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TRANSPARENCY, COMPLIANCE AND SUSTAINABILITY OF CONTRIBUTORY PENSION SCHEME IN NIGERIA

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Abstract

Policymakers have taken cognisance of necessity to improve the transparency and compliance level among parameters of pension reforms. Empirical literature found positive roles of transparency and compliance toward the achievement of pension reform objectives such as sustainability. However, the level of transparency and compliance of pension fund managers and employers of labour under the contributory pension scheme in Nigeria leaves much to be desired. Thus, this study examined the effects of transparency and compliance on the sustainability of the Nigerian contributory pension scheme. Data was collected with the use of survey questionnaires administered on purposive sampling method on the managerial level staff of contributory pension operators and active participants enrolled in the scheme. The data collected was analysed using partial least square structural equation modelling with the aid of Smart PLS statistical application. The results showed that transparency has positively significant effect on the sustainability of contributory pension scheme in Nigeria while compliance has positive but insignificant effect. The study recommends the need for National Pension Commission as the regulator of the contributory pension scheme to strengthen its capacity to enforce adequate transparency and compliance level among the operators and employers of labour in contributory pension scheme in order to achieve not only the sustainability but other objectives of contributory pension reform.

Key Words: Compliance, Transparency, Contributory Pension Scheme, Nigeria.
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1. Introduction

In 2004, the Nigerian pension system was reformed via a transition to the contributory pension scheme (CPS). Among the objectives of CPS is to provide a sustainable funded pension scheme (Pension Reform Act, 2014-thereafter referred to as The Act). This objective is similar to the recommendation of the World Bank (1994) that stipulates that any pension reform must achieve sustainability criterion. The Act empowers pension fund administrators to manage the accumulated CPS fund to the optimal benefit of the CPS participants. While discharging their roles, operators of CPS are charged to perform with a high level of transparency and compliance with provisions of The Act to facilitate the achievement of sustainable CPS. Mol (2015) asserted that the more transparency and compliance level is, the more the sustainability of social policies such as pension reforms. Scholarly evidence showed low level of transparency and compliance among pension plan managers and employers of labour as a lingering challenge facing plan plans (Gerrard et al., 2019).

In Nigeria , low level of transparency and compliance had been reported among operators of Nigerian CPS. For instance, studies (Babatunde, 2012; Imhanlahimi & Joseph, 2011) have reported low transparency level among Nigerian CPS operators, while Ayegba, James and Odoh (2013), Kantudu (2005; 2008), Oladipo and Fashagba (2012) and Oluwatoyin (2013) have also found low compliance with CPS regulations. The studies documented unsatisfactory level of transparency and compliance among CPS operators and employers of labor in Nigeria. For instance, only about 45% of participants get adequate information on their retirement saving accounts (Imhanlahimi & Joseph, 2011) from their pension fund administrators PFAs and only 1.5% small and medium enterprises duly deducted and remitted employees' CPS contributions (Ayegba et al., 2013). This buttressed Report on the Observance of Standards and Codes (ROSC) (2004) that ranks Nigeria weak in institutional regulation compliance and transparency.

Policymakers have taken cognisance of necessity to improve the transparency and compliance level among parameters of pension reforms. Studies (Gerrard et al., 2019; Hess, 2005) have shown positive roles of transparency and compliance toward the achievement of pension reform objectives, major of which is sustainability. Yet, the level of transparency and compliance of CPS fund managers and employers of labour in Nigeria still leaves much to be desired (Ayegba et al., 2013; Imhanlahimi & Joseph, 2011). The peculiar weak regulatory enforcement and compliance in Nigeria raises a serious concern on the potential of the regulatory frameworks on the activities of the CPS industry stakeholders (Ahmad, 2010).

Despite the level of transparency and compliance reported by scholars and anecdotal reports, no study has examined the effects of transparency and compliance on CPS sustainability in Nigeria. The study fills this gap by assessing the effects of transparency and compliance on the sustainability of CPS in Nigeria with survey data obtained from the CPS operators and the active participants. The remaining sections after the introduction were presented as follow. The literature review and hypothesis development, the methodology, the results presentation and discussions and the conclusion in that order.

2. Literature review and hypotheses Development

Occupational pension sustainability (Contributory pension scheme sustainability)

Occupational pension sustainability has been defined by scholars. Dorfman et al. (2013) define occupational pension sustainability as the tendency of a pension plan to secure availability of enough resources to honour current and future pension commitments to retirees. Asher and Bali (2013) define occupational pension sustainability as the capability of the pension system to provide an adequate level of funding both currently and into the future to redeem pension obligations. The sustainability of the occupational pension system represents the social component of sustainable development. Thus, occupational pension sustainability has been attracting the attention of policymakers in both developed and developing economies. In most developed economies, the main threat to occupation pension sustainability is largely attributed to the ageing population due to decreasing birth rates and increasing life expectancy (Giang & Nguyen, 2017). The shifting of the demographic structure towards older ages puts enormous pressure on the sustainability of the occupational pension system.

Empirical studies have investigated other determinants of occupational pension. In a comparative analysis of factors that sustained the pension system in the Netherland and Finland to stand the test of time, Sorsa and van der Zwan (2022) found that regular assessment of pension sustainability by experts and scholars takes into consideration the design of pension plan and the ability and willingness of policymakers to maintain a pension plan by averting pressure to replace the scheme from other stakeholders are the major factors. In Nigeria, Oloruntoba and Jimoh (2021) examined 15 CPS fund administrators' data using fixed-effect regression panels. They found that age and size of pension funds have a significant positive influence on the sustainability of the Nigerian CPS while inflation has an insignificant negative influence.

Transparency

Transparency focuses on communication to enhance the relationship between the stakeholders and the company (Fernandez-Feijoo, Romero, & Ruiz, 2014). Pension transparency is the extent to which information disclosure reflects the state of the pension assets under the management of pension managers (Anantharaman & Chuk, 2017). Undoubtedly, transparency is one of the determinants of a successful pension scheme implementation (Rocha et al., 2001). Akeni (2009) stated that the integration of transparency in the operations of pension plans facilitates vital information accessibility to contributors of CPS in Nigeria. Akeni (2009) stated that the integration of transparency in the operation of pension plans facilitates vital information accessibility to contributors of CPS in Nigeria. As established by Mol (2015), the more transparent, the better it is for the sustainability of social policies such as pension reforms. Crowther and Seifi (2011) argue that transparency has become necessary for the proper flow of relevant and timely information to those who are affected by a decision. Transparency imposes discipline on those entrusted with the administration and management of a pension in a manner that leads to sustainable interest in serving the primary stakeholders (plan participants) (Hess, 2005). This is attributed to the role of transparency in reducing secrecy to a minimal level on the part of the fund managers as it facilitates scrutiny of their performance. Designing an effective transparency process for pension system is essential to allow plan participants to assess the value creation performance and management of risks to avert sustainability risks (Tomassettis, 2022). Thus, transparency improves public trust in the activities of pension fund operators.

Hess (2005) found that transparency has a positive effect on the growth of pension funds while lack of transparency leads to poor growth of pension fund and causes inequalities and distortions in the allocation of pension funds (Hess, 2005). Doménech and Melguizo (2008) found that lack of transparency in most pension reforms is one of the rationales for the low level of support among the targeted participants of different age and political affiliation. Thus, ensuring transparency through adequate regulatory frameworks is vital to the sustainability of pension plans. Dolls et al. (2018) conducted an experimental event-based study on the effects of transparency on pension savings over 2002- 2004 among German pension plan participants. Copies of experimental “information letter” which stated more detailed pension information compared to the normal pension statements were sent to participants above 27 years. The results showed a significant increase in pension savings among recipients of the information letter compared with those receiving normal pension statements with no crowding-out effect on other personal savings.

While studies outside Nigerian on transparency revealed conclusive evidence of high level of transparency, Nigerian studies have established the potential positive effect of transparency on CPS industry. However, empirical findings document a dismal level of transparency among operators of Nigerian CPS. For instance, Imhanlahimi and Joseph (2011) undertook a survey of 1350 civil servants enrolled in CPS in South South-south and South-west geopolitical regions of Nigeria. They found that 55 percent of the respondents did not receive regular information from their PFAs on their retirement saving accounts (RSAs). In another survey of 187 participants, Babatunde (2012) examined the transparency level of CPS operators. The data found that 124 (61%) were not receiving adequate information on their RSAs from CPS operators. Ojiaku et al. (2020) examined the influence of transparency on customers' loyalty to CPS operators in Anambra South-east, Nigeria. They reported positive and significant influence of transparency on customers' loyalty of CPS participants to CPS operators. Studies are yet to be conducted on the effect of transparency on sustainability of CPS in Nigerian. In view of the gap, this study further examined the link between transparency and CPS sustainability. Thus, the following hypothesis was proposed:

H1: Transparency in reporting and communication by operators to PenCom and participants has a positive relationship with contributory pension scheme sustainability in Nigeria.

Compliance

Compliance is the process of obeying and applying the rules and regulations governing business operations (Bejide, 2019). Compliance has been identified as one of the significant elements in the management of pension plans (Baker, Logue & Rader, 2005). Compliance in pension management requires that the managers of occupational pension funds and other stakeholders conform to various rules and regulations which change from time to time in line with emerging operational and managerial challenges. Section 68 of The Act (2004) mandates the pension fund administrators (PFAs) and pension fund custodians (PFCs) to appoint a compliance officer (CO) who would be accountable towards ensuring compliance with the provisions on rules and regulations stipulated in The Act (2004). The CO is also charged with compliance with the internal rules and regulations made to regulate the pension fund operators (PFAs and PFCs). Further effort to strengthen the function of CO was made by PenCom in 2009 with the issuance of "Regulations for Compliance Officers" as the responsible officer for ensuring compliance with relevant regulations on pension matters such as investment regulation, internal controls, accounting disclosure and making required returns on the management of

the pension assets to the PenCom and the plan participants. The regulations on compliance with CPS seek to minimise the concerns of stakeholder arising from business failures associated with non-compliance with rules and regulations by industry players. Besides, compliance regulation of CPS seeks to achieve the set goals of providing sustainable pension to deserving retired employees by ensuring operators adhere to the business continuity plan (PenCom, 2009b).

A strand of literature has examined compliance with accounting standards in the preparation of the pension-related annual report and financial statements. Valderrama (2017) examined the financial reporting practices of the large private employee occupational pension plans in the Philippines. The study reported significant non-compliance practices with financial reporting standards based on a content review of the 2014 financial statements. This is manifested by widespread insufficient information provided in the financial statements. In a study of five big corporations in the US, Beprestis and Xu (2006) reveal that accounting reporting of defined benefits plans of the sampled companies do not show reasonableness and clarity in their disclosure of pension accounting in their financial statements in line with the accounting standards and the guidelines such as the SFAS NO. 87. In Nigeria, Kantudu (2006) examined the impact of auditors' reputation on the level of compliance with Statement of Accounting Standard 8 on employee retirement (SAS 8) issued by the Nigerian Accounting Standard Board (NASB). Results from a sample of 30 listed firms on the Nigerian Stock Exchange revealed a weak correlation between auditors' reputations and the level of compliance.

Contrarily, a follow-up study by Kantudu (2008) investigated the impact of The Act (2004) on compliance with local accounting standard on employee benefits (SAS 8). Based on pre-and post- periods of The Act (2004) implementation, analysed with annual accounts data of 30 listed firms, the results of the t-test showed that The Act (2004) had a significant improvement on compliance with SAS 8 in the post- CPS implementation period. However, the study noted a significant variation in the level of compliance with The Act (2004) among employers in Nigeria. Similar to Kantudu (2004), Sule and Ezugwu (2009) also assessed the impact of CPS implementation on compliance with the disclosure requirement of employees' retirement benefits. Using data over 10 year-period, separated into pre and post - CPS implementation, t-test analyses showed a significant improvement in the level of compliance with the disclosure requirement of employees' retirement benefits among Nigerian listed companies after the implementation of CPS. However, variation was noted among firms in compliance with the regulations of CPS.

Oluwatoyin (2013) examined the impact of CPS implementation on compliance with employee retirement benefits payment of quoted firms in Nigeria using a pre and post - CPS analysis over 1998-2007. T-test results showed a positive impact of CPS implementation on compliance with employee retirement benefits payments based on data obtained from ten sampled firms. Ayegba et al. (2013) examined compliance with CPS among small and medium enterprises (SMEs). Records of PenCom on complying SMEs revealed a low level (1.5%) of compliance among SMEs with CPS requirements. Ugwoke and Onyeonu (2013) also examined the level of compliance with the provision of CPS. Chi-square and t-test analyses of survey data and records of complying and non-complying employers with CPS also indicate a weak level of compliance among all categories of employers. Similarly, Ovbiagele (2015) assessed the level of compliance with the new CPS using questionnaires administered to 21 employers that enrolled their workers in CPS and PFAs employees. The results of Chi-square technique showed a low level of employers' compliance. The result was attributed to the low level of awareness among workers enrolled in CPS. Thus, to examine the effect of compliance on CPS sustainability, this study thus hypothesised as follows:

H2: Compliance with rules, regulations, and standards has a positive relationship with contributory pension scheme sustainability in Nigeria.

3. Methodology.

To obtain data for the study, a cross-sectional questionnaire survey was carried out once at a point in time. Cross-sectional administration of surveys reduces the time and resources committed to data collection and facilitates a higher rate of response and generalisation of the results about the entire population under study (Rea & Parker, 2005). The questionnaires were administered on 710 respondents drawn from managerial staff of unit/departmental of 31 CPS operators and active participants (employees) enrolled in CPS in Nigeria. Ten respondents each were purposively selected from 31 operators totalling 310 and 400 active participants in CPS following previous studies (Ijeoma & Nwifo, 2015; Imhanlahimi & Joseph, 2011). The operational items used to measure CPSS were adapted from Cong, Frank, Gianakis, and Guo (2015) and Ijeoma and Nwifo (2015). Eight items employed to measure transparency and five items for compliance were adapted from Njuguna (2012). Partial least squares structural equation modelling (PLS-SEM) was employed for testing the hypotheses using SmartPLS 4.0 Statistical Package because of its capability to obtain the best model fit (Ringle, Wende, & Becker, 2022)

Profile of respondents

A total of 578 respondents returned valid questionnaires to the researchers. 212 (36.68%) were staff of CPS operators, while 366 (63.32%) were active participants in CPS. Among the CPS operator staff, 74 (34.9%) were in managerial positions, while 138 were assistant managers. 155 (78.1) respondents from CPS operators were in the employment of open PFAs, 42 (19.8) in closed PFAs and 159(7.1%). Among the CPS participants, 547 (94.64%) were enrolled with open- PFAs and the remaining 31(5.36%) were enrolled with closed PFAs. 309 (53.46%) were male while 269 (46.54%) were female. In terms of educational qualification, 45 (7.79%) respondents- all CPS participants- had senior school certificates. 77 (13.32%), 323 (55.88%) and 133 (23%) obtained Diploma, Bachelor’s degree/HND and Postgraduate degree respectively. The mean tenure of respondents drawn from CPS operators was 3.88 years in managerial positions, while the mean tenure of CPS enrolment for CPS participants was 9.56 years

4. Measurement Model Assessment

Based on PLS-SEM algorithm model in Figure 1, the outer loading of all the items is above the minimum threshold of 0.5 recommended by (Hair Jr. et al. (2017)). The internal consistency of the construct was assessed with Cronbach’s alpha and composite reliability estimates which all reported above 0.7 recommended by Hair Jr. et al (see Table 1). The convergent validity of items to measure the constructs was also found to be acceptable with average variance explained (AVE) above minimum estimate of 0.5 recommended by Bagozzi and Yi (1998). The discriminant validity of the constructs was assessed using cross-loading (Appendix 1), Fornell Lackeker (Table 2) and heterotrait-monotrait ratio (HTMT) (Appendix 2) criteria which all confirmed the constructs were free from discriminant validity threat.

Table 1: outer loading, Cronbach’s alpha, composite reliability and average variance explained

	Outer loading range	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average Variance extracted (AVE)
CPSS	0.769-0.839	0.869	0.885	0.904	0.653
TRANS	0.613-0.866	0.909	0.924	0.922	0.600
COMP	0.914-0.952	0.860	0.812	0.971	0.868

Table 2 Fornell-Larcker criterion

	COMP	CPSS	TRANS
COMP	0.932		
CPSS	0.089	0.808	
TRANS	0.135	0.328	0.775

Structural Model Assessment

The multicollinearity of the endogenous variables was assessed using variance inflation factor (VIF) and tolerance level estimates. TRANS and COMP reported VIF of 1.019 and 1.034 with tolerance level of 0.981 and 0.967 respectively. According to (Tabachnick & Fidell, 2013), a VIF of less than 5 and tolerance level of greater than 0.2 indicate no multicollinearity threat among exogenous constructs of a model. Therefore, no threat of multicollinearity in our model. The model reported R-square of 0.109 and adjusted R-square of 0.106 indicating minimal effect of TRANS and COMP on the CPSS. Both TRANS and COMP have small effect sizes with F-square of 0.022 and 0.025 respectively. Stone-Geisser (Q^2) of 0.07 which is above zero also showed that the model has predictive validity.

Table 3: Variance inflation factor (VIF) and Tolerance level estimates

Constructs	Variance inflation factor	Tolerance level
TRANS	1.019	0.981
COMP	1.034	1.034

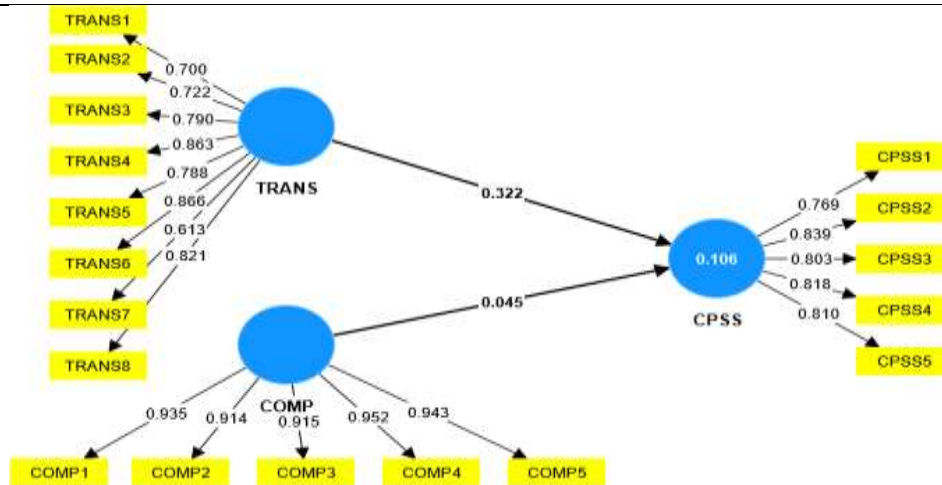


Figure 1: PLS-SEM algorithm model

Hypothesis Testing and Discussion of findings

Transparency and Contributory Pension Scheme Sustainability

In Table 4, the results of H1 were shown on the path TRANS to CPSS. The path results ($\beta= 0.322$, $t=4.840$, $p= .000$) showed that the hypothesis was supported. Thus, H1 is positive and significant. The positive finding of the study is consistent with previous studies (Doménech & Melguizo, 2008; Hess, 2005) that also report a positive and significant effect of transparency. The finding is also in line with the submission of Rocha et al. (2001) that transparency is a vital regulatory factor for the successful implementation of a pension scheme. Transparency facilitates communication among the stakeholders in a firm to allow a free flow of relevant and timely information to those who are affected by the operations of the firms (Crowther & Seifi 2011; Fernandez-Feijoo et al. 2014). The finding also asserts that transparency forces discipline on trustees of a pension by facilitating scrutiny of the pension manager's performance which leads to sustainable interest in serving the primary stakeholders especially plan participants (Hess, 2005). Thus, the flow of information improves the level of the trust reposed in operators of pension plans by the public.

The finding of the study is also consistent with that of Anantharaman and Chuk (2017) that also found that a good pension reform that delivers timely maximal information to plan participants on their accounts, details of the flows in and out of the account, fees, and rates of return improves the performance of the pension plans. This keeps the plan participant informed on the financial worth of their pension contributions. Dolls et al. (2018) also stated that transparent information allows plan participants to get feedback and updates about historical, current and forecasted returns on their pension assets and how they are allocated to various investments. In Nigeria, The Act (2004) mandates PFAs to render information on their activities to both the enrollees and PenCom- the regulatory agency- by rendering various returns. Thus, ensuring transparency through adequate regulatory frameworks is vital to the sustainability of pension plans.

Compliance and Contributory Pension Scheme Sustainability

As shown in Table, H2 on path COMP to CPSS with results ($\beta= 0.045$, $t=0.701$, $p= .484$) showed the hypothesis was not supported. Thus, the H2 was positive but not significant. The findings is in line with Kantudu (2005, 2008) and Bepristis and Xu (2006). The findings is contrary that of Sule and Ezugwu (2009) that compliance with the disclosure requirement of employee retirement benefits significantly improves at post CPS implementation years among Nigerian listed companies with variations among firms on compliance with the regulations of CPS. The

insignificant results may have been the case for a number of reasons. Empirical evidence affirmed low level of compliance with the provisions of The Act (2004) at the level of employers and CPS operators with failures to address complaints for years. For instance, Ayegba et al. (2013) found that compliance level with CPS among small and medium enterprises was low. With respect to the public sector, by the end of the first quarter of 2022, the problem has continued unabated as PenComs’ report indicated that only four states and the Federal governments have commenced remittance of their employees CPS contributions (TheCable, 2022). Thus, non-remittance of deductions and/or remittances of pension contribution by private and public organisations enrolled under CPS has become one of the greatest CPS challenges.

In order to boost the remittance of contributions, PenCom recruited the services of 173 firms as recovery agents in June 2012. Between June 2012 to June 2022, the agents recovered a total of N11.44 billion which is a paltry sum of the unremitted contributions (TheCable, 2022). Reports of non-compliance by PFAs on investment limits; delay in the payment of retirement benefits; receipt of pension contributions without appropriate schedules; unresolved customer complaints; and non-implementation of disaster recovery plans weigh down CPS (ThisDay (2022)). PenCom revealed cases of non-compliance. For instance, non-compliance on the part of CPS operators has led to court cases such as that instituted by CPS pensioners of Union Bank of Nigeria to challenge the Bank and PFAs on gross violation of the CPS (Reports of non-compliance by PFAs on investment limits; delay in the payment of retirement benefits; receipt of pension contributions without appropriate schedules; unresolved customer complaints; and non-implementation of disaster recovery plans weigh down CPS (ThisDay (2022)). Another petition of non-compliance was lodged by Delta State Government against the failure of PFAs to duly pay the employees of the State government who retired under the CPS.

Table 4: Path coefficient estimates

	Beta	Standard deviation	T-statistics	p-value	Decision
TRANS -> CPSS	0.322	0.036	9.062	0.000	Significant
COMP -> CPSS	0.045	0.065	0.701	0.484	Not significant

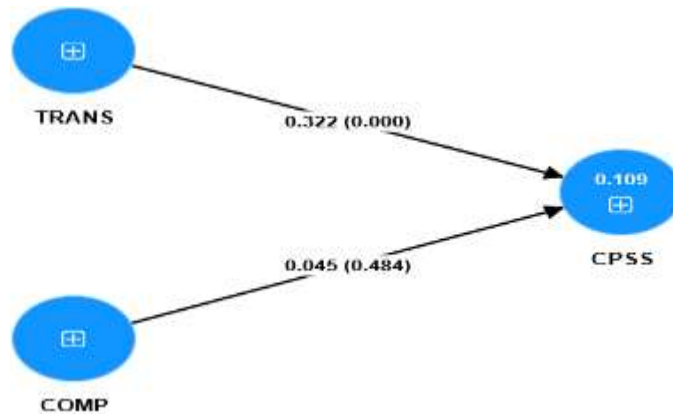


Figure 2 Bootstrap model

5. Conclusion and recommendation

In consistent with global trend of assessing the sustainability of national pension funds, this study examined the effects of transparency and compliance on the sustainability of the contributory pension scheme in Nigeria. The study obtained data using questionnaire survey administered on the managerial level staff of CPS operators and active participants enrolled in the CPS. Data was collected from the two sample groups in order to have a balanced view from the CPS operators acting in the capacity of agents managing the pension funds and the participants who are the principal and owners of the pension funds in the stewardship of the CPS operators. Based on the results from the data analyses, it was found that transparency has significantly positive effect on the sustainability of the CPS in Nigeria. The effect of compliance was also found to be positive but insignificant. After discussions of the results in line with previous related literature, plausible reasons were provided for the results.

The results imply the need for National Pension Commission (PenCom) to strive to strengthen its capacity to enforce adequate transparency and compliance among the CPS operators and employers of labour to ensure the CPS sustainability in the interest the employees enrolled in CPS and the nation. The management of CPS operators also needs to ensure that high level of transparency and compliance is followed in their operations to ensure the sustainability of the CPS industry. Similarly, the organised labour unions should carry out awareness rallies, workshops, seminars etc to sensitise employees who are participants in the CPS on the need to seek adequate information on their retirement saving accounts and compliance with laid down rules and regulations by operators of CPS. This would also strengthen the achievement sustainability of CPS reform.

References

- Ahmad, M. K. (2008). *Pension reform process in Nigeria: Transition from defined benefits to defined contribution*. Paper presented at the IOPS Workshop on pension supervision, 5th February, Dakar.
- Akeni, P. O. (2009). *Pension fund administration in Nigeria: Problems and prospects of implementation*, A conference paper presentation at University of Benin.
- Anantharaman, D., & Chuk, E. (2017). Standards or incentives: What determines financial reporting transparency for defined benefit pension assets?. *Available at SSRN 3010009*.
- Asher, M. G., & Bali, A. S. (2013). Fairness and sustainability of pension arrangements in Singapore: An Assessment. *Malaysian Journal of Economic Studies*, 50(2), 175-191.
- Ayegba, O., James, I., & Odoh, L. (2013). An evaluation of pension administration in Nigeria. *British Journal of Arts and Social Sciences*, 15(2), 97-108.
- Babatunde, M. A. (2012). The impact of contributory pension scheme on workers' savings in Nigeria. *The Social Sciences*, 7(3), 464-470.
- Bagozzi, R., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16, 74-94.
- Baker, A. J., Logue, D. E., & Rader, J. S. (2005). *Managing pension and retirement plans: A guide for employers, administrators and other fiduciaries*. Oxford: Oxford University Press.
- Bejide, A. O. (2019). Compliance with Regulations: Path to Adequate Corporate Governance in the Nigerian Banking Industry for Business Sustainability and Enhanced Financial Performance. *Journal of Business*, 7(1), 31-58
- Beprestis, M., & Xu, Y. (2006). Defined benefit fund accounting: relevancy, clarity and consistency. *Journal of American Academy of Business* 9(2), 294-299.
- Cong, Y. C., Frank, H. A., Gianakis, G. J., & Guo, H. D. (2014). Critical Issues in the Transition from the Defined Benefit to the Defined Contribution Pension Model Perceptions From Florida Municipal Finance and Human Resource Directors. *Review of Public Personnel Administration*, 35(4), 333-351.
- Crowther, D., & Seifi, S. (2011). *Corporate governance and international business*. BookBoon
- Dolls, M., Doerrenberg, P., Peichl, A., & Stichnoth, H. (2018). Do retirement savings increase in response to information about retirement and expected pensions?. *Journal of Public Economics*, 158, 168-179.

- Doménech, R., & Melguizo, Á. (2008). Projecting pension expenditures in Spain: On uncertainty, communication and transparency. *Fiscal Sustainability: Analytical Developments and Emerging Policy Issues. Banca d'Italia, Roma.*
- Dorfman, M. C., Holzmann, R., O'Keefe, P., Wang, D., Sin, Y., & Hinz, R. (2013). *China's Pension System: A Vision: World Bank Publications.*
- Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2014). Effect of stakeholders' pressure on transparency of sustainability reports within the GRI framework. *Journal of Business Ethics, 122(1), 53-63.*
- Gerrard, R., Hiabu, M., Kyriakou, I., & Nielsen, J. P. (2019). Communication and personal selection of pension saver's financial risk. *European Journal of Operational Research, 274(3), 1102-1111.*
- Giang, L. T., & Nguyen, C. V. (2017). The aging population and sustainability of the pension scheme: Simulations of policy options for Vietnam. *Journal of Economics and Development, 19(3), 40-51.*
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).* SAGE Publications.
- Hess, D. (2005). Protecting and politicizing public pension fund assets: empirical evidence on the effects of governance structures and practices. *UC Davis Labour Review, 39, 187-227.* Ijeoma, N. B., & Nwifo, C. I. (2015). Sustainability of the contributory pension scheme in Nigeria. *Journal of Business & Management Studies, 1(1), 1-15.*
- Imhanlahimi, J. E., & Joseph, E. (2011). Pension Reform, Public Workers' Productivity and Welfare in Nigeria: Lessons for some other African Countries. *Indian Journal of Economics and Business, 10(2), 173-202*
- Kantudu A. S. (2005). The impact of auditor's reputation on compliance with accounting standard on employee retirement benefit by listed firms in Nigeria. *Journal of Social and Management Sciences, 10, 71-100,* available at: <http://ssrn.com/abstract=1112505>.
- Kantudu, A. S. (2008). Impact of Pension Reform Act 2004 on compliance with accounting standard on employee retirement benefits in Nigeria, available at: <http://ssrn.com/abstract=1106462>.
- Mol, A. P. (2015). Transparency and value chain sustainability. *Journal of cleaner production, 107, 154-161.*
- Ojiaku, O. C., Nwatu, B. C., & Aghara, V. N. (2020). Using the DART model of value co-creation to predict customer loyalty in pension fund administration in Nigeria. *Asian Journal of Economics and Business, 1(2), 121-137.*

- Oladipo, J. A., & Fashagba, M. O. (2012). Evaluation of Compliance with the Stipulations of the Contributory Pension Scheme: A Case Study of Quasi-Government Institutions in Nigeria. *African Research Review*, 6(4), 59-75.
- Oloruntoba, A. D., & Ojo, J. I. (2021) Financial sustainability and pension fund performance in Nigeria: the effects of inflation rates. *Umaru Musa Yaradua University Journal of Accounting and Finance Research*, 2 (2), 54-67
- Oluwatoyin, S. I. K. (2013). An impact assessment of the contributory pension scheme on employee retirement benefits of quoted firms in Nigeria, *Elixir Finance Management*, 55, 12802-12809.
- Ovbiagele, A. O. (2015). Management of pension schemes in Africa: Nigeria's experience, challenges, and the way forward. *Global Journal of Interdisciplinary Social Sciences*, 4(2), 33-34.
- Pension Reform Act [PRA] (2004). *Pension Reform Act 2004*: Federal Government of Nigeria.
- Report on the Observance of Standards and Codes (ROSC) (2004). *Nigeria*. Available at:<http://documents.worldbank.org/curated/en/109681468288617735/pdf/351680UNIOAccounting0rosc1aalnga.pdf.pdf>.
- Ringle, C. M., Wende, S., and Becker, J.-M. 2022. "SmartPLS 4." *Oststeinbek: SmartPLS GmbH*, <http://www.smartpls.com>.
- Rocha, R., Hinz, R., & Gutierrez, J. (2001). Improving the regulation and supervision of pension funds: Are there lessons from the banking sector? In: R. Holzmann & J. E. Stiglitz (Eds), *New ideas about old age security toward sustainable pension systems in the 21st century*, (pp171- 212). *The World Bank. Washington, D. C.*
- Sorsa, V. P., & van der Zwan, N. (2022). Sustaining the unsustainable? The political sustainability of pensions in Finland and the Netherlands. *Journal of European social policy*, 32(1), 91-104.
- Sule, O., & Ezugwu, C. I. (2009). Evaluation of the application of the contributory pension scheme on employee retirement benefits of quoted firms in Nigeria. *African Journal of Accounting, Economics, Finance and Banking Research*, 4(4). 47-60.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Boston: Pearson.
- TheCable (2022). PenCom: Only four states, FCT remitting pension contributions to workers under CPS, *retrieved from*

<https://www.thecable.ng/pencom-only-four-states-fct-remitting-pension-contributions-to-workers-under-cps>

- ThisDay (2022). How PenCom Recovers Outstanding Pension Contributions from **Employers**, <https://www.thisdaylive.com/index.php/2022/08/22/how-pencom-recovers-outstanding-pension-contributions-from-employers/>
- Tomassetti, P. (2023). Between stakeholders and shareholders: Pension funds and labour solidarity in the age of sustainability. *European Labour Law Journal*, 14(1), 73-91.
- Ugwoke, R. O., & Onyeonu, E. O. (2013). Determination of the level of acceptance and compliance to the new pension scheme in Nigeria. *Research Journal of Finance and Accounting*, 4(1), 8- 15.
- Valderrama, H. A. S. (2017). The Quality of Financial Reporting of the Social Security System. *Philippine Management Review*, 24, 1-16.
- World Bank. (1994). *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*. New York: Oxford University Press.