

# Implementation of Accrual Accounting in the Ghanaian Public Sector: The Moderating Role of Financial Resources Availability

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## Abstract

*Considering the rate of failures in developing economies where accrual accounting has been implemented, the study investigated the factors that could affect the implementation of accrual accounting in Ghana. Drawing on Institutional Theory and Luder's contingency model for governmental accounting innovation, six hypotheses were postulated. The survey methodology was used with 499 finance officers from public sector institutions being sampled. Data were analyzed using the Explanatory Factor Analysis, Confirmatory Factor Analysis, and Structural Equation Model. The results show that instrumental-conceptual use and management support were found to have a significant positive relationship with the implementation of accrual accounting. Input-based competencies were found to have no relationship with the implementation of accrual accounting. The study also found that financial resource availability positively and significantly moderates the relationship between instrumental-conceptual uses, input-based competencies, management support, and implementation of accrual accounting. The findings of the study may imply that the implementation of accrual accounting in Ghana could be achieved if users of accounting information use it for decision-making, and management demonstrates readiness towards the change to accruals by providing significant budgetary allocation to support activities related to the transition to accruals.*

**Keywords:** use of information, organizational capabilities, readiness towards change, financial resources availability, accrual accounting, instrumental use, conceptual use, input-based competencies, management support, and personal valence.

## 1. INTRODUCTION

According to Wynne (2008), a post-implementation review conducted on countries that have implemented public sector financial reforms such as accrual accounting in Malaysia, Pakistan, Sri Lanka, Fiji, and Nepal have recorded low success rates due to poor implementation strategies. Consequently, some scholars have argued that accrual accounting is inappropriate for the public sector. Similarly, Abeyasinghe and Samanthi (2016) assert that no developing economy reports success in the implementation of accrual accounting in the public sector. Some scholars have even described developing economies' moves to accrual as unsuccessful and problematic missions (see e.g. Adhikari and Mellemvick 2011; Tickcell 2010). On the surface, it may seem that accrual accounting, as developed for the private sector can be imported directly into the public sector without difficulty. However, the extent to which this could be done may have produced tensions and unconvincing results in its introduction to the public sector. This is because the movement to accrual accounting while increasingly pervasive has taken place with continuous debates and disagreements (Lapsely et al. 2009) as no developing economy reports success in the change to accrual accounting.

Notwithstanding the above scary evidence, the Government of Ghana has decided to fully transition from cash to accrual accounting by the year 2025 in the public sector. However, Ghana's decision to implement accruals may encounter challenges if the factors that could impede the implementation process are not investigated before the

transition. This may stem from the fact that although post-implementation literature suggests that the use of information, organizational capabilities, readiness towards change, and financial resources availability are some of the factors affecting the implementation of accruals accounting ( see e.g. Mateke et al. 2020; Mbelwa et al. 2019, Tickcell 2010,) its effects differ from economy to economy. Further, the dimension of these factors has not been examined to see its effect on the implementation of accrual accounting especially in developing economies. Additionally, while the literature on the implementation of accrual accounting has a preponderance of assertions in terms of financial implications, (Gigli and Mariani 2018; Mbelwa et al. 2019) pre-implementation empirical evidence to support these assertions is underweight. Therefore, the empirical findings of the study will extend our understanding of the implementation of accrual accounting from a developing economy perspective considering the moderating role of financial resources availability.

## **2. NEW INSTITUTIONAL THEORY AND LUDER'S CONTINGENCY MODEL FOR GOVERNMENTAL ACCOUNTING INNOVATION**

According to Lapsely et al. (2009), accounting practices do not escape the pressures of the standardized world and the mechanisms are in the world of accounting regulations, pressure groups, knowledge experts, and arenas of standardization. The core concept of institutional theory isomorphism reflects the pressures mounted by institutional elites to get certain practices institutionalized in the public sector regardless of technical efficiency. Mimetic isomorphism refers to the power that drives organizations to model themselves on other organizations considered more successful such as the private sector and developed economies. The concept of mimetic isomorphism may be perceived in the case of developing countries such as Ghana in following the implementation of accrual accounting of developed economies such as Australia and New Zealand where the implementation has arguably been successful in the public sector.

From the perspective of mimetic isomorphism, Anessi-Pessina et al. (2008) suggest that policymakers and top management mimic the accounting systems of the private sector for legitimacy and technical reasons. For this reason, the top management of public sector organizations is influenced by international donor partners to support the institutionalization of accrual accounting in the public sector to increase legitimacy (see Mbelwa et al. 2019; Hyndman and Connolly 2011). Coercive isomorphism according to DiMaggio and Powell (1983) emanates from both formal and informal pressures exerted on institutions by other organizations upon which they are dependent for resources. Such pressures according to Adhikari and Mellemvick (2011) are felt as forces, persuasions, or an invitation. Within the context of the public sector, users of accounting information such as international lending organizations, and credit rating agencies amongst others exert pressures for the use of accrual accounting in developing countries for legitimacy, accountability, conditions for loans and grants, credit ratings, and policy credibility. Consequently, donors and governments use the provision of financial resources to influence the institutionalization of accrual accounting in the public sector.

Luder's contingency model for governmental accounting innovation explains how contextual, political, administrative, and social factors influence and shape the implementation of accounting innovations in the public sector. From the social structural perspective Upping and Oliver, (2007) posits that the orientation of users to use accrual information is a factor that influences the implementation of accounting systems. This is because the need for accounting information increases the producer's readiness to produce that information. Similarly, the interest of the government and donors in using accrual information heightens the implementation of accrual accounting. From the structural variables of the politico-administrative perspective, Luder (1992) affirms that specialist training (organizational capabilities) concerning knowledge, skills, and competencies of accountants are factors that enhance the abilities of producers of accounting information to implement accruals. Lastly, from the implementation barrier perspective, Ouda (2010) suggests that financial and budgetary support from the government and international community act as barriers or facilitators for economies that intend to transit to accruals must overcome to enhance the implementation. Based on these theoretical considerations, the model for the study has been conceptualized as shown in Figure 1.

## 2.1. Hypothesis Development

### Use of Information and Implementation of Accrual Accounting

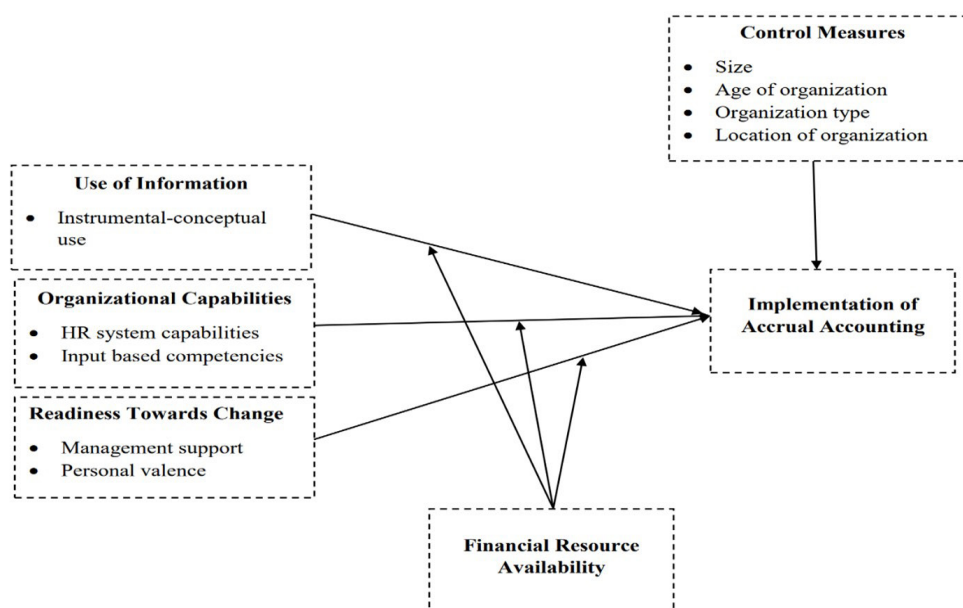
In the study, two dimensions of the use of information are considered, namely, instrumental and conceptual use. According to Diamantopoulos and Souchon, (1999), instrumental use refers to the direct application of information to make a particular decision. However, conceptual use refers to the indirect application of information to broaden the managerial knowledge base. Accrual accounting is defined as a system of accounting that recognizes revenue or expenditure whether cash has been received, paid, or not (Mbelwa et al. 2019). Instrumental-conceptual use of information may lead to effective evaluation of decisions in seeking to establish expenditure controls and policy formulation and eventually influences organizations' performance. The study argues that the influence of instrumental–conceptual use of financial information on organizational performance may be attributed to the fact that both instrumental and conceptual use operates when rational budget decisions are taken. According to Hyndman and Connolly (2011), the non-usage of accrual financial statements for instrumental or conceptual analysis accounts for the poor transition from cash to accruals in the public sector. The study further argues that if users of accounting information such as creditors, civil society organizations, and donor partners demand accrual information, it will force the government to change from the cash basis of financial reporting to the accrual basis. This is because Luder's model for governmental accounting

innovation asserts that the orientation for users to use accounting information creates an environment of an economic market of information (demand and supply) which compels the producers of accounting information to supply such information. Based on such considerations, the study hypothesizes that:

**H1: There is a positive relationship between the instrumental-conceptual use of information and the implementation of accrual accounting.**

### Organizational capabilities and implementation of accrual accounting

In the study, one dimension of organizational capabilities was considered, namely, input-based competencies. Input-based competencies encompass the knowledge, and skills that enable a firm's transformational process to create and deliver products and services (Lado and Wilson, 1994). Whereas Connolly and Hyndman (2006) found that staff shortages are obstacles to the implementation of accrual accounting, Tickcell (2010) found that the lack of skilled and experienced accounting staff in government organizations represents a major challenge affecting the adoption of accrual accounting.



**Figure 1: Factors affecting implementation of accrual accounting**

Competencies in the opinion of Trivallas et al (2015) are vital to performing a specific task in organizations within a defined technical or functional work area. The study argues that competencies are tools that will improve employees understanding of how to apply accounting techniques and standards in preparing financial statements. This stems from the fact that Maheshwani and Vohra (2015); Chang, and Huang (2010) affirm that competencies have a substantial importance on a firm's human capital that leads to a more strategic role in contributing to organizational change and reforms. The institutional theory according to Mbelwa, (2015) suggests that the diffusion of professional competencies to organizations through training, and education influences the implementation of reforms. Further, the skill sets of accountants in the technical area of accounting could prove decisive in the march to accruals. This is because accountants could be classified as one of the knowledge employees. For instance, the professional qualification of accountants could be argued to be a key ingredient of the organizational capability to reform due to their abilities to apply accounting standards. According to Luder's contingency model, the lack of certain general skills in accounting creates implementation barriers that cannot be eliminated in the short term, and an attempt to introduce accrual accounting will fail due to the lack of knowledgeable accountants. The study, therefore, hypothesizes that:

***H2: There is a positive relationship between input-based competencies and the implementation of accrual accounting.***

### **Readiness towards Change and Implementation of Accruals Accounting**

The study considers one dimension of readiness namely, management support. Management support according to Holt et al. (2007) refers to the extent to which one feels that the organization's leadership and management are committed to and support or do not support the implementation of prospective change. Choi and Chang (2009) argue that employees appear to develop positive beliefs toward implementation when institutional leadership encourage innovation and provide a convincing vision for its implementation. Whereas these authors claim that senior managers are the primary source of organizational change due to their capacity to manipulate the organizational environment, Chatterjee et al. (2002) see senior management as significant enablers of organizational innovation. Empirically, Ismail (2018) provides evidence to show that change valence has a significant positive influence on the change efficacy of accrual accounting. Given this, the study argues that when senior management becomes the promoters and supporters of the implementation of accrual accounting, they will provide a clear, long-term vision for its implementation. The study further, argues that implementation of accrual accounting is likely to happen with management support. This is because, senior management would send a clear message to employees about the importance of accrual accounting and thereby, create a strong climate for implementation to take place. Haffar et al. (2019) argue that organizational members who believe that they will personally gain or accrue some benefits such as promotions, increases in salary, or bonuses because they participate in change are generally more willing to accept change.

Consequently, in the absence of strong convincing, and demonstrable support for implementation, employees are likely to conclude that the innovation being implemented is a passing managerial fancy ignore it and it will go away (Klein and Knight, 2005). The study, therefore, hypothesizes that:

***H3: There is a positive relationship between management support and the implementation of accrual accounting.***

## **Moderating Hypothesis**

Financial resources refer to money and related aspects of funding and finance (Potokri, 2014) including government allocations and grants from development partners to finance public sector reforms. Extant literature has argued that the use of accounting information is influenced by institutional and contingency factors (see for e.g. Alijarde and Julve 2014 Paulson 2006). For instance, Suddaby (2010) contends that the factors that influence the use of accounting information are subject to change due to the influence of financial resources and donors. Luder's contingency model, suggests that the socio-economic levels, including the income of a user, influence the individual behavior toward the use of accounting information. The study, therefore, hypothesizes that:

***H4: Financial resource availability moderates the positive relationship between instrumental-conceptual use and implementation of accrual accounting.***

Investments in human resources may affect the talent that enhances the process and resources that affect the organization's strategic success. The study argues that getting the best out of human resources depends on what resources are used to deliver human resource practices. Human resource management, according to Ragupathi (2013), involves the acquisition of people. This presupposes that funds are required to be able to acquire the best human resources before the transition to accruals. In view of this, Damanpour and Schneider (2006) affirm that organizations with greater economic health invest more in innovation. As a result, researchers such as Mbelwa et al. (2019) have recognized the role played by human resources in achieving strategic objective changes. As a result, they describe human resources as an asset that requires continuous investment. This suggests that attracting, recruiting, training, and retaining skillful and potential accountants may require substantial investment in wages and salaries as well as training and development. Further Ochetan and Ochetan (2012) found that financial crisis has a strong impact on the organization's human resources. The study, therefore, hypothesizes that:

***H5: Financial resources availability moderates the positive relationship between input-based competencies and implementation of accrual accounting.***

Weiner (2009) posits that organizations' readiness towards change is a function of how organization members value the change and how favorably they appraise key determinants such as task demand, resource availability, and situational factors. The resources include human, physical, and financial. Studies such as Choi and Chang (2009) identify funding as a key driver for an organization's readiness for change. This may suggest that an organization's readiness to change is dependent on the agency's resources. For example, Damanpour and Scheider (2006) provide evidence to suggest that the economic health of an organization positively influences managerial decisions toward the adoption of an innovation. Aside from offering attractive remuneration to entice competent accountants, existing staff competencies, skills, and knowledge will have to be developed through training. The study argues that without financial resources, staff skills in accounting cannot be developed because Ochetan and Ochetan (2012) contend that situational constraints such as financial crises act as barriers to employees' competencies development. Organizational members, according to Weiner (2009) may value or support the change because of the benefits they stand to get financially. Further, financial resource availability influences decision-makers (top management) to take the risk and invest in a new program because Hooi (2007) argues that readiness and feasibility of implementation are dependent on financial resources. Based on these considerations the study hypothesizes that:

***H6: Financial resources availability moderates the positive relationship between management support and implementation of accrual accounting.***

### 3. METHODOLOGY

The study adopted a quantitative research design by surveying to collect data. The study had 44 items in the survey instrument to be used for data analysis. Consequently, the study required a minimum sample size of 44 times 10 = 440 using the ratio of 10:1 because the population was unknown as recommended by Hair et al. (2010). The purposive sampling technique was used to enable the researcher to access public sector organizations with a functional accounts unit whose heads were selected as the key informants for the study. The accountants were purposively selected as key informants, because government accounting and reporting in Ghana is a legal responsibility of public sector accountants. Consequently, 700 questionnaires were administered but 519 were returned given a response rate of 72%. After data cleaning and checking for common method bias, 499 questionnaires were deemed fit for Exploratory Factor Analysis, Confirmatory Factor Analysis, and Structural Equation Model analysis. The measures used for the study were respectively adapted out of the item pool in the literature; (see e.g. Mbelwa 2015; Diamantopoulos and Souchon 1999; Saa-Perez and Garcia-Falcon 2002; Spreitzer 1995; Heijde and Heijden 2006; Holt et al. 2007; Miller and Friesen 1982; Klein et al. 2001; Choi and Chang 2009 and Lapsely 1986). The items were anchored on 5 points Likert scale from strongly disagree to strongly agree.

#### 3.1. Exploratory Factor Analysis

A Maximum Likelihood Analysis (MLA) was conducted on the 44 items with oblique rotation (promax) because there is evidence in the literature that the variables in the study correlate with each other. The Kaiser–Meyer–Olkin (KMO) measure verified the sampling adequacy for the analysis, Kaiser–Meyer–Olkin = .838 ('superb' according to Field, 2009), and all Kaiser–Meyer–Olkin values for individual items were > .50, which is well above the acceptable limit of 0.5 (Field, 2009). Bartlett's test of sphericity  $\chi^2 (351) = 5439.486$ ,  $p < .001$ , indicated that correlations between items were sufficiently large for Maximum Likelihood Analysis. An initial analysis was run to obtain eigenvalues for each component in the data. Factors with cross-loadings were deleted to ensure the unidimensionality of the factors. The resultant analysis showed eight factors explaining 67.994 percent of the variance. Table 2 shows the factor loadings for the variables of the study from the pattern matrix. The items that cluster on the same components suggest that factor 1 is Management Support (RLS); factor 2 is Financial Resource Availability (FRA), and factor 3 as Instrumental-Conceptual Use (UIC). Further, factor 4 clustered on Implementation of Accrual Accounting (IAA I), factor 5 as Input Based Competencies (CIB), factor 6 as Organizational Capabilities (CHR), factor 7 as Implementation of Accrual Accounting (IAA II), and factor 8 as Readiness towards change (RPV). The factor analysis result is shown in Table 1.

**Table 1 Exploratory Factor Analysis of Items**

Variable list	Component							
	1	2	3	4	5	6	7	8
RLS1	.731							
RLS2	.817							
RLS3	.818							
RLS4	.755							
UIC1			.817					
UIC2			.783					
UIC3			.765					
FRA2		.621						
FRA3		.797						
FRA4		.816						
FRA5		.648						
CIB1					.715			
CIB2					.795			
CIB3					.795			
CIB4								
IAA1				.726				
IAA2				.845				
IAA3				.858				
IAA6							.773	
IAA7							.863	
IAA8							.828	
CHR2						.717		
CHR3						.786		
CHR4						.684		
RPV3								.593
RPV5								.846
RPV6								.878
<b>Eigen values</b>	6.337	3.312	1.952	1.910	1.417	1.277	1.098	1.054
<b>% of variance explained</b>	10.343	8.745	8.393	8.303	8.238	8.206	8.115	7.650
<b>Cum. variance explained</b>	10.343	19.088	27.481	35.784	44.022	52.229	60.344	67.994

Source: Author's Construct, 2023

### 3.2 Confirmatory Factor Analysis

A confirmatory factor analysis using AMOS 21 was performed to test the measurement fit model. The confirmatory factor analysis as prescribed by Hair et al. (2010) was used to test how well the measured variables represent the number of constructs and the normality of the data. Six model fit indices were used to assess the overall goodness of fit of the model: the ratio of  $\chi^2$  to the Degrees-of-Freedom (d.f.), Root Mean Square Error of Approximation (RMSEA), Normed Fit Index (NFI), Comparative Fit Index (CFI), Goodness-of-Fit Index (GFI), Adjusted Goodness of Fit Test (AGFI). All the model indices except the CFI and NFI were within the accepted levels, confirming the measurement model as a good fit with the data collected. Thus, we tested the reliability and validity of the constructs in terms of reliability, convergent, and discriminant validity. Therefore, the model fit indices obtained were  $\chi^2 = 494.767$ ; d.f. = 265;  $\chi^2/d.f. = 1.867$ ; RMSEA = .042; GFI = .931; CFI = .954 and NFI = .906; IFI = .954; TLI = .943 thereby confirming the unidimensionality of each construct in the model (Anderson and Gerbing, 1988). To evaluate the measures of the constructs in the measurement model a reliability test analysis was performed. This was estimated by the Cronbach Alpha value and composite reliability. The composite reliability was estimated using the square of the summation of the factor loadings)/ {(square of the summation of the factor loadings) + (summation of error variables)}. The interpretation of the

resultant coefficient is similar to that of Cronbach's alpha, except that it takes into account the actual factor loadings rather than assuming that each item is equally weighted in the composite load determination. The result in Table 2 showed the composite reliability of the main constructs in the study was above 0.80 and the Cronbach Alpha value was all above 0.70 which met the recommendation by Nunnally (1978).

### 3.3 Validation and Reliability Analysis

To determine that the constructs used for this study were valid, the convergent validity and discriminant validity procedure were used. The loadings for the measures of each construct from the exploratory factor analysis results were all relatively large and positive above .50. The squared of these loadings, indicates the commonality of the measure, or the variance that the measure has in common with the construct. When the communality measures are standardized, the average communality of a block of indicators is referred to as Average Variance Extracted (AVE) (Fornell and Larcker, 1981). The criterion for establishing validity is that the AVE measures should exceed .50 to ensure that, on average, the measures share at least half of their variation with the latent variable (Fornell and Larcker, 1981). As shown in Table 2, the AVE criteria were met for all the latent variables. Thus, for the constructs with AVE .50 and above, the validity of their measures was supported. Again, the correlation between latent constructs in the study was used as the focus for discriminant validity. The discriminant validity of the constructs was assessed as Fornell & Larcker (1981) suggest by comparing the squared root of the AVE with the correlations among constructs. Examinations of Table 3 showed that the squared root of the AVE was significantly greater than the correlation among latent variables that supports the discriminant validity of the construct.

**Table 3 Confirmatory Factor Analysis of Measures**

Model Fit Indexes: $\chi^2 = 494.767$ ; d.f. = 265; $\chi^2/d.f. = 1.867$ ; RMSEA = .042; GFI = .931; CFI = .954 and NFI = .906; IFI = .954; TLI = .943	
<b>Implementation of accrual accounting I (CA = 0.827 CR= 0.839)</b>	SFL
1. Stock on hand at the end of the accounting period is reported.	.676
2. Accounts payables at the end of the accounting period are reported.	.883
3. Accounts receivables at the end of the accounting period are reported.	.821
4. The values of assets are recorded in the accounts at their market values.	.704
5. A non-current asset is depreciated to identify underutilized assets	.863
6. Accrual from capital projects is recorded in the books.	.706
<b>Financial resource availability (CA = 0.746 CR= 0.754)</b>	
1. Money is readily available to support activities related to an accounting change.	.681
2. There is always a provision in the national budget for public sector reforms	.634
3. Allocating sufficient budgets for reform-related activities is envisaged	.684
4. Development partners <u>would provide</u> additional financial resources for public sector reforms	.634
<b>Management support (CA = 0.799 CR = 0.836)</b>	
1. Management has set a clear signal that the accounting practice is going to change	.650
2. I believe management has done a great job in bringing about this accounting change.	.827
3. Our senior management have put all their support behind this change effort.	.798
4. Every head of the department has stressed the importance <u>of this</u> accounting change	.711



<b><i>Instrumental-conceptual use (CA= 0.811 CR = 0.811)</i></b>	
1. Accounting information is translated into significant practical executed budget actions of the dept.	.741
2. Accounting information is often used to keep the department revenue and cost knowledge base in the budget execution	.794
3. Accounting information is often used to keep the department revenue and cost knowledge base in the budget approval process	.767
<b><i>Input-based competencies (CA= 0.780 CR = 0.799)</i></b>	
1. I have mastered the skills necessary for my job	.669
2. I consider myself competent to engage in in-depth accounting discussions in my job	.740
3. I consider myself competent to provide accounting information	.746
4. I have confidence in my capability within the area of accounting expertise	.637

Source: Author's Construct, 2023

SFL= Standard Factor Loadings CA= Cronbach Alpha CR = Composite Reliability

<b>Constructs</b>	<b>No. of items</b>	<b>AVE</b>	<b><math>\sqrt{AVE}</math></b>
Instrumental use	3	0.589	0.768
Input based competencies	4	0.500	0.700
Management support	4	0.562	0.750
Financial resource availability	4	0.500	0.700
Implementation of accrual accounting	3	0.637	0.798

Source: Author's Construct, 2023 Note: AVE=Average Variance Extracted

#### 4. RESULTS

The hypothesized relationships were tested using AMOS. The items for each scale were averaged to create single indicators for each latent variable, which turned the hypothesized structural model into a path model. This approach has been used to correct for random measurement error (Netemeyer et al. 1990) and to reduce model complexity (Li and Calantone, 1998). The variance inflation factors associated with each of the regression coefficients ranged from 1.105 to 1.833, suggesting no serious problems with multicollinearity. After confirming the validity and reliability of the measurement model, the researcher proceeded to analyze the structural model. The properties of the casual paths, including path coefficients and t-values, are shown in Table 4. The path coefficients related to each hypothesized relationship in the model, as well as the moderation effects are also summarized in Table 4.

## 5. DISCUSSIONS OF RESULTS

**Hypothesis 1** was supported. The findings confirm some parts of the literature such as Pollanen and Loiselle-Lapointe (2012); Hyndman and Connolly (2011); that the implementation of accrual accounting in the public is affected by the extent of utilization of the financial statement for decision-making. The results may imply that governments' desire to use accounting information for decisions may ultimately result in the implementation of accrual accounting. This is because according to Cohen et al. (2013) elected government uses accrual accounting figures as an animation machine. This is to primarily gain an advantage during negotiation for a loan and in that sense; accrual accounting is implemented to legitimize public sector organizations to their external constituents. Because accounting information plays a technical, rational role when used to measure the efficiency of decision-making government may implement accrual accounting to achieve technical efficiency. The results are validated through Luder's model which raises the fact that the orientation for users to use accounting information creates information markets (demand and supply) which producers attempt to meet by implementing a more informative accounting system.

**Hypothesis 2** was not supported as the study found no relationship between inputs-based competencies and the implementation of accrual accounting. The results offer many insights concerning Ghana's quest to implement accruals in the public sector. First, it has been established in the literature that, epistemic communities such as the International Monetary Fund, World Bank, and other donor agencies (see for e.g Adhikari and Garseth-Nesbakk, 2016; Ahn et al. 2014) champion the diffusion of public sector financial reform such as accrual accounting. These donors hire lead external consultants; professional institutions and academia often referred to as "champions of accrual accounting" to lead the implementation of accrual accounting in the public sector. These consultants often reject the services of government accountants during implementation. It has been argued in the literature that the whole accrual accounting thing is a private sector accounting being imported into the public sector, hence requiring private sector consultants to implement and not the internal government accountants (Adhikari and Mellemvik, 2011). In view of this, the skills, competencies, and expertise of the internal accounting staff of the public sector may not be required during the implementation of accrual accounting. Hyndman and Connolly (2011) have also raised doubts even about the capacity of public sector accountants to provide meaningful financial reports. The implementation of accrual accounting discourse is literally under the control of consultants-promoters whereas the competencies of government accountants have little or no role to play as it happened in Sri Lanka, Nepal, and Fiji (Adhikari and Mellemvik 2011; Harun and Robinson, 2010).

Further, the existence of accounting software could be cited as one of the reasons that, the competencies of accountant may not count during financial reforms. It may be argued that these days, the technical work of accounting such as the preparation of vouchers, cash books, ledgers, reconciliations, statements of financial position and performance, and cash flows amongst others can be handled by accounting software such as the Ghana Integrated Financial Management System (GIFMIS), quick books, sun, and others. Consequently, human resources without accounting competencies may be able to handle accounting operations with the aid of computers. Such arguments may also fuel the assumption that the specialized skills of accountants may be irrelevant in the implementation of accrual accounting. In view of this, some literature has even admonished accountants to concentrate on non-accounting tasks such as communication, organizational behavior, and human relationship to enhance their service potential. What may be required to prepare financial statements may not be competencies in accounting or the recruitment of qualified accountants but the ability to operate computer applications. This may be attributed to the fact that some researchers such as Kavanagh and Drennen (2008), have even recommended abandoning a wholly procedural technical approach to financial accounting due to the proliferation of accounting packages which has lowered the value of accountants in the implementation of accrual accounting.

**Hypothesis 3** was supported. The study results confirmed the works of Mbelwa et al. (2019), Choi, and Chang (2009) who found that there is a significant positive relationship between management support and implementation of accounting systems. The results could mean that in the absence of strong, convincing, informed, and demonstrable management support, an implementation may not take place. This is because, in the absence of top management support, the employees are likely to conclude that the implementation according to Klein and Knight (2005) is just a public sector fancy that should be ignored. This could mean that, management behavior, statement, and comments may send positive signals about the importance of accrual accounting to employees to get their buy-in. However, Bruno and Lapsely (2018) identified the lack of management support in terms of issuing clear-cut policies as obstacles to policy implementation in the public sector. Within the context of the public sector in Ghana, discussions about organizational readiness towards change for management support may be unlikely to be taken out of the political arena. This stems from the fact that top management positions in the public sector are occupied by political apparatchiks. Consequently, financial reform decisions rest with these government appointees. In view of this management, support in terms of the demonstration of political will may be imperative. This is evidenced by the South Korean and Canadian experiences where the demonstration of management and political support led to the implementation of accrual accounting (see e.g. Ahn et al. 2014; Pollanen and Loiselle-Lapointe (2012). The results may be validated by Luder's contingency model which raises the fact that the changed behavior of politicians, leaders, managers, and accountants determines the introduction or non-introduction of a more informative public sector accounting system.

With the moderation effects, **hypothesis 4** was supported implying that the availability of financial resources may facilitate the training of users of accounting information in understanding the complex accrual accounting information and how to apply the information in decision-making. Again, financial resource availability will allow more user education to be carried out for users to be interested in using accrual information. One reason cited in the literature (Alijarde and Julve, 2014; Hyndman and Connolly, 2011) for non-utilization of accrual information during political and administrative discussions is the complexity of such information which often tends to negatively affect the implementation of accrual accounting. Further, users of accounting such as anti-corruption campaigners may be interested in accounting information in organizations with high financial resources to safeguard the public interest and this may necessitate the implementation of a more informative accounting system.

**Hypothesis 5** was supported. This result may suggest that organizations with more financial resources will be able to develop the capacities of their employees. The skills and knowledge of employees can be developed by sponsoring staff to attend workshops on the accrual-based International Public Sector Accounting Standards (IPSAS), computer application operations, and interpretation to be able to cope with accrual transactions. Continuous Professional Development (CPD) programs organized by professional institutions are often not free. An organization with more financial resources available will be in a position to pay such fees and invest funds to enhance staff competencies that may be required during the implementation of accrual accounting.

**Hypothesis 6** was supported. This may imply that the demonstration of support for accrual implementation by the government could be done by making adequate budgetary allocations toward implementation-related activities. It may take money to lay the legal and regulatory framework, development of accounting policies, and valuation of assets, recruitment of consultants, and purchases of accounting software and technological infrastructure. The availability of more financial resources will allow government support to manifest by acquiring logistics for the implementation. For instance, Hooi (2007) has confirmed that the feasibility of management to implement reforms is dependent on the availability of financial resources.

## 6. PRACTICAL IMPLICATION AND CONCLUSION

The results avert the minds of policymakers that the whole implementation of accrual accounting may be dependent on readiness toward change. It highlights the importance of political and administrative support from leadership as well as employee support.

Further, the extent to which accrual financial information is used for decision-making is also a key factor. For instance, the recent request to the IMF for a bailout may demand the use of accrual information to determine the total public debt and the total value of national assets. This may require that both the national budget and national accounts are prepared on an accrual basis hence making the transition to accruals urgent and non-negotiable. In addition, the results affirm that the mere presence of chartered accountants in the public sector will not necessarily lead to a transition to accruals if the government over-rely on external consultants. Similarly, the internal accounting staff should be assured that no one would lose his/her job during the march to accruals to get their support. Lastly, the study results illuminate the fact that there is a need to make significant budgetary allocations as the study results suggest that more financial resources facilitate the transition to accruals.

In conclusion, the study makes a novel contribution by providing comprehension of the moderating role of financial resources in the implementation of accrual accounting from a developing economy perspective.

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