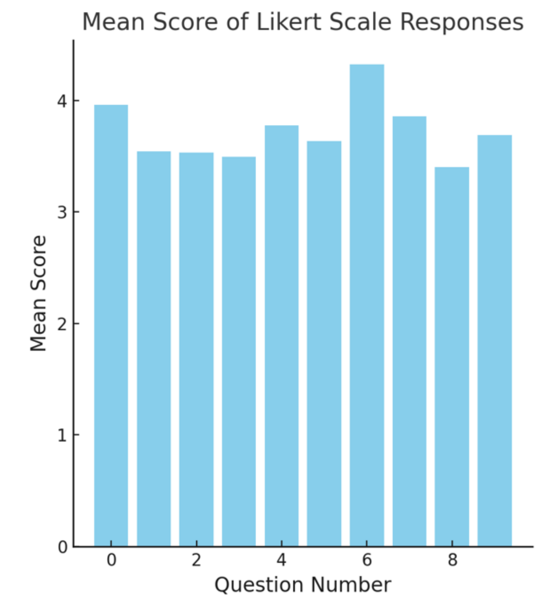


**Figure 2:** Mean Score of Scale Responses

This subsection presents the mean scores of stakeholder responses obtained through the Likert-scale survey. These means are indicative of overall perceptions about the effectiveness of accounting standards toward fiscal discipline and accountability as shown in Figure 2.

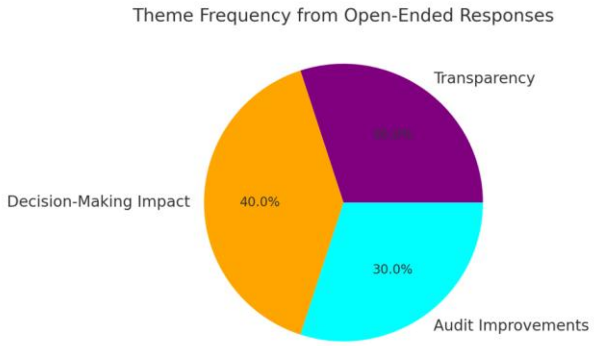


**Figure 3:** Theme Frequency from Open-Ended Response

This subsection summarizes the most common themes identified through open-ended responses of stakeholders. It highlights recurrent opinions and concerns about the formation and effects of accounting standards as shown in Figure 3.

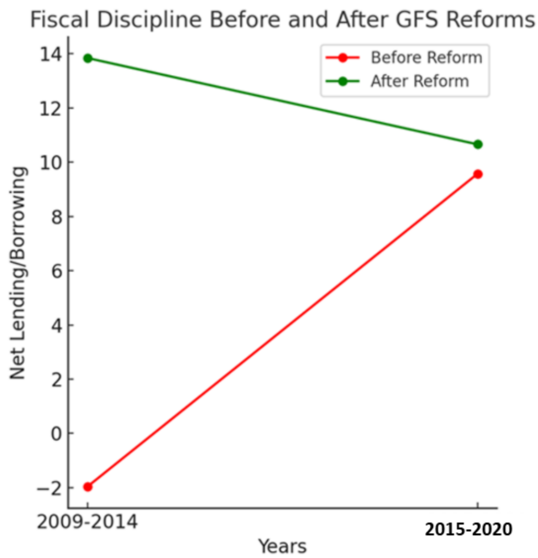


**Figure 4:** Fiscal Displine Before and After GFS Reforms

This subsection compares the key fiscal indicators such as the magnitude of budget deficits and control of expenditures before and after the implementation of GFS-based accounting reforms. In doing so, it attempts to measure the effectiveness of the reforms in terms of fiscal discipline at grade over time as shown in Figure 4.

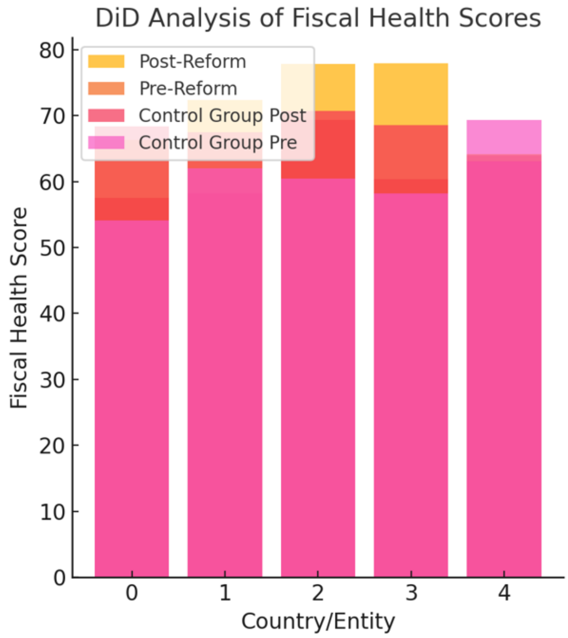


**Figure 5:** DiD Analysis of Fiscal Health Scores

This subsection presents the Difference-in-Differences (DiD) analysis before and after accounting standard adoption in the treated versus control groups, which aids in isolating the causal impact of the reforms on fiscal discipline as shown in Figure 5.

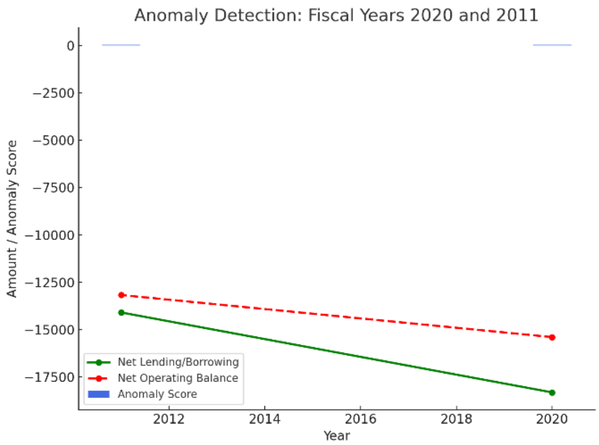


**Figure 6:** Anomaly Detection

This graph summarizes corruption data with anomaly scores for the fiscal years 2011 and 2020; the higher these scores, the more corrupt tend to be the fiscal trends. The bars show the anomaly scores, while the lines show Net Lending/Borrowing (green) and Net Operating Balance (red) as shown in figure 6.

### *A. Discussion*

The study concludes that accounting standards have had a positive effect on fiscal discipline and financial accountability within the public sector. Secondary data analysis focusing on Net Lending/Borrowing and Net Operating Balance revealed that fiscal performance bettered, especially after the full-fledged adoption of the GFS reforms. There is an indication that the Fiscal Health Score (FHS) shows more sound fiscal stability after these reforms. Stakeholder responses have, nevertheless, given some of the challenges. There is almost unanimous agreement among stakeholders that accounting standards enhanced fiscal accountability; however, others pointed out some shortcomings relating to lack of training, delay in reporting, and resistance at the local level. This then indicates that while accounting standards can improve financial outcomes, their real impact will mainly depend on implementation, continuous training, and political support. Thus, overall, the study indicates an improvement in fiscal performance, based on greater transparency and strengthened auditing systems.

## IX. Conclusion

The study suggests that accounting standards, including the adoption of GFS reforms, are important institutions that strive to bring fiscal discipline and enhance accountability in public expenditures. After a close examination of the financial data, improvements in fiscal performance were found to be reflective of reforms in the indicators of Net Lending/Borrowing and Fiscal Health Score. The perception of stakeholders also blends with a view that accounting standards increase transparency and accountability, though some resistance to implementation lingers in some places. The conclusions strongly call for surveillance, the necessity for timely reporting and the political will for effective use of accounting standards. Ultimately, the study concludes that if accounting standards are implemented effectively, they perhaps will encourage better financial outcomes and gain the trust of the public in financial management.

## APPENDIX: SURVEY/INTERVIEW QUESTIONNAIRE

**Section 1: Likert-Scale Questions (Agree/Disagree)**

**Instructions:** Please indicate your level of agreement with the following statements using the scale below:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

1. The adoption of accounting standards (e.g., GFS, IPSAS) has improved fiscal accountability in the public sector.
2. Accounting standards have made government financial reporting more transparent.
3. The implementation of accounting standards has resulted in better management of public funds.
4. The adoption of these standards has helped reduce corruption and mismanagement in public sector financial reporting.
5. The use of standardized accounting practices has made government decision-making more efficient.
6. Public trust in government financial management has increased due to the adoption of accounting standards.
7. The implementation of accounting standards has led to more accurate financial forecasting and budgeting in the public sector.
8. Government auditors have a more effective role in identifying financial discrepancies due to the adoption of accounting standards.
9. Accounting reforms have contributed to the overall improvement in public sector financial sustainability.
10. Accounting standards have improved the clarity and comprehensiveness of financial audits.

**Section 2: Open-Ended Questions (Themes)**

**Instructions:** Please provide detailed responses to the following questions. Your answers will help us better understand the impact of accounting standards on government financial management.

1. **Transparency**:
   - In your opinion, how have accounting standards impacted the transparency of government financial operations?
   - Are there specific examples where these standards have either helped or hindered transparency in financial reporting?
2. **Decision-Making Impact**:
   - How have accounting standards affected government decision-making in budget planning and expenditure management?
   - Can you share any examples where the implementation of accounting standards has led to more informed financial decisions?
3. **Audit and Reporting Improvements**:
   - How have accounting standards improved the quality and efficiency of financial audits in the public sector?
   - Do you think the auditing process has become more rigorous or transparent since the adoption of accounting standards? Please provide examples or observations.
4. **Challenges in Implementation**:
   - What challenges have you encountered or observed in implementing accounting standards within the public sector?
   - How can these challenges be addressed to ensure better compliance with accounting standards?
5. **Additional Comments**:
   - Are there any other aspects of financial management that have been positively or negatively affected by the adoption of accounting standards?
   - What further improvements would you suggest for enhancing the effectiveness of accounting standards in the public sector?

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