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Nexus of Corporate Governance and Organizational Performance: Evidence from Pakistan Stock Exchange

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Abstract

The study aims to examine the association between corporate governance (CG) and organizational performance considering some important factors of CG i.e., board size, audit committee, composition of board, and chief executive status. Organizational performance is measured through two important profitability ratios, Return on Equity (ROE), and Profit Margin (PM). Data are gathered from companies listed on Pakistan Stock Exchange (PSX) 30-index. Study findings indicate that there are significant positive relationships among board size, composition of board and audit committee towards performance of firms (ROE and PM). However, this study does not provide significant relationship between CEO duality and organizational performance. This study extends the knowledge to help Pakistani listed companies improve performance through effective corporate governance practices. This study implies that corporations must exert more efforts to adopt the right blend of corporate governance to improve organizational performance. The core contribution of this study is that it enlightens the important insights into how the companies are really focusing on corporate governance with its core features.

Keywords: Corporate Governance, Organizational Performance, Pakistan Stock Exchange

Introduction

The way in which corporations make policies for themselves is known as corporate governance. It is fundamentally providing rules and regulations to the sovereign state and corporations to all levels of hierarchy, from top to bottom. The key advantage of implementing corporate governance is to increase the check and balance on the operations of corporations. Alongside, it helps to increase the performance of organizations by inhibiting huge disasters and frauds which could occur in any organization.

Frequently the definitions related to corporate governance are allied with the word of 'control and accountability' of any corporation and its management. Contrary to it, corporate governance is also defined as the legal framework, procedures and rules in order to make it more consistent. Corporate governance in any corporation increases the effectiveness and efficiency in the operations of the organizations.

Corporate performance is a significant concept which shows the relationship between effectiveness and efficiency of the financial resources of the organization. Corporate objective of the organization can only be achieved by optimization of its resources. Growth and future of the business is basically related to this concept. If capital of the firm is managed in the good way, it can run in a longer pace. When this concept is expanded globally, all legal territories in the world has its own rules and regulations according to the social norms, culture, nationalism and regionalism. Another definition says that rules and regulations related to any organizations are predefined in the formal way, which basically acts in the protective role for the stakeholders who are keen to know the performance of the organization.

In early twentieth century and some later, almost every country has made, set and issued its codes of working and guidelines being part of body of corporate governance. These rules act like a binding power among the stakeholders and companies. In Pakistan, the regulating authority that introduces the rules and regulations for corporation is Securities and Exchange Commission of Pakistan (SECP). SECP started working at the start of the 2002 on the rules and regulations for the corporate bodies and then introduced reforms in these regulations from time to time. The major parts of the codes introduced by SECP are recommendations for the best business practices internationally. It has also included revolutionary approach in the form of external and internal audit of the organizations, which definitely has increased the efficiency of the firms.

Corporate Governance Mechanism

In Pakistan, Cheema (2003) worked on the overview of the financial markets, its dynamics, rules and regulations. Various elements of the corporate structure were studied in the same pattern as Cheema's that imparts a lot in the corporate governance. This research basically shows the concentration of controls and ownership in order to determine the structure of ownership in Pakistan capital market.

It is studied that culture and corporate structure have association with each other. Corporate structure may change because of the change in the cultural traits. But if some traits in the culture are penetrated deeply in the society, it might not change (Roe, 2015). A plenty of work has been done in this sector to find the relationship and influence of corporate governance on the performance of the organizations. Adjaoud et al (2012) warned the weak relationship among the components of board of directors. Weir et al (2002); Bhagat et al (2000) concluded that there is an optimistic relationship between corporate governance and organizational performance.

Moreover, corporate governance is in fact a broader phenomenon which contains various aspects of regimes (Zingales, 2005). There is an important role of those shareholders who pay high concentrations on their firms which indirectly influence the management to develop and take interest in the control of organization. The other major impact of good corporate governance is on the better venture of shareholders (Friend and Lang, 2012).

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Components of Corporate Governance Mechanism

Corporate governance plays plenty of dynamic roles in order to affirm law and order in the firms. Major components of corporate governance are discussed below.

Board Size

According to the codes of Corporate Governance, size of the board is an important factor which influence on the performance of the organization. Ideal size of board lies in between 5 to 20 but it also depends on the size and nature of the organization in which it is being implemented. Studies show the bad and negative impact on the performance of organization because of the relatively large size of board.

Large scale boards are mostly ineffective as bigger group of people are less trusty and less truthful. In larger group members of board, some people try to show their powers implicitly which indirectly enforce to create an agency problem. This way, it can be concluded that in those organizations where there is large board size, there are more contradictory groups who are demonstrating their varied interest in the organization. There is also increase in the free riding as some workers neglect their duties. So, chaos can be created in such corporations.

There are some companies who have a demonstrative on behalf of smaller shareholders. Their number cannot be increased by changing size of board. Hence, size of the board can be controlled. For better performance of organization, the ideal size of the board is between 6 to 20 members. Review of those firms who have small board sizes shows that they have more value of their stocks as compared to those firms who have larger board size. In fact, an inverse relationship was found between size of the board and value of the firm. In 2016, Mishra stated that decision making of smaller size of board members is quicker as compared to those firms who have large board of members. There is negative affiliation between board size and performance of firm.

Board Composition

Those boards which are working independently are ranked higher by the corporate governance. There is no association between the independence of board and measurement of firm's performance (Hermalin and Weisbach, 2010). According to the literature, those organizations which are not working well, they are more independent (Dare, 2012). Those members in the board who are working as non-executive directors and also working as visiting board members always come up with the limited scope of understanding the complexity. They also face a lot of problems in decision making (Baysinger and Hoskisson, 2014). According to the codes of SECP in Pakistan for corporate governance, the number of executive directors should not increase than 75% of the size of the board which in turn impact positively on the representation of the independence of directors and minority of shareholders.

Responsibility of CEO/Chairman's Duality

There are different schools of thoughts which support or negate the challenge of the CEO's dual role in an organization. Keeping in view the agency theory, antagonistic challenger says that the dual role of CEO weaken the role played by the members of board of directors which indirectly influence negatively on the performance of the corporation (Levy, 2012; Dayton, 2012)

Effective decision making is induced when the unity of command of CEO go for the vague leadership according to the Stewardship theory. (Donaldson and Davis,2015) There would be a lot of informational problems to determine the agenda and information delivered to the

board in case of CEO duality (Jensen, 2013). Stock market shows an adverse manner when there comes any news related to CEO duality which support the hypothesis that dual role of CEO encourages weakness in the monitoring role of the board (Worrell et al., 2015).

Audit Committee

There is a negative correlation between audit committee and earnings of management having corporate governance in the organizations (Klein, 2000). Financing costs of the debts will be lower when there is independent audit committee (Anderson, 2004).

Table

Components of Corporate Governance

BS = Size of Board	Overall members on the board of organization			
BC = Composition of Board	Fraction of non-executive directors attending board section.			
SCE =Status of Chief Executive	Measurement sizes zero (0) define CEO dualism, whereas one (1) define if CEO and Chairman are exclusively dissimilar.			
AC = Audit Committee	Total no of members in the audit committee			

Significance of the Study

In underdeveloped countries there is lack of funding in the research, therefore, such gap is available in countries like Pakistan and many other underdeveloped countries. Moreover, with the passage of time due to social and political reasons standards change and these standards cast a major impact on how organizations do regarding that particular subject as corporate governance's most important factors. However, internationally many countries like South Korea, UK, USA, China and Malaysia have researched in this sector a lot but still everything is variable in the long run.

Study Design

In order to conduct this study, the data is purely collected from the financial statements of listed companies under the head of 30-index in KSE which is now known as Pakistan Stock Exchange. The sample of the KSE-30 is collected according to their turn over and revaluation in index issued after every 6 months. The data was collected from the top 30 companies of KSE of major sectors including automobile, banking, insurance, gas, and telecommunication.

Economic Modeling

The following model is prepared for elaborating this research.

Ү=β+БF+€

Y is denominating the dependent variable. β represents constant, \overline{b} is the coefficient of corporate governance mechanism; F is the expounding independent variable corporate governance and \in is described as errorterm (where it is presumed that error term is 0 and independent in this research for a time period).

In order to measure the performance of corporations, two significant financial ratios are used for a definite period of time [Return on Equity (ROE) and Profit Margin (PM)]

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Description of Variables

There are basically two types of variables in this study. Dependent Variables The dependent variables are

- Return on Equity (ROE)
- Profit Margin (PM)

Return on Equity (ROE) = Net Income of the firm during the year / Average Shareholder Equity at year end

Profit Margin (PM) = Net profit of the firm during the year / Total Revenues generated by the year End

Independent Variables

The independent variables are

- BS = Size of Board
- BC = Composition of Board
- SCE = Status of Chief Executive
- AC = Audit Committee

Table 2

Descriptive Statistics

Tendency	ROE	PM	BS	BC	SCE	AC
Mean	0.48	0.32	18.64	15	.88	.82
Median	0.4	0.22	18	14	2	2
Mode	-	-0.0092	14	14	2	2
Std. Dev	0.348	0.3478	5.004	7.5134	0.503	0.503
Skewness	1.0476	3.851	1.5906	0.294	-7.1282	-7.1282
Kurtosis	-0.9718	9.5156	-0.5162	-1.0622	22.1422	22.1422
Range	-1.3574	1.8116	18	29.5	2	2
Minimum	-0.086	-0.92	12	0.5	0	0
Maximum	134.88	180.24	30	30	2	2
Sum	28.44	19.1	1120	900.08	112	109
N Valid	120	120	120	120	120	120
Missing	0	0	0	0	0	0

Empirical Study and Interpretation

Descriptive Statistics

Descriptive statistics of this studies shows that mean of dependent variable ROE is almost 48% and mean of dependent variable PM is almost 32%. By viewing the statistics, it can be concluded that Rs.40 is the amount of profit approximately which is earned in proportion to every Rs 100 turnover of the firms taken as a sample. The average board size in this study is 18. On the other hand, the fraction of directors sitting in the board is approximately 15. Investigations also show that 88% of the listed firms under observations have different person for CEO position, merely 12% of the firms are occupying the same position and working as the role of CEO duality. Almost 82 % of the organizations audit committee is composed of non-executive members. According to the code of corporate governance, there should be

minimum 3 members in the audit committee where non-executive members must have accounting discipline qualification along with relevant experience in the field. Therefore, it can be concluded from the given data that majority of the sampled firms choose for investigation have independent boards.

Regression

Pearson Correlation

Correlations among the variables are shown in the table 3a and 3b with the help of Pearson Correlation. According to this table (3a), ROE is strongly and positively correlated to the size of board (sig 0.000). ROE has similar strong positive and significant correlation with the composition of board, status of chief executive and audit committee of the corporations. According to this table (3b), PM and size of board also show a strong positive and significant correlation (sig 0.000). PM has similar strong positive and significant correlation with the composition of board, audit committee of the corporations except status of chief executive or chainman duality which is non-significant.

curson conclutions measure of performance (neturn on Equity)					
	ROE	BS	BC	SCE	AC
ROE	2	0.458	0.284	0.198	0.31
BS	0.458	2	1.17	0.502	0.568
BC	0.284	1.17	2	0.322	1.092
SCE	0.198	0.502	0.322	2	0.364
AC	0.31	0.568	1.092	0.364	2
Sig (1-					
tailed)	-	0	0.56	0.902	0.476
ROE					
BS	0.156	-	0	0.106	0.056
BC	0.56	0	-	0.436	0
SCE	0.902	0.106	0.436	-	0.328
AC	0.476	0.056	0	0.328	-
N ROE	120	120	120	120	120
BS	120	120	120	120	120
BC	120	120	120	120	120
SCE	120	120	120	120	120
AC	120	120	120	120	120

Table 3a

Pearson Correlations - Measure of performance (Return on Equity)

	PM	BS	BC	SCF	AC
PM	2	0.36	0.444	-0.094	0.32
BS	0.36	2	1.17	0.502	0.568
BC	0.444	1.17	2	0.322	1.092
SCE	-0.094	0.502	0.322	2	0.364
AC	0.32	0.568	1.092	0.364	2
Sig (1-tailed) PM	-	0.34	1.76	1.438	0.446
BS	0.34	-	0	0.106	0.056
BC	0.176	0	-	0.436	0
SCE	1.438	0.106	0.436	-	0.328
AS	0.446	0.056	0	0.328	-
N PM	120	120	120	120	120
BS	120	120	120	120	120
BC	120	120	120	120	120
SCE	120	120	120	120	120
AC	120	120	120	120	120

Table 3b Pearson Correlations -Performance Measurement (Profit Margin)

ANOVA Tests

ANOVA tests are performed in order to check the relationship between independent variable and dependent variable. This test is performed to know the analysis of variance of variables. According to table a and b, ROE and PM are showing significant F-values which explicitly indicates a strong positive and significant association between PM and ROE and size of board, composition of board, status of chief executive, and Audit committee.

According to the Table (5) it demonstrates the coefficient estimates of dependent variables. The coefficient of size of the board is 0.4384 which indicates that there is a constructive connection of size of board and ROE. It is extremely considerable at the level of 5 to 10%. On the other hand, the Chief Executive Status of the firms shows that weak significance exists in between ROE and duality role of CEO.

No relationship is found between Chief Executive Status and the other dependent variable PM while it has the significant level of 1, 5 and 10%. A positive and significant relationship among PM, size of board, composition of board and committee for audit can be observed. According to the results combined of Table 5, it can be observed board size and ROE, PM positive and significant relationship between them. The average size of board working in Pakistan is quite small board, but its results shows agreement with the studies shown by the

(Yemack, 2009; Liand Liang, 2015; Yauanto, 2006; Sandra et al., 2007; Bokpinn et al., 2008). Table 5 also illustrates positive significant relationship between ROE, composition of board and profit margin. It shows that there is in fact strong relationship between financial performance of the corporation and the non-executive's director's presence in the composition of board. This result shows the agreement with the studies shown by (Forsberg, 2010; Weisbach, 2009; Bhagat Black, 2006; Sanda et al., 2008). According to table 5, the relationship between Chief Executive Status and role of duality has negative impact on the performance measure (ROE and PM). This result is showing consistency with the studies done

by the (Yermack, 2014; Brown et al., 2008; Bokpin et al., 2008)

The last independent variables of corporate governance Audit Committee has shown a positive relationship on the two performance measures of the firm (PM & ROE). Its results are also significant which shows the consistency with the studies of (Klein, 2006; Mansi and Reeb, 2008)

internetion neturne	in Equity							
Model	Sum of squ	are	Df	Mean squa	are	F	Sig	
Between group	0.2282		8	0.057				
Within group	3.3448		110	0.0608		1.8768	0	
Total	3.573		118					
Table 4b								
ANOVA- Profit M	argin							
Model	Sum of s	quare		Df	Mean sq	uare	F	Sig
Between group	0.2378			8	0.0594		1.9642	0
Within group	3.3286			110	0.0606			
Total	3.5664			118				
Table 5								
Coefficient of Dep	pendent Vario	ables						
Independent Va	riables	ROE					PM	
RS		0 4384	[4 18]	521{0 082}	0 332	2[4 0302	1 {0 0972}	

Table 4a ANOVA- Return on Equity

Independent Variables	ROE	PM
BS	0.4384[4.1852]{0.082}	0.3322[4.0302] {0.0972}
BC	0.2836[2.8158] {0.329}	0.4448 [2.2356] {0.5364}
SCE	0.1902[1.0788] {1.183}	-0.0948[-2.2574] {0.5274}
AC	0.2974[2.4246] {0.461}	0.319 [2.059] {0.615}
R2	0.1278	0.1334
Adjusted R2	-0.0084	0.0024
F- Statistics	1.8768	1.9642
Number of Observations	120	120

Conclusion

Numerous researchers have tried to find out relationship between corporate governance and its impact on the performance of firm, however every investigator come up with the different conclusion. In this study, two dependent variables are used to measure performance of firm (ROE, PM) and four independent variables comprises of corporate governance mechanism including (BS = Size of board, BC = Composition of board, , AC = Audit Committee, SCE = Status of Chief Executive). Data is collected from the primary sources of 30 listed companies from Pakistan Stock Exchange PSX 30-index. For analysis and results, multiple regressions is used which highlights the following key points.

• ROE and size of board shows a positive and highly significant relationship.

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• ROE and Chief Executive/ chairman status of duality indicates weak and insignificant relationship.

- ROE , composition of board and audit committee of the corporations show significant and strong positive correlation.
- There is no correlation between PM and Chief Executive/ chairman Status duality. It does not show significant result.
- There is significant and strong positive correlation among PM, size of board, composition of board and audit committee of the corporations.

Room for Future Research

The limitation of this study is small sample size used for the study of corporate governance and performance of organization. Furthermore, samples should be added in the research in order to increase its scope as well as generalization of the results. In future, there is need to study the relationship of the performance of the firm when debt is introduced in the capital structure.

References

- Abdullah, S. N. (2004). Board composition, CEO duality and performance among Malaysian listed companies. *Corporate Governance: The international journal of business in society*.
- Abu-Serdaneh, J., Zuriekat, M., & Al-Sheikh, I. (2010). Ownership Structure and Corporate performance in the Jordanian manufacturing companies. *Jordan Journal of Business Administration*, *6*(3), 426-440.
- Adams, R. B., & Mehran, H. (2005). Corporate performance, board structure and its determinants in the banking industry. In *EFA 2005 Moscow meetings*.
- Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2004). Board characteristics, accounting report integrity, and the cost of debt. In Journal of Accounting and Economics (Vol. 37, Issue 3, pp. 315–342). Elsevier BV. https://doi.org/10.1016/j.jacceco.2004.01.004
- Berger, A. N., Kick, T., & Schaeck, K. (2014). Executive board composition and bank risk taking.
 In Journal of Corporate Finance (Vol. 28, pp. 48–65). Elsevier BV. https://doi.org/10.1016/j.jcorpfin.2013.11.006
- Bhagat, S., & Black, B. (2001). The non-correlation between board independence and long-term firm performance. J. CorP. I., 27, 231.
- Bi, X., & Khanna, M. (2012). Reassessment of the Impact of the EPA's Voluntary 33/50 Program on Toxic Releases. *Land Economics*, *88*(2), 341-361.
- Black, B. S., Tang, H., Kim, W. (2003). Does corporate governance affect firm value? Evidence from Korea. Working Paper No. 237, Stanford Law School.
- Black, B. (2001). The corporate governance behavior and market value of Russian firms. In Emerging Markets Review (Vol. 2, Issue 2, pp. 89–108). Elsevier BV. https://doi.org/10.1016/s1566-0141(01)00012-7
- Brown, L. D., Robinson, J. M., Caylor, M. C. (2004). Corporate governance and firm performance. http://www.issproxy.com/pdf/corporate governance.
- Carline, N. F., Linn, S. C., Yadav, V. (2002). "The Influence of Managerial Ownership on the Real Gains in Corporate Mergers and Market Revaluation of Merger Partners: Empirical Evidence." Working Paper.
- Chrisman, J. J., Chua, J. H., & Litz, R. A. (2004). Comparing the agency costs of family and nonfamily firms: Conceptual issues and exploratory evidence. *Entrepreneurship Theory and practice*, *28*(4), 335-354.

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- Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all?. *Journal of financial* economics, 87(2), 329-356.
- Corbetta, G., & Salvato, C. (2004). Self–serving or self–actualizing? Models of man and agency costs in different types of family firms: A commentary on "comparing the agency costs of family and non–family firms: Conceptual issues and exploratory evidence". *Entrepreneurship theory and practice*, *28*(4), 355-362.
- Demsetz, H., Villalonga, B. (2001). Ownership structure and corporate performance, J. Corporate Finan., 7: 209-233.
- Deutsch, Y. (2005). The impact of board composition on firms' critical decisions: A metaanalytic review. *Journal of Management*, *31*(3), 424-444.
- Fernandes, N. (2008). EC: Board compensation and firm performance: The role of "independent" board members. *Journal of multinational financial management*, 18(1), 30-44.
- Gillan, S. L. (2006). Recent Developments in Corporate Governance: An Overview. In Journal of Corporate Finance (Vol. 12, Issue 3, pp. 381–402). Elsevier BV. https://doi.org/10.1016/j.jcorpfin.2005.11.002
- Goswami, O. (2002). Corporate governance in India. *Taking action against corruption in Asia and the Pacific*, 85-106.
- Haniffa, R., &Hudaib, M. (2006). Corporate governance structure and performance of Malaysian listed companies. *Journal of business finance & accounting*, *33*(7-8), 1034-1062.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management review*, *28*(3), 383-396.
- Hossain, M., Prevost, A. K., & Rao, R. P. (2001). Corporate governance in New Zealand: The effect of the 1993 Companies Act on the relation between board composition and firm performance. *Pacific-Basin Finance Journal*, *9*(2), 119-145.
- Kader, S., Cigdem, S. B., & Aygun, O. (2011). The impact of board composition on corporate financial and social responsibility performance: Evidence from public-listed companies in Turkey. *African Journal of Business Management*, *5*(7), 2959-2978.
- Kallamu, B. S. (2016). Impact of the revised Malaysian code on corporate governance on audit committee attributes and firm performance. *Turkish Economic Review*, *3*(1), 188-200.
- Khan, A., Muttakin, M. B., & Siddiqui, J. (2013). Corporate governance and corporate social responsibility disclosures: Evidence from an emerging economy. *Journal of business ethics*, *114*(2), 207-223.
- Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of corporate Finance*, *10*(5), 703-728.
- Lehmann, E., & Weigand, J. (2000). Does the governed corporation perform better? Governance structures and corporate performance in Germany. *Review of Finance*, 4(2), 157-195.
- Leykun, F. (2011). The impact of managerial self-interest on corporate capital structure:(A case of selected companies in Addis Ababa, Ethiopia).
- Liu, Y. (2014). Outside options and CEO turnover: The network effect. *Journal of Corporate Finance, 28,* 201-217.
- Muniandy, B., & Hillier, J. (2015). Board independence, investment opportunity set and performance of South African firms. *Pacific-Basin Finance Journal*, *35*, 108-124.

- Nath, S. D., Islam, S., & Saha, A. K. (2015). Corporate board structure and firm performance: the context of pharmaceutical industry in Bangladesh. *International Journal of Economics and Finance*, 7(7), 106-115.
- Ozkan, N. (2011). CEO compensation and firm performance: An empirical investigation of UK panel data. *European Financial Management*, *17*(2), 260-285.
- Perry, T. (2000). Incentive compensation for outside directors and CEO turnover. *Available at SSRN 236033*.
- Petra, S. T. (2005). Do outside independent directors strengthen corporate boards?. *Corporate Governance: The international journal of business in society*.
- Rashid, A., De Zoysa, A., Lodh, S., & Rudkin, K. (2010). Board composition and firm performance: Evidence from Bangladesh. *Australasian Accounting, Business and Finance Journal*, 4(1), 76-95.
- Rioja, F., & Valev, N. (2004). Does one size fit all?: a reexamination of the finance and growth relationship. *Journal of Development economics*, *74*(2), 429-447.
- Tseng, C.-Y., & Goo, J. Y.-J. (2005). Intellectual capital and corporate value in an emerging economy: empirical study of Taiwanese manufacturers. In R and D Management (Vol. 35, Issue 2, pp. 187–201). Wiley. https://doi.org/10.1111/j.1467-9310.2005.00382.x
- Yasser, Q. R., Entebang, H. A., & Mansor, S. A. (2011). Corporate governance and firm performance in Pakistan: The case of Karachi Stock Exchange (KSE)-30. *Journal of economics and international finance*, *3*(8), 482-491.

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Appendix

Serial Number	Name of Firm	Sector
1	Attock Refinery Ltd.	Oil & Gas
2	Bank AL-Habib Ltd.	Banking
3	D. G. Khan Cement Company Ltd.	Cement
4	Engro Corporation Ltd. Consolidated	Chemicals
5	Engro Fertilizers Ltd.	Chemicals
6	Engro Polymer & Chemicals Ltd.	Chemicals
7	Fauji Fertilizer Company Ltd. Consolidated	Chemical
8	Nishat Limited	Textile
9	Habib Bank Ltd.	Banking
10	Kot Addu Power Company Ltd.	Oil & Gas
11	Lucky Cement Ltd. Consolidated	Cement
12	Maple Leaf Cement Factory Ltd. Consolidated	Cement
13	Mari Petroleum Company Ltd.	Oil & Gas
14	MCB Bank Ltd.	Banking
15	Meezan Bank Ltd.	Banking
16	Millat Tractors Ltd. Consolidated	Automobile
17	National Refinery Ltd.	Oil & Gas
18	Bank Alfalah Limited	Banking
19	National Refinery Ltd.	Oil & Gas
20	Oil & Gas Development Company Ltd.	Oil & Gas
21	Pakistan Oilfields Ltd.	Oil & Gas
22	Pakistan Petroleum Ltd.	Oil & Gas
23	Pakistan State Oil Company Ltd. Consolidated	Oil & Gas
24	Systems Ltd.	IT
25	Telecard Ltd. Consolidated	Telecommunication
26	The Hub Power Company Ltd. Consolidated	Oil & Gas
27	Adamjee Insurance Company Limited	Insurance
28	ICI Pakistan Limited	Chemical
29	United Foods Limited	Telecommunication
30	Pakistan Telecommunication Co. Ltd	Banking