

IMPACT OF CORPORATE GOVERNANCE PRACTICES ON FINANCIAL DISTRESS: EMPIRICAL EVIDENCE FROM PAKISTAN

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Abstract

Corporate bankruptcies and poor management strategies have increased the financial distress situation of the companies due to the non-compliance with the corporate governance practices. The purpose of the present study is to investigate the impact of corporate governance practices on the financial distress status of the companies by using a sample of 42 financial distressed and a matched sample of healthy companies. Using the data for the period of 2006 to 2010 from manufacturing sector of Pakistan, the results of this study reveal that CEO duality and outside block-holders as well as liquidity and firm size have significant impact on financial distress position of firms. The present study shows that the financially distressed firms have lower chances of independent board. Financially distressed firms have larger boards as compared to the financially healthy firms. The presence of CEO duality impacts significantly the financial distress situation of the firms and may leads towards bankruptcy. The study has important implications for the investors, financial analysts, and policy makers.

Key words: Corporate Governance, Financially Distressed firms, Healthy Firms.

Introduction

When corporate bankruptcies reached disastrous results in the late 1980s and 1990s (Altman, 1993; Gales & Kesner, 1994), criticism regarding the weakened implications of corporate governance practices was taken into consideration. A serialized set of corporate scandals have also occurred in the early 2000s such as “Enron and WorldCom (USA)”, “Nortel and Crocus (Canada)”, and “Parmalat and Royal Ahold (EU)”. The reason of these collapses was also found to be the failures of corporate governance that agitated the capital markets of urbanized countries and also had highlighted weak corporate governance practices of unurbanized and transitional economies (Bremer & Elias, 2007). Such scandals proved that the companies’ systems need to be externally regulated rather than only self-regulated.

With the increasing competition between the companies, some of the companies neglect the management strategies and decision making in doing investments, production and operations of the business, due to which they have to see a declination in their operating performance. Due to this entire scenario, companies may be trapped in the situation of financial distress which may ultimately lead the companies towards their winding up or bankruptcy. The companies have to face this situation of financial distress due to the poor management and also due to the non-compliance with the corporate governance practices. Bundles of studies upto today have proved this fact that the companies face financial distress due to the non-compliance and non-adoption of the corporate governance principles and practices. Some include research studies of Elloumi and Gueyie (2001), Lee and Yeh (2004), Abdullah (2006), Li *et al.* (2008),

Fich and Slezak (2008) and Miglani *et al.* (2010).

Research studies on the prediction of financial distress are good in number. But studies developing the connection between CG practices and financial distress are not enough in the literature. Elloumi and Gueyie (2001), Lee and Yeh (2004), Abdullah (2006), Li et al (2008), Fich and Sezak (2008), Miglani et al. (2010) have originated that financial distress is linked with different characteristics of corporate governance.

The present study is the first study of its kind in the Pakistani context that has taken into account the impact of corporate governance on the financial distress while controlling for the financial variables. The rest of the paper is planned as follows. Section two discusses the literature, section three is based on the research methodology used in the study, section four presents a comprehensive discussion on results and section five exhibits the conclusion of the study along with its policy implications, limitations and future research areas.

Development of Hypotheses

Elloumi and Gueyie (2001) indicated that financially distressed firms have lower incidence of outside directors. A negative association was found between independent directors and the probability of financial distress by Li et al. (2008). Hui and Jing-Jing (2008) found that among corporate governance variables, only proportion of independent directors came out to be significantly negatively linked to financial distress costs. Empirical evidence generally depicts an association between distressed firms and board independence

(Daily & Dalton, 1994; Daily, 1995). Pfeffer (1972) found that declining firms have a tendency of insider representation on their boards. Judge and Zeithaml (1992) shown that boards with high insider representation have lower involvement in the strategic decision making. Therefore, from the literature reviewed so far, we can sketch the following hypothesis;

1: *The proportion of outside / independent directors in the board of directors is negatively associated with financial distress status.*

The chances of the board to become non-adaptive and dysfunctional are more for the larger boards as compared to the smaller boards because with increase in board size, directors are less probable to overview and condemn the top managers' policies. The larger boards also undergo more productivity losses like slower decision making processes, more coordination problems and are likely to be more risk averse. Cheng *et al.* (2008) reported that to reach a unanimous decision, the larger boards have to undergo many compromises when compared with the smaller boards. In a comparative study of Japan and Australia, conducted by Bonn et al. (2004), no association has been reported between size of board and financial health of the company. So, the hypothesis will be

2: *There is positive association between the board size and likelihood of financial distress status of Pakistani firms.*

The results of the study of Miglani et al. (2010) indicated that the presence of CEO duality explain financial distress of the firm. Hambrick and D'Aveni (1992) and Daily and Dalton (1994) found that occurrence of CEO duality step ups the

likelihood of bankruptcy. Elloumi and Gueyie (2001) and Abdullah (2006) found no difference in the financially distressed and healthy companies based on CEO duality. Hui and Jing-Jing (2008) found positive association between CEO/chairman duality and financial distress costs. Empirical evidence suggests that CEO-Board chairperson non-duality is important in resolving agency conflicts, otherwise which may lead to distress in the firm. So it is hypothesized that:

3: Financially distressed firms prone to have greater incidence of joint CEO-board chair structure than healthy firms.

Porter and Gendall (1993) noticed that the audit committee should have minimum three members in its composition, from which the majority should be non-executive directors and that this composition will enhance the reputation of the audit committee as a good monitor. As non-executive directors are more objective and critical regarding management policies, therefore, this exercise of objectivity and criticism reduces the likelihood of manipulation in the financial statements (McMullen & Raghunandan, 1996). On the other hand, Miglani et al. (2010) have not documented any significant association of non-executive directors' composition in the audit committee with financial distress status of the company. Thus,

4: There is a negative association between the majority of non-executive directors in the audit committee and financial distress.

For expressing a valuable audit opinion to the clients of audit services, Watts & Zimmerman (1981) have put stress on technical competence and independence of the auditors. Furthermore, Flagg et al.

(1993) discovered a positive relationship between going-concern opinion and financial distress status of the firms. Miglani et al. (2010), in their study, proved that the audit opinion is a significant predictor of financial distress of companies. Wu and Wu (2005) have suggested that companies are more probable to go into the situation of financial deterioration if they are receiving negative standards of audit result. Li et al. (2008) have proved that audit opinion is negatively associated to the financial distress probability which indicated that audit committee is a useful external governance mechanism in reducing the financial distress likelihood. So we hypothesize that

5: Unsatisfactory audit opinion is positively associated with the financial distress status.

Elloumi and Gueyie (2001) and Abdullah (2006) reported a negative association between outside block-holders and financial distress status of the firms. Li et al. (2008) also found negative association between ownership concentration (large shareholdings) and the likelihood of financial distress while Miglani et al. (2010) found no association between the presence of block-holders and financial distress status of the firm. Polsiri and Sookhanaphibarn (2009) have developed prediction models for distress by employing both governance and financial variables. Franks et al. (2001) have described that large outside shareholders who restructure and monitor the poorly performing firms in a better way. Koeke and Renneboog (2002) have also provided strong evidence that large shareholders have strong and beneficial impact on the productivity improvements of the poorly

performing companies. Thus our Hypothesis becomes:

6: *Outside block-holder's interest is negatively related to financial distress status of the Pakistani listed firms.*

The research proposes that the firm's level of leverage is anticipated to boost its probability of going into distress and bankruptcy (for example, Altman, 1968; Platt & Platt, 1990; Elloumi & Gueyie, 2001; Lee & Yeh, 2004; Li et al., 2008; Polsiri & Sookhanaphibarn, 2009). Awan et al. (2008) indicated that the leverage ratios show prominent differentiation between the failed and non-failed companies. He stated that the non-failed firms are less indebted as compared to the failed firms. Thus, based on the literature discoursed above, we tend to draw the hypothesis that;

7: *There is a positive connection between the firm's leverage level and financial distress status of the Pakistani listed firms.*

Having liquidity problem in a business means facing trouble in making payment for all of the immediate and near future demand of business expenditures. The univariate analysis done by Awan et al. (2008) revealed that the low liquidity is one of the significant indicators of a firm's failure. Elloumi and Gueyie (2001) have shown lower levels of liquidity for distressed firms as compared to the healthy firms. The results of the study conducted by Abdullah (2006) have also shown that the distressed companies have lower liquidity ratios than the non-distressed companies. Thus,

8: *Liquidity is negatively associated with financial distress status of Pakistani listed firms.*

Firm size is indicated by the value of assets which the company owns. When a company's assets are more than the other companies, it shows that it is not only larger in size but also better in its production capacity. It is believed that a company with better production capacity as compared to other companies has potential to yield more profits. Nevertheless, the production reaches at its maximum level to meet the demand at certain amount of company's assets. Yoon and Jang (2005) signaled that smaller firms are more risky than the larger ones. The results of the study conducted by Miglani et al. (2010) have shown that the mean value of log of total assets of distressed firms is less than healthy firms which suggest that the financially distressed firms are mostly smaller in size. Therefore, we hypothesize that

9: *There is a negative relationship between the firm size and financial distress status of the Pakistani listed firms.*

Based on the review of past studies and development of various hypotheses, the present study aims to answer the following research questions;

1. Does the ratio of outside directors in the board of directors and outside block-holders' interest of Pakistani listed companies have great influence on the financial distress?
2. Do the financially distressed firms are more likely to have large board size and joint CEO-board chair structure than healthy firms?
3. Does the majority proportion of non-executive directors in the audit committee and unsatisfactory audit

opinion influence the financial distress status of listed companies in Pakistan?

4. Do leverage, liquidity and firm size have an impact on the distress status of the companies?

Research Methodology

Sample and Data:

In order to test the impact of corporate governance practices on the financial distress status, manufacturing sector has been selected which is the third largest sector after agriculture and mining sector of the economy of Pakistan. It contributes 18.5 percent of GDP (Gross Domestic Product) and 13 percent of the total employment. To identify the financially distressed firms (firms presenting negative EPS for consecutive five years from 2006 to 2010) for initial screening purpose, "Financial statements analysis of Companies (non-financial) listed at Karachi Stock Exchange (2005-2010)" issued by State Bank of Pakistan was sorted (SBP, 2011).

Only those firms from the manufacturing sector are included in the final sample which fulfills the following criteria.

1. Manufacturing firms which remain enlist in the Karachi Stock Exchange (KSE) in the period of our study, i.e., from 2006 to 2010.
2. Firms in the financial sector are omitted due to their financial reporting particularities.
3. Firms whose financial and corporate governance information is not available during 2006 to 2010 have also been excluded.
4. Manufacturing companies not meeting the criteria of this study will also be eliminated, i.e.,
 - if firms' EPS is not negative in the consecutive five years (2006-2010),
 - if firms are earning negative EPS for five years but not in the period of our study (2006-2010).
5. Financially distressed firms which have no matching healthy firms will also be excluded from the final sample.

On the basis of above discussed criteria, the no. of financially distressed firms finally sorted were 42. Each distressed company is then matched with a healthy firm (firms presenting positive EPS in each of the five years from 2006 to 2010), thus forming choice based sample of financially distressed and financially healthy companies. The firm will be categorized as financially healthy if:

1. It is earning positive EPS in each of the five years from 2006 to 2010,
2. It is in the same industry in which the distressed firm lies and
3. The period in which the EPS is analyzed is same (2006-2010) with available financial statement data and proxies.

Model Specification:

The model for our study is:

$$\text{Fin_Distress}_{it} = \frac{1}{1+e^{-\left(\alpha_0 + \alpha_1 (\text{Corporate Governance characteristics})_{it} + \beta_2 (\text{Control variables})_{it} + \varepsilon_{it}\right)}}$$

- where Fin_Distress_{it} = Distress status of the i th company (1 for financially distressed, 0 otherwise) in time period t ;
- Corporate Governance characteristics = These are the governance characteristics used in the study of the i th company in time period t , i.e., Brd_indep , Brd_sze , Dual_BCS ,

Adt_comp, Adt_opn and Outside_BLK;

- Control variables = These are the control variables used in the study of the i th company in time period t , i.e., Lvrgr, Lqdy and Frm_size;
- ε_i = Error term

Statistical Analysis: Results and Discussion

Descriptive Analysis of Financially Distressed and Financially Healthy firms:

Table 1 depicts descriptive and t-statistics for testing the difference of means between financially distressed and financially healthy companies. The mean values of earnings per share (EPS) is negative for the distressed companies (-5.317) and positive for the healthy ones (14.861) and this difference is statistically significant at less than 1% level.

The mean of independence of board (Brd_indep) of financially distressed firms is smaller by 0.248 than the financially healthy firms and statistically significant at less than 1% level. The mean value of board size (Brd_size) for distressed firms is 7.776 and 8.191 for healthy firms. It means that on the average, the board size of distressed firms is between 7 to 8 members but inclination is more towards 8 members and board size of healthy firms also show that on the average the inclination is more towards the 8 members on the board of directors. Financially healthy firms are more likely to have majority of non-executive directors in their audit committee composition (Adt_comp), i.e, 98.6% as compared to the 49.52% in the financially distressed companies and it

is also significant at less than 1% level. There lies a huge difference between financially distressed and financially healthy companies on account of audit opinion (Adt_opn) results. 75.7% of the distressed firms show unsatisfactory audit opinion while only 12.9% of the healthy firms are showing unsatisfactory opinion of the audit team. This also stood statistically significant at less than 1% level. The mean value of outside block-holders (Outside_BLK) indicates that the healthy companies show more outside block-holders in their total shareholdings as compared to the distressed firms and this also held statistically significant at less than 1% level.

Correlation Analysis

The correlation analysis is observed between the independent and control variables to validate the data as well as to identify the issue of multicollinearity. Multicollinearity can be explained when two or more predictors in the model are perfectly correlated (Mendenhall & Sincich, 2003). If the value of the correlation coefficient is abnormally high between two independent variables, it can cause the multicollinearity problem. As a result of this problem, the estimates of the coefficients of the model could remain unresolved and the chances of standard errors of these estimates could become huge enough (Mendenhall & Sincich, 2003). The table of Correlation analysis (Table 2) shows that there is no issue of multicollinearity in the data as there is no value above 0.50 which shows any substantial association between the variables.

Table 1. Descriptive Statistics and Test of difference in Means of Financially Healthy and Financially Distressed firms' Variables:

	Fin. Healthy firms	Fin. Distressed firms		
	Mean	Mean	Mean Difference	T-test
EPS	14.8608	-5.317	20.1778	0.000*
Brd_indep	0.5967	0.3486	0.24802	0.000*
Brd_size	8.1905	7.7762	0.41429	0.014**
Dual_BCS	0.2524	0.6952	-0.4429	0.000*
Adt_comp	0.9857	0.4952	0.49048	0.000*
Adt_size	3.581	3.2476	0.33333	0.000*
Adt_opn	0.1286	0.7571	-0.6286	0.000*
Outside_BLK	0.2825	0.1125	0.16999	0.000*
Lvrg	0.5222	8.5369	-8.0146	0.013**
Lqdy	1.6776	0.5274	1.15026	0.000*
Frm_size	9.503	8.6031	0.89993	0.000*

Table 2. Correlation Table:

	I	II	III	IV	V	VI	VII	VIII	IX
I. Brd_indep	1								
II. Brd_size	0.359**	1							
III. Dual_BCS	-0.191**	-0.208**	1						
IV. Audit_comp	0.374**	0.129**	-0.211**	1					
V. Audit_opn	-0.417**	-0.108*	0.248**	-0.292**	1				
VI. Outside_BLK	0.275**	0.241**	-0.267**	0.148**	-0.234**	1			
VII. Lvrg	-0.06	-0.066	0.009	-0.185**	0.133**	0.101*	1		
VIII. Liquidity	0.287**	0.012	-0.250**	0.183**	-0.311**	0.184**	-0.105*	1	
IX. Firm size	0.285**	0.265**	-0.109*	0.238**	-0.184**	0.088	-0.209**	0.239**	1

Table 3. Logit Regression Results:

Coefficients	Independent Variables	Predicted relation	Logistic regression results (β)	Sig.	Exp. (β)
α_0	Intercept	?	11.922	0.001	1.506
α_1	Brd_indep	-	-7.857	0	0.0004
α_2	Dual_BCS (1)	+	2.678	0	14.549
α_3	Brd_size	+	0.643	0.002	1.901
α_4	Adt_comp (1)	-	-10.24	0	0.00003
α_5	Adt_opn (1)	+	3.861	0	47.515
α_6	Outside_BLK	-	-5.47	0.002	0.004
β_1	Lvrg	+	1.194	0.157	3.301
β_2	Lqdy	-	-1.936	0	0.144
β_3	Frm_size	-	-0.532	0.009	0.587
Cox & Snell R square					0.689
Hosmer and Lameshow test of Model's fit:					
Chi-square					2.281
Sig.					0.971
Classification of performance (%)					95.7
Number of observations					420

*Statistically significant at less than 1% level based on two tailed tests.

**Statistically significant at less than 5% level based on two tailed tests.

Source: *Annual Reports of Manufacturing firms listed in KSE from 2006-2010 (Authors' own compilation)*

Logit Regression Analysis

Logit analysis is conducted to estimate the impact of different corporate governance practices on the distress status of the sampled companies i.e., financially distressed and financially healthy companies.

Cox & Snell R Square tell us that 68.9% variance is explained by the model in the dependent variable. In other words, we are 68.9% confident that our model is correct. The 'Hosmer and Lemeshow Test' is considered to be the most robust test available in SPSS to check the model's goodness-of-fit statistic. Unlike most of the p-values, the p-value of this test should be greater than or equal to 0.05 to indicate good fit of the data. In other words, the chi-square value should not be statistically significant if the model is really great. For our model, the significance value is 0.971 which indicates that the model is really great. The null hypotheses for the model is rejected that there is no difference in the observed and predicted values of the models. Classification of performance tells us that 95.7% of the cases have been predicted correctly by the model.

Results of the model indicate that the coefficient of outside block-holders (Outside_BLK) is negative (-5.470) as expected and is statistically significant at less than 0.05 level (p-value = 0.002). These results are also supported by some prior research studies of Elloumi and Gueyie (2001), Abdullah (2006) and Li et al. (2008). From the Exp (β), we can detect that with one percent increase of outside block-holders in a company, the odds of the company being in financial distress is decreased by 0.004 times with all other predictors kept as constant. These outside block-holders also proved to be helpful for

the productivity improvements of the poorly performing companies (Koke & Renneboog, 2002).

With respect to the control variables, leverage (Lvrg) is not found to have statistically significant (β coefficient = 1.19, p - value = 0.157) impact on the financial distress status of the firms. It is consistent with the prior research of Miglani et al. (2010) who also do not found statistically significant result of leverage on the financial distress. Although the results of leverage are positive as expected, however, these are found to be insignificant. It means that the high leveraged firms are more likely to be in distress than the low leveraged firms (Elloumi & Gueyie, 2001; Li et al., 2008).

The results reveal that all the corporate governance practices have significant impact on the financial distress. From among the control variables, liquidity and firm size are significant but the leverage does not show significant results for this study. The results of this study are in line with the past studies of Chen and Church (1992), Flagg et al. (1993), Elloumi and Gueyie (2001), Abdullah (2006), Hui and Jing-Jing (2008), Li et al. (2008) and Miglani et al. (2010).

Conclusion

The present study shows that financially distressed firms have larger boards as compared to the financially healthy firms. The reason may be that the larger boards face problems in communicating with one another in the board regarding the decision making which results in their financial distress. The presence of CEO duality impacts significantly the financial distress. There is also evidence that the duality in

the firms can lead the firms towards bankruptcy (Hambrick & D'Aveni, 1992; Daily & Dalton, 1994). The code of corporate governance also states to separate the two positions of CEO and board chair person but there is no compulsion implied by the code for the separation of these two positions (SECP, 2002). There is a significant difference between the financially distressed and financially healthy companies on the basis of the majority composition of the non-executive directors' majority in the audit committee. Financially distressed companies are not found to have majority of non-executive directors in their audit committee composition.

The present study also found that the financially distressed companies receive unsatisfactory audit report. However, the receipt of the unsatisfactory reports can save the distressed firms from being bankrupted. Outside block-holders 'Outside_BLK' is also found to be significant predictor of the financial distress in the companies. The financially healthy companies have more outside directors as their block-holders than the financially distressed companies. Outside block-holders are also necessary to run and monitor the poorly performing companies

in a better way because such block-holders are believed to work in the best interest of the companies rather than in their own interests and benefits. Liquidity and firm size are also found to be significant in the results. It suggests that the financial distress of the companies decreases with the increase in the liquidity and firm size of the companies. Leverage, on the other hand, is not statistically significant.

Policy Implications

The findings of the study demonstrate that applying the corporate governance practices is in the best interest of the companies. By practicing these CG practices, the companies can be saved from the situation of financial distress and from bankruptcy as well. The findings of the study would also be accommodating for the regulatory authority in making policies on corporate governance reformation. In case, the companies are not following the corporate governance practices, the regulatory authority i.e. Securities and Exchange Commission of Pakistan (SECP) can take initiative to take the preventive measures of corporate governance reformation.

References

- Abdullah, S. N. (2006).** "Board structure and ownership in Malaysia: the case of distressed listed companies", *Corporate Governance*, 6(5), 582-694.
- Altman, E. I. (1993).** "Corporate Financial Distress", *A Complete Guide to Predicting, Avoiding and Dealing with Bankruptcy*, New York, NY.
- Awan, H. M., Bhatti, M. I., Qureshi, M. A., & Bashir, F. (2008).** "On predicting Financial failure of Karachi Stock exchange Listed Textile firms", Paper presented at 15th Annual Global Finance Association Conferenc, Hangzhou, China.
- Beaver, W. (1966).** "Financial ratios as predictors of failure", *Empirical Research in Accounting selected studies*

(Supplement to Journal of Accounting Research), 4, 35-51.

Bonn, I., Yoshikawa, T., & Phan, P. H. (2004). "Effects of board structure on firm performance: A comparison between Japan and Australia", *Asian Business and Management*, 3, 105-125.

Chen, C. W., & Church, B. K. (1996). "Going concern opinions and the market's reaction to bankruptcy", *The Accounting Review*, 71(1), 117-128.

Cheng, S., Evans III, J. H., & Nagarajan, N. (2008). "Board size and firm performance: the moderating effects of the market for corporate control", *Review of Quantitative Finance and Accounting*, forthcoming, DOI: 10.1007 / s11156-007-0074-3.

Daily, C. M. (1995). "The relationship between board composition and leadership structure and bankruptcy reorganization outcomes", *Journal of Management*, 21, 1041-1056.

Daily, C. M., & Dalton, D. R. (1994). "Bankruptcy and corporate governance: the impact of board composition and structure", *Academy of Management Journal*, 37, 1603-1617.

Doumpos, M., & Zopounidis, C. (1999). "A multi-criteria discrimination method for the prediction of financial distress; the case of Greece", *Multinational Finance Journal*, 3(2), 71-101.

Elloumi, F., & Gueyie, J. P. (2001). "Financial Distress and Corporate Governance: An Empirical Analysis", *Corporate Governance: The International Journal of Business in Society*, 1(1), 15-22.

Fernando, A. C. (2009). "Corporate Governance: Principles, Policies and Practices", Pearson Education India.

Fich, E. M., & Slezak, S. L. (2008). "Can Corporate Governance save distressed firms from bankruptcy? An empirical analysis", *Review of Quantitative Finance and Accounting*, 30(2), 225-251.

Flagg, J. C., Giroux, G. A., & Wiggins, C. E. (1993). "Predicting corporate bankruptcy using failing firms", *Review of Financial Economics*, 1(1), 67-79.

Franks, J., Mayer, C., & Renneboog, L. (2001). "Who disciplines the management of poorly performing companies?", *Journal of Financial Intermediation*, 10, 209-248.

Gales, L. M., & Kesner, I. F. (1994). "An analysis of board of director size and composition in bankrupt organizations", *Journal of Business Research*, 30(3), 271-292.

Hadju, O., & Virag, M. (2001). "A Hungarian model for predicting financial bankruptcy, Society and the Economy in Central and Eastern Europe", *Quarterly Journal of the Budapest University of Economic Sciences and Public Administration*, 23(1-2), 28-46.

Hambrick, D. C., & D'Aveni, R. A. (1992). "Top team deterioration as part of the downward spiral of large corporate bankruptcies", *Management Science*, 38, 1445-1466.

Hui, H., & Jing-Jing, Z. (2008). "Relationship between Corporate Governance and Financial Distress: An Empirical Study of Distressed Companies in China", *International Journal of Management*, 25(4), 654-664.

- Ibrahim, A. A. (2006).** “Corporate Governance in Pakistan: Analysis of Current Challenges and Recommendations for Future Reforms”, Washington University Global Studies Law Review, 5, 323-332.
- Javid, A. Y., & Iqbal, R. (2010).** “Corporate Governance in Pakistan: Corporate Valuation”, Ownership and Financing. PIDE Working papers, Page 4.
- Judge, W. Q., & Zeithaml, C. P. (1992).** “Institutional and strategic choice perspectives on board involvement in the strategic decision process”, Academy of Management Journal, 35, 766-794.
- Koeke, J., & Renneboog, L. D. (2002).** “Does good corporate governance lead to stronger productivity growth?”, Center Discussion Paper, 2002-89. 1-41.
- Lee, T. S., & Yeh, Y. H. (2004).** “Corporate Governance and Financial Distress: evidence from Taiwan”, Corporate Governance: An International Review, 12(3), 378-388.
- Li, H., Wang, Z., & Deng, X. (2008).** “Independent Directors, Agency Costs and Financial Distress: Evidence from Chinese Listed Companies”, Corporate Governance, 8(5), 622-636.
- Maddala, G. S. (1991).** “A perspective on the use of limited-dependent and qualitative variable models in accounting research”, The Accounting Review, 788-807.
- Maddala, G. S. (1992).** “Introduction to Econometrics”, Englewood Cliffs, NJ: Prentice Hall, Inc.
- McMullen, D. A., & Raghunandan, K. (1996).** “Enhancing audit committee effectiveness”, Journal of Accountancy, 182(2), 79-81.
- Miglani, S., Ahmed, K., & Henry, D. (2010).** “Corporate Governance and Financial Distress: Evidence from Australia”, Accounting and Finance Association of Australia and New Zealand (AFAANZ) conference, Christchurch, New Zealand, July 4-6.
- OECD. (2004).** “OECD Principles of Corporate Governance”, OECD Publications Service, Organization for Economic Co-operation and Development.
- Ong, S. W., Yap, V. C., & Khong, R. W. (2011).** “Corporate failure prediction: a study of public listed companies in Malaysia”, Managerial Finance, 37(6), 553-564.
- Pfeffer, J. (1972).** “Size and composition of corporate boards of directors: the organization and its environment”, Administrative Science Quarterly, 17, 218-219.
- Polsiri, P., & Sookhanaphibarn, K. (2009).** “Corporate Distress Prediction models using Governance and Financial Variables: Evidence from Thai listed firms during the East Asian Economic crisis”, Journal of Economics and Management, 5(2), 273-304.
- Porter, B. A., & Gendall, P. J. (1993).** “An international comparison of the development and role of audit committee in the private corporate sector”, Working paper, Accounting Department, Massey University, Palmerston North.
- Rais, R. B., & Saeed, A. (2005).** “Regulatory Impact Assessment of SECP’s Corporate Governance Code in Pakistan”, Lahore University of

Management Sciences, Lahore. (CMER Working Paper 06-39).

SBP. (2011). “Financial statements analysis of Companies (non-financial) listed at Karachi Stock Exchange (2005-2010). State Bank of Pakistan”, Statistics and DWH Department.

SECP. (2002). Code of Corporate Governance. Securities and Exchange Commission of Pakistan.

Suntraruk, P. (2009). “Predicting Financial Distress: Evidence from Thailand. European Financial Management

Association 2009 Annual Meeting”, Milan, Italy, June 24-27 .

Titman, S., & Wessels, R. (1988). “The determinants of capital structure choice”, *Journal of Finance*, 43(1), 1-19.

Watts, R., & Zimmerman, J. (1981). “The markets for independence and independent auditors”, Working Paper, University of Rochester.

Wu, C. P., & Wu, S. N. (2005). “Study on financial situation analysis and prediction model based on value creating and corporate governance”, *Economic Review*, 11, 99-110.