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# **Corporate Governance and Environmental Reporting in Pakistan**

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**Abstract:** *The focus of the present study is to investigate the association between environmental reporting and corporate governance traits in Pakistan. The prior studies related to the association between environmental disclosure and corporate governance characteristics show fickle findings. This study fills the gap by using cross sectional data of 100 randomly selected firms registered at Karachi Stock Exchange for the year 2015. The results of the present research showed a positive association between the level of environmental disclosure and fraction of independent directors on the board. Negative relationship was found between environmental disclosure and institutional investors. The result shows a positive association between the level of environmental reporting and board size. It confirms a positive association. The analysis revealed a lack of association between level of environmental reporting and fraction of female directors on a board. In case of control variables, positive relationship was found between firms' profitability and level of environmental disclosure, whereas, no correlation was found between firm size and the level of environmental reporting. Moreover, the results of incremental regression indicate that ownership concentration is the most important independent variable among all the independent variables in the model.*

**Keywords:** Environmental Reporting, Independent Directors, Institutional Investors, Female Directors.

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## 1. Introduction

Companies around the world are under more community inspection than ever before and are forced to disclose information about their environmental enactment. This issue has grasped the interest of researchers because of the increased knowledge and understanding of the environmental subject. Few countries around the world have specific legal obligations for organizations to reveal voluntary facts in their annual reports, though environmental disclosure is still voluntary in nature. However, the researchers have now realized that it is vital for organizations to mull over their effect on the natural environment and to reveal the outcome of their operations to stakeholders (Deegan, 2002), which includes consumers, employees, media, general public, investors and last but not the least the shareholders (Peiyuan, 2005). Different means have been used in a variety of countries to provide information on environmental performance. It is important for the organizations to communicate the environmental information to the stakeholders. For this purpose different means of communication such as, press releases, newsletters, annual reports, magazines and sustainability reports can be employed. A review of the previous studies indicates the yearly reports of the firms as the key source of environmental reporting (Neu et al. 1998). According to Deegan (2002) environmental reporting provides information related to the environmental implication of their processes.

Virtuous corporate governance practices play a key role in refining the firm value and open door to external equity. In developing countries, good corporate governance practices fulfill a number of objectives such as reduction of transaction costs; interest paid on the borrowed capital, reduction of political turmoil, and facilitates the development of the capital market in the country. Good corporate governance practices result in strong affiliation among the management, board of directors, majority shareholders, minority shareholders, customers, employees, suppliers and finally regulatory agencies. Shareholders' wealth maximization is the main objective of the corporate governance. Corporate social responsibility, environmental reporting are ethical ways of doing business with major focus on stakeholders that include customers, as well as, financial performance of the firm, are the main components on which corporate governance depends.

Pakistani corporations are highlighting the so called green issue, but, as far as literature is concerned, no evidence is available. It is, therefore, not surprising that previous studies point out towards broad multiplicity on corporate environmental reporting performance (Patten, 2002) indicating that some corporations voluntarily disclose such environmental information which supports their image in the eyes of the stakeholders (Deegan & Rankin, 1996) and at the same time others do not disclose their environmental information because they believe in the lack of affiliation between voluntary disclosure and environmental enactment (Wise & Ali, 2008) and still others view a negative relationship between environmental information and environmental performance (Patten, 1991, 1992). Due to the absence of rigorous regulatory system, it makes difficult for the

stakeholders to take decisions about the company because of the extensive disparity in the environmental disclosure practices.

According to Deegan and Rankin (1996) most of the studies regarding environmental reporting have taken into account only those factors that are external to the corporation and do not provide information for those variables that are mediating or interceding. It is at the discretion of the top management to report environmental information or not, whereas factors that motivate the top management to disclose the information about the environmental performance are inadequate (Tilt, 1994).

The present study intends to find out whether there is an affiliation between the corporate governance instruments and the environmental reporting. In this regard, previous studies (Patten, 2002; Wise & Ali, 2008) have taken into account environmental information reported in the annual reports that can directly affect the stakeholders of the company. The present research contributes to the prior studies. It will provide awareness about the environmental reporting issues in an emerging market like Pakistan.

There exists a gap in literature regarding association between corporate governance and environmental reporting, specifically in case of Pakistan. This study endeavors to fill this gap by providing a primary scrutiny into the association between features of corporate governance and the level of environmental recording by Pakistani companies.

## **2. Literature Review**

There is an ongoing practice of exercising various techniques to study corporations' environmental reporting. Majority of studies are performed in the industrialized countries (Gray et al 1995; Wilmshurst & Frost, 2000; Adams, 2004). But, in case of emerging markets, studies on this topic are few; this may be due to the low level of reporting of environmental information (Gunawan, 2010). Furthermore, social information reporting about product and service is considered as important, but information that can benefit the society as a whole is considered as less important.

A study conducted on environmental reporting in India by Chatterjee and Mir (2006) highlighted that disclosure of information about environmental activities in the yearly reports of Indian companies were not correct and in reality the information was overstated. The study further pointed out that corporations normally report their environmental information on their websites.

Gallhofer and Haslam (1997) conducted an extensive study to uncover the strength of policy to include the reporting of environmental evidence in accounting terms in the yearly reports of the corporations. It was highlighted that quality disclosure of environmental information was allied to sustainable growth. Bebbington et al. (2007) pointed out that disclosure of environmental evidence in the yearly reports is the ingredient of sustainable development. A study conducted by Power (1991) highlight the importance of revelation of environmental evidence by knowing the voluntary nature of such disclosures.

Environmental accounting is a budding issue. Environmental accounting legislations are in the development phase in emerging markets including Pakistan. According to Pakistan Environment Protection Act 1997 "since the organizations are involved in the destruction of the environment by polluting it so, they are also required to provide information about the fortification, safety, maintenance, improvement of the environment and finally, endorsement of the sustainable development".

Corporate governance is defined as “an organized method and scheme through which organizations are directed, led and governed” (ASX, 2003). Researchers highlight corporate governance as amplification and exposition to the agency hitches (Eng & Mak, 2003; Shan, 2009). Corporate governance is a system of extenuating agency problem that occurs because of management’s lack of obligations (Bergolf & Pajuste, 2005). Major purpose of corporate governance is to mitigate and control the exploiting behavior of managers. Corporate governance comes out not only to solve the agency problems, but also to shield and safeguard the interest of the investors (Canadian Institute of Chartered Accountants, 1995; Donnelly & Mulcahy, 2008). Corporate governance has a constructive upshot on the financial performance of the organizations. Companies are required to ensure transparency, justice, equality and responsible reporting both financial and non-financial that includes voluntary disclosures, which clearly protects the rights of the stakeholders (Hamilton, 2004). Organizations that have sound corporate governance systems in place disclose both financial and non-financial results that can attract and protect the stakeholders in the market (Beekes et al., 2016). However, without sound corporate governance systems in place, organizations manipulate and exclude important information, because of the voluntary nature of the information that results in information asymmetry in the market (Mathews, 2008).

Numerous studies have tested the association between attributes of corporate governance and corporate philanthropy especially environmental disclosure. Results of the previous studies reveal positive association between corporate philanthropy (environmental reporting) and corporate governance (Gibson & O’Donovan, 2007), while some studies investigate the association between corporate governance and environmental revelation (Chen & Jaggi, 2000; Gul & Leung, 2004; Laidroo, 2009). Corporate governance mechanism results in better disclosure of voluntary as well non voluntary disclosure of information for the stakeholders.

The amount of environmental writings in yearly reports of the companies can be calculated by using any one of the following ways: amount of pages devoted to the environmental concerns, quantity of words, amount of sentences, total amount of subject matter, or counting the line on environmental issue (Milne & Adler, 1999; Patten, 2002). However, Milne and Adler (1999) point out that word totaling results in biasness of the environmental information. In this case, sentences chosen over the word counting by this method also have some problems (Gray et al., 1995). Any of the above mentioned methods can be used to collect the evidence on the environmental issue. Quantity of data disclosed in the yearly reports shows the importance of issues in the eyes of the company’s management (Neu et al., 1998; Walden & Schwartz, 1997).

Deegan (1994) in his study comprising of 197 Australian corporations indicate that companies having detrimental effects on environment with their operations provided more environmental evidence in their yearly reports compared to other sectors of the stock market. Likewise, results of the study conducted by Wise and Ali (2008) found that equitable treatment of all stakeholders promotes good image of the organization and attracts shareholders. This can be achieved by having sound corporate governance mechanism in the organization.

This work attempts to investigate the association between the corporate governance and the level of environmental disclosure. Four hypotheses are developed to test this association. Corporate governance measures used to develop the hypotheses are: number

of female directors on the board, total number of directors on the board, total number of independent directors serving on the board and finally, ownership concentration. Study hypotheses are as follows:

**H<sub>1</sub>:** Independent non-executive directors have positive relationship with environmental reporting.

**H<sub>2</sub>:** Ownership concentration has negative relationship with environmental reporting.

**H<sub>3</sub>:** Board size has negative relationship with environmental reporting.

**H<sub>4</sub>:** Proportion of female directors on board has positive relationship with environmental reporting.

### 3. Methodology

Data for this study was collected from the yearly reports of the randomly selected 100 companies listed on the Karachi Stock Exchange. Respective company's yearly reports were taken from their websites for the year 2015. Furthermore, access to the annual reports is easy as compared to other data collection methods. Few big companies listed on Karachi Stock Exchange prepare separate reports on this issue (Corporate Social Reporting), but, not every company does so. Therefore, in order to collect the required data, annual reports was best option. In order to establish the association between dependent, independent and control variables, regression analysis and correlation analysis is performed. The study assessed the level of environmental reporting by the companies listed on Karachi Stock Exchange. The model for the study is presented below.

$$\text{env\_perc} = \beta_0 + \beta_1 \text{p\_inndir} + \beta_2 \text{ins\_inv} + \beta_3 \text{tot\_dir} + \beta_4 \text{p\_femdir} + \beta_5 \text{mkt\_cap} + \beta_6 \text{ret\_ta} + \mu$$

The above mentioned equation shows the estimation. Where:

env\_perc = portion of environmental disclosure.

p\_inndir = Fraction of independent directors.

inst\_inv = Fraction of institutional investors.

tot\_dir = Total amount of directors.

p\_femdir = Percentage of female directors.

mkt\_cap = Market capitalization (Rs. in millions).

ret\_ta = Return on total assets.

$\mu$  = Stochastic error term

### 4. Results and Discussion

#### Regression Models

$$\text{env\_perc} = \beta_0 + \beta_1 \text{p\_inndir} + \beta_2 \text{ins\_inv} + \beta_3 \text{tot\_dir} + \beta_4 \text{p\_femdir} + \beta_5 \text{mkt\_cap} + \beta_6 \text{ret\_ta} + \mu$$

In the above regression model, the environmental reporting variable is regressed on five manipulated corporate governance variables. These manipulated variables are fraction of independent directors (p\_inndir), proportion of institutional investors (inst\_inv), total number of directors (tot\_dir), and fraction of female directors (p\_femdir) along with two

control variables: market capitalization (mkt\_cap) and return on total assets (ret\_ta). This model shows association between corporate governance characteristics and environmental reporting.

**Table 1: Regression Model Results**

<b>Variables</b>	<b>Coefficient</b>	<b>T-statistic</b>	<b>Prob.</b>
C	2.851501	6.663105	0.0000
INST_INV	-0.014874	-6.79498	0.0000
P_FEMDIR	-0.004563	-0.820311	0.4141
P_INDDIR	0.00321	1.150754	0.0100
TOT_DIR	0.105966	2.241743	0.0273
RET_TA	0.184704	2.154324	0.0338
MKT_CAP	2.41E-06	0.614363	0.5405
R-squared	0.372414		
Adjusted R-squared	0.332356	F-statistic	9.29673
Prob (F-statistic)	0	Durbin Watson St.	2.00045

\*. Correlation is significant at the 0.05 level (2 tailed).  
 \*\*. Correlation is significant at the 0.01 level (2 tailed).

The table 1 specified above portrays the outcomes of the multiple regressions whereby Env\_Perc is the dependent variable. The outcome of the test shows a noteworthy and significant correlation between dependent and independent variables. The regression model exemplifies 37 percent (F=9.29673; p=0.000) of environmental reporting variance for the explanatory variables.

Moreover, the results for independent variables show a significant negative association between institutional investors and environmental disclosure. Furthermore, lack of association is established between female directors and environmental disclosures. Positive significant association is present between independent directors, total directors and environmental disclosures. Moreover, in case of control variables, positive significant association is established between return on total assets and environmental disclosures and no significant association is present between market capitalization and environmental disclosures.

A noteworthy and significant association between fraction of autonomous directors (P\_INDDIR) and the level of environmental reporting is reported from the results of the regression model. The regression model shows that revelation of environmental facts in the yearly reports of the Pakistani corporations increases with rise in the fraction of independent directors (P\_INDDIR) on the board. The result is significant at (P=0.0100). Thus, Hypothesis (H1) is accepted. This variable is taken in the percentage form. One percent rise in the portion of independent directors upturns the level of environmental writing or disclosure in the annual reports by 0.00321units. This outcome is in line with the results of prior studies (Post et al. 2012); Cheng & Courtenay, 2006; Lim et al. 2007; Huafang & Jianguo, 2007).

Significant negative association is pointed out between ownership concentration (INST\_INV) and level of environmental reporting. The regression model shows that revelation of environmental data in the yearly reports of the Pakistani Corporations increases with decrease institutional ownership or ownership concentration. The result is

significant at (P=0.0000). Thus, H2 is accepted. This variable is taken in the percentage form which means, percent point increase in the proportion of concentrated ownership decreases the level of environmental reporting or disclosure in the annual reports by 0.014 units. This result is consistent with the findings of prior studies (Lau et al., 2009; Bergolf & Pajuste, 2005; Lakhali, 2005).

Opposite to the third hypothesis, significant positive relation is established between board size and level of environmental reporting. This result is contrary to our third hypothesis. According to resource dependency, larger board in the organization work positively by creating links between organization and its environment and save scarce resources. Larger board contains directors who have knowledge of diverse fields and can provide management expert opinion in the critical matters. It is possible for the top management to dominate the larger board. This shows that larger board creates value for the firm in the developing market. Larger board possesses huge intellectual knowledge compared with small boards that helps in decision making and finally improved firms' performance which includes financial as well as non-financial. This result is consistent with the finding of prior studies (deVilliers et al., 2009; Bonn, 2004; Pearce & Zahra, 1989). Thus, H3 is rejected.

Insignificant association is present between feminine directors' fraction and environmental reporting. Therefore, H4 is rejected. The result indicates that in developing countries like Pakistan, female directors have no role in creating the wealth for the firm nor have any role in creating long lasting relations with the stakeholders. Female directors are more emotional than men directors. Insignificant result is because of difference in the study time period, economic environment, governance structure, culture and size of the capital market and last but not the least the sample size and methodological differences. This result is consistent with the findings of prior study of Tibben (2010).

Incremental regression is performed to check out the importance of each independent variable in affecting the value of dependent variable. Incremental regression is performed on total six models by dropping single independent variable one by one from the model of regression to determine the value of R-Squared. Final results are given below in table 2.

Table 2: Incremental Regression Results

R-Squared original	<b>37%</b>
R-Squared after the exclusion of Institutional investors	<b>8%</b>

This table shows the change in R-squared after the exclusion of institutional investors from the regression model. The exclusion of R-Squared brings maximum change in the value of R-squared which drops from 37% to 8%. This demonstrates that most significant independent variable among all the variables is concentrated ownership.

## **5. Conclusion**

This study has contributed to the prevailing knowledge by exploring the association between environmental disclosure and corporate governance features in emerging financial market. The results of the study are interpreted by keeping in mind the voluntary nature of the environmental reporting. The results suggest that increase in the



number of independent directors on the board increases the level of environmental reporting in the annual reports of the companies. The companies must have low fraction of institutional investors because as the institutional investors' increases in the company, the level of environmental reporting in the annual reports of the companies decreases. Companies must have bigger board in their companies because a bigger board improves the performance of the firm and promotes the disclosure of financial as well as non-financial information in the annual reports. Finally, a lack of association is documented between environmental reporting and corporate governance characteristics in emerging financial market.

## References

- Adams, C. & Zutshi, A. (2004). Corporate social responsibility: why business should act responsibly and be accountable. *Australian Accounting Review*, 14(34), 31-40.
- Adams, R.B. & Ferreira, D. (2009). Women in the board room and their impact on the governance and performance. *Journal of Financial Economics*, 94(2), 291-309.
- Adams, C. A. (2004). The ethical, social and environmental reporting - performance portrayal gap. *Accounting, Auditing & Accountability Journal*, 17(5), 731-757
- ASX (2003). Principles of good corporate governance and best practice recommendations. Australian Stock Exchange, available at: [www.asx.com.au](http://www.asx.com.au)
- Barako, D.G., Hancock, P., & Izan, I.H.Y. (2006). Relationship between corporate governance attributes and voluntary disclosures in annual reports: the Kenyan experience. *Financial Reporting, Regulation and Governance*, 5(1), 1-25.
- Bebbington, J., Larrinaga, C. & Moneva, J.M. (2008). Corporate social reporting and reputation risk management. *Accounting, Auditing and Accountability Journal*, 21(3), 337-361.
- Beekes, W., Brown, P., Chin, G. & Zhang, Q. (2016). The effect of corporate governance on information disclosure, timeliness and market participants' expectations. Available at SSRN: <http://dx.doi.org/10.2139/ssrn.2122300>
- Berglof, E. & Pajuste, A. (2005). What do firms disclose and why? Enforcing corporate governance and transparency in Central and Eastern Europe. *Oxford Review of Economic Policy*, 21(2), 178-197.
- Bonn, I. (2004). Board structure and firm performance: evidence from Australia. *Journal of the Australian and New Zealand Academy of Management*, 10(1), 14-24.
- Brammer, S. & Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. *Business Strategy and The Environment*, 17(2), 120-136.
- Chen, C.J.P. & Jaggi, B. (2000). Association between independent non-executive directors, family control and financial disclosures in Hong Kong. *Journal of Accounting and Public Policy*, 19(4), 285-310.
- Cheng, E.C.M. & Courtenay, S.M. (2006). Board composition, regulatory regime and voluntary disclosure. *The International Journal of Accounting*, 41(3), 262-289.
- Cheng, S. (2008). Board size and the variability of corporate performance. *Journal of Financial Economics*, 87(1), 157-176.
- Dutta, P., & Bose, S. (2007). Gender diversity in the boardroom and financial performance of commercial banks: evidence from Bangladesh. MPRA Paper No. 7916.

- De Villiers, C., Naiker, V. & van Staden, C. (2009). Good corporate governance makes for good environmental performance. Paper presented at the AFAANZ Conference, Adelaide.
- Deegan, C. (2002). The legitimizing effect of social and environmental disclosures - a theoretical foundation. *Accounting, Auditing and Accountability Journal*, 15(3), 282-311.
- Deegan, C. & Rankin, M. (1996). Do Australian companies report environmental news objectively? An analysis of environmental disclosures by firms prosecuted successfully by the environmental protection authority. *Accounting, Auditing and Accountability Journal*, 9(2), 50-67.
- Donnelly, R. & Mulcahy, M. (2008). Board structure, ownership, and voluntary disclosure in Ireland. *Corporate Governance: An International Review*, 16(5), 416-429.
- Eng, L. & Mak, Y.T. (2003). Corporate governance and voluntary disclosure. *Journal of Accounting and Public Policy*, 22(4), 325-45.
- Gallhofer, S. & Haslam, J. (1997). The direction of green accounting policy: critical reflections. *Accounting, Auditing, and Accountability Journal*, 10(2), 148-174.
- Ghazali, N.A.M. (2007). Ownership structure and corporate social responsibility disclosure: some Malaysian evidence. *Corporate Governance: An International Review*, 7(3), 251-266.
- Gibson, K. & O'Donovan, G. (2007). Corporate governance and environmental reporting: an Australian study. *Corporate Governance: An International Review*, 15(5), 944-956.
- Gray, R., Kouhy, R. & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing and Accountability Journal*, 8(2), 47-77.
- Gul, F.A. & Leung, S. (2004). Board leadership, outside directors' expertise and voluntary corporate disclosures. *Journal of Accounting and Public Policy*, 23(5), 351-379.
- Gunawan, J. (2010). Perception of important information in corporate social disclosures: evidence from Indonesia. *Social Responsibility Journal*, 6(1), 62 – 71.
- Habib, A., & Jiang, H. (2009). The impact of different types of ownership concentration on annual report voluntary disclosures in New Zealand. *Accounting Research Journal*, 22(3), 275 – 304.
- Halme, M. & Huse, M. (1997). The influence of corporate governance, industry and country factors on environmental reporting. *Scandinavian Journal of Management*, 13(2), 137-157.
- Hamilton, K. (2004). The need for effective communication with market stakeholders. *Australian Accounting Review*, 14(32), 3-8.
- Haniffa, R.M. & Cooke, T.E. (2002). Culture, corporate governance and disclosure in Malaysian corporations, *Abacus*, 38(3), 317-348.
- Harte, G., & Owen, D. (1991). Environment disclosure in the annual reports of British companies: a research note. *Accounting Auditing & Accountability Journal*, 4(3), 51-61.

- Ho, S.M. & Wong, S.K. (2001). A study of relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting, Auditing and Taxation*, 10(2), 139-156.
- Hossain, M. & Reaz, M. (2007). The determinants and characteristics of voluntary disclosure by Indian banking companies. *Corporate Social Responsibility and Environmental Management*, 14(5), 274-288.
- Huafang, X. & Jianguo, Y. (2007). Ownership structure, board composition and corporate voluntary disclosure: evidence from listed companies in China. *Managerial Auditing Journal*, 22(6), 604-619.
- Ibrahim, N.A. & Angelidis, J.P. (2003). Effect of board members' gender on corporate social responsiveness orientation. *Journal of Applied Business Research*, 10(1), 393-401.
- Jamali, D., Safieddine, M.A. & Rabbath, M. (2008). Corporate governance and corporate social research synergies and interrelationships. *Corporate Governance: An International Review*, 16(5), 443-459.
- Kang, H., Cheng, M. & Gray, S.J. (2007). Corporate governance and board composition: diversity and independence of Australian boards. *Corporate Governance: An International Review*, 15(2), 194-207.
- Kassinis, G. & Vafeas, N. (2002). Corporate boards and outside stakeholders as determinants of environmental litigation. *Strategic Management Journal*, 23(5), 399-411.
- Laidroo, L. (2009). Association between ownership structure and public announcements' disclosures. *Corporate Governance: An International Review*, 71(1), 13-34.
- Lakhal, F. (2005). Voluntary earnings disclosures and corporate governance: evidence from France. *Review of Accounting & Finance*, 4(3), 64-85.
- Lau, J., Sinnadurai, P. & Wright, S. (2009). Corporate governance and chief executive officer dismissal following poor performance: Australian evidence. *Accounting & Finance*, 49(1), 161-182.
- Lim, S., Matolcsy, Z. & Chow, D. (2007). The association between board composition and different types of voluntary disclosure. *European Accounting Review*, 16(3), 555-583.
- Liu, X. & Anbumozhi, V. (2009). Determinant factors of corporate environmental information disclosure: an empirical study of Chinese listed companies. *Journal of Cleaner Production*, 17(6), 593-600.
- Loderer, C. & Peyer, U. (2002). Board overlap, seat accumulation and share prices. *European Financial Management*, 8(2), 165-192.
- Mathews, R. (2008). Personal reflections on a tale of two books: social and environmental accounting research in the past, present and future. *Australian Accounting Business & Finance Journal*, 2(1), 1-13.
- Milne, M.J. & Adler, R.W. (1999). Exploring the reliability of social and environmental disclosures content analysis. *Accounting, Auditing and Accountability Journal*, 12(2), 237-256.
- Neu, D., Warsame, H. & Pedwell, K. (1998). Managing public impressions: environmental disclosures in annual reports. *Accounting, Organizations and Society*, 23(3), 265-282.

- O'Neal, D. & Thomas, H. (1995). Director networks/director selection: the board's strategic role. *European Management Journal*, 13(1), 79-90.
- Patten, D.M. (1991). Exposure, legitimacy and social disclosure. *Journal of Accounting and Public Policy*, 10(4), 297-309.
- Patten, D.M. (1992). Intra-industry environmental disclosures in response to the Alaskan oil spill: a note on legitimacy theory. *Accounting, Organizations and Society*, 17(5), 471-475.
- Patten, D.M. (2002). The relation between environmental performance and environmental disclosure: a research note. *Accounting, Organizations and Society*, 27(8), 763-773.
- Peiyuan, G. (2005). Corporate environmental reporting and disclosure in China. *Social Responsibility Journal*, 3(3), 26-34.
- Post, C., Rahman, N. & Rubow, E. (2012). Green governance: boards of directors' composition and environmental corporate social responsibility. *Business and Society*, 50(1), 189-223.
- Power, M. (1991). Auditing and environmental expertise: between protest and professionalization. *Accounting, Auditing and Accountability Journal*, 4(3), 30-42.
- Pramanik, A. K., Shil, N.C., & Das, B. (2008). Corporate environmental reporting: an emerging issue in the corporate world. *International Journal of Business and Management*, 17(12), 471-475.
- Rizk, R., Dixon, R., & Woodhead, A. (2008). Corporate social and environmental reporting: a survey of disclosure practices in Egypt. *Social Responsibility Journal*, Vol. 4, No. 3, pp. 306 – 323.
- Gray, R., Kouhy, R., & Lavers, S. (1995). Constructing a research database of social and environmental reporting by UK companies. *Accounting, Auditing & Accountability Journal*, 8(2), 78-101.
- Rupley, K. H., Brown, D., & Marshall, R. S. (2012). Governance, media and the quality of environmental disclosure. *Journal of Accounting and Public Policy*, 31(6), 610-640.
- Salama, A. (2003). The relationship between environmental disclosure, environmental reputation and firm financial performance: UK evidence. *Unpublished PhD thesis, University of Nottingham*.
- Salo, J. (2008). Corporate governance and environmental performance: Industry and country effects. *Competition & Change*, 12(4), 328-354.
- Shan, Y.G. (2009). Related party disclosures in China: influences of factors identified from agency, legitimacy, and signalling theories. Paper presented at the Symposium SA, Adelaide. [http://www.symposiumsa.org/Shan%20\\_2008\\_%20-%20Accounting.pdf](http://www.symposiumsa.org/Shan%20_2008_%20-%20Accounting.pdf).
- Tibben, P.A. (2010). What is the impact of top management team diversity on firm performance in Western Europe? Doctoral dissertation, Utrecht University.
- Tilt, C.A. (1994). The influence of external pressure groups on corporate social disclosure: some empirical influence. *Accounting, Auditing and Accountability Journal*, 7(4), 47-72.
- Wilmshurst, T. D., & Frost, G. F., (2000). Corporate environmental reporting: a test of legitimacy theory. *Accounting, Auditing & Accountability Journal*, 13(1), 10-26.

- Turgut, G., & Hafsi, T. (2008). Does Diversity inside Boardroom Matter On Performance?. Paper presented at ASAC conference, Halifax.
- Darrell, W. & Schwartz, B.N. (1997). Environmental disclosures and public policy pressures. *Journal of Accounting and Public Policy*, 16(2), 125-154.
- Wise, V. & Ali, M. (2008). Case studies on corporate governance and corporate social responsibility. *South Asian Journal of Management*, 15(3), 136-150.
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185-211.
- Zahra, S.A. & Pearce, J.A. (1989). Board of Directors and Corporate Financial Performance: A Review and Integrative Model. *Journal of Management*, 15(2), 291-334.