Journal of Economics and Sustainable Development www.iiste.org
ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online)
Vol.6, No.6, 2015

Investigation the Effect of using ICT Tools on Success of Companies at Increasing Market Share (A Case Study: Manufacturer of Smart Homes and Offices of Tehran)

Amiran, Heydar[1] Jamshidi Goharrizi,Mozhdeh[2*] Jamshidi Goharrizi, Mehrnaz[3]
1.Assistant Professor in Entrepreneurial Management in Azad Islamic University of Tehran
2.MA from entrepreneurial management in business in Azad Islamic University of Tehran
3.BS student in Environmental engineering in Parand University

Abstract
This paper studies the relationship between information and communication technology and market share in manufacturer of smart homes and offices of Tehran using yearly data (2008-2014). Using the panel data and pooled models, this paper analyses the effect of using ICT tools on success of companies at increasing market share in manufacturer of smart homes and offices of Tehran. Most of the studies in this area indicate that in developed countries, this technology has a positive and meaningful effect on productivity and market power. For this reason, Author discussed and examined the relationship between ICT and market share in manufacturer of smart homes and offices industries in Tehran. The results show the meaningful relationship between ICT and market share and also the relationship between ICT and decrease in marginal cost in these firms at the period.
Keywords: Information and communication technology (ICT), Market share, Manufacturer of smart homes and offices, Panel data.

1. Introduction

Generally Information & Communication Technology (ICT) consists of all the advanced technologies of communication and transformation of data in telecommunication systems. This system can be a telecommunication network, a number of communicated computers and connected to a telecommunication network and also programs used in them.

ICT focuses on important place of information, information storage and process devices and devices of transformation and acquiring information. It's obvious that in this way, apart from communicational potentials, other media, like radio and television would be also in the list of communicational devices (information distribution and publication channel). Relaying the structure of ICT prerequisites an informational laying structure in which all communicational devices and equipments like telecommunication equipment's, radio and television would be involved.

Generally, it worth noting that the evaluation of the impact of information and communication technology on increasing market share and market power business has been considered since 1990s. One of the most important variables is aggregate productivity. ICT can promote economic growth in three ways: first, as an economic sector; second, as the input used in others sectors; and the third way is through the impact of ICT on the productivity of inputs. If the growth rate of ICT is based on the efficiency benefits, this would lead to productivity growth in the economy. There, part of technology has been attributed to the productivity growth in ICT. The fact is that the use of different types of ICT in economic and business sectors is booming and it I expected that the role of ICT in the economy of the countries improve.

The use of ICT on firm's market power can be crucial. The difference between developing countries and developed countries in terms of ICT infrastructure is significant. Information and communication technology consists of all the manufacturing and service industries that store, transmit and display data and information electronically. Manufacturing industries include those that complete the information process which are transmission and display of the data for usage in electronic processes in order to display, measure and store physical phenomenon or control physical process. Service industries include those which are in the process of strengthening the performance of information and communication process through electronic devices. The use of information technology devices and modern communication devices in firms can help expand firms' market and increase their market power. In fact, firms through ICT can increase their monopoly power in the market and by reducing their transaction costs with using the information technology markets which lead to higher profit and lower lateral transaction costs.

Therefore, the main problem in this study is whether the use of modern communication devices and ICT indices can be effective in reducing firm's transaction costs and in turn increase firm's profit and market power. Thus, it is necessary to study the impact of ICT on firms' success in increasing market share. Which for this in a case by case method, house producing companies and smart office producers of Tehran has been studied?

This study is guided by the following research questions: What is the relationship between ICT indexes and market share in manufacturer of smart homes and offices industries in these selected firms? Does ICT have

significant effect on these firms' market share in the short-run and in the long-run?
Accordingly, the following hypotheses are considered:
Hypothesis 1: There is a long-run relationship between ICT indexes and market share.
Hypothesis 2: Improvement in ICT indexes leads to increase in market share.

In this paper the relationship between ICT indexes and market share in manufacturer of smart homes and offices industries is tested by using panel data of 13 selected firma in Tehran over the period 2008 - 2014. This paper consists of four sections. Section 1, discusses the introduction, in which the background and rationale of the study is outlined. Section 2, covers the details of the data and research methodology employed in this study. Section 3, reports the findings and discussions. The final section contains the conclusions.

2. Data and Methodology

2.1. Model specification

We first start estimating the effects of each independent variables on the dependent variable "market power" by using pooled ordinary least squares model. We create a pooled data by combining time series and across section data for manufacturer of smart homes and offices industry. The pooled regression model doesn't estimate the impact of variables separately on each firm, but instead yields an overall measure of each variables on the group of firm. If we find large standard errors for variables, the next step is testing the fixed and random effect which are more advanced models if the pooled one was not appropriate.

Panel data provide a large number of point data, increasing the degrees of freedom and reducing the collinearity between regressors. Therefore, it allows for more powerful statistical tests and normal distribution of test statistics. It can also take heterogeneity of each cross-sectional unit into account, and give "more variability, less collinearity among variables, more degrees of freedom, and more efficiency" (Baltagi, 2001).

In this paper, regressions are based on data concerning a group of 13 firms in manufacturer of smart homes and offices of Tehran over the period 2008 - 2014. Data for ICT expenditure, total cost in each firm, total output, wage, capital cost, price of production for 13 firm in these industry come from the each firm data base.
In this paper we pool cross-section and time series data to study relationships between ICT tools and market share.

1.1. Estimation Procedure

In order to investigate the possibility of panel cointegration, first, it is necessary to determine the existence of unit roots in the data series. For this study we have chosen the Im, Pesaran and Shin (IPS, hereafter), which is based on the well-known Dickey-Fuller procedure.

Im, Pesaran and Shin denoted IPS proposed a test for the presence of unit roots in panels that combines information from the time series dimension with that from the cross section dimension, such that fewer time observations are required for the test to have power. Since researchers have found the IPS test to have superior test power for analyzing long-run relationships in panel data, we will also employ this procedure in this study. IPS begins by specifying a separate ADF regression for each cross-section with individual effects and no time trend:

$$\Delta y_{it} = \alpha_i + \rho_i y_{i,t\,1} + \sum_{j=1}^{pi} \beta_{ij} \Delta y_{i,t\,j} + \varepsilon_{it} \quad (1)$$

Where $i = 1, \ldots, N$ and $t = 1, \ldots, T$

IPS use separate unit root tests for the N cross-section units. Their test is based on the Augmented Dickey-fuller (ADF) statistics averaged across groups. After estimating the separate ADF regressions, the average of the t-statistics for p_1 from the individual ADF regressions, $t_{iTi}(p_i)$

$$\bar{t}_{NT} = \frac{1}{N} \sum_{i=1}^{N} t_{iT}\,(p_i \beta_i) \quad (2)$$

The t-bar is then standardized and it is shown that the standardized *t-bar* statistic converges to the standard normal distribution as N and T $\rightarrow \infty$. IPS (1997) showed that *t-bar* test has better performance when N and T are small. They proposed a cross-sectional demeaned version of both test to be used in the case where the errors in different regressions contain a common time-specific component (Nor'Aznin and et al, 2010).

The next step is to test for the existence of a long run relationship among the variables. A common practice to test for cointegration is Johansen's procedure. However, the power of the Johansen test in multivariate systems with small sample sizes can be severely distorted. To this end, we need to combine information from time series as well as cross-section data once again. In this context three panel cointegration tests are conducted.

First, we use a test due to Levin and Lin (1993) in the context of panel unit roots, to estimate residuals from (supposedly) long run relations. Levin and Lin (1993) consider the model

$$y_{it} = \rho_i y_{i,t-1} + z_{it}' \gamma + u_{it} \quad (3)$$

Where z_{it} are deterministic variables, u_{it} is iid$(0,\sigma^2)$ and $\rho_i = \rho$. The test statistic is at t-statistic on ρ given by

$$t_{\rho} = \frac{(\hat{\rho}-1)\sqrt{\sum_{i=1}^{N}\sum_{t=1}^{T}\tilde{y}_{i,t-1}^{2}}}{s_e} \qquad (4)$$

Where

$$\tilde{y}_{it} = y_{it} - \sum_{s=1}^{T} h(t,s)y_{is}, \quad \tilde{u}_{it} = u_{it} - \sum_{s=1}^{T} h(t,s)u_{is} \quad h(t,s) = z_t'\left(\sum_{t=1}^{T} z_t z_t'\right) z_s,$$

$$s_e^2 = (NT)^{-1}\sum_{i=1}^{N}\sum_{t=1}^{T}\tilde{u}_{it}^2,$$

And $\hat{\rho}$ is the OLS estimate of ρ. It can be shown that if there are only fixed effects in the model, then

$$\sqrt{N}T(\hat{\rho}-1) + 2\sqrt{N} \rightarrow N(0,\sigma^2)$$

Second, we use the unit root tests developed for Eq. (2) by Harris and Tzavalis (1999). It must be noted that Levin and Lin (1993) tests may have substantial size distortion if there is cross-sectional dependence (O'Connell, 1998). Also, Harris and Tzavalis (1999) find that small T yields Levin and Lin tests which are substantially undersized and have low power. A drawback of the Levin and Lin or Harris and Tzavalis tests is that they do not allow for heterogeneity in the autoregressive coefficient, ρ.

Finally, to overcome the problem of heterogeneity that arises in both tests we use Fisher's test to aggregate the p-values of individual Johansen maximum likelihood cointegration test statistics, see Maddala and Kim (1998). If p_i denotes the p-value of the Johansen statistic for the ith unit, then we have the result$-2\sum_{i=1}^{N}\log p_i \sim \chi_{2N}^2$. The test is easy to compute and, more importantly, it does not assume homogeneity of coefficients in different countries (Christopoulos and Tsionas, 2004).

The next step is to test for the existence of a long-run cointegration market share and the independent variables using panel cointegration tests suggested by Pedroni (1999 and 2004). We will make use of seven panel cointegration by Pedroni (1999), since he determines the appropriateness of the tests to be applied to estimated residuals from a cointegration regression after normalizing the panel statistics with correction terms (Nor'Aznin and et al, 2010).

The procedures proposed by Pedroni make use of estimated residual from the hypothesized long-run regression of the following form:

$$y_{i,t} = \alpha_i + \delta_i t + \beta_{1i}x_{1i,t} + \beta_{2i}x_{2i,t} + \cdots + \beta_{Mi}x_{Mi,t} + \varepsilon_{i,t} \qquad (5)$$

For t = 1,…..,T; I = 1,….,N; m = 1, …., M,

Where T is the number of observations over time, N number of cross-sectional units in the panel, and M number of regressors. In this set up, α_i is the member specific intercept or fixed effects parameter which varies across individual cross-sectional units. The same is true of the slope coefficients and member specific time effects, $\delta_i t$.

Pedroni (1999 and 2004) proposes the heterogeneous panel and heterogeneous group mean panel test statistics to test for panel cointegration. He defines two sets of statistics. The first set of three statistics$Z_{\hat{v},N,T}$, $Z_{\hat{\rho},N,T\ 1}$ and $Z_{tN,T}$ are based on pooling the residuals along the within dimension of the panel. The statistics are as follows

$$Z_{\hat{v},N,T} = T^2N^{3/2}\ \sum_{i=1}^{N}\sum_{t=1}^{T}\hat{L}_{11i}^2\,\hat{e}_{i,t\ 1}^2 \qquad (6)$$

$$Z_{\hat{\rho},N,T\ 1} = T\sqrt{N}\ \sum_{i=1}^{N}\sum_{t=1}^{T}\hat{L}_{11i}^2\,\hat{e}_{i,t\ 1}^2 \quad \sum_{i=1}^{N}\sum_{t=1}^{T}\hat{L}_{11i}^2\,(\hat{e}_{i,t\ 1}\,\Delta\hat{e}_{i,t}\ \ \hat{\lambda}_i) \qquad (7)$$

$$Z_{tN,T} = \tilde{\sigma}_{N,T}^2\sum_{i=1}^{N}\sum_{t=1}^{T}\hat{L}_{11i}^2\,\hat{e}_{i,t\ 1}^2{}^{\ 1/2} \quad \sum_{i=1}^{N}\sum_{t=1}^{T}\hat{L}_{11i}^2\,(\hat{e}_{i,t\ 1}\,\Delta\hat{e}_{i,t}\ \ \hat{\lambda}_i) \qquad (8)$$

Where $\hat{e}_{i,t\ 1}$ is the residual vector of the OLS estimation of Equation (5) and where the other terms are properly defined in Pedroni. The second set of statistics is based on pooling the residuals along the between dimension of the panel. It allows for a heterogeneous autocorrelation parameter across members. The statistics are as follows:

$$\tilde{Z}_{\hat{\rho}N,T\ 1} = \sum_{i=1}^{N}\sum_{t=1}^{T}\hat{e}_{i,t\ 1}^2{}^{\ 1}\sum_{t=1}^{T}(\hat{e}_{i,t\ 1}\,\Delta\hat{e}_{i,t}\ \ \hat{\lambda}_i) \qquad (9)$$

$$\tilde{Z}_{tN,T\ 1} = \sum_{i=1}^{N}\sum_{t=1}^{T}\hat{e}_{i,t\ 1}^2{}^{\ 1/2}\sum_{t=1}^{T}(\hat{e}_{i,t\ 1}\,\Delta\hat{e}_{i,t}\ \ \hat{\lambda}_i) \qquad (10)$$

These statistics compute the group mean of the individual conventional time series statistics. The asymptotic distribution of each of those five statistics can be expressed in the following form:

$$\frac{X_{N,T}\ \mu\sqrt{N}}{\sqrt{V}} \rightarrow N(0,1) \qquad (13)$$

Where X_{NT} is the corresponding form of the test statistics, while μ and ν are the mean and variance of each test respectively. They are given in Table 2 in Pedroni (1999). Under the alternative hypothesis, Panel v statistics diverges to positive infinity. Therefore, it is a one sided test were large positive values reject the null of no cointegration. The remaining statistics diverge to negative infinity, which means that large negative values reject the null (Al-Awad and Harb, 2005).

2. Estimation Result

In order to investigate the possibility of panel regression, it is first necessary to determine the existence of unit roots in the data series. Panel unit root tests are similar, but not identical to unit root tests carried out on a single series. The literature suggests that a panel-based unit root test enhances the power of the unit root test as it allows for greater efficiency by providing more degrees of freedom and for heterogeneity across individual series. For this study we have chosen the Im, Pesaran and Shin (IPS), which is based on the well-known Dickey-Fuller procedure. Investigations into the unit root in panel data have recently attracted a lot of attention.

Table 1 presents the panel unit root tests. At a 5% significance level. The p-values corresponding to the IPS and LLC values calculated for the ICT expenditure, total cost of production, administrative expenditure, firm's profit, public service costs to customers and income from the internet orders are larger than 0.05. This indicates that these series of variables are non-stationary at 5% level of significance and thus these variables are non-stationary. At first differences, however, the null is strongly rejected in all cases. We conclude that these series are integrated of order one *I*(1) in the constant plus time trend of the panel unit root regression and other variable is stationary in level. Therefore, we can conclude that some of the variables are non-stationary in with and without time trend specifications at level by applying the Panel unit root test which is also applied for heterogeneous panel to test the series for the presence of a unit root.

Table 1 – Panel unit root tests

Variables	IPS Statistic	Prob
ICT expenditure	0.18	0.57
Total cost of production	0.38	0.65
Administrative expenditure	-0.005	0.49
Firm's profit	1.33	0.90
Public service costs to customers	1.78	0.96
Income	1.96	0.97
Market share indexes	**-8.29**	0.00

Note: Levels and first order differences denote the IPS t-test for a unit root in levels and first differences respectively. Number of lags was selected using the AIC criterion. We use the Eviews software to estimate this value.

We can conclude that the results of panel unit root tests reported in Table1 support the hypothesis of a unit root in all variables across firms, as well as the hypothesis of zero order integration in first differences. At most of the 1 percent significance level, we found that all tests statistics in both with and without trends significantly confirm that all series strongly reject the unit root null. Given the results of IPS test, it is possible to apply panel data method in order to test for the existence of the stable long-run relation among the variables.

Table 2: The Pedroni Panel Cointegration Test

Test	Constant trend	Constant + Trend
Panel *v*-Statistic	0.002	**0.001**
Panel *ρ*-Statistic	0.999	**1.000**
Panel *t*-Statistic: (non-parametric)	0.999	**0.892**
Panel *t*-Statistic (*adf*): (parametric)	0.000	**0.000**
Group *ρ*–Statistic	0.837	**0.871**
Group *t*-Statistic: (non-parametric)	0.001	**0.000**
Group *t*-Statistic (*adf*): (parametric)	**0.000**	**0.000**

Note: All statistics are from Pedroni's procedure (1999) where the adjusted values can be compared to the N(0,1) distribution.

By using the cointegration test, results show that the variables move together in the long run. That is, there is a long-run steady state relationship between our variables for a cross-section of firms. The next step is an estimation of such a relationship.

The main goal of the paper is to measure the effect of ICT tools variables on market share using an available panel dataset. The main hypothesis in to test that ICT tools has a positive significant on market share. If this is true, then we will be able to measure the effect of ICT tools on the market share.

For our panel data pooled OLS, fixed and random effect estimation techniques will be used. However, there are few important econometric issues which need to be addressed. First, having several proxies of macroeconomic stability may result in the multi-collinearity in the explanatory variables. However, this issue can be tackled by computing the correlation between the corresponding variables. If the correlation is large, it means that these explanatory variables contain similar information and should not be both included in the regression.

Another more important problem is the possible problem of endogeneity between the capital flight and growth, as we cannot state for sure which variable determines which. Even though the regressions are very likely to have country- or region specific effects, we will start the estimation from the OLS procedure. The coefficients for the Pooled OLS regression have the expected sign. However, we know that the Pooled OLS is very restrictive. Choosing between Pooled OLS and fixed effect procedure is based on F test, we analyzed the statistics from the F-test for common intercept, which favored the fixed effect estimation.

The main results are presented in Table 3. As we have noted earlier, all explanatory variables are taken in level. As was noted above, we discuss the results, obtained with the fixed effect model. After we estimate the model by using Pooled and fixed effect we use F test. Four models based on assumptions about how the fixed term is are used so as to predict the relationship between the variables. These are "pooled regression" (pooled OLS) and "fixed effects". The first phase in choosing the correct method is carrying out the F test which tests the homogeneity of the firm's effects. The null hypothesis in which fixed effect model is redundant versus pooled regression model. According to the result, the model is predicted through Pooled OLS method first, the hypothesis that presents that fixed affects are invalid altogether is also rejected in F tests. According to the results of test, fixed effects model provides are not reliable predictions and we use Pooled model.

Table 2. Pooled Regression results

Dependent Variable: LER?				
Method: Pooled EGLS (Cross-section weights)				
Total pool (unbalanced) observations: 78				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	56.49852	0.664389	85.03827	0.0000
LICT?	2.425193	0.073639	32.93336	0.0000
SQLICT?	0.098867	0.028311	3.492208	0.0005
LPROFIT?	1.031542	0.061672	16.74457	0.0009
LINCOME?	0.067632	0.007362	9.186363	0.0000
LCOST?	0.005246	0.003872	3.237642	0.0000
R-squared	0.785880	Mean dependent var		74.43490
Adjusted R-squared	0.783650	S.D. dependent var		70.48159
S.E. of regression	6.790136	Sum squared resid		17704.68
F-statistic	352.3476	Durbin-Watson stat		1.731646
Prob(F-statistic)	0.000000			

Each firms we are studying have some individual characteristics which may influence the independent variables. Therefore, we can assess the net effect of each independent variable on market share. We estimate the above regression with Pooled OLS. The empirical results support a short-run co-integration relationship after allowing for the heterogeneous manufacturer of smart homes and offices industry effect.

The result of estimation indicates a positive effect from ICT tools on market share in long run and short run. In this model the coefficient of ICT equal 2.42 which shows that a unit of increase in ICT, lead to 2.42 percent increase in market share. Also we find that the coefficient of firms profit, equal 1.03 which shows that a unit of increase in firm's profit, lead to 1.03 percent increase in market share. Moreover the coefficients of income from internet orders and total cost of firm 0.067 and 0.005 respectively, which shows that a unit of increase in income from internet orders and total cost of firm, leads to 0.067 and 0.005 percent increase in market share. The Durbin Watson statistic showed error terms are correlated. Also, we test between pooled regression and OLS fixed effect in which null hypothesis states fixed effect is redundant. Regarding to dataset which was available, F-stat and Chi-square cannot reject the null hypothesis so we don't need to consider the individual effect of manufacturer of smart homes and offices industry on market share.

3. Conclusion

This paper is an empirical study on the effect of using ICT tools on success of companies for increasing market share, a case study: Manufacturer of smart homes and offices of Tehran. For that reason we use the panel cointegration approach. The unit root test (IPS) is used to confirm the stationarity of all variables before the cointegration test can be performed. After confirming that all variables are non-stationary at level, the panel cointegration approach is applied. Using Pedroni's, the long run cointegration test is performed to investigate the existence of the long run cointegration among the variables. Results obtained indicate the presence of the long run and the short run relationship between ICT tools and market share for 13 firm. Four models based on assumptions about how the fixed term is are used so as to predict the relationship between the variables. These are "pooled regression" (pooled OLS) and "fixed effects". The first phase in choosing the correct method is carrying out the F test which tests the homogeneity of the firms' effects. The null hypothesis in which fixed effect model is redundant versus pooled regression model. According to the result, the model is predicted through Pooled OLS method first, the hypothesis that presents that fixed affects are invalid altogether is also rejected in F tests. According to the results of test, fixed effects model provides are not reliable predictions and we use Pooled model. The result of estimation indicates a positive effect from ICT tools on market share in long run and short run. In this model the coefficient of ICT equal 2.42 which shows that a unit of increase in ICT, lead to 2.42 percent increase in market share.

Reference

1. Abdullah. Nor'Aznin. Hussin, Abu Bakar and Sallahuddin Hassan, (2010), "Analysis of FDI Inflows to china from selected Asean countries: Apanel Cointegration approach", International Economic Conference on Trade and Industry (IECTI).
2. Baltagi, B.H., (2005), Econometrics Analysis of Panel Data. Wiley, Chichester.
3. Christopoulos, K. Dimitris and Tsions, G. Efthymios (2004), "Financial development and economic growth: evidence from panel unit root and cointegration tests", Journal of Development Economics, Vol. 73, pp. 55– 74.
4. Dahduli, Mahmoud S., (2009), "Islamic Banking and Economic Development", working paper series, Available at SSRN: http://ssrn.com/abstract=1616624 or http://dx.doi.org/10.2139/ssrn.1616624.
5. Maddala, G.S., Kim, I.-M., (1998), "Unit Roots, Cointegration, and Structural Change", Cambridge Univ. Press, Cambridge.
6. Pedroni, P. (1996). Fully Modified OLS for Heterogenous Cointegrated Panels and The Case Of Purchasing Power Parity. Working paper, North American Econometric Society Summer Meeting, 96-120.
7. Pedroni, P. (1999). Critical Values for Cointegration Tests in Heterogeneous Panels with Multiple Regressors," Oxford Buellton Economic Statistics, Special Issue 61:653-678.
8. Pedroni, P. (2000). Fully-Modified OLS for Heterogeneous Cointegration Panel. in Nonstationary Panels, Panel Cointegration and Dynamic Panels, Advances in Economic 15, 93-130.
9. Pedroni, P. (2001). Purchasing Power Parity Tests in Cointegrated Panels. The Review Economic Statistics, 83(4), 727-731.
10. Pedroni, P. (2004). Panel Cointegration: Asymptotic and finite samples properties of pooled time series Tests with an application to the PPP hypothesis. Economic Theory 20: 597-625.
11. Pesaran, H.M. and Shin, Y. (1995), "Autoregressive distributed lag modelling approach to cointegration analysis", DAE Working Paper Series No. 9514, Department of Economics, University of Cambridge, Cambridge.
12. Pesaran, H.M., Shin, Y. and Smith, R. (1996), "Testing the existence of a long-run relationship", DAE Working Paper Series No. 9622, Department of Applied Economics, University of Cambridge, Cambridge.
13. Pesaran, H.M., Shin, Y. and Smith, R. (2001), "Bounds testing approaches to the analysis of level relationship", Journal of Applied Econometrics, Vol. 16, pp. 289-326.
14. Phillips, P.C.B., Hansen, B.E., (1990), "Statistical inference in individual variables regression with I(1) process", Review of Economic Studies, Vol. 57, pp. 99–125.

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