

Full Length Research Paper

Corporate social responsibility in times of financial crisis

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The purpose of this study is to examine the effects of financial crisis on the number and extent of CSR projects. It is presumed that, during a financial crisis, as organizations act more conservatively and defensively (Cheney et al., 1990), they fail to balance the expectations of related parties. Therefore, organizations might choose not to engage in CSR projects. To study this, globally operating companies listed in Fortune 500 were examined by using paired sample t tests on 100 randomly-sampled global companies from the list of Fortune 500. Overall, it was found that there is significant drop in numbers and extent of CSR projects in times of financial crisis. The study contributes to the literature by initiating discussions on CSR and the ways they are affected by financial crisis.

Key words: Corporate social responsibility, financial crisis, contract theory.

INTRODUCTION

Corporate social responsibility (CSR) is an essential topic that is receiving increasing attention from organizations. One of the reasons is that, according to corporate governance principles issued by OECD (2004), CSR is highly associated with good corporate governance. In addition, if properly used, CSR projects have a positive influence on consumer's behavior (Mohr et al. 2001). Beside profitability and earnings performance, stakeholders have recently developed interests in CSR projects that organizations engage in. In other words, organizations are also measured by their concerns about the society in which they operate.

Organizations have a large, positive or negative, direct or indirect influence on every party in society. In general, in the literature, any action taken for society as a whole or for a particular party within society is considered as CSR. It is a management approach (Quintin, 2004) which enhances social issues related to internal and external environment of organizations. The need for CSR projects has increased in accordance with the changing understanding of organizations on each party affected by an organization's actions. Organizations are socially

responsible to each party related with the organization. However, this responsibility does not necessarily mean that organizations' main goal is to satisfy all parties they contract with. The benefits expected by each party from an organization vary. For an organization, the aim is to create economic and social value to their organization, for a shareholder, it might be to increase wealth, or for the government to decrease unemployment and increase Gross Domestic Product by high volume production of organization. Thus, the role of organizations in balancing the interacting benefits or expectations of each party is crucial for both society and the business environment.

The importance of the role of CSR is a long standing debate. In the literature, extensive research has been conducted to explain the importance of CSR, to examine the level of CSR within or across countries to reveal the level of CSR in organizations using a CSR index and to find the drivers of CSR (Turker 2008; O'Riordan and Fairbrass 2008; Gao 2009). In addition, there are many studies on the relation between CSR and financial performance (Coombs and Gilley, 2005; McWilliams and Siegel, 2000, Simpson and Kohers, 2002). After recent financial scandals and collapses of large corporations, attention to CSR has grown significantly. It is presumed that, during financial crisis, as organizations behavior

Abbreviations: CSR, Corporate social responsibility.

becomes more conservative and defensive (Cheney et al., 1990), they fail to balance the expectations of related parties. Therefore, based on the conflicting benefits among stakeholders and organizations, organizations may choose not to engage in CSR projects. The dilemma is that while the financial crisis demands more CSR projects, organizations are less willing to engage in such projects in these times. Studies on the level of CSR projects in times of financial crisis are limited. Recently, Njoroge (2009) has studied the effects of financial crisis on CSR projects. Njoroge (2009) indicated that companies are in consensus that financial crisis affects social projects. In addition he argued that, financial crisis may result in stalling of the projects, postponement, or cancellation of the social projects.

The purpose of this study is to discuss the need for CSR and to examine the effects of financial crisis on CSR projects. This paper tests the question of whether there is a change in CSR projects during financial crisis, which has been examined using data from Fortune 500 firms after the financial crisis deepened in 2008. The study contributes to the literature by expanding discussions on CSR to a new direction - the effects of financial crises on CSR projects. The structure of the remainder of the study is as follows: in the first section, a theoretical framework is drawn up to explain the need for CSR. In the second section, the literature on the role of CSR and the relation between CSR and financial crisis is reviewed. In the research part, CSR projects in global companies were examined for the year 2008, using content analysis and statistical techniques. The effect of financial crises on CSR projects were measured by analyzing the CSR projects of these companies after the financial crisis deepened, especially in United States (US). In the final section, findings of the study are presented with limitations and suggestions for further research.

THEORETICAL BACKGROUND

The need for CSR

Organizations are profit maximizing entities. However, with changing structure of the business environment, the role of organizations has changed dramatically. Today, organizations are an intrinsic part of social life. Sunder (1997) has proposed a broader definition on the role of organizations, describing them as being a "set of contracts" among employees, customers, managers, shareholders, suppliers, auditors etc. This definition directs organizations to be socially responsible. Hence organizations are social agents contracting with other agents, as a part of chain; their aim goes beyond simple profit-maximization. It is assumed that organizations construct the business environment and agents are the members of social society. Therefore, each individual either voluntarily or involuntarily plays the role of an

agent. As seen from Figure 1, an employee of organization B could also be the creditor of organization G. Therefore, any externality, whether negative or positive, affecting the employer of B, is likely to affect G in the same way. Figure 1 is presentation of a small group of such relations. Therefore the more diversified society is, the greater the effects on society in general changes have.

Sunder (1997), in his study on contract theory, explain the relations of companies with stakeholders. Each party (organization or agent as a stakeholder) plays different roles for other parties. Because organizations are bound together by the contracts each agent has with different organizations they play a crucial role on contract parties. These links between organizations and agents mean that every organization has responsibility to other agents and organizations. Organizations balance the benefits of each party by using managerial tools and actions such as CSR, and communicate their actions through annual reports and websites. Social accounting has an impact on the way organizations manage contracts. As a concept or process, CSR has different definitions. It may lead to use of corporate power and social involvement in socially responsible activities (Turker, 2008). Carroll (1999) indicates that the economic component of CSR is what the business does for itself, while, the non-economic components of CSR are what the business does for others. Branco and Rodrigues' (2008) definition includes two main factors that motivate companies to engage in CSR projects and disclosure; conducting good relations with stakeholders to gain financial returns through resources and capabilities, and conforming to stakeholder norms on operations. Wanderley et al. (2008) believes that the requirement for social projects is part of the definition of capitalism in today's global business environment. Based on definitions in literature, based on Sunder's (1997) proposition of set of contracts, in this study CSR is defined as actions taken by organization for creating value to agents contracting with organizations. This definition goes beyond economic value adding activities; to include the social value adding process. However, the definition of CSR might be different for each party, as a result of different expectations.

CSR and financial crisis

The major criticisms to CSR come from the nature of business. The main purpose of organizations is to deliver goods or service in order to gain profit for the shareholders. Friedman (1970) argues that "there is one and only one social responsibility of business - to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud". Reich (2007) contends that, as a result of high competition in the market, instead of

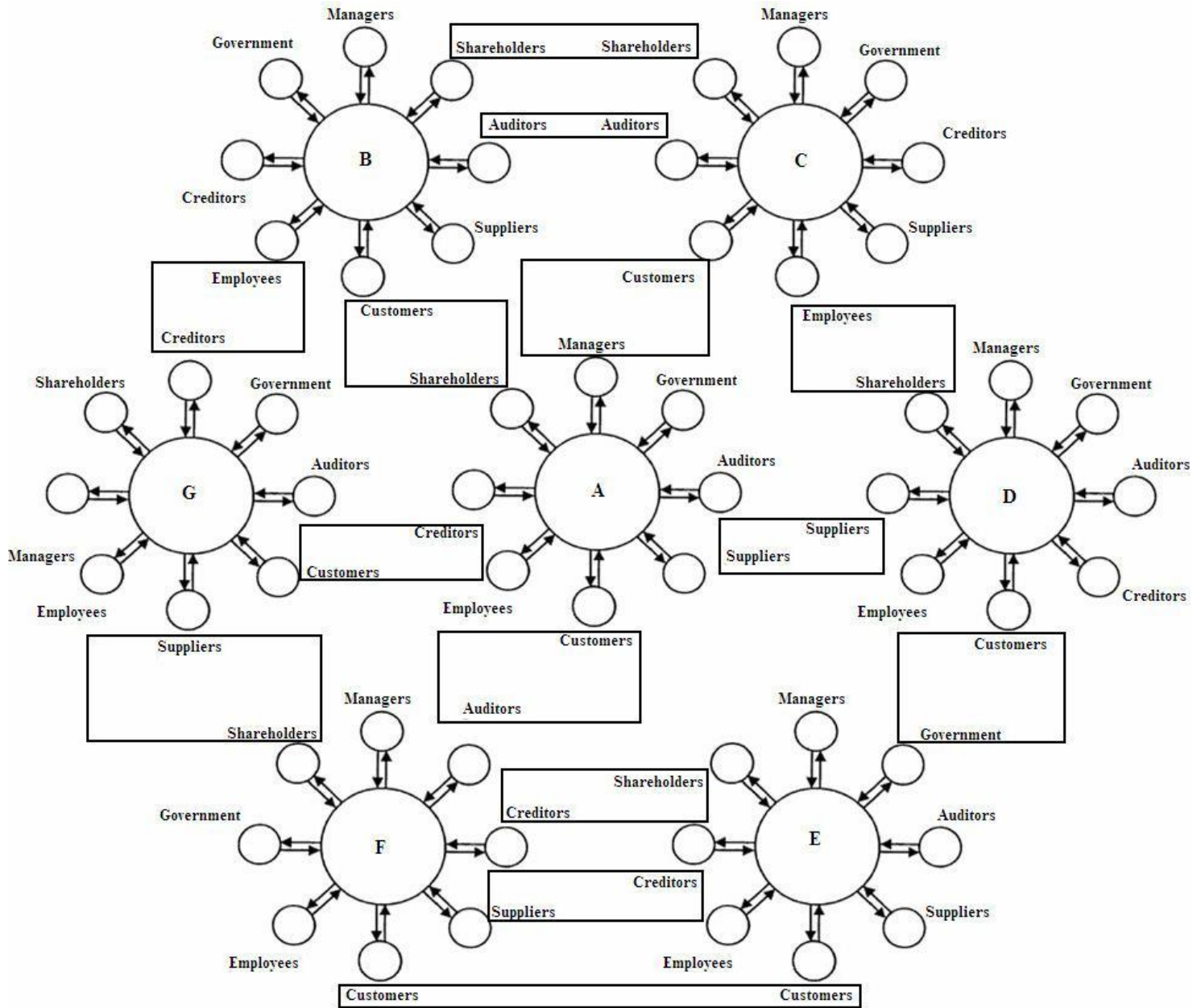


Figure 1. Role of agents in contracted organizations.
 * A, C, D, E, F and G represent different organizations in a society.
 **adapted from Sunder (1997).

engaging in CSR projects, which harm themselves, corporations need to concentrate on activities that have positive affects and gains. If the nature of business is to maximize profits, what are the motives that lead organizations to engage in social projects? This might be explained by the view that CSR projects provide for the sustainability of organizations long term profits, so it could be tool for profit maximization. In the literature, it is claimed that organizations engage in CSR projects for commercial benefits to increase the value of the organizations for society and government (Sachs et al.,

2006). In other words, with the help of CSR projects organization differentiate themselves from other companies (Morsing and Schultz 2006), which could have a positive effect on stakeholders (Jamali and Mirshak, 2007).

Financial crisis are times that are likely to be characterized by uncertain business environment. Both organizations and each party in the society try to avoid the effect of crisis by remedial actions; such as cutting costs by laying off workers, postponing investments, reducing budgets for the following year in a contraction

manner, consuming less. Wilson (2008) suggests that it is a mistake for organizations to reduce their CSR projects. In order to cope with the financial and economic downturn, organizations need to focus on providing society's needs; therefore, transparent CSR projects could provide the social support needed by organizations and society to overcome the down turn. The financial crisis has raised the question of whether supporting CSR initiatives is a good issue in financially troubled times. If organizations are purely profit maximizing units, it would be expected that they would not engage in CSR projects in times of financial crisis, however, CSR is more demanded in times of financial crisis (Air Human Right, 2008). Sometimes organizations perceive CSR magnificent in times of financial crisis. However, for long term sustainability and stability, CSR is required for all companies. In light of the discussion, the research question of the study is;

RQ1: "Do organizations engage less in CSR projects in times of financial crisis?"

Considering all criticisms and the need for CSR projects, the study aims to investigate the effect of financial crisis on the level of CSR projects of large organization, which have engaged in more CSR projects in recent years. Therefore, the following hypothesis is proposed.

H₁: CSR projects decreases significantly in times of financial crisis.

MATERIALS AND METHODS

Research design

To measure the effect of financial crisis on CSR of Fortune 500 companies, two CSR indexes are used for each company, one for the year 2007, and one for the year 2008, which is considered as the starting point of the global financial crisis. If the financial crisis had no effect, the average difference between the CSR projects conducted is not significant and the null hypothesis holds. The paired-samples t test is used to test the hypothesis of no difference between two variables. It is also used by Branco and Rodrigues (2008) and Haniffa and Cooke (2005) to test the difference of corporate social responsibility activities between two sample.

The CSR performance of leading companies in 2008 has been thoroughly and comprehensively investigated through web pages of companies. In previous studies, annual reports of organizations were used as means of CSR measure (Gray et al., 1995; Neu et al., 1998). However, wide use of internet allows companies to communicate through their web pages (Wanderley et al., 2008). In this study, organizations' web pages were examined because these now have replaced annual reports as a source of company information, and the most convenient way to access information.

Sample

The population for the study consists of the top 500 companies in the world. The frame for the study was drawn from 2008 Fortune 500¹. A sample of 100 companies was randomly selected from the

2008 Fortune 500². Previous research on CSR shows that firm size has either a positive (Branco and Rodrigues, 2008) or a U-shaped effect on CSR projects (Udayasankar, 2008). It is therefore expected that large companies are more likely to conduct socially responsible activities. Industry composition and characteristics of sample is presented in Table 1. The 100 companies selected from Fortune 500 employ a total of 22,076,069 employees, on which the actions of a company have direct effect, as directed by contract theory. Furthermore, as employers have stakes other than employees in that organization, the overall effect of organizations' actions expand dramatically.

Data collection and variables

The global financial crisis started to show its effects at the end of 2007 and in 2008. However, with the collapse of large corporations announced in September 2008, the crisis deepened. Therefore, from this point, the year 2008 is considered to be the cut point of the crisis. To analyze the effect of financial crisis, details of CSR projects from the web pages of 100 companies among the Fortune 500 were analyzed in depth. The data was obtained through "content analysis" method (Branco and Rodrigues, 2008). The presence or absence of information is examined based on equal-weighted index (1-disclosed and 0= not disclosed). Companies were examined based on CSR issues related to each stakeholder; shareholder, employee, consumer, suppliers, government and society humanity and society environmental. Each company was rated on a base of disclosing CSR projects related to stakeholders.

All available news related to social activities for the year 2008 and for the year 2007 were collected by examining all voluntary CSR disclosures available (online, external link, related attached documents on companies' web pages and search engines³) or any news related to CSR projects of the company presented under the following keywords; corporate social responsibility, corporate citizenship, sustainability, community, corporate development, society. It is indicated in previous research that measuring the direct links of CSR projects with stakeholders is difficult. So the best way to measure the CSR projects is to obtain data from web pages of companies, which is an effective way of communication and the most popular method of disclosure for organizations (Holder-Webb et al., 2008).

FINDINGS

In Table 2, all issues disclosed by companies are presented. Employees and society (which includes the environmental issues) are the most popular agents in stakeholders. Hence social issues arise as a result of public interests or organizations' strategic goals and these issues vary over time. Therefore, these results can only be considered to represent the current circumstances of CSR projects in 2008.

Effects of financial crisis on corporate social responsibility

The data were statistically tested using the SPSS 16.0. The paired-samples t test results shows that, across all 100 companies, CSR projects conducted dropped 0,357 on average in 2008. The mean of CSR projects conducted in 2007 is on average 0,784, in 2008, 0,427. At 0,227, the correlation between CSR projects

Table 1. Sample Characteristics.

Number of employees (total of 100 companies, consolidated)		22.076.069 employees		
Industry	Number of companies	Country of origin		
		US	Europe	Others*
Merchandise	1	1	-	-
Petroleum refining	15	4	6	6
Motor vehicles and parts	11	2	5	4
Banks: commercial and savings	18	4	12	2
Diversified financials	1	1	-	-
Insurance	7	2	6	-
Utility	2	-	1	1
Telecommunications	7	2	4	1
Food and drug stores	5	2	3	-
Electronics, electrical equipment	6	-	1	5
Metal	2	-	2	-
Computers, office equipment	3	2	-	1
Mining, crude-oil production	1	-	-	1
Healthcare	4	4	-	-
Energy	3	-	2	1
Mail, package and freight delivery	2	1	1	-
Food consumer products	1	-	1	-
Securities	3	3	-	-
Specialty retailers	2	2	-	-
Chemicals	1	-	1	-
Household and personal products	1	1	-	-
Network and other communications equipment	1	-	1	-
Aerospace and defense	1	1	-	-
Total	100	32	46	22

Source: 2008 Fortune 500 (Global).

*Other countries; Japan, Russia, China, Mexico, Brazil, Malaysia, n= 100.

Table 2. List of CSR Issues addressed.

Stakeholders	Issues addressed
Shareholders	Corporate governance
Employee	Workforce development training Enhancing workforce to participate volunteer social projects Improving social opportunities and life quality of employees. Reducing employee injuries and illness Support local environment Human rights(inc. the right to freedom of opinion and expression, the right to work and the right to join a trade union, equal diversity) Actions taken against forced child labor. Improving healthcare system of employees Recruiting disable people
Consumer	Customer relationship management Developing local environment and community Improving product and service quality
Government	Actions taken against money laundering and terrorism- financing Improving joint projects with local governments

Table 2. Contd.

Supplier	Supporting suppliers and increasing supplier diversity (inc. supporting women retailers) Improving joint projects with suppliers Value the relationship with suppliers
Society	Humanity Sponsoring art and cultural activities (inc. concerts and exhibitions) Care of human life (inc. safe driving, reducing traffic accidents) Improving education (inc. youth education, educating women and girls, improving education in developing countries) Doctors for developing countries
	Environmental Developing renewable energy Protecting the nature and forests Reducing emission and improving air quality Maintaining biodiversity Treating and recycling waste Reducing water use Providing clean water Protection of ecosystem and climate (inc. eco friendly offices)

Table 3. Difference between the level of CSR projects in 2007 and in 2008.

Paired samples statistics			
	Mean	Std. deviation	Std. error mean
CSR activities in 2007	.784	.202	.020
CSR activities in 2008	.427	.345	.034
Paired samples correlations			
		Correlation	Sig.
CSR activities in 2007		.227	.023
CSR activities in 2008			
Paired samples test			
	Paired differences		Sig. (2-tailed)
	Mean difference	t	
CSR activities in 2007	.357	9.982	.000
CSR activities in 2008			

* n = 100

conducted in 2008 and CSR projects started after September 2008 is statistically significant.

The mean column in the paired-samples t test Table 3 displays the average difference in CSR projects before and after financial crisis, which is 0.357. It is found that, since the significance value for change in CSR projects is less than 0.05, the average drop of 0,357 per company is not due to chance variation, and can be attributed to the financial crisis. So, H_1 is accepted, and there is statistically significant difference between CSR projects

conducted in times of financial crisis and in good times. T-test is repeated to examine the disaggregate results of CSR difference for the year 2007 and 2008. Data is disaggregated based on the country of origin.

Therefore, the following hypotheses are proposed;

H_{1A}: CSR projects conducted by US - companies decrease significantly in times of financial crisis.

H_{1B}: CSR projects conducted by European - companies decrease significantly in times of financial crisis.

Table 4. Differences for CSR projects conducted in 2007 and in 2008 (Country of origin).

Paired sample t test				
	N	Mean difference	T	Sig. (2-tailed)
Companies in US	32	.544	9.240	.000
Companies in Europe	46	.285	5.457	.000
Companies in other countries	22	.233	3.685	.001

* n = 100

H_{1C}: CSR projects conducted by companies in other countries decrease significantly in times of financial crisis.

If the data is segmented by country of origin, t test results shows that, across companies in US, Europe and other countries, CSR projects conducted dropped 0.544; 0,285 and 0.233 on average, respectively, after September 2008. All paired differences are statistically significant at 5% significance level. This In Table 4, paired differences for countries are presented. According to t test results, H_{1A}, H_{1B} and H_{1C} are accepted. There is statistically significant decrease in CSR projects in times of financial crisis. Overall, this study found that there was a significant decrease in the level of CSR projects of Fortune 500 in 2008. Therefore, it is concluded that, CSR projects of large corporations' decreases significantly in times of financial crisis.

CONCLUSION AND DISCUSSION

Corporate social responsibility has become an increasingly important research topic since the 1980s. Because, organizations are a set of contracts with all stakeholders or agent that they interact with, they play an essential role in society. This study attempts to explore the issues addressed by large organizations and to reveal the effect of financial crisis on organizations' CSR behavior. In general, employees and society were found to be the most popular agents in stakeholders; also, it is empirically found that, there was significant decrease in the CSR projects of Fortune 500 companies in 2008.

The global importance in CSR is on the rise. Beyond gaining economic profit, more and more organizations respect social issues related to the surroundings where they operate. Environmental protection and human rights, customer relationship management, developing the local environment and community, supporting suppliers and increasing supplier diversity, improving education and improving healthcare conditions in developing countries are among most addressed social issues. In the literature, proponents of CSR claim that organizations need to respect interest and contribute to social benefits of society while sustaining operating activities. In contrast, opponents claim that, organizations do not necessarily need to consider the interest of wider society,

since the existence of organizations already provides opportunities for society; organizations need to focus on their main activities in order to maximize profit. The demand for social projects is higher in times of financial crisis; however, it seems that companies engage in such activities less rather than more in the present crisis. There are several limitations of the study. First, the data is obtained through web sites of the organizations and search engines based on an assumption that all companies communicate their social activities through the web and that information is presented simultaneously, however a time difference between a projects and its announcement can cause a distortion of information. Second, a proportionate strata sampling by expanding the sample frame could be more appropriate. Finally, this study does not evaluate the reasons why organizations continue to conduct CSR projects in times of financial crisis. Further research should study the behavior of organizations in times of financial crisis in terms of CSR projects and possible explanations. In addition, the study could be reproduced expanding the sample-years observed.

Notes

1. Annual ranking of the world's largest corporations, 2008 Fortune 500. The ranking is based on revenues of the companies. (Global 500, 2008).
2. $n = (1 - \alpha) / (e / Z)^2$; $(1 - \alpha) = \%95$ $Z_{0,05} = 1,96$ $e = 0,05$ $n = 0,50 (1 - 0,50) / (0,05 / 1,96)^2 = 384$.
Sample size* Population correction factor: $n * [(N - n) / (N - 1)] = 384 * [(500 - 384) / (500 - 1)] = 90$ Statistically, a random sample of 90 (at least) from top 500 companies is required to represent the population. (Kurtulu 2004)
3. www.google.com.

REFERENCES

- Air Human Rights: (2008). Available at: <http://www.aimforhumanrights.org/latest/news/newsitem/article/financial-crisis-demands-corporate-social-responsibility/>, accessed on 16 January 2008.
- Branco MC, Rodrigues LL (2008). Factors Influencing Social Responsibility Disclosure by Portuguese Companies. J. Bus. Ethics 83 (4): 685–701.

- Carroll AB (1999). Corporate Social Responsibility – Evolution of a Definitional Construct. *BuS. Soc.* 38(3): 268–295.
- Cheney G, McMillan JJ (1990). Organizational rhetoric and the practice of criticism. *J. Appl. Comm. Res.* 18(2): 93-114.
- Coombs JE, Gilley KM (2005). Stakeholder Management as a Predictor of CEO Compensation: Main Effects and Interactions with Financial Performance. *Strateg. Manage. J.* 26(9): 827–841.
- Friedman M (1970). The social responsibility of business is to increase its profits. *New York Times Magazine*, 13 September, available at: <http://www.colorado.edu/studentgroups/libertarians/issues/friedman-soc-resp-business.html>, accessed on 18 December 2008.
- Gao Y (2009). Corporate Social Performance in China: Evidence from Large Companies. *J. Bus. Ethics* 89(1): 23-35.
- Global 500 (2008). Annual rankings of world's largest corporations. *Fortune Magazine*. available at: http://money.cnn.com/magazines/fortune/global500/2008/full_list/, accessed on 17 May, 2009.
- Gray R, Kouhy R, Lavers S (1995). Methodological Themes: Constructing a Research Database of Social and Environmental Reporting by UK Companies. *Account. Audit. Account. J.* 8 (2): 78-101.
- Haniffa RM, Cooke TE (2005). The impact of culture and governance on corporate social reporting. *J. Account. Public Policy* 24(5): 391-430.
- Holder-Webb L, Cohen J, Nath L, Wood D (2009). The Supply of Corporate Social Responsibility Disclosures among U.S. Firms. *J. Bus. Ethics* 84(4): 497-527.
- Jamali D and Mirshak R (2007). Corporate Social Responsibility (CSR): Theory and Practice in a Developing Country Context. *J. Bus. Ethics* 72(3): 243–262.
- Kurtulu K (2004). *Pazarlama Ara tirmaları*, stanbul: Literatür Yayıncılık.
- McWilliams A, Siegel D (2000). Corporate Social Responsibility and Financial Performance: Correlation or Misspecification?. *Strateg. Manage. J.* 21(5): 603–609.
- Mohr LA, Webb DJ, Haris KE (2001). Do Consumers Expect Companies to be Socially Responsible? The Impact of Corporate Social Responsibility on Buying Behavior. *J. Consum. Aff.* 35(1): 45-28.
- Morsing M, Schultz M (2006). Corporate Social Responsibility Communication: Stakeholder Information, Response and Involvement Strategies. *Business Ethics: Eur. Rev.* 15(4): 323–338.
- Neu D, Warsame H, Pedwell K (1998). Managing Public Impressions: Environmental Disclosures in Annual Reports. *Account. Organ. Soc.* 23(3): 265-282.
- Njoroge J (2009). Effects of the global financial crisis on corporate social responsibility in multinational companies in Kenya, *Covalence Intern Analyst Papers*, available at: www.covalence.ch/docs/Kenya-Crisis.pdf accessed on 30 December, 2009.
- OECD (2004). *Corporate Governance Principles*, available at: www.oecd.org/dataoecd/32/18/31557724.pdf accessed on 12 December, 2009.
- O'Riordan L, Fairbrass J (2008). Corporate Social Responsibility (CSR): Models and Theories in Stakeholder Dialogue. *J. Bus. Ethics* 83(4): 745-758.
- Quintin O (2004). *Activities of the European Commission on Corporate Social Responsibility*. Tokyo, 9 February, available at: http://ec.europa.eu/employment_social/speeches/2004/oq090204_en.pdf, accessed on 15 November, 2008.
- Reich R (2007). Supercapitalism: The Transformation of Business, Democracy, and Everyday Life in Pava ML (2008). Why Corporations Should Not Abandon Social Responsibility. *J. Bus. Ethics* 83(4): 805-812.
- Sachs S, Maurer M, Rühli E, Hoffmann R (2006). Corporate social responsibility from a “stakeholder view” perspective: CSR implementation by a Swiss mobile telecommunication provider. *Corporate Governance* 6(4): 506-515.
- Simpson W, Kohers T (2002). The Link between Social and Financial Performance: Evidence from the Banking Industry. *J. Bus. Ethics* 35(2): 97-109.
- Sunder S (1997). Accounting and the Firm: A Contract Theory. *Indian Account. Rev.* 1(1): 1-19.
- Turker D (2008). Measuring Corporate Social Responsibility: A Scale Development Study. *J. Bus. Ethics* 85(4): 411-427.
- Udayasankar K (2008). Corporate Social Responsibility and Firm Size. *J. Bus. Ethics* 83(2): 167-175.
- Wanderley LSO, Lucian R, Farache F, de Sousa Filho JM (2008). CSR Information Disclosure on the Web: A Context-Based Approach Analyzing the Influence of Country of Origin and Industry Sector. *J. Bus. Ethics* 82 (2): 369-378.
- Wilson A (2008). Deepening financial crisis should not derail corporate social responsibility, 15 October, 23:06, Special to *Kyiv Post*, available at: http://www.kyivpost.com/business/bus_focus/30379, accessed on 20 January, 2009.