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EXPLORING THE EFFECT OF INTERNATIONAL PUBLIC SECTOR ACCOUNTING STANDARDS ADOPTION ON NATIONAL RESOURCE ALLOCATION EFFICIENCY IN DEVELOPING COUNTRIES

Abstract

International capital providers such as the World Bank suggest that inefficient resource allocation in developing countries remains a major challenge for borrowing countries. Therefore, the purpose of this study is to examine whether the adoption of International Public Sector Accounting Standards (IPSAS) improves the resource allocation efficiency of developing countries. A robust econometric modeling including fixed effect and Two-Step Generalized Method of Moments is employed on a sample of 64 developing countries between 2005 and 2021. The results are not sensitive to potential endogeneity issues. The findings indicate that the IPSAS coefficient is significantly and positively correlated at a 5% level or higher. This suggests a strong and significant relationship between IPSAS adoption and resource allocation, indicating that using IPSAS improves efficient resource allocation. Additionally, the resource allocation coefficient is positive and highly significant at a 5% level or higher. These results are particularly notable in countries with low bureaucratic quality, suggesting that IPSAS adoption strengthens policies and regulations in the public sector's financial structure, ultimately leading to more efficient resource allocation. Therefore, these findings imply that adopting IPSAS is crucial for developing countries to ensure efficient resource allocation and attract international capital providers.

Keywords

International Public Sector Accounting standards, resource allocation, public financial management, public sector organizations, bureaucratic quality, developing countries

JEL Classification

H83, O19, H81, M41

INTRODUCTION

The quality of public sector financial reporting is significant for countries' economic and financial development. It promotes accountability, transparency, and good governance and facilitates the securing of funding, support, and investments (Gourfinkel, 2022; Tawiah, 2023a, 2023b; Tawiah & Soobaroyen, 2022). However, financial reporting in the public sector faces specific challenges in developing countries, directly impacting the adequacy of financial reporting practices. These challenges affect the effectiveness of managing public funds and ultimately undermine public trust (Adhikari & Jayasinghe, 2017; Grossi et al., 2023; Liberato et al., 2023).

Consequently, influential international institutions such as the World Bank (WB) and the International Monetary Fund (IMF) have been promoting the implementation of public sector reforms and encouraging the implementation of international accounting standards, in particular, the International Public Sector Accounting Standards (IPSAS)



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in developing countries (Polzer et al., 2023). These international institutions argue that adopting IPSAS can enhance the financial reporting of the public sector, improve transparency and accountability, and attract foreign investment.

To support their economic development and sustainable growth, developing countries usually depend on loans and grants from the WB, the IMF, and other international donors (Adhikari et al., 2021; Kuruppu et al., 2021). International lenders are often hesitant to invest in developing countries characterized by low levels of economic stability, accountability, and transparency, as they are considered high-risk investments (Steele & Patel, 2020). To this end, the WB conducts annual Country Policy and Institutional Assessments (CPIAs) to assess countries eligible for financial support from the International Development Association (IDA). The CPIAs comprise 16 sets of criteria that rate countries on their structural policies, social inclusion and equity policies, public sector management and institutions, and economic management (IDA, n.d.). The results of the CPIA are the IDA Resource Allocation Index (IRAI), which determines the allocation of resources to eligible countries that require financial support from IDA.

Given the importance of resource allocation for developing countries to secure global funds and the relevance of financial reporting in resource allocation, it is significant to understand how adopting IPSAS could influence the resource allocation index.

1. LITERATURE REVIEW

In the public sector of developing countries, effective resource allocation is considered an essential aspect of funding, sustainable economic development, and growth (Mauro et al., 2021). Efficient resource allocation helps ensure that funds are distributed and managed effectively. Therefore, by strategically allocating resources, governments of developing countries can prioritize public sector funding and enhance the quality of living standards and public services.

Despite the expected benefits associated with effective and efficient resource allocation, several factors significantly impact it, which are also shaped by the context of the country (Adhikari et al., 2015, 2021). For example, the size of a country's Gross Domestic Product (GDP) will determine the available resources for effective allocation. However, political stability and pressure from influential parties can influence resource allocation decisions (Mbelwa et al., 2019). Institutional factors, such as weak institutional frameworks and regulatory systems, may result in inefficiencies in resource allocation (ACCA, 2017; Mnif & Gafsi, 2023). In addition, corruption and the absence of good governance practices can distort resource allocation and manipulate public resources for personal gain (Bakre et al., 2017).

Research has shown that developing countries heavily depend on support and loans from international institutions to grow their economies (Sellami & Gafsi, 2019). However, this reliance on external funding increases their debt and puts them under pressure to implement public sector accounting and finance management reforms, including the adoption of IPSAS (ACCA, 2017; Adhikari et al., 2015, 2013; Mbelwa et al., 2019; Tetteh et al., 2021). These reforms aim to decrease corruption, improve transparency, and enhance accountability. This, in turn, would facilitate the effective allocation of resources and attract external funding and support (Gómez-Villegas et al., 2020; Nagirikandalage & Binsardi, 2015). However, there has been an ongoing debate about utilizing and managing public resources and funds, with a greater focus on improving resource allocation and the efficient use of public funds (ACCA, 2017; Hood, 1995; Torfing & Traintafillou, 2013).

The adoption of IPSAS can affect resource allocation efficiency in both ways. On the one hand, IPSAS increases the consistency of financial reporting both nationally and internationally by providing timely and reliable information (Salia & Atuilik, 2018). This enables the government to compare the performance of public sector organizations, leading to better decision-making in resource management and allocation. Standardized

financial reports also allow governments of developing countries to compare the performance of public sector institutions and make more informed decisions regarding resource allocation (Gourfinkel, 2022). Moreover, adopting international accounting standards such as IPSAS builds confidence in international investors and funding institutions, helping developing countries attract investments and funds. In this regard, Tawiah and Soobaroyen (2022) examined the relations between access to external finance and IPSAS adoption within the context of 54 developing countries. They found that countries adopting IPSAS have improved their financial sustainability and transparency. As a result, they have higher opportunities for financing from international institutions and donors.

Moreover, Tawiah (2023b) investigated the association between IPSAS adoption and corruption in 77 developing countries. They found that IPSAS reduces corruption, especially in developing countries adopting the accrual-based IPSAS. This corresponds with research that argues that IPSAS adoption improves governance quality by promoting transparency, accountability, and disclosure (Tawiah, 2023a; Mnif & Gafsi, 2020). It strengthens governance practices by establishing financial reporting and management guidelines within the public sector. It emphasizes the significance of segregating the roles, responsibilities, and power between decision-makers and those controlling the finances. This segregation will ensure that resource allocation is conducted objectively, without interference from powerful politicians or other parties (Adhikari & Jayasinghe, 2017; Bakre et al., 2017; Mbelwa et al., 2019). These findings underline the importance of international harmonization of accounting practices and the significant advantages developing countries can gain from adopting IPSAS.

However, on the other hand, previous research indicates that the pressure international institutions exert on developing countries to adopt the IPSAS has resulted in negative consequences (ACCA, 2017). For example, researchers have emphasized that these Western standards do not fit with developing countries' varying cultural and socio-political contexts (Adhikari et al., 2021; Bakre et al., 2017; Mbelwa et al., 2019). In addition, adopting

uniform accounting standards could weaken local practices and impede economic and sustainable development (Bekiaris & Paraponti, 2023; Polzer et al., 2023). Other concerns relate to the high costs associated with IPSAS adoption, as developing countries have insufficient resources, expertise, and infrastructure for successful implementation (Boolaky et al., 2020; Mnif & Gafsi, 2023). Also, it has been reported that IPSAS is not frequently utilized in financial decision-making and the budgeting process (Adhikari & Gårseth-Nesbakk, 2016).

Further, the significance and advantages of IPSAS have been questioned in developing and developed countries (Adhikari et al., 2021; Bonollo, 2023). In light of this, Adhikari et al. (2021) conducted a study on IPSAS adoption in Egypt, Nepal, and Sri Lanka. The findings revealed that these reforms encountered internal conflicts, resistance, and manipulation of results due to the unique contextual factors in these countries. These factors include power structures, communication flows, reform complexity, and informal networks. The research underscores the role of contextual factors and explains why accounting reforms advocated by international institutions have, in some cases, been unsuccessful.

Similarly, Lassou (2017) reported that accounting reforms in Ghana and Benin, driven by pressure from donors, resulted in the symbolic adoption of IPSAS and portrayed facades. Political interference, disregard for accounting reforms, deliberate refusal to comply with accounting procedures, and denial of necessary resources to accounting institutions led to the decoupling of accounting reforms and limited improvements in accountability, transparency, and control of corruption. In Ghana, the adoption of IPSAS was primarily for seeking legitimacy, resulting in weaknesses in control, recording, reporting, and internal audit within the government accounting system. In the case of Benin, their accounting reforms lacked accounting, control, and resources. The increase in corruption in Benin led to their loss of eligibility for external funding from the US Millennium Challenge Account (Lassou, 2017, p. 502). It is important to note that accrual-based IPSAS may lead governments to focus on short-term objectives, negatively impacting the effectiveness of long-term resource allocation. It also enables engage-

ment in manipulative practices, which can result in inefficient resource allocation decisions (Bakre et al., 2017; Mbelwa et al., 2019).

Subsequently, the above discussion highlights that, in developing countries, IPSAS adoption can positively impact resource allocation. This is achieved through enhanced transparency, accountability, governance quality, and control of corruption (Polzer et al., 2020; Salia & Atuilik, 2018). However, it also emphasizes the challenges and potential negative impacts that may arise due to institutional and contextual factors (ACCA, 2017; Mnif & Gafsi, 2023). Therefore, it reflects that the advantages of IPSAS adoption are subject to debate, and further research is necessary (Abdulkarim et al., 2020; Bekiaris & Paraponti, 2023; Liberato et al., 2023; Schmidhuber et al., 2022). As a result, this study aims to investigate the effect of the adoption of IPSAS on resource allocation efficiency in developing countries to contribute to the existing body of knowledge (Grossi et al., 2023).

2. METHODS

Consistent with Tawiah (2023a, 2023b), the sample was obtained from developing countries through the International Federation of Accountants (IFAC) website. The countries with incomplete data on IPSAS adoption and resource allocation index were excluded. The final sample selection yields 64 developing countries between 2005 and 2021. The data were collected from reputable databases and reports such as the IFAC 2019 and 2022 reports, World Governance Indicators, Country Policy and Institutional Assessment, and World Development Indicators. Furthermore, the variables' definition and measurement are as follows.

Resource allocation: IRAI is an index that assesses countries based on their efficient financial aid management. Effective resource management hinges on the quality of reporting and financial practices. The IRAI is derived by calculating the average score within each cluster and then averaging these cluster scores. Each of the sixteen criteria is rated on a range of one (low) to six (high). The scores for each criterion consider various indicators, judgments, and observations, focusing on the quality of each country's current policies

and institutions, which are key factors influencing the effectiveness of aid. The WB conducts its annual CPIA for all borrowing countries. To emphasize the significance of the CPIA in the IDA Performance-Based Allocations, the overall country score is referred to as the IRAI.

IPSAS adoption status (IPSAS): Following prior studies (Tawiah, 2023a, 2023b; Tawiah & Soobaroyen, 2022), this paper identifies the adoption status from IFAC country profile, IFAC adoption status, and ACCA (2017). Consistent with the IFAC adoption labeling, countries are classified as not adopted (0), partially adopted (1), and fully adopted (2). Further analysis also considers traditional binary classification of adopted (1) and non-adopted as robustness. In addition, this paper estimates how years of adoption influence resource allocation. In line with Houque and Monem (2016), the variable "years of experience" (IPSASEXP) is computed as the number of years from adoption to the end of the sample period.

Several variables are included to control for other factors likely to drive resource allocation efficiency in developing countries. The impact of government stability on resource allocation is considered. A stable government is more likely to allocate resources efficiently and effectively (Foley, 1966). The political stability of the World Governance Indicator is used to measure government stability. Next, the impact of the country's economic features on resource allocation is considered. The GDP per capita is utilized as a control variable to mitigate the impact of economic development on resource allocation. It is expected that countries with high economic development have high resource allocation. Like economic development, this study controls for the literacy rate of the control with the number of students in secondary school. The government and legal systems to control the influence of governance structures on resource allocation are also included. Prior studies suggest that ethnic fragmentation is one of the major challenges to development and resource efficiency in developing countries. Therefore, ethnicity is included to control for the impact of ethnic fragmentation on resource allocation. Ethnicity indicates the likelihood that two randomly chosen individuals from a specific country will have a similar ethnicity. This measure falls within the

Table 1. Variable description and sources

Variable name	Description	Sources
Resources allocation	IRAI is acquired by calculating the average score for each cluster and then averaging those scores. Each country is rated on a scale of one (low) to six (high) for each of the sixteen criteria	Institutional Assessment and Country Policy
IPSAS	The status of the country's adoption of IPSAS ranges from zero to two. A score of zero indicates that the country has not adopted IPSAS, a score of one indicates partial adoption and a score of two indicates full adoption	ACCA (2017) and IFAC
Bureaucratic quality	This represents how civil and public services are viewed regarding their quality and independence from political influences. The scale spans from -2.5 to 2.5, with higher scores signifying a more robust and high-quality bureaucratic system	World Governance Indicators
IPSAS experience (IPSASEXP)	The number of years a country has been using IPSAS since its adoption. For instance, IPSASEXP for Barbados, which was adopted in 2007, is calculated as 1 in 2007 and increases by one each subsequent year, reaching eleven in 2017	ACCA (2017) and IFAC
Accounting globalization	A composite index that measures a country's adoption status of ISA, IFRS, and IFRS (SME). The index falls in a range from zero to three, with zero indicating that the country did not adopt any international standard. A score of one indicates adoption of only one of the three international standards, while a score of two indicates adoption of two out of the three international standards. Lastly, a score of three indicates adoption of all three standards	ACCA (2017) and IFAC
Ethnic	This highlights the likelihood that if one selects two individuals randomly from a specific country, there is a low chance that they belong to the same ethnic group. As a result, the measure falls between zero and one, with a higher score signifying a more pronounced level of diversity or fragmentation	Quality of Government
Legal system	A binary variable that assigns a score of one for common-law legal countries and a score of zero to those that do not	Quality of Government
Government system	A categorical variable that assigns a value of zero to presidential systems, one to assembly-elected president systems, and two to parliamentary systems	Database of Political Institutions
Stability of government	The measures of the absence of violence and political stability gauge how likely political instability is perceived. The scale spans from -2.5 to 2.5, where higher scores suggest a lower likelihood of instability	World Governance Indicators
Literacy	The enrolment of secondary school students, presented as a proportion of the official school-age population for that education level	World Development Indicators
Economic development	It is measured by GDP per capita, calculated as the gross domestic product divided by the midyear population. GDP encompasses the total gross value added by all resident producers in the economy, adjusting for product taxes and subsidies not incorporated in the product's value. The paper employs the logarithmic representation	World Development Indicators

range of zero to two. Table 1 outlines the variable definitions and sources.

The likelihood of IPSAS adoption being endogenous to its impact on the adopting country is higher, as suggested by previous research such as Cuadrado-Ballesteros et al. (2020) and Tawiah (2023a, 2023b). This is due to certain economic results that may affect the decision to adopt IPSAS. For instance, Tawiah and Soobaroyen (2022) argue that developing countries are pressured to adopt IPSAS to attract foreign aid and international loans. This means that modeling the impact of IPSAS on resource allocation is likely to raise endogeneity issues. Therefore, two robust econometric identification strategies are employed to overcome these potential endogeneity issues. The estimation begins with a panel fixed effect controlling for country and year effects. The fixed effect mitigates omitted

variable bias. The fixed effect modeling is specified as follows.

$$\begin{aligned}
 \text{Resource allocation}_{it} = & a + \beta_1 \text{IPSAS}_{it} + \\
 & + \beta_2 \text{Ethnic}_{it} + \beta_3 \text{legalsystem}_{it} + \\
 & + \beta_4 \text{Electoralssystem}_{it} + \\
 & + \beta_5 \text{Politicalstability}_{it} + \beta_6 \text{Education}_{it} + \\
 & + \beta_7 \text{GDPpercapita}_{it} + \varepsilon_{it}.
 \end{aligned} \tag{1}$$

Although fixed effects address some potential endogeneity issues, such as omitted variables, there is still a possibility of reverse causality between resource allocation and IPSAS adoption. Therefore, the Two-step System-Generalized Method of Moment (S-GMM) is employed (Arellano & Bond, 1991) instead of the traditional instrumental variable estimator. That is because the S-GMM offers a number of benefits. Initially, the S-GMM estimator can manage control for the unobservable coun-

try-specific influences. Second, it controls for the potential endogeneity of the explanatory variables, thus addressing the issue of simultaneity bias. The instrumental variables consist of the values of the dependent variable from the previous year and the predetermined variables. According to Arellano and Bond (1991), the GMM system employs extra moment conditions to address the weak instruments encountered in the GMM. To estimate the empirical model, represented by equation (2), it is reformulated for use with the System GMM method in the following manner:

$$\begin{aligned} \text{Resource allocation}_{it} = & \beta_j \text{IPSAS}_{ijt} + \\ & + X_{it}' \text{Controls} + \Delta \varepsilon_{ijt}. \end{aligned} \quad (2)$$

A two-step model is employed to ensure the System GMM estimation's reliability. The validity of the instrumental variable is verified using the over-identification test developed by Hansen. To determine whether the assumption of the absence of second-order serial correlation $j = \text{holds}$, the methodology proposed by Arellano and Bond (1991) is applied.

3. RESULTS

Table 2 summarizes statistics, encompassing the mean, standard deviation, the 25th percentile, the median, and the 75th percentile. The mean of the dependent variable, resource allocation, 3.526 (measured on a 1-6 points scale), indicates that the sample countries score above the midpoint of 3, suggesting that resource allocation efficiency is improving in borrowing countries. However, the standard deviation of 0.294 highlights the large variance across the sample countries during the

sample period. The descriptive statistics of the main explanatory variable, IPSAS, indicate significant variations among the sample countries. The mean value of 0.300 (measured on a categorical scale of 0, 1, 2) shows low adoption among developing countries. This aligns with the results of emerging studies in the IPSAS literature (Tawiah, 2023a, 2023b; Tawiah & Soobaroyen, 2022).

As part of the pre-regression analysis, a pairwise correlation matrix is performed between the variables to detect any possible multicollinearity issues. Table 3 presents the correlation matrix results. Notably, the correlation coefficients between the variables are below the commonly accepted threshold of 0.8 (Field, 2000; Tabachnick & Fidell, 2013). Consequently, it is less likely that the data are affected by multicollinearity issues, and the sample is suitable for multi-regression estimations.

After establishing the suitability of the data for multi-regression, the next step was to perform estimation using the econometric identification modeling discussed in the methodology section. The estimation begins with fixed-effect ordinary least squares. The estimations include year and country effect to control for time-country variance. The results are outlined in Table 4, Column 1. Next, the potential endogeneity issues that may arise are considered in the modeling and employ the two-step S-GMM, and the results are shown in Table 4, Column 2. The IPSAS coefficient shows a significant positive correlation at the 5% level or higher in both columns. The findings indicate that when countries adopt IPSAS, it correlates with increased resource allocation within borrowing nations. In other words, countries that have embraced IPSAS are more likely to enhance their efficiency in utilizing resources received from lend-

Table 2. Summary statistics

Variables	(2)	(3)	(4)	(5)	(6)
	mean	p25	p50	sd	p75
Resource allocation	3.526	3.308	3.550	0.294	3.733
IPSAS	0.300	0	0	0.534	1
Ethnicity	0.648	0.532	0.728	0.263	0.846
Legal system	0.483	0	0	0.500	1
Government system	0.472	0	0	0.772	1
Economic development	7.014	6.439	7.008	0.709	7.476
Government stability	-0.540	-0.911	-0.418	0.683	-0.0447
Literacy	53.12	34.09	46.78	23.96	73.48

Table 3. Correlation matrix

Variables	1	2	3	4	5	6	7	8
Resource allocation	1	–	–	–	–	–	–	–
IPSAS	0.1	1	–	–	–	–	–	–
Ethnicity	–0.28	0.06	1	–	–	–	–	–
Legal system	–0.15	0.04	0.33	1	–	–	–	–
Government system	–0.24	–0.12	–0.16	0.1	1	–	–	–
Government stability	0.17	–0.1	–0.06	–0.36	–0.18	1	–	–
Literacy	0.19	0.02	–0.33	–0.14	0.21	0	1	–
Economic development	0.19	0.17	–0.21	0.02	0.24	–0.09	0.71	1

ers and aid donors. The results support that IPSAS is positively associated with resource allocation. Economically, the results imply that when developing countries adopt IPSAS, it enhances their chances of securing more funding from the international market.

To ensure the robustness of the results and allay any concern that the measure of IPSAS adoption drives the results, the regression with an alternative measure of IPSAS adoption is estimated. Consistent with prior studies (Gordon et al., 2012; Tawiah & Gyapong, 2023), this paper reverts to the traditional binary measure of the IPSAS adop-

tion, assigning a value of one to countries that have adopted IPSAS and zero to those that have not. The findings are outlined in Table 4, Columns 3 and 4. The resource allocation coefficient is positive and highly significant at a 5% level or better. The results are consistent with the main estimation, validating the findings of a positive relation between IPSAS and resource allocation. These findings are not sensitive to the measurement of the variables.

The control variable results are in line with standard assumptions and previous research. For example, a positive association between government

Table 4. Baseline regression

Variables	Main Variable	Main Variable	An alternative measure of IPSAS	
	(1)	(2)	(3)	(4)
	Fixed effect	S-GMM	Fixed effect	S-GMM
IPSAS	0.034** (2.009)	0.013*** (3.298)	0.146*** (3.217)	0.024*** (3.713)
Lag dependent variable	–	0.675*** (18.513)	–	0.451*** (4.824)
Ethnicity	–0.066** (–2.096)	–0.083** (–2.080)	0.005 (0.482)	–0.193** (–2.375)
Legal system	0.001 (0.023)	–0.000 (–0.002)	0.000 (0.749)	0.159*** (3.039)
Government system	–0.317*** (–4.405)	–0.017 (–1.359)	–0.265*** (–3.205)	–0.093*** (–2.616)
Government stability	0.115*** (4.730)	0.010 (0.870)	0.116*** (3.616)	0.048* (1.739)
Literacy	0.001 (0.507)	0.001 (1.341)	0.000 (0.150)	0.001 (0.514)
Economic development	–0.063** (–2.146)	–0.009 (–0.585)	–0.053 (–1.472)	–0.070* (–1.730)
Constant	4.160*** (23.303)	1.253*** (8.466)	3.923*** (17.900)	2.540*** (5.185)
Observations	377	348	221	204
Arellano-Bond (AR1-Pr > z)	–	0.002	–	0.008
Arellano-Bond (AR2-Pr > z)	–	0.852	–	0.785
R-squared	0.149	–	0.131	–
Number of countries	64	64	64	64

Note: t-statistics in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

stability and resource allocation is reported. Stable governments are more likely to plan and efficiently allocate resources than non-stable governments. Ethnicity is negatively associated with resource allocation. This is unsurprising given that high ethnicity brings divisions and potential conflicts, leading to a waste of resources.

Following that, the impact of bureaucratic quality on the association between IPSAS adoption and resource allocation is tested. Consistent with Tawiah (2023b), government effectiveness is used to measure bureaucratic quality. The government effectiveness index is part of the six governance indicators (Kaufmann & Kraay, 2018). Government effectiveness is used because it measures the quality of civil services responsible for implementing and enforcing government policies and regulations, including IPSAS.

Following Tawiah and Gyapong (2023), countries are categorized into those with low and high quality based on the media score of each sam-

pled country. The findings are outlined in Table 5, Columns 1 and 2. In both columns, the IPSAS coefficient demonstrates a positive and notable significance. These results indicate a positive and statistically significant connection between IPSAS and resource allocation in low- and high-quality developing nations. It is worth noting that the coefficient is more substantial in low-quality countries than in high-quality countries. Additional regression is estimated using the moderating identification strategy to check the robustness of the results further. A moderating variable is constructed between IPSAS and bureaucratic quality. For this analysis, low-quality countries are coded as 1 and 0 for high quality. Table 5, Column 3 presents the results. The coefficient of the moderating term is positive and highly significant at 1% (0.118^{***}) and is greater than the coefficient of the IPSAS (0.049^{***}). Hence, the findings validate that the advantage of IPSAS in enhancing resource allocation is particularly advantageous for developing nations with low-quality bureaucratic structures.

Table 5. Effect of bureaucratic quality

Variables	(1)	(2)	(3)
	High quality	Low quality	Moderating term
IPSAS012	0.318 ^{***} (3.303)	0.080 ^{**} (2.559)	0.049 ^{***} (3.011)
Bureaucratic quality	–	–	0.268 ^{***} (3.030)
IPSAS*Bureaucratic quality	–	–	0.118 ^{***} (0.0171)
Lag Dependent variable	0.882 ^{***} (6.209)	0.688 ^{***} (11.561)	3.654 ^{***} (3.023)
Ethnicity	–1.252 (–1.290)	–0.066 (–1.429)	–0.0920 ^{***} (3.022)
Legal system	–0.140 (–1.036)	–0.013 (–0.502)	–0.0440 ^{***} (3.013)
Government system	0.036 (0.405)	–0.030 (–1.481)	–0.023 ^{***} (4.008)
Government stability	0.111 ^{**} (2.102)	–0.027 (–1.601)	–0.0863 ^{***} (3.011)
Literacy	–0.005 (–0.909)	0.000 (0.010)	1.916 (1.000)
Economic development	–0.008 (–0.076)	–0.006 (–0.356)	–0.013 (0.159)
Constant	1.391 (1.089)	1.188 ^{***} (5.218)	1.507 ^{***} (3.132)
Arellano–Bond (AR1–Pr > z)	0.003	0.001	0.002
Arellano–Bond (AR2–Pr > z)	0.345	0.351	0.819
Number of countries	30	34	64

Note: z-statistics in parentheses; ^{***} p < 0.01, ^{**} p < 0.05, ^{*} p < 0.1.

To this point, the preceding estimations are based on the assumption that the consequence of IPSAS adoption begins immediately and continues over the years. Prior studies suggest that the experience of using the standard matters in assessing its outcome (Houqe & Monem, 2016; Tawiah, 2023a). Consistent with the novelty effect theory, the impact of IPSAS on resource allocation could be short-lived. Therefore, the impact of years of using IPSAS on resource allocation is tested. Consistent with Houqe and Monem (2016) and Tawiah (2023a), IPSAS experience is measured from the year of adoption to the end of the sample period. IPSAS is replaced with IPSASEXP in both equations 1 and 2. Table 6 presents the results. The coefficient of IPSASEXP is positive and enters into significance at 1%. The results align with the baseline results, indicating that IPSAS is positively and significantly associated with resource allocation. These findings are consistent with Tawiah (2023a), who discovered that the advantages of IPSAS adoption go beyond the adoption year in developing countries.

Table 6. Effect of IPSAS experience

Variables	(1)	(2)
	Fixed effect	S-GMM
IPSASEXP	0.033** (2.231)	0.045*** (3.531)
Lag Dependent variable	–	0.467*** (6.106)
Ethnicity	0.118*** (3.627)	–0.187** (–2.496)
Legal system	0.000 (0.284)	0.152*** (3.420)
Government system	–0.014 (–0.370)	–0.089*** (–2.722)
Government stability	0.111*** (3.356)	0.047* (1.909)
Literacy	–0.000 (–0.073)	0.001 (0.606)
Economic development	–0.053 (–1.418)	–0.077* (–1.883)
Constant	3.933*** (17.455)	2.526*** (5.422)
Observations	221	204
Arellano-Bond (AR1-Pr > z)	–	0.006
Arellano-Bond (AR2-Pr > z)	–	0.851
R-squared	0.108	–
Number of countries	64	64

Note: t (z)-statistics in parentheses; *** p < 0.01, ** p < 0.05, * p < 0.1.

4. DISCUSSION

IPSAS adoption and implementation increase the timely reliability and consistency of financial reporting in government agencies and ministries (Salia & Atuilik, 2018). Therefore, IPSAS reports allow government officers to compare the performance across public sector organizations, enabling better decision-making for managing and allocating resources (Gourfinkel, 2022). Similarly, adopting IPSAS across the globe ensures easy cross-country comparisons, enabling policymakers to implement the best public sector practices worldwide. Additionally, quality reports from IPSAS ensure timely identification of areas that require more attention in resource allocation. Furthermore, IPSAS improves transparency and accountability (Tawiah, 2023a, 2023b; Tawiah & Soobaroyen, 2022), which are critical ingredients for resource allocation. Similar to the transparency and accountability argument, IPSAS also strengthens the governance of the public sector by providing clear guidelines for financial reporting and management (Ijeoma & Oghoghomeh, 2014; Salia & Atuilik, 2018). The clarity of guidelines and robust reporting standards of IPSAS ensures that government financial reports are objectively free from political pressure or manipulation, which leads to proper resource allocation. Efficient and effective utilization of resources, which leads to high resource allocation, makes these countries attractive to international lenders and aid donors. This is consistent with the findings of Tawiah and Soobaroyen (2022) that adopting IPSAS increases developing countries' access to funding on the international market.

Scholarship in the adoption and consequences of international accounting suggests that the benefit of adopting international accounting standards significantly depends on the institutional settings of the country (Houqe & Monem, 2016; Tawiah, 2023b; Tawiah & Gyapong, 2023). International standards can be a source of institutional quality structures that strengthen the country's institutional structures (Bellanca, 2014). On the other hand, strong institutional structures are required to enforce the efficient and effective implementation of the IPSAS to harness the full benefit of the standards. Thus, international accounting, like IPSAS, will not benefit developing countries with low institutional structures (Bova & Pereira, 2012). In the midst of these arguments, there are empirical findings that indi-

cate that institutional structures do not matter as a consequence of international standards. The results show the positive consequences of IPSAS increasing resource allocation is more beneficial to developing countries with low-quality bureaucratic structures. This is consistent with the argument that internation-

al accounting standards add another layer of institutional structures (Houque & Monem, 2016; Tawiah & Gyapong, 2023). The adoption of IPSAS strengthens the bureaucratic structures of developing countries. Therefore, emphasizing the potential advantages of adopting IPSAS can benefit developing nations.

CONCLUSION

This paper has investigated the effect of IPSAS adoption on resource allocation efficiency in developing nations. The efficiency of resource allocation is a key indicator the IDA uses to allocate financial support to borrowing countries. Financial reporting is crucial for efficient resource allocation because financial reports provide the necessary information to make informed decisions.

Consistent with expectations, a positive and significant relationship between IPSAS and resource allocation is found. The results imply that countries adopting IPSAS are likely to experience higher resource allocation than their counterparts. In further analysis, the results are more pronounced in developing countries with low bureaucratic quality. Also, the findings reveal that the consequences of IPSAS go beyond the adoption year. These results imply that IPSAS is more advantageous to low-quality developing countries, and the benefit has been sustained over the years.

The findings of a positive association between IPSAS and resource allocation offer new insight for policy formulation. The results provide empirical evidence to support the drive for IPSAS adoption in developing countries. They are consistent with arguments and perceived benefits driving the adoption of IPSAS. This study also suggests that developing countries consider adopting IPSAS as a mechanism to improve resource allocation to be more attractive to international capital providers. The study also extends the emerging literature on the consequences of IPSAS adoption, particularly in developing countries.

Despite the comprehensive and robust econometric estimations, the study has limitations. First, like other studies on international accounting, there is a challenge in identifying the implementation level of sample countries. Therefore, it is suggested that future studies examine the compliance level of IPSAS in developing countries. Other studies can also examine how adopting IPSAS affects borrowing costs for developing countries.

AUTHOR CONTRIBUTIONS

Conceptualization: Noha Alessa.

Data curation: Noha Alessa.

Formal analysis: Noha Alessa.

Funding acquisition: Noha Alessa.

Investigation: Noha Alessa.

Methodology: Noha Alessa.

Project administration: Noha Alessa.

Resources: Noha Alessa.

Software: Noha Alessa.

Supervision: Noha Alessa.

Validation: Noha Alessa.

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