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OF MANAGEMENT AND BUSINESS RESEARCH: D

## Accounting and Auditing



Internal Control Practices

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Discovering Thoughts, Inventing Future

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## Internal Control Practices of Information Technology Sector (IT Industry) in Bangladesh

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**Abstract-** Internal control plays a significant role in maintaining sustainable development of any industry. Preventing and detecting fraud and protecting the organization's resources as a whole can be achieved easily through proper internal control practices. In this study several aspects of internal control practices in the Information Technology (IT) sector have been identified. Sample of thirty companies were chosen from both public and private sector. Primary data were collected through a questionnaire survey. Results indicate that most of the cases companies are practicing acceptable level of internal control, while in some cases they are not doing so accordingly which can be the concerning sectors for further improvement. The findings of this paper will help managers, owners, board of directors, audit committee and other controlling bodies get an overview of the internal control practices within Information technology (IT) sector.

**Keywords:** *information technology (IT) industry, internal control (IC), corporate code of conduct, cost-benefit analysis.*

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# Internal Control Practices of Information Technology Sector (IT Industry) in Bangladesh

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**Abstract-** Internal control plays a significant role in maintaining sustainable development of any industry. Preventing and detecting fraud and protecting the organization's resources as a whole can be achieved easily through proper internal control practices. In this study several aspects of internal control practices in the Information Technology (IT) sector have been identified. Sample of thirty companies were chosen from both public and private sector. Primary data were collected through a questionnaire survey. Results indicate that most of the cases companies are practicing acceptable level of internal control, while in some cases they are not doing so accordingly which can be the concerning sectors for further improvement. The findings of this paper will help managers, owners, board of directors, audit committee and other controlling bodies get an overview of the internal control practices within Information technology (IT) sector.

**Keywords:** information technology (IT) industry, internal control (IC), corporate code of conduct, cost-benefit analysis.

## I. INTRODUCTION

The role of the Information Technology (IT) industry in the economy of Bangladesh is getting powerful gradually. IT sector is emerging as a pivotal player in the world economy. Today Bangladesh is one of the best destinations of sourcing IT support internationally that provides a large contribution to the growing economy of this country. The wind of digitalization brings a bridge between prosperity and success gradually. Thus, its sustainability is of much significant for the development and moving the national economy faster. Internal control is one of the focal mechanisms to establish the long-term sustainability of any institution. It obviously aids to ensure the achievement of the organizational success. Therefore, the internal control practice pursued by the companies in the IT sector is one of the key-determining indicators of the sustainability of this emerging sector. Young energetic human resources are devoted in this sector that is sometimes out of touch as there is no clear-cut guideline from the regulatory body yet. The operating costs of IT companies are rising and placing profitability and sustainability at stake.

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The recent Digital Bangladesh concept makes the sector more promising internationally. Indeed, proper controlling systems, guiding tools and its implementation could lead this promising sector faster to contribute in the economy.

## II. STATEMENT OF THE PROBLEM

Bangladesh is one of the fastest growing IT empowering destinations. In near future IT will emerge as a key player in the continual push for national development. According to the Bangladesh Association Software and Information Services (BASIS, 2012) survey the IT industry has consistently grown in recent years at 20 to 30 percent per annum. In 2012-2013 fiscal year the export was 101.36 million USD and the growth were over the last year 54.80% (BASIS, 2014). The area of IT is expanding faster where companies are involved in customized application development and maintenance; IT enabled services, and E-commerce/Web services for both domestic and international market. The key strength is energetic young talent people. Though the sector is growing day by day with the support of government and other non-government agencies the competition is increasing internationally. Therefore the sustainability of this highly valuable sector is therefore, of much concern. This study focuses on the vigilance of internal control system and policy of companies in the IT sector. The outcome aftermath guides to understand the present scenario as a whole.

## III. LITERATURE REVIEW

From the very beginning corporate governance had been a major interest to the researchers. The way a company is directed and controlled is referred to as corporate governance (Cadbury, 2000). Corporate governance ensures accountability to shareholders or stakeholders (Keasey and Wright, 1997), creates mechanisms for controlling managerial behaviour (Tricker, 1994), ensures that companies are running according to the laws (Dunlop, 1998), ensures that reporting systems are prepared in such a way that good governance is facilitated (Kendall, 1999).

Corporate governance contributes to the value of the firm. According to Black (2001), Klapper and Love (2004), Gompers et al.(2003) and Beiner and Schmid (2005) corporate governance has been playing a pivotal role in developing the value of the firm and the

relationship between the two is positive in both developed and developing countries. Good corporate governance practice is required to calculate the cost of capital in a capital market. Rouf (2011) identified the positive relationship between value of the firm and board independent director & chief executive officer duality which are two among four mechanisms of corporate governance. Corporate governance and internal control is closely related. According to Mihaela and Lulian (2012) there are important associations between corporate governance and internal control and without excellent internal control practice corporate governance is not feasible. Internal control can be referred to as policies and procedures that are used to attain an effective management of business. The auditors consider internal control as a relevant factor in case of assessing risks of material misstatement of financial statements (Mihaela and Lulian, 2012).

Through this study it has been tried to identify the internal control practices of Information Technology Sector (IT Industry) in Bangladesh. The information technology (IT) industry of Bangladesh experienced in using computers about five decades. At the very beginning days the Information Communication Technology (ICT) sector in Bangladesh mainly focused on hardware operations. Soon after this several public and private financial, non-financial institutions and industrial concerns started using computers, mainly for accounting and payroll applications and customer services. Unfortunately the financial crisis prevailed during liberation war in 1971 that hampered largely the expansion of computer uses in the Bangladeshi corporate sector. However in 1982 a computer center was established at the Bangladesh University of Engineering and Technology that was renamed later as the Department of Computer Science & Engineering that played a pivotal role in Bangladeshi IT education and expansion.

At present there are over 800 registered software and ITES (IT Enabled Service) companies in Bangladesh (BASIS, 2013). Besides there are also few hundred of unregistered small and home-based software and IT ventures doing business for both local and international markets. Individual and organizational body conducted different study to understand about this emerging industry. One of the main IT governing organizations, Bangladesh Association of Software and Information Services (BASIS), surveyed on three hundred of its member companies to understand the business nature, business volume and size of companies. The result revealed that over the 70% of the companies were found to be involved in development and maintenance of software for their clients. Also a number of those are simultaneously engaged in providing different IT enabled services for their clients and almost half of the total surveyed companies are involved in providing range of IT enabled services

(data/form processing, graphic/web design, content management etc.)(BASIS, 2013). These emerging new business and service delivery models might define the new wave in the coming years for Bangladeshi IT industry. With regard to average size of enterprises within the industry, it is interesting to note that, the distribution is quite spread with respect to both revenue size and employment number. Individual entrepreneur's i.e joint venture, private company owns majority of the firms where only few are publicly traded companies. Currently there are over one thousand registered software and ITES companies in the country employing over 70,000 ICT professionals. Out of these companies, around 60% are mainly domestic market focused while 40% are mainly export focused (BASIS, 2014).

Islam, Md. Saiful (2000) said that Bangladesh went on line in 1996 but the advancement in the field IT is not encouraging as then neighbouring due to various barriers encountered in multiple spheres. Moreover, poor infrastructure, including frequent power crises, and slow and unreliable internet connections are the most immediate problems. Despite facing challenges like high price of internet bandwidth, absence of submarine cable, lack of infrastructure, skilled human resources and software Technology Park. The absence of policy reforms for software export and import, strict regulation, tax waiver for internet use, bank loans and content development efforts by the government make the survival of new IT companies difficult. The current competition level in the software industry is another major challenge, since many large and small local companies provide fierce competition to new initiatives of small companies. Thus, different news articles and reports have shown that companies in the IT industries need to address several shortcomings to maintain their position in the global market and continue contributing to the national economy.

Feng et al (2009) found a positive association between internal control and management forecast accuracy. They also found a positive relationship between management ability and implementation of strong internal controls, suggesting that internal controls may be one way to address firm's shortcomings. Inappropriate recording of accounting transactions, making illegal transactions, fraud, all these are the results of lack internal control practices which have a negative impact on firms' financial performance and its profitability. While there are some studies on policy, guide-line, and other physical problems in the IT sector, but previous studies have not assessed the internal control practices in the IT sector, neither internationally nor locally. So lack of attention to the system practices and development calls for pioneering research in this area.

INTOSAI (2004) updated the Guidelines for Internal Control Standards for the Public Sector, originally conceived in 1992. In their guidelines they

identified internal control consisted of five interrelated components. Among the five components the control environment is the first, and referred to as the keystone for the whole internal control system within the organization. It ensures order and discipline, as well as the environment which further influences the overall quality of internal control. How successive strategy and objectives are established, and control activities are structured are usually influenced by the control environment. The subcomponents of this component are (1) the personal and professional integrity and ethical values of management and staff (2) commitment to competence (3) management’s philosophy and operating style (4) organisational structure (5) human resource policies and practices. Wilkinson, Michael, Vasant & Bernard (2000) also added two more subcomponents, which are (1) The Board of Directors (2) Assignment of Authority and responsibility. According to them, the control environment imitates the alertness and attitude of the managers, owners, board of directors and audit committee regarding the significance and inevitability of the internal control within the firm.

Later, Saha & Mondol (2012) studied the internal control practices of ready-made garments sector in Bangladesh. The subcomponent they used for their study were as follows - (1) Management philosophy and operating style (2) Organization structure (3) Assignment of Authority and responsibility (4) Human resource policies and practices (5) Cost Benefit Analysis.

IV. METHODOLOGY OF THE STUDY

This study used survey method to collect information on internal control practices within the companies in the IT sector. A questionnaire, consisting of 18 separate questions was adopted from Wilkinson, Michael, Vasant & Bernard (2000) and Saha & Mondol (2012). These questions were primarily close ended. Besides, some additional questions were used to capture descriptive comments. In order to have a clear overview of the current situation, 100 respondents were surveyed from 30 IT organizations including seven Dhaka Stock exchange (DSE) enlisted public limited

company and rest 23 are private limited company. Private limited companies which are operating for around ten years and more than ten years were chosen. The questions have been placed into five broad categories. These are as follows:

1. Management philosophy and operating style
2. Organization structure
3. Assignment of Authority and responsibility
4. Human resource policies and practices
5. Cost Benefit Analysis

The respondents were issued separate set of question(s) under each category. The complete survey appears in Appendix. All the respondents are the members of top management of the chosen companies. Respondents have been chosen based on purposive sampling method.

V. ANALYSIS OF THE STUDY FINDINGS

The internal control structure of the companies has been analyzed from five different perspectives:

a) Management Philosophy and Operating Style

Among the respondents seventy percent (70%) of them replied that they accentuate short-term profits and operating goals even it is detrimental of long-term goals; the remaining thirty percent (30%) claimed they focus on long-term goals. This practice should be reviewed, because in the long run this practice will limit the growth of company. Eighty percent (80%) respondents responded that they are dominated by only few individuals, whom results in lower participation of majority in decision making. In contrast, only ten percent (10%) responded that they have well practice as management body is dominated by enough members that increase accountability. And the rest 10% preferred not to answer this question.

Of the studied companies, more than one third (35%) are conservative toward electing accounting policies, while 40% of the respondents said they are aggressive in selecting from available alternative accounting policies. They think that aggressiveness in selecting and applying accounting policy is necessary for profitability.

Table 1: Responses to questions on management philosophy and operating style

Questions	YES	NO	PNA*	Total
Does management emphasize short-term profits and operating goals to detriment of long-term goals?	70%	30%	0%	100%
Is the management group dominated by one or a few individuals?	80%	10%	10%	100%
Is the management conservative toward selecting from available alternative accounting policies?	35%	40%	25%	100%

\* PNA=Prefer not to answer

b) Organization Structure

Up to date organizational chart showing the details of the key personnel is important for the

company. Seventy percent (70%) of the respondents maintain this type of chart, which is positive for this sector. Separating internal audit function from the

accounting unit is good for company. Forty-five (45%) percent of the IT companies have separate and distinct internal audit function. Half of the companies (50%) do the internal audit and accounting functions by the same department. This causes more error and inaccuracy. This practice also prohibits the cross checking opportunity. The rest 5% opted not to answer this question.

Near about three-fourth (70%) of the companies' surveyed, subordinate managers' report to more than one superior. In 25% of such cases, subordinates have only one superior for reporting purpose. This indicates the lack of proper distribution of authority in the companies. Another 5% remained neutral.

*Table 2: Responses to questions on organization structure*

Questions	YES	NO	PNA*	Total
Is the up to date organization chart prepared, showing the names of key personnel?	75%	25%	0%	100%
Is the internal audit function separate and distinct from accounting?	45%	50%	5%	100%
Do subordinate managers report to more than one superior?	70%	25%	5%	100%

\* PNA=Prefer not to answer

c) *Assignment of Authority and Responsibility*

Explicit job description can guide the employees and increase their enthusiasm. Employees can know what is expected to them and how they will be evaluated for their performance. Fairly a large share (90%) of the companies surveyed, have written job descriptions for its employees defining specific functions, attributes needed for job and evaluation criteria. Only a small portion (3%) does not have such job description. More than half (60%) of respondents said that there is a prerequisite for written approval before making any changes to the existing information systems. More than a quarter (30%) of the respondents denied having any such requirements in their company. This indicates the lack of adequate assignment of authority and responsibility in organizations.

Forty five (45%) of the companies clearly outline the margins of authority and responsibility related to employees and managers. Half of the remaining twenty percent (10%) do not have delineation of authority and responsibility to employees and managers and other half (10%) did not respond to the question.

In most of the companies (72%), there is a system of proper delegation of authority to employees and departments. In contrast, twenty one percent (21%) of the companies do not have such system of authority. Delineation of the boundaries and delegation are important because these are ways by which opportunity for sharing knowledge increases and manager multiples himself. This practice also brings steadiness, skill and accuracy to a concern. And the remaining rest in this regard 7% preferred not to answer.

*Table 3: Responses to questions on assignment of authority and responsibility*

Questions	YES	NO	PNA*	Total
Does the company prepare written employee job descriptions defining specific duties and reporting relationships?	90%	3%	7%	100%
Is written approval required for changes made to information systems?	60%	30%	10%	100%
Does the company clearly delineate to employees and managers the boundaries of authority responsibility relationships?	80%	10%	10%	100%
Does the company properly delegate authority to employees and departments?	72%	21%	7%	100%

\* PNA=Prefer not to answer

d) *Human Resource Policies and Practices*

Proper training practices regarding internal controls, ethical policies, and corporate code of conduct for newly recruits are prevalent in most of the companies (88%); 6% of the respondents said that such training is not present in their companies. Absence of such an orientation program for new employees may have an adverse effect in terms of control and achievement of intended goal. In this case, 6% decided not to respond.

Grievance procedure is a mean of dispute resolution used to address complaints by employees, suppliers, customers, and/or competitors. This procedure should be in place to maintain a congenial working environment within any organization. In the study, findings revealed that three-fourth (75%) companies have this practice. Ten percent (10%) of the companies have not implemented any such procedure for their employees. The remaining 15% of the



respondents preferred not to state anything regarding this issue.

Most of the companies (90%) maintain a sound employee relation program. Such program ensures healthy employee relation practice within the organization and show management's commitment to employee. Only six percent (6%) of the respondents said they do not have any such program in position that signifies that management is careless about the significance of employee relation. The other four percent (4%) of the respondents opted to remain silent.

Eighty nine percent (89%) of the respondents said that they work in a safe and healthy working environment. As almost all the respondents are from management group so the responses from them would be yes in most of the cases. However, the recent establishment of High Tech Park for IT made a great mark. But still some IT firms are being operated in residential zone where required industrial safety tools and equipments are not available in the workplaces. These reports indicate there is still gap to maintain a safe and healthy work environment in the IT sector. Among the remaining 11% of the respondents, 7% admit that safety and healthy working environment is absent in their organization and rest 4% preferred not to response.

In today's competitive business settings managing deadlines, meeting targets, lack of time to fulfil personal and family commitments may create stress, depression among the employees. In force counselling program can ease the situation to a great

extent. Among the surveyed companies 84% of them claimed to have such counseling program in their organizational setting. Only 9% of the respondents said that counseling program is not still in place for the employees, while the remaining 7% were silent when asked about this issue.

Employee turnover has been a common phenomenon in recent period. Better opportunity, more salary, career growth opportunity, and grievance from present job etc. may cause the employee to switch organization or job. Confidentiality of information and goodwill of the company will be maintained if there is a proper and well-managed separation program for the employees who are leaving the company. Less than half (43%) of the respondents said that they have such separation programs in force for employees who leave the firm. Exactly half (50%) of the respondents replied that they do not have such separation program available. Employees who have access to cash and other negotiable instruments are bonded in thirty three percent (33%) of the cases. This practice is in action to ensure safety of cash and other negotiable instruments. On the other hand, almost half (48%) of the companies do not have any such policy to bond employees having such access to cash and negotiable instruments. Remaining nineteen percent (19%) of the respondents opted not to answer. This may be due to the skepticism against bonds.

*Table 4:* Responses to questions on human resource policies and practices

Questions	YES	NO	PNA*	Total
Are new personnel indoctrinated with respect to internal controls, ethics policies, and corporate code of conduct?	88%	6%	6%	100%
Are grievance procedures to manage conflict in force?	75%	10%	15%	100%
Does the company maintain a sound employee relations program?	90%	6%	4%	100%
Do employees work in safe, healthy environments?	89%	7%	4%	100%
Are counseling programs available?	84%	9%	7%	100%
Are proper separation programs in force for employees who leave the firm?	43%	48%	9%	100%
Are employees who have access to cash and other negotiable instruments bonded?	33%	48%	19%	100%

\* PNA=Prefer not to answer

#### e) Cost Benefit Analysis

Overall, three-fourth percent (75%) of the respondents think that internal control practices present benefit better than the cost involved to the organization.

In contrast, nine percent (9%) of the respondents denied the statement. Remaining sixteen percent (16%) of the respondents opted not to answer.

*Table 5:* Responses to questions on cost benefit analysis

Questions	YES	NO	PNA*	Total
Are the internal control practices in your organization offering any benefit to your organization at all? If yes, how?	75%	9%	16%	100%

\* PNA=Prefer not to answer

Internal control is more than an accounting function because it includes people and the relationship with them. Several benefits of the internal control practices within the organization were identified by the respondents.

It facilitates and accelerates in decision making, increases efficiency of internal operations, identifies and reduces financial, human resources, technological and political risks, increases financial security and credibility, empowers to focus on future growth rather than past, ensures better control over the organization and resources, maximizes profit, eliminates and minimizes meaningless cost and expenses from savings, time savings, helps proper evaluation of financial and nonfinancial performances, managing large employee groups effectively, maintains order and discipline and ensures safety of employees and resources, helps to deal with overall operations related to supply chain and others, and ensures good corporate governance as a whole.

## VI. CONCLUSION AND SUGGESTION FURTHER RESEARCH

The aim of this study is to obtain a concrete idea of the effectiveness of internal control practices in the Information Technology (IT) sector in Bangladesh. The IT sector contributes considerably to the development of the national economy of Bangladesh. This sector plays well both domestic and international market in the means of creating employment and generating foreign currency gradually. A handsome amount of the foreign export income comes from this sector every single year and increasing sharply, thus it is gradually getting an influential role running the economy wheel faster. In recent time this sector getting more focuses nationally and internationally. This recent initiative by different wings including national, international, government and private suggest the need for purposeful evaluation of the sustainability of this industry. As the international market is highly competitive which continuously increasing that pushes for cost minimization every day. To avoid any hazard and to ensure the long lasting presence of this promising sector, the control system should be strengthened. This study indeed reveals a picture of the present situation in this respect.

The responses to the eighteen questions asked to the respondents suggest that some improvements need to be made. However, majority of the organization do have control systems in place. Around fifty percent of the company's internal audit function is not separated and distinct from accounting. Less than fifty percent of the respondents reported that-

1. The institution is actually not maintaining conservatism while choosing from alternative accounting policies,
2. There is no proper separation programs for employees who leave the firm and
3. Employees are not bonded who have access to cash and negotiable instruments.

This study includes respondents from management only. A future study including respondents from representatives of management, employee and regulatory groups would discover if there is agreement between these stakeholders. No relationship has been developed between the benefits derived from the internal control practices and the costs involved. A cost benefit analysis could be done as well. Another future research area can be the relationship between organizational profitability and effectiveness & efficiency of internal control in place in that organization to verify the contribution of internal control to the profitability.

## REFERENCES RÉFÉRENCESREFERENCIAS

1. BASIS, 2012, *Annual Report*, viewed on 15 August 2016, from- [http://www.basis.org.bd/publication/-Annual\\_Report\\_2012.pdf](http://www.basis.org.bd/publication/-Annual_Report_2012.pdf)
2. BASIS, 2013, *Annual Report*, viewed on 15 August 2016, from- <http://www.basis.org.bd/publication/-Annual%20Report%202013.pdf>
3. BASIS, 2014, *Annual Report*, viewed on 15 August 2016, from- <http://www.basis.org.bd/publication/-Annual%20Report%202014.pdf>
4. Beiner, S. & Schmid, M.M., 2005, 'Agency conflicts, corporate governance and corporate diversification- Evidence from Switzerland' *Social Science Research Network*, Available at [http://papers.ssrn.com/so13/papers.cfm?abstract\\_id=666264](http://papers.ssrn.com/so13/papers.cfm?abstract_id=666264)
5. Black, B.S., 2001, 'Does corporate governance matter: A crude test using Russian data', *Univ. Pennsylvania Law Rev.*, 149: 2131-2150.
6. Cadbury, A., 2000, 'The Corporate Governance Agenda,' *Journal of Corporate Governance*, *Practice-Based Papers*, 8: 7-15.
7. DENMARK, INTOSAI INTERNAL CONTROL STANDARDS COMMITTEE, INTOSAI, 2004, *Guidelines for Internal Control Standards for the Public Sector*.
8. Dunlop, A., 1998. *Corporate governance and control*. Kogan Page Publishers. Page.17.
9. Feng, M., Li, C. & McVay, S., 2009, 'Internal Control and Management Guidance', *Journal of Accounting and Economics*, pp 1-50.
10. Gompers, P.A., Ishii, J.L. & Metrick, A., 2003, 'Corporate governance and equity prices', *Q. J. Econ.*, 118: 107-155.
11. Islam, M. S., 2000, 'Prospect and Challenges of Information Technology in Socio-economic



- Development of Bangladesh', *Sixth annual paper meet and international conference*, The institute of engineers, Bangladesh Mechanical engineering division, 27-29 January, p.370-376
12. Keasy, K. & Wright, M., 1997, '*Corporate Governance – Responsibilities, Risks and Remuneration*,' John Wiley & Sons, New York.
  13. Kendall, N., 1999, '*Good Corporate Governance, Accountants' Digest*,' Issue 40. The ICA in England and Wales.
  14. Klapper, L. & Love, I., 2004, 'Corporate governance, investor protection & performance in emerging markets', *J. Corporate Finance*, 10: 703-728.
  15. Mihaela, D. & Iulian, S., (2012), 'Internal Control and the Impact on Corporate Governance, in Romanian Listed Companies', *Journal of Eastern Europe Research in Business & Economics*, Vol. 2012 (2012), Article ID 676810.
  16. Rouf, M.A., 2011, 'The Relationship Between Corporate Governance and Value of the Firm in Developing Countries: Evidence from Bangladesh', *The International Journal of Applied Economics and Finance*, Volume-5, Number-3, pp. 237-244. Available at SSRN: <http://ssrn.com/abstract=-2576591>
  17. Saha, A.K., & Mondol, K.C., 2012, 'Internal Control Practices of Readymade Garments Sector (Textile Industry) in Bangladesh', *Asian Business Review*, Volume 1, Issue 1, pp67-71.
  18. Tricker, R. I., 1994, '*International Corporate Governance: Text, Readings and Cases*', Prentice Hall, New Jersey.
  19. Wilkinson, Joseph W. and Cerullo, Michael J., 2000, *Accounting Information Systems-Essential Concepts and Applications*, Fourth edition, John Wiley & Sons, Inc. pp 233-23

## APPENDIX

Dhaka Stock exchange (DSE) enlisted public limited companies	
1. aamra technologies limited	2. Agni Systems Ltd.
3. BDCOM Online Ltd.	4. Daffodil Computers Ltd.
5. Intech Limited	6. Information Services Network Ltd.
7. IT Consultants Limited	
<b>Private limited companies</b>	
8. AzolveTechnologies Bangladesh Limited (AZBD)	9. Asset Soft Technologies Limited
10. Advanced Software & IT Services Ltd.	11. ACME IT Ltd
12. Best IT Solutions Ltd.	13. Beximco Computers Limited
14. Computer source ltd	15. CSL Software Resources Limited
16. DataSoft Systems (BD) Limited	17. e-Soft
18. Flora Limited	19. Genuity Systems Limited
20. Hawar IT Limited	21. Information Tools South Asia Co. Ltd.
22. Multimedia Content & Communications Limited	23. Mediasoft Data Systems Ltd
24. New Era Softwares	25. Nexdecade Technology (Pvt.) Ltd
26. Orion Informatics Limited	27. Promiti Computers and Network (Pvt) ltd
28. Q-Soft Precise Assistance	29. Relisource Technologies Ltd.
30. smart technologies bd ltd	



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# The Security Price Impact on Firms Utilizing Derivatives across Industries

By Ronald Stunda

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*Abstract-* The purpose of this study is to shed light on the link between the information content of accounting earnings on security returns in the presence of derivatives within firms. To accomplish this, a study sample was chosen from years 2011-2015 which included firms within eight separate industries. The sample was partitioned by firms which engage in derivatives and firms which do not.

Results indicate that firms that do not utilize derivatives have a resultant average security price change that is almost double that of their derivative using counterparts. Also, the variance in the stock movements for non-derivative firms is approximately half of that for the derivative firms studied, indicating the potential for less risk in the non-derivative firms.

Also, analysis shows that industry membership may in fact have some bearing on stock price of firms that utilize derivatives. Accounting earnings of derivative-using firms in high growth industries seem to have a greater impact on security prices whereas for those derivative-using low growth firms, the security price impact of accounting earnings is not significant. It may well be that the upside of significant growth outweighs the potential downside of derivative usage in the minds of the investors when it comes to high growth industry firms.

*GJMBR-D Classification: JEL Code: K23*



*Strictly as per the compliance and regulations of:*



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Results indicate that firms that do not utilize derivatives have a resultant average security price change that is almost double that of their derivative using counterparts. Also, the variance in the stock movements for non-derivative firms is approximately half of that for the derivative firms studied, indicating the potential for less risk in the non-derivative firms.

Also, analysis shows that industry membership may in fact have some bearing on stock price of firms that utilize derivatives. Accounting earnings of derivative-using firms in high growth industries seem to have a greater impact on security prices whereas for those derivative-using low growth firms, the security price impact of accounting earnings is not significant. It may well be that the upside of significant growth outweighs the potential downside of derivative usage in the minds of the investors when it comes to high growth industry firms.

Lastly, when comparing non-derivative using firms along industry lines there appears to be some slight differences in significance levels between high growth and low growth industry firms. The general result, however, is that investors in firms which do not participate in derivative usage significantly correlate accounting earnings with security prices. Therefore, industry membership is not as crucial in investor selection of firms when the firm does not utilize derivatives.

## 1. INTRODUCTION

Derivatives are viewed by many as complex and murky in nature, however, they are not new to the financial scene. The early derivatives market began in the 1860s and consisted of farmers and grain merchants coming together in Chicago to hedge price risks in such commodities as corn, wheat, soy and other grain products. This began what came to be known as "futures" contracts. The traditional futures contract is an agreement between a seller and a buyer that the seller will deliver a product to the buyer at a price agreed to when a contract is first entered and the buyer will accept and pay for the product at some agreed upon future date. In addition, the buyer has the opportunity to liquidate some or all of the product prior to delivery. Although developed initially in the agricultural sector,

derivatives quickly spread into the metals, energy and financial sectors.

Because of the debilitating effect of agricultural prices during the Depression, President Roosevelt recommended to Congress the first market reform that impacted derivatives. The Commodity Exchange Act (CEA) of 1936 restricted, as far as possible, the use of futures purely for speculative purposes, thus relieving commodity producers of injury and thus producing some amount of control over the use of derivatives. In addition, the CEA called for a formal and regulated exchange through which transactions may occur. Futures contracts were required to be traded on a publicly transparent market, fully regulated, and ensuring that commitments would be backed by adequate capital.

By the 1980s, a variant of futures contracts was developed, commonly referred to as "swaps." They are defined as an agreement between two parties to exchange a series of cash flows measured by different interest rates, exchange rates, or prices with payment calculated by reference to a base amount. An example of an interest rate swap would be where one party exchanges a variable rate obligation on an existing loan for a fixed rate obligation. The expectation is that the fixed rate will be lower than the variable rate. Thus, instead of buying or selling a single future rate (as would be true under a traditional futures contract) there now exists the potential for the "swapping" of commitments. As these complex derivative types took hold during the 1980s and 1990s the Commodity Futures Trading Commission (CFTC) granted them exemption from the CEA of 1936. This caused the number of interest rate swaps, currency swaps, and other swaps to increase at a significant rate. This culminated in the Commodity Futures Modernization Act (CFMA) of 2000. Signed into law by President Clinton, the CFMA removed derivative transactions, from all the regulatory requirements established in 1936 by the CEA. Those parties engaging in derivatives were now exempt from capital adequacy requirements, reporting and disclosure, regulation of intermediaries, self-regulation, and bars on fraud or manipulation and excessive speculation. The Securities and Exchange Commission (SEC) was also barred from derivatives oversight. Through the passage of this Act lay the seeds for the destruction that would come in less than a decade.

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By October, 2008, the value of the unregulated derivatives market was estimated to be in excess of \$60 trillion. Included in that amount was somewhere close to \$30 trillion in credit swaps. At the same time, a perfect storm was developing. The Federal government was pursuing a course of easy money for home loans through maintaining low interest rates and providing Federally-backed less-than-secure home loans. Many of these “sub-prime” loans became embedded in the \$30 trillion of credit swaps. As a result, when defaults began to occur, they first created a mortgage crisis, which developed into a credit crisis, which then turned into a “once in a century” systematic financial crisis that, but for a huge U.S. taxpayer intervention, may have led in the fall of 2008 to a worldwide devastating Depression.

The use of derivatives has become widespread throughout the U.S. economy over the past 25 years. Derivative usage is found in a broad range of industries, from office equipment producers, to retail, to healthcare. Although derivative usage seems to be most common in the United States, significant usage also has been occurring in Canada, France, Great Britain and Japan (International Swaps and Derivatives Association 2009). Usage of commodity, equity, and credit derivatives is more concentrated among specific industries. Multinational companies across all industries use derivatives to manage foreign exchange and interest rate risk. Indeed, derivatives continue to be an integral part of risk management within a growing number of corporations worldwide.

It should be clear that futures contracts in the form of derivatives must possess some benefit by shifting risk, otherwise they would not be used at all. Given that derivatives have been, and will continue to be used as instruments that permit the potential minimization of future financial risks, the question must be asked, “to what extent do they affect the security price of the firms that utilize them?” Clearly, if the objective of management is to maximize the return to the stockholders, some firms may be inhibited from using derivatives if they are viewed to minimize stock prices. On the other hand, if derivative use ultimately increases the stock price, more firms would elect their use.

The purpose of this study is to assess the role that derivatives play on the security prices of firms. In particular, do firms that engage in derivative use find that their change in stock price is significantly different from firms that do not utilize derivatives? This question will be addressed by first comparing derivative-using firms with firms that do not use derivatives in order to assess any general differences between the two groups. Next, a similar analysis will be conducted by firms in specific industry groups in order to assess if derivative usage is more pronounced by industry association.

## II. LITERATURE REVIEW

The use of derivatives is a contentious issue. Nevertheless, whether one subscribes to Warren Buffet’s warning about the danger of derivatives or Allen Greenspan’s assertion that derivatives reduce risk (Berry 2003), the fact is that derivatives are popular and growing in use (Bodner et al 1995, Wolfson and Crawford 2010). Therefore, given the place of derivatives in the financial market place, it seem reasonable to ask what, if any, information content they provide in relation to security prices.

Many studies have examined the risk associated with derivative usage (Cornfield 1996, Guay 1999, Kuprianov 1995, Newman 1994, Hentschel and Kothari 2001). In general, these studies note that firms use derivatives as a hedge against exposure, but find that compared to firms which do not use derivatives, there does not appear to be any measurable difference in risk. This would lead one to suspect that no market impact from the use of derivative instruments would be found. Stunda (2014) finds that there is a difference in market impact for derivative-using firms which accepted Troubled Asset Relief Program (TARP) funds versus those which did not receive TARP funds.

In addition to risk, other researchers have examined the role of derivatives in an earnings management context. Jan Barton (2001) examined this issue and presented evidence “consistent with managers using derivatives and discretionary accruals as partial substitutes for smoothing earnings.” An implication of this finding is that derivatives may indeed have a market impact through their effect on corporate earnings.

There is a popular belief that derivatives do not contribute any financial or economic substance to the general economy but are mere financial gambling devices (Gilani 2008). As a result, some authors arrive at the conclusion that derivative usage should play no role in security prices (Stulz 2009).

But how exactly can things go wrong for buyers and sellers of derivative instruments and how can this in turn lead to adverse earnings results which may in turn affect stock prices? Skeel and Partnoy 2007, describe the scenario in which this can occur. The ease of credit, in conjunction with loose U.S. monetary policy can lead to the mispricing of credit. This means that loans which can be sub-prime in nature are bundled together with loans with lesser risk, the risk on the bundle is, therefore, underestimated. As a result, mispricing on the bundled rate can lead to highly leveraged bets for the holders of such bundles. Subsequent defaults can then lead to an attempt to unwind these bundles, the effects can then steamroll and permeate national and international financial markets, and ultimately, the bottom line of a firm. Holders of undervalued derivatives are forced to record current period losses as the swaps take place,



placing downward pressure on earnings and forcing greater securitization (Pertrova 2009).

Given the use, nature, and circumstances that have swirled around derivative financial instruments, and based on the research undertaken to date, it becomes even more important to determine the link that derivatives have to stock prices. As the Financial Accounting Standards Board (FASB) continues to struggle to identify what exactly their role should be in the derivatives debate, it is important to understand the relationship that derivatives have to stockholder wealth, and stockholder wealth is ultimately dictated by the price of the stock.

### III. HYPOTHESIS DEVELOPMENT

As previously noted, very few studies of derivatives directly link derivative usage to information content of earnings and security returns [Barton 2001, Stunda 2014]. However, if a correlation is established, evidence may suggest that firms could directly or indirectly affect the price of their stock in the capital markets through use (or non-use) of derivatives. Controlling for extraneous factors (i.e., change in corporate form, change in management, and change in ownership) there should not be significant difference in information content of earnings across study periods. Thus, the first hypothesis tests for the existence of market reaction for the sample firms using derivatives versus sample firms not using derivatives during a test period. Stated in the null form, the hypothesis tested is:

*H1:* Earnings information content effect on security prices for firms utilizing derivatives is not significantly different from firms not utilizing derivatives.

Stunda 2014 finds that there is a difference in market impact for derivative-using firms which accepted Troubled Asset Relief Program (TARP) funds versus those which did not receive TARP funds. This provides some market-based evidence that firms utilizing derivatives may have different characteristics. If so, a question that arises is are any differences associated with a particular industry or set of industries? In order to test this, the following hypothesis is stated in the null form:

*H2:* There is no significant difference in information content on security prices when firms utilizing derivatives are assessed by industry.

Lastly, in attempt to place findings from hypothesis 2 into perspective, an analysis is made of

firms not utilizing derivatives. A premise set forth by Ball and Brown (1968) and others, is that earnings, more specifically, “unexpected earnings” was causing the stock price to move. Therefore, this extant theory is used to replicate the model first used by Ball and Brown in 1968 in order to establish that there is a correlation between earnings and security prices. This leads to the following hypothesis, stated in the null form:

*H3:* There is no significant difference in information content on security prices when firms not utilizing derivatives are assessed by industry.

### IV. DATA AND METHODOLOGY

The sample consists of quarterly earnings and security prices during the years 2011-2015. Earnings data is obtained from Compustat and security price information is derived from the Center for Research on Security Prices (CRSP). The economic recession was said to officially end sometime in late 2009 to early 2010. In order to not confound results, the test period begins in the following year (i.e., 2011) and extends to the most recent year for which data is available (i.e., 2015). Also, the Electronic Data Gathering and Retrieval System (EDGAR), and the Wall Street Journal (WSJ) are used to analyze financial notes and other associated firm information in order to control for such things as change of corporate form, change in ownership, or change in management. If any of these could be documented during the test period, the firm is subsequently eliminated from the study.

A total of eight industries are analyzed in the study. In their analysis of earnings forecast accuracy, Sinha, Brown, and Das (2015) find that certain industries have experienced above average growth in the last ten years, while other industries have experienced below average growth during this same period. This study incorporates industry analysis from that study to highlight similar above growth industries, namely; Technology, Healthcare, Oil/Gas, and Banking/Finance. In addition, the same below average growth industries are also analyzed, they are; Utilities, Real Estate, Transportation, and Industrials. The total samples of firms by industry, are listed in Table 1. Firms included in the study sample contained all available information throughout the five year test period. In addition, the two sample groups were matched as closely as possible in terms of size (expressed by total assets).

Table 1: Study Sample

Industry	Derivative Firms	Non-Derivative Firms
Utilities	38	27
Real Estate	26	24
Transportation	29	29
Industrials	42	31
Technology	37	28



Healthcare	42	21
Oil/Gas	30	19
Banking/Finance	29	17
Total	273	196

In assessing hypothesis 1 an analysis of variance (ANOVA) is conducted on the total composite average percentage security price change of the two groups (i.e., derivative firms and non-derivative firms) in order to assess any differences between them.

With regard to hypothesis 2, the analysis follows the procedure first established by Ball and Brown (1968). The premise of the Ball and Brown study was to see whether the magnitude of unexpected earnings (as opposed to merely the sign of unexpected earnings) was related to the magnitude of the stock price response. Beaver, Clarke and Wright (1979) addressed the issue and discovered, in fact, that the magnitude of unexpected earnings was related to the magnitude of the stock price response. Again, they focused on market-adjusted stock returns to facilitate across-firm comparisons and to control for market-wide movements in stock prices. Ball and Brown (1968) and Beaver, Clarke and Wright (1979) show that despite the deficiencies of historical cost accounting, accounting earnings are potentially useful to investors. They also ushered in the so-called information perspective on the decision usefulness of accounting. The information perspective implies that investors' response to accounting information can provide a guide as to what type of information is or is not valued by investors.

The next logical question to ask was whether the market responded more strongly to unexpected earnings in some firms, and less strongly in other firms. This question is quite pertinent to accountants because we potentially would be better able to design financial statements if we knew the factors that predict when and why investors respond more strongly (less strongly) to financial statement information. Consistent with the literature, the term "Earnings Response Coefficient," or "ERC" is used to describe the strength of the market response to unexpected earnings. To understand this line of research, one needs to have an intuitive understanding of how investors might respond to accounting information in light of single person decision theory, portfolio theory, and efficient market theory. Here is the basic idea: Let's say that last period's earnings were \$1 and, accordingly, that is the level of earnings an investor expects this year. When this year earnings are announced, the level of earnings are, say, \$1.25, implying a \$0.25 earnings surprise. If the investor believes this \$0.25 level of unexpected earnings is a one-time shot that will not recur into the future, the investor will increase his assessment of stock value by \$0.25. However, if the investor believes this \$0.25 unexpected increase in earnings is a permanent boost

to earnings that will recur in future years, then the investor's increase in stock price is \$0.25 + the present value of receiving \$0.25 into perpetuity. Given this framework for thinking about how investors should respond to unexpected earnings, it can be predicted that investors will respond more strongly to unexpected earnings when those earnings are expected to persist into the future. It can also be predicted that investors' response to unexpected earnings will be smaller the higher the discount rate they use in discounting those unexpected earnings that are expected to be received into perpetuity.

Subsequent numerous studies have tested these predictions, and here is what they found:

- 1) ERC are increasing in the persistence of earnings. This has implications for accountants because it suggests the importance of clearly identifying on the income statement those transactions that are nonrecurring transactions (Baginski and Hassell, 1990).
- 2) ERC are decreasing in the riskiness of the firm and the leverage of the firm because both imply that investors demand higher expected returns and thus will use a higher discount rate in discounting the unexpected earnings expected to persist into the future. Thus, accountants should minimize the opportunities for off-balance sheet financing (or make sure the off-balance sheet financing is transparent) (Ajinkya, Atiase, and Giff, 1991).
- 3) ERC are increasing in the growth opportunities of the firm because unexpected earnings reported by growth firms are expected to persist into the future. Thus, the forward-looking MD&A disclosures are particularly important because they provide information about growth opportunities (Collins and Kothari, 1994).
- 4) ERC are increasing in the quality of accounting accruals. Thus, detailed information about the components of accounting accruals might be useful to investors (Lev, 1989).

Therefore, the above extant theory and rationale was used to replicate the model first used by Ball and Brown in 1968 in order to establish that there is a correlation between earnings and security prices. The Dow Jones News Retrieval Service (DJNRS) was used to identify the date that each firm released quarterly financial data for the study periods. This date of data release is known as the event date. The following model is established for determining information content:

$$CAR_{it} = a + b1UE_{it} + b2MBit + b3Bit + b4MV_{it} + eit \tag{1}$$

Where: CARit = Cumulative abnormal return firm i, time t  
 A = Intercept term  
 UEit = Unexpected earnings by specific industry for derivative firms  
 Mbit = Market to book value of equity as proxy for growth and persistence  
 Bit = Market model slope coefficient as proxy for systematic risk  
 MVit = market value of equity as proxy for firm size  
 eit = error term for firm i, time t

The above regression is run multiple times for each industry and year in the sample. The coefficient "a" measures the intercept. The coefficient b1 is the traditional earnings response coefficient (ERC), found to have correlation with security prices in traditional market based studies (see Ball and Brown 1968). Unexpected earnings (UEi) is measured as the difference between the management earnings forecast (MFi) and security market participants' expectations for earnings proxied by consensus analyst following as per Investment Brokers Estimate Service (IBES) (EXi). The unexpected earnings are scaled by the firm's stock price (Pi) 180 days prior to the forecast:

$$UEi = [(MFi) - (EXi)]/Pi \quad (2)$$

Unexpected earnings are measured for each of the sample firms during the test period. The coefficients b2, b3, and b4, are contributions to the ERC for all firms in the sample. To investigate the effects of the

$$CARit = a + b1UEit + b2MBit + b3Bit + b4MVit + eit \quad (3)$$

Where: CARit = Cumulative abnormal return firm i, time t  
 a = Intercept term  
 UEit = Unexpected earnings by specific industry for non-derivative firms  
 MBit = Market to book value of equity as proxy for growth and persistence  
 Bit = Market model slope coefficient as proxy for systematic risk  
 MVit = market value of equity as proxy for firm size  
 eit = error term for firm i, time t

Again, the above regression is run multiple times for each industry and year in the sample. All

information content of earnings on security returns, there must be some control for variables shown by prior studies to be determinants of ERC. For this reason, the variables represented by coefficients b2 through b4 are included in the study.

For each firm sample, an abnormal return (ARit) is generated around the event dates of -1, 0, +1 (day 0 representing the day that the firm's financials were available per DJNRS). The market model is utilized along with the CRSP equally-weighted market index and regression parameters are established between -290 and -91. Abnormal returns are then summed to calculate a cross-sectional cumulative abnormal return (CARit).

In testing hypothesis 3, for firms not using derivatives, a regression analysis, similar to that used in testing hypothesis 2, is utilized. That model is presented below:

parameters used in hypothesis 2 are again used in testing this hypothesis.

## V. RESULTS

Table 2: Test of Hypothesis 1

One Way ANOVA-Derivative Versus Non-Derivative Firms Sample (2011-2015)					
Summary					
Groups	Count	Sum	Average	Variance	
Derivative Firms	273	1094.7	3.215	6.287461	
Non-Derivative Firms	196	707.2	7.385	3.476922	
Source of Variation	SS	df	MS	F-ratio	P-value
Between Groups	2518.106	1	401.618	23.191	.0000
Within Groups	982.775	468	3.002		
Total	3500.881	469			
Levene Statistic	df1	df2	Two-tail Significance		
7.1950	1	468	.001		
t-stat	df	p-value			
Welch's t-test	1.696	1	< .020		

As indicated in Table 2, the two groups are analyzed using the one-way ANOVA. The one-way ANOVA test indicates an F-ratio of 23.191 with an associated p-value of .0000. When the Levene test was performed to assess for homogeneity of variance, a Levene statistic of 7.1950 was obtained with a significance level of .001. This test indicates significant differences in the variances of the groups.

Because the variances of the groups are not equal, there exists violation of the assumption of homogeneity across the samples. In order to account for this, The Welch's test was performed. This test assesses significance between groups when variances do not equal. Based on the Welch's test, and as indicated in Table 2, a t-statistic of 1.696 was computed

with a p-value of less than .020. This indicates that the mean of the sample groups are significantly different, and thus the null hypothesis of similarity between the groups is rejected.

In addition, close analysis of Table 2 indicates that the average composite percentage change in stock price for the derivative firms sample was +3.215, the respective change for the non-derivative firms sample was +7.385. This indicates that firms that do not utilize derivatives have a resultant average security price change that is almost double that of their derivative using counterparts. Also, the variance in the stock movements for non-derivative firms is approximately half of that for the derivative firms studied, indicating the potential for less risk in the non-derivative firms.

Table 3: b1 Variable Assessment- Derivative Firms Sample by Industry ERC2011-2015

$$\text{Model: } CAR_{it} = a + b1UE_{it} + b2MB_{it} + b3B_{it} + b4MV_{it} + eit$$

Industry	2011		2012		2013		2014		2015	
	ERC	p value	ERC	p value	ERC	p value	ERC	p value	ERC	p value
Utilities	.019	0.48	.020	0.29	.021	0.57	.027	0.22	.030	0.30
Real Estate	.022	0.72	.019	0.44	.016	0.65	.017	0.59	.015	0.61
Transportation	.025	0.51	.030	0.47	.024	0.33	.022	0.19	.023	0.60
Industrials	.015	0.31	.011	0.40	.017	0.52	.012	2.27 <sup>c</sup>	.014	2.37 <sup>c</sup>
Technology	.091	1.90 <sup>b</sup>	.090	1.95 <sup>b</sup>	.094	1.88 <sup>b</sup>	.099	1.91 <sup>b</sup>	.097	1.88 <sup>b</sup>
Healthcare	.051	2.42 <sup>c</sup>	.053	2.39 <sup>c</sup>	.053	2.23 <sup>c</sup>	.060	2.19 <sup>c</sup>	.057	1.92 <sup>b</sup>
Oil/Gas	.060	2.33 <sup>c</sup>	.064	1.91 <sup>b</sup>	.058	1.88 <sup>b</sup>	.064	2.24 <sup>c</sup>	.074	2.28 <sup>c</sup>
Banking/.Finance	.032	1.88 <sup>b</sup>	.038	2.21 <sup>c</sup>	.042	2.36 <sup>c</sup>	.053	1.91 <sup>a</sup>	.052	2.22 <sup>c</sup>
<sup>a</sup> Significant at the .01 level <sup>b</sup> Significant at the .05 level <sup>c</sup> Significant at the .10 level Total 273 firms in the sample										

Table 3 indicates results of the regression analysis with respect to variable b1, which assesses the ERC of 273 derivative using firms contained in the sample by industry. Following the lead of Sinha, Brown, and Das (2015), Table 8 may be summarized as an analysis of above average growth industries (Technology, Healthcare, Oil/GA, Banking/Finance) and below average growth industries (Utilities, Real Estate, Transportation, Industrials).

For the above average growth industries, the CAR reflects positive information content on the ERC in each year of the study, and the response is significant at conventional levels in each year. For the below average growth industries, the CAR reflects positive information content on the ERC in each year of the study, but the response is not significant at conventional levels. The lone exception is for the "Industrials" industry which indicates a significant correlation between accounting earnings and stock price at the .10 level in years 2014 and 2015. All other variables in the regression are not significant at conventional levels.

Results indicate that industry membership may in fact have some bearing on stock price of firms that utilize derivatives. Accounting earnings of derivative-

using firms in high growth industries seem to have a greater impact on security prices whereas for those derivative-using low growth firms, the security price impact of accounting earnings is not significant. It may well be that the upside of significant growth outweighs the potential downside of derivative usage in the minds of the investors when it comes to high growth industry firms.

In addition, whenever regression variables are employed, there is a probability of the presence of multicollinearity within the set of independent variables which may be problematic from an interpretive perspective. To assess the presence of multicollinearity, the Variance Inflation Factor (VIF) was utilized. Values of VIF exceeding 10 are often regarded as indicating multicollinearity. In the test of hypothesis 1, a VIF of 2.5 was observed, thus indicating a non-presence of significant multicollinearity

The results contained in Table 3 lead to a rejection of the second hypothesis which states that there is no significant difference in information content on security prices when firms utilizing derivatives are assessed by industry.

Table 4: b<sub>2</sub> Variable Assessment- Non-Derivative Firms Sample by Industry ERC2011-2015

$$\text{Model: } CAR_{it} = a + b_1UE_{it} + b_2MB_{it} + b_3B_{it} + b_4MV_{it} + e_{it}$$

Industry	2011		2012		2013		2014		2015	
	ERC	p value	ERC	p value	ERC	p value	ERC	p value	ERC	p value
Utilities	.030	2.31 <sup>c</sup>	.033	2.41 <sup>c</sup>	.039	2.22 <sup>c</sup>	.031	2.27 <sup>c</sup>	.038	2.32 <sup>c</sup>
Real Estate	.025	2.44 <sup>c</sup>	.029	2.46 <sup>c</sup>	.022	2.33 <sup>c</sup>	.030	2.34 <sup>c</sup>	.025	2.48 <sup>c</sup>
Transportation	.037	2.33 <sup>c</sup>	.039	2.51 <sup>c</sup>	.028	2.23 <sup>c</sup>	.040	2.40 <sup>c</sup>	.039	2.29 <sup>c</sup>
Industrials	.022	2.44 <sup>c</sup>	.027	2.37 <sup>c</sup>	.033	2.49 <sup>c</sup>	.037	2.29 <sup>c</sup>	.035	2.38 <sup>c</sup>
Technology	.109	1.68 <sup>a</sup>	.104	1.63 <sup>a</sup>	.113	1.65 <sup>a</sup>	.112	1.69 <sup>a</sup>	.109	1.77 <sup>a</sup>
Healthcare	.082	1.64 <sup>a</sup>	.079	1.59 <sup>a</sup>	.091	1.66 <sup>a</sup>	.087	1.70 <sup>a</sup>	.091	1.72 <sup>a</sup>
Oil/Gas	.079	1.63 <sup>a</sup>	.070	1.90 <sup>b</sup>	.082	1.63 <sup>a</sup>	.077	1.88 <sup>b</sup>	.080	1.93 <sup>b</sup>
Banking/.Finance	.048	1.86 <sup>b</sup>	.052	1.68 <sup>a</sup>	.059	1.62 <sup>a</sup>	.050	1.81 <sup>b</sup>	.057	1.60 <sup>a</sup>
<sup>a</sup> Significant at the .01 level <sup>b</sup> Significant at the .05 level <sup>c</sup> Significant at the .10 level Total 196 firms in the sample										

Table 4 provides results of the regression analysis with respect to variable b<sub>1</sub>, which assesses the ERC of 196 non-derivative using firms contained in the sample by their respective industry. Results indicate that for each year, the CAR reflects positive information content on the ERC and the response is significant at conventional levels. All other variables in the regression are not significant at conventional levels.

There appears to be some slight differences in significance levels between high growth and low growth industry firms. The general result, however, is that investors in firms which do not participate in derivative usage significantly correlate accounting earnings with security prices. Therefore, industry membership is not as crucial in investor selection of firms when the firm does not utilize derivatives.

To assess the presence of multicollinearity, the Variance Inflation Factor (VIF) was utilized. Values of VIF exceeding 10 are often regarded as indicating multicollinearity. In the test of hypothesis 3, a VIF of 2.2 was observed, thus indicating a non-presence of significant multicollinearity.

The results contained in Table 4 do not lead to a rejection of the third hypothesis which states that there is no significant difference in information content on security prices when firms not utilizing derivatives are assessed by industry.

## VI. CONCLUSIONS

The purpose of this study was to shed light on the link between the information content of accounting earnings on security returns in the presence of derivatives within firms. To accomplish this, a study sample was chosen from years 2011-2015 which included firms within eight separate industries. The sample was partitioned by firms which engage in derivatives and firms which do not. In order to avoid confounding of the sample, firm size was matched as

closely as possible in both samples. In addition, externalities such as changes in management, corporate form or management change were factored into the study and any firm(s) found to contain these changes were eliminated from the study sample.

Results indicate that firms that do not utilize derivatives have a resultant average security price change that is almost double that of their derivative using counterparts. Also, the variance in the stock movements for non-derivative firms is approximately half of that for the derivative firms studied, indicating the potential for less risk in the non-derivative firms.

Also, analysis shows that industry membership may in fact have some bearing on stock price of firms that utilize derivatives. Accounting earnings of derivative-using firms in high growth industries seem to have a greater impact on security prices whereas for those derivative-using low growth firms, the security price impact of accounting earnings is not significant. It may well be that the upside of significant growth outweighs the potential downside of derivative usage in the minds of the investors when it comes to high growth industry firms.

Lastly, when comparing non-derivative using firms along industry lines there appears to be some slight differences in significance levels between high growth and low growth industry firms. The general result, however, is that investors in firms which do not participate in derivative usage significantly correlate accounting earnings with security prices. Therefore, industry membership is not as crucial in investor selection of firms when the firm does not utilize derivatives.

With the increasing usage of derivatives across industries, it becomes important for investors to understand any implications associated with the use of derivatives. This includes not only the implication on the bottom line of the firm, but the subsequent impact of

those earnings on the security price of the firm. Given the dearth of extant studies on derivatives, this paper attempts to address this issue. In addition to the investor-related issue of the study, there are also implications for managers of firms within certain industries when derivatives are used.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. Sinha, P., L. Brown, and S. Das (2015). "Differential Earnings Forecast Accuracy," *Contemporary Accounting Research*, 60-79.
2. Ajinkya, B., R. Atiase, and M. Gift (1991). Volume of Trading and the Dispersion in Financial Analysts' Earnings Forecasts, *The Accounting Review* 66, 389-401.
3. Baginski, S., and J. Hassell (1990). The Market Interpretation of Management Earnings Forecasts as a Predictor of Subsequent Financial Analyst Forecast Revision, *The Accounting Review* 65, 175-190.
4. Ball, R., and P. Brown (1968). An Empirical Evaluation of Accounting Income Numbers, *Journal of Accounting Research*, (Autumn) 159-178.
5. Barton, J. (2001). Does the Use of Derivatives Affect Earnings Management Decisions? *The Accounting Review*, 76(1), 1-26.
6. Berry, J. (2003). Derivative Divide Financial Sages Greenspan Says they Reduce Risk but Buffet calls them Dangerous. *Seattle Times* (March 7): C2.
7. Beaver, W, R. Clarke, and W. Wright (1979). The Association between Unsystematic Security Returns and Earnings Forecast Errors, *Journal of Accounting Research* (Autumn), 316-340.
8. Bodnar, G., G. Hayt, R. Marston, and W. Smithson (1995). Wharton Study of Derivative Usage by U.S. Firms, *Journal of Financial Management* (24)2, 104-114.
9. Collins, D., and S. Kothari (1994). Lack of Timeliness and Noise as Explanations for the Low Return-Earnings Associations, *Journal of Accounting and Economics* 18, 289-324.
10. Cornfield, A. (1996). Some Recent Innovations in International Finance: The Case for Derivatives, *Journal of Economics*, 30, 493-508.
11. Gilani, S. (2008). The Real Reason for the Global Financial Crisis, <http://mondaymorning.com>, September 18, 2008.
12. Guay, W. (1999). The Impact of Derivatives on Firm Risk, *Journal of Accounting and Economics*, 26, 319-351.
13. Hentschel, L., and P. Kothari (2001). Are Corporations Reducing or Taking Risks with Derivatives? *Journal of Financial and Quantitative Analysis*, Vol 7, 146-158.
14. International Swaps and Derivatives Association (ISDA). First Quarter News Release, April 23, New York, New York, 1-14.
15. Kuprianov, A. (1995). Case Studies of Large Losses in the Derivatives Market, *Federal Reserve Bank of Richmond, Economic Quarterly* (18), 1-39.
16. Lev, B. (1989). On the Usefulness of Earnings and Earnings Research, *Journal of Accounting Research* 27, 153-192.
17. Newman, P. (1994). The Real Story of an Insurance Giant's Fall. *Maclean's* 107, 1-24.
18. Petrova, I. (2009). Derivatives as the World Financial Crisis Factor, *Journal of Business Management*, March, 75-84.
19. Skeel, D., and F. Partnoy (2007). The Promise and Perils of Credit Derivatives, *University of Cincinnati Law Review*, Vol 75, 1019-1027.
20. Stulz, R. (2009). Credit Default Swaps and the Credit Crisis. *Poznan University Economics Review*, 11, 64-72.
21. Stunda, R. (2014). The Role of Derivatives in the Financial Crisis and their Impact on Security Prices, *Accounting and Taxation*, 6 (1), 39-50.
22. Wolfson, J., and C. Crawford (2010). Lessons from the Current Financial Crisis, *Journal of Business and Economic Research*, July, Vol 8, 85-91.





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# The Association between Board Size, Independence and Firm Performance: Evidence from Saudi Arabia

By Mohammed Alshetwi

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**Abstract-** This study examines the association between board size, independence and firm performance in Saudi nonfinancial listed firms. The sample consists of 329 firms during the period 2013 to 2015. Both between- and within-firms variation analysis are used to test the hypotheses. The study finds that neither board independence nor board size is linked to firm performance, but some evidence (from additional tests) supports the argument that non-executive members of the board of directors may lack real independence; in this case they would be both less effective and more costly for firms. Together, these findings are consistent with the view that business structure in Saudi Arabia is dominated by a tribal system that gives more attention to personal relationships instead of skill and competency in selecting member of the board of directors.

**Keywords:** board size, board independence, firm performance, saudi nonfinancial listed firms.

**GJMBR-D Classification:** JEL Code: L20



*Strictly as per the compliance and regulations of:*





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**Keywords:** board size, board independence, firm performance, saudi nonfinancial listed firms.

## I. INTRODUCTION

The main function of the board of directors is to monitor management's activities to ensure they are in line with shareholders' interest (Jensen & Meckling, 1976). Through their monitoring function, independent board members can reduce agency cost and ensure that management does not use the firm's resources in their own interests (Hillman & Dalziel, 2003). The size of a board is another important factor in corporate governance (CG) that affects the monitoring system and can improve the decision-making process (Haniffa & Hudaib, 2006), and in this way can help enhance the long term performance of the firms.

A review of the literature confirmed that board size and independence were among the important factors affecting firm performance, but the findings are contradictory. Some prior studies have concluded that independence of the board is associated with improved performance (Hossain, Prevost & Rao, 2001; Reddy, Locke, Scrimgeour & Gunasekarage, 2008), while in other studies an independent board was found to have a negative impact on firm performance (Fauzi & Locke, 2012; Agrawal & Kneoeber, 1996).

Meanwhile, many of the studies investigating the relationship between board size and performance found that smaller boards are more effective in improving the level of firm performance (Cheng, Evans

& Nagarajan, 2008; Eisenberg, Sundgren & Wells, 1998; Guest, 2009; Hossain et al., 2001; Reddy et al., 2008); although some studies found that firms with large boards reported better performance (Coles, Daniel, & Naveen, 2008; Dalton, Johnson, & Ellstrand, 1999; Fauzi & Locke, 2012; Larmou & Vafeas, 2010).

Regardless, board size and independence have become a focus of CG regulations around the world. For instance, the Cadbury Report, published in 1992, mandated that all UK listed firms should appoint a minimum number of three outside directors on their boards, the majority of whom should be independent of the firms (Cadbury, 1992). Meanwhile, in the US, the Sarbanes Oxley Act (SOX) required that boards should have five members to provide full-time independent services (SOX, 2002). In this regard, The New York Stock Exchange (NYSE) required that independent members of boards should constitute the majority on the boards of all listed firms (NYSE, 2009).

In the case of Saudi Arabia, the CG regulation, issued by the Capital Market Authority (CMA) in 2006, emphasized the importance of board size and independence in improving governance quality and firm performance. Specifically, the CG regulation required that all listed firms could determine the number members on the board of directors provided that the number was no less than three and no more than eleven, the majority of whom should be non-executive members (CMA, CG Regulation, 2006).

While Saudi Arabia is no different from advanced countries in this respect, it should be noted that each country has unique characteristics that affect its economy and modelling of its business sector. The argument that one CG code, therefore, could be applied universally to all business structures ignores the differences between countries and their economic features that shape their business environment. It can also be pointed out that there are differences within a single country and between each business unit inside that country, with each based on its own leadership model and capital structure.

With regard to the case of Saudi Arabia, it should be noted that there are specific environmental factors affecting the business sector. For example, Saudi society is dominated by a tribal system in which decision making is concentrated in one influential

person, and ultimately this can lead to aspects of cronyism and nepotism (Haniffa & Hudaib, 2007). Such a system affects the decisions related to nominating members of the board, so that directorships are often selected on the basis of relationship with the CEO and not on formal rules or professional competence. Although such a pattern may increase the board size in terms of quantity, it may negatively affect the quality of the board. This is due to the gap between the qualification of members selected and the requirements of the position held. In such a situation, it is to be expected that the board of directors would be less effective and more costly in terms of higher total remuneration paid to the members. On the other hand, such a model of board composition may explain the personal nature of business in which agency conflict is likely to increase as a result of absence of consultation and consensus in the decision making process. Another problem of such a model is related to secrecy of information, where CEOs determine the type and quantity of information available to different individual board members based on their personal preferences. This limitation of information can adversely affect the ability of directors in carrying out their monitoring functions (Jensen, 1983).

To summarize, these factors, related to society and social structure in Saudi Arabia, affect business structures and processes in ways that are different from what is expected in advanced countries. Consequently, adopting CG regulations from advanced countries and applying them directly in less developed countries like Saudi Arabia might not be an ideal option.

Considering the environmental factors of the Saudi business sector, the important question the current study set out to answer is: to what extent are the CG regulations appropriate for Saudi firms in terms of the relationship between board independence and board size, and the performance of Saudi nonfinancial listed firms?

The sample frame of this study includes all 329 of Saudi nonfinancial listed firms over the period 2013 to 2015. Two main statistical tests are used to analyze data for within- and between-firms variation tests.

The findings reveal that neither board size nor board independence is linked to firm performance. However, there is some evidence from an additional test that reveals a negative relationship between board independence and firms' financial performance, indicating that board members are less effective in carrying out their functions and represent a higher cost for their firms. Overall, the results are consistent with the view that the Saudi business sector is influenced by factors present in its society that give more attention to personal relationships instead of skill or competency in selecting the members of board directors.

These results may alert the policy maker (i.e. the CMA) to the differences between Saudi Arabia and

advanced countries in terms of relevant business sector needs. Specifically, in its efforts to renew CG regulations, the CMA should adopt appropriate regulations that consider the specific needs of Saudi business sector instead of blindly borrowing regulations from abroad.

The remainder of this paper is organized as follows: Section 2 reviews the literature and develops the research assumption. The research methodology is described in Section 3. Section 4 reports and discusses the results of the study. The final section provides the conclusion, and discusses limitations of the study and possible areas for future research.

## II. THEORY AND HYPOTHESIS DEVELOPMENT

Due to a separation between ownership and management, management might misuse the firm's resources to maximize their own interest. This would cause a conflict between owners of firms and management. Agency theory suggests that the board of directors can reduce such conflicts by acting as a monitoring control system and ensuring that management acts are consistent with the behavior of owners (Jensen & Meckling, 1976). However, as the board is responsible for authorizing access to a firm's resources (Hendry & Kiel, 2004), developing the strategic direction of the firm and providing guidance for setting roles and objectives aligned with owners' interests (Jensen, 1993, Zahra & Pearce, 1989), it is most important to ensure that performance complies with established goals. In addition, as part of their responsibilities to ensure that firms achieve the goals established, the boards have the authority to remove a CEOs if he or she fails to perform as expected (Zahra & Pearce, 1989), thereby indicating the direct influence board members can exert on corporate performance.

In general, board size, among other board characteristics, is considered to be an important factor that affects the monitoring of management and limits the extent of domination of the CEO on the board of directors (Fauzi & Locke, 2012; Zahra & Pearce, 1989), and can improve the decision process (Haniffa & Hudaib, 2006) leading to enhanced corporate performance.

Similarly, independent boards can also add value to firms in terms of monitoring management activities and the financial performance of the organization (Hillman & Dalziel, 2003). They also influence a firm's performance in such matters as monitoring the operational processes (Fuzi, Adliana, & Julizaerma, 2016) encouraging managers to focus on long term performance rather than routine activities (Alves, 2014) and authorizing the decisions of management based on whether they benefit shareholders (Fama & Jensen, 1983). In this regard,

Haniffa and Hudaib (2006) indicated that an effective independent board helps reduce agency cost resulting from misallocation of resources. Indeed, an independent board with a majority of non-executive directors can better provide firms with experience, skill, and contacts (Haniffa & Hudaib, 2006; Hermalin & Weisbach, 1988) and thereby helping firms to identify the opportunities for better performance.

Zahra and Pearce (1989) argued that the presence of a majority of independent directors is important for developing strategies through their involvement in debates and discussions related to established strategies and long term objectives. In this respect, independent boards provide assurance that the firm's strategies are established consistent with the shareholders' objectives.

Previous studies have documented that firms with independent boards tend to report better performance. For example, Reddy et al. (2008) used the data from small firms to investigate the effect of independent boards, among other CG characteristics, on the performance of New Zealand listed firms and found that independent boards improved firm performance, as did Hossain et al. (2001). Likewise, Fauzi and Locke (2012) found a positive relationship between the proportion of non-executive directors on the board and firm performance as measured by Return On Asset (ROA).

Using a sample consisting of firms listed on the New Zealand Stock Exchange, Coles et al. (2008) found that firms with a more complex structure with more outside directors on the board performed better in maximizing the value of firms. Similarly, Luan and Tang (2007) documented a positive relationship between outside directors and firm performance, implying that the more outside directors there were on the board, the more independent the board would be of the management and the better the firm would perform.

A study undertaken by Bhagat and Black (2002) revealed that low-profitability firms tend to increase the independence of their boards with the expectation of better future performance. This implies that firms recognize that having more independent directors is a viable strategy for improving their performance.

In a similar vein, Hermalin, and Weisbach (1988) had earlier reported that in low- profitability firms, internal directors are replaced by outside directors, and they suggested that ineffective management by internal directors could cause poor performance, thus leading to the need for more outside directors. This indicates that more independent boards, measured by the proportion of outside directors on the board, are better able to monitor management and hence improve a firm's performance.

Dahya and McConnell (2007) found that British firms that added outside directors in response to the adoption of the Cadbury Report were able to increase

their operating performance, indicating that independence of the boards measured by the number of outside directors does indeed have a beneficial impact on the performance of firms.

Nevertheless, despite the studies that have shown the positive impact of board independence on firm's performance, some research studies provide evidence that independence of the board is negatively associated with the performance of firms (Agrawal & Kneoeber, 1996; Fauzi & Locke, 2012); while other studies found board independence had no significant impact on the firm's performance (Fuzi et al., 2016; Haniffa & Hudaib, 2006; Wang & Oliver, 2009). One explanation for the negative results might that the non-executive directors have had limited time or irrelevant experience to perform their functions effectively. Wang and Oliver (2009) mentioned other possible reasons for this situation, including the appointment of non-executive directors who share similar demographic characteristics as other board members, or where results were reported from passive boards rather than more active boards. This implies that non-executive directors may be selected intentionally to play a passive role in the boardroom. In other cases, non-executive directors may lack real independence as they are controlled by the CEOs (Bhagat & Black, 2002), and therefore they will be less effective in monitoring management; their appointment is merely to comply with the CG regulation. This would lead to adding more non-executive directors with a higher cost to the firm (Fauzi & Locke, 2012) and less contribution to the firm's performance.

In summary, research on the relation between independence of the board and firm performance has produced mixed results; some studies have reported positive results supporting the view that independent boards help enhance a firm's performance as they are better able to monitor management and ensure that management activities are in compliance with the interest of owners. Hence, they help limit misuse of firm's assets and improve earnings outcomes. In contrast, some studies documented that with the domination of CEOs on the board of directors as noted in less developed countries, non-executive directors as indicators of independence of the board become more costly, in that they outweigh the benefit obtained from them. This cost is a function of many factors, such as lack real independence, limitations of time, irrelevant experience, and higher remuneration.

CMA in Saudi Arabia has adopted a positive view when developing CG regulations. It requires that non-executive directors shall constitute the majority of the board, and the one-third of the board shall be composed of independent directors.

The current study extends prior studies by investigating the effect of these requirements on the performance of Saudi nonfinancial listed firms. Since

this study uses data from an environment with unique characteristics (i.e. more adherence to social norms and the influence of a tribal system), it is anticipated that the relation between independence of the board and firm performance could well be negative rather than positive.

This implies that when the proportion of non-executive directors increases, as an indicator of independent boards, the level of firm performance decreases, correspondingly. In other words, an increase in the proportion of non-executive directors is associated with a reduction in the level of firm's performance. Hence, the first hypothesis of this study is stated in the alternative form as follows:

*H1:* There is a negative relationship between the proportion of non-executive directors on the board and the performance of Saudi nonfinancial listed firms.

Board size is another important factor affecting the performance of firms. The literature reports that the size of the board can affect performance through its role in monitoring management and the board's involvement in the making decision process of the firms (Haniffa & Hudaib, 2006).

In fact, two competing views are used to explain the association between board size and the performance of firms. In the first view, researchers argue that small boards are more effective in improving performance because they can be more easily monitored by shareholders (Haniffa & Hudaib, 2006), and thus they become very helpful in ensuring good outcomes.

In addition, Guest (2009) indicated that coordination and communication problems would be less when boards are small, indicating that decisions could be made quickly with small boards. Reddy et al. (2008) argued that small boards are likely to reach consensus more easily on issues being discussed simply because they consist of fewer members. Coles et al. (2008) also argued that small boards are more effective and more productive and cohesive. This suggests that small boards deal better with financial performance issues in a timely and productive manner, thereby being more active compared to large boards and more likely to attain better performance.

Prior studies provide evidence consistent with this view. For example, Guest (2009) investigated the impact of board size on firm performance using a large sample of UK listed firms. His results support the hypothesis that larger board size has a negative impact on the performance of firms, implying that smaller boards are more effective in getting better performance.

In the American corporate context, Cheng, Evans, and Nagarajan (2008) examined the association between board size and firm performance. Their findings revealed that smaller board has a positive influence on the firm performance. Specifically, this relationship existed at higher takeover intensity. Similarly, Yermack

(1996) investigated board size for a large sample of 452 US firms over the period 1984-1991 and provided evidence that smaller boards were more effective in enhancing the firm's value and hence maximizing earnings outcomes. In a study of New Zealand firms, Hossain et al. (2001) found that firms with fewer directors were better able to achieve a higher level of performance.

Eisenberg, Sundgren, and Wells (1998) reported a negative relation between board size and financial performance of firms in small and mid-sized Finnish firms. Likewise, Reddy et al. (2008) also found evidence of the negative effect of board size on firm performance, implying that as board size increases, the level of performance decreases. Problems of large boards that affect their effectiveness have been documented in the literature, such as higher co-ordination costs (Jensen, 1993), slow decision making processes (Zahra & Pearce (1989), and higher free riding cost (Cheng et al., 2008).

However, the alternative view that larger boards are more effective in improving the performance of firms also has some support. It is argued that larger boards provide a wider diversity of experiences and skills that are needed to secure firms' resources (Haniffa & Hudaib, 2006); they can give good advice and counsel to management and hence improve firm performance (Dalton et al., 1999). In this context, Zahra and Pearce (1989) argued that because larger boards have more experts and qualified members, they would be better able to monitor the CEOs and retain the power required to resist attempts at domination or exploitation by management. Hence, they would help enhance the quality of managerial activities and improve earnings outcomes.

It is also suggested that, because of wider networks of contacts, firms with larger boards are likely to have easier access to outside resources such as external funding and suppliers (Dalton et al., 1999); that, in turn, affects the implementation of strategies and facilitates transactions and contracts with external resources, all of which contribute to improved firm performance.

Several studies provided evidence supporting this view. For example, Coles et al. (2008) found that board size is positively associated with Tobin's Q implying that larger boards help enhance value maximizing outcomes for firms. Larmou and Vafeas (2010) also found that having a larger board positively influences the performance of smaller firms that have already suffered from poor operating performance. The results of a study undertaken by Fauzi and Locke (2012) suggested that large boards are more effective in monitoring of management and achieving long-term objectives. Likewise, Dalton et al.'s (1999) meta-analytic study investigated whether number of directors had an influence on the performance of financial firms. They



found a positive relation existed between board size and firm performance.

In sum, the literature on the relation between board size and firm performance is divided. On one hand, some researchers have argued that smaller boards are more effective in improving firms' performance as they involve less coordination and fewer communication problems. Because they are more cohesive and cooperative, they are more likely to reach consensus easily, which is important in order to deal with financial performance issues in a timely and productive manner.

On the other hand, other researchers argue that large boards are more effective as they include directors who have broad, diversified knowledge and the skills needed to secure firm's asset, provide good advice and counsel, and reduce the domination and exploitation of management. Because external directors often serve on multiple boards they have strong contacts with outside firms, which facilitates transactions and contracts with external resources.

In the case of Saudi Arabia, CMA required that the number of board members of each listed firms shall not be less than three and not exceed eleven. This implies that CMA stands in the middle between the two competing views.

Considering the CMA regulations and also the inconsistent results regarding this issue published in the literature, the current study does not predict the direction of a relationship between board size and firm performance. Hence, in order to examine whether board size is associated with the performance of Saudi

nonfinancial listed firms, the second hypothesis of this study is stated, in alternative form, as follows:

*H2:* There is relationship between the number of board members and firm performance in Saudi nonfinancial listed firms.

### III. METHODOLOGY

#### a) Data

The current study uses data obtained from the financial reports of Saudi nonfinancial listed firms over the period 2013 to 2015. Data were collected from TADAWL, the official site of the Saudi Stock Exchange. The reason for selecting this period is to examine the relationship between board size, independence and firm performance after the adoption of the CG regulation. Following Larmou and Vafeas (2010), it is considered that a period of three years is sufficient to reflect the effect of both board size and independence on the firms' performance. However, banks and insurance firms are excluded from the sample due to their specific regulatory requirements (Dahya & McConnell, 2007; Guest, 2009; Haniffa & Hudaib, 2006; Hermalin & Weisbach, 1988) that lead to differences in CG practices.

The initial sample consisted of 355 firms after excluding banks and insurance firms. Eight firms were found to be outliers, and a further eighteen firms were excluded due to incomplete data. This yields the final sample of 329 firms over the period 2013-2015. Table 1 reports the number of firms per year for the final sample used in the analysis.

Table 1: Sample description

Year	Firms	Sample/Total
2013	105	94%
2014	110	95%
2015	114	89%
Total	329	

#### b) Variables

The first independent variable is board independence. This variable is defined in line with the CMA definition and studies by Haniffa and Hudaib (2006) and Reddy et al. (2008). It is defined as the proportion of nonexecutive directors to total number of directors on the board. Nonexecutive directors are all members of the board who do not have a full-time management position at the firms, or who do not receive monthly or yearly salary (CMA, 2006).

The second independent variable is board size. It is measured as the total number of executive and nonexecutive members of the board, as used in previous studies (Fauzi & Locke, 2012; Reddy et al., 2008).

The dependent variable of this study is firm performance, defined as overall earning power or profitability. Consistent with prior studies (Fallatah & Dickins, 2012; Guest, 2009; Huybrechts et al., 2016), this study uses an accounting-based measurement of performance, namely Return On Asset (ROA). This indicator of performance is widely used in the literature to capture outcomes of management activities. Hence, it is appropriate for studies that examine board-performance relationships. ROA is calculated as dividing operating profit before depreciation and provision by total asset.

Deriving from earlier studies, several control variables are included in the regression model. Leverage (LEV) is a ratio of total liabilities to total assets. Prior studies have documented that leverage is

negatively associated with firm performance (Fallatah & Dickins, 2012; Guest, 2009; Reddy et al., 2008). Firm size (SIZE) is the natural log of total assets. The relationship between size and firm performance is expected to be positive (Fallatah & Dickins, 2012; Guest, 2009; Haniffa & Hudaib, 2006). Board meeting activity (BMEET) is included in the model to capture the effect of board activities. Zahra and Pearce (1989) argued that effective board meetings are an important tool to ensure that the board is active in monitoring firms' performance. Larmou and Vafeas (2010) used a composite index of factors including board and committee meetings to measure board activity; they found that board activity is positively correlated with firm performance. It is measured by the number of board meetings held during a year. Age (AGE) is the number of years from the first listing in TADAWL. In line with Guest (2009), who found that age has a negative impact on ROA, the current study expects a negative relationship between firm age and performance. Business segment (SEGMENT) is measured by the number of business segments that are included as main activities of firm. In line with the findings of previous studies (Cheng et al., 2008; Hossain et al., 2001), the current study expects that the number of business segments is negatively associated with performance. Table 2 summarizes the measurements of the variables used in the regression model.

The regression model is specified as follows:

$$ROA = \beta_0 + \beta_1 BIND + \beta_2 BSIZE + \beta_3 LEV + \beta_4 SIZE + \beta_5 BMEET + \beta_6 AGE + \beta_7 SEGMENT + e$$

Where ROA is an accounting-based measurement of firm performance and other variables are as defined in table 2.

Table 2: Variables Definition

BIND	=	the proportion of nonexecutive directors to total number of directors on the board
BSIZE	=	the total number of executive and nonexecutive members of the board
LEV	=	The ratio of total liabilities to total assets
SIZE	=	the natural log of total assets
BMEET	=	the number of board meetings held during a year
AGE	=	the number of years from the first listing in TADAWL
SEGMENT	=	the number of business segments that are included as main activities of firm

#### IV. RESULTS

##### a) The main results

The descriptive statistics of the sample are presented in table 3. It shows that the mean value of ROA is .06 with a minimum value of -.18 and a maximum value of .33. This statistic value indicates that Saudi nonfinancial listed firms reported generally low performance over the period 2013-2015. On average,

##### c) Model

In general, the model is used to examine whether board size and independence have an influence on firm performance. Following the studies by Guest (2009) and Larmou and Vafeas (2010), two analytic methods are used to explain the variation in the level of firm performance resulting from the independent variables (i.e. the independence and size of board). The within-firms variation model is estimated first, for each firm in time. The aim of this test is to capture the effect of other factors that are not included in the model; in this way this fixed effect model reduces any endogeneity problem that exists in the board - firm performance relationship (Guest, 2009). To do this, data for each firm is entered three times in a panel covering the period of 2013-2015. This yields an unbalanced sample of 329 firms.

The second model is estimated to explain the between-firms variation by using the mean value for each firm (i.e. one observation per firm). The aim of this test is to capture the differences in firm performance across firms. Notably, the regression model is also re-estimated for each year separately by using the real value for each variable instead of the mean value. The purpose of re-estimation analysis is to enhance the validity of the between-firms variation test. In addition, this technique provides additional control for bias in standards errors (Guest, 2009).

the proportion of non-executive members of board is about 38 %, suggesting that the proportion of non-executive members of board in Saudi nonfinancial listed firms is relatively low, a little over one-third of board directors. In terms of board size, the number of board members range from 4 to 12 members, with the mean value of 8. It appears that Saudi nonfinancial listed firms tend to adhere to the CG regulation that requires the number of board members to be between 3 and 11. It is



suggested that the board size is not so large as to adversely affect the firm’s performance, nor is it so small to the extent that the firm suffers from problems related to smaller boards. The mean value of leverage is .37, a ratio of total liabilities to total assets that can be considered low for the Saudi nonfinancial listed firms included in the sample. On average, Saudi nonfinancial listed firms are mid-sized firms in terms of total assets. With regard to board activity, the mean value of the

number of board meetings is five per year, which can be considered sufficient in terms of frequency. On average, the Saudi nonfinancial listed firms are not recently established; the mean number of years from the first listing in TADAWL is 17.2 years, with a range from 1 year to 46 years. Finally, the mean number of sectors in which the Saudi nonfinancial listed firms are engaged is about 3, with a range from 1 to 10.

Table 3: Descriptive Statistics

Variable	Minimum	Maximum	Mean	Median	Standard deviation
ROA	-.18	.33	.06	.05	.08
BIND	.00	.89	.38	.43	.19
BSIZE	4	12	8	9	1.5
LEV	.01	.84	.37	.36	.21
SIZE	4.3	8.5	6.4	6.35	.69
BMEET	2	16	5	5	2.2
AGE	1	46	17.2	13	13.4
SEGMENT	1	10	2.96	3	1.80

Table 4 presents the correlation between the variables included in the model. None of independent variables are strongly related to each other, indicating

the absence of any multicollinearity problem in the regression model.

Table 4: Pearson Correlation Coefficients

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ROA (1)	1	.02	.11*	-.31*	.09	-.02	.11*	-.17*
BIND (2)		1	.23*	.24*	.41*	.08	-.07	.02
BSIZE(3)			1	.10*	.45*	-.05	-.001	-.006
LEV(4)				1	.43*	-.04	-.31*	-.07
SIZE(5)					1	.07	-.05	-.06
BMEET(6)						1	.19*	.04
AGE (7)							1	-.06
SEGMENT (8)								1

Note: Correlation is significant at the .05 level; variables are as defined in model specification in section III

Table 5 presents the regression results for within- and between-firms variation models. Both models are significant at the .01 level with F values of 11.41 and 2.91, respectively.

The result of within-firms variation model reveals that board independence is not associated with firm performance (p= .75). This result implies that an independent board has no significant impact in explaining variance in the level of firm performance for any one firm over time. In the between-firms variation model, board independence is also not significantly associated with firm performance (p=.89) implying that board independence is not able to explain the variance

in firm performance across firms included in the sample. The result of the regression models for each year, as reported in table 6, reveals that board independence has no significant impact( p= .63; p=.83; p=.83). Therefore, the first hypothesis of this study is not supported. This result suggests weak performance on the part of non-executive directors. Overall, the findings of this study are not consistent with the view that an independent board has an important role in reducing any agency conflict that might arise from a separation between owners and management.

Table 5: Regression Result

ROA= $\beta_0 + \beta_1 \text{BIND} + \beta_2 \text{BSIZE} + \beta_3 \text{LEV} + \beta_4 \text{SIZE} + \beta_5 \text{BMEET} + \beta_6 \text{AGE} + \beta_7 \text{SEGMENT} + e$		
Variables	Within- firm variation	Between- firm variation
Intercept	.35 -(.93)	.24 -(1.18)
BIND	.75 (.32)	.89 -(.14)
BSIZE	.50 (.67)	.64 (.47)
LEV	.000* -(7.42)	.001* -(3.54)
SIZE	.000* (3.75)	.04* (2.07)
BMEET	.38 -(.88)	.99 (.01)
AGE	.74 -(.34)	.19 (1.33)
SEGMENT	.000* -(3.72)	.06 -(1.87)
Firm effect	Yes	
Time effect	Yes	
Adjusted R <sup>2</sup> =	.18	.11
F-ratio =	11.41	2.91
n =	329	106

Note. \*p-values represent one-tailed tests when direction of coefficient is consistent with expectations; variables are as defined in model specification in section III.

One possible explanation for this result is the fact that the Saudi population consists of many tribes, and respect for the wishes of a tribal leader may outweigh official rules. This leads to the proposition that the business environment in Saudi Arabia is shaped by the tribal system (Haniffa & Hudaib, 2007). In this regard, Haniffa and Hudaib (2006) indicated that non-executive directors, in less developed countries, are frequently selected based on considerations such as political affiliation or contacts and not because their qualifications or experience.

Another problem linked to such a system is related to board culture, where most patterns of behavior exhibited by the board of directors are derived from those applied in a tribal system (in this case, for example, the rules of nominating non-executive members on the board). Based on this view, most non-executive members of boards are selected from among those individuals who have a strong tribal relationship with the CEOs. Consequently, politeness and deference

rather than truth and frankness would be common during discussions at board meetings and, in turn, this would adversely affect the performance of firms (Jensen, 1983). This situation also results in selecting directors with irrelevant experience or poor knowledge about the performance of firms and hence they will be not able to review CEO actions or disclose the faults of management. Another problem when the power is concentrated in one or a few individuals is that information is closely controlled; in this issue, the CEOs determine the type and quantity of information available to members of board (Jensen, 1983). In some cases, they prevent non-executive directors from access to information that might disclose weaknesses in firm performance.

However, the result is consistent with the findings of Bhagat and Black (2002), Haniffa and Hudaib (2006), and Fuzi et al. (2016) who found that board independence was not significantly associated with firm performance.

With regard to board size, the results of within-firms variation model reveal that board size is not statistically associated with firm performance ( $p = .50$ ). In other words, the number of board members has no significant impact on the variance in the level of firm performance for any single firm over time. In the between-firms variation model, board size is also not significantly associated with firm performance ( $p = .64$ ); thus it is unable to explain the variance in firm performance across firms. The result of the regression models for each year, as reported in table 6, reveals that board size does not have any significant impact ( $p = .79$ ;  $p = .78$ ;  $p = .44$ ). Therefore, the second hypothesis of

this study is not supported. This finding can be attributed simply to the effectiveness of the members of boards. Although the number of board members seem to be sufficient (eight on average), they are ineffective in performing their functions and therefore serve merely to fill empty seats. This finding stresses the importance of having executive members to perform complementary roles in improving the performance. As executive directors work in firms on a daily basis, they would be more familiar with the operating systems and the processes that need to improve (Haniffa & Hudaib, 2006). Thus, familiarity with the inner workings of the firm would help identify the opportunities for its success.

**Table 6:** Multiple Regression of ROA on Board size and independence (model 1-3)

Variables	Model 1	Model 2	Model 3
Intercept	.31	.57	.87
BIND	.63	.83	.83
BSIZE	.79	.78	.44
LEV	.00*	.00*	.00*
SIZE	.02*	.02*	.13
BMEET	.64	.17	.68
AGE	.98	.70	.44
SEGMENT	.06**	.03*	.03*

Note. \*, \*\* Represent statistical significant at  $P < .05$ ,  $P < .10$ , respectively. One-tailed test for a directional predicted sign, and two-tailed otherwise.

Considering the very small percentage of executive directors of Saudi nonfinancial listed firms (only .11 of board members), it is suggested that firms should find a mix of both non-executive and executive directors so that both can contribute effectively to firm's performance. Since the recent regulations in Saudi Arabia have not specified the number of executive board directors, there is a need to open discussion on this issue due to the importance of having executive directors along with the non-executives on the board of directors.

In terms of control variables, the results show that leverage (LEV) is negatively associated with firm performance ( $p < .01$ ), confirming that firms with a high level of leverage achieve a lower level of performance. Size (SIZE) is positively associated with firm performance ( $p < .05$ ) implying that larger firms outperform smaller firms. Finally, the number of segments in which a firm operates (SEGMENT) is negatively associated with firm performance ( $p < .01$ ). The remaining variables (BMEET and AGE) were found to be not significant. The result of the AGE variable also shows that the number of years of listing does not have any influence on firms' performance.

#### b) Results of additional tests

Several tests were carried out in order to enhance the validity of the key results.

Alternative measurements of the variables: To test the stability of the initial analysis, alternative measurements are used for board size, independence, and ROA. First, following Larmou and Vafeas (2010) the between-firms variation analysis were repeated using industry-adjusted ROAs. Each value of ROA is adjusted by the corresponding median ROA of firms in the same industry. The TADAWL classification was adopted to classify the industries into 13 industries excluding banks and insurance firms. The aim of this technique is to reduce the fluctuation in ROA across industries, and enhance the accuracy of comparisons made between firms in similar industries included in the sample (Larmou & Vafeas, 2010). However, there was no change in outcome: the result shows that variation in the median industry-adjusted ROA is not influenced by either board size or independence ( $p = .83$ ;  $p = .32$  respectively).

In line with a study carried out by Fallatah and Dickins (2012), board independence was measured by a dummy variable taking 1 when the board consists of a majority of independent directors. Notably, this definition uses independent directors instead of non-executives to

measure board independence. The un-tabulated result shows that association between board independence and the firm performance does not change across firms, while the coefficient of board independence remains insignificant ( $p = .10$ ). In within- firms variation model, board independence is not significant in explaining within-firms variation in ROA values ( $p = .11$ ).

With regard to board size, it is measured by the natural log of board size (Cheng et al., 2008), proposing that the relationship between the board size and performance is non-linear. The two models (i.e. with- and between- firms variation) were re-estimated to test the relation between board size and performance. The results show that the relation between board size and performance for both models are not significant ( $p = .32$ ,  $p = .47$  respectively).

The interaction effect: this study controlled for the effect of interaction between variables on the level of performance as measured by ROA. The study of Wang and Oliver (2009) reported that large firms are more likely to have independent boards and, in turn, this might affect the performance of these firms. To test the effect of interaction between board independence and firm size on performance, the variable of  $BIND * SIZE$  is included in the model. The finding (not reported) shows that the interactive variable ( $BIND * SIZE$ ) is not significant ( $p = .38$ ); thus, the result remains unchanged. In particular, the result indicates that non-executive board members in large firms in Saudi Arabia appeared to play no significant role in improving the performance across firms.

Prior studies (Eisenberg et al., 1998; Fauzi and Locke, 2012; Guest, 2009) have documented that board size is associated with firm size proposing that larger firms are more likely to have larger boards of directors to meet with their increased needs. To test the effect of interaction between board size and firm size on performance, the variable of  $BSIZE * SIZE$  is included. The result shows that the coefficient of the interactive variable ( $BSIZE * SIZE$ ) is not significant ( $p = .16$ ) implying that the number of board members in larger firms do not have a significant role in improving the firms' performance. In order to test whether board size is associated with performance of firms in small and mid-size firms, the sample was split into two subgroups based on the median value of firm size. The values below the median of firm size (6.35) represent the small and mid-size firms. The result shows that board size does not have a significant impact on the performance of small and mid-sized firms ( $p = .78$ ). Taken together, the results suggest that size of firms does not modify the relationship between board size and firm performance.

Sensitivity to change in the level of independent variables: The regression model was also re-estimated to test whether the relation differs based on the variation in the level of independent variables.

In first test, it is proposed that the relation between board independence and firm performance is not constant across the entire range of board independence (Bhagat and Black, 2002). In order to test this hypothesis, the range of proportion of non-executive directors on the board is divided into three levels based on quartile values. Each level could be a breakpoint at which the relationship between board independence and firm performance might be significant. The three levels of board independence are: low level of board independence (BINDL): taking 1 if  $BIND < .24$  (the scores less than the first quartile); mid-level of board independence (BINDM): taking 1 if  $.24 < BIND < .54$  (the scores representing the interquartile range between .25 and .75 of values); high level of board independence (BINDH): taking 1 if  $BIND > .54$  (the scores greater than the top quartile). To run the regression, BIND is replaced by one of the three variables and entered one by one to the initial model. This yields three regression models. The results of the three models reveal that neither of the first two coefficients of board independence (BINDL and BINDM) is significant across firms ( $p = .91$ ;  $p = .14$  respectively). However, the variable of high board independence is negatively significant at the 10 percent level of significance ( $p = .058$ ). This provides some evidence that firms with a high percentage of non-executive directors perform more poorly than other firms. Collectively, the results suggest that non-executive directors are neutralized by the power of the CEOs. In most cases, their presence in the firms has no effect on performance, while in some other cases they might have an adverse impact due to their higher cost in terms of board remuneration paid to them and lower benefit obtained from them.

In terms of board size, Guest (2009) indicated that the relation between board size and firm performance might be determined by the optimal board size in which firms achieve a highly valued mix of non-executive and executive board members. To test whether the relation between board size and performance might be influenced by a change in the number of board members, the range of board size is divided into three levels based on the percentile values: low, mid, and high size. This yields three independent variables representing the different levels of board size (i.e. BSIZEL, BSIZEM, and BSIZEH). The first variable (BSIZEL) is measured by a dummy variable taking 1 if board size  $< 7$  members; the second variable (BSIZEM) is measured by a dummy variable taking 1 if  $7 < \text{board size} < 9$  members; the third variable (BSIZEH) is measured by a dummy variable taking 1 if board size  $> 9$  members. Each of the three variables is used separately in the regression model instead of board size. The results of the three models show that none of the coefficients of the three variables representing different levels of board size (i.e. BSIZEL, BSIZEM, and

BSIZEH) is significant ( $p=.25$ ;  $p=.11$ ,  $p=.43$ , respectively). This implies that the relation between the board size and performance is not influenced by a change in the number of board members and remains constant across board size.

## V. CONCLUSION

This paper has examined the association between board size, independence and firm performance as measured by ROA. In terms of board independence, the results of this study suggest that board independence is not associated with firm performance. This implies that the CMA recommendation regarding the independence of the board (i.e. that non-executive directors shall make up the majority of members of the board of directors) seems to be ineffective and it is posited that this is because of the specific nature of business structure in Saudi Arabia. In general, Saudi business structure is influenced by societal norms that are heavily influenced by the tribal system and tribal values. In such a system, decision making is based on the views of one or a few individuals who are in positions of high esteem and not based on the official requirements. For example, decisions regarding the selection of individuals for certain positions in the company are most likely to be based on their relationship to the influential person, regardless of their skill or qualification. This situation often results in the selection of unqualified directors with irrelevant experience or inadequate knowledge about the performance of the firm. Hence they will be not able to review the CEO's actions or disclose the faults of management. Another problem is the close control over information by the CEOs, who can determine the type and quantity of information available to other members of the board. In particular, the CEOs prevent non-executive directors from gaining access to the information that they need to be able to monitor the management, thus affecting their ability to contribute effectively to the firm's performance.

The result of the additional tests provide some indication that board independence can, in fact, have an adverse impact on the firm's performance. In particular, the results of the additional tests show that firms with a higher percentage of non-executive directors perform worse than firms with a smaller proportion of non-executive directors. This is because, in the Saudi business context, non-executive members lack real independence from management and represent an additional cost burden that outweighs any benefits obtained from them.

In terms of board size, the results reveal that, similarly, the number of board members is not associated with firms' performance. This unexpected result, which contradicts the findings of a number of other studies, occurs simply because members of

boards in Saudi nonfinancial listed firms are not effective in performing their functions. In other words, there is a discrepancy between the requirements of the position and the official qualification of the appointees. This results in the presence of directors on boards who are unable to contribute meaningfully to firms' performance.

In view of a new movement in Saudi Arabia toward reviewing the CG regulation, the results of this study may be useful for policy makers (i.e. CMA) who are concerned about the relation between board size, independence and firm performance. In terms of board independence, it is recommended that CMA require firms to have a nomination and remuneration (N&R) committee whose members shall be non-executive members. However, Since the R&N committee is responsible for selecting members of boards, it is expected that CEOs are influenced by societal factors (i.e. relation or contact with directors) when selecting members of boards. To alleviate this problem, it is suggested that the CEOs could be not be included as members of the R&N committee. On the other hand, to ensure that non-executive directors are both qualified and independent from management, it is recommended that CMA encourages firms to have more directors who serve on multiple boards. In terms of board size, CMA should consider the importance of the role of executive directors in improving firm performance, instead of continuing the current model of board composition that focuses only on non-executive directors.

A limitation of the current study concerns the use of an accounting-based measurement of firm performance (i.e. ROA). This was used because information on market-based measurements of performance was not available. As noted by Dalton, Daily, Ellstrand, & Johnson (1998), accounting-based measurement of performance might lack precision since it involves estimations that are more subject to management control.

Nevertheless, the current study has addressed several issues that might be researched further in future studies. First, the current study was carried out to examine the issues of board size and independence in one country of the Gulf Cooperation Council (GCC); that is, Saudi Arabia. It is recommended that future studies could obtain evidence from other GCC countries that have similar business structures. Second, it is recommended that future studies examine the role of board committees on firm performance. One suggested area is to examine whether audit committees play a role in improving corporate performance. A third possible area for future research is the effect of CEOs on board independence and firm performance when they chair the R&N committee. Fourth, the current study has used the quantitative method to examine the role of board size and independence on firm performance. It is suggested that future studies should incorporate



qualitative methods to study such issue in more detail. Finally, future studies might investigate the effect of other factors on the relation between board size, independence and firm performance. For instance, culture is an important factor that could modify the relationship between board size, independence and firm performance, especially in less developed countries, and it is a viable issue for future research to investigate.

## REFERENCES RÉFÉRENCES REFERENCIAS

- Alves, S. (2014). The Effect of Board Independence on the Earnings Quality: Evidence from Portuguese Listed Companies. *Australasian Accounting, Business and Finance Journal*, 8(3), 24-44.
- Bhagat, S., Black, B. (2002). The Non-Correlation between Board Independence and Long Term Firm Performance. *Journal of Corporation Law*, 27, 231-274.
- Cheng, S., Evans, J, H., Nagarajan, N, J. (2008). Board size and firm performance: the moderating effects of the market for corporate control. *Rev Quant FinanAcc*, 31,121–145.
- Coles, J., Daniel, N., & Naveen, L. (2008). Boards: Does one size fit all?. *Journal of Financial Economics*, 87, 329-356.
- Dahya, J., McConnell, J. (2007). Board Composition, Corporate Performance, and the Cadbury Committee Recommendation. *Journal of Financial and Quantitative Analysis*, 42(3), 535-564.
- Dalton, D, R., Daily, C, M., Ellstrand, A, E., & Johnson, J, L. (1998). Meta-Analytic Reviews of Board Composition, Leadership Structure, and Financial Performance. *Strategic Management Journal*, 19, 269–290.
- Dalton, D, R., Johnson, J.L., Ellstrand, A.E. (1999). Number of Directors and Financial Performance: A Meta- Analysis. *Academy of Management Journal*, 42(6), 674-686.
- Eisenberg, T., Sundgren, S., Wells, M, T. (1998). Larger board size and decreasing firm value in small firms. *Journal of Financial Economics*, 48, 35-54.
- Fallatah, Y., Dickins, D. (2012). Corporate governance and firm performance and value in Saudi Arabia. *African Journal of Business Management*, 6 (36), 10025-10034.
- Fauzi, F., Locke, S. (2012). Board Structure, Ownership Structure and Firm Performance: A study of New Zealand Listed-Firms. *Asian Academy of Management Journal of Accounting and Finance*, 8, (2), 43–67.
- Fuzi, S, F., Adliana, S, A., Julizaerma, M, K. (2016). Board Independence and Firm Performance. *Procedia Economics and Finance*, 37, 460 – 465.
- Haniffa, R., Hudaib, M. (2006). Corporate Governance Structure and performance of Malaysian Listed Companies. *Journal of Business Finance & Accounting*, 33(7) & (8), 1034–1062.
- Guest, P. (2009). The Impact of Board Size on Firm Performance: Evidence from the UK. *The European Journal of Finance*, 15(4), 385-404.
- Hendry, K., Kiel, G, C. (2004). The Role of the Board in Firm Strategy: integrating agency and organizational control perspectives. *Corporate Governance*, 12(4), 500-520.
- Hermalin, B., Weisbach, M.S. (1988). The Determinants of Board Composition. *The Rand Journal of Economics*, 19(4), 589-606.
- Hillman, A.J., Dalziel, T. (2003). Boards of Directors and Firm Performance: Integrating Agency and Resource Dependence Perspectives. *Academy of Management Review*, 28(3), 383–396.
- Hossain, M., Prevost, A, K., Rao, R, P. (2001). Corporate Governance in New Zealand: The Effect of the 1993 Companies Act on the Relation between Board Composition and Firm Performance. *Pacific-Basin Finance Journal*, 9, 119-145.
- Huybrechts, J., Voordeckers, W., Espallier, B., Lybaert, N., & Jils, A, V. (2016). The Board's Demography-Firm Performance Relationship Revisited: A Bayesian Approach. *Journal of small Business Management*, 54(3), 992-1007.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Financial*, 48, 831-880.
- Jensen, M. C. & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- Larmou, S., Vafeas, N. (2010). The relation between board size and firm performance in firms with a history of poor operating performance. *Journal Management Government*, 14, 61–85.
- Luan, C, J, Tang, M.J. (2007). Where is independent Director Efficacy?. *Corporate Governance*, 15(4), 636-643.
- Reddy, K., Locke, S., Scrimgeour, F., Gunasekarage, A. (2008). Corporate governance practices of small cap companies and their financial performance: an empirical study in New Zealand. *Int. J. Business Governance and Ethics*, 4(1), 51-78.
- Wang, Y., Oliver, J. (2009). Board composition and firm performance variance: Australian evidence. *Accounting Research Journal*, 22 (2), 196-212.
- Yermack, D. (1996). Higher Market Valuation of Companies with a Small Board of Directors. *Journal of Financial Economics*, 40, 185–211.
- Zahra, S, A., Pearce, J. (1989). Boards Of Directors And Corporate Financial Performance: A review and Integrative Model. *Journal of Management*, 15(2), 291-343.





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# The Impact of Corporate Social Responsibility Practices on Financial Performance of Banking Sector in Ethiopia

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**Abstract-** Abundant studies were undertaken throughout the world, mainly in the context of advanced economy, to investigate the correlation between corporate social responsibility (CSR) and corporate financial performance (CFP) though the studies came up with conflicting results. Some studies shows a positive relationship between corporate social responsibility practice and firm financial performance (see for example, Waddock & Graves, 1997; Cheruiyot, 2010), on the other hand, some of the studies shows negative relationship (Cordeiro & Sarkis, 1997; Wagner et al, 2002) and still others showing that there is no relationship between the two variables (McWilliams & Siegel, 2000; Aragon & Lopez, 2007). This study used a mixed research approach and applied multivariate econometric model to assess the relationship between CSR and Banks' financial performance in Ethiopia. The finding shows that, there is no relationship between the financial contribution for CSR activities and CFP at 1% significance level which similar to the findings of McWilliams & Siegel, 2000; Aragon & Lopez, 2007.

**Keywords:** CSR, CFP, content analysis, CSR pyramid.

**GJMBR-D Classification:** JEL Code: M41



THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY PRACTICES ON FINANCIAL PERFORMANCE OF BANKING SECTOR IN ETHIOPIA

*Strictly as per the compliance and regulations of:*



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**Keywords:** CSR, CFP, content analysis, CSR pyramid.

## 1. INTRODUCTION

Corporate Social Responsibility (CSR) was first noticed in the Anglo-Saxon world in 1950s with the idea of contributing societal welfare and environmental responsibility (Kostyuk et al, 2008). This implies generally, CSR is defined as the voluntary activities undertaken by a company to operate in an economically, socially and environmentally sustainable manner. However, the basic question here is that, how business could discharge CSRs while maximizing corporate financial performance in today's competitive market? The problem is very much rough to understand the concept of CSRs activities in developing economy, particularly in Ethiopia where majority of the society are poor and illiterate. As the living standard of society is low, the CSR expected from business firms are much

higher than it is used to be in developed economy as long as the government in developing nation is unable to fulfill all the needs of the society. Though it looks difficult, if companies operate in an economically, socially and environmentally responsible manner, it helps firms to have shared value and social license. Management and mitigation of social and environmental risk factors are increasingly important for business success abroad, as the costs to companies of losing that social license, both in terms of share price and the bottom line may be significant (Foreign Affairs, Trade and Development Canada, 2009).

From business point of view, a given firm may incur a loss because of two main reasons viz. because of high operating costs as compared to sales revenues and loss of customer as a result of loss of social license. For a business firm, loss of profit because of loss of customer is much harsh to get it back. In my view, however, this can be realized in the short-run, if the market is competitive. Some business firms in Ethiopia are discharging their social responsibility although the approach used while implementing CSR seems unsystematic and which may adversely affects financial performance. In other word, in order to discharge CSRs properly, firms need to be proactive and outward than reactive or push factor. However, according to Asemamaw Tilahun (2011), corporations and social enterprises in Ethiopia engage in environmental management or CSR as a result of the influence of external factors such as legislators, customers and competitors, on the one hand and own responsibility, public recognition and improve relations with the local community, on the other.

Corporate Social Responsibility is concerned with treating the stakeholders of the firm ethically or in a responsible manner. This means treating stakeholders in a manner thought acceptable in an enlightened and educated society. Stakeholders exist both within and outside a firm. The wider aim of social responsibility is to create higher and higher standards of living, while preserving the profitability of the firm and society. Corporate Social Responsibility therefore means the ethical behavior of business towards its constituencies or stakeholders. Conversely, there are a wide variety of concepts and definitions associated with the term

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corporate social responsibility even if finding a single definition is difficult. Bowen (1953) defines social responsibility of businessmen as to the obligation of businessmen to pursue those policies, to make decision or to follow those lines of action which are desirable to society.

Corporate Social Responsibility concept emphasizes community participation by business enterprises. It proposes that a private firm has responsibilities to society that extend beyond making a profit. It is the obligation of the firm's decision makers to make decisions and act in ways that recognize the relationship between the business and society. It is therefore important for a business to continue in its commitment to behave ethically and contribute to economic development while improving the quality of life of the workforce and the surrounding community at large. This can be achieved through the various CSR activities that the business chooses to engage in for the benefit of its stakeholders. This means, firms can discharge CSRs in different ways such as through paying standard salaries and providing securities to employees, contributing financial and non-financial resources to the community at the time of disasters, and providing educational and health services to the society if needed and possible. Contrary to this, private commercial banks of Ethiopian has looser attitude to support greener industries, lower lending options to low income individuals and small business, less engage in community development and less understanding on poor financial management in banking organizations which results to adverse effect to the environment and society (Yeneneh Tadesse, 2015).

From theory point of view, there are two schools of thought regarding the role of business firms to the overall society; one is against and the other is pro to corporate social responsibility practices. The former one assumes that businesses are meant for making profit so that firms are not supposed to involve in any kind of societal activities as one part of its responsibility. Of course, the overall objectives of a business organizations are profit as well as shareholders wealth maximization. Here, the logical question that might rise is that, isn't profit and/or shareholders wealth maximization part of CSRs activity? Though maximization of profit and/or wealth of shareholders are for individual investors, technically it is part of discharging CSR since investors are part of the society. This is true because of the fact that the efficiency of business firm increases productivity thereby maximizes employment opportunities to the society. On the other hand, the second school of thought believes that, even if businesses are established to make profit and /or maximize shareholders' wealth, they are also responsible to discharge their social responsibilities. This means that, business firms should go beyond

maximization of profit and /or wealth to the shareholders and put some effort to maximize the welfare of the society directly. The justification for this is that, business firms are part of the society and they could not have survived if there was no society at all. Supporting and involving in societal activities proactively and sometimes also reactively when the need arises will help to enhance mutual benefits. For the researcher, both schools of thought are correct even if they differ in terms of the approaches (indirect versus direct) the firms involve in the societal activities. In one or other way, business firms in Ethiopia are discharging their social responsibilities.

According to the social contracts theory, businesses must not just act in a responsible manner because it is in their commercial interest, but because it is how society expects the business to behave. Society is a series of social contracts between members of society and society itself (Gray et al, 1996). Managers are therefore expected to take decisions in an ethical manner. Donaldson and Dunfee (1999) developed an integrated social contracts theory as a way for managers to use their discretion to make decisions but to ensure their decisions do not have negative effects on others. Businesses are expected therefore, to provide some support to the community under given circumstances. Since the contract is not written, businesses only get to feel its consequences when they fail to do what is expected. Although contradicting results existed, the common understanding is that investment in CSR promotes product differentiation at firm levels UNIDO (2002). Obviously, product differentiation will result in an improved welfare of the society, both the firm and the customer, which is win-win approach. In my view, however, this comes true if and only if all the stakeholders have a clear understanding about the concept of CSR. But there were no specific studies have done to explore the awareness of management about CSRs in Ethiopia context, particularly in the banking industry. According to OluwarotimiKude, and Derek Watson (2012), CSR activities are present in banks around the world. On the other hand, banks lack the effort to ensure that customers are aware of their implemented CSR criteria both externally and internally. With the increasing rate of competition among banks in the real world, attracting new customers is no longer the sole objective of financial institutions. What concerns most is whether or not banks are able to maintain existing customers with a positive impression and improving rate of meeting desired expectations of customers. Reliability and satisfaction are vital elements to keeping existing customers to ensure they have a pleasant and good experience while enjoying what the banks have to offer in terms of services.

On the other hand, even if abundant studies were undertaken throughout the world, mainly in the context of advanced economy, to investigate the correlation between corporate social responsibility (CSR) and corporate financial performance (CFP), the studies came up with conflicting results. Some studies shows a positive relationship between corporate social responsibility practice and firm financial performance (see for example, Waddock & Graves, 1997; Cheruiyot, 2010), on the other hand, some of the studies shows negative relationship (Cordeiro & Sarkis, 1997; Wagner et al, 2002) and still others showing that there is no relationship between the two variables (McWilliams & Siegel, 2000; Aragon & Lopez, 2007). Therefore, the objective of the study is to examine the relationship between CSR practices and financial performance of banking industry in Ethiopia.

## II. REVIEW OF RELATED LITERATURE

The concept of corporate social responsibility (CSR) refers to the general belief held by many that modern businesses have a responsibility to society that extends beyond the stockholders or investors in the firm. These other societal stakeholders typically include consumers, employees, the community at large, government, and the natural environment. The CSR concept applies to organizations of all sizes, but in this paper the discussions tend to focus on firms in the banking industry because they tend to be more responsive than others sectors as long as the banking sector is highly levered. Moreover, in Ethiopia context except the financial institutions, no one has a formal website to disclose accounting records and reports. Hence, only firms in banking sector were included in the study as many have observed, with power comes responsibility. The concept of corporate responsibility draws upon the strategic management theory that says managers can add value to an enterprise by taking into account the social and economic effects of an enterprise's operations when making decisions (Freeman RE, 1984). According to this theory, managers can best promote the long-term viability of an enterprise by balancing the needs of its stakeholders with the financial requirements of sustaining and growing a business. Reporting on an enterprise's performance (CSR disclosure) in this area is therefore a means to provide owners and other stakeholders an account of an enterprise's impact on society. This added transparency can lead to greater accountability of the enterprise to its principal stakeholders. Since stakeholders are understood as groups of persons that are affected by and/or can influence an enterprise, without necessarily holding an equity share of the enterprise. Their actions can affect an enterprise's brand and reputation, its financial performance, and even its license to operate.

According to Carroll (2000), as society expects business to make a profit (as an incentive and reward) for its efficiency and effectiveness, society also expects business to obey the law. The law, in its most rudimentary form, represents the basic rules of the game by which business is expected to function. Society expects business to fulfill its economic mission within the framework of legal requirements set forth by the society's legal system. Thus, the legal responsibility is the second part of Carroll's definition. However, in Ethiopia businesses operate their activities based on their feeling and interest since the businesses as well as the regulatory body are not strong and efficient enough to set or obey laws. This is because of the fact that, in Ethiopia there is no formal accounting standards and the business environment is guided by the oldest Commercial Code of Ethiopia issued in 1960's. By taking the human nature in mind, one can easily conclude that, in the absence of formal standards and rules, expecting people will act lawfully is foolishness. Moreover, the other two responsibilities represented Carroll's attempt to specify the nature or character of the responsibilities that extended beyond obedience to the law are ethical and discretionary responsibility. The ethical responsibility was claimed to represent the kinds of behaviors and ethical norms that society expected business to follow. These ethical responsibilities extended to actions, decisions, and practices that are beyond what is required by the law. Though they seem to be always expanding, they nevertheless exist as expectations over and beyond legal requirements.

Finally, Carroll argued there are discretionary responsibilities. These represent voluntary roles and practices that business assumes but for which society does not provide as clear cut an expectation as in the ethical responsibility. These are left to individual managers' and corporations' judgment and choice; therefore, they were referred to as discretionary. Regardless of their voluntary nature, the expectation that business perform these was still held by society. This expectation was driven by social norms. The specific activities were guided by businesses' desire to engage in social roles not mandated, not required by law, and not expected of businesses in an ethical sense, but which were becoming increasingly strategic. Examples of these voluntary activities, during the time in which it was written, included making philanthropic contributions, conducting in-house programs for drug abusers, training the hard-core unemployed, or providing day care centers for working mothers. Later, Carroll began calling this fourth category philanthropic, because the best examples of it were charitable, humanistic activities business undertook to help society along with its own interests. Hence, given this all facts, the study use philanthropic contributions made by each firm as a independent variable to run the regression in



addition to the content analysis of the accounting report of the respective firms. Of course this aspect, philanthropic contribution, gives more sense while talking or evaluating the corporate social responsibility in developing country, especially in Ethiopia. This is because of the fact that, most people in Ethiopia earns less than one dollar, which is below poverty line, needs contribution or assistance from the business firms since government is unable to satisfy the basic needs of the society in the market economy. Financial, philanthropic, contribution made by firms to the community, employees, and environmental protections were used to measure CSR. Though many studies have ignored these factors or attributes to measure CRS, this paper employed the attributes to assess the relationship.

Several studies have been carried out on the relationship between CSR, measured using content analysis, and CFP resulting in different conclusions. Klassen and McLaughlin (1996) studied 14 manufacturing sector firms to conclude that environmental management can play a positive role in improving corporate financial performance. In exploring the linkages between environmental performance and financial performance with respect to the market value, Konar and Cohen (2001) argued that a firm with a better environmental performance has a significant positive impact on its market value. Fauzi (2009) did a research on firms listed on the New York Securities Exchange (NYSE) to determine the relationship between CSR and corporate financial performance. Using a sample of 101 companies listed at the NYSE and a regression model with financial performance as the dependent variable and CSR index as the independent variable, he found that CSR has no effect on CFP. He however found that leverage (a control variable in the model) has a moderating effect on the interaction between CFP and CSR.

Financial performance considers one of the most important studied indicators of the strategic value of CSR (Orlitzky, et al. 2003). Researchers have started the empirical study of corporate social responsibility (CSR) and financial performance (FP) over a past few decades ago in western countries. Many firms have faced the pressure for corporate accountability which it is increasing from their stakeholders (managers, employees, customer, government, shareholders, and so on) (Waddock, 2004). This pressure includes some aspects such as legal, social, moral, and financial aspects. In addition to this, as a result of an ongoing of government attention towards social activities, there are some government restrictions with respect of social conduct, even in times of liberalization. Stakeholder's demands are increasing with the growing transparency of markets. One of the most important stakeholders is customers who are asking for sustainable products (Gauthier, 2005).

According to Hailu FK and Nigatu TF (2015), study aimed at investigating the question of what are the employee oriented CSR practices in the first level hotels and lodges in Gondar city, Ethiopia; gender equality acceptance, the commitment to balance the private and professional life, the employees freedom to go freely in sick and maternity were the highly practiced. However, reward and proper salary system, secure job and promotion of work were less practiced issues to the employees.

Financial performance is not only the main objective for numbers of investors which are looking at it in a Corporation's portfolio, but they are also valuing the way corporations meet their social responsibilities (Barnett & Salomon 2006). All these developments lead to the focus of corporate attention from a merely financial orientation to the importance of CSR activities and disclosure into a firm. This focus has led to the ongoing debate whether corporate social responsibility disclosure (CSRSD) affects financial performance in terms of the firms share price, its consumer support, the loyalty of its employees and the amount of attention. The potential for stakeholder demands to compete with one another for firm attention and prioritization and the consequences of conflicting demands being (or not being) met are rarely considered (Barnett 2005). But in Ethiopia, much of the population is agrarian and illiterate so that what so ever efforts have been done in providing quality report may not make differences among firms as long as either they provide philanthropic contribution to the society or produce quality product at reasonable price which is visible for the decisions. Understanding the link between CSRSD and financial performance is significant as managers balance stakeholders' expectations of the firm to be socially responsible against demands for firm financial performance (Bertels & Pelozo 2008). According to Emebet Melese (2009), study conducted to understand the state of non financial reporting: CSR and environmental reporting practices in Ethiopian corporate firms and NGOs, there is the practice of reporting CSR and environmental issues in Ethiopian NGOS in full. In addition many public enterprises used to report their CSR and environmental issues within their corporate annual reports since they are forced by the Privatization and Public Enterprises Supervising Agency (PPESA). On the other hand, with regard to the privately owned corporate firms the company characteristics has influence on non financial reporting or disclosures. In order to see the conformity between CSRSD measured using content analysis of accounting report and CFP, the study tested this in Ethiopia context.

a) *Relationship between CSP and CFP*

Perhaps the first attempt to establish the business case for CSR has been the pursuit of establishing a positive relationship between CSP and CFP. Margolis and Walsh (2003) describe this endeavor as a 30-year quest for an empirical relationship between a corporation's social initiatives and its financial performance. Griffin and Mahon (1997) present a review and an assessment of studies exploring the CSP–CFP relationship. The authors conclude that there is a positive relationship between CSP and CFP. They argue that inconsistencies in the results of previous empirical studies investigating the CSP–CFP relationship may be attributed to methodological differences. Roman et al. (1999) disagree with Griffin and Mahon and offer a different conclusion. They argue that results produced by CSP–CFP studies fall into three categories. One category shows a positive link between CSP and CFP, the second shows a negative link, and the third shows no link. The authors thus conclude that the results are inconclusive. Mahon and Griffin (1999) respond to Roman et al. (1999) by acknowledging that the CSP–CFP relationship merits further investigation; however, they contend that the findings of Roman et al. (1999) are influenced by interpretation biases. In order to resolve these conflicting results, this paper used two models to measure the CSR, these are content analysis and philanthropic contribution since the variation of the former studies were because of the fact that the proxies used to measure CSR may not be correct.

Some studies argue that activities might be consistent with wealth maximization motives of the firm and provide appropriate information for corporate decision making (Keim 1978; Pava & Krausz 1996). Hence, short and long run financial impacts are employed to measure the impact of CSR activities and disclosure on financial performance. However, this does not mean that all CSR program must satisfy the traditional cost-benefit criterion. There are two types of empirical studies of the relationship between corporate social responsibility disclosure (CSR) and corporate financial performance. The first set uses the event study methodology to measure the short-run financial impact when companies appoint in socially responsible or irresponsible acts (e.g. Hannon & Milkovich 1996; Margolis & Walsh 2003; McWilliams & Siegel 2000; Orlitzky et al. 2003; Saleh et al. 2008; Wright & Ferris 1997). Market-based measure of financial performance was employed to achieve these studies such as the firms share price, share price appreciation. Market-Based measure reflects the concept that shareholders are the most important stakeholder group whose satisfaction determines the firms' fate (Cochran & Wood 1984). Mixed results have been produced by studies conducted in developed nation on the effects of CSR activities and

disclosure on firm value yet no or few studies were undertaken to test this fact in developing countries, particularly in Ethiopia. Of course it impossible to conduct event study since well-developed capital market is absent in Ethiopia context to explore stock price overtime. Hence, two proxies, content analysis and philanthropic contribution and donation, were used to measure CSR of business firms in Ethiopia.

Few studies have concluded the positive beneficial effects of CSR activities on CFP while others found that the effects are negative or no relationship. For example, Margolis and Walsh's found that 4% of the 160 studies examined considered a negative relationship between CSR and financial performance, 55% a positive relationship, 22% was no relationship, and 18% reported a mixed relationship. Furthermore, Orlitzky, Schmidt and Rynes (2003) achieved another of higher order analysis and revealed similar results. While other studies are not similarly stable concerning the relationship between CSR and short-run financial return (McWilliams & Siegel 2001).

The examination of the nature of the relationship between measures the long-term financial performance and a measures of CSR is the second set that is used from accounting and financial measures of profitability (e.g. Aguilera et al. 2007; Mahoney & Roberts 2007; McGuire et al. 1988; McWilliams & Siegel 2000; Simpson & Kohers 2002; Waddock & Graves 1997). In addition, McWilliams and Siegel (2000) examined the relationship between two with a regression model that measures financial performance as the dependent variable while social performance as the independent variable for the period 1991-1996 for 524 large companies. They reached that there was no link between a CSR and financial performance if the regression model is properly specified. Furthermore, Moore and Robson (2002) analyzed the link between CSR and financial performance of eight firms. Mahoney and Roberts (2007) also examined the relationship between CSR and financial performance in a large sample of public companies of four years of panel date in Canada. This study yielded no significant relationship between them. Yet, they revealed a significant relationship between some CSR activities and disclosure such as environmental and international activities and financial performance. Finally, Rettab, Brik and Mellahi (2009) in the UAE market as an emerging economy did the latest study of corporate social and financial performance. They tested the relationship in 280 industries (Manufacturing, Trading and repairing services, Hotels and restaurants, Real estate, rental, and business services, Education, Banking and financial services, Mining and quarrying, and Others). Although there are some challenges that have contributed to ineffective engagement with



stakeholders and the lack of communication of CSR activities, they found a strong positive relationship between CSR and financial performance.

#### b) *Philanthropic responsibilities in practice*

The discretionary or philanthropic responsibilities of business encompass those corporate actions that are in response to society's expectation that business be a good corporate citizen. This includes, actively engaging in acts or programs to promote human welfare or good-will (Carroll 1991). Many businesses make donations directed at various causes such as education, community improvement, and arts and culture (Seifert et al., 2004). Currently businesses in Ethiopia are intensively involving in different social affairs especially in promoting human welfare through philanthropic contribution as compared to the former practices. This might be because of emerging competition as a result of adoption of IFRS in Ethiopian business which made the market to be free and easy for international businesses firms to join all businesses except financial institutions. Hence, the business culture has already changed from only local to international which made the business to be tough to survive without having strong relation and support to the overall society. Surprisingly, the involvement of businesses firms in CSR activities in the country is booming, even if the level of stakeholders/customers reaction is unknown, as it is common to see the contribution made by firms displayed in different media especially at the time of holiday. Unlike developing countries, in advanced economy the level of customers' awareness is known and high. Australia was said to achieve the utmost CSR prospects in business (Environics, 1999) in a 23-nation poll of public attitudes, followed by the American region with 86% and the UK, 74%. The respondents indicated that an organization's behaviour in terms of ethical sales and marketing strategies would influence their purchasing decisions (Pomeroy et al., 2009). Therefore, firm's involvement in any CSRs activities in such countries, advanced economy, will have mutual benefits. Though financial contribution to the society is necessary, it is equally important to see or evaluate its effect on the company performance since the contribution will continue if and only if the company is able to survive by maximizing its profit or wealth. However, it is unsure to generalize the cointegration between discharging CSR and firms performance in developing countries. According to Alan Pomeroy et al (2009), if consumer awareness is low, the effect of CSR initiatives on purchasing behaviour is only of theoretical, not practical, relevance. On the other hand, the contribution of business firm in the country economy and eradicating poverty in Ethiopia is significantly increasing. Though discharging CSRs are equally important both for firm and the society, no empirical

studies were made to examine the tradeoff between CSR and CFP in developing economy like Ethiopia.

Bruch and Walter (2005) observe that in the United Kingdom alone, leading publicly traded companies made donations to non-profit organizations in 2003 and 2004 that were valued at more than \$1.6 billion and that equaled close to 1% of the companies' pre-tax profits. Corporate philanthropy is not a new phenomenon. Seifert et al. (2003) reports that corporate philanthropy as a percentage of profits averaged 1.3% in 1999'. Corporate philanthropy is also global in scope. Of course, there is no formal recorded data that shows which company has made how much they have made in philanthropic contribution so as to rank the firm. Many corporations engage in philanthropic activities directed at foreign recipients. A number of Fortune 500 companies made donations for disaster relief in the US, Kashmir and South Asia (Muller and Whiteman 2009).

To appreciate the importance of the corporate philanthropy movement, one needs to acknowledge its scope. Corporate philanthropy is not just limited to monetary donations made by corporations. Many corporations encourage philanthropic activities by their employees and customers through various forms of collaboration. Microsoft, Ashland Oil and JPMorgan Chase are among the members of the Workplace Giving campaign, which is an employer-sponsored program that offers employees the opportunity to make a charitable contribution through payroll deduction (Global Impact 2009).

Bruch and Walter (2005) argue that companies use philanthropy to enhance their competitive advantage through combinations of market (external) and competence (internal) orientations. Through a market orientation, companies design their philanthropic activities to fit external demands and meet the expectations of key stakeholders. The companies therefore improve their competitive advantage through improved marketing and selling capabilities, higher attractiveness as an employer or better relationships with governmental and nongovernmental organizations (ibid). Deutsche Lufthansa AG, for example, enhances its relationship with communities within which it operates by operating a community-involvement program (ibid).

#### c) *Hypotheses*

Finance theory differs on how the firm should be responsible to in the course of its business. According to stakeholder theory, firms possess both explicit and implicit contracts with various constituents, and are responsible for honoring all contracts (Freeman, 1984). As a result of honoring these contracts, a company develops a reputation that helps determine the terms of trade it can negotiate with various stakeholders. While explicit contracts legally define the relationship between a firm

and its stakeholders, implicit contracts have no legal standing and are referred to in the economic literature as self-enforcing relational contracts. Since implicit contracts can be breached at any time, Telser (1980) argues that they become self-enforcing when the present value of a firm's gains from maintaining its reputation (and, therefore, future terms of trade) is greater than the loss if the firm reneges on its implied contracts. This theory, therefore predicts a positive relationship between CSR and corporate financial performance (CFP). However, stakeholder theory has acquired opponents from various areas including classical economics, industrial relations and management. Sternberg (1997) for example, argues that the principles of stakeholder theory undermine the property rights of the owners of the company, compromise the mechanism of the free market, destabilize the operations of governments and thus subvert the very nature of capitalism.

Despite the conflicting results, all of the studies above were done in western countries and US except Rettab, Brik, and Mellahi study (2009). This indicates that there is no or limited research that have done to investigate the relationship between CSR and financial performance in developing countries, particularly in Ethiopia where the business are infant and well-developed capital markets are absent. Moreover, many businesses engage or donate for different social activities as a means of promoting their business without considering its effect on their financial performance. Hence, the main contribution of this study is to assess the effect practicing social practices on the financial performance of banking industry in Ethiopia. In other word, this study used mixed research approach to test the following hypothesis.

- *H1*: Higher levels of CSR Disclosure provided by firms are positively associated with its higher financial performance of banks in Ethiopia.
- *H2*: Higher levels of CSR activity in the form of financial contribution provided by firms are positively associated with its higher financial performance of banks in Ethiopia.
- *H3*: Most managers in the banking industry have awareness about the concept of corporate social responsibility practices.

### III. MATERIALS AND METHODS

The study comprised all Banking firms in Ethiopia. This sector was selected because of the importance of the firms in enhancing economic growth through discharging CSR activities properly and sensitivity of the industry as it deals with different stakeholders. Moreover, the level of competition in discharging CSR activities among the firms in the sectors is tough so as to maximize market share and

even to sustain in the future. Census surveys were carried out due to the small number of the population though only 10 of them have fulfilled the requirement and also were willing to respond the questionnaire and interview. It is known that a census is feasible when the population is small, only 18 banks were operating as of June 2016, and necessary when the elements are quite different from each other. However complete data, financial report, for the study period under consideration were not available for 8 of the companies and therefore only 10 financial institutions firms, banks were finally used to run the regression model for the study.

#### a) *Research Design and Methods of Data Collection*

Mixed research approach (quantitative and qualitative) was used in order to address the research questions under study. According to Creswell (2000), the use of mixed approach, both quantitative and qualitative data are important to address the research objective. The primary source data were collected through questionnaire and semi-structured interview with top-management of the respective firms. Data gathered from the interviews were recorded using tape recorder of the firms enabled the researchers to gain the deeper insights on this issue in this research.

Secondary data were obtained from audited financial reports and other publications by the companies including information from the company websites for six years from 2009 to 2014. The ability of companies to convey their intentions and actions to the societies in which they are located is recognized as being integral to the relationship between business and society. The use of websites to disseminate company information serves this purpose.

#### b) *Measurement of Variables and Model Specification*

The models used in this study were adopted and modified in the context of developing economy from past studies undertaken in developed nation since measuring CSR activities are complex. As a result, the study used philanthropic contribution and CSR disclosures as a proxy to quantify the dependent variable, corporate social responsibility. CSR disclosure is generally seen as an important tool for companies to manage their relationship with society at large, and its subsequent stakeholders in particular. On the other hand, accounting-based measures was used to quantify the independent variable, Corporate Financial Performance and define financial performance as return on assets (ROA). One of the best ways to measure company performance is ROA since it explicitly takes into account the assets used to support business activities. It determines whether the company is able to generate an adequate return on the assets rather than simply showing robust returns on sales. Although considerable research has been done to conceptualize and measure corporate social activity

within several social, environmental and consumer behavioral contexts, there is no general solution or answer as to which is the right model for an ideal or optimal level of CSRs investment while maximize corporate financial performance (see for example Cheruiyot, 2010, Aragon & Lopez, 2007). While, some authors claim it is impossible to do a 'one-for-all' model, others have already designed these kinds of models under specific conditions. Such a model design faces considerable constraints with regard to the contextual differences in which the corporations must operate, as well as the varying levels of stakeholders social responsibility awareness. The development of this kind of 'one-for-all' long-term model, balancing and maximizing financial and social responsible performance should initially focus on larger international firms where awareness and context towards CSR is more homogeneous. Otherwise, research should focus on the different specific firm contexts (Martinez and Kang, 2013).

Therefore, this study incorporated/used one unique but logical proxy to measure CSR, financial contribution of the respective firms for any CSR activity even though, many studies have been done using only content analysis of the audited report as a proxy for CSR.

Multivariate regression models were used to determine the relationship between the two variables, CSR and financial performance of the firm. As a control variable, company's efficiency and capital intensity were also introduced in the regression models and the dependent variable used was return on assets. Company's efficiency is measured in terms of minimizing cost of production as measured by the relative value, which is cost of sales divided by total sales revenue; whereas, capital intensity using the total assets employed to total sales revenue of the company. The multivariate regression was used to measure, explain and predict the degree of linkage among variables. As a result, the following regression models were used;

$$CFP = \beta_o + \beta_1DX_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon_i \dots\dots\dots (1)$$

$$CFP = \beta_o + \beta_1PX_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon_i \dots\dots\dots (2)$$

Where:

- ✓ CFP- Financial performance measures return on assets (ROA) as dependent variables
- ✓  $\beta_o$ - Constant
- ✓  $DX_1$ - CSR disclosure score measured using content analysis of the report which represents the independent variables such as Employee concern (EMP), Community involvement (COM), Consumers concern (CON), and Environment concern (ENV)
- ✓  $PX_1$ - CSR score measured using financial (philanthropic) contribution made to discharge CSR activities.
- ✓  $X_2$ -Efficiency = Cost of sales/Total sales,
- ✓  $X_3$ - Capital intensity = Total assets/ Total sales
- ✓  $X_4$ - Age of the firm
- ✓  $\beta_1$ - a constant (coefficient) of various elements
- ✓  $\epsilon_i$ - the error term

One of the variables considered in this study was to explore whether the banking sector has an understanding about the concept of corporate social responsibility. Hence, in addition to the econometric model, the study employed descriptive analysis to assess the awareness about the concept and meaning of corporate social responsibility in the banking sector in the country.

implementing CSR activities properly in such a way that will optimize (win-win) to both the firm and society. As confirmed through the survey tools and presented in Table 4.1, all managers working in the position of CSR have awareness about the concept. This implies that, the null hypothesis accepted. In other words, the researcher fails to reject the null hypothesis.

#### IV. RESULT AND DISCUSSION

##### a) Awareness about CSR

The effectiveness of CSR activity depends upon the level of awareness of top-management as well as the society. According to Shirley Yeung (2011), understanding the key elements of a CSR framework can help fulfill the principles of CSR and improve the level of customer satisfaction for increasing market share and profits ultimately. This implies, awareness of top-management helps the effectiveness of

Table 4.1: Awareness of CSR

	Do you know what does mean by CSR?		
		Yes	No
How do you come to know about CSR?	Through formal education	50%	
	Through training	10%	
	From Commercial code	0	
	Through Reading	30%	
	Your company's code	10%	

On the other hand, about half (50%) of the managers come to know about the concept of CSR for the first time through formal education; whereas, the remaining through reading, training and their companies code. However, no one has learned from the commercial code or business rule of the country about the concept of CSR. This indicates that, the commercial code of the country, Ethiopia, either doesn't say something about the CSR or even though it exists, there might be no mechanism or institution that can push the firms to implement it. As investigated from interview with top-management, on the other hand, however, very insignificant number of the stakeholders knows about the CSR activities undertaken by the firm. As a result of

this, the positive reaction of the stakeholders to the company's product is not satisfactory which is not good for firms to be committed to discharge their responsibility as long as they don't see any differences.

b) *Multivariate regression analysis*

In order to test the two hypothesis, two regression models were analyzed and presented in two tables (table 4.12 and Table 1.13) respectively. The results in table 4.12 revealed that there were no significant relationship between level of financial contribution to CSR activity and CFP as well as CSRD and financial performance at the even at 10% significance level.

Table 4.12: Random-effects GLS regression Output

ROA	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]
ENVD	.4449356	.3401744	1.31	0.191	- .221794 1.111665
COND	-.6415586	.355375	-1.81	0.701	-1.338081 .0549637
COMD	-.4211408	.1942476	-2.17	0.301	-.801859 -.040425
EMPD	.3748464	.3976096	0.94	0.346	-.4044542 1.154147
Efficiency	-.1163348	.2532339	-0.46	0.646	-.6126641 .3799946
Capital Intensity	-1.71e-07	3.49e-06	-0.05	0.961	-7.01e-06 6.67e-06
Age	-.0010807	.0011999	-0.90	0.368	-.0034324 .001271
_cons	.3549777	.2921096	1.22	0.224	-.2175467 .9275021

As in the table 4.12, the coefficients of the independent variables are 0.44, -0.64, -0.42, and 0.37 for disclosure about environmental, consumer, community, and employees' concern respectively. This indicates that, disclosure about consumer and community concerns has negative effect on the performance of the firm though statistically insignificant. On the other hand, disclosure about the environment and employees' concern on the annual report of the banking sector shows positive relationship with firm's financial performance measured using return on assets (ROA), though statistically insignificant.

The potential reasons for this insignificant relationship between CSRD and CFP might be:

- Majority of the people in the country are farmers and illiterate so that whether the company has clearly

stated it's concern about the community or the environment, few people could able to read and understand and positively react accordingly. As explored through interview with top-managements of the companies, very few numbers of their stakeholders knew properly their organizations active involvement in different CSR activities. Hence, if only few stakeholders knew about their involvement in different CSR activities, the cost outwaits the benefit they could have earned had the societies were literate. And/or

- Even if few of the societies are literate and able to understand the secondary data of firms in the sector, it is very much tough to find the financial reports easily. Most of the time firms in Ethiopia consider themselves as a loser if their financial and



management information were disclosed to someone out of their firms' compound. However,

financial reports are produced not only for internal users but also to all external users timely.

Table 4.13: Random-effects GLS regression Output

ROA	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
Donation	9.55e-09	4.19e-08	0.23	0.820	-7.25e-08	9.16e-08
Efficiency	-.289055	.1726948	-1.67	0.094	-.6275307	.0494207
Capital Intensity	-3.11e-07	2.85e-06	-0.11	0.913	-5.90e-06	5.27e-06
Age	-.0015627	.0011022	-1.42	0.156	-.0037229	.0005975
_cons	.2038436	.0940006	2.17	0.030	.0196059	.3880814

The beta coefficient for the independent variable, financial contribution for firms for different CSR activities, which was the summation of donation, membership fees and grant as proxy, was 0.00000001. This indicates that, the relationship between financial contribution for CSR activities by firms and corporate financial performance was just nonexistence. As also indicated in the table 4.13, the statistical relationship between the two variables was insignificant. The possible reasons as it was explored through interview and discussion with top-management, for the nonexistence of the two variables relationship might be as follows.

- Most firms in Ethiopia use donation as a means of competition than as a responsibility as indicated on table 4.4. The main motive was just to snatch the market share in unfair/unsystematic way that is why they distribute or donate to the needs mostly at the time of holiday.
- Except one firm, almost all firms considered for study did not have a standardized written guideline for how to discharge their CSR activities. This implies that, firms consider CSR activities as something that they could do it based on personal judgments. And /or
- Absence of full-time employee who can handle the societally issue made CSR activities in the firms not to be effective and systematic so as to maximize their financial performance.
- Hence, as tested using the econometric model, both the hypotheses are rejected at 10% level of significance. This shows that, there were no relationships between CSR and firms financial performance.

## V. CONCLUSION

The study was conducted to assess the relationship between CSR and CFP using the approaches used by different research by modifying to the Ethiopian context. The modification was mainly made of the proxies used to measure the independent

variable, CSR activities. Hence, in addition to the descriptive statistics, two econometric models were used to analyze the relationship between the two. One was the financial contribution made by firms in all activities of CSR, and the other proxy was the corporate social responsibility disclosure using the content analysis. Of course several studies were undertaken throughout the world, mainly in the context of advanced economy, to see the correlation between corporate social responsibility (CSR) and corporate financial performance (CFP) although results were different and even sometimes contradicting one another. For example, studies conducted by Waddock & Graves, 1997; Cheruiyot, 2010 shows a positive relationship between corporate social responsibility practice and firm financial performance. Contrary to these, some of the studies shows negative (Cordeiro & Sarkis, 1997; Wagner et al, 2002) and still others showing that there is no relationship between the two variables (McWilliams & Siegel, 2000; Aragon & Lopez, 2007). The root cause for this variation might be because the fact that the research approach used and the proxies used to measure CSR activities were not efficient. Therefore, this study used a mixed research design approach and applied multiple econometric models to assess the relationship between CSR and firm's financial performance in Ethiopia since one size does not fit all.

Moreover, the study explored the perception of top-managements' and different stakeholders' awareness about CSR through questionnaire and interview; and also analyzed using descriptive statistics. The finding shows that, there is no significant relationship between the financial contribution for CSR activities and CFP which similar to the findings of McWilliams & Siegel, 2000; Aragon & Lopez, 2007. Similarly, the study proved that corporate social responsibility disclosure (CSR D) and CFP have no relation even at 10% significance level. This might be because of the fact that, the accounting reports and disclosures issued by firms are uniform, just copy and paste, across the year. This shows that, reports



produced by firms in Ethiopia are just for formality and as a means of pretending the regulators that is why reports are not available on some firms' website timely. Furthermore, the reports disclose only the customers and employees aspect ignoring the community at large as well as the environmental issues. This implies that, firms in the sector are much more concerned about the competition and totally ignoring their role in the

community and environmental concern. To conclude, a lot of improvements are expected from firms in the country to discharge their CSR properly; this is because as proven in finding, majority of the business firms in Ethiopia were in the lower layer of Carroll's 1991, CSR pyramid, which is profit maximization, ignoring the other three pillars even though top-management has an understanding/awareness.

Summary of the hypotheses

	Hypothesis	Expected	Actual
H1	Relationship between corporate social responsibility disclosure and Financial Performance	Positive	No relationship
H2	Relationship between corporate social responsibility activity and Financial Performance	Positive	No relationship
H3	Most firms in the banking industry have awareness about the concept	Yes	Yes

VI. RECOMMENDATION TO FIRMS AND POLICY IMPLICATIONS

- As explored through survey questionnaires, interview, and other related queries most firms in the sectors did not have any written guidelines on how to discharge CSR properly. Hence, the top-management should develop clear guidelines and also assign full-time staff otherwise their little effort will become zero-sum game.
- As investigated through the above finding (see table 4.4), majority of the firms in the sector used financial contribution for different CSR activities as a means of competition by pretending stakeholders that is why mostly businesses donate to the poor only at the time of holiday. To be effective and efficient enough, firms in the sectors should use proactive approach for discharging their CSR properly.
- All firms should need to have website where they can post all the CSR activities and also annual financial reports timely.
- The role of government in curbing unwanted social behavior and unlawful acts is very sound and effective in all aspects; the government of Ethiopia should develop and enforce how the businesses in the country should discharge their responsibility properly though some of the CSR activities are discretionary.

VII. LIMITATIONS AND FURTHER RESEARCH NEED TO BE ADDRESSED

Though considerable efforts were made to address the research objective, the study has faced limitation in measuring corporate social responsibility disclosures and CSR activities. The study used items disclosed on the annual report of the firms so as to measure CSR disclosure and amount of donation for philanthropy as a measure of corporate social

responsibility activities. Hence, further study need to done so as to identify which measurement techniques are more explanatory.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Aragón-Correa, J.A, & Rubio-López, E.A., (2007). Proactive Corporate Environmental Strategies: Myths and Misunderstandings. Long Range Planning, 40(3), 357-381.
2. Asemamaw Tilahun (2011). Corporate Social Responsibility in Sustainable Environment Management in Ethiopia: The case of selected corporations and social enterprises, unpublished master's thesis, Addis Ababa University.
3. Auger, Pat, Devinney, Timothy M., & Louviere, Jordan J. (2007). Using best-worst scaling methodology to investigate consumer ethical beliefs across countries. Journal of Business Ethics, 70(3), 299-326. doi: 10.1007/s10551-006-9112-7.
4. Barnett, ML & Salomon, RM 2006, 'Beyond dichotomy: The curvilinear relationship between social responsibility and financial performance', Strategic Management Journal, vol. 27, no. 11, pp. 1101-22.
5. Barnett, ML 2005, 'Stakeholder influence capacity and the variability of financial returns to corporate social responsibility', Academy of Management Review.
6. Bertels, S & Pelozo, J 2008, 'Running just to stand still? Managing CSR reputation in an era of ratcheting expectations', Corporate Reputation Review, vol. 11, no. 1, pp. 56-72
7. Bowen, H. (1953). Social Responsibilities of the Businessman. New York: Harper.
8. Bruch, H. and Walter, F. (2005). The keys to rethinking corporate philanthropy. MIT Sloan Management Review, 47, pp. 48-56.

9. Carroll, A.B. (1991). The pyramid of corporate social responsibility: toward the moral management of organizational stakeholders. *Business Horizons*, July–August, pp. 39–48.
10. Cheruiyot, F. K. (2010). The relationship between corporate social responsibility and financial performance of companies listed at the Nairobi Stocks Exchange, Unpublished MBA Thesis, University of Nairobi.
11. Cochran, PL & Wood, RA 1984, 'Corporate social responsibility and financial performance', *Academy of Management Journal*, vol. 27, no. 1, pp. 42-56
12. Cordeiro, J.J., & Sarkis, J. (1997). Environmental pro-activism and firm performance: evidence from security analyst earnings forecasts. *Business Strategy and the Environment*, 6(2), 104-114.
13. Creswell, (2000), *Research design: qualitative and quantitative approaches*, Sage Publications: Thousand Oaks, CA.
14. Donaldson, T., Dunfee, T.W. (1999), *Ties That Bind*, Harvard Business school press, Boston, MA
15. Emebet Melese (2009), *Non Financial Reporting: Corporate Social Responsibility and Environmental Reporting (An Ethiopian case)*, unpublished Research project for partial fulfillment of MSc. In Accounting and Finance, Addis Ababa University.
16. Environics: 1999, *The Millennium Poll*. URL: <http://www.mori.com> accessed Dec27, 2011. , a
17. Fauzi, H (2009), *Corporate Social and Financial performance: Empirical evidence from American companies*. *GMJ*, 3, Iss Jan – June 2009.
18. *Foreign Affairs, Trade and Development Canada*, 2009
19. Freeman RE (1984). *Strategic Management: A Stakeholder Approach*. New York, Pitman.
20. Gauthier, C 2005, 'Measuring corporate social and environmental performance: the extended lifecycle assessment', *Journal of Business Ethics*, vol. 59, no. 1, pp. 199-206
21. *Global Impact* (2009). *Workplace giving*. Available at: [http://www.charity.org/site/c.gtJUJfMQlqE/b.3416753/k.99D0/Workplace\\_Giving.htm](http://www.charity.org/site/c.gtJUJfMQlqE/b.3416753/k.99D0/Workplace_Giving.htm). (accessed 22 March2009).
22. Gray, R.H., Dillard, J., & Spence, C. (1996), *Social accounting as if the world matters: an essay in postalgia and a new absurdism*, *Public Management Review*, 11(5),545-73.
23. Griffin, J.J., & Mahon, J.F. (1997), *The corporate social performance and corporate financial performance debate*", *Business and Society*, 36, 5-32.
24. Hailu FK, Nigatu TF (2015) *Practices and Challenges of Corporate Social Responsibility (CSR) in the Hospitality Industry: The Case of First Level Hotels and Lodges in Gondar City, Ethiopia*. *J Tourism Hospit* 4: 184. doi: 10.4172/21670269.1000184
25. Hannon, JM & Milkovich, GT 1996, 'The effect of human resource reputation signals on share prices: An event study', *Human Resource Management*, vol. 35, no. 3, pp. 405-24
26. Keim, GD 1978, 'Managerial behavior and the social responsibility debate: Goals versus constraints', *Academy of Management Journal*, vol. 21, no. 1, pp. 57-68.
27. Klassen, R.D. & McLaughlin, C.P. (1996), *The impact of Environmental Management on Firm Performance*, *Management Science*, 42, 1199-214.
28. Konar, S., & Cohen, M. A. (2001). *Does the Market Value Environmental Performance? The Review of Economics and Statistics*, 83(2), 281-289.
29. Kostyuk et al (2008). "Corporate social responsibility in banks", an international overview", *Ukrainian Academy of Banking of the National Bank of Ukraine*, Sumy
30. Mahon, J.F. and Griffin, J.J. (1999). *Painting a portrait: a reply*. *Business and Society*, 38, pp. 126–133.
31. Mahoney, L & Roberts, RW 2007, 'Corporate social performance, financial performance and institutional ownership in Canadian firms'.
32. Margolis, JD & Walsh, JP 2003, 'Misery loves companies: Rethinking social initiatives by business', *Administrative Science Quarterly*, vol. 48, no. 2, pp. 268-305.
33. Martinez and Kang, 2013, "A Review on Contextual Corporate Social Responsibility: Towards a Balanced Financial and Socially Responsible Performance", *International Journal of Humanities and Social Science*, Vol. 3 No. 18.
34. McDonald's (2009). *Values in practice*. Available at: <http://www.crmcdonalds.com/publish/csr/home/about/community.html> (accessed 23 March 2009).
35. McGuire, JB, Sundgren, A & Schneeweis, T 1988, 'Corporate social responsibility and firm financial performance', *Academy of Management Journal*, pp. 854-72
36. McWilliams, A. & Siegel, D. (2000), *Corporate Social Responsibility and Financial Performance: correlation or misspecification?* *Strategic Management Journal*, 21(5), 603-9.
37. McWilliams, A., & Siegel, D. (2001). *Corporate social responsibility: A theory of the firm perspective*. *Academy of Management Review*, 26(1), 117-127. doi: 10.2307/259398
38. Moore, G. (2001). *Corporate social and financial performance: An investigation in the UK supermarket industry*. *Journal of Business Ethics*, 34(3-4), 299-315. doi: 10.1023/a:1012537016969
39. Muller, A. and Whiteman, G. (2009). *Exploring the geography of corporate philanthropic disaster*

- response: a study of Fortune Global 500 firms. *Journal of Business Ethics*, 84, pp. 589–603.
40. Oluwarotimi Kude, and Derek Watson (2012) AN EMPIRICAL STUDY ON CORPORATE SOCIAL RESPONSIBILITY IN THE BANKING SECTOR. *SEGi Review* ISSN 1985-5672 5: 1.
  41. Orlitzky, M, Schmidt, FL & Rynes, SL 2003, 'Corporate social and financial performance: A meta-analysis', *Organization Studies*, vol. 24, no. 3, p. 403.
  42. Pava, ML & Krausz, J 1996, 'The association between corporate social-responsibility and financial performance: The paradox of social cost', *Journal of Business Ethics*, vol. 15, no. 3, pp. 321-57.
  43. Pomeroy A., and Dolnicar S, 2009, Assessing The Prerequisite Of Successful CSR Implementation: Are Consumers Aware Of CSR Initiatives, *Journal Of Business Ethics* Apr2009 Supplement 2, 85, Page 285-301.
  44. Rajasekhara Mouly Potluri, Zelalem Temesgen, 2008, "Corporate social responsibility: an attitude of Ethiopian corporates", *Social Responsibility Journal*, Vol. 4 Iss: 4, pp.456 – 463.
  45. Rettab, B, Brik, AB & Mellahi, K 2009, 'A study of management perceptions of the impact of corporate social responsibility on organizational performance in emerging economies: The case of Dubai', *Journal of Business Ethics*, vol. 89, no. 3, pp. 371-90.
  46. Roman, R.M., Hayibor, S. and Agle, B.R. (1999). The relationship between social and financial performance. *Business & Society*, 38, p. 109.
  47. Ronald McDonald House Charities (2009). Our relationship with McDonald's. Available at: <http://www.rmhc.org/who-we-are/our-relationship-with-mcdonald-s/> (accessed 23 March 2009).
  48. Saleh, M, Zulkifli, N & Muhamad, R 2008, 'An Empirical Examination of the Relationship between Corporate Social Responsibility Disclosure and Financial Performance in an Emerging Market', pp. 1-22.
  49. Seifert, B., Morris, S.A. and Bartkus, B.R. (2003). Comparing big givers and small givers: financial correlates of corporate philanthropy. *Journal of Business Ethics*, 45, pp. 195–211.
  50. Seifert, B., Morris, S.A. and Bartkus, B.R. (2004). Having, giving, and getting: slack resources, corporate philanthropy, and firm financial performance. *Business and Society*, 43, pp. 135–161.
  51. Simpson, WG & Kohers, T 2002, 'The link between corporate social and financial performance: evidence from the banking industry', *Journal of Business Ethics*, vol. 35, no. 2, pp. 97-109.
  52. Shirley Yeung (2011). The Role of Banks in Corporate Social Responsibility, *JAEBR*, 1(2): 103-115.
  53. Sternberg, E. (1997). The defects of stakeholder theory. *Corporate Governance: An International Review*, 5(1), 3-10.
  54. Telser, L. G. (1980). Theory of self-enforcing agreements. *Journal of Business*, 53(1): 27–44.
  55. Waddock, S 2004, 'Creating corporate accountability: Foundational principles to make corporate citizenship real', *Journal of Business Ethics*, vol. 50, no. 4, pp. 313-27.
  56. Waddock, S.A. & Graves, S.B. (1997), The corporate social performance: financial performance link, *Strategic Management Journal*, 18 (4), 303-19.
  57. Wagner, M., Van, P. N., Azomahou, T., & Wehrmeyer, W. (2002). The relationship between the environmental and economic performance of firms: an empirical analysis of the European paper industry. *Corporate Social Responsibility and Environmental Management*, 9 (3), 133-146.
  58. Wright, P & Ferris, SP 1997, 'Agency conflict and corporate strategy: The effect of divestment on corporate value', *Strategic Management Journal*, vol. 18, no. 1, pp. 77-83.
  59. Yeneneh Tadesse (2015). The Role of Private Commercial Banks on Corporate Social Responsibility in Ethiopia. Unpublished MSc Thesis, Addis Ababa University.



APPENDIXES

Table 4.2: CSR Activities for Financial Institution Firms in Ethiopia

CSR Activities	Rank
a) Philanthropic or Humanitarian contribution	8 <sup>th</sup>
b) Doing business lawfully	1 <sup>st</sup>
c) Doing everything ethically	3 <sup>rd</sup>
d) Producing quality product	2 <sup>nd</sup>
e) Fair pricing of products	6 <sup>th</sup>
f) Protecting Environment	7 <sup>th</sup>
g) Providing employees sufficient benefit	4 <sup>th</sup>
h) Preparing and issuing quality financial report periodically	5 <sup>th</sup>

Table 4.3: Discharging CSR

	Does your company properly discharge CSR?			
		Yes	No	Partially
How many percent of firms in Ethiopia do properly discharge CSR?	Less than 10%	40%		
	11-25%	30%		10%
	26-50%	20%		
	Above 50%	0		

Table 4.4: Reasons for discharging CSR

Reasons for discharging CSR	%
a) Commercial code/rule and regulation of the country forces to do so	30%
b) Every company has their own rules and regulation to discharge CSR	
c) Because of competition in the industry both from domestic and international firms	40%
d) Discharging CSR has an effect on the profitability of the company	10%
e) Do not know	10%

Table 4.5: Financial Contribution to CSR Activities

CSR Activities	Percent (%)
a) Donation to government development projects	30%
b) Donation to NGOs'	26%
c) Establishing school for the community and/or employees'	3%
d) Establishing health center for the community and/or employees'	3%
e) Infrastructure (electric, water, road.....) for the community and/or employees'	1%
f) Supporting suppliers/farmers in transferring technology	2%
g) Sponsorship for Sport, arts and culture	10%
h) Donating the country's disasters or Humanitarian activities	10%
i) Environmental protection	14%

Table 4.6: Budget for CSR Activities

	Does your company has budget for financial contribution to CSR?			
		Yes	No	Sometimes
How do you estimate the budgeted cost for all financial contributions to CSR?	Guess			
	Past experience	80		10
	Based on competitors			
	Some other formula		10	

Table 4.7: CSR disclosure Areas

Categories and subcategories of corporate social responsibility disclosure (CSR)	Rank
<b>a. Environmental disclosure:</b>	
1- Environmental policy or company concern for the environment. 2- Environmental management, systems and Environmental audit. 3- Environmental friendly product and processing system. 4- Environmental protection financially costs. 5- Sustainability of the environment protection. 6- Energy usage and emission reduction. 7- Environmental other	4 <sup>th</sup>
<b>b. Consumer disclosure</b>	
1- Product and consumer safety 2- Consumer complaints 3- Prevision for disabled 4- Provision for difficult-to- reach customers.	1 <sup>st</sup>
<b>c. Community involvement disclosure</b>	
1- Charity and political donations 2- Support for education. 3- Support for public health. 4- Support for the arts and culture. 5- Sponsoring sporting or recreational projects	3 <sup>rd</sup>
<b>d. Employee disclosure</b>	
1- Employee data 2- Pension data 3- Consultation with employees 4- Employment of disabled 5- Value added statement 6- Health and safety 7- Share ownership 8- Equal opportunities 9- Employee other	2 <sup>nd</sup>

Table 4.8: Summary for Descriptive Statistics for CSRD & CFP (Model 1)

Variable	Mean	Std. Dev.	Min	Max
ENVD	.203	.1340162	0	.29
COND	.65	.123508	.5	.75
COMD	.28	.1613502	0	.6
EMPD	.556	.0860666	.45	.67
ROA	.0383944	.1072129	-.0197645	.8376265
<b>Control Variables</b>				
Efficiency	.42055	.113756	.2481005	.7303137
Capital Intensity	1347.203	5481.54	13.46302	32961.8
Age	28.9	19.15211	6	73

Table 4.9: Summary for Descriptive Statistics for Donation & CFP (Model 2)

Variable	Mean	Std. Dev.	Min	Max
ROA	.0383944	.1072129	-.0197645	.8376265
Donation	177320.2	374428.7	0	1818202
<b>Control Variables</b>				
Efficiency	.42055	.113756	.2481005	.7303137
Capital Intensity	1347.203	5481.54	13.46302	32961.8
Age	28.9	19.15211	6	73



Table 4.10: Correlation Coefficient

	ENVD	COND	COMD	EMPD	ROA	Efficiency	Cap.Intey	Age
ENVD	1.0000							
COND	0.8018	1.0000						
COMD	0.6001	0.1531	1.0000					
EMPD	0.5574	0.5357	0.4921	1.0000				
ROA	-0.2664	-0.2031	-0.3006	-0.0228	1.0000			
Efficiency	-0.0625	0.0028	-0.0798	-0.4913	-0.1547	1.0000		
CapitalInt~y	0.1596	-0.2922	0.4797	-0.0197	-0.0526	-0.1268	1.0000	
Age	0.1229	-0.1225	0.2132	-0.0687	-0.1274	-0.5266	0.2810	1.0000

Table 4.11: Correlation Coefficient

	ROA	Donation	Efficiency	Capita~y	Age
ROA	1.0000				
Donation	0.0615	1.0000			
Efficiency	-0.1547	0.1488	1.0000		
Capital Intensity	-0.0526	-0.0583	-0.1268	1.0000	
Age	-0.1274	-0.1588	-0.5266	0.2810	1.0000





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## Classification of Socially-Oriented Business Entities Costs

By Kostiantyn Galak & Olga Romashko

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**Summary-** The article examines the nature and content (components) of the of socially-oriented activities costs of economic entities.

The definition of the "socially-oriented activities costs" is provided." The structure and classification of socially-oriented activities costs is developed, which is necessary for the improvement of the internal controls in the economic activity of the entities.

The article also provides the recommendations, which are aimed at improvement of the socially-oriented activities costs accounting, which will increase the level of the social responsibility.

*GJMBR-D Classification: JEL Code: M41*



*Strictly as per the compliance and regulations of:*



# Classification of Socially-Oriented Business Entities Costs

Kostiantyn Galak<sup>α</sup> & Olga Romashko<sup>ο</sup>

**Summary-** The article examines the nature and content (components) of the of socially-oriented activities costs of economic entities.

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## I. FORMULATION OF THE PROBLEM

Modern dynamic conditions of economic activity led to the need of accounting to adapt according to the clarification of the economic substance of the basic concepts, including costs of socially-oriented activities, determination of their structure and classification, as the business becomes more socially responsible, learns the concept of the social responsibility, which covers all economic entities. Moreover this is a very relevant and interesting research topic for many scientists in various areas.

### a) *Analysis of the recent research and publications*

The concept of costs, its understanding and meaning changes along with the economic development. This can be proved by numerous studies of this concept, made by scientists from the different countries.

A more extended definition provided by Charles Anthony Richard, states that costs is a value of resources presented in monetary terms and used for a specific purpose [1]. Hornhren Charles Thomas and George Foster note that the costs are the resources consumed or money that should be paid for goods and services [2]. Shim Jay determines costs as a monetary measure of the amount of resources, which are used in purpose to achieve certain goals [3].

Accounting issues of social and environmental costs are elucidated in the works of scientists as social responsibility assessment of the entities. Scientific researches of socially-oriented activities costs are highlighted in the scientific works of economists who

contributed to the theoretical and methodological aspects of accounting: Olga Patsula [7], Tetyana Strybulevych [8], Ganna Fomenko [9], Iryna Zhyhley [10], Vasyl' Len' [11], Yulia Cheban [12], G. Kozachenko [13].

*Results of these studies* show that the main areas for the development of socially-oriented activities costs in accounting should be: the improvement and implementation of standards and norms, which takes into account the international experience. In addition, the analysis of the literature revealed the contradictions of the "social costs" concept definition, which can help to define the term "socially-oriented activities costs". Moreover, it can help to develop its classification for the in-depth understanding of its nature and rational management, and also finding the opportunities to establish the connections of socially-oriented activities costs accounting with the other objects and accounting processes.

A large amount of publications on this subject indicates that this issue is very important for the scientists. However, until now the differences in conceptual apparatus exist between the scientists, practical recommendations in this area are underdeveloped; the prospects of accounting development are always considered. Since accounting is developing constantly, methods of accounting and practical advices are continuously researched, which emphasizes the relevance of this research topic once again.

*The aim of the study* is to define the "socially-oriented activities costs", make a research about their composition and structure, as well as to develop a classification of socially-oriented activities costs for the adoption in the accounting of economic entities.

## II. MATERIALS AND METHODS

Materials of the research included works of the economists, who contributed to the theoretical and methodological aspects of the accounting of socially-oriented activities costs, as well as regulatory and legislative acts of Ukraine.

The study used the following scientific methods: induction and deduction, analysis and synthesis in purpose to express the meaning; comparison for establishing similarities or differences between conflicting concepts; synthesis in purpose to form

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appropriate conclusions; bibliographic method to study literature for receiving the relevant information about the research topic; method of associations and analogies for introduction of the new ideas and proposals that arise based on the comparison with other more or less similar objects.

### III. RESULTS OF THE RESEARCH

While studying the socially-oriented activities costs, we should consider the major national and international regulations, which defined the term "costs" and regulate their implementation. In Ukraine it is Policy (Standard) of accounting 16 "Costs" (from now on – the P(S)BO 16 "Costs") approved by the Ministry of Finance of Ukraine on 31<sup>st</sup> of December, 1999, № 318 with amendments [4].

In this P(S)BO the concept of "costs" is indicated, it also records its composition and recognition, and disclosure of information related to it. P(S)BO 16 "Costs" was developed according to the international standards, but the separate IFRS "costs" does not exist there. Key provisions that define methodological principles of forming of the information about the costs in accounting are revealed in the Conceptual framework of the financial reporting, which is based on combined IFRS (IAS) 1 "Presentation of the Financial Statements", IFRS (IAS) 2 "Inventories", in which the costs are divided in order to evaluate inventories [5].

According to P(S)BO 16 "Costs" the subjects of costs are the products, works and services, types of activity, that require the identification of the costs associated with their production (implementation). Therefore, there is a reason to provide a definition of "socially-oriented activities costs".

Considering our proposed definition of "socially-oriented activities" [6] and the concept of "costs" according to the P(S)BO 16 "Costs", IFRS and the Conceptual framework of the financial reporting, we propose the following definition: "The socially-oriented activity costs are the reduction of the economic benefits and/or increase in liabilities of the entity, which leads to the reduction of the equity capital because of the socially-oriented activities implementation".

It should be noted that the "socially-oriented activities costs" term is used by us for the first time, so it is new and unexplored in accounting.

The concept of the social responsibility has been explored for many years, but now there is an understanding that economic entities are spending their resources on the implementation of socially-oriented activities and it requires consideration of the costs, which are carried out for this purpose.

Moreover, it is important not to confuse the concept of "social costs" and "socially-oriented activities cost". There are different definitions of "social costs."

Here are some of them, which are proposed by the scientists.

Olga Patsula proposes to define them as a disposal of different types of economic resources in accordance with the legal, socio-economic and moral-psychological guarantees which are aimed at meeting social needs of individuals or legal entities [7, p.6].

According to Tetyana Strybulevych, social costs are the economic resources expressed in monetary terms, which are aimed at providing state social guarantees required by applicable law, meeting the needs of the enterprise personnel, prevention of the adverse effects on its internal and external environment, and financing of the state social security system [8, p. 186].

Ganna Fomenko summarizes the proposed variants of this term, defining the social costs of the company as the sum of any costs of the taxpayer in the monetary, material or immaterial forms, associated with maintenance of the personnel, ensuring social protection and labour incentives of the personnel, as well as any costs aimed at socio-economic development of the society, which results in decrement of the economic benefits in the form of an outflow of assets or increase in liabilities, resulting to the decrease in equity [9, p.359].

Scientists have repeatedly tried to classify the main types of social costs [10, p. 187]. Thus, they have separated:

1. Use of the human factors (costs associated with the creation of working conditions at the enterprise, treatment of workers and employees);
2. Air purification;
3. Water purification;
4. Restoration of flora and fauna;
5. Filling of the energy resources;
6. The introduction of the new manufacturing processes;
7. Other expenses;
8. Compensation to the unemployed.

From this list we can see that the scientists tried to connect to the social costs classification those costs, which are related to the environmental protection (ecological ones, definitions of which are also enough) and in this regard they disagree.

In our opinion we should continue to adhere to the idea that the social costs are associated with the relationships between the entity and its employees in the calculation of wages and social security.

That is why we have proposed to solve this problem by generalizing economy, ecology and sociality of activities of economic entities in the "socially-oriented activities costs" concept.

In this regard, it is appropriate to show the structure of socially-oriented activities costs, this structure will enable better representation of their parts

(components) to understand and define the importance of the research object for further work of scientists and

managers (including accountants) of the economic entities.

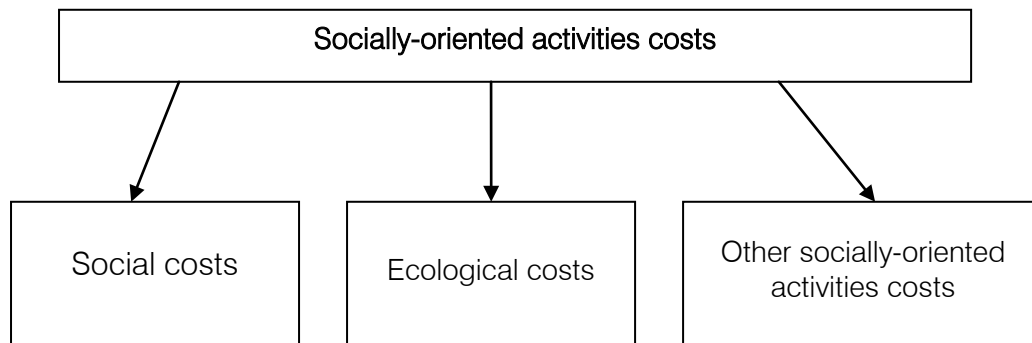


Fig. 1.1: The structure of socially-oriented activities cost

\* Overviewed, developed and adapted by the author

Due to the fact that this is a new concept, for the proper organization of accounting of the socially-oriented activities cost, it is important to have their scientifically-based classification that will allow to manage them more effectively and understand the purpose of their implementation.

While classifying the socially-oriented activities costs, all the possible criteria for social responsibility should be taken into consideration.

Various researchers have paid attention to the problem of the socially-oriented activities cost classification. For example, Vasyl' Len' notes [11, p. 305] that often social costs include only mandatory charges on wages and charitable aid; such a situation prompted to examine the issue of social costs and propose their proper classification.

Yulia Cheban suggests her own classification of social costs of agricultural enterprises [12]; this classification contains a feature "Depending on socially responsible enterprise activity" to which environmental and socially-oriented costs are attributed, it is noted that the fundamental difference between social costs is caused by the lack of clear legal regulations for the substantial part of them.

As we have already mentioned, we should adhere to the idea that socially-oriented activities costs are not a part of social costs, but rather vice versa, which comes out of the suggested definition and structure. In this regard, we believe that it is inappropriate to include the environmental costs into the social costs.

Classification of costs is quite dynamic and open system, so the emergence of new criteria does not prevent the use of previously proposed, it also allows users to select and manage new types of costs depending on the needs and opportunities of the management system [13, p. 82].

It is impossible to create a unified classification of costs that would be perfectly suitable for all types of

business entities, because humanity needs change, new activities, techniques and technologies evolve.

It is worth noting that this may cause differences in the opinions of the researchers and business leaders who are practitioners. Entities can independently classify their spending, considering the type of the economic activity they exercise and needs of internal and external users for the information about the socially-oriented activities costs. Scientifically grounded classification of costs, including the socially-oriented activities costs, can serve as a basis for the classification of the own costs. That is why, in our opinion, managers, accountants and scientists should perceive new types of signs and classifications costs with understanding, and moreover it is necessary to improve this area of work continuously. This will help to consider the costs in a versatile and new way, improve the process of its management; in addition the information about the socially-oriented activities costs is also used by the various stakeholders.



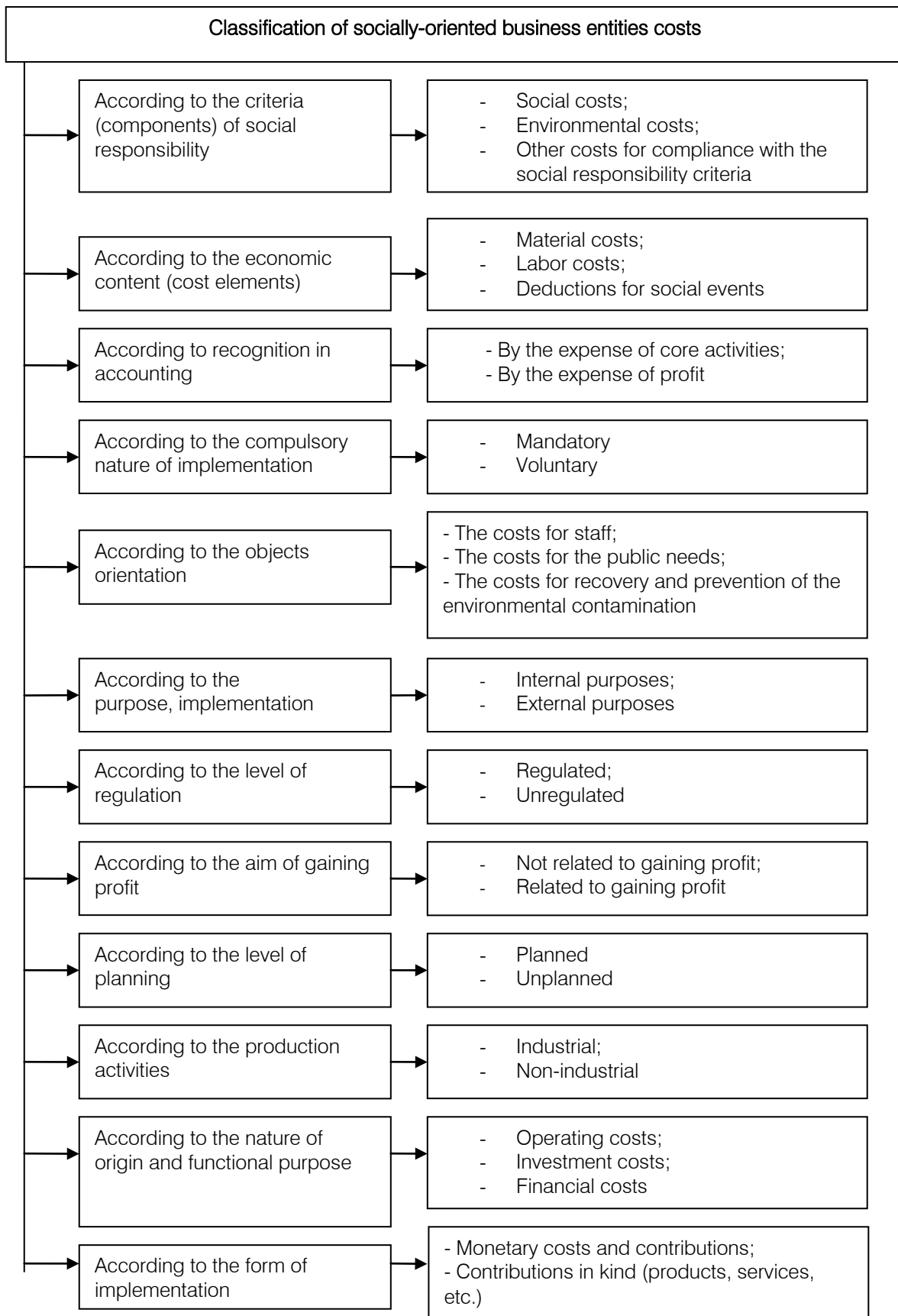


Fig. 1.2: Classes cost socially oriented activities and types of signs

\* Overviewed and adapted by the author based on the sources [9, 11]

From this figure we can see that the socially-oriented activities costs can be a production necessity, also they can be associated with other activities.

To confirm the importance and correctness of classification of any object of the research, it is necessary to explain each feature (or the most important, most controversial and unexplained ones).

In the proposed classification of the socially-oriented activities costs, a feature "According to the criteria (components) of social responsibility" was attributed to them due to the fact that they are directly related to the social responsibility and its components. This feature includes social, environmental and other costs associated with compliance with the criteria of the social responsibility. The last ones can include costs for the support of the social responsibility and work with the society, which are not covered by the first two.

In our opinion, a very important feature is "According to the economic content (cost elements)" which includes material costs, labour costs; deductions for the social events. These costs can exist in the form of financial aid, gifts to the schools in the form of the own products and so on. It is necessary for the accountancy to conduct the synthetic and analytical accounting properly. With regard to wages and deductions for the social events, information about it demonstrates the responsibility towards the employees. The costs of the social protection of the workers are united in the "social package" concept.

For economic entities the socially-oriented activities costs may be mandatory and voluntary, which led to the selection of the "According to the compulsory nature of implementation" feature. All costs, associated with the social protection of workers and the environment, determined by law, are mandatory for the entity; those funds should be paid to the state budget. Fulfilment of these obligations in full and timely, the amount of costs spent by an entity is one of the indicators (evidence) of an active socially-oriented practice.

To the "voluntary" we attribute all the costs over those ones, which are legislatively established, which are carried out by the initiative of the entity to improve the quality of life of its employees, communities and the environment. They can have a one-time character (charitable or environmental action, etc.) or permanent assistance or support of the community. One of the most common particles in voluntary cost is charity and philanthropy. It depends on the financial position of an entity and governed within its own social policy and is optional.

For the better understanding of the object of costs, we have created a feature "According to the objects orientation". This is, accordingly, the people (employees, community) and the environment.

Business entities invest not only in their employees and business processes, but also in the

needs of other people, which is one of the social responsibility criteria. In this regard, we have identified the feature "According to the purpose, implementation", it demonstrates that the entities carry out costs not only internally but also externally, beyond its limitations.

The social protection of workers is regulated by the state, but the entity may allocate additional costs for the needs of society, within its means, it is regulated by the director or by the individual decision makers (managers). In this regard, we have identified the classification feature "According to the level of regulation".

Among the examined feature so classification of the socially-oriented activities costs is an important one "According to the aim of gaining profit", which speaks for itself, because the entities not always carry out costs for gaining profit. For example, it could be voluntary charitable activities undertaken voluntarily by the owners. In this case, income is not the main purpose of these expenditures. Incomes are possible only if the charity is made to improve business reputation, which contributes to the better business conditions and increases incomes in particular. In this case there is no awareness of the importance of social responsibility, which also could be reflected on the reputation of the entity.

The economic situation changes drastically, so entities can perform unplanned costs in their budget, therefore the feature "According to the level of planning" is appropriate and important because information on these costs, as any other, is important for the budget.

One of the criteria of responsibility to the consumers is the production of the high-quality products, providing services and works of a good quality. Production costs are incurred for the production of quality products from the high-quality materials, non-production are related to other areas of work with employees and the public. The feature "according to the production activities" is also very relevant for this classification of the socially-oriented activities costs.

Considering the classification of the costs, it should be noted that by the nature of the origin and functionality the socially-oriented activities costs belong to the operational, investment and financial costs.

The abovementioned classification of the socially-oriented activities costs will improve their internal controls in business.

The definition, structure and classification proposed by us, will make it possible to find the relationship of the socially-oriented activities costs with other objects and accounting processes. From the definition their connection with the social responsibility can be traced, costs are important indicator of it. Since the socially-oriented activities costs are a part of the social cost, there is a relationship with such accounting processes as calculations of wages and other social guarantees and payments for taxes.

In addition, environmental costs are included to the socially-oriented activities costs, which indicate the relationship with the environmental protection.

Like any object of the cost accounting, the socially-oriented activity costs entail accounting, economic information which is important for the management and other stakeholders. They act as a factor that influences the decision-making for the development of the entity and improvement of its competitiveness.

Internal and external position of the entity, including its business reputation, depends on the accuracy of recording information on the socially-oriented activity costs.

#### IV. CONCLUSIONS

As the result of the study we have found out that the socially-oriented activities costs can be seen as the reduction of the economic benefits and/or increase in liabilities of the entity, which leads to the reduction of the equity capital because of the socially-oriented activities implementation.

We have proposed to show the structure of the socially-oriented activities cost schematically. In our opinion, this will help to know and understand their component parts (components) better; it will also enable better understanding and definition of the importance of this object of study. We have included the social, environmental and other cost to the elements of socially-oriented activities, which enabled unification of them into a single type of costs, which are associated with the concept of the social responsibility.

Due to the fact that the term "socially-oriented activities costs" is new, for the proper organization of accounting we have developed a scientifically-based classification, which is important for the effective management and understanding of its purpose and implementation.

The definition, structure and classification provided by author gives an opportunity to look for relationships of the accounting of the socially-oriented activities costs with other objects and accounting processes, such as payments of wages and other social guarantees and payments for taxes.

In addition, we emphasize the existing interconnection of the socially-oriented activities costs with the protection of the environment.

#### REFERENCES RÉFÉRENCES REFERENCIAS

1. Charles Anthony Richard. Accounting: Situations and samples [Text] / R. Entoni Dzh.Ris. -: Finance and Statistics. 1993. - 560 p.
2. Hornhren Charles Thomas. Accounting: administrative aspect [Text] / C.H. Hornhren, Dzh.Fors Lane. - Finance and Statistics, 1995. - 415 p.
3. Shim Jay K. Methods of the cost management and cost analysis / Shim Jay K., H. Syhel Dzhoel - Filin, 1996. - 344 p
4. Decree of the Ministry of Finance of Ukraine on Approval of the Regulations (standards) accounting 16 "Costs". // [Electronic resource] - Access: <http://zakon4.rada.gov.ua/laws/show/z0027-00>
5. The conceptual financial reporting framework. // [Electronic resource] - Access: [http://zakon4.rada.gov.ua/laws/show/929\\_009](http://zakon4.rada.gov.ua/laws/show/929_009)
6. Kostiantyn Galak. The theoretical basis of social-oriented business entities / Galak K.// "Accounting and Finance" - the professional research and production magazine - 2016 - №3 (73) - p. 140-146
7. Olga. Patsula // Accounting and control of social spending Enterprise: Author. Thesis ... candidate. Econ. Science / AI Patsula. - Kyiv: B. v., 2008. - 21 p.
8. Tetyana Strybulevych Foreign and domestic experience in the identification of social spending accounting and analytical systems /T.O. Strybulevych // Economic Analysis. - 2010. - № 5. - p. 186-188.
9. Ganna Fomenko Development of the social costs of enterprises in the implementation of the social protection / G. Fomenko // Industrial economics - 2012, № 3-4 (59-60) - p.356-360.
10. Iryna Zhyhley Accounting socially responsible business entities: the need for guidance and development: monograph / IV Zhyhley; Zhytomyr. state. technical. Univ. - Zhytomyr, 2010. - p. 495.
11. Vasyly' Len' Social costs: classification and accounting / V. Len', Y. Krot // Bulletin CSTU. A series of economic science - 2012.- № 62 (4), p. 302-309.
12. Yulia Cheban the social costs of agricultural enterprises, specifics of the formation, registration, reflected in the financial statements / Y. Cheban // Electronic scientific specialized edition "Effective Economy" - 2015 - number 3 // [Electronic resource] -Access: <http://www.economy.nayka.com.ua/?op=1&z=4009>
13. G. Kozachenko Improvement of the enterprise classification of costs/ G. Kozachenko, Y. Pogorelov // Bulletin of Economic Sciences of Ukraine - 2008. - № 2 (14). - p. 81-85.

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