Full Length Research Paper

Determinants of financial performance of a firm: Case of Pakistani stock market

Sidra Ali Mirza[1]* and Attiya Javed[2]

[1]Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology, Islamabad, Pakistan.
[2]Institute of Development Economics, Islamabad, Pakistan.

This paper examines the possible association between financial performance of the firm and economic indicators, corporate governance, ownership structure, capital structure, and risk management. It is also one of the very few examples, which attempts to test various determinant of firm performance in context of developing market (Pakistan). The present study examines the performance of firms in terms of profitability and its association with multiple determinants for 60 Pakistani corporate firms listed in Karachi stock exchange for the period of 2007 to 2011 and attempts to explain the observed behavior with the help of fixed effect model. The results consistently support the potential association between firm's financial performance and economic indicators, corporate governance, ownership structure, and capital structure although the intensity of relationship differs across different measures of performance. We find evidence in support of the hypotheses that a positive association exists between corporate governance, and risk management and performance while mixed results are observed for other variables.

Key words: Economic indicators, ownership structure, capital structure, risk management, financial performance, Pakistan.

INTRODUCTION

Performance of firms is of vital importance for investors, stakeholders and economy at large. For investors the return on their investments is highly valuable, and a well performing business can bring high and long-term returns for their investors. Furthermore, financial profitability of a firm will boost the income of its employees, bring better quality products for its customers, and have better environment friendly production units. Also, more profits will mean more future investments, which will generate employment opportunities and enhance the income of people. Many studies have been conducted to determine various financial and non-financial factors that can boost or have an adverse effect on the performance of firm. But still no single effective model has been established which captures maximum variation.

There is incomplete literature and an on-going debate on the issue of performance of firms. There is wider gap specifically in the case of growing economies like Pakistan, because most of the research done is based on the data from developed economies.

The purpose of this study is to empirically investigate the contribution of economy, ownership patterns, capital structure, and risk management towards financial performance, of firms in Pakistan. And also to find empirical evidence for contribution of economy, ownership patterns, capital structure, and risk management towards shareholders' return. It is important to conduct this study in Pakistan because it is a growing economy and there are a lot of differences in the situation faced by firms in developed and developing economies. Firstly, the

*Corresponding author. E-mail: sidrah.ali@gmail.com. Tel: 0092-304-5161287.

difference of corporate governance affects the profit distribution policy. Weak corporate governance leads to ownership concentration ultimately increasing the power of owners to influence the policy decisions. Secondly, tax environment differences can lead to different investor behavior regarding the return. In Pakistan stock price appreciation is preferred mostly, but now capital gain tax has also been imposed which has lead to a slight change in the investor interests.

Effects of various factors on financial performance can be firm specific. This study will contribute to the limited literature on determinants of firm performance in Pakistan.

The rest of the study is organized as follows. First, the literature review and second the research methodology, and data were discussed. Also, empirical findings of the study are discussed, and finally, conclusion of this research is drawn.

LITERATURE REVIEW

Industrial revolution has divided the world economies into two categories; developed and under-developed. Those that are under-developed are struggling to get out of their present state and stand in line with those that are developed. To achieve this goal these countries have to work to decrease their resource unemployment, gradually reaching to full employment. More employment means higher productivity and better income which leads to a better life style. For employment of resources new and innovative projects have to be undertaken, industries need to be established, infrastructure has to be built and all this requires a lot of capital. Employment of resources requires investment in production activities that is, manufacturing industries. Private sector needs to play a supportive and sometimes leading role to establish the economy by investing in new projects (Kalirajan and Singh, 2009) and government should support these ventures by providing appropriate infrastructure for the industry to grow.

The basic motive behind any investment, made by the corporate sector, is to earn profit (Kyereboah-Coleman, 2007). It is among the goals of the organization to maximize shareholders' wealth and generate enough profits to continue the business and to grow further in future. Performance of the firm is affected by multiple external and internal factors. It is important to note here that the internal factors are firm specific while external factors can be same for all or most of the firms. The external factors include market preferences and percep-tions, country rules and regulations, and economy of the country. The market and laws are same for similar businesses but different across industries. Economy impact is same for all industries but is nonetheless an important and un-ignorable determinant of firm performance.

Economic condition

Economic condition of the country can affect a firm's performance on multiple fronts. Cost of borrowings can negatively influence the firm's capability to generate finances and invest in projects (Ntim, 2009). Prices of utilities, high costs associated with plant and machinery due to either deterioration of currency or import costs, high inflation rate and low income level of people can decrease the demand for industrial goods and hence negatively impact the firm's performance (Forbes, 2002). This leads to our first two hypotheses;

H1: Inflation rate has a negative impact on firm performance.
H2: Per capita income has a positive impact on firm performance.

Corporate governance

Corporate governance practices are the structures and behaviors that guide how a business entity sets its objectives, develops strategies and plans, monitors and reports its performance, and manage its risk (Reddy, 2010).

Researchers are also of the view that good corporate governance practices enhance the performance of the firm (Chugh et al., 2009). There are two models of corporate structure shareholder model and stakeholder model. Shareholder model focuses on the wealth creation of owners while stakeholder model covers broader aspect and concerns the welfare of all stakeholders and overall firm performance (Maher and Andersson, 1999). There are five principles of corporate governance (Bocean, 2001);

(1) Protection of shareholders' rights
(2) Equitable treatment of shareholders
(3) Protection of stakeholders' rights
(4) Proper disclosure and transparency
(5) Fulfillment of responsibilities by board (IFC, 2009)

A study conducted by Javed and Iqbal (2007) explored impact of corporate governance on firm performance by creating indices for board characteristics, transparency and disclosure, and shareholder and ownership characteristics. Results of the study indicate a significant relation between indices and performance except for transparency and disclosure. Another recent research conducted by Yasser et al. (2011), tested for board characteristics, also support the previous findings. So we hypothesize;

H3: Better corporate governance practices lead to better firm performance.

Ownership structure

Division of Ownership into types rests on the dimension that is, separation of ownership and control. Berle and Means developed a dichotomy of ownership and identified two types namely, Owner-controlled firms and Managerially-controlled firms. McEachern found it to be insufficient for explanation of ownership structure and its impacts, so he identified three types adding Externally-controlled firms (cited by Ugurlu, 2000)

(i) Owner controlled firms are the ones where the managers are the dominant shareholders.
(ii) Externally controlled firms are the ones where the managers are not dominant shareholders.
(iii) Managerially controlled firms are the ones in which no dominant shareholder exists.

According to agency theory if managers of a firm also have ownership stake they are most likely to maximize shareholder wealth (Dutta, 1999). Managerial risk aversion and constraints on wealth, limit the ownership of managers. And ownership can become costly for more diversified managers (Jensen et al., 1992). Number of tradable shares is inversely related to inside ownership (Lin et al., 2011) as most of the shares owned by insiders are restricted from trading (Born, 1988).

Through greater monitoring the negative and positive impacts of ownership concentration can be equated, and some time benefits can over weigh the negativities (Kaserer and Moldenhauer, 2008). Insider ownership is negatively related to foreign institutional ownership (Ugurlu, 2000).

Agency conflict is an important problem associated with ownership structure. There are two agency problems, 1st agency problem is the one between managers and shareholders and is dominant in the firms having low inside ownership. Whereas, 2nd agency problem is between the large shareholders and small shareholders, this type is dominant in the firms where ownership is concentrated in blocks (Bohren et al., 2009). High inside ownership also reduces the agency conflict and information asymmetry (Ugurlu, 2000) which results in lower capital signaling needs.

According to a study in 2000 done by Ang et al. agency costs are higher when outsiders manage the firm, and are inversely related to inside ownership concentration but directly related to outside ownership. High inside ownership is associated with increased level of R&D, which leads to the 2nd agency conflict (Bathala et al., 1994 cited by Ugurlu, 2000). Institutional and concentrated outside ownership improves monitoring and helps reducing the agency conflict (Khan, 2006) but high R&D becomes more costly for external monitors (Jensen et al., 1992).

Ownership structure of a firm is influenced by some factors. Some scholars found that outside ownership concentration increases with the quality of law while others reported a varying relation between quality of law and size of inside ownership (Burkart and Panunzi, 2005). However there is a unified opinion regarding the impact of size of firm on the ownership structure (Jensen et al., 1992). Composition of board of directors also affects the type of major shareholders (Ugurlu, 2000). Short-term profitability of the firm is found to have a positive relation with institutional ownership (Ugurlu, 2000).

Ownership structure of a company is a very important factor which influences the company in multiple ways. Inside ownership concentration is directly associated with financial constraints of the firm, this association is weakened by institutional ownership (Lin et al., 2011). Some studies have found that outside ownership concentration leads to restructuring and downsizing of the firm (Ugurlu, 2000).

Inside ownership is also positively related to the growth of the firm (Bohren et al., 2009) but inversely related to its size (Jensen et al., 1992). Inside ownership positively affects corporate performance (Kaserer and Moldenhauer, 2007). Inside ownership has great impact on the financial choices of managers while individual ownership is unlikely to influence the choices (Dutta, 1999). The impact on the debt policy is still ambiguous because of conflicting findings of scholars. Some scholars report a positive relation between inside ownership and debt (Dutta, 1999) while others report a negative relation (Jensen et al., 1992) (Theis and Casey, 1999) and according to Ugurlu (2000), debt is not influenced by inside or institutional ownership. According to entrenchment hypothesis managerial controlled firms have lower debt ratios as compared to institutionally controlled firms (Ugurlu, 2000).

Ownership structure of firm is also found to have a great impact on the performance. The phenomenon has been empirically tested on various occasions that internal ownership results in long-term firm performance (Reddy, 2010). And concentrated ownerships and institutional ownerships lead to better control and monitoring of the board of directors and somehow force them to undertake profitable projects to ensure future earnings (Bhagat and Bolton, 2008). However small shareholdings by public do not support long-term plans, these owners are mostly interested in the short-term profits and not the overall growth of the company and same is the case for small or no internal ownership. So, the ownership structure should be carefully balanced for a firm to perform well. We hypothesize;

H4: Inside ownership negatively impacts firm performance.
H5: Blockholdings positively impact firm performance.

Capital structure

Every industry requires a substantial amount of

resources, whether it is land, labor or capital employment of all required finances. These finances can either be generated internally (retained earnings) or hired from outside sources (loans and bonds). The decision of selection of the source of finance is based on the cost associated with them and the capital structure of firm. These costs can be monetary or non-monetary.

Capital structure is also an important factor that determines the performance of a firm. Capital structure refers to the ratio of debt and equity financing. In case if more debt financing the company has to face certain bankruptcy risk, but there are also some tax and monitoring benefits associated with debt financing (Su and Vo, 2010). It also mitigates the agency conflict by reducing the free cash flow of the firm. There should be an appropriate capital structure that generates the maximum profit for the organization, as too less equity financing increases the control of the owners to a large extent (Abu-Rub, 2012).

In case of internally generated finances, it is said that these have the highest opportunity cost (Lewellen and Lewellen, 2004) for the firm because retainment of profits can affect share holder trust, because it would otherwise have been distributed as dividend. Dividend announcements have a significant impact on share prices (Akbar and Baig, 2010). As far as external borrowings are concerned they are considered to be the cheapest source of financing because of the tax benefits. But they do still have certain costs like interest payments and it is widely accepted that the cost of external funds is directly proportional to the amount of these funds also while borrowing the capital structure policy of the firm has to be kept in mind.

Another important factor which influences the generation of funds is the financial position of the corporation (Havemann and Webster, 1999). Firstly, to invest through retained earnings the corporation must generate enough profit that can satisfy its owners and fulfill the investment demands. Secondly, creditors like to invest in profitable corporations and projects (Amidu and Hinson, 2006); they tend to invest in corporations that can, to some extent, ensure the payment of their liability. This leads to our hypotheses;

H6: High ratio of debt leads to high performance.
H7: Short term debt is negatively related to firm performance.
H8: long term debt is negatively related to firm performance.

Risk management

Risk management of a firm may also impact its performance. Risky firms tend to attract only risk taking investors. The relationship of risk and returns has to be managed so that the investors do get the return associated and expected with the risk they are bearing.

Leading to our final hypotheses;

H9: Business risk has a positive impact firm performance.
H10: Firm risk is positively associated with firm performance.

Firm characteristics and policies

Certain firm characteristics are associated with high performance of firm. These include size (Love and Rachinsky, 2007), growth rate, dividends, liquidity (Gurbuz et al., 2010) and sales (Forbes, 2002). The forms that have better growth rate can afford better machinery, and then gradually the assets and size of the firm will increase. Large firms attract better managers and workers who in turn contribute to the performance of the firm. So, both firm and its people support each other's goals (Succuro) (n.d.).

Although many studies have been conducted on the individual determinants of firm but a very few have modeled all the factors. There is a much larger gap for the developing economies (Maher and Andersson, 1999). A few studies have been conducted in Pakistan on firm performance determinants; one was conducted in 2010 on the effects of capital financing patterns on firm performance. Another study was conducted by Yasser et al. (2011) which investigates the effect of board characteristics on firm performance. Wahla et al. (2012) analyzed the impact of ownership structure on firm performance. There is no study up till now to have modeled various determinants of firm performance for Pakistani firms, this study attempts to fill this gap of empirical research.

RESEARCH METHODOLOGY AND DATA

This section discusses the research and data collection methodology.

Method

We propose to analyze the non-financial firms listed in 100 index of Karachi stock exchange for five year period, 2007 to 2011. Empirical analysis will be done on panel data, according to researchers it controls for individual heterogeneity and multi-colliniarity (Kyereboah-Coleman, 2007). Fixed effect or random effects model whichever is appropriate will be used to find the results. Two models are estimated in the study, one for performance and other for shareholders' return:

ROE = α + β1Income + β2 Inflation+ β3 Blockholding + β4 Inside ownership + β5 Debt-to-equity+ β6 Long-term debt to total assets + β7 short-term debt to total assets + β8 Firm size + β9 Current ratio + β10 Business risk + β11 Firm risk + εi   (Model 1)

SHR = α + β1Corporate governance + β2 Blockholding + β3 Inside ownership + β4 Long-term debt to total assets + β5 Firm size + β6 Dividend yield + β7 Business risk + β8 Firm risk + εi   (Model 2)

Here, α and β1 to β11 are coefficients, Income, inflation, corporate governance, Blockholding, inside ownership, leverage, long-term debt to total assets, short-term debt to total assets, firm size, current ratio, dividend yield, business risk and firm risk are set of explanatory variables, and εi is the error term.

Variables

Firm Performance: The dependant variable is measured using following variables.
Return on Equity (ROE): It is calculated as net income divided by common equity. The ratio is used to measure profitability of the firm in terms of its equity investments, as used by Yasser et al. (2011) for Pakistani firms.
Share holder Return (SHR): It is calculated by adding annual share price and dividend per share of the year. Dividend per share is calculated by dividing dividend paid by number of shares. And annual share price is calculated by averaging the standard daily returns of the firm. This variable is used to measure share holder return as done by Gregg et al. (2012) for firms of UK.
Economic condition: two economic indicators are included in this study as explanatory variable, as done by Forbes (2002).
Inflation: core annual inflation rate is taken to measure the impact of annual decline in the purchase power of currency.
Income per capita: constant factor per capita income is taken as a measure to analyze the impact of change in real income of people.
Corporate governance: dummy variable is created where registration with Pakistan institute of corporate governance is used as proxy for measuring corporate governance compliance, as done by Gurbuz et al. (2010).
Ownership structure: ownership structure is measured using two groups of variables, as done by Ugurlu (2000).
Blockholding: In the first group outside ownership concentration is measured. It uses percentage of ownership of shareholders with more than 10% holdings.
Inside ownership: The second group measures inside ownership as percentage of shares held by directors, CEO and their families.
Capital structure: we use three ratios to measure this variable.
Debt-to-equity: the ratio is obtained by dividing total debt by total equity. We use this measure to check the impact of debt ratio in a firm's capital on its performance as done by Ntim (2009).
Long-term debt to total assets: the ratio is calculated as long-term debt divided by total assets. We use this measure to check the impact of asset financing done through long-term debt on the performance of firm.
Short-term debt to total assets: the ratio is calculated as short-term debt divided by total assets. We use this measure to check the impact of asset financing done through short-term debt on the performance of firm.
Risk management: two variables are used in the study to as measures of risk;
Business level risk: it is calculated as standard deviation of return on asset of firm for past five years. The ratio is used by Reddy (2010).
Firm level risk: it is calculated as standard deviation of share price of firm for past five years. The ratio is used by Bhagat and Bolton (2008).
Firm policies and characteristics: four control measures are added to the study;
Dividend yield: the ratio is calculated as dividends divided by stock price. We use this ratio as a proxy to measure the dividend policy as used by Reddy (2010).
Size of firm: size is measured as natural log of total assets. Gurbuz et al. (2010) found that size of the firm is an important factor affecting the firms' performance.
Sales growth (SG): The value is obtained by subtracting preceding year's sales from current year's sales and dividing the figure by preceding year's sales. The variable measures the growth in sales of the corporation during the year. It is used to measure company growth as done by Peng (2004).
Current ratio: the ratio is calculated by dividing current assets by current liabilities. The ratio is used as measure of liquidity of firm as done by Gurbuz et al. (2010).
Market capitalization: the value is obtained by multiplying share price with the outstanding shares. It is used by Brav et al. (2008).

Data and sample

Sample of 60 was selected from the population of 100 firms listed in KSE-100. Only the non-financial firms were observed for the study and they were selected on the basis of data availability. The sample contained 9 firms each from oil and gas, and chemical industry, 5 each from general industries, food producers, electricity and personal goods industries, 4 from construction and materials industry, 3 from automobile and parts industry, 2 each from gas, water and multi utilities and pharma and biotech industries, and 1 each from leisure goods, tobacco, household goods, support services, media, fixed line communication, travel and leisure, Technology, hardware and equipment, electronic and electrical equipment.

Data was collected from Pakistan economic survey in 2011 for economic indicators. For corporate governance variable was obtained from PICG, and for ownership variables the values were calculated from the company annual reports, the data for the rest of the variables was taken from balance sheet and annual report analysis done by KSE.

EMPIRICAL ANALYSIS

The section presents the empirical findings and analysis of the data.

Descriptive statistics

The descriptive statistics of dependent variables and explanatory variables by using SPSS are reported in Table 1. It shows the average indicators of variable computed from the financial statements and deviations from those averages.

Average return on equity indicates that firms are earning 32.8% on their equity capital. While the average return a shareholder was getting was 322.7 rupees. On analyzing the economic indicators we find that the average inflation rate during the observed period was 14.03 and income per capita was 33725.43.

Mean of corporate governance dummy was 0.45, indicating that less than half of the analyzed firms were member of PICG (Pakistan institute of corporate governance).

Regarding the ownership structure we find that average inside ownership was 15.11% with standard deviation of 23.9 and average blockholdings were 45.51% with stan-dard deviation of 31.82, indicating that most of the shares of firms in Pakistan are being held by blockholders.

After the analysis of capital structure we found that

Table 1. Means, standard deviations of variables (N=290).

Variable	M	SD
Return on equity	32.81	60.85
Shareholders' return	322.708	547.88
Income per capita	33725.432	681.16
Inflation	14.03	4.5
Corporate Governance	.4514	.477
Block holders	48.51	31.82
Inside ownership	15.11	23.96
Debt-to-equity ratio	1.40	3.42
Short-term debt to assets	99.75	138.64
Long-term debt to assets	72.066	196.19
Business risk	7.35	6.89
Firm risk	67.609	100.02
Sales growth	5.54	62.16
Size	9.73	1.65
Current ratio	2.02	3.46
Market capitalization	142393.63	1308323.28
Dividend yield	7.66	9.30

debt-to-equity ratio on average was 1.4 with standard deviation of 3.42, indicating that financing of firms is based on leverage rather than equity. Then we analyze short-term debt to total assets and long-term debt to total assets ratios and find that on average firms tend to use short-term debt as compared to long-term debt.

Business risk of firms on average was 7.35 with standard deviation of 6.89, while the firm risk average was 67.60 with standard deviation of 100.02.

Average firm size was 9.73, and average growth in sales was 5.54. The current ratio mean was 2.02, indicating that firms are keeping high liquidity. Average market capitalization was 142393.63 and mean of dividend yield was 7.66.

Correlation analysis

The correlation results are also reported in table 2. Matrix shows the relationship or association between the dependent variables and explanatory variable. The results of correlation matrix are as follows.

When return on equity is considered as performance measure, Pearson correlation test shows positive significant relationship between firm performance and income per capita, blockholding, debt-to-equity, business risk, firm risk, firm size and dividend yield. While the relationship of performance with inflation, inside ownership, long-term debt to total assets, short-term debt to total assets, and current ratio is negatively significant.

And the relationship of performance with other variables is insignificant. Where corporate governance and sales growth have positive impact on performance

while market capitalization has a negative effect.

With shareholders' return as performance measure, the correlation between firm performance and corporate governance, blockholding, business risk, firm risk, firm size, sales growth and dividend yield is positively significant, while a negatively significant relation is observed between firm performance and income per capita, inside ownership, and long-term debt to total assets. Impact of inflation, and current ratio on performance was negatively insignificant. And the effect of debt-to-equity, short-term debt to total assets and market capitalization is positive on firm performance but is insignificant.

All the insignificant variables were excluded from further analysis.

Fixed effect model results

Haussmann test was conducted to decide between fixed effect and random effects models. For both the models the values for random effects model were insignificant, for model one the p-value of chi^2 was 0.08 and for model two it was 0.1, pointing towards the significance of fixed effects model. Fixed effect model was applied for both performance measures separately. Initially the test was conducted for all the variables showing significant correlation but later on the insignificant variables in the model were also excluded and only the significant variables were included in the final models.

Beta coefficients of model 1 are presented in Table 3. In this model return on equity was taken as the measure of firm's performance. Model r-square was 0.78 with an f-statistic of 14.09 significant at 0.00. According to the

Table 2. Correlations between independent and explanatory variables (N=290).

	ROE	SHR	CG	IN	INF	BH	IO	D-E	S-A	L-A	SG	S	CR	MC	DY	BR	FR
ROE	1																
SHR	0.42*	1															
CG	.01	.12*	1														
IN	.20*	.06	-.01	1													
INF	-.18**	-.01*	.00	.67**	1												
BH	.15**	.27*	.04	-.10	-.03	1											
IO	-.13*	-.23**	-.14	.12	.04*	-.67	1										
D-E	.63*	.05	.03	-.07	-.14	-.13	.05	1									
S-A	-.05*	-.10	-.06	-.01	.02	-.14	.15	-.00	1								
L-A	-.17*	-.14*	.01	.23	.11	-.08	.01	-.12	.36	1							
SG	.04	.04*	-.05	.06	-.00	.04	-.04	.00	-.06	-.03	1						
S	.08*	.20*	.42**	.01	-.01	.13	-.21*	-.11	.04	.12	-.10	1					
CR	-.01*	-.05*	.07	-.22**	-.14	-.18	.19*	.03	-.18	-.11	-.01	.04	1				
MC	-.02	.05	.10	.05	.11	.02	-.06	.01	-.06	-.02	-.01	.11	-.02	1			
DY	.26*	.63*	-.02	-.17	-.08	.20**	-.16	.03	.03	-.09	-.03	-.10	-.04	-.03	1		
BR	.14**	.15**	.03	.22	.12	-.05	.20	.04	-.02	.00	.01	-.01	.09	-.07	.03	1	
FR	.39**	.76**	-.16*	.04	.07	.18*	-.13	.06	-.11	-.16	-.03	-.29	.05	-.05	.48	.22	1

*$p \le .05$; **$p < .01$.

Here CG=Corporate governance, IN=Income per capita, INF=Inflation, BH=Blockholding, IO=Inside ownership, D-E=Debt-to-equity ratio, S-A=Short-term debt to total assets, L-A=Long-term debt to total assets, SG=Sales growth, S=Firm size, CR=current ratio, MC=Market capitalization, DY=Dividend Yield, BR=Business risk, FR=Firm risk.

Table 3. Fixed effect model analysis summary for income per capita, inflation, blockholdings, inside ownership, debt-to-equity ratio, short-term debt to total assets, long-term debt to total assets, business risk, firm risk and firm size predicting ROE (N=290).

Independent variable	B	SEB	β	Probability of t-stat
Constant	236.225		2.038	0.044
Income	.007	.167	2.042*	0.043
Inflation	1.012	-.021	-.285*	0.049
Blockholding	.146	.138	1.814*	0.045
Inside ownership	.202	-.021	-.264*	0.05
Debt-to-equity ratio	.026	.621	11.014**	0.00
Short-term debt to total assets	.027	.116	-1.868*	0.05
Long-term debt to total assets	.019	-.048	-.777*	0.05
Business risk	.525	.101	1.696*	0.048
Firm risk	.043	.336	4.745**	0.00
Size	2.417	.079	1.195*	0.03
Current ratio	1.069	-.066	-1.082*	0.038

Note. $R^2 =0.78$; $F (11, 290) =14.09$, $p < .05$
*$p \le .05$; **$p < .01$.

results income per capita boosts firm's performance by 2.04 times. This can be explained by the fact that whenever there is an increase in income level of people the demand for goods also increases which contribute to firm's profits. Inflation rate had a negative impact on performance, because when inflation rises so do the costs and expenses of firms reducing the income. The results are in line with research conducted by Forbes (2002).

When we analyze the impact of ownership structure we see that blockholdings have a positive impact while inside ownership negatively influences the firm's profits. Blockholdings increase monitoring and control which motivates firms to invest in more profit generating projects. The results are in line with studies conducted by Reddy (2010) and Ntim (2009).

Then we see the impact of capital structure on firm performance. It is evident from the results that debt-to-

Table 4. Fixed effect model analysis summary for corporate governance, block holdings, inside ownership, long-term debt to total assets, business risk, firm risk, firm size and dividend yield, predicting SHR (N=290).

Independent variable	B	SEB	β	Probability of t-stat
Constant	1865.058		1.205	0.13
Corporate Governance	6.15	-.035	.656*	0.046
Blockholdings	1.150	.030	.444*	0.05
Inside ownership	1.592	-.072	-1.029*	0.03
Long-term debt to total assets	.151	.015	-.285*	0.04
Business risk	4.145	.048	.929*	0.035
Firm risk	.340	.579	9.328**	0.00
Size	19.086	.004	.075*	0.05
Dividend yield	.001	.321	5.661**	0.00

Note. $R2 = 0.67$; $F (8, 290) = 20.99$, $p < .05$
$*p \leq .05$; $**p < .01$.

equity ratio has a positive impact on performance, referring to the fact that more debt pushes the firms' directors to develop more profit generating strategies in order to satisfy the existing creditors and also to attract new investors. The result is line with the study of Ntim (2009). Long-term debt to total assets and short-term debt to total assets had a negative influence on firm performance, indicating that in case of more financing of assets through these sources the firms' profits may suffer, because of heavy interest payments.

Business risk and firm risk both have a positive influence on firm performance. More risk leads to more return up to a point. For the observed period the firms have managed their risk so that it has not reached that limit. The results are supported by the study of Reddy (2010).

Firm size positively impacts its performance while the liquidity of firm's assets will negatively influence its performance. High liquidity means that too much assets are not being properly utilized, if this liquid were invested it may earn more profits. The results are supported by the research conducted by Gurbuz et al. (2010).

Beta coefficients of model 2 are presented in Table 4. In this model shareholders' return was taken as the measure of firm's performance. Model r-square was 0.67 with an f-statistic of 20.99 significant at 0.00. From the results of fixed effect model we find that corporate governance has a positive impact on firm performance. This indicates that firms listed in PICG have better profit distribution policies. The result is supported by the investigation of Gurbuz et al. (2010), which used the listing of corporate governance index as measure for corporate governance practices in their study.

After the analysis of impact of ownership structure on firm performance we find that blockholding had a positive while inside ownership had negative effect on performance of firms. This can be because of better monitoring from blockholders. And also due to the negative relation of inside ownership with dividends which directly contribute to shareholder return. The results are in line with studies conducted by Reddy (2010) and Ntim (2009).

For capital structure only long-term debt to total assets had a significant impact on shareholders' return. The reason for this negative influence is the long term compounding interest payment of debt, which reduces the company's profits and hence the return to shareholders.

Both business risk and firm risk have positive influence on return. Because proper risk management leads to higher profit for firms and hence better dividends to shareholders. Also the return for riskier investments is higher. The results are in line with the study of Reddy (2010). Firm size has a positive impact on shareholder return and dividend yield is also directly influential on the return. The results are supported by the research conducted by Gurbuz et al. (2010) and Reddy (2010).

Conclusion

Many researchers have conducted studies on financial performance of firms and have proposed various theories to explain the variation. But the issue is still under debate. We attempt to answer the following questions: what are the determinants of the financial performance of a firm?

Fixed effect model is applied on 60 non-financial companies listed in KSE 100-index of Pakistan. Our results show that economic factors, ownership structure and risk management have a major impact in determination of the financial performance of firms in Pakistan, if return on equity is considered as performance measure. Similarly if we consider financial performance in terms of shareholder return, which in most cases is the main concern of shareholders for it can also effect the share prices (Csanad, 2009), corporate governance, ownership structure, capital structure and risk management have

major influence on firm performance. This means that firms having proper risk management and capital structure policies will be more profitable for too much financing done through long-term debt will reduce earnings by increasing the mark-up expenses. Similarly firms with well maintained ownership structures will also earn more than their counterparts because of a proper mix of monitoring and control. Economic factors are also important contributors to firm performance but are external to firms' control, so, proper measures should be taken while developing strategies and goals to minimize the negative impact of these factors and get maximum out of the positive ones. From the findings of this study we can say that firms having proper corporate governance structures and monitoring will be more profitable for shareholders. The results are in line with the previous studies. Overall we can conclude on the basis of the empirical findings of this study that firms having well governed ownership structure, capital structure, and proper risk management tend to have a better financial performance. Also corporate governance practices should be improved to increase the worth of the investors' wealth.

POLICY IMPLICATIONS

From the findings of the paper we can say that it would be advisable for the economic decision makers to consider the impact of their decisions on the corporate sector before finalizing them, especially the decisions related to the matter of inflation. And for the managers there are two important policy considerations. First, short term debt should be preferred over long term debt to minimize the negative impact of debt financing. And second, the negative impact of inside ownership on shareholders return should be analyzed before offering stock bonuses.

LIMITATIONS AND RECOMMENDATIONS

This paper contributes to the literature of determinants of firm performance, where we find significant effect of economic factors, corporate governance, ownership structure, capital structure and risk management on profitability of firms in case of emerging market of Pakistan. There is a need to further analyze with respect to effects and factors that can determine the performance of firm. Further researcher may extend the present study by the use of generalized model to examine the behavior of economic and other non-financial factors. From the findings of this paper it would also be useful to consider the future research on the share prices and their relation with corporate governance practices.

REFERENCES

Abu-Rub N (2012). Capital structure and firm performance; Evidence from Palestine stock exchange. J. Money Invest. Bank. 23:109-117.

Akbar M, Baig HH (2010). Reaction of Stock Prices to Dividend Announcements and Market Efficiency in Pakistan. Lahore J. Econ. 15(1):103-125.

Amidu M, Hinson R (2006). Credit risk, Capital Structure and lending decisions of banks in Ghana. Banks and Bank Systems, Volume 1.

Ang JS, Cole RA, Lin JW (2000). Agency Costs and Ownership Structure. J. Finance 55(1):81-105.

Bhagat S, Bolton B (2008). Corporate governance and firm performance. J. Corporate Financ. 14:257-273

Bocean CG (2001). Corporate governance and firm performance.

Bohren O, Josefsen MG, Steen PE (2009). Dividends and stakeholder conflicts: A cleaner test.

Born JA (1988). Insider Ownership and Signals: Evidence from Dividend Initiation Announcement Effects. Financ. Manage. 17:38-45

Brav A, Jiang W, Partnoy F, Thomas R (2008). Hedge fund activism, corporate governance and firm performance. J. Financ. 63(4):1729-1775

Burkart M, Panunzi F (2005). Agency conflicts, ownership concentration, and legal shareholder protection. J. Financ. Intermediation 15(1):1-31.

Chugh LC, Meador JW, Kumar AS (2009). Corporate governance and firm performance: evidence from India. Journal of finance and accountancy.

Csanad (2009). Earnings per Share-Interpreting EPS. Retrieved from http://hubpages.com.

Dutta AS (1999). Managerial Ownership, Dividend and Debt Policy in the US Banking Industry. Manag. Financ. 25(6):57-68.

Forbes KJ (2002). How do large depreciations affect firm performance? Palgrave Macmillan 49(1):214-238.

Gregg P, Jewell S, Tonks I (2012). Executive pay and performance: Did bankers, bonuses cause the crises? Int. Rev. Financ. 12 (1):89-122.

Gurbuz AO, Aybars A, Kutlu O (2010). Corporate governance and financial performance with a perspective on institutional ownership: empirical evidence from Turkey. J. Appl. Manage. Account. Res. 8:21-38.

Havemann R, Webster P (1999). Does Ethical Investment Pay?

IFC (2009). Corporate governance: the foundation for corporate citizenship and sustainable businesses. Global corporate governance forum.

Javed AY, Iqbal R (2007). The relationship between corporate governance indicators and firm value: A case study of Karachi stock exchange. MRPA Paper No.225, available at http://mpra.ub.uni-muenchen.de/2225.

Jensen GR, Solberg DP, Zorn TS (1992). Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies. J. Financ. Quant. Anal. 27(2):247-263.

Kalirajan K, Singh K (2009). The Impact of Globalization on Employment Generation in India: The case of emerging 'Big Shopping Malls and Retailers'. The Foundation for Advanced Studies on International Development in Tokyo ASARC Working Paper 2009/18.

Kaserer C, Moldenhauer B (2008). Insider ownership and corporate performance: evidence from Germany, RMS (2008)DOI 10.1007/s11846-007-0009-3.

Khan T (2006). Company Dividends and Ownership Structure: Evidence from UK Panel Data. Econ. J. 116(510):C172-C189.

Kyereboah-Coleman A (2007). Corporate governance and firm performance in Africa: A dynamic panel data analysis. International conference on corporate governance in emerging markets. Sabanci University, Istanbul, Turkey, November.

Lewellen J, Lewellen K (2004). Taxes and financing decisions. AFA 2005 Philadelphia Meetings Paper.

Lin C, Ma Y, Xuan Y (2011). Ownership Structure and Financial Constraints: Evidence from a Structural Estimation. J. Financ. Econ. 102:416-431.

Love I, Rachinsky A (2007). Corporate governance, ownership and bank performance in emerging markets: evidence from Russia and Ukraine. Siteresources-worldbank. Working Paper, http://siteresources.worldbank.org/DEC/Resources/Corporate_Governnace

_Ownership_and_Bank_Performance.pdf.

Maher M, Andersson T (1999). Corporate governance: effects on firm performance and economic growth. OECD.

Ntim CG (2009). Internal corporate governance structures and firm financial performance: Evidence from South African listed firms. Department of accounting and finance, University of Glasgow.

Peng MW (2004). Outside directors and firm performance during institutional transition. Strateg. Manage. J. 25(5):453-471

Reddy K (2010). The relationship between corporate governance practices and financial performance in New Zealand: An empirical investigation. The University of Waikato.

Su G, Vo HT (2010). The relationship between corporate strategy, capital structure and firm performance: an empirical study of the listed companies in Vietnam. Int. Res. J. Financ. Econ., ISSN 1450-2887 Issue 50.

Succuro (n.d.). Does good corporate governance really make a difference? Available at www.succuro.com.au.

Theis J, Casey M (1999). An empirical investigation of agency relationships and capital structure of property management firms in the UK. Journal of property investment and finance. MCB university press.

Ugurlu M (2000). Agency costs and corporate control devices in the Turkish manufacturing industry. Journal of economic studies. MCB university press.

Wahla K, Shah ZA, Hussain Z (2012). Impact of ownership structure on firm performance. Evidence from non-financial listed companies at Karachi stock exchange. Eurojournals publishing Inc.

Yasser QR, Entebang H, Abu Mansur S (2011). Corporate governance and firm performance in Pakistan: the case of Karachi stock exchange (KSE)-30. J. Econ. Int. Financ. 3(8):482-491.