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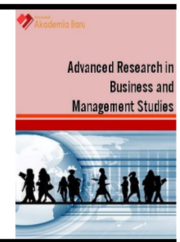

A Proposed Framework of Corporate Governance and Investment Strategy Impacts on Occupational Pension Sustainability: the Moderating Effects of Risk Management

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ABSTRACT

Recently, sustainability has emerged among major concerns in a broad range of fields. Comparatively, little research attention has been paid to sustainability of occupation pension (OP) scheme despite its significance on public finance. The widespread nature of pension reforms triggered by occupational pension crisis has led to privatization of management of pension funds among approaches of reforms. Grounded in institutional and agency theories, this paper proposes a theoretical framework of the influences of corporate governance and investment strategies on the sustainability of OP and the moderating role of risk management. The framework focuses on the Nigerian contributory pension scheme (CPS) which came into effect in 2004. Review of extant literature indicates that with good corporate governance and optimal investment strategies, the sustainability of Nigerian CPS would be enhanced. Furthermore, the moderating effects of risk management were established based on evidences from literature. The review has significant implication on the management of CPS not only in terms of the stewardship roles entrusted with privately firms (pension operators) managing the CPS fund, but also for the employees and other stakeholders to reap the benefits of well-regulated CPS.

1. Introduction

Anecdotal and empirical reports have showed that in virtually all countries, the sustainability of occupational pension (OP) has become a major concern that cannot be overlooked [1]. The sensitive nature of OP sustainability is related to the financial, social and political consequences of retirement pay-out defaults. Thus, it is of utmost importance for the government to ensure OP sustainability [2]. This study proposes a framework on the moderating effect of risk management on the impacts of corporate governance and investment strategy on OP sustainability in Nigerian context arguing from the perspectives of institutional and agency theories. Pension literature [3-10] have identified

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population ageing, declining fertility and labour supply, migration, early retirement, size of pension fund and its investment returns among the determinants of OP sustainability. Despite the impacts of these determinants, sustainability concern of OP has continued unabated as most OP could hardly take care of next generation of retirees in their present forms due to their deteriorating finances [1, 11]. For instance, evidences indicate worsening funding status of many OP schemes as a source of concern in both developed and developing countries which has caused default in OP benefits payment to pensioners with majority of them living in materially reduced post–work standard of living [12].

To address the above challenges, OP reforms were embarked upon globally to address the concerns of stakeholders [1, 13]. Emerging global efforts at reforming OP schemes for improved performance have identified sustainability as the main performance evaluation criterion [14]. Pension sustainability is the capacity of a pension system to adjust to economic, financial and longevity shocks without undermining its objective of prompt payment [15]. Among the areas of focus of pension reforms is addressing relevant regulations [16,17]. Nigeria followed suit with the passage of Pension Reform Act 2004 that brought into effects a contributory and fully funded OP, managed by private pension fund administrators (PFAs) and taken custody by pension fund custodians (PFCs).

A number of studies [18-19] have advocated that the need to provide an efficient regulatory framework on the activities of the pension industry operator cannot be over-emphasized in Nigeria. However, regulatory implementation among the operators has been rated ineffective [20-21]. For instance, the Nigeria experience of CG implementation was considered very weak when compared with the global standard for public companies [22-23]. As further asserted by Adeyemi *et al.*, [23], the collapse of 36 Nigerian banks in 2003 was attributed to poor culture of CG characterized by poor management, fraud and insider abuses by both management and boards of banks. Similarly, adequate skills to maximise investment of fund on the part of pension asset managers is still lacking in Nigeria [24]. This has the potential of leading to situations where pension assets are utilised on suboptimal investment portfolios [24]. This might have accounted for the losses in private pension fund investment during 2007-2008 financial crisis to the tune of $5.4 trillion across capital markets globally [25-26].

In Nigeria, the growing pension industry under CPS has not developed the required manpower needed for maximal investment of the CPS fund and most industries where pension funds are invested also lack adequate corporate regulation [27]. This has heightened the level of concern among the stakeholders in the CPS on the ability of pension fund operators (PFAs and PFCs) to perform their duties in line with objective of PRA 2004 to guarantee the sustainability of CPS [21]. In view of the above inherent challenges facing CPS sustainability, this paper proposes a framework of the impacts of investment strategies and corporate governance on the sustainability objective of CPS. The study also argues that risk management could moderate the effects investment strategies and corporate governance on sustainability of CPS. As a follow up, Section 2 discusses the related literature and develops hypotheses. Sections 3 presents the proposed framework while Section 4 concludes the study.

2. Literature Review

2.1. Occupational Pension Sustainability

OP benefits are deferred earnings meant to provide income to retirees after cessation of active employment to live a secured, independent and decent life after active service [12]. Occupational pension (OP) sustainability refers to a form of equilibrium between the outflows and inflows of pension on yearly basis into a foreseeable future with adequate resources and the ability to smoothen inter-temporal volatility [5]. Pension sustainability can be viewed from narrow and broad perspectives [28]. The narrow perspective focuses on the ability of the pension system to maintain a long-term balance between pension assets and liabilities. On the broad perspective, it is the capability of the pension system to provide adequate level of protection currently and in the future. OP scheme has become a major shareholder in major corporations through building up of large savings to finance capital market [29]. Thus, the significance of OP sustainability is vital for the capital formation of any country for meaning development to be achieved.

Empirical studies have considered several determinants of pension sustainability. Work of Blake *et al.*, [5] posited that factors such population ageing and declining fertility have negative effects on occupational pension sustainability. Blake *et al.,* [5] further stated that employees need to work longer and retire at later age than the stipulated minimum age to ensure sustainability occupational pension. Study by Honda [30] confirmed that investment return on pension asset investment as an essential component of a sustainable pension system. Other recent studies such as Kortleve [31] have further argued that for pension system to be sustainable it must be well-managed in the interest of the participants and other stakeholders and adjustable to exogenous shocks and risk sharing. In a study of relative ability of various pension plans to be sustainable, Ambachtsheer [32] found that neither defined benefits nor defined contribution can on its own solve the sustainability problems of OP. Ambachtsheer [32] concluded that the recent trend of partial and full transition from the DB plan to plan DC plan and privatisation of the management of pension funds across the world largely put employees at disadvantage of being the sole bearers of risks associated with pension systems.

2.2. Corporate Governance

Corporate governance refers to mechanism by which stakeholders of corporation place control over corporate insiders and management in order to have the stakeholders' interest protected [33]. Clark *et al*., [34] observe that corporate governance systems provide mechanisms for ensuring that firms are operated effectively and stakeholders' value are maximised in the face of conflicting interests between the shareholders and other providers of resources on one hand and the stakeholders in the firm and the management on the other hand. Corporate governance forces board of directors and senior management to be accountable and responsible for their actions so as ensure corporate discipline, transparency, independence, accountability, responsibility and fairness in dealing with stakeholders in the firms [35]. Pension plans like California Public Employees' Retirement System (CalPERS) and California State Teachers Retirement System (CalSTRS) played prominent role in advocating for good corporate governance reform to minimise to the barest level poor management of pension funds [36].

As noted by Van Dalen *et al*., [37], the financial crisis of 2008 brought to the fore the importance of good corporate governance on the sustainability of pension plans to centre stage. Study by Kasek *et al*., [38] concluded that improved pension fund corporate governance among specific areas that should be given priority for a sustainable pension. Studies have also document that CG impacts positively on pension fund management by creating trust amongst all stakeholders, reducing the need for constant prescriptive regulation, and facilitating supervision [39]. These impacts lead to well-managed pension funds. CG seeks more active shareholder-oriented policy for the fund investments that guide the management in dealing with being caught between aligning with the board of director or the stakeholders [40]. Clark [34] argued that for a pension plan that is determined to have well- governed funds, the design of the governance structure need to continuously seek to improve their functional performance.

Empirical evidence shows positive significant effects of corporate governance towards improving the going concern of firms [37, 41-44]. Conversely, other studies [45-46] demonstrated in their finding that CG can also have negative or neutral effects on the financial and non- financial performance indicators of firms. In their study, Ambachtsheer [47] argued that effective corporate governance has the tendency to improve the performance of the board by "doing the right things" rather than simply "doing things right". To them, in the context of a pension plans, right things include deciding the fund's mission, selecting competent fund manager/CEO, clearly delegating management authority, and monitoring outcomes against plans. Entine [48] further found that CG plays crucial role in minimising conflicts of interest between the management of public employee pension funds and the participants in the funds. Ambachtsheer *et al*., [49] establishes that over the longer term, adequate corporate governance adherence by pension fund has significant positive impact on pension fund performance adjusted for risk and expenses than poorly governed funds. Thus, we hypothesize as follows:

H1: There is significant positive effect of corporate governance on the sustainability of contributory pension scheme in Nigeria.

2.3. Investment Strategies

Investment strategies in pension regulation refers to established guidelines on the allocation of pension asset on stocks, bonds, estates and cash appropriately to meet the long run liability constraints without exceeding tendency to bear risk [50]. Investment restrictions on pension fund are meant to serve as a control mechanism to safeguard the pension assets and maximise the tendency of achieving the reasonable income at retirement [51-52]. Traditionally, investment strategies are determined on the bases of the pension asset value allowed to be invested in (equities, bonds, mortgage, money markets) organisations (public or private), domain (local or foreign) among others following portfolio theory [50]. Investment strategy formulation of pension fund has been shaped by valuation of pension assets [53]. However, this approach has been challenged by Merton [51] in favour of shifting to income-focused pension investment strategy. This has led to pension fund managers to re-evalaute their investment strategies on how to meet their obligations to their beneficiaries in the face of pension funds fluctuations due to market failures [53].

Studies focusing on impact of investments strategies on the performance of pension fund have remained inconsistent. For example, a panel study of 155 mutual funds between the period of 1975-1984, Grinblatt [54] found that majority (77%) used momentum investment strategies based on the positive feedbacks significantly earned better returns than those which are not using momentum investment strategy. However, Cocco *et al.*, [55] found that fluctuations in prices of equities have substantial impact on the investment strategies and pension plan capability to meeting the financial requirements of paying pension benefit as and when due. To address this impact of equities price fluctuations, Accenture [56] proposed innovative pension investment strategy as a mean of improving the returns on pension fund investment which assist in closing the payment gaps of pension liabilities. Study by Mesa-Lago [57] affirmed that returns on pension funds are affected by innovativeness of the investment strategies of pension plan positively. Palacios [58] found that when a pension fund is subject to limited investment constraints that allows foreign equity holdings they tend to achieve superior returns over the period than those with strict constraint on investment with largely domestic investible instruments. This finding was challenged by the results of study by Nofsinger [52] that showed there is no significant impact on investments returns of pension plans with restricted-investment strategy and non- restricted investment strategy policy of pension plans. Based on the above empirical evidences, we hypothesize as follows:

H2: There is significant positive effect of investment strategy of on the sustainability of contributory pension scheme in Nigeria.

2.4. Moderating Effects of Risk Management on Corporate Governance, Investment Strategy and CPS Sustainability

Risks on pension system are viewed as the possibilities of actual events differing from expectation which could lead to insufficient fund to guarantee payment of pension as and when due [59]. Risk management is conceptualised as strategies, processes and reporting procedures necessary to identify, measure, monitor, assess, control and report, on a continuous and ad hoc basis, all material risks, at individual and aggregated level, to which the pension fund or plan is or could be exposed, and their interdependencies [12]. Risk management is highly important as a critical success factor in a defined contribution scheme where pension risks is assumed by the employees unlike the defined benefit where the employer bears the risk [60]. Theoretical and empirical evidences have shown that the association between investment strategy and pension fund performance is still unresolved [61-62].

Similarly, literature indicated that the effect of corporate governance on performance remained mixed [37, 41-44,]. To further explore these inconsistencies empirically, risk management has been proposed to have moderating effect on the performance of the pension system, other funds and firms' performance and characteristics [63-65]. Arnold *et al.*, [3] provided evidence on the effects of risk management in assisting firms to comply with regulatory controls. Stewart [17] also established that a sound risk management practices by pension managers as essential for prudent operation of pension plan in minimizing of risks relating to pension fund's financial vulnerability and their potential adverse effects. In a study by Louargand [66], he asserted that risk management has become an integral part of pension fund management as risks influence the achievement of pension objectives. Risk management is highly important as a critical success factor in a defined contribution scheme where pension risk is assumed by the employees unlike defined benefit where the employer bears the risk [67].

In Nigerian context, study by Alabede *et al.*, [68] showed that risk preference negatively moderates the relationship between tax evasion attitudes and the compliance behaviour. Investment risks on pension fund can affect both the value of pension assets committed to investment and the earnings expected from such investment. Thus, managing the effect of risks cannot be neglected in view of its effect towards proper management OP plans [69]. Beasley *et al.*, [70] posited that based on in-depth interview of plan participants and advisers in US, UK, Germany and Netherland, Franzen [71] reveals that the approach of risk management is largely driven by regulatory and accounting issues than the specific risk profile of pension funds. Besides, implementation of risk management has been found to have positive impact on the value of firms [72]. In view of the effects of risk management, the following hypotheses on moderation effects of risk management are proposed:

H3: Risk management has moderating effect on the relationship between pension fund investment strategies and CPS sustainability in Nigerian.

H4: Risk management has moderating effect on the relationship between implementation of corporate governance and the sustainability of the CPS in Nigeria.

3. Proposed Theoretical Framework

The operational design of Nigerian CPS involves tripartite of National Pension Commission (PenCom), Pension fund Administrators (PFAs) and Pension Fund custodians (PFCs) acting in capacity of regulator, managers and custodians respectively. The role of PenCom as the regulator is in line with the tenet of institutionalizing activities of CPS operations by way of regulations as institutions. Institutions have been defined as "regulative, normative, and cognitive structures and activities that provide stability and meaning for social behavior" [73]. These institutions are exerted through isomorphic pressures coercive, normative and mimetic of institutional theory [74]. Institutional theorists [73, 74] posited that regulations serve as coercive and vital elements towards effective and efficient achievement of desired ends, missions and goals of an organisation. In relation to CPS, Ahmad [75] asserted that adopting regulatory framework on CPS operators lies within the framework of institutional theory. Abor *et al*., [76] documented that institutionalizing good corporate governance impact positively on firm sustainability as it minimizes the agency conflicts between the managers and the owners of the resources under the managers' stewardship.

Besides, the separation of ownership and management of pension fund indicate hallmark of agency problem which form the focus of corporate governance, investment strategy and risk management [77-78]. As noted by Abor *et al*., [76], the basic purpose of regulations on governance of privately managed pension funds is the need for minimization of potential agency problems between pension fund managers and owners. By inference, corporate governance and investment strategy and risk management are means of control on direction to be followed by fund managers to ensure long-term sustainability in the best interest of the contributors [78-79]. Thus, it is evident that investment strategy and corporate governance codes of pension are vital regulations towards the achievement sustainability objective of pension reform as well as minimizing the agency conflicts between the owners of the pension fund and the operators managing it. Similarly, risk management is in accordance with the general norm of attempting to minimize the risks associated with pension management Based on this, the theoretical framework was in conformity with institutional and agency theories. The framework proposed is presented in Figure 1:

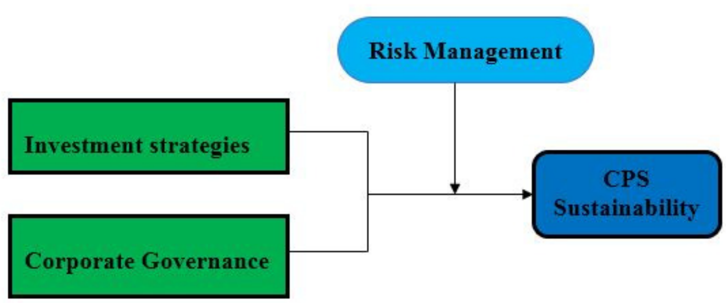

Fig. 1. Proposed theoretical framework

4. Conclusions

This study reviewed the effects of regulation on corporate governance and investment strategies of pension fund towards achieving the sustainability of occupational pension and propose a framework to that effect. The review of literature shows that good corporate governance and optimal investment strategies would enhance the sustainability of Nigerian CPS. However, literature evidence document, the effects of corporate governance and investment strategies remained mixed. Consequently, given the negative influence of risks on pension funds, we therefore proposed risk management as a moderating variable to strengthen the relationship in line with evidences from literature. The paper offers a guide to the pension industry regulator, operators and other stakeholders on the impacts of good corporate governance, optimal investment and adequate risk management of the accumulated CPS assets.

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