The Implementation of Budget Reform and the Level of Compliance among the Public Sector Entities in Nigeria

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Received: October 22, 2020   Accepted: October 30, 2020   Online Published: October 31, 2020
doi:10.5430/jbar.v9n2p19           URL: https://doi.org/10.5430/jbar.v9n2p19

Abstract
The study investigated the implementation of budget reform and the level of compliance in Nigeria. Purposive Sampling Technique was employed to select the two sectors – Ministry of Education and Health – where the adoption and implementation of the budget reform were popular. The population of the study comprised fifty (50) MDAs of the two ministries. Primary data were sourced from five hundred (500) respondents through structured questionnaire administered to the selected Ministries, Departments and Agencies. Data were analyzed using the Factor analysis technique. The results showed that only 55% of the MDAs within the sample size exhibited high compliance level with the budget reform while 45% demonstrated low compliance with the budget reform mandate. The summary of the overall results, therefore, revealed that there was no full compliance with the budget reforms’ directives among the MDAs during the research period. The study concludes that only continuous and critical re-assessments of the budget reform and its periodic re-appraisals by the central authorities in Nigeria can guarantee full compliance and thorough implementation in order to achieve desired results of the reforms in the public sector entities in Nigeria. The study, therefore, recommends that a central monitoring unit be created jointly by the Federal Ministry of Finance and the Office of the Accountant-General of the federation to ensure strict compliance, which will in turn enhance transparency and accountability in the public sector entities in Nigeria.

Keywords: budget reform, public sector entities, factor analysis

1. Introduction
Budget reform is a set of rules and regulations that regulate the conduct of budget preparation, processes and implementation in any given entity or economy. Budget reform was introduced in the operations of Ministries, Departments and Agencies in Nigeria (MDAs) to improve the effective service delivery of capital expenditure and allocated fund from the central authority. Budgeting occupies a dominant place in public sector entity financial service delivery. The public sector entities are the government institutions that carry out public activities in order to provide general services and redistribute income through the pool of wealth available, and supported with tax payer monies or levies (Kara, 2012). The introduction of budget reform among the MDAs in Nigeria was propelled by both the International pressures and domestic necessities (Salawu & Odewole, 2020). At the international levels, drastic innovations occurred in the global trends that shaped the traditional ways of doing things. In Nigeria, there were prevailing domestic events among the public entities that exerted pressure on the central authority that led to the introduction of budget reforms in the MDAs. Before the budget reform in Nigeria, there was no organic budget law within the nation’s constitutional framework that combined budget laws in a single legislative document for the country. The subsisting and existing laws and regulations in the nation could not make adequate provision for a fixed and realistic budget calendar for people’s participation in the budget process. Also, in the pre- reform era, budgeting system was input-based rather than output/outcome -based without rigorous analytical framework for determining policy objectives (Ben-Caleb & Agbude, 2013). As a result of this, therefore, financial leakages among the MDAs in both capital project implementation and revenue estimates, sometimes translates into erosion of resources and organizational inability to complete budgeted projects. Series of budget management reforms were embarked upon in Nigeria with the objectives of improving public sector resource management, ensuring budget discipline and curtailing macro excessive or wasteful spending. Some of the reforms in budget processes focus on the medium-term expenditure framework (MTEF). Objective of MTEF is to spell out the organization’s fiscal policy objectives. It
also outlines macro-economic targets and projections by dwelling on fiscal targets, projections in the revenue estimates and expenditure limits aggregates. Stages in MTEF involves medium term fiscal framework (MTFF). It entails documenting fiscal policy objectives, targets and projects. MTEF also includes medium term budget framework (MTBF). It consolidates medium term budget estimates around different individual spending agencies within an economy based on the country’s strategic priorities. The study therefore investigated the level of compliance of MDAs in the implementation of budget reform among the public sector entities in Nigeria.

The remainder of this paper is arranged as follows: following the introductory section, section 2 reviews the literature. Section 3 presents the methodology of the study. Further, section 4 presents the analysis and discussion of results, while section 5 concludes the study and offers some crucial policy implications.

2. Literature Review

Budget reform is one of the components of the public financial reform efforts of federal government in Nigeria. The financial reforms in public sector entities focus on critical aspects of public financial management operations. It defines the ways financial activities are carried out and reported in the most efficient and transparent manner among the MDAs. The primary purpose of the various reforms is to bring accountability and transparency into the central financial systems. The cardinal public financial reforms introduced into public sector entities National Chart of Accounts, GIFMIS, TSA, IPPIS, Budget Reforms, IPSAS, E-payment and Pension reform (Omolehinwa & Naiyeju, 2015). Guthrie and Olson (1999) identify major public financial management areas that public sector reform should focus as the budget reform frameworks. De Vries and Nemec (2013) enumerate the American philosophy on budget reforms and the compliance among the MDAs. The public sector entities under North America carried out radical budget reform over the years and monitored the compliance among the various entities (Bowrey & Smark, 2010). The budget reform was topical among the financial reforms which started in Europe under the Economic Growth and Institutional Change (De Wulf, 2010). Reform in the budgeting system is popular among the European countries as a catalyst towards enhancing financial independence. The compliance of the entities with the full contents of the reforms yielded positive results (Bess, 2012). Budget reforms were introduced in Europe for accelerated economic growth with enforced compliance among the public sector entities (Lindquist, 2012). The reforms were aimed at enhancing public financial management operations in UK, Germany and other European countries (Bach & Givan, 2011). Specific reforms in budgeting system, with adequate compliance, were encouraged among the countries in Europe (Liguovi & Steccolini, 2014). A competitive edge was maintained by Europe over other nations with the adoption of budget reform. This initiative recorded a high level of compliance among the entities (Bordogna & Neri, 2011). The compliance with the budget reforms enhanced even development in the domestic economy of Australian (Meh, Nirmala, & Hari, 2015). Most Asian countries implemented budget reforms and complied fully with the contents of the reforms within their domestic economy (Huque, 2005; Siddiquee & Mohamed, 2007).

The result of compliance with budget reforms in Korea was noticeable in the increased profitability of the nation (Campos & Esfahani, 2000). Anghes (2003) and Cheung (2005) hold that compliance with the contents of budget reform is the potent public sector entities weapon in achieving efficiency in the Asian countries. Samaratunge (2008) outlines the purpose of the adoption and implementation of financial management reforms among nations. Different economic and political experiences prevailing in various countries were adduced as contributory factors influencing the adoption. Sri Lanka’s adoption and implementation of budget management reforms was propelled by both the prevailing global consciousness and market trends around the world (Adhikeri, Kurupp, & Matilal, 2013). China and India achieved economic recognition by complying with various reforms’ mandates in their respective countries (Aizenmen & Shah, 2013; Dongre, 2012).

The implementation of budget reforms in Indonesia was precipitated with the desire to improve transparency and accountability in public sector entities’ transactions. The compliance among the entities with the various reforms’ mandates enhanced the economic recovery of the country (Mateev, 2013). The financial reforms crusade was taken to Africa as an indispensable financial catalyst in an effort to open up a rapid financial development process (Owusu, 2006, 2012). Most African economies were revived as a result of the entities compliance with the adoption and implementation of financial reforms in their various countries (Adamolekun, 1999). However, much success was not recorded in Africa on the implementation and compliance with public financial reforms except in Ethiopia and a few other countries (Peterson, 2011). The Ghanian economy notwithstanding experienced economic transformation as a result of the implementation and compliance of various financial reforms (Antui, 2008). In South Africa, the public sector reform was restricted to only information dissemination and official propaganda. Much has not been done on capital budget reform among the public sector entities within the country (Wenzel, 2007).
In Nigeria, the budget reform processes were embraced as magic wands. The efforts were perceived as positive direction to turn around the dwindling performance of public sector entities. The reforms started within the financial sector, with the aim of addressing the macroeconomic imbalances in the economy (Ogun & Akinlo, 2011; Sekwat, 2002). The public sector reform also affected the budgeting processes (Visser & Erasmus, 2013). Budgeting provides a controlling mechanism to bring cost within the allocated fund in an economic unit. (Spekle & Verbeeten, 2014; Nyamita, Dorasamy, & Garbharran, 2015). It allocates resources on preplanned priorities and facilitates the performance of the public sector entities to achieve desired results (Visser & Erasmus, 2013; Van Helden & Reichard, 2013). Most of the researchers on budget reforms in Nigeria focus on the adoption, implementation and benefits of the budget reform in the MDAs. But the MDAs compliance with the contents of the budget reform in line with the blue prints have neither been investigated nor given a major consideration to assist the role players in the public sector entities. This study therefore focused on the compliance of the MDAs with the budget reform in Nigeria. The paper is anchored on public interest theory as a theoretical framework to drive the rest of the work. The theory states that both regulations and reforms are initiated in the public sector entities as a direct response to the demand of the public in an effort to correct the inefficiency within the economic environment. The public interest theory therefore states that the reform is initiated to address the wrongs, redress the inadequacy, protect and satisfy the benefits of the public at large or some large subclass of the public (Lewis, 2013).

3. Methodology

The data for this study were generated from the selected MDAs in the educational and health sector that have carried out the reform. Descriptive analysis such as charts and percentages involving tables and econometric analysis were adopted as analytical tools. Factor analysis approach was used to reduce the number of items under the reform to a class of unique uncorrelated components. Factor analysis is a part of General Linear Model which bears the same assumptions as multiple regressions. It assumes that the underlying dimensions of factors are used to explain complex phenomena of data set (Nimalathasan, 2009; Dumitrescu & Vinerean, 2013). The usage of factor analysis is in the identification of variables or factors that are not directly observed due to the large data set. It is a scientific technique of meaningful data reduction which assumes that latent variables or independent variables determine the values of the dependent variables (Henson, 2006; Watkins, 2018; Aguinis, Gottfredson, & Joo, 2013). Factor analysis has been in frequent usage to study relationships among variables in psychology, social sciences and management sciences by many scholars (Yamashita & Jaffe, 2008; Appelbaum, Cooper, Kline, Mayo-Wilson, Nezu, & Rao, 2018). It is predominantly employed in researches to produce descriptively summarized data of matrices. It was adopted in this study to detect the presence of meaningful patterns in a set of variables by categorizing items to a class of unique components. Under each component, the factor with the highest eigen value was chosen. Eigen value measures the variance of the variables accounted for by that factor in a data set. The process is that a factor with a low Eigen value is rejected or ignored. It is believed that the contribution of the factor in the explanation of the variances in the variables is little if the Eigen value is low. Also, the item with the highest factor loading on the budget reform question was equally selected in that order. A factor loading explains the correlation between the original variable in a data set with the specific factor. It also explains the central theme of understanding the nature in the specific factor (Debasish, 2004; Robin & Roberts, 2006). Therefore, the selected item on the questionnaire was then chosen based on the responses represented in a likert scale format of strongly disagreed to strongly agreed. All respondents on the questionnaire that chose strongly disagreed and disagreed were categorized as low compliant class. The respondents with strongly agreed, agreed and undecided were treated as high compliant class. The study equally adopted rotated component matrix in the second stage of selection. This was automatically generated by the software. Rotated matrix was then employed to finalize the outcome selection based on varimax rotation which assumes correlation among items.

4. Interpretation of Results

Table 1 presents the principal component analysis of the variables. Eight variables were identified as the major components in the process. This therefore cumulatively captures the variance in the factor of interest. The test of adequacy (KMO) on the data confirms that the selected samples adequately measured the factor. This is supported with a value which is greater than 0.6. Also, the Bartlett’s test of sphericity in the analysis supports this assertion indicating a value which is significant. Therefore, from the analysis, only component 1 recorded eigen values of 5.422. This component translates and accounts for 20.855% of the total 64.2%. Also, figure 1 clearly shows the scree plot which give statistical supports to the eight selected factor components from the study with eigen values greater than or equals to one.
Table 1. Factor Analysis Result for Budget Reform

| Component | Initial Eigen values | Extraction Loadings | Rotation Sums of Squared Loading |
|-----------|----------------------|---------------------|----------------------------------|
|           | Total                | % of Variance       | Total                            | % of Variance       | Total                            | % of Variance       |
| 1         | 5.422                | 20.855              | 5.422                            | 20.855              | 2.766                            | 10.637              |
| 2         | 2.725                | 10.483              | 2.725                            | 10.483              | 2.593                            | 9.973               | 20.610              |
| 3         | 1.966                | 7.561               | 1.966                            | 7.561               | 2.224                            | 8.556               | 29.166              |
| 4         | 1.755                | 6.749               | 1.755                            | 6.749               | 2.065                            | 7.942               | 37.108              |
| 5         | 1.437                | 5.525               | 1.437                            | 5.525               | 1.968                            | 7.568               | 44.676              |
| 6         | 1.226                | 4.714               | 1.226                            | 4.714               | 1.894                            | 7.285               | 51.960              |
| 7         | 1.115                | 4.287               | 1.115                            | 4.287               | 1.640                            | 6.306               | 58.266              |
| 8         | 1.048                | 4.030               | 1.048                            | 4.030               | 1.543                            | 5.936               | 64.202              |
| 9         | .992                 | 3.815               | .992                             | 3.815               | 1.471                            | 88.017              |
| 10        | .904                 | 3.477               | .904                             | 3.477               | 1.821                            | 86.475              |
| 11        | .806                 | 3.101               | .806                             | 3.101               | 1.892                            | 86.475              |
| 12        | .776                 | 2.983               | .776                             | 2.983               | 1.821                            | 88.296              |
| 13        | .653                 | 2.512               | .653                             | 2.512               | 1.732                            | 90.028              |
| 14        | .604                 | 2.323               | .604                             | 2.323               | 1.647                            | 91.675              |
| 15        | .564                 | 2.169               | .564                             | 2.169               | 1.624                            | 93.298              |
| 16        | .492                 | 1.892               | .492                             | 1.892               | 1.471                            | 94.769              |
| 17        | .474                 | 1.821               | .474                             | 1.821               | 1.174                            | 95.943              |
| 18        | .450                 | 1.732               | .450                             | 1.732               | 1.152                            | 97.095              |
| 19        | .428                 | 1.647               | .428                             | 1.647               | 1.058                            | 98.153              |
| 20        | .422                 | 1.624               | .422                             | 1.624               | .976                             | 99.129              |
| 21        | .382                 | 1.471               | .382                             | 1.471               | .871                             | 100.00              |
| 22        | .305                 | 1.174               | .305                             | 1.174               | .871                             | 100.00              |
| 23        | .299                 | 1.152               | .299                             | 1.152               | .871                             | 100.00              |
| 24        | .275                 | 1.058               | .275                             | 1.058               | .871                             | 100.00              |
| 25        | .254                 | .976                | .254                             | .976                | .871                             | 100.00              |
| 26        | .227                 | .871                | .227                             | .871                | .871                             | 100.00              |

KMO
BARTLET 0.761; $\chi^2 = 3535.957$
TEST OF SPHERICITY
OFSig = 0.000; df = 325

Source: Authors’ Computation (2019).
Figure 1. Eigen Value and Component Number

Figure 1 shows the scree plot which further supports the eight selected factor components with eigen values greater than or equals to one.

From Table 2, the factor analysis conducted in selecting principal components of the factors that constitute budget reforms is presented. Eight factor components were identified to represent budget reform compliance level. Eight variables with the highest correlation coefficient were selected. These variables were further grouped into high and low compliance level. Also, the component with the highest eigen value which stands and explains the most variance component in the overall construct was selected for analysis and consideration.
Table 2. Rotated Component Matrixa

| Component | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  |
|-----------|----|----|----|----|----|----|----|----|
| VAR00006  |    |    |    |    |    |    |    |    |
| VAR00007  |    | .769|    |    |    |    |    |    |
| VAR00008  |    | .612|    |    |    |    |    |    |
| VAR00009  |    |    |    |    |    |    |    | .637|
| VAR00010  |    |    |    |    |    |    | .616|    |
| VAR00011  |    |    |    |    |    | .788|    |    |
| VAR00012  |    |    |    |    |    |    | .849|    |
| VAR00013  |    |    |    |    |    |    |    |    |
| VAR00014  |    |    |    |    |    |    |    |    |
| VAR00015  |    |    | .743|    |    |    |    |    |
| VAR00016  |    |    |    |    |    | .748|    |    |
| VAR00017  |    |    |    |    |    |    | .849|    |
| VAR00018  |    |    |    |    |    |    |    |    |
| VAR00019  |    |    |    |    | .805|    |    |    |
| VAR00020  |    |    |    |    |    |    |    | -.598|
| VAR00021  |    |    |    |    |    | .778|    |    |
| VAR00022  |    |    |    |    |    |    |    |    |
| VAR00023  |    |    |    |    | .507|    |    |    |
| VAR00024  |    |    |    |    |    |    |    | .673|
| VAR00025  |    |    |    |    |    | .806|    |    |
| VAR00026  |    |    |    |    |    |    | .549|    |
| VAR00027  |    |    | .678|    |    |    |    |    |
| VAR00028  |    |    |    |    |    | .811|    |    |
| VAR00029  |    |    |    |    |    | .730|    |    |
| VAR00030  |    |    |    |    | .537|    |    | .611|
| VAR00031  |    |    |    |    |    |    |    | .788|

Source: Authors’ Computation (2019).

Table 3 shows the compliance level with the budget reform on the implementation of budget mandate among the respondents. The result of the analysis shows a low level of compliance of 45% among the MDAs while high compliance level of 55% was recorded. The chart below in figure2 depicts the high and low budget compliance dichotomy among the entities.

Table 3. Frequency table showing the distribution of compliance levels with budget reform

| Compliance Level | Frequency | Percent |
|------------------|-----------|---------|
| Low              | 184       | 45.0    |
| High             | 225       | 55.0    |
| Total            | 409       | 100.0   |

Source: Authors’ Computation (2019).
Figure 2. Compliance Level among MDAs with Budget Reforms

Figure 2 shows the presentation of the MDAs compliance with the budget reform on high and low dichotomy.

The analysis of the results therefore shows the challenges encountered by the MDAs with the compliance with the budget reform as follows: One, the budget reform process is technical and demands expertise skills for effective implementation. Many MDAs lack skillful and trained personnel saddled with the responsibility of implementing the budget mandates in its full contents. Two, the level of technological infrastructure needed for a full compliance of budget reform is low in many MDAs. This has made transformation process difficult in the public entities. Modern day budgeting depends largely on computer assisted programme. Three, there is a subtle resistance to the adoption and implementation of the budget reform in some entities. This resistance is partly borne out of the fact that the key stakeholders were not carried along at the inception of the reform. Four, the delay in the budget allocation releases from the appropriate quarters to the MDAs constitutes a great hindrance to the full compliance with the budget reform. The central authority sometimes delays the releases of appropriated fund to the MDAs almost towards the end of the budget year which makes utilization difficult and encourages diversion. Five, the budget reform does not take into consideration the long process stipulated by the Procurement Act before accessing budgeted fund. Slack time normally exist in many MDAs between the time of project conception and the time of delivery. Some projects are unnecessarily carried over beyond the budget year thereby prolonging the project execution circle. Six, the implementation of the budget reform is expensive to many MDAs. The need to train some key members of staff for relevant workshops and conferences to update their knowledge and acquire technical skills is sometimes unaffordable by many organizations. Seven, the payment process is sometimes threatened by network failures, queue management, etc. which affect the output expectation of the budget reform. Eight, the budget payment processing is carried out on the confined platform. The balances on the platform are sometimes not available for utilization by the MDAs when the appropriations are not cash backed. There are situations when the balances can be viewed but access denied because the balances are unfunded. The implication of compliance levels with the budget reform on frequency table2 showing 45% low compliance is that there is no full compliance with budget reform among the selected Ministries, Departments and Agencies in Nigeria.

5. Conclusion and Policy Recommendation

The objective of this paper is to investigate the rate of compliance with budget reforms among the MDAs in Nigeria. The apparent poor budget performance in the public sector entities reports, which weaken public financial management processes, gave birth to the introduction of budget reform in the public sector entities in Nigeria. The implementation of the reforms, however, suffered many setbacks, which occasioned a low compliance with the budget reform instructions.
In order to enforce a full compliance among the MDAs in Nigeria, the following recommendations are proffered for immediate implementation: One, adequate training for all the key stakeholders, operators, accountants, auditors and the top management echelons. The operation of budget on the GIFMIS platform requires adequate knowledge of computer literacy. Most of the operations starting from expense request to employees request and cash management are essentially IT based which will demand basic IT knowledge from the operators. Two, the government should assist in the provisions of adequate technological infrastructure to the MDAs. The budget reform processes are critically different from the traditional methods used before the reform era. Three, the central authority should facilitate stakeholder meetings where burning issues that can impede the successful implementation of the budget will be ironed out. The fears that lead to the resistance of the reform will be dispensed and the opportunity to see the gains of budget reform will be shared by all the key stakeholders. Four, the gap between the release of capital fund to the MDAs and the mopping exercise should be widened in order not to frustrate the carrying out of the capital projects in which the appropriated fund is meant for. Five, appropriate budgetary provision for budget workshops and training on year basis should be made by the federal government through budget office and the office of the Accountant-General to alleviate the financial burdens of the MDAs. Only the continuous assessment of the compliance of the budget reform among the MDAs by the central authority and the periodic appraisal among the public entities can guarantee a full compliance of the reform in Nigeria.

References
Adamolekun, L. (1999). Public administration in Africa: Main issues and selected country studies. United States of America, Westview Press.
Adejey, A. O. (2016). Assessment of innovative ideas in Nigeria’s public sector. The Journal of Humanities and Social Sciences, 2(3), 1-10. https://doi.org/10.20286/JHSS.V412.39
Adhikari, P., Kuruppu, C., & Matilal, S. (2013). Dissemination and institutionalization of public sector accounting reforms in less developed countries: A comparative study of the Nepalese and Sri Lankan Central Governments. Accounting Forum, 37(3), 213 - 230. https://doi.org/10.1016/j.accfor.2013.01.001
Aguinis, H., Gottfredson, R. K., & Joo, H (2013). Best practice recommendation for defining, identifying and handling outliers. Organizational Research methods, 16, 270-301. https://doi.org/10.1177/1094428112470848
Aizenman, J., & Shah, A. (2013) Overview: Macroeconomic and financial policy challenges of China and India. Journal of International Money and Finance, 39, 1-5. https://doi.org/10.1016/j.jimonfin.2013.06.016
Antwi, K. B., Analoui, F., & Nana-Agyekum, D. (2008). Public sector reform in sub-saharan Africa: What can be learnt from the civil service performance improvement programme in Ghana? Public Administration and Development, 28(4), 3-11. https://doi.org/10.1002/pad.503
Appelbaum, M., Cooper H., Kline, R. B. Mayo-Wilson, E. Nezu, A. M., & Rao, S. M. (2018). Journal article reporting standards for quantitative research in psychology: the APA Publications and communications board taskforce report. American Psychologist, 73, 3-25. https://doi.org/10.1037/amp0000191
Bach, S., & Kolins Givan, R. (2011). Varieties of public management? The reform of public service employment relation in UK and USA. International Journal of Human Resource Management, 22(11), 2311-2330. https://doi.org/10.1080/09585192.2011.584399
Barendse, M. T., Oort, F. J., & Timmerman, M. E. (2015). Using exploratory factors analysis to determine the dimensionality of discrete responses. Structural Equation modelling, 22, 87-101. https://doi.org/10.1080/10705511.2014.934850
Bess, R. (2012). Public management in New Zealand and its effects on institutional arrangement for managing fisheries. Marine Policy, 36(2), 550-558. https://doi.org/10.1016/j.marpol.2011.03.004
Bordogna, L., & Neri, S. (2011). Convergence towards an NPM programme or different models? Public Service Employment Relation in Italy and France. International Journal of Human Resource Management, 22(11), 2311-2330. https://doi.org/10.1080/09585192.2011.584393
Bowrey, G., & Smark, C. (2010). The influence of Jeremy Bentham on recent public sector financial reforms. Journal of New Business Ideas and Trends, 8(1), 25-35.
Campos, J. E., & Esfahani, H. S. (2000). Credible commitment and success with public enterprise reform. World Development, 28(2), 221-243. https://doi.org/10.1016/S0305-750X(99)00128-X
Cheung, A. B. L. (2005). The politics of administrative reforms in Asia: Paradigms and legacies. Paths and
Debasish, S. S. (2004). Exploring customer preference for life insurance in India: Factor analysis method. Vilakshan, 1, 1.

De Vries, M., & Nemec, J. (2013). Public sector reform: An overview of recent literature and research on NPM and alternative paths. International Journal of Public Sector Management, 26(1), 4-16. https://doi.org/10.1108/09513551311293408

Dongre, A. P. (2012). Policy changes in the wake of globalization and its impact on Indian industries. Journal of Policy Modeling, 34(3), 476-496. https://doi.org/10.1016/j.jpolmod.2011.10.004

Dumitrescu, L., & Vinerean, S. (2013). Using Factor Analysis in Relationship Marketing. Prodia Economics & Finance, 6(1), 466-475. https://doi.org/10.1016/S2212-5671(13)00164-0

Guthrie, J., & Olson, O. (1999). Debating Developments in New Public Financial Management: The limits of global theorizing. Financial Accountability and Management, 15(3/4), 209-228.

Hughes, O. E. (2003). Public Management and Administration (3rd ed.). Great Britain: Palgrave Macmillan. https://doi.org/10.1111/1468-0408.00082

Kara, E. (2012). Financial analysis in public sector accounting: An example of EU, Greece and Turkey. European Journal of Science Researches, 6(1), 81-89.

Liguori, M., & Steccolini, I. (2014). Accounting, innovation and public sector charge. Translating reforms into charge? Critical Perspectives on Accounting, 25(4-5), 319-323. https://doi.org/10.1016/j.cpa.2013.05.001

Lindqvist, K. (2012). Effects of public sector reforms on the management cultural organization in Europe. International Study of Management and Organization, 42(2), 9-28. https://doi.org/10.2753/Imo0020-8825420201

Marley, W. W. (2018). Exploratory Factor Analysis: A Guide to Best Practice. Journal of Blake Psychology. https://doi.org/10.1177/0095798418771807

Mateev, M., Poutziouris, P., & Ivanov, K. (2013). On the determinants of SME capital structure in central and eastern Europe: A dynamic panel analysis. Research in International business and Finance, 27(1), 28-51. https://doi.org/10.1016/j.ribaf.2012.05.002

Micah, O. N., Nirmala, D., & Hari Lall Garbharran, A. (2017) A review of public sector financial management reforms: An international perspective. Public and Municipal Finance, 4(2), 25-37.

Nimalathasan, B. (2009). Factor Analysis: Nature, Mechanisms & Uses in Social and Management Researches. Journal of Cost and Management Accountant, xxxvii(2), 15-25

Nyamita, M. O., Dorasamy, N., & Garbharran, H. L. (2015) A review of public sector financial management reforms: An international perspective. Public and Municipal Finance, 4(2), 25-37.

Ogun, T. P., & Akinlo, A. E. (2011) Financial sector reforms and the performance of the Nigerian economy. Review of Finance and Banking, 3(1), 47-60.

Omolehinwa, O. E., & Naiyju, K. J. (2015). Government accounting in Nigeria: An IPSAS approach. Lagos, NG, Pumark Nig. Ltd.

Owusu, F. (2006). On public organization in Ghana: What differentiates good performers from poor performs? African Development Review, 18(31), 471-485. https://doi.org/10.1111/j.1467-8268.2006.00151.x

Owusu, F. Y. (2012) Organizational culture and public sector reforms in a Post-Washington consensus era: Lessons from Ghana’s good performers. Progress in Development Studies, 12(2/3), 135-151. https://doi.org/10.1177/146499341101200304

Peterson, S. B. (2011) Plateaus not summits: Reforming public financial management in Africa. Public Administration and Development, 27(2), 139-157. https://doi.org/10.1002/pad.601

Robin, H. (2006). Use of exploratory Factor Analysis in Published Research Common Errors and some comment on improved practices. Educational and Psychological Measurement, 66(3), 393-416. https://doi.org/10.1177/0013164405282485

Robin, K. H., & Robert, J. K. (2006). Use of exploratory factor analysis in published research: Common errors and some comment on improved practice. Educational and Psychological Measurement, 66(3), 393-416.
Salawu, R. O., & Odewole, P. O. (2020). The efficiency of personnel costs utilization among MDAs in Nigeria: The data envelopment analysis approach. *International Journal on Governmental Financial Management, 20*(1), 65-82.

Samaratunge, R., Alam, Q., & Teicher, J. (2008) Public sector reforms and accountability: The case of South and Southeast Asia. *Public Management Review, 10*(1), 101-126. https://doi.org/10.1080/14719030701763237

Sekwat, A. (2002). Civil service reform in post-independence Nigeria: Issues and challenges. *Public Administration Quarterly, 25*(4), 498-517.

Shafiqul Huque, A. (2005) Explaining the myth of public sector reform in South Asia: DeLinking cause and effect. *Policy and Society, 24*(3), 97-121. https://doi.org/10.1016/S1449-4035(05)70062-X

Siddiquee, N. A., & Mohammed, M. Z. (2007) Paradox of public sector reforms in Malaysia: A good governance perspective. *Public Administration Quarterly, 21*(2), 284-312.

Spekle, R. F., & Verbeeten, F. H. M. (2014). The use of performance measurement systems in the public sector: Effects on Performance. *Management Accounting Research, 25*(2), 131-146. https://doi.org/10.1016/j.mar.2013.07.004

Van Helden, G. J., & Reichard, C. (2013) . A meta - review of public sector performance. *Management research. Tekhne, 11*(1), 10-20. https://doi.org/10.1016/j.tekhne.2013.03.001

Visser, C. B., & Erasmus, P. W. (2013). *The management of public finance*. In K. McGillivray (Ed.), Cape Town, South Africa. Oxford University Press.

Wenzel, P. (2007) Public sector transformation in South Africa: Getting the basics right. *Progress in Development Studies, 7*(1), 47-64. https://doi.org/10.1177/146499340600700105

Youhei, Y., & Rudolf, J. (2005). Characterizing the interactions between trace metals and dissolved organic Metals using excitation - emission matrix & parallel factor analysis. *Environmental Science Techno, 42*(19), 7374-7379. https://doi.org/10.1021/es801357h

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