# Employer Related Determinants of Scheme Design in Occupational Defined Contribution Schemes in Kenya

Justus Tari[1]*        Nelson H.W. Wawire[2]        Charles Ombuki[3]

1.Faculty of Commerce, Egerton University, P.O. Box 13357 -20100, Nakuru, Kenya

2.School of Economics, Kenyatta University, P.O. Box 43844 -00100, Nairobi, Kenya

3.School of Business & Economics, Machakos University College, P.O. Box 136, Machakos, Kenya

*Email of corresponding author: jtari1@yahoo.com

**Abstract**

This paper aims to provide an understanding of employer related determinants of scheme design in occupational defined contribution schemes (ODCS) in Kenya. ODCS involve no promises about the size of the benefits and no risk to the employer. The risk of ending up with low or no benefits falls entirely on the scheme members. It is necessary therefore, that determinants of scheme design are carefully considered in establishment and review of defined contribution schemes to deliver adequate benefits to members. Based on modern portfolio and the life cycle theories, the study investigated the key employer related determinants of scheme design in ODCS in Kenya. Primary data were collected using a questionnaire administered to scheme administrators in the sample. Descriptive statistics were used to profile respondents, describe sample characteristics and a logistic econometric model was applied to evaluate the employer related determinants of scheme design. The study showed that the key employer related determinants of scheme design were the employer's budgetary constraint and recognition of the length of service of scheme members. From the findings, it was recommended that employers should in addition consider pensionable salary, retirement age and occupation in designing schemes. This would guarantee members a reasonable standard of living after retirement.

**Keywords:** Scheme Design, Occupational Defined Contribution Schemes.

## 1. Introduction

The level of attention paid to the provision of adequate retirement benefits for workers around the world has continued to increase. The emerging consensus around the world has been a shift away from dominant state provision towards private funded schemes in a competitive environment (Nyagah, 2000). Given the three main objectives of retirement income systems of redistribution, saving and insurance, an ideal system should build around the three pillars of old age security. First pillar, being government providing some minimum income to all workers at retirement and if possible income to the elderly whether previously employed or not. A second pillar, of properly regulated occupational schemes, which when added to the first pillar, target an income replacement rate adequate for employees to maintain their standard of living after retirement. Lastly, a third pillar of well regulated, individual retirement schemes in which workers can make additional savings to supplement their retirement savings or for those without access to occupational schemes.

The history of formal pension schemes in Kenya is closely associated with the social, economic and political developments towards an industrial society that the country witnessed after the Second World War (Marwa, 1992). The earliest insured pension plans in Kenya were mainly administered from England and were exclusively for the whites. Such plans were informal and discriminatory. It was only in the late 1950s that the colonial government set up a social security scheme along the lines of one existing in England as well as encouraging the development of occupational pension plans (Angima, 1985). The period after independence saw a steady growth in the number of pension plans owing to the social, economic and industrial growth in the country.

The earliest retirement benefits schemes to be established in Kenya were insured plans providing guarantees to members on the level of benefits (Angima, 1985). With time the insured plans gave way to Defined Benefit (DB) schemes which guaranteed a pension based on an actuarial formula targeting a replacement ratio. Since then, many schemes converted from DB to defined contribution (DC). In the year 2001, DC schemes constituted 84 percent of all occupational schemes and by 2005 the proportion had risen to 87 percent (Retirement Benefits Authority, 2005). DC plans have become the primary retirement savings vehicle for many employees in Kenya and the DC design continues to grow in importance. However, DC plans, unlike DB plans, involve no promises about the size of the pension and no risk to the employer with entire risk borne by scheme members. Therefore, a DC scheme should be based upon a design that will deliver adequate benefits to members.

DC schemes in Kenya have not been well-designed as a single integrated financial product by the three key players namely; employer, trustees and regulator. In addition, there are no legislative guidelines and standards

for design of DC schemes to guarantee adequate benefits to members. These, coupled with lack of periodic reviews of DC scheme design, compromise the benefits to members. The consequence of failure in scheme design is members getting low or no benefits when leaving service or on retirement. The risk of ending up with a low or no benefits falls entirely on the scheme members. A natural measure of this risk is the probability of falling short of the pension available from a fully-funded DB plan.

While some studies have been carried out in the area of retirement benefits such as conversion of DB schemes to DC schemes (Chirchir, 2010); pension choices (Cocco and Lopes, 2004) and effect of insufficient knowledge on retirement savings (Lusardi, 2003). In Kenya, Njuguna (2011) carried out a study on the determinants of pension fund corporate governance while Ngetich (2012) carried out a study on determinants of the growth of individual pension schemes. There has been no specific study exploring the employer related determinants of scheme design in ODCS in Kenya and is what this study explored.

An ODC scheme that is well designed will be a single, integrated finanacial product that delivers at a reasonable cost to the scheme member a pension that provides a high degree of retirement income security. The pension should provide an adequate replacement income for the remaining life of the member or partner and remove the risk that the member outlives the resources. The main employer related determinants of scheme design in ODCS in the literature reviewed composed of; pensionable salary, budgetary constraints, recognition of longer service, retirement age and occupation.

## 2. Research Methodology

The study adopted a cross-sectional descriptive design. A descriptive study was used because the purpose was to describe the employer related determinants of DC scheme design, make specific recommendations and evaluate factors influencing the design. The population comprised of 1339 ODCS as published in the Retirement Benefits Authority Annual Report for the financial year 2011 – 2012 (RBA, 2012).

### 2.1 The Model

The logit model was used to examine the employer related determinants of scheme design in ODCS in Kenya. This was appropriate since the dependent variable was categorical with binary response. The regressand (scheme design) was a binary variable taking 1, if the design was good or 0 if poor. The model was adopted from that of Nzuki (2012) with modification. The decision on scheme design depended on the level of benefits expected, which was equivalent to maximization of expected utility. The trustees, therefore strived to maximize utility while employers sought to maximize profits. The scheme administrators were assumed to be risk neutral and therefore preferred good designs to poor designs. Good design results when the objective function is realized or closely mirrors the actual results, poor design results in low benefits.

If the dependent variable (scheme design), Y=1, meaning that the scheme design is good, then:

$P_i = E(Y=1 \mid X_i) = \beta_0 + \beta_1 X_1 + \ldots + \beta_i X_i + \varepsilon_i$ ……………………………………………….(1)

Where: Y=1 means the scheme has a good scheme design, otherwise zero, and $X_1 \ldots X_i$ are independent variables,

$E(Y=1 \mid X_i)$ means a function in which the regressand and regressors are Y and $X_i$ respectively

$\beta_0$ is a constant, $\beta_1 \ldots \beta_i$ are regression coefficients

$P_i$ is the probability of a good design and $\varepsilon_i$ is the error term

Since the probability of a good design is $P_i$, then the probability of a poor design is $(1-P_i) = 1/(1+e^{zi})$, hence the ratio of the probability that a scheme will have a good design to the probability that it will be poor is as follows:

$P_i/(1-P_i) = (1+e^{zi})/(1+e^{-zi}) = e^{zi}$ …………………………………………………….(2)

Therefore;

The natural logarithm of (3.2) is:

$L_i = \ln (P_i/(1-P_i)) = Z_i$

$= \beta_0 + \beta_1 X_1 + \ldots + \beta_i X_i + \varepsilon_i$

The study evaluated employer, trustee and regulatory related determinants of scheme design, thus, the model specification was:-

$\ln (P_i/(1-P_i)) = Z_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon_i$

Where;

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$ and $\beta_5$ were the parameters to be estimated

$X_1, X_2, X_3, X_4$ and $X_5 =$ pensionable salary, employer's budgetary constraint, recognition of longer service, the retirement age and occupation.

*2.2 Sampling Technique and Sample Size*

According to Sekaran (2003), in order to enhance research ability to draw generalizations on the whole population, the sampling process and sample selection should consider the properties of the population. The selection of the sample was based on stratified random sampling technique. The population was first divided into mutually exclusive groups that were relevant, appropriate and meaningful in the context of the study (Sekaran, 2003). Thus, the schemes were selected according to three different scheme sizes; small, medium and large schemes. Small schemes were those with a membership of 50 or less, medium schemes with a membership between 51 upto 100 and large schemes with a membership above 100. Tracing the differences in the parameters of the subgroups within a population would not have been possible without the stratified random sampling procedure (Frankfort-Nachmias, *et al.*, 1992). Once the population had been stratified, simple random sampling was used to draw schemes whose administrators were to respond to questionnaires. Since this study involved a survey (questionnaires) and on the basis of the past research on pensions involving schemes as the unit of the analysis (Blake, 2004), a sample of 200 was chosen. A sample of 200 schemes representing 15 percent of the population was extracted. The justification for the sample size was that 15 percent was adequately representative and allowed reliable generalizations on the population of study.

The study used questionnaires in which the respondents were subjected to structured and unstructured questions. In this study, the indicators for measuring the employer related determinants of scheme design had a high content validity since the development of the measurement items was based on an extensive review of the literature, detailed evaluations and validation by earlier studies (Blake, 2004). According to Sekaran (2003) the external or internal reliability depends on consistency. Reliability is essentially a synonym for consistency and replicability over time, over instruments and over groups of respondents while validity is what it purports to measure (Cohen *et al.*, 2000). There are four methods, which can be used for assessing reliability: (i) the test-retest method, (ii) the alternate-form method, (iii) the split-halves method, and (iv) the internal consistency method (Nunnally, 1978). Of these four methods, internal consistency reliability is the most commonly used in assessing survey instruments and scales and hence used for this study. Internal consistency is an indicator of how well the different items measure the same concept. This is important since a group of items purporting to measure one variable should indeed be clearly focused on that variable (Nunnally, 1978). The Cronbach's alpha (α) is a reliability coefficient that indicates how well the items in a set are positively correlated to one another (Sekaran, 2003). Generally, reliability coefficients of 0.70 or more (α ≥0.70) are considered good (Nunnally, 1978) and was the benchmark used for this study.

The employer related determinants had Cronbach's alpha of 0.758 and was considered good. None of the items could be deleted since this could have led to lowering of the coefficient and reliability. There are three popular methods to evaluate the validity of scales. These are content validity, criterion-related validity, and construct validity (Hair *et al.*, 1998). This study used content validity where every single item of the employer related determinants of scheme design questionnaire was item analyzed by experts in pensions and also by academicians.

*2.3 Data Analysis*

Since this study was inferential in nature, data analysis started with testing for the statistical significance. The primary purpose of the inferential statistics was to estimate or predict the employer related determinants of scheme design from a selected sample of cases. A logit model which is a specialized regession model of binomial response variables was used. Logit models use the inverse of the standard normal cumulative distribution function and assume the categorical dependent reflects an underlying quantitative variable. Since the explanatory variables were categorical, dummy variables were used to contrast the different categories. For each variable, the baseline (reference) category was chosen as very important and was contrasted with all remaining categories. Since the explanatory variables had four categories, utmost three dummy variables were created to investigate all the differences in the categories with respect to the dependent variable. The model was used to predict the probability of a good design based on the predictors. The model established the employer related determinants of scheme design in Kenya, the significance level used was 0.05 percent.

Multicollinearity issues were considered because in multivariate models, it is desirable for each independent variable to be highly correlated with the dependent variable, but not among the independent variables. The study used the guide that 0.80 is a more acceptable threshold level and severe multicollinearity existed if the coefficient was more than 0.8. Also the omnibus tests of model coefficients were performed to check that the model (with explanatory variables) was an improvement over the baseline model (with no explanatory variables). This was determined through differences in the -2 log-likelihoods by use of chi-square tests. Cox & Snell and Nagelkerke R squares were used to establish the proportion of variation in scheme design explained by the model. The Hosmer and Lemeshow tests were used to assess the goodness of fit of the model to the data. Lastly,

the classification table of logit model was used to determine the proportion of the outcome that was correctly classified relative to the null model. The Odds Ratios were used in the interpretation of the significant coefficients in the equations. The tests and first logit were analysed using SPSS. Since marginal effects could not be computed in SPSS, these were run in Stata and predicted the probability of achieving a good design.

### 3. Employer Related Determinants of Scheme Design
This section presents results and discusses the employer related determinants of scheme design for occupational defined contribution schemes.

### 3.1 Descriptive Statistics of the Employer Related Determinants of Scheme Design
Table 3.1 presents the results of the descriptive statistics of the employer related determinants.

**Table 3.1: Descriptive Statistics for Employer Related Determinants**

|  | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Pensionable salary (basic or consolidated) | 184 | 3 | 4 | 3.82 | .389 |
| Employer's budgetary constraint | 185 | 1 | 4 | 3.62 | .674 |
| Recognition of longer service | 185 | 1 | 4 | 3.51 | .841 |
| The retirement age | 182 | 1 | 4 | 3.80 | .617 |
| Occupation | 185 | 1 | 4 | 3.69 | .827 |
| Valid N (listwise) | 175 |  |  |  |  |

Source: Survey Data, 2014

From table 3.1, the mean scores were used to gauge the overall position of respondents. The determinants were ranked in terms of their mean scores, from not important to those considered very important. A score of 1 represented not important, 2 least important, 3 important and 4 very important. A mean score of 3 and above captured the important determinants. Respondents generally agreed that; pensionable salary (3.82), the retirement age (3.80), occupation (3.69), employer's budgetary constraint (3.62) and recognition of longer service (3.51) were very important determinants. There was a general agreement among the respondents that all the five were important employer related determinants of ODCS. Pensionable salary was considered the most important determinant. The findings supported those of Blake (2007) that pensionable salary, occupation, employer's budgetary constraint, the retirement age and recognition of longer service were key considerations in scheme design.

### 3.2 Regression Results for Employer Related Determinants of Scheme Design
Since a logistic model was used for the analysis, test for multicollinearity was important. Given that the explanatory variables did not have high correlation (>0.8), they were all considered good for model. The Omnibus Tests of Model Coefficients were used to check that the model (with explanatory variables included) was an improvement over the baseline model (without explanatory variables). The inclusion of the determinants reduced the -2 log likelihood by 62.966 with 12 degrees of freedom. The -2 log likelihood (deviance) measured how well the model explained variations in scheme design. The p value for the result was 0.000 which was less than the conventional cut off significance level of 0.05. Hence it was concluded that the addition of the determinants to the model explained the variations in scheme design. Further, the model with a Cox & Snell and Nagelkerke R Square of 0.305 and 0.434 respectively, explained between 30.5 and 43.4 percent of the variation in scheme design. In addition, the Hosmer & Lemeshow test of the goodness of fit suggested that the model was a good fit to the data as p=0.810 (>.05). The null hypothesis that the model does not fit was thus rejected. Lastly, the classification table of the logistic model for employer related determinants, correctly classified the outcome for 83.8 percent of the cases compared to 70.5 percent in the null model (without explanatory variables), providing a marked improvement in the results. The table that follows presents the results of the first logit regression estimating the employer related determinants of a good scheme design.

**Table 3.2: Logit Regression Results for Employer Related Determinants of Scheme Design**

| Variable | | B | S.E. | Wald | Df | Sig. | Odds Ratio |
|---|---|---|---|---|---|---|---|
| Step 1[a] | Pensionable salary(Not Important) | .004 | .650 | .000 | 1 | .995 | 1.004 |
| | Employer budget | | | 10.870 | 3 | .012 | |
| | Employer budget(Not Important) | 42.899 | 31221.266 | .000 | 1 | .999 | 4273527797.755 |
| | Employer budget(Least Important) | 1.811 | .891 | 4.137 | 1 | .052 | 6.119 |
| | Employer budget(Important) | 1.569* | .513 | 9.340 | 1 | .002 | 4.803 |
| | Recognition service | | | 5.864 | 3 | .118 | |
| | Recognition service(NotImportant) | .881 | 1.453 | .368 | 1 | .544 | 2.414 |
| | Recognition service(Leastimportan) | .727 | .926 | .617 | 1 | .432 | 2.070 |
| | Recognition service(Important) | 1.325* | .550 | 5.811 | 1 | .016 | 3.762 |
| | The retirement age | | | .162 | 2 | .922 | |
| | The retirement age(Not Important) | 40.389 | 21996.108 | .000 | 1 | .999 | 3474802104.388 |
| | The retirement age(Important) | -.450 | 1.118 | .162 | 1 | .687 | .637 |
| | Occupation | | | .461 | 3 | .927 | |
| | Occupation(Not Important) | .578 | .851 | .461 | 1 | .497 | 1.782 |
| | Occupation(Least Important) | 22.412 | 19827.069 | .000 | 1 | .999 | 5410172991.316 |
| | Occupation(Important) | -20.404 | 12924.010 | .000 | 1 | .999 | .000 |
| | Constant | -2.020 | .300 | 45.305 | 1 | .000 | .133 |

*Implies the Coefficient is Significant at 0.05 and ** implies it is significant at 0.01
Source: Survey Data, 2014

Table 3.2 presents the regression coefficient (β), the Wald statistic (to test the statistical significance) and the Odds Ratio for each determinant category (ranking). The results indicated that the coefficient for employer budget was significant (Wald=10.870, df=3, p<.050). Therefore the variable employer budget was making a positive contribution to the predictive power of the model. The coefficient for employer budgetary constraint (ranked as important) was significant and positive, indicating that an increased ranking of employer budgetary constraint was associated with increased odds of achieving a good scheme design. The Odds Ratio shows that respondents who ranked employer budgetary constraint as important were five (5) times more likely than those ranking it as very important (reference category) to achieve a good scheme design, holding other determinants constant. The coefficient of recognition of length of service (ranked as important) was also significant and positive, indicating that an increased recognition of length of service was associated with the increased odds of achieving a good scheme design. The Odds Ratio indicates that respondents who ranked recognition of the length of service as important were three (3) times more likely than those ranking it as very important (reference category) to achieve a good scheme design. The table that follows presents the results of the marginal effects from the regression results.

**Table 3.3: Marginal Effects of Employer Related Determinants: Y=Pr(Good design)=.22215069**

| Variable | dy/dx | Std. Err. | Z | P>|z| | [ 95% C.I. ] | X |
|---|---|---|---|---|---|---|
| Pension salary(Not Important) | .0007447 | .11256 | 0.01 | 0.995 | -.219878  .221367 | .165605 |
| Employer budget(Least Important) | .4086207 | .20638 | 1.98 | 0.058 | .004129  .813112 | .044586 |
| Employer budget(Important) | .3228824* | .11302 | 2.86 | 0.004 | .101369  .544396 | .229299 |
| Recognition service(Not Important) | .1840167 | .34607 | 0.53 | 0.595 | -.494274  .862307 | .031847 |
| Recognition service(Least Important) | .1468006 | .21029 | 0.70 | 0.485 | -.265366  .558967 | .057325 |
| Recognition service(Important) | .2741081* | .12515 | 2.19 | 0.029 | .028811  .519406 | .184713 |
| The Retirement age(Important) | -.0692471 | .15144 | -0.46 | 0.647 | -.366069  .227575 | .057325 |
| Occupation (Not Important) | .1132942 | .18476 | 0.61 | 0.540 | -.248831  .47542 | .063694 |

*Implies the Coefficient is Significant at 0.05 and ** implies it is significant at 0.01
Source: Survey Data, 2014

From table 3.3, the predicted probability of achieving a good design was 0.22 for administrators of ODCS. Marginal effects and discrete changes were listed under dy/dx column. For a unit increase in the ranking of employer budgetary constraint by those ranking it as important than very important, the predicted probability of achieving a good design increased by 32.29 percent, holding other determinants constant at the reference points.

In addition, for a unit increase in the ranking of recognition of length of service, the predicted probability of achieving a good design increased by 27.41 percent, for those ranking it as important than very important, holding other covariates at the reference points. It was concluded that employer's budgetary constraint and recognition of length of service were the most important employer related determinants of scheme design for occupational defined contribution schemes.

The findings supported those of Smith (2006) who established that employer budgetary constraints manifested by the contribution rates chosen and matching programmes were important determinants for scheme design. The results were also consistent with those of Shiraz (2004) who reported that if, for instance, the objective was to reward long service, this could be achieved by having a lower employer contribution level initially and followed by a higher one, say after five years. The employer would set the contribution objective as say, 'delivering five times the member's final salary on average' at retirement. However, the results showed that pensionable salary, the retirement age and occupation were largely disregarded.

## 4. Conclusion

Though ODCS involve no promises about the size of the benefits and no risk to the employer, they expose members to the risk of ending up with low or no benefits at retirement. The scheme is supposed to be designed as a single integrated financial product to guarantee adequate benefits to members. Employers gave consideration to their budgetary constraint and the recognition of length of service as important determinants in scheme design. However, they largely disregarded pensionable salary, the retirement age and occupation, making them weak determinants.

## 5. Recommendations

Employers need to take into consideration their budgetary constraints, length of service, pensionable salary, the retirement age and occupation since they contribute to a synergy of higher benefits. No one determinant should be given overly due attention while disregarding others, since it is the summation of all employer related determinants that contribute to a good design. Employers could for instance, adopt actual salary and not basic pay as the pensionable salary, have a higher normal retirement age and consider the occupation since compensation influences contribution levels. This is because results show that employers in Kenya only considered their budgetary constraint and the recognition of length of service as important determinants in scheme design. However, they largely disregarded pensionable salary, the retirement age and occupation. This evidently led to the conclusion by most administrators that their schemes were poorly designed, leading to low benefit levels.

## References

Angima, J.N.M. (1985), Employers' Accounting for the Cost of Pension Schemes in Kenya, Unpublished MBA Project, University of Nairobi

Blake, D. (2007), It's all Back to Front: Critical Issues in the Design of Defined Contribution Pension Plans, Paper presented at the Annual Conference on Frontiers in Pension Finance and Reform 2007, 22-23 March 2007.

Blake, D., Cairns, A., and Dowd, K. (2004), The Impact of Occupation and Gender on Pensions from Defined Contribution Plans, Pensions Institute Paper, Cass Business School.

Chirchir, S. (2010), Conversion of Defined Benefit Schemes to Defined Contribution Schemes. *Retirement Benefits Authority*

Cocco, J.F. and Lopes, P. (2004), Defined Benefit or Defined Contribution? An Empirical Study of Pension Choices.

Cohen, L., Manion, L. and Morrison, K. (2000), *Research methods in education.* (5th ed.). London: Routledge Falmer.

Frankfort-Nachmias, C. and Nachmias, D. (1992), *Research Methods in the Social Sciences.* 4th edition. London: St. Martin's Press, Inc.

Hair, J. F., Anderson, R. E., Tatham, R. L. and Black, W. C. (1998). *Multivariate Data Analysis* (5th ed.). Chicago: NJ: Prentice Hall.

Lusardi, A. (2003), Planning and the Effectiveness of Retirement Seminars, *National Tax Association Proceedings*, Dartmouth College.

Marwa, S.M. (1992), Actuarial Costing Methods used in Insured Pension Schemes in Kenya, Unpublished MBA Project, University of Nairobi.

Ngetich, C. (2012), Determinants of the Growth of Individual Pension Schemes in Kenya. Unpublished MBA Project, University of Nairobi.

Njuguna, A. (2011), Determinants of Pension Governance: A Survey of Pension Plans in Kenya. *International*

*Journal of Business and Management*, 6 (11)

Nunally, J. C. (1978), *Psychometric Theory*. New York: McGraw-Hill. 305

Nyagah, N. (2000), Chief Executive's Report, Retirement Benefits Authority- Annual Report July 1999- June.

Nzuki, D.M (2012), Factors Affecting Adoption of Enterprise Resource Planning Software in the Manufacturing Sector in the Nairobi Metropolitan, Nairobi, Unpublished PhD thesis.

Retirement Benefits Authority, (2012), Unpublished Kenya Annual Report for the year 2012

Retirement Benefits Authority, (2005), Unpublished Kenya Annual Report for the year 2005

Sekaran, U. (2003), *Research Methods for Business. A Skill Building Approach*. (5th ed.) New York: John Wiley.

Shiraz, J. (2004), Designing Defined Contribution Pension Schemes, Quarterly Newsletter of the Retirement Benefits Authority, Vol.3, March, 2004

Smith, S. (2006), Persistency of Pension Contributions in the UK: Evidence from Aggregate and Micro-data", CMPO Paper, The University of Bristol.

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/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

**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 Digtial Library , NewJour, Google Scholar