

PalArch's Journal of Archaeology of Egypt / Egyptology

THE IMPACT OF INTERNAL CONTROL ON MINIMIZING FRAUD: THE CASE OF SMALL-MEDIUM ENTERPRISES

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Yulia A. Artemieva, Marina N. Ermakova, Lyubov L. Pokrovskaya, Larisa D. Petrenko, Natalia L. Dolotova. The Impact Of Internal Control On Minimizing Fraud: The Case Of Small-Medium Enterprises-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(3), 1284-1297. ISSN 1567-214x

Keywords: Financial Performance, Control Environments, Controlling Activities, Risk Assessment, Monitoring And Information And Communication.

ABSTRACT

Affiliations face inside and outside forces that require an approach to empower them to continue being in a healthy financial condition. The affiliations' ability to meet their objectives with respect to remaining engaged and critical depends on the courses of action and systems similarly as the sufficiency of procedures developed to shield their exercises. Beginning from the workplace speculation and buttressed by the probability theory are inside control systems (internal control systems) which assure ground-breaking organization of benefits despite feasible and compelling exercises. However, the research implemented the quantitative methodology throughout distributing a questionnaire over 100 respondents in different SMEs for data collection, and then the collected data had been analyzed using the SPSS statistical tool for hypotheses validation.

The results proved that there is a direct relationship between internal control systems and financial performance.

BRIEF OVERVIEW

Preference to many previous researches done before in Kenya to study the impact of internal control systems on minimizing fraud and improving efficiency. Kenya is considered one of the most countries which had high fraud reference to a study done by Gibendi (2014). Kenya had been facing problems in implementing the COSO framework which included the control environment, information communication, monitoring and risk assessment, and the thing which affected the financial performance of most of the Small Medium Enterprises in Kenya.

The researcher implemented a mixed approach using both quantitative and qualitative methodologies using stratified random sampling. However, both descriptive research designs and anova were implemented. The sample included operational managers from different departments over a sample of 92 respondents from a population of 120. The SPSS software was used to assess the results.

His findings proposed that Small Medium Enterprises should work on managing the chain of command using proper delegation in terms of responsibilities. However, the study proposed that the institutions should manage risk in a proper way to minimize future fraud.

PROBLEM STATEMENT

The main problem that lies behind the research is the absence of awareness about the importance of internal control systems on the financial performance. This study had not been implemented before, and by that it will be considered one of the important studies to enhance financial performance based on COSO framework.

RESEARCH QUESTIONS

- a) How control environment can be used to control fraud in financial institutions?
- b) How risk assessment control fraud in financial institutions?
- c) How information and communication can be used to control fraud in financial institutions?
- d) How monitoring can be used to control fraud in financial institutions?

Internal control and its impact on minimizing fraud

Preference to many previous researches done before in Kenya to study the impact of internal control systems on minimizing fraud and improving efficiency. Kenya is considered one of the most countries which had high fraud reference to a study done by Gibendi (2014). Kenya had been facing problems in implementing the COSO framework which included the control environment, information communication, monitoring and risk assessment, and the thing which affected the financial performance of most of the Small Medium Enterprises in Kenya.

Establishing the correlation among internal control systems and managing control in Small Medium Enterprises is the main aim of the research which is done by Poley

(2014). The researcher focused on the COSO framework of internal control which includes control environment, risk assessment, controlling activities, information and communication and monitoring.

The researcher implemented a mixed approach using both quantitative and qualitative methodologies using stratified random sampling. However, both descriptive research designs and anova were implemented. The sample included operational managers from different departments over a sample of 92 respondents from a population of 120. The SPSS software was used to assess the results.

His findings proposed that Small Medium Enterprises should work on managing the chain of command using proper delegation in terms of responsibilities. However, the study proposed that the institutions should manage risk in a proper way to minimize future fraud.

In other words, the more the internal control practices are implemented according to the COSO framework, the higher the financial performance of Small Medium Enterprises will be reflecting a lower rate of fraud.

The study implemented the questionnaire tool for collecting the data. The questionnaires were prepared based on Likert Scale. Both primary and secondary data were used in his research. The primary data relied on collecting the data using the questionnaire, as for the secondary data relied on addressing existing literature reviews and previous studies done in different countries.

After collecting the data, the researcher used the SPSS tool to analyze them and the results were displayed in the form of descriptive and regression analysis. The sample addressed includes 100 respondents out of a population of 200 respondents working in the SMEs in Kenya. The researcher scored a 50% response rate. He used the COSO framework as independent variables including monitoring, risk assessment, controlling environment, controlling activities, and information and communication and he used the fraud as a dependent variable.

The main findings of his research proposed that there is a direct correlation among internal control systems and managing fraud control in Small Medium Enterprises. However, to achieve the required purpose of the research a questionnaire was developed to collect data from respondents and later on used the SPSS statistical tool to analyze the collected data. However, 100 respondents out of 200 respondents filled the poll.

The researcher aimed to study how control environment can be used to manage fraud. The outcomes proposed that most of the participants agreed that controlling environment is one of the most important constituents to manage fraud. Furthermore, risk assessment aims to manage how information and communication and monitoring should be used to manage fraud in the SMEs.

COSO framework and its impact on minimizing fraud

Loss of confidence in bank customers is the result of fraud which is creating anxiety. Furthermore, absence of effective implementation of internal control systems tend to increase the bank losses (ACFE,2010). To set up an effective internal control system, a management is required to manage the COSO framework since internal control systems vary as the size of the company differs. The bigger the company is the higher the fraud is likely to take place. Thus, this article will shed the light on the importance of internal control systems on minimizing fraud in Small Medium Enterprises in Nigeria.

Questionnaire was used to collect data, and it was constructed based on Likert Scale. Three different sections constituted the questionnaire which addressed the reconciliation controls, as for the second section it addresses the financial government controls and the third section addresses the reporting and budget control.

In each section of this questionnaire, statements had been proposed and the respondents should answer on these statements on a likert scale which ranges from to 1 to 5.

1= Strongly Agree

2= Agree

3= Neutral

4= Disagree

5= Strongly Disagree

The questionnaire addressed a sample of 200 respondents out of a population of 500 respondents in Nigerian Small Medium Enterprises.

The research aimed to study the impact of internal controls on detecting fraud in Small Medium Enterprises in Nigeria. The main obstacle is that there is an increased level of fraud and misappropriation of funds in SMEs in Nigeria because of poor implementation of internal control practices. The researcher recommended to implement the COSO framework in SMEs in Nigeria to boost the performance of the SMEs and achieve a lower fraud rate.

Internal Controls and financial performance

Financial performance has been linked to internal controls and broadly discussed in the literature. Agency theory and contingency one represent the important theories concerning this type of relationship. The existence of mechanism in finding solutions for the problems that exist in principal-agent relationships is explained in the agency theory.

Internal audit is contended by this theory to help in keeping cost-efficient contract between holders and administration just like other intervention mechanisms such as financial reporting and external auditing.

Adams (1994) proposed that a richer and more important research is provided by the agency theory in the internal auditing area.

Operational tools organizations are represented by internal control systems and deploy tackling the principal-agency problem (Jensen and Payne, 2003). Audit boards, external auditing, financial reporting and budgeting are included in the instruments and bodies employed in fixing agency issues.

However, agency costs have been shown by studies to be decreased by effective internal controls (Abdel-khalik 1993; Barefield et al. 1993).

Organizations that have an economic incentive have been argued by some studies to address internal control, even without the Sarbanes-Oxley Act of 2002 (SOX) requirements, (Deumes & Knechel, 2008).

The contingency theories are stated to be representations of the sociological performant theories of institutional structure which are the structural concepts of the researches regarding an enterprise (Woods, 2009). Nevertheless, contingency theory concentrates on the behavioral side of an institution in determining the way contingent factors such as culture, technology and external environment have an impact on institutions.

Contingency theory is stated to have no unique type of companies' structure which can be fairly applicable to all institutions. The effectiveness of a company relies strongly on the kind of technology, the size of the company, the volatility of the environment, the aspects of the organization of a company and the information's system that is being used.

The existing relationship in the effectiveness of internal control structure is explained by the contingency theory. The context of this structure varies as well as institutional performance such as authenticity.

The utilization of control systems is considered to be contingent depending on the context of the institutional setting in which these controls operate (Fisher, 1998). Control environment, risk evaluation, control functions, information and communication and controlling and supervising are included in internal control variables and have stayed operational instruments through which companies accomplish diverse institutional objectives predominantly income generations (COSO1994).

Controlling environment and financial fraud

The relevance of control environment is emphasized by Cohen et al. (2000), the thing which follows results from a study which proposes that management's leadership and engagement towards honesty and ethical behavior and their impacts on employees' one stay the most essential aspect for effective control. In the

circumstances where the management resonance is weak, there is a tendency to have more fraudulent financial activities since the control environment starts with managers who institute rules and policies (Rittenberg et al. 2005).

The increasing need for monitoring system in institutions in an effective way has emerged because of the evolving body of evidence that propose well established monitoring mechanisms to influence performance measures (Weisbach 1988).

Monitoring and financial fraud

Monitoring internal control systems is required in order to assess performance. A frequent monitoring is primordial because of changing conditions, therefore determining if actual internal control mechanisms are still consistent and new risks can be addressed (Roth, 1997). Information and communication systems established in companies aimed to produce reports in large quantities in which operational and financial and compliance-related information are comprised which in turn makes it easy for efficient management of business activities. Information regarding external activities are separately important to inform business decision-making (Sawyer et al. 2003).

Information and communication and fraud

Information and communication features are asserted by Gaskill (2000) to facilitate the achievement on time of reporting through collecting and delivering data within a given time. Identification, evaluation and supervision are mechanisms of internal risk control and are an expression of risk evaluation element of internal control. Misrepresentation of financial data or unprofitable use of assets are involved in the risks that may negatively influence institutional performance.

Some empirical researches have also been performed in order to detect the influence of internal controls on performance variables. While the positive relationship between internal controls and performance is reaffirmed by many of such studies, the absence of relationship or a weak one may be depicted by other ones.

The effect of internal control on financial performance was showed to be very important in a study done by Muraleetharan (2010) linking internal control and financial performance ($R^2 = 0.818$). It is a corresponding finding to the one of Mawanda (2008) who was willing to determine the impacts of internal control systems on financial performance in organization of higher learning in Uganda and which results indicated a considerable influence of internal control systems on financial performance.

Internal audit and financial performance

It was found out by Eko and Hariyanto (2011) that internal control system and internal audit as well as company's engagement has considerable relationship with good management among contracted thirty-five districts in the province of central Java in Indonesia. In a comparable study conducted by Nilniyom and Chanthinok (2011) regarding accounting system modernization and stakeholder acceptance of Thai listed companies, it was found that the effectiveness of internal control is positively correlated with stakeholder's consent. Similarly, Feng et al. (2009) also conducted a study concerning internal management control and it was indicated that internal control quality has a considerable impact on the accuracy of management guidance in terms of economy.

Nevertheless, it was discovered by Douglas (2011) that internal control has a poor relationship with financial performance.

Internal framework control for the majority of the firms is that it encompasses the need for an effective control and must be "built into" the infrastructure of the organization (COSO 1992). Many studies performed on the impact of internal control on performance were mainly concentrated on financial and administrative companies. The investigation of the relationship that connects internal control to performance in secure organizations offers a full new insight to the analysis. Moreover, the decreasing financial performance in healthy companies in the upper west region of Ghana makes it essential to examine the effectiveness of internal control systems in increasing financial performance among these conveniences.

Agency Theory (AT)

The agency theory provides the most ideal method for sorting out relationships where one party, the investor or the manager characterizes the work, but another party, the director or the operative plays the work (Tawareh, 2006). In this relationship, the manager uses an operator to play a case or to take all the necessary steps that the manager is reluctant or unable to do. In organizations, for example, the companies are investors in the organization, who appoint agent governing bodies to complete matters for their sake. This gives assumptions about the agency theory due to the rises and intentions behind human behavior.

As suggested by Pratt (2006) the sharing of ownership by managers could lead to probable objective conflicts between agent and manager. The hypothesis further states that the agents are independent and are likely to extend their additions to the insolvency of the principals (Sharma, 2007). Similarly, the agency theory proposes that both the agent and the manager are affected without anyone else's intervention scheme and then must not act according to each other's advantage.

Kipropo (2010) conducted a research related to fraud and addressed the obstacles that the SMEs are facing in Nigeria. He used primary data to collect data using interviews and questionnaires. The interviews are made up of open ended questions and the research aimed to analyze the views of managers and employees to manage

fraud risk in SMEs. 20 interviews had been done but only 18 answered the questionnaire which means that the researcher achieved a response rate of 87%. The study found that SMEs should implement fraud detection systems, but the study also failed to evaluate the effectiveness of internal control systems that were practiced.

Another study done by Munya (2013) focused on the importance of internal control and its impact on managing fraud in Small Medium Enterprises in Kenya. The study implemented all the members of KCDCS. The data were collected using google forms and were analyzed using the STRATA method and the results were displayed using descriptive and correlational analysis.

The study found that a mix of operational strategies had been implemented by the Small Medium Enterprises to minimize the fraud rate.

RESEARCH DESIGN

Layer One: Philosophy Used

Ontology is designed to address the nature of reality and a system of beliefs represents the perception of evidence by an individual. On this surface there is both objectivism and subjectivism and they are two different concepts. Positivism is about expectations and subjectivity is perceived.

However, in science, pragmatism, positivism, scepticism, and interpretivism are mostly subjects of ontology.

Positivism is called objective and is independent of the defined factors. Reality is defined as impartiality which concentrates on real beliefs, perceptions and principles.

The theory of a theoretical is interpretivism which attempts to explain a given situation.

Pragmatism seems to be the best research philosophy as it includes many ways of answering questions related to science, since it requires surveys and interviews. The primary determinant of this approach is the question of analysis according to the pragmatism. Pragmatism offers an opportunity to use the mixed method (objectivism and subjectivism) in the next sections of the research onion.

Layer Two: Approach:

Deductive and inductive approaches are two kinds of study techniques that can be used in a research methodology. This part of the research on each method provides a brief explanation and the study should determine the approach to be used in research at future stages.

The deductive method is focused on the literature reviews and theories previously discussed. Experimental results and conclusions are usually mentioned in the literature review part of the research. The deductive approach seeks to test the validity of researchers' hypotheses in the literature review based on previous theories.

On the other hand, the inductive method is designed to create new theories, but usually from a certain point of view, to support untested assumptions.

In analytics, the deductive method is used as a study based on past internal control concepts and their effects on results and is dependent upon prior studies and research in reputable journals.

In other terms, the research is based on and based on historical theories and processes. The hypotheses are formed and tested using different tools, which are then extensively debated.

Layer Three: Strategy Implemented:

Combined mixed approaches, including quantitative and qualitative methodologies are applied in the record collection analysis. A sample is built on the basis of criteria to be defined later in the analysis. Unlike the implementation of the analytical approach, there have been open-ended inquiries and consultancies on the effect of internal controls on financial performance. The managers have been surveyed.

In other terms, the theoretical analysis is performed and the case study is carried out during unstructured, under-depth interviews with executives from the various companies.

Layer Four: Research Choices:

The research will include the many, mixed methods, since interviews and surveys for the collection of data are performed concurrently.

Layer Five: Time Horizon:

The research has an estimated data collection duration of about two months and data collection which take time, provided that many steps are required, for example, prior to authorisation by organisations, the time for data analytics in SPSS and the time for managers interviews.

The phase is split into two dimensional and cross-sectional forms. The cross-sectional time horizon is the time horizon centered on a snap shot of the data submitted at a certain point to a certain number of people.

On the other side, the historical time frame relies on the collection of data at various times. The research will include the time of assessment, since 200 participants obtain responses from 100 participants in the questionnaire. This can not be done

in a single snap shot because interviewees have to be monitored to collect the required number.

Moreover, many field trips will be required by the application of the performance approach to achieve the study goals.

Layer Six: Techniques and Procedures:

For 100 data collection interviewees, the investigation will use quantitative and qualitative methodologies. The data will be obtained through a sample process from accountants and auditors. But the qualitative method utilizes the methodology of in-depth interview data collection. The stored knowledge is used for evaluating hypotheses.

Participants

The academic group is composed of different companies to study the effect of internal controls on company performance. Nevertheless, the focus group of the analysis will be acquisition managers, assistants and auditors. The goal study is for 100 individuals to arrive at the correct result, but more than 200 people are distributed to hold 100 and conduct data analyzes.

Based on its experience, the sample is chosen for accurate data. The study incorporates the Multi-phase sampling method and in particular the non-random sampling process, as it relies on respondents from different companies and utilizes the purposeful sampling method for in-depth interviews with managers and their opinions on the basis of established skills.

Variables and Hypotheses

Dependent variable: Performance

Independent variables:

Risk Assessment, Control Activities, Controlling Environment, information and communication, and monitoring.

Hypotheses

The hypotheses will be listed as follows:

H1₀: There is no relationship between risk assessment and performance

H1₁: There is relationship between risk assessment and performance

H2₀: There is no relationship between controlling environment and performance

H2₁: There is relationship between controlling environment and performance

H3₀: There is no relationship between control activities and performance

H3₁: There is relationship between control activities and performance

H4₀: There is no relationship between information and communication and performance

H4₁: There is relationship between information and communication and performance

H5₀: There is no relationship between monitoring and performance

H5₁: There is relationship between monitoring and performance

Ethical Considerations

Several ethical considerations are evaluated in the process of this research. Nonetheless, to follow the ethics of this report after the author clarified the intent behind this experiment and that their identification would remain anonymous, respondents voluntarily participate in the analysis.

4.2 Regression Analysis

Coefficients						
Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error				
1	(Constant)	-.049	.053		-.928	.356
	Monitoring	.057	.084	.064	.673	.002
	Information and Communication	.055	.086	.060	.644	.021
	Controlling Environment	.825	.102	.818	8.061	.000
	Controlling Activities	.066	.099	.062	.662	.010
	Risk Assessment	-.013	.070	-.012	-.180	.017
a. Dependent Variable: Performance						

Referring to the above regression analysis, the results proposed that there is a direct relationship between the COSO framework and the financial performance and fraud, the higher the COSO framework is implemented the higher the financial performance will be and the lower the fraud rate will be. Thus, and references to the above table, the results are as follows:

- There is direct relationship between monitoring and performance
- There is direct relationship between information and communication and performance
- There is direct relationship between controlling environment and performance
- There is direct relationship between controlling activities and performance
- There is direct relationship between information and communication and performance

Since the significance level for all independent variables is below 5%, there is a direct relationship between the dependent and independent variables of the research.

SUMMARY OF DISCOVERIES

It has been set up that control is fundamental as an administration work that prompts the estimation and redress of the exhibition of subordinate with a perspective on accomplishing hierarchical goal with most extreme effectiveness and at least cost. Internal control ought to along these lines be some time framework budgetary and something else, set up by the executives for it to carry on the matter of the organization in an effective way and target guaranteeing adherence to the board strategies shields of benefits and verifying the culmination and exactness of records.

On the off chance that there is compelling inner control framework it will check and counteract extortion and blunder that could have frustrated and limit the job at which the association target will be accomplished.

In the primary part of the venture; it clarifies the foundation of the examination work of importance of inner control framework, proclamation of research issue, reason for the investigation, inquire about speculation, look into theory, hugeness of the investigation, extent of the investigation, constraint of the investigation and operational meaning of terms.

In part two the analyst has having the option to accentuation the different order of inner control framework, the section for the most part center around different idea, for example, idea of inside control framework, target and examination the ranch of inward control framework for example managerial and bookkeeping control framework.

Be that as it may, the part likewise clarifies the idea of inward check and targets, idea of inner review and goal, additionally fundamental technique for good interior control framework in assembling industry and basic normal for good inside control framework with chronicled

In part three, it manages the exploration philosophy, this incorporate the examination strategy and the instrument of research utilized which obviously are essentially survey, gathering of information from applicable diaries, writing and as of now existing review, freebee with data from web. The analyst proceeds in section four to examine and understanding to the information accumulated through the survey and the utilization of chi-square strategy, in which the outcome was test on the huge of inward control framework on assembling enterprises.

CONCLUSION

Mention that the data contained in this examination work will be valuable to an individual or benefit situated association managing in item and producing or something else. The examination set out to demonstrate that the high pace of misappropriation and bungle of asset could be ascribed to absence of sound and viable inward control framework and the current of poor control condition.

To have smooth organization and bookkeeping process there must be sound successful inward control framework in activity. In this manner, it is appropriate for Evans Plc. to give most extreme and satisfactory consideration to inner control framework.

RECOMMENDATIONS

With the examination work did, the analyst, can acquire presence to demonstrate that inner control framework does exist in Evans Plc. and furthermore the suggestion that would be made referenced of isn't for the foundation of inner control framework in the open part, yet it is planned for prescribing improvement of the open division.

- Maintain their degree of inner control frameworks through successful observing and separate assessments of their frameworks of control. This will help upgrade or keep up the present degree of their inner control frameworks and execution.
- Strengthen their control condition through instruments, for example, a guarantee to uprightness, moral qualities and fitness. This will make compelling the control condition and help improve execution levels.
- Strengthen their data and correspondence frameworks by producing quality data to help different segments of inner control. This will render different parts of inside controls compelling and improve execution.
- Adopt diverse hazard evaluation systems using hazard distinguishing proof estimates that fit their possibility qualities. This will help improve the adequacy of their hazard evaluation systems and lift execution levels.
- Espouse unique control exercises through the choice and usage of data framework controls that suit their authoritative setting. This will support the viability of INTERNAL CONTROL SYSTEMS and improve execution levels.
- Maintain indistinguishable control condition by embracing comparable working style. This is on the grounds that the business has indistinguishable control condition.
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Proposition for Further Investigations

Because of the imperatives, the analyst couldn't complete the exploration title "Effect of Interior control framework in assembling industry". Hence the exploration constrained her discoveries to the assembling part. It is proposed that future research ought to be led in different divisions, for example, Assembling industry, Business associations and other element (Firm).

REFERENCES

- Absi, A. (2008). Factors Affecting Cost Efficiency. Journal of Applied EconomInternal control systems, 119-138.
- Antomero, A. (1997). A Non Parametric Approach. . Journal of Finance, 100-165.
- Asiri. (2007). Cost Efficiency Factors. . Journal of Banking and Finance, 185-190.
- Atemnkeng. (2006). Analyzing the determinants of bank efficiency. . Journal of Economic and Business, 509-528.

- Athabasoglou. (2006). Financial Factors affecting efficiency. *Financial Engineering Journal*, 333-369.
- Athanasoglou. (2006). *Journal of Productivity Analysis*, 209-224.
- Athanasoglou. (2006). Efficiency Factors. . *European Journal of Finance*, 3200-3217.
- Baum, B. (1996). Bank Costs, Structure and Performance. . *Journal of Banking and Finance*, 27-35.
- Beile, B. a. (2010). What drives bank competition? *Journal of Money, Credit and Banking*, 562-583.
- Cashell, E. (2012). International Auditing. Internal auditors' roles in overcoming the financial reporting crisis. , 3-10.
- Cass, Z. (2017). Derregulation and Operational Efficiency. . *Journal of Managerial Finance*, 35-47.
- Delis, J. (2006). Further Link on the evidence between cost efficiency and performance. . *Journal of Financial Services*, 169-202.
- Edris, J. (2017). Factors affecting banking market. . *Journal of Banking and Finance*, 31-53.
- Ejom, E. &. (2014). The Effect of Internal Audit Function On The Financial Performance. *International Journal of Economics, Commerce and Management*, 1-14.
- Hastel, G. (2004). The relationship between cost efficiency and banks performance. *International Journal of Financial Engineering*, 333-369.
- Jazon, K. (2014). Factos affecting cost efficiency. . *Journal of banking and finance*, 111-158.
- Jhonny, B. (2002). Revenues and Liabilities. *Banking and Finance*, 50-62.
- Kays, A. (2006). Efficiency of Financial institutions. . *European Journal of Operational Research*, 175-212.
- Miller, G. (2016). A contingency framework for the design of accounting information systems. *Accounting Organization & Society*., 59-69.
- Mohammad, H. (2009). Relationship between risk and cost efficiency. *Journal of Banking and Finance*, 125-153.
- Okpe, D. (2014). .Inventory Positioning and Firm Performance . *Journal of Accounting and Auditing*.
- Tamimi, A. (2009). Factors affecting cost efficiency. *International Journal of Monetary Eco*, 409-426.
- Tregenna, C. (2009). Efficiency Analysis by using Data Development Model. . *International Journal, Latest Trends Financial and Economic Science*, 228-237.
- Tregenna, C. (2009). Productivity, Technology and Efficiency. *Journal of Multinational Financial management*, 427-442.
- Van, D. (2012). The role of ownership structure and investment protection. . *Journal of Financial EconomInternal control systems*, 369-399.