American Journal of Economics 2020, 10(1): 29-36
DOI: 10.5923/j.economics.20201001.05

Impact of Economic Parameters of China and Pakistan with Return on Assets and Tobin's Q Using Statistical Techniques

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Abstract The study was proposed to test the relationship between firm performance with size, growth, tax, and business risk. Considering the sample of 60 listed companies from Pakistan and China for a period of seven years spanning from 2007-2013 thereby making 420 observations. Random and Fixed effect panel regression was run based on Hausman specification test on pooled and country-wise data. Tobin's Q and return on assets (ROA) were taken as dependent variables as indicators of firm performance. The data was tested for multicollinearty and its absence was concluded. However, Breusch-Pagan and Wooldridge tests confirmed presence for Heteroscedasticity and autocorrelation, respectively. Thus the regressions were run with the option of *Newey-West* standard errors. The study has found ROA has greater average for Chinese companies, which indicate that Pakistani companies have low accounting performance as compared to Chinese firms. Results also show that China has higher growth rate. The panel data regression elucidated that size, growth opportunity and business risk have significant positive effect over firm performance in both countries' firms. On the other hand, tax had negative effect over performance but the relationship was not statistically significant.

Keywords Firm performance, Return on Asset, Panel data, China, Pakistan

1. Introduction

This study refers to examine performance of industrial units of Pakistan and China, relevant to different sectors, and also compares the results of both countries to check the relationship in firm growth, its size, paid taxes and business risk with overall industrial performance of industries. Pakistan contributes all economic establishments of 90%, With 25% of export earnings and 30% of GDP, The growth of Pakistan in general and, especially in manufacturing sectors reminded more than average and less than very in the recent past, The period from 1960 to 2012 the GDP annual average growth rate is 4.47% only, while manufacture sector with growth rate was approximately 6.3%. Conversely in this identical period mostly 'regional economies rapidly grew with high percentages' and China with phenomenal GDP leading with 9.1% of growth rate. While conferring to IMF, China rank 67th per capita income by GDP (nominal) and 73rd by GDP, Purchasing power parity (PPP) per capita 2018. China has projected 23 trillion Dollar cost of natural possessions, 90% of which rare earth metals and coal. In emerging markets like Pakistan, corporate governance plays a vital role as a part of the public policy. Due to Pakistan China economic corridor, a huge revival has been witnessed in the automobile assemblers in Pakistan; which makes this sector worthy to study. China has potential to globally take over the American economy in next few years and in Pakistan also numerous mega projects will be implemented due to incoming features by China. Significantly Pakistan and China have recently agreed for implementation of Pakistan China Economic Corridor (CPEC) projects, which can be termed as a local economic incorporation elsewhere in the topographical route; it signifies the internal official arrangements and macroeconomic management between Pakistan and China.

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Published online at http://journal.sapub.org/economics

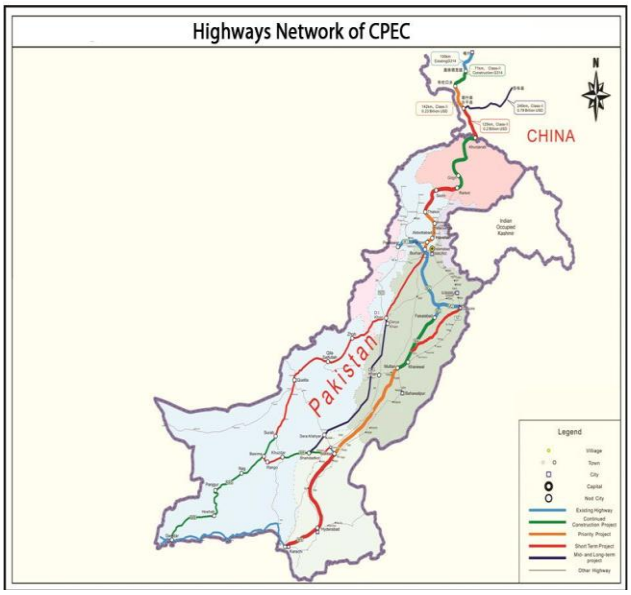

Figure 1. Map of Pakistan and China showing CPEC route

Capital structure (CS) means a compound of various fund sources that a firm is allowed to use to finance, It's all over growth and operations. After publication of [1] in 1958, the matter of great debate became capital structure, which is well-known for "Capital structure modern theory in which they exposed the CS to independently affect the performance of the firm. The great debate then has been started in this part and many research has been done, which is still sustained. Pakistan has lot of issues but it is considered to be a developing country related to unstable micro and macroeconomic conditions, political crises, geographical structures, social behavior, complex tax mechanisms and non-healthy legal systems. Performance of a firm is a vital idea which refers to the manner and way where in which resources of finance offered to a society is to attain the over goals of a society. Entrepreneurship's the basic prerequisite for Pakistan.

However, substantial work on factors done that affects leverage level and that factors have influences on choice of firm and CS such as, age size, growth and risk,. etc., because these factors has impact on the capital structure firm choice. This indicates that CS has excessive effect on performance of a firm and emphasis sizes effect of CS on performance of firm in assessment of textile sector of Pakistan.

The developed entrepreneurship following macro-economic analysis has been founded on advanced thoughts and to supporting firm performance to new techniques. As stated by [2], enterprise can be identified as too many concepts, but three important indicators are; finance, production and marketing. [3] Investigated following three sectors for capital structure including food, manufacture and chemicals for a period, 2008-2012 of Omani industrial companies. They found a positive and significant association amongst risk, tangibility, leverage, and with growth, leverage, profitability they found negative relationship. And they also found that there is no relationship with size. Moreover the effect of size on performance is identified by researchers and found presence of significant relationship [4] as well as negative relationship [5]. Business performance or firm performance is a subset of organizational effectiveness that covers both operational and financial outcomes [6].

The important reason of this study is to focus that no previous work was done for example organization chart, guarantee value of properties, free cash flow, and for Pakistan and China firms, bankruptcy cost and capital structure age as determinants. Therefore this work is the most useful for administrators of the organization and also provides well-organized guideline of capital structure for use of determinants for the purpose to increase performance of the firm. From this study Government authorities, Taxation bodies and policy creators can also get benefit. Therefore, this work can also serve to determination of a rich involvement in the presence of the determinants and literature of Pakistan's firm's capital structure. For the purpose investigation in this study is done to moderate inspiration which has been shifted the firm size, firm growth, firm taxes, firm business risk as the main purpose of study and also examine to check that what kind of relationship is between size, growth, tax, business risk as independent and dependent variables needless to mention macroeconomic analysis for any enterprise is imperative.

Following study is planned as in next section, the applicable literature is discussed which presents various relationships of firm performance with the independent variables. And in section third, testable hypothesis are developed. While in forth part research mentioned methodology is maintained. In fifth part tests, results and discussions are explained relevant to this study and the conclusion of study is presented in sixth part and in last part showed some recommendations along with conclusion to this study.

2. Literature Review

In following section we explore and discus correlated literature which are concerned with the association among performance of firm and size, tax, growth and risk, details of response variables.

Many researchers enlighten capital structure importance, which also is investigated that in what way a company is funded with principal reputation. If a wrong mixed of finance is selected that would create lot of problems for managers and firms. Some researchers showed that tax advantage which cause decrease in firm's performance and increase in leverage. [7] Worked on Turkish banking sector and found positive and significant results of capital structure with size, GDP growth and industry leverage. [8] Investigated that firms with high tendency to modernize are the largest, with great technical power and market segments. [9] Studied Pakistan automobile sector for, 2008-2012 for period. They investigated that leverage are significant and negative

relationship with liquidity and profitability, while leverage has positive but insignificant with earning variability.

[10] Used pooled regression model to explored sector of cement in Pakistan, and found inverse relationship between firm size and leverage. [11] Listed on Karachi stock exchange of Pakistan in 2013, examined textile sector, and showed that size and profitability have negative trends found significant relationship with leverage. [12] Concluded that association between firm performance indicators (PM and ROE) and corporate governance mechanism in automobile assemblers in Pakistan, They also examined importance of company governance in Pakistan by t-test and multiple regression models.

[13] Examined the stock exchange Karachi using registered non-financial firms of Pakistan in period of 2004-2012 and found negative correlation between Leverage and profitability. [14] In Japan concluded that research units are only developed, through the data subject's limitation. On various countries leading a practical study including Jordan Egypt, Bahrain, Qatar, Kuwait, Morocco, UAE, Tunisia, Oman, and to see sights of the "effect of structure ownership on the firm routine". [15] Found that return on equity of firms get a negative relationship with effect of ownership insider, and with influence of block ownership holder get on Tobin's Q positive effect. Examining firms on the stock exchange listed in Vietnam in duration of their performance grounded on their OS (ownership structure), [16] get between ownership and firm performance a non-linear relationship. [17] Investigated that, the crisis of energy has a great effect on performance of firm listed in Pakistan, though (CPEC) China Pakistan economic corridor is probably to solve the energy crises. Food registered firms could have raised capability for production. [18] examined the association among firm performance and CG (corporate governance) based on Pakistan listed 10 firms, did not find a straight relationship among the three corporate governance structures such as including board composition, board size based and audit committee composition depending on the two of variables of performance which are ROA (Return on asset) and NPR (net profit ratio). [19] measured the business environment constraints on the firm performance and he showed the few business constraints effected performance. Other factors such as education, health care matter more than difference in the business environment for firm performance. [20] Suggested that relationship between managerial ownership and firm performance of listed Turkish firms for the period 2004 to 2008. They used panel data analysis that conclude that significant relationship between managerial ownership and firm performance with respect to Tobin's Q. [21] examined the financial performance of the companies with foreign ownership listed on the Istanbul stock exchange using panel data analysis with the sample of 205 non-financial firms for the period 2005 to 2007 and their results conclude that foreign ownership improves firm financial performances in Turkey.

3. Materials and Methods

3.1. Population and Sampling

Our samples consist of data of 60 companies, 30 each from Pakistan and China. These sample firms are comprised of six different sectors (Consumer discretionary, consumer staple, Energy, T & S and utilities, see table 1). These firms are observed from the period of 2007 to 2013, thus comprising of a penal data of 420 observations. The firms in each country are selected using the criteria of the highest market capitalization and the availability of respective firm data over the sample period of 7 years. Data for firm specific variables, country-specific variables and leverage are collected from Capital IQ by Standard & Poor's. In our study the response variables is firm performance and we have considered its two indicators namely return on Assets (ROA) and Tobin's Q. (table 2). The book value of total debt and equity of market value is diving by total asset to obtain Tobin's Q. While independent variable are size of firm and tax paid by firm to government, growth opportunity and Business Risk of the firm. The list of dependent and independent variables taken under consideration for this study is in the following table 2.

For this study the selected number of registered companies are 60 from Pakistan and China which are arranged in different 6 sectors mentioned earlier. That will be studied in time period of 2007-2013. The selection of firms is represented in table 1 below:

Table 1. Sector-wise distribution of selected companies

S.NO	Sector	Number of Companies	Selected Companies
1	Consumer Discretionary	36	18
2	Consumer Staples	22	16
3	Energy	21	06
4	Industries	40	14
5	Telecommunication & services	03	02
6	Utilities	14	04
Total	**……..**	**136**	**60**

3.2. Empirical Model and Proxies Variables

We have used two measures of firm performance namely, Tobin's Q and ROA, and this Tobin's Q is considered as major indicator of performance of a company. In this paper Tobin's Q shows the performance of market measurement of firms. And Return on asset is showing measures of accounting performance.

The purpose to examining more than one substitution for performance in this work is to know whether the explanatory variable enlightened the measures of performance running on the same level or not. Most of the researchers take ROA as measure of performance for accounting and Tobin's Q as market performance measures. For example, [22] used return

on asset which calculated as ratio of net profit to total assets. [23] and [24] investigated that firm's size may influence that's its performance, the firms which are large in size have no capacity and capability. Since in this study try to regulator the variation in firm's operating situation as well as the viable of size in model.

The association between performance as a dependent variable and four independent variables was tested by following models:

$$\text{Tobin Q}_{it} = \beta_0 + \beta_1 Size_{it} + \beta_2 TAX_{it} + \beta_3 Growth_{it} + \beta_4 \text{Business Risk}_{it} + \varepsilon_{it} \quad (1)$$

$$\text{ROA}_{it} = \beta_0 0 + \beta_1 Size_{it} + \beta_2 TAX_{it} + \beta_3 Growth_{it} + \beta_4 \text{Business Risk}_{it} + \varepsilon_{it} \quad (2)$$

Where the coding and explanation of variables is already given in table 2. Before application of Regression Analysis different tests were applied to check multicollinearty Heteroscedasticity, Autocorrelation etc. by using STATA version 12.

Table 2. Coding and explanation of variables considered in the study

Variables	Measurement
Tobin's Q	Tobin's Q is the ratio of the market value of a company's assets (as measured by the market value of its outstanding stock and debt divided by the book value company's assets)
Return on Assets, (ROA)	Net income divided by total assets. Net income is the profit after taxes
Size (SZE)	Firm size is defined as the natural logarithm of total sales.
Tax (TAX)	Effective average tax rate of the year
Growth opportunity (GRW)	Growth opportunity is defined as the market value of total equity over the book value of total equity.
Business Risk (BRSK)	Defined as the standard deviation of first difference in EBIT divided by assets during the sample period.

3.3. Testing of Hypothesis

Firm size is defined as the natural logarithm of total sales. The hypothesis for firm size that, it is positively associated with performance of firm, as bankruptcy costs decrease with size. Therefore, it is predictable that size of firm has positive association with performance. Size influence significance and positive trend result on (ROA) firm performance. So first Hypothesis can be written as:

H1: Firm size is expected to have positive impact on performance of firm.

Occasions of growth are measured by Growth of sales. It is estimated that firms which have great opportunities of growth have performance ratio high, the growth opportunities are expected to have positive affect performance of firm as growth companies are capable to make income from shares. Therefore second hypothesis can be written as:

H2: Firm's performance has negative relation with Tax

A standard deviation of cash flow gives us a measure of business risk of firms which have advanced variation in functioning returns are considered to consume greater return. Therefor the third hypothesis can be tested as:

H3: Firm's performance increase by growth opportunity

We always have the influence of Tax on firm's performance. As the profitability decreases the effective tax rate became higher. And this accrues only that situation when there is a high share of non-detectable expenses or we can say a big firm achieve a higher taxable income in a tax burden. Based on all these discussion, thus our fourth hypothesis is stated as:

H4: Corporate performance has positive relation with risk

Regression model takes the form of random effect models for unstable panel data. And these random effect models well suited in this set of data, Thus it is necessary to regulate the effect of the Industrial sectors on firm performance and the fixed effect model, does not permit to control the effect of the industrial sectors because industrial models do not change with passage of time, That's why not being described in the fixed effect models.

4. Result and Discussion

Table 3. Descriptive Statistics of the selected firms in China and Pakistan

	Pakistan					
	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
Tobin's Q	1.508	1.410	0.227	8.526	2.312	6.000
ROA	0.566	0.164	1.264	0.755	-2.42	27.505
Size	9.831	1.501	6.283	13.91	0.186	-0.033
Tax	0.350	0.177	0.022	1.830	4.863	34.159
Growth	3.771	6.187	-1.72	45.72	3.771	16.796
Bus. Risk	0.064	0.083	-0.01	0.752	3.082	10.410
	China					
Tobin's Q	2.359	1.796	0.395	8.612	1.459	1.793
ROA	0.073	0.074	-0.20	0.427	1.522	7.618
Size	10.01	2.842	0.542	14.86	0.671	0.055
Tax	0.179	0.105	0.000	1.026	2.413	19.49
Growth	4.462	4.270	0.295	27.93	3.017	11.75
Bus. Risk	0.033	0.052	0.001	0.486	5.405	38.57

The result of the model estimation with each performance measured and all samples of observation for the period of 2007-2013 are shown in table 3 with descriptive statistics. The average return on assets for the sample as a whole is 5.6% while the Tobin's Q is about 15.08% of Pakistan and

similarly the average value ROA and Tobin's Q for companies of China is 7.3% and 23.59%, respectively. This indicates that Pakistani companies have low accounting performance as compared to Chinese companies. As China is a developed country, therefore, 44.6% growth rate is highest value as compare to Pakistan, 37.7%. In both tables of Pakistan and China the low standard deviation for the variables ROA, tax and business risk, highlights the point that variables are less risky in their applications in the current study.

4.1. Testing for Multicollinearity

The variance inflation factor (VIF) and Tolerance statistics were used to test Multicollinearty. If the V.I.F is greater than 10 (VIF>10) or Tolerance statistics less than 0.10 indicates trouble with Multicollinearty. Table 3 shows the data for both Pakistan and China comparative results that all the independent variables are having weak multicollinearty which indicate approximately that there is no multicollinearty between independent variables elucidated by the response variable. Results indicates in table 4, all the independent variables had V.I.F less than 10 and tolerance statistic greater than 0.10. The study, therefore, concludes that there is no problem of multicollinearty.

Table 4. Variance Inflation Factor to test for Multicollinearity

	Pakistan		China	
	Tolerance	VIF	Tolerance	VIF
Size	0.917	1.091	0.751	1.331
Tax	0.925	1.081	0.904	1.106
Growth	0.793	1.254	0.754	1.326
Bus. Risk	0.712	1.405	0.934	1.071

4.2. Testing for Heteroscedasticity and Autocorrelation

The Breusch-Pagan test was constructed to test for Heteroscedasticity in the regression models for both subsets of Pakistan and China with ROA and Tobin's Q as indicators of firm performance. The null hypothesis is that residuals are homoscedastic. The test results of Breusch-Pagan test are presented in table 5. It revealed that with a p-value below 0.05 for both the models with Tobin's Q, and ROA; the significant chi-squares confirm the presence of Heteroscedasticity in the data.

Table 5. Breusch-pagan Test for Heteroscedasticity

Pakistan		China	
Tobin's Q	ROA	Tobin's Q	ROA
52.26	63.69	83.54	143.61

For testing of autocorrelation in a panel data setup, we have used Wooldridge test [25] to identify the occurrence of autocorrelation. The command for this test in STATA is:

Xtserial dep.Var ind.Var

The null hypothesis for this test is that there is absence of serial correlation in the data. The results obtained from Wooldridge test are given in table 6. The result confirm the presence of autocorrelation in pooled as well as country specific models.

To overcome this issues of Heteroscedasticity and autocorrelation present in the data sets, we have opted for *Newey-West* standard error in STATA. It is to bring in notice of readers that to make *Newey-West* work in panel data setup is to run *–newey-* option with the *-force-* option in STATA, without the *-force-* option, STATA issues an error message and refuses to calculate the estimator. The coding is given as under:

. Newey dep.Var ind.Var, lag(number) force

Table 6. Wooldridge Test for Autocorrelation

Panel Data	Wooldridge Test value	P-value	Decision
Pooled	F(1, 59)= 93.790	0.0000	Autocorrelation Present
Pakistan	F(1, 29)= 27.755	0.0000	Autocorrelation Present
China	F(1, 29)= 74.715	0.0000	Autocorrelation Present

4.3. Factors of Firm Performance

After having solution for controlling for Heteroscedasticity and autocorrelation, next we have run the panel regression by choosing among fixed effect (FE) model and random effect (RE) model. This selection was done by applying Hausman specification test. The null hypothesis under the test is that the random effect is appropriate. In case of Tobins's Q, Hausman specification test was accepted in favor of random effect (RE) over fixed effect (FE) for pooled as well as Pakistan data. On the other hand, Hausman specification test confirmed the superiority of FE model over RE model for all regressions having ROA as dependent variable and also for China in case of Tobin's Q model.

Table 7 and table 8 represent findings of micro-level firm specific factors affecting firm performance (taken as Tobin's Q and ROA, respectively). The regression has been run on pooled observations as well as country-specific observations. The results of Hausman specification test to choose between RE and FE, its p-value, Wald chi-square for RE and value of F-test for FE are also reported.

Comparing the results of pooled and country specific models from tables 7 and 8, it is observed that, no matter the performance has been assessed by Tobin's Q or ROA, size has significant positive affect on firm performance throughout. Therefore, we accept our first hypothesis i.e. *H1: Size has positive influence on firm performance.*

Table 7. Determinants of Firm Performance by **Tobin's Q** for Pakistan and China using annual average data of 2007-2013. The independent variable is Tobin's Q and the regression coefficients are reported for independent variables defined already in methodology section. *Newey-West Standard errors* are reported. The superscripts *, ** and *** indicate statistical significance at 10%, 5% and 1% level, respectively. Wald chi-square for random effect (RE) and F-test for fixed effect (FE) models are given to show the strength of model-fit

Variables	Pooled Data		Pakistan		China	
	Coefficient	Newey-West Std. Error	Coefficient	Newey-West Std. Error	Coefficient	Newey-West Std. Error
Size	0.259***	0.048	0.023**	0.011	0.340***	0.069
Tax	-1.094***	0.345	-0.367	0.312	-0.806	1.109
Growth	0.125***	0.030	0.080***	0.028	0.179***	0.046
Business Risk	3.335**	1.606	2.585**	1.303	2.219**	1.110
Constant	4.444***	0.588	2.235***	0.667	4.786***	0.828
No. of Observations	420		210		210	
Hausman specification test	6.82		1.24		15.91	
P-value (Hausman)	0.146		0.872		0.003	
Wald chi-square (RE)	31.82***		18.13***		-	
F-test (FE)	-		-		5.05***	

Table 8. Determinants of Firm Performance by **ROA** for Pakistan and China using annual average data of 2007-2013. The independent variable is ROA and the regression coefficients are reported for independent variables defined already in methodology section. *Newey-West Standard errors* are reported. The superscripts *, ** and *** indicate statistical significance at 10%, 5% and 1% level, respectively. Wald chi-square for random effect (RE) and F-test for fixed effect (FE) models are given to show the strength of model-fit

Variables	Pooled Data		Pakistan		China	
	Coefficient	Newey-West Std. Error	Coefficient	Newey-West Std. Error	Coefficient	Newey-West Std. Error
Size	0.023**	0.011	0.125***	0.018	0.008**	0.003
Tax	0.017	0.055	-0.692*	0.414	0.794	1.031
Growth	0.005*	0.003	0.085***	0.017	0.007***	0.002
Business Risk	0.591***	0.169	0.686***	0.225	0.394**	0.203
Constant	0.065**	0.038	0.283***	0.096	-0.108**	0.049
No. of Observations	420		210		210	
Hausman specification test	76.25***		56.81***		14.88***	
P-value (Hausman)	0.000		0.000		0.005	
Wald chi-square (RE)	-		-		-	
F-test (FE)	12.69***		13.55***		8.16***	

Our combined and country based models show significant positive impact on firms' performance, which shows that higher value of total assets improves the firms' performance. The positive effect of size on firm performance is plausible because large sized firms are more diversified and specialized in operations and thus enjoy the economy of scales. As size has been measured by the natural log of sales which is one of the major determining factors of firm performance. Previous researches advocate that firm's size influence larger firms and enjoy number of capabilities such as economies of scales, which may influence financial performance ([26] & [27]). Larger firms have lesser risk involved in its operations, therefore have lowest bankruptcy cost. So, it is assumed that firm's size has a positive impact on firm's performance. The large-sized firms are more diversified with advanced technology and higher market power, all of which could contribute positively to firm profitability ([28] & [29]). On the inverse, [28] argues that after reaching at certain point, firms have a preference for divestiture, from this point onwards, relationship between firm size and firm performance tends curvilinear.

Regarding the effect of tax on firm performance, it was observed that although the coefficient of tax was negative, yet the effect is not significant in almost all the models. Thus, the second hypothesis, *H2: Firm Performnce has negative reltion with tax*, cannot be accepted and we conclude that tax does not have significant effect on performance.

The second significantly influencing factor affecting firms' performance in our study was growth opportunity (GRW) which showed positive significant impact on firm performance across all combined and country based models taking both Tobin's Q and ROA as performance indicators. Therefore, third hypothesis *H3: Growth opportunity increase firm performance*, is accepted. This relationship appears reasonable as argued by Zeitun and Tian [22] in their study in case of firms in Jordan, argue that growth opportunities help firms in generating profit from investments. This relationship has also been supported by the

positive relationship of growth opportunities with firms' performance for Australia [30]. Our models support this relationship for Tobin's Q and ROA with growth opportunities measured as market to book ratio. It is a fact that firms with high growth opportunities have a high-performance ratio, because such high growth firms will generate profits from investment. Non-debt tax shields like investment tax credits and depreciation also affects the firm performance.

Risk is measured by the standard deviation of return on assets (net income plus depreciation). Our results confirm a positive and significant impact of business risk on firm performance in case of Pakistani and Chines firms. Regarding all three relationships, i.e. pooled and country based models, the results confirm that growth opportunities and firm's risk have a significant positive relationship with the financial performance, thereby we accept fourth hypothesis *H4: performance has positive relation with Business Risk.* This is also supported in case of the study done on UK capital market done by [31]. The relationship is plausible with the assumption that firms will have higher returns with high associated risk because of higher variability in operating income. Theoretical studies (e.g. [32]) advocate that higher risk is associated with more debt because debt intensifies shareholders' incentives to take greater risk. Similar results were also confirmed and supportive to our research findings for 16 Asian markets [33] where business risk showed significantly positive association with firm performance. The mentioned study has undergone a very intensive and in-depth analysis by taking a panel data of seven years from 16 Asian countries and by taking data from 100 firms from each country. The study has also divided the poled sample into three subgroups based income economies, namely Lower-middle, Upper-middle and High income economy.

5. Conclusions

The study was proposed to test the relationship between firm performance with size, growth, tax, and business risk. Considering the sample of 60 listed companies from Pakistan and China for a period of seven years spanning from 2007-2013. The study has found ROA has greater average for Chinese companies, which indicate that Pakistani companies have low accounting performance as compared to Chinese firms. Results also show that China has higher growth rate. Random and Fixed effect panel regression was run based on Hausman specification test on pooled and country-wise observations. Tobin's Q and return on assets (ROA) were taken as dependent variables as indicators of firm performance. The data was tested for multicollinearty and its absence was concluded. But Breusch-Pagan test and Wooldridge test for Heteroscedasticity and autocorrelation, respectively, confirmed their presence. Thus the regressions were run with the option of *Newey-West* standard errors. The panel data regression elucidated that size, growth opportunity and business risk showed significant positive effect over firm performance in both countries Pakistan and China. On the other hand, tax had negative effect over performance but the relationship was non-significant.

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