

Towards Innovative Housing Financing in Ghana: An Evidence-Based From South Africa's Pension Housing Financing System

Samuel K. Afrane¹ DeGraft Owusu-Manu² Kenneth Appiah Donkor-Hyiaman³ Francis Kwesi Bondinuba⁴

1. Department of Planning, Kwame Nkrumah University of Science and Technology, Ghana.

2. Department of Building Technology, Kwame Nkrumah University of Science and Technology, Ghana.

3. Department of Land Economy, University of Cambridge, CB3 9EU, Cambridge, UK.

4. School of the Built Environment, Institute for Housing and Urban Research, Heriot-Watt University, Edinburgh, UK.

*Email of Corresponding author: kwakuhyiaman@gmail.com

Abstract

It is onerous for low- and middle-income earners in most developing economies to satisfy the five (5) Cs lending criteria: character, capacity, capital, collateral and conditions. Consequently, about 80% - 90% of Ghanaians cannot afford a mortgage to purchase the cheapest developer-built unit. Key to the affordability problem is inadequate sources of long-term funds and the high cost of the available formal housing financing sources; i.e. mortgage. The concept of pension housing financing in South Africa provides evidence as a potential innovative solution to the above challenges in Ghana. Hence, through a review of extant literature based on axiological philosophy argues for the similar use of pension assets for 'direct' mortgage and micro housing financing in Ghana. In theory, pension loans and pension-secured loans could provide a better asset-liability matching for housing financing based on the Preferred Habitats Hypothesis; a potential solution to the long-term scarcity of mortgage funds, maturity gap problem and liquidity risk, which currently accounts partly for the substantial risk premiums on mortgage loans. Thus, eighty-five (85%) of SSNIT members have about 25-30 years to retirement. The paper starts a debate for the implementation of section 103 (2) of the National Pensions Act of Ghana, 2008 (Act 776), which provides the legal impetus for the collateralization of pension benefits as security in replacement of the adverse traditional brick and mortar collateral regime in accessing mortgage finance. Future studies could identify ways by which section 103 (2) could be implemented. Prior to that, testing the proposed hypotheses is vital.

KEYWORDS: Ghana, Housing Financing, Innovative Financing, Mortgage, Pension Loan

1. Introduction

Shelter is a basic necessity of life; which comes in the form of houses in this era. In fact, the Bank of Ghana (2007) and Buckley (1996) observe that housing is the most significant component of household wealth, acting as a source of protection against inflation in the long run; and the most important form of savings (Zhu Xiao, 2001). Beside this, housing and homeownership are very important aspects of Ghanaian values, which serve as a measure of social standing and prestige (Moss, 2003). Therefore, housing and homeownership are priorities for most households, predominantly low-income households in the majority of developing economies according to Ferguson (2000). Housing thus represents the largest single investment, taking about 50% - 70% of household income in Nigeria (Ajanlekoko, 2001).

At the national level, housing is an integral part of national output, evident in its significant contribution to the gross domestic product (GDP) and socio-economic development of nations. For instance, Chanond (2009) observes that the residential real estate industry alone contributes about 10 percent to the GDP of Thailand. Aside creating employment and providing related infrastructure (Sandilands, 2002) leading to improved cities and broader economic development, the real estate market including housing serves as a system for wealth creation and business development (Joint Centre for Housing Studies, 2005).

Yet, the decency, adequacy, affordability and quality of housing have become a significant source of worry for most developing economies especially in Africa (Yormesor, 2007). The critical short supply of housing resulting in huge housing deficits is a sign of under-development (Todaro and Smith, 2009), which reflects the mirror and the barometer of the state of health of a Nation; because of its backward linkages with the productive sectors of

the economy. For instance, with an estimated population of 24,965,816, the housing deficit in Ghana is estimated at about 1.57 million units as at 2011 (Ghana Statistical Service, 2012). Similarly, South Africa has had a chequered history of housing its populace.

It is well documented that financing is the major setback in the delivery of housing in Ghana (Boamah, 2011; Karley, 2009; Bank of Ghana, 2007, HFC Bank, 2007; Asare and Whitehead, 2006; Debrah, *et al.*, 2002) and South Africa (Melzer, 2007; Pillay and Naude, 2006; Melzer, 2005). To be concise, the financing challenge manifests in two forms: (1) scarcity of long-term housing finance for the middle and low income populace, and (2) the excessive cost of available formal financing sources (mortgage); averaging 30 percent per annum (3). Hence, the middle- and low-income populace who constitute the majority are priced out of the formal housing finance market.

In meeting the indispensable need of acquiring a home in economies with housing credit deficiencies, most households in Ghana and South Africa resort to incremental housing. In Ghana, incremental housing (self-help housing) accounts for nearly 80 - 90 percent of home acquisitions (Centre for Affordable Housing Finance in Africa, 2012; HFC Bank, 2007). Incremental housing is where prospective house owners become self-developers, relying on small crafts and trades to build gradually over 5 to 15 years using their sweat equity (Debrah, *et al.*, 2002); as and when it is available or otherwise personal savings accumulated over long periods (Mathema, 1999; Tomlinson, 2007). It is however constrained by its relatively long time delivery rate.

The search for a more efficient housing finance system prompts arguments in favour of mortgage financing; touted as the most capable and superior financier of housing (Bank of Ghana, 2007). In fact, in most advanced economies with well-developed housing finance systems, mortgage financing is inseparable from homeownership. A well-functioning mortgage market will primarily increase funding for housing at competitive cost and pricing to consumers of housing thereby enabling more people to afford decent housing (*ibid.*). Unlike South Africa with one of the largest mortgage markets in Africa; about US\$56.8 billion (Coovadia, 2006); Ghana's mortgage market is under-developed and inefficient although the mortgage facility has been operative in Ghana since 1956. However, common to both markets is the basic setback of low-income levels resulting in affordability problems, which skews the market to the rich in society.

As urbanization accelerates due to population increases, the search for a more efficient housing finance system that meets the needs of middle and low-income people has been on the radar of Governments, banks, housing experts and the international community. What is common however in both economies is the existence of pension funds with substantial long-term capital and liabilities. With the high prevalence of HIV/AIDS and low life expectancies, the long run benefit of pension benefits is questionable; thus, South Africa innovated and implements pension loans and pension-secured loans for housing; an approach which according to extant literature has been instrumental in allowing middle and low-income South Africans to benefit from their pensions while alive. It is worth noting the development of pension housing financing was enabled by the South African Pension Act of 1956.

In recent times, a number of studies have proposed for the similar utilization of Ghana's national pension fund (Donkor-Hyiaman, 2013; Ayitey, *et al.*, 2013; Boamah, 2011; Mahama and Antwi, 2006; Asare and Whitehead, 2006). In this study, we identify and discuss the vital lessons from South Africa's experience with pension loans and pension-secured loans for Ghana; as the promulgation of the new National Pensions Act, 2008 (ACT, 766)¹, s103(2) provides the necessary legal framework, making now the optimal time to consider these proposals. The new National Pensions Act, 2008 (Act 766) establishes a contributory three-tier pension system which requires

¹ The New National Pensions Act, 2008 (Act 766) provides for pension reform in the country by the introduction of a contributory three-tier pension scheme; the establishment of a National Pensions Regulatory Authority to oversee the administration and management of registered pension schemes and trustees of registered schemes, the establishment of a Social Security and National Insurance Trust to manage the basic national social security scheme to cater for the first tier of the contributory three-tier scheme, and to provide for related matters.

employers to contribute 13% and workers 5.5% of gross income, making a total contribution of 18.5%. Through a discussion of evidence from South Africa, we build a qualitative argument (herein '*our axiology*') to support the feasibility of pension mortgage financing in Ghana as a more efficient alternative to both the traditional incremental housing and mortgage financing for middle-income earners. Hence, the need to build the necessary quasi legal, administrative and financial structures for its implementation in Ghana; bearing in mind this field as a desert and less researched even in extant literature; an impetus for innovation.

The study is generally positioned in the philosophy of Axiology; which stems from the words worth (value) and reason. First applied by Lapie (1902) and Hartmann (1908) in the twentieth century, axiology is a useful tool for investigating conditions of life, the structure of reality and man's place in it (Hart, 1971). The problems and issues of pension contributions and investments as against benefits are sentimentally value-based with critical concerns for retirement planning, which are indisputably a matter of axiology as construed by Hartmann (1962). In all probability the quest for values, for things and events which are conducive to survival and the enhancement of life, engender the quest for innovation. Therefore, man in his very nature has been primarily interested in how things and events administer to his basic and derivative needs like housing, how they satisfy or frustrate him, how to preserve and promote the good things of life and curtail and erase objects which stifle his zest for living (ibid.).

Recent principal-agent problems and moral hazard issues in the management of pensions funds in Ghana raises axiological notions of good and bad as well as right and wrong, which are as old as real and apparent as implied by Hart (1971). Thus, valuational preferences are not artifacts we can dispense with, rather inquiry into the claims, truth, and validity of value judgments is a necessity of life itself, which permeates our life at every stage (ibid.; Prall, 1921). The preference for investing the 2nd tier pension assets of the new National Pension Fund of Ghana in housing financing to the traditional investment activities of the Social Security and National Insurance Trust (SSNIT)¹ shifts our attention from perhaps '*disliked convention*' to '*innovation*', which holds the potential to meeting the basic pressing needs and preferences of pension contributors in Ghana. Hence, when we prefer one event to another, praise one behavior and condemn another, like and dislike, we only magnify the importance of value (Perry, 1926), which axiologically situates this study. In fact, we not only value, but are always conscious of a scale of values, which scale rests with degree and quality of satisfaction. Hence, Ehrenfels (1897) opine that value is contingent upon desire: "*We desire things not because we comprehend some ineffable quality 'value' in them but we ascribe value to them because we desire them*", predicated on ascertained qualities of the object of proposition (Prall, 1921; 1929).

2. Concept of Pension Mortgage Financing in South Africa: History and Typology

Pension funds play a significant role in housing financing varying per country. For instance, in Mexico, pension funds invest in the direct construction of housing units, or make loans directly available to their members (Chirchir, 2006). In the United States, they invest a portion of the fund's asset portfolio in collective financing vehicles that either finance residential property development or which offer scheme participants access to mortgage loans on favourable terms. The Central Provident Fund (CPF) in Singapore allows members to access accumulated benefits or even in some instances, to use future payment streams for housing (ibid.). These housing loan facilities conceptually come in two forms: pension loans and pension-secured loans.

Pension mortgage financing is not uncommon to South Africa. It became necessary as an alternative source of housing financing in 1997 to low- and middle-income earners who were priced out of the formal mortgage finance market. That is, people who could not afford and/or access mortgage facilities based on the five lending criteria: capital, condition, collateral, character and capacity. Karley (2003) and Karley (2002) on the

¹ The Social Security and National Insurance Trust (SSNIT) established in 1972 currently manages the first tier national basic social security (10.5% of the total 18.5% contribution) under the new National Pensions Act, 2008 (Act 766). It originally operated under the NRCD 127 to administer the National Social Security Scheme, later converted to a Social Security Pension Scheme and then from Provident Fund to a Defined Benefit Scheme under the Social Security Act, 1991 (PNDC Law 2427).

“Challenges in Mortgage Lending for the Underserved in South Africa”, very similar to Ghana as reported by Karley (2002) on “Alternative Options to Mortgages in Ghana” summarizes the adverse situation as:

“[1] Capacity: that most have low and informal incomes, and in relation to price of dwelling it implies high default rate and insecurity for mortgage loan; [2] Capital: that there is general lack of savings to fulfil the initial deposit requirement; [3] Collateral: that prevalence of slums and backyard houses posed collateral risk; [4] Character: that many potential borrowers are unaccustomed to formal credit and financial obligations. Thus, they have no credit record for proper assessment; [5] Conditions: that macroeconomic volatility creates cash flow and inflation risk and limits long-term lending especially to low income borrowers and that the transaction cost of lending for low income is uneconomical”- p. 5.

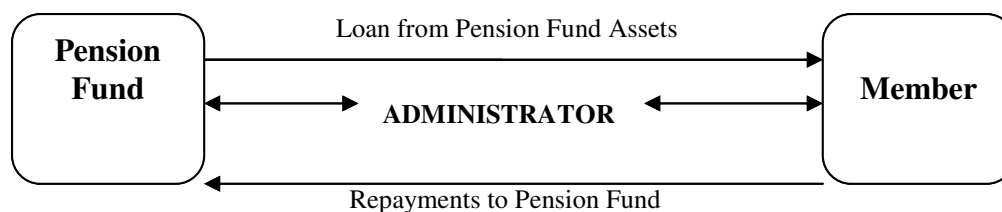
In fact, there was little justification for the South African poor with low life expectancies (52.11 in 2011) (UNDP, 2013) and high HIV/AIDS prevalence to save towards pensions. For many people, they would not live to enjoy the benefits of pensions; hence, why save towards pensions when they had no or inadequate shelter? Arguably, the assurance of a comfortable retirement is also discounted by proponents in the absence of decent shelter during the lifetime of a pension member. Sing (2009) puts it better, positing that:

“Prudent regulation emphasises the need to preserve retirement savings for fund members’ old age. However, what is the use of being assured of a comfortable retirement without a roof over one’s head today?”

More so, home ownership is considered as part of retirement benefits planning (Chirchir, 2006). Usually, most low- and middle-income earners are unable to build or acquire a house in their lifetime and would most likely be homeless during the economic inactive years of their life but for the availability of family houses or the help of their children. Thus, mobilizing pension assets for low- and middle-income housing financing as enabled by the Pension Fund Act (1956) was critical as a social policy and as a mechanism for circumventing the difficult-to-qualify five (5) lending criteria.

Therefore, two main models exist in South Africa to connect pension assets to housing financing: **pension loans and pension-secured loans**. The home loan can be used to purchase, build, repair, improve or even redeem an existing housing loan. The pension loan model was the first to evolve followed by pension-secured loans. Pension loans are direct loans from the fund secured in two ways: (i) over the member’s accrued benefits and (ii) effectively as a mortgage loan in favour of the fund over the property in question (Short, *et al.*, 2009). They are financed and administered internally (by the fund) or through a designated administrator depending *inter alia* on the in-house capacity, size and nature of the pension fund. The size of the loan is primarily determined by the accrued pension benefits which varies with time, size of contributions and returns earned from investments. Figure 1 below is a generic model of pension loans.

Figure 1: Pension Loan Model



Loan-to-value (of accrued pension benefits) has been in the range of 30% to 90%, usually attracting interest at the prime rate of (+1%) and an arrangement fee around 1% to 2% of the loan to the designated administrator, as determined by legislation (*ibid.*). Funds remain intact and are not disinvested from the fund and members

continue to make contributions to the scheme on periodic basis. Thus, the repayment of the loan follows a conventional bond-like interest-only over the life of the loan and the principal on maturity, usually over a five-year repayment term, upon retirement or leave of the fund (Rust, 2002). Interest on the loan principal is paid from borrowers' occupational income separate from the statutory pension deductions. The payment of the principal follows after the principle of '*sinking funds*', where periodic amounts are set aside from income to meet out a future expenditure. This accumulates as future benefits from which the loan principal is paid. An alternative would be the sale of the property (if was the collateral) upon borrower default. Pension loans amounted to R9 billion (£596.610 million) in 2009 (Sing, 2009).

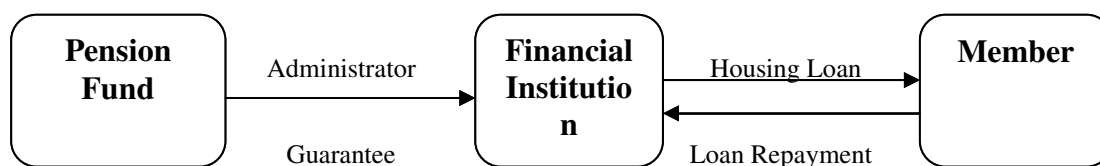
Aside utilizing member's (borrower) accrued pension benefits, the pension loan model allows a member to effectively in principle borrow other people's benefits as a mortgage. In this case, a borrower's accrued benefits is conceptually considered as '*capital*' (deposit towards mortgaging), while the accrued benefits of other members is employed as the '*mortgage loan amount*' --- supplement to the tune of the house price. While in the first model, the accrued benefits of a pension member is collateralized, the second model utilizes the house as the loan collateral. In effect, both models enable the activation of otherwise deferred benefits as spendable income towards the acquisition of a house.

Although a useful alternative to the formal mortgage loan and unsecured loan, pension loans are beset with challenges, which are mainly administrative in nature. Most pension funds lack the requisite technical acumen in housing loan origination, underwriting and administration. Moreover, pension housing loans reduce the investible funds of pension funds in other investment conduits; which possess investment risk diversification and reduction issues. As a solution to these two bottlenecks, a bill was passed recently to allow pension funds to be used as guarantees to secure housing loans from specialised institutions that are better equipped to administer housing loans than the pension funds. Thus, enabling the transfer of lending risk to third party institutions. This resulted in the creation of the pension-secured (-backed) loan model, which has gained relative popularity due to extensive usage in recent times. In 2005, Alexander Forbes issued its first tranche of R750 of its R2 billion pension-backed securitisation programme to cater for 80,000 members of the 500 funds under its Housing Finance arrangement '*Homeplan*' (Chirchir, 2006).

Pension-secured loans enable contributors to secure housing loans by collateralizing their accumulated benefits to a third party; the pension fund (or administrator) in this case acts as a guarantor (Sing, 2009). The loan amount is limited to one third of the pension benefit outstanding at retirement age and should be repaid for a maximum period of 30 years within the normal retirement date (Chirchir, 2006). Repayment is bond-like in structure; monthly interest-only payments to the lender via direct salary (payroll) deductions during the term of the loan and the principal deducted from accrued pension benefits at the maturity of the loan. The pension contributor (borrower) continues to make monthly contributions to the fund as a separate deduction. As an advantage over the pension loan model, members have a variety of institutions to borrow from and therefore guarantee borrowers' preferences as well as stimulate competition necessary for competitive pricing.

For this reason, housing loans guaranteed by pensions attract favourable rates (ibid.). The interest rate on the loans is generally negotiated and fixed for all eligible members, but should attract a premium in the absence of pension/provident fund as collateral for increased risk. In this case, the loan looks like an unsecured loan. Although the bond-like repayment structure enhances members' ability to afford these loans, it increases default risk regarding the repayment of the principal – a major issue faced by lenders and at the heart of the global economic crisis. In this vein, most lenders in the advanced economies especially the United States and the United Kingdom have restructured most loans on amortizing principles (Baum and Hartzell, 2012). The Figure 2 below is a model of pension-secured loans.

Figure 2: Pension-Secured Loan Model



The Financial Services Board noted that pension-secured loans amounted to R5 billion (£331.450 million) as at December 2005 and R10 billion (£662.900 million) in 2008 by Alexander Forbes. By 2009, pension-secured loan totalled R17 billion (£1.127 billion) (Sing, 2009); demonstrating significant growth in the industry. With average sizes of R19, 000 (£1,260), $\pm 30\%$ and $\pm 70\%$ of all pension-secured loans are from retirement funds and third-party loan providers respectively (ibid.). According to the Centre for Affordable Housing Finance in Africa (CAHF) (2012), there are about 850 000 outstanding pension-backed loans based on average loan size of about R20, 000. Default rates are low, reported at 2 percent in 2009 (ibid.). The securitisation of the pension-backed loans will go a long way in sustaining 'Homeplan' (Hogg, 2005).

3. The Legal Framework for Pension Mortgage Financing in Ghana: The New Pension Law, 2008 (Act 766) in Perspective

A characteristic of the investment problem in any country is the lack of a preferred investment conduit; which is also a function of the legal framework. In other words, the existence of an investment opportunity depends on its legality as enabled or disallowed by legislation. Pension housing financing is an investment conduit which is doable if supported by the legal environment of a country; which sets the rights and obligations of parties. For instance, the Pension Fund Act (1956) of South Africa is very instrumental in setting the modalities for the investment of pension assets in housing financing. Therefore, not much is anticipated in the absence of legal enablement for the operation of pension housing scheme, since pension funds are *statute barde* from allocating investible funds to investment conduits illegally.

In 2008, the new National Pensions Act (Act 766) was enacted to provide for pension reform by the introduction of a contributory three-tier pension scheme. This requires employers as per section three (3) to contribute 13% and workers 5.5% of gross income, making a total contribution of 18.5%. This is distributed below as:

- a. First tier basic national social security scheme (13% out of total contributions); which is managed by the SSNIT is mandatory for all employees in both the private and public sectors. 2.5% out of 13% is a levy for the National Health Insurance scheme. With a registered membership of 1,390,945 and monthly minimum average salary of GH¢497 and GH¢688 from public sector workers, the total amount of GH¢825.955 million (43.19%) was collected in 2011 over GH¢576.833 million previously (Social Security and National Insurance Trust (SSNIT), 2011). The total investment portfolio of GH¢3.42 billion increased over GH¢2.90 billion previously (ibid.).
- b. Second tier mandatory occupational (or work-based) “*defined contribution*” pension scheme (5% out of total contribution) is “*fully funded*” by employees is privately-managed by approved Trustees assisted by Pension Fund Managers and Custodians. It is designed primarily to give contributors lump sum benefits.
- c. Third tier voluntary provident fund and personal pension schemes, supported by tax benefit incentives for workers in the informal (blue collar) and formal sectors (white collar).

The second tier mandatory occupational pension (MOP) scheme is the subject matter of this study. Yermo (2000) defines pension funds as independent non-profit making legal entities that are established and managed mainly for the purpose of providing retirement and other old-age benefits. The security of retirement benefits is a function of its economic value, which is necessary to ensuring that such benefits, usually monetary in nature are sufficient for their intended purposes. As an investment unit, return on the investments of pension funds is a *sine qua non* to sustaining its establishment. Thus, Yermo's description only focuses on the superficial objective of setting up a pension fund and ignores the critical managerial and investment process needed to achieving these objectives.

Therefore, pension funds from a more comprehensive perspective are profit making entities effectively requiring profits to maintain the values of members' contributions. In other words, pension contributions by themselves do not achieve their set objectives especially in unstable macro-economies like that of Ghana. It is for this reason that pension trustees as per section 176 are mandated to invest pension funds and assets in real estate among other investments. Given the broad typology of the real estate asset class although classified by Baum (2009) into four main divisions: public equity, public debt, private equity and private debt real estate, investment in any division is highly discretionary to and influencible by pension trustees. This means that investment in residential real estate especially low- and middle-income housing financing which is a major issue in Ghana could be starved of funds. This is against the backdrop that the "*defined contribution principle*" underlying the second tier scheme gives the right to members to determine their investment preferences as well as bearing the investment risk.

Priority of investment allocation in this regard cannot be compromised; and the specification of the use of members' accrued benefits from the second tier scheme for mortgage financing is that of priority, magnifying the state's commitment to providing alternatives for housing financing in Ghana. Consequently, Section 103 (2) of the Act despite subsection 1 provides that "*a scheme may allow a member to use that member's benefit to secure a mortgage for the acquisition of a primary residence*" It is this provision in the new legislation that provides the catalyst that establishes the legal background, making now the optimal time to consider proposals for pension housing financing in Ghana. According to the Temporary Pension Fund Account (TPFA) Committee/Board (2013), the 2nd-tier has accumulated GH¢851.732 million (US\$425.866 million) as at 23rd April, 2013 in the last two years. Simply, given that affordable housing costs about GH¢30,000 (Karley, 2009), GH¢851.732 million could purchase about 28,391 affordable houses in Ghana for prospective beneficiaries (ignoring J-Curve effect).

In spite of this legal provision, it is worthy to note that there are absolutely no administrative and regulatory frameworks to implement this housing financing opportunity. The regulatory framework would elaborate on the legal provision by setting the standards and modalities for borrowing a member's accrued benefits. These would include loan origination, underwriting and administration standards; while the modalities would specify and clarify the pension housing financing models; either pension loans and or pension-secured loans permitted under the scheme. In the absence of these instruments, section 103 (2) is not operational and as good as non-existent without any benefit to members. Therefore, it is essential to build an evidence-based argument and proposal to inform the authorities concerned especially the National Pensions Regulatory Authority (NPRA) about the feasibility of pension housing financing in Ghana; particularly as a potential alternative to existing low- and middle-income housing financing options: incremental housing financing and the traditional mortgage financing.

4. Establishing the Feasibility of Pension Housing Financing in Ghana: A Qualitative Analysis

The Social Security and National Insurance Trust (SSNIT) has demonstrated in no uncertain terms its capability to manage the public pension fund to maximize profits for its agents in the public interest. Issues about inadequate pension benefits lingers on and this has raised public concerns about the investment activities of the SSNIT in recent times. Lately in 2012, the Director-General of SSNIT admitted that some of its investments in some companies had gone bad, and had decided to either recapitalise those companies to make them more vibrant or liquidate them. A typical example is the State Transport Corporation (STC) bankruptcy case. As the major shareholder in the corporation, the SSNIT according to the revelation had made losses in the last five year prior to the reportage.

Similarly, the central car park constructed by the SSNIT has been deserted by the target clients – workers of the various corporate institutions located around Ridge and Heritage Towers in Accra according to investigations conducted by Economy Times. The central car park has a parking capacity of 818 cars, but less than 150 cars patronise it daily due to high rate charged by the Trust according to the Economy Times. The car park charges GH¢2 every hour and attracts GH¢50p for every subsequent hour, seasonal tickets attracts a fee of GH¢4 a day for eight hours while parking for a week attracts GH¢20 every week. The irony is that both the Ridge and the Heritage Towers were also built by the SSNIT. This phenomenon of low patronage is likely to threaten SSNIT's investment in this regard. There is an economically rational explanation to this phenomenon; as the alternative of parking at unauthorized places like on the road is costless. Thus, institutional factors like planning regulations on car parking are of material essence in salvaging the substantial investment by the SSNIT.

Furthermore, Mustapha (2012) anticipated that Merchant Bank, one of SSNIT's most prized assets in the 1990's was now just turning out to be a liability on the books of the pension fund manager. By the close of 2013, the bank had been divested to Fortiz Equity Fund; a deal which has received intense public outcry. A worry for the Central Bank is that SSNIT does not seem to have an exit strategy for its investments, and lacks the required expertise to manage the banks and institutions in which it holds majority shares (Amissah-Arthur, 2010).

A cursory look at recent evidence points to substantial principal-agent problems and moral hazard issues. This could be attributed principally to the '*Defined Benefit*' principle underlying the old pension law; which mandated the SSNIT to make investment decision as trustees on behalf of contributors. In other words, contributors virtually had no say regarding the choice and allocation of their contributions to investments; which is still the case with the first-tier basic social security managed by SSNIT. Contributors bear the investment risk because of the moral hazards although the SSNIT in principle must bear the investment for having the right to make the investment decisions. This has become an albatross hanging on the neck of contributors as a petition of the court of law by one interested party, a contributor to SSNIT was thrown out of the court on grounds of capacity. The mind boggling question many are asking is what normally informs SSNIT's decision before deciding on projects that will attract good returns on the investment of the pension funds it manages?

In the government's new pension law, 2008 (Act 776), the burden of pensions-management will be shared by SSNIT with private fund-managers; a principle actively promoted in the media about cutting the large investible funds of the SSNIT into bits for better-managed as a result of high government or quasi-government institutional failure in operating successfully in the public interest. Consequently, as part of the new three tier pension scheme, the second tier MOP which is fully funded by contributors and privately-managed is to operate as a '*Defined Contribution*' scheme, which is managed by pension trustees assisted by pension managers and custodians; not SSNIT. This gives the contributor the right to choose a preferred pension fund trustee among the many registered lot to oversee to the investment of their contributions.

Impliedly, the principle also allows contributors to make their own investment choices and bears the investment risk subsequently. However, the intermediation of the pension trustees between its clients (contributors) and the ultimate pension fund managers may be a clog on contributors' ability to exercise their right fully without influence from the trustees. Despite the defined contribution principle, in the last three years during which time pension trustees were been registered, the 5% second-tier MOP contribution of contributors were initially lodged in a temporary account effective from 1st January 2010 and subsequently in Treasury bills. Although statutory, such a provision temporary deprived contributors of the right to choose their preferred investments by assuming weakly that all contributors are risk averse. The opportunity cost is the possible high returns they could have earned in alternative investments like stocks and real estate.

In detail, the challenge is that under the old scheme, pension entitlement was based on the average of the best three months' salary. A worker could earn between 50% to 80% of his/her total contribution as pension and an upfront lump sum payment of 25% of the entitlement made by SSNIT to the retiree and the remainder spread over the qualifying years - i.e. up to 72 years. This was based on the total contribution of 17.5% going to SSNIT, albeit 2.5% of the amount remitted to the National Health Insurance Scheme (NHIS) by SSNIT. Under the new

scheme, SSNIT is not going to make lump sum payment. Again, the retiree's monthly pension is going to be reduced by 25% compared to what he/she could have earned under the old scheme because of the 5% deduction to the 2nd Tier. The implication is that the 2nd Tier (MOP) must be invested in a manner that it generates enough returns to compensate for the loss of the 25% lump sum as well as the 25% loss in the monthly pension payment. Workers will receive reduced monthly pensions and the upfront lump sum payment may not compensate for the reduction since for about three years now, the funds are not being invested to yield maximum returns (Boateng, 2011).

Perhaps, it was coincidental that the Graphic Business Published its story and editorial that Pensioners across the country were lamenting about the dwindling power their miserly monthly payments could muster in the face of prevailing economic conditions. There was talk some time ago that SSNIT can do far better than it does to invest profitably and thereby considerably improve pensions. Nonetheless, SSNIT and pension fund trustees and managers have a problem; that is the investment opportunities in the country are not many (Asante, 2012). This could be attributed to the nation's underdeveloped capital market. For this reason, according to Antwi (2012) is "encouraging people to bring in more products once they meet the standard and protect the investor. Therefore, according to the Director-General "the Securities and Exchange Commission (SEC) is currently developing rules and regulations to develop the Real Estate Investment Trusts (REITs) industry to create a strong link between the capital market and the real-estate sector" (ibid.).

According to Antwi (2012), "*the SEC seeks to promote REITs as an instrument for real-estate investment to help solve the housing deficit in the country ... in low-cost housing requirements*". He further emphasizes that the REIT "*... is aimed at addressing the funding constraints of the real estate sector by providing the funding for developers as well as prospective home owners*". There have been many attempts in the past by governments to bridge the gap but the challenge had been how to raise funds from donors and other investors to be able to carry out any meaningful housing project.

A REIT is a collective investment company that owns and typically operates income-producing real estate or real estate related assets. They provide a way for individual investors to earn a share of the income produced through commercial real estate ownership, without actually having to go out and buy commercial real estate. REITs have however been in limited existence in Ghana since 1994 when the HFC Bank (which has been at the forefront of mortgage financing in the country), established the HFC REIT, the first one in August of that year. We therefore need to develop the REITs so that there can be a link between the capital markets which will be providing these funds through these trusts, and there would be subsequent investment of these funds in real estate. The product would help to address the lack of capital for real estate sector and bridge the gap between the supply and demand of houses in Ghana. The capital market is indispensable in raising funds to undertake housing projects that can benefit all of us; hence the "*time had come for the government to look within*" (Antwi, 2012).

This is where we believe the 5% second-tier pension contributions could be of immense use to contributing towards mitigating the substantial housing deficit especially in the affordable (low-income) housing market. The affordable housing market should be the focus for the government because of the substantial housing finance market failure facing the growing and thickening middle-income class. In fact, Oppong-Beeko, the President of Manet Group¹ reveals that "*Ghana does not have a shortage of medium to high-end homes, but a shortage of low-income housing*". What is intriguing is that the 'Defined Contribution' principle of the second-tier pension scheme allows individual contributors to invest their 5% remittances through a pension trustee which is similar to an individual buying a share of a REIT. In this vein, the size of the 5% pension contribution which is inadequate to purchase real estate due to its large lot size is adequate to purchase the shares of a REIT. Thus, our proposal is that, the REIT which in this case should be a mortgage trust would then lend by providing pension loans and pension-secured loans to the members of SSNIT secured by their second-tier 5% pension contributions as section 103 (2) of the new pension law, 2008 (Act 766) enables. We contend that pension housing financing is

¹ Manet Group is Ghana Real Estate Developers Association's Award winner for Best Developer (1998) and the Millennium Excellence Award – Shelter Category (1999). Manet's developments include Manet Cottage, Manet Gardens, Manet Ville, Manet Palms and Manet Court situate in Accra.

feasible, while noting the critical need for empirical evidence to fill the research gap. Thus, our arguments are potentially thematic and curved as a future research agenda.

4.1 Elimination of Maturity Gap Problems and Asset-Liability Mismatching

The long-term liabilities and investment horizon of pension fund assets correlate positively with the long-term assets of mortgage financing aside matching its substantial capital requirement - both around 20 to 30 years. Theoretically, this supports the Market Segmentation and Preferred Habitat Hypotheses: investors have preferred habitats which match maturity of assets to liabilities (Culbertson, 1957; Modigliani and Sutch, 1966). It is therefore a prerequisite in eliminating the potential maturity gap created by the use of short-term assets in financing long-term housing liabilities (Short *et al.*, 2009). It is therefore hypothesized that:

*H1 = Pension Mortgage Financing (PMF) provides a better asset-liability matching
and eliminates the maturity gap problem of hitherto mortgage financing products.*

4.2 Liquidity Risk, Risk Premium and Mortgage Rate Reduction

Asset-liability matching would reduce liquidity risk, reduce mortgage rates and expand mortgage funding opportunities as well as increase mortgage market participation necessary to improve mortgage affordability (Chiquier and Lea, 2009). This is the result of a reduction of the liquidity premium, required to compensate and/or motivate a short-term investor to invest for the long-term. For instance, Sing (2009) observes that in South Africa the average pension secured-loan attracted interest of the prime rate +1%; which is cheaper than bank mortgage lending and greatly cheaper than unsecured lending (prime rate + 5%). This is a benefit of pension loans and pension-secured loans as a source of long-term housing finance (Melzer, 2007; Short, *et al.*, 2009).

Further in a recent study by Owusu-Manu *et al.*, in (2013) the risk premium charged by lenders on mortgages over the period from year 2003 to 2013 was the most important determinant of the mortgage rate. Thus, pension loans and pension-secured loans priced at the prime rate without a risk premium will reduce the cost of loans significantly; which will improve the affordability positions of most SSNIT members. More so, repayment of pension loan and pension-secured loan principals are senior-subordinated to mortgage repayments and are guaranteed by the legal mandate to deduct contributions at source. This makes it less risky than a traditional mortgage. Thus:

*H2 = Pension Mortgage Financing (PMF) reduces liquidity risk, risk premium
and mortgage rates compared with the traditional mortgage financing.*

4.3 Collateral Risk Reduction via Collateralization of pension benefits

In addition, the high risk premium regime in Ghana is a function of the unfavourable property rights system which has expanded collateral risk; thus, constraining the use of brick and mortar (property) as collateral for credit. However, by activating hitherto deferred pension benefits for pension housing financing, collateralization of pension benefits is possible and less risky compared with using property as security for credit. Consequently, pension housing financing circumvents the current high collateral risk in Ghana which would enure pricing benefits to contributors. Therefore, it is further hypothesized that:

H3 = Collateralization of pension benefits reduces collateral risk

4.4 Better Retirement Planning Option

Pension lending however puts retirement savings at risk; but even government bonds theoretically considered risk-free are practically risky due to interest rate risk and inflation risk. However, the positive co-movement of house values and inflation makes it a viable investment in very high inflationary economies like Ghana with little or no inflation-hedging investment vehicles; aside the potential of strong future cashflow generation (Hudson-Wilson, *et al.*, 2003; Bond *et al.*, 2007). More so, it is difficult to sustain the argument that long-term pension

savings are more important than the immediate need for shelter (Sing, 2009). What is the point in saving for the long term if the contributor (i) is unlikely to survive in the long term and (ii) has no roof over his head for those years when he is alive and economically active? Hence:

*H4 = Pension Mortgage Financing (PMF) is a better retirement planning options
for the 2nd tier occupational scheme of the new National Pension Scheme*

By leveraging otherwise deferred long-term savings for immediate benefit; contributors can release the equity that is locked in their pension funds to facilitate their entry into the housing market and/or improve their housing conditions. The successful repayment of the loan preserves the long-term benefits of the plan and provides a double benefit at retirement of a home and a pension. Furthermore, what is the use of pension benefits when members may not live to enjoy these benefits due to low life expectancies? For instance, life expectancy at birth as at 2012 in Ghana is 64.6 years and 53.1 years for SSNIT members born in 1980 (United Nations Development Project, 2013); which may even be lower for members born before 1980.

4.5 Source of Long-Term Mortgage Finance

Moreover, according to Donkor-Hyiaman (2013) about eighty-five (85%) of SSNIT members have about 25-30 years to retirement; which confirms two findings. First, it is an indication of a young working and growing middle class as supported by the National Housing and Population Census (2010). Secondly, there is less pressure on the SSNIT to provide pension benefits because pensioners constitute only about 8% of the total membership; that is 112,522 out of a total of 1,390,945 (SSNIT Annual Report, 2011). This provides high prospects for growth in the pension fund industry and underpins the need to match these long-term pension assets to housing financing, which is also long-term in nature.

H5 = The 2nd tier is a source of long-term mortgage finance

Lastly, an alternative and/or complement to long-term mortgage financing via pension loans and pension-secured loans could be the development of a micro housing finance scheme to support SSNIT contributors' self-help processes towards housing acquisition. As evidence of the potentially useful utilization of pension assets in financing mortgages for SSNIT contributors, the pension fund industry contributed 84% and 20% to GDP in South Africa and Kenya respectively; and accounted for N\$78.5 million as end-user home loans to members in Namibia as of March 2008 (Short, *et al.*, 2009; Mutero, *et al.*, 2010). Pension funds that have effectively connected their housing developing activities with housing financing has benefited low and middle-income earners. The Central Provident Fund of Singapore is a good example; about 81% of the Singaporean population own a Housing Development Board (HDB) flats, and over 95% of the adult population are homeowners (HDB, 2000; McCarthy, *et al.*, 2001).

5. Conclusion

In summary, the lack of long-term housing finance, low incomes, and the high mortgage rates resulting in affordability problems in Ghana has skewed the traditional mortgage market towards the rich to the detriment of low and middle-income earners. Majority if not all low-income and middle-income earners do not satisfy the five (5) lending criteria. That is, due to a weak contact with the formal financial institutions, they cannot demonstrate enough character to access a mortgage loan. Their low-income status makes it difficult to save and for that matter raise the required deposit as well as show adequate capacity to repay a loan. Unstable macroeconomy underpinned by unfavourable interest rates and volatile inflation regime makes mortgages excessively expensive against what low- and middle-income earners can afford.

However, the situation is not hopeless as the need to look further inward into the various fund mobilization mechanisms in Ghana has never been any stronger than hitherto. In this regard, the national pension fund of Ghana like others in South Africa and Singapore provides enough impetus to assuaging the housing financing needs of low- and middle-income earners. Like any legal investment, section 103 (2) of the National Pension

Law, 2008 (Act 776) provides the legal enabling environment for innovating pension housing financing models like pension loans and pension-secured loans as is the case in South Africa.

Mobilizing pension assets for housing financing could be a relatively easy way to mitigating the prevailing principal-agent problems and moral hazards in the management of pensions in Ghana. Pension loans and pension-secured loans promise substantial affordability improvement opportunities by serving as a source of long-term affordable housing finance, improvement to borrowers liquidity (capital) through the activation of otherwise deferred pension benefit for immediate use. Pension assets provide a better matching for housing financing compared with the shorter term (maximum of 15 years) mortgages provided by mortgage lenders; with the potential of spreading repayment over a relatively longer period; hence, reducing the probability of default. By investing pension assets in housing, the effect of inflation on investments is better mitigated as an inflation hedge as research reveals.

A better asset-liability matching could reduce the maturity gap problems faced by commercial banks in lending long with short-term deposits. This would reduce liquidity risk and consequently the risk premium which has been reveal by research as very substantial and problematic in the pricing of mortgages in Ghana. Even more importantly, given that many SSNIT members (low and middle-income) may not live to enjoy their pensions benefits, imputes a responsibility on government and pension authorities to consider the financing of housing a way of making pension benefits beneficial to contributors during their active economic years. This proposals though tangible requires further research and testing especially using a quantitative approach. In this vein, further studies should focus on the social acceptability, economic and financial feasibility and the institutional workability of pension housing financing in Ghana.

REFERENCES

- Ajanlekoko, J.S., (2001). Sustainable Housing Development in Nigeria. In: The Financial and Infrastructural Implication International Conference on Spatial Information for Sustainable Development. Nairobi, Kenya, 2–5 October, 2001.
- Asante, K.B. (2012). Voice From Afar: Many of the old die before their time. Daily Graphic: Accra. August 3, 2012, 22:00 GMT.
- Ayitey, J.Z., Gyamfi-Yeboah, F. and Agyei-Mensah, S. (2010). The State of Residential Mortgage in Ghana. *The Ghana Surveyor*, 3(1), 33-44.
- Bank of Ghana (2007). The Housing Industry in Ghana: Prospects and Challenges, Bank of Ghana Policy Briefing Paper. Bank of Ghana: Accra.
- Baum, A. (2009). Commercial Real Estate Investment: A Strategic Approach. 2nd Edition. EG Books: London.
- Baum, A. and Hartzell, D. (2012). Global Property Investment: Strategies, Structures, Decisions. Wiley-Blackwell: UK.
- Benita, G. and Lauterbach, B. (2004). Policy Factors and Exchange Rate Volatility: Panel Data Verses a Specific Country Analysis. Jerusalem: Bank of Israel: Research Unit, Foreign Exchange Activity Department
- Boamah, N.A., (2011b). The Macro-Economy and Housing Credit Market in Ghana. *An International Multi-Disciplinary Journal, Ethiopia*, 1(1), 25-39.
- Boateng, K. (2001). My Fears about the New Pension System [Online]. Myjoyonline: Accra. August 28, 2011, 22:20 GMT.
- Bodie, Z., Marcus, A.J. and Merton, R.C., (1988). Defined Benefit versus Defined Contribution Pension Plans: What is the Real Trade-offs? University of Chicago Press: USA.
- Bond, S.A., Hwang, S., Mitchell, P. and Satchell, S.E. (2007). Will Private Equity and Hedge Funds Replace Real Estate in Mixed-Asset Portfolios? *Not likely. Journal of Portfolio Management*. Special Issue 2007, 74-84.
- Buckley, R.M. (1996). Housing Finance in Developing Countries. Basingstoke: Macmillan.
- (CDD) Centre for Democratic Development-Ghana (2002). The Growth of Democracy in Ghana despite Economic Dissatisfaction: A Power Alternation Bonus, September 2002. Research Paper 11:
- Chanond, C. (2009). Pro-Poor Housing Finance. Thailand Country Report, June.

- Chirchir, S.L. (2006). Promoting Home Ownership Using Retirement Benefits [Online]. Kenyan Retirement Benefits Authority, Research Paper Series 01/2006, June 2006. Available at: <http://www.rba.go.ke> [Accessed 9 June 2013].
- Culbertson, J.M., (1957). The term Structure of Interest Rates. *Quarterly Journal of Economics*, 71(1), 485-517.
- Debrah, W. K., Ibrahim G., and Rufasha, K. (2002). Micro Finance for Housing for Low/Moderate-Income Households in Ghana. In: Conference on Housing and Urban Development for Low-income groups in Sub-Saharan Africa, 22-26, July 2002.
- Donkor-Hyiaman, K.A. (2013). Rethinking Ghana's Housing Financing Challenge: A Paradigm Shift from the Traditional Mortgage Financing Approach. Unpublished MPhil Dissertation submitted in Partial Fulfillment of an MPhil Degree in Planning Growth and Regeneration. Department of Land Economy. University of Cambridge, United Kingdom.
- Ehrenfels, C.V. (1897/98). System der Werttheorie. *Psychologie des Begehrens*, Vol. I & II, Grundzüge einer Ethik, Leipzig: Reisland.
- Ghana Statistical Service (2012). 2010 Population and Housing Census: Summary Report of Final Results. Ghana Statistical Service (GSS), Accra, 1 - 105.
- Hart, S.L. (1971). Philosophy and Phenomenological Research. *International Phenomenological Society*, 32(1), 29-41.
- Housing Development Board (HDB) (2000). Facts on Public Housing in Singapore. HDB Board, Singapore. www.hdb.gov.sg
- HFC Bank (2007). Challenges and Opportunities for Developing Mortgage Markets (The Ghanaian Experience) [Online]. HFC Bank: Ghana. Available at: <http://www.hfcbankgh.com> [Accessed July 20, 2012].
- Hudson-Wilson, S., and Guenther, D.P. (1995). The Four Quadrants: Diversification Benefits for Investors in Real Estate—A Second Look. *Real Estate Finance*, 12(2), 82-99.
- IFC (2013) International Finance Cooperation, the World Bank group, Access to Finance Sub-Saharan Africa available on <http://www.ifc.org> [Accessed 17 Feb, 2014]
- Joint Centre for Housing Studies (2005). Framing the issues: housing finance, economic development, and policy innovation, *Housing Finance International*, September.
- Karley, N.K. (2009). An Overview of and the Prospects for Ghana's Real Estate Market. Royal Institute of Chartered Surveyors (RICS): UK.
- Mahama, C.A. and Antwi, A., (2006). Land and Property Markets in Ghana. 2006 World urban Forum; prepared by Royal Institute of Chartered Surveyor. Vancouver, Canada. June 19-23, 2006.
- Mathema, A.S., (1999). Housing and Land Markets in Kathmandu, Nepal. Department of Urban Studies and Planning Massachusetts Institute of Technology: Cambridge, MA.
- Melzer, I., (2006). How Low can we go? Charting the Housing Finance Access Frontier: A Review of Recent Demand and Supply Data, s.l.: FinMark Trust: South Africa.
- Modigliani, F. and Sutch, R., (1966). Innovations in Interest Rate Policy. *American Economic Review*, 56(1), 178-197.
- Moss, V. and M. Pillay (2000). End User Survey and Studies. *NHFC Research series*, Johannesburg.
- Moss, V. (2003). National Housing Finance Corporation. *Housing Market Bulletin*, 1(4), 1-7.
- Moodley-Isaacs, N., (2008). Act sets out how your Fund may help you with a Home Loan. Personal Finance [Online]. Available at: <http://www.persfin.co.za> [Accessed 3 July 2013].
- McCarthy, D., Mitchell, O.S. and Piggott, J., (2001). Asset Rich and Cash Poor: Retirement Provision and Housing Policy in Singapore, Pension Research Council Working Paper. Wharton School, University of Pennsylvania.
- Mutero, J.G., (2007). Access to Housing Finance in Africa: Exploring the Issues in Kenya. FinMark Trust with support from UN Habitat for Humanity.
- Mustapha, S. (2012). SSNIT on Assets 'Selling Spree' as it Gears up for the New Pension Regime. Daily Graphic: Accra. August 10, 2012, 00:15 GMT.
- Mwilima, N., Fillipus, H. and Fleermuys, F., (2011). Evaluating the Namibian Housing Market: Opportunities and Constraints. s.l.: Bank of Namibia.
- Owusu-Manu, D., Donkor-Hyiaman, K.A., Edwards, D.J., and Ayitey, J. (n.d). The Relative Importance of Mortgage Pricing Determinants in Mortgage Affordability in Ghana: An Ex Post Attribution". [Forthcoming].
- Perry, R.B. (1926). General Theory of Value: Its Meaning and Basic Principles Construed in Terms of Interest. New York: Longmans Green.

- Prall, D. W. (1921). A Study in Theory of Value. *Publications in philosophy*, 3(2). New York: Berkeley University of California Press.
- Prall, D. W. (1929). Aesthetic Judgment. New York: Thomas Y. Crowell Company.
- Sing, L., (2009). Pension-Secured Loans: Facilitating Access to Housing in South Africa. FinMark Trust. A Report prepared for the FinMark Trust. Available at: URL: <http://www.finmark.org.za/documents/Pensionsecuredloans.pdf> [Accessed 10 August 2012].
- Short, R., King, J., Musa, O., Hobden, T. and Sing, L., (2009). Mobilizing Pension Assets for Housing Needs - Experiences in Southern Africa. A Report Prepared by Genesis Analytics for the FinMark Trust.
- (SSNIT) Social Security and National Insurance Trust, (2011). Annual Report.
- Todaro, M.P. and Smith, S.C. (2009). Economic Development. Addison-Wesley: U.S.A.
- Tomlinson, M. R. (1999). South Africa's Housing Policy: Lessons from four Years of the New Housing Subsidy Scheme. *Third World Planning Review*, 21(1), 283–296.
- Tomlinson, M.R., (2007). Literature Review on Housing Finance Development in Sub-Saharan Africa, s.l.: FinMark Trust. Available at: <http://www.finmark.org.za> [Accessed 19 August 2010].
- (UNDP) United Nations Development Programme (2013). Human Development Report. United Nations Development Programme.
- Yermo, J. (2000). Investment Regulation of Insurance Companies and Pension Funds. *Insurance and Private Pensions Compendium for Emerging Economies Book 2 Part 1:3B*.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Recent conferences: <http://www.iiste.org/conference/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

