Diversification Nexus Corporate Performance and Risk Assessment: Empirical Examination for Pakistan

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Abstract

This study intends to analyze empirically the relationship between diversification, corporate performance and risk in case of Pakistan. For the accomplishment of the purpose of this study, a sample of 60 non-financial firms listed in Karachi Stock Exchange was collected over the period 2011-2015, which was further fiber gated into diversified firms (DF) and non-diversified firms (NDF). The data of this study was evaluated on the basis of risk and return, and the factors which determine this risk and return are average return on assets (AAR), average of the return to equity (AER), average market to book value of equity (ABVE), average Tobin's q (ATOQ) and average of the leverage (ALGE). Hence, the Standard Deviation (SD) and Coefficient of Variance (CV) have been used as the measures of risk. Paired sample T-test and General Linear Multivariate Model (GLMM) are applied to achieve the aim of this study. However, the empirical findings of this study reveal that the non-diversified firms outperform the diversified firms, which means that the non-diversified firms have better performance as compared to the diversified firms. Since this study also verifies the fact that higher the returns, higher will be the risk; as the empirical findings assess that the higher risks are associated with non-diversified firms along with the higher returns. The empirical results of this study are based on market and book values related to the variables included in the model. At bottom line, this study concludes that the diversified firm's didn't get economies of scale as compared to the non-diversified firms, as it holds more market share but didn't outperform in profitability and performance.

Key Words: Diversification, Corporate Performance, Risk Management, Tobin's q, Pakistan.

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Introduction

Corporate diversification is considered as an important icon in firms' strategies from last few decades (Antoncic, 2006). As the diversification is not a trend, it is based on the logical reasoning in the maximization of return, hedging of risk and firm's value creation. The diversified portfolio has less risk as compared to the nondiversified portfolio (He, 2009). There are two general techniques for reducing the risk on investment, namely diversification and hedging. Diversification implies on the motive of positive relationship among the portfolio and its return, even if the correlation between them is near to zero, it must be positive. It is pertinent to note that diversification reduces the risk element in a portfolio because the investment in the individual asset is reduced (Modigliani and Miller, 1958).

The logical reason behind the diversification is that it strives to compensate the unsystematic risk to manage the performance of the organization (Yang *et al.,* 2014). Therefore, diversification suits best if the assets or securities in a portfolio are not perfectly correlated. There is a considerable debate in a choice of a portfolio to compete in the market. Portfolio diversification is the strategy in which an organization mitigates their company-specific risk, minimizes systematic risk and ultimately moderates the individual asset performance in a portfolio (Fosberg & Madura, 1990).

A portfolio is considered a well-diversified if it manages the risk of overall circumstances and, hence; contribute towards profit maximization, stability and strong credit standing of the organizations. Majority of the researchers have found that managing a particular type of diversification is as important as selecting a portfolio in the first place. In fact, some of the vocal circumstances of multi-business firms often have to do with mismanagement regarding their portfolio selection and their management ultimately. There are some main risks which faced by the corporations including 1) economic conditions of a particular country in which they exist or perform and 2) the risk which is prevailing in the sector through which a corporate belongs and 3) is the company's risk (Gatzert *et al.,* 2015). A well-diversified portfolio helps the management in getting economies of scale regarding its return because the firm invests in different sectors and get returns from these different sectors and the risk will be minimized and mitigate through that procedure.

Diversification reduces the predictable and unpredictable fluctuations which ultimately results in smoothing of flow of income to the household. However, these are considered as the seasonal factors which affect the behavior of return during its financial year (Einum & Fleming, 2004). Moreover, the diversification can reduce that kind of unexpected

loses and their variances through the well-managed portfolio as there is a perfect correlation between diversification and loss risk management.
There are seven features related to the successful diversifiers available in the literature and in the real-world phenomena. These seven features include division of capable managers; managing the competitive advantage; establishment of a supportive corporate center for divisions; appropriate performance measures; incentives for managers; corporate cultural and strategic direction alignment; right price payments for acquisitions; spending of the time and resources relating to the acquisitions with the existing organization (Kenny, 2011).

Diversification is a major player in mitigating the risk through portfolio adjustment and market measures of return. However, the core objective of this research is to analyze empirically the relationship between diversification, corporate performance, and risk in perspective of Pakistan. This study will analyze the corporate performance and risk with a comparison to those firms which are not diversified as deals in related diversification. This research will help investors in decision-making process regarding portfolio selection and profit maximization along with the extent of risk which will ultimately result in economic growth and economic exposure.

Literature Review

Diversification is considered as an important icon for corporate financial performance and getting economies of scale. A lot of studies have been conducted and there are conflicting ideas among researchers regarding this issue. The literature is subdivided into two categories – diversification and performance, diversification and risk – according to the scope of the study.

Diversification and Performance

Firms are of two categories: diversified firms and nondiversified firms. However, relatedness in case of diversification is no more acceptable because in that particular diversification the firm didn't diversify its portfolio and invests in the same kind of asset which may perfectly correlate with each other. The financial economists state that the diversification is only considered while it reflects unrelated businesses in its portfolio (Pandya and Rao, 1998).

Investigating on 145 Singapore firms, Chen & Ho (2000) get evidence in case of corporate diversification and firm's performance. The study concluded that there is a significant relationship between the under-consideration stance. Ramaswamy & Li (2001) examines the variations in ownership behavior and propensity to diversify. This study was conducted on Indian corporate sector to get the aim of the study. The findings show that the ownership groups are closely related to the

focused strategies. In contrast, some results show the positive impact of diversification and encourage its use while some are against it.

Wan & Hoskisson (2003), conduct research on corporate diversification and firm's performance by considering the environment of the country. The findings show that the environmental factor affects the corporate diversification in a particular country. Lee *et al.* (2003), compares the US and Korean firms in respect of their changes in diversification and performance. By comparing 400 US and 400 Korean firms, the results reveal that in the U.S., firms represent the positive relationship with international diversification and negative relationship with product diversification and performance as their association is related with profit base measure. The bottom line of this study showed the comparison between these two countries and represents that they don't treat diversification in the same way.

Top-management wants to improve their performance in rapidly changing organizations (Yusoff *et al.*, 2016; Qureshi *et al.*, 2017). Santalo & Becerra (2008) compares the linkage between performance and diversification. The findings of this research reveal that diversified firms have better impending and command over the rival firms as they had strong standings in different sectors and which bail them in case of contingencies.

Pakneiat *et al.*, (2010) states the different critical aspect of diversification in their study as the identification of appropriate diversification and its related areas. However, the findings of this study reveal that the diversified firms have more knowledge and understanding of the market trends and have a variety of experiences to manage the businesses. Moreover, in this modern era of technology, firms having advancement in their processes and uniqueness in their product may survive in the market through diversification.

Diversified firms create shareholder value by lowering the market vitality and through beating the market index, but the unrelated diversification shows more positive results and performance as compared to the related diversified firms (Marinelli, 2011). Firm's performance is associated with the appropriate level of diversification. It is somehow an application of strategic planning and can be account for organizational best management and return practices (Massaro *et al.*, 2015; Santarelli & Tran 2016).

Diversification and Risk

On-balance sheet and off-balance sheet risk management practices are considered by the managers to manage the firm's risk (Chaudhry *et al.*, 2014). The management of a firm plays a key role in boost up and the

downfall of a company as the pre-emptive measures and approaches against the risk made the firm enable to mitigate that risk and get benefit from prevailing contracts and transactions. Off-balance sheet instruments are derivatives which are namely: futures, options, and swaps, which help the managers to manage the risk. The diversification is some kind of on-balance sheet risk management practice. The diversification is also a major player in risk management practices just like the hedging techniques (Antoncic, 2006; He, 2011), but according to Modigliani and Miller (1958), paradigm, risk management is irrelevant to the firms; as the diversification of portfolios enable the shareholders to manage their own risk.

Madura (1992), states that the risk of any country within an emerging region is much higher than the risk of the industrialized countries. This study addresses the potential benefits of diversifying business within or across these emerging regions. There is much potential for reducing exposure to country risk in Pacific Rim countries through diversification. Findings of this study reveal that the diversification shows the risk mitigation strategy, yet diversifies their international portfolio across regions so that exposure to country risk is tolerable.

Purnanandam & Swaminathan (2004) introduces a concept of coherent risk measure. This kind of measure allows the induction of risk-free capital to reduce the risk of a portfolio. Moreover, this measure also used in rebalancing the portfolio due to diversification which ultimately lowers the risk. However, the findings conclude that liquidity and transaction cost may be incorporated into portfolio rebalancing decision.

Based on the above literature, conflicting results can be observed in this regard. The empirical results and findings vary from one study to another study. The current study revolves around the issue of the empirical relationship between diversification, corporate performance, and risk. Indeed, this study reviews all those studies which have relevance to our under-consideration scenario. Research by Pandya and Rao (1998) open up a new horizon related to this issue and gave the researchers a new way for conducting research in their respective area. Earlier researchers emphasize on the related and unrelated diversification, but according to the literature the unrelated diversification is proved on the bottom line that in this situation the firm invests in a portfolio and does not invest in the same line of activity and represent different product market investments. Afza *et al.,* (2008) conduct research on the firms listed in KSE-100 index of Pakistan and conclude that the diversified firms have better performance as compared to other mode of working. Among different risk management techniques,

diversification is of considerable importance. However, firms value creation and successful entrepreneurial activities are backed by diversification (Yigit *et al.*, 2013; Gatzert *et al.*, 2015). Diversification deploys the risk management in a way that it helps the manager to manage their funding and investment capacity so that returns can be attained from different sectors of the economy (Chen *et al.*, 2016; Mehmood *et al.* 2017).

The earlier literature depicts that the studies are conducted on the core issue of diversification, corporate performance, and risk, in relevance to the European countries and some of the Asian countries. However, the issue of diversification in case of Pakistan is of considerable debate because Pakistan is also facing the issues of risk and their associated areas because Pakistan is one of the emerging countries has serious economic and managerial challenges. Hence it is necessary to empirically confirm and investigate the relationship between the diversification corporate diversification, performance and risk in case of Pakistan.

Research Methodology

Sampling and Data Collection

A sample of 60 non-financial firms has been selected from KSE-100 index, as these firms qualified according to the criteria of diversification – diversified firms (DF's) – and non-diversified firms. From the sample firms, 34% satisfies the criteria of diversified firms and 66% of them show the attributes of non-diversified firms (NDF's).

For the accomplishment of the purpose of this study, data has been collected from the official website and annual financial reports of the selected companies are considered over the period 2011-2015.

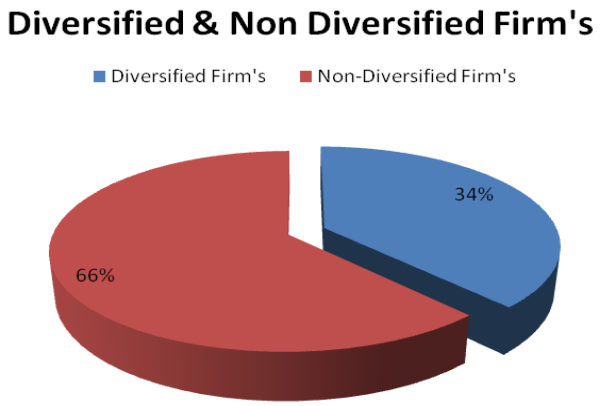

Figure 1: Diversified and Non Diversified Firms

The average return on assets (AAR), average return on equity (AER), average market to book value of equity (ABVE), average Tobin's q (ATOQ) and average of the leverage (ALGE) have been used as a measure of performance and standard deviation (SD) and coefficient of variance (CV) as a measure of risk to prove empirically the above said issue.

This study aimed to investigate empirically the performance measures and risk factors in case of Pakistan for the two types of firms which are under consideration. In this study SPSS been used as a statistical tool to achieve the result related to the aforementioned issue. Moreover, paired sample T-test was applied to the data, as the data is in pair form. The general linear multivariate model was also applied to authenticate the results of paired sample T-test.

Model Specification

$Y = \alpha_0 + \alpha_1 TYPE + \varepsilon$ ——————— (1)

Whereas Y is considered as a row vector

Y = [AAR, AER, ABVE, ATOQ, ALGE]

Where; AAR = Average Return on Assets, AER = Average Return on Equity, ABVE= Average Market to Book Value of Equity, ALGE= Average of the Leverage, ATOQ = Average of Tobin's *q,* TYPE = Dummy variable "1 for diversified and 0 for non-diversified firm", α = Intercept, ε= Error term.

Variables Definition/ Operationalization

Return on Asset

The return on assets is considered as an organic indicator for the measurement of firm's performance. However, this study will take an average return on assets (AAR) to understand and conclude the earlier mentioned situation. AAR will provide an insight in case of performance nexus assets of the organization. Moreover *"return on assets is calculated as net income available to common stockholders divided by the book value of total assets"* in this particular research.

Return on Equity

Return on equity is also an indicator of the performance of an organization. "*Return on equity is calculated as net income available to common stockholders divided by stockholders' equity*". Average of the return to equity (AER) in case of firms which are included in this study is taken.

Market to Book Value of Equity

Market to book value of equity is also calculated to evaluate the performance of the under-consideration organizations. However, it is calculated by *"taking the market value of equity divided by the book*

value of equity". Moreover, the average for both types of firms is taken in case of the market to book value of equity (ABVE).

Leverage

Leverage is the performance and operating measure used in this study and *"calculated as book value of total debts divided by total assets"*. This ratio will categorically be calculated to measure the risk associated with the operations of both the types of firms. Average of the leverage (ALGE) is considered for data analysis and results.

Tobin's q

Tobin's q is a performance measurer and "*calculated as the ratio of the sum of the market value of equity and the book value of debt divided by the book value of total assets"*. However, higher the value of Tobin's q, higher will be the net worth of the organization at the bottom line. Average Tobin's q (ATOQ) is calculated for analysis and concern of this research.

Dummy Variable

TYPE is a dummy variable included in this study to differentiate the diversified and nondiversified firms. Hence 1 is used for those firms which are diversified and 0 is used for those firms which are nondiversified firms.

Error Term (ε)

Error term shows the effect on a dependent variable other than the effect of the independent variable. This effect will be included in the error term.

Moreover, apart from performance identification, SD and CV will be calculated for all the variables for determination of risk factor associated with organizations

All the above five measures are included in the model as they purely define or evaluate the performance and the risk associated with a firm. ROA and ROE are purely the performance measure and standard deviation and coefficient of variation associated with both of these variables shown the risk of the firms. Tobin's q and Leverage is the indicator of performance as well as the risk. Our major goal of this research is to find out empirically the relationship between diversification, corporate performance and risk and all of the above five variables are the measures of performance along with the risk associated with these firms. So these variables help in achieving the aim of this study in better form. It is a quantitative research in nature associated with the positivist paradigm. This however follows the top-down approach. The validity of conclusions is shown to be dependent on one or more premises being valid.

Hence, secondary data of nonfinancial firms listed in KSE-100 index have been collected over the period of 2011-2015 to find out the

significant difference between DF and NDF. Moreover, this is a quantitative research which distinguishes empirically the diversified and nondiversified firms due to their performance, which is also the ultimate objective of this study. However, this study will conclude densification strategy to attain economies of scale and competitive edge over those firms which do not adopt such kind of strategies and vice versa.

Data Analysis

The empirical examination is an essential criterion to conclude a situation (Chaudhry *et. al.,* 2013). Generally, the t-test is used for gap analysis. T-test shows the difference between the means of the variables included in the model. However, this will differentiate one group from the other. *"Paired sample t-test is a statistical technique that is used to compare two population means in the case of two samples that are correlated".* The data in this study is in the form of two groups, 1) diversified firms 2) non-diversified firms, so the best-fit measure to represent the differences among these two groups was t-test, as it compares the means in groups and gave bottom line at the end regarding the significance and non-significance of the variables included in the model.

In this study, the diversified and nondiversified firms are under consideration to achieve the objective of this study. General linear multivariate model (GLMM) is used to validate the results obtained through the implementation of T-test. GLMM served as a proof of T-test results at the bottom line.

Empirical Results and Discussion

The core aim of this study was to determine empirically the relationship between diversification, performance and risk management. For the accomplishment of this purpose, data of nonfinancial firms listed in Karachi Stock Exchange has been collected over the period 2011-2015 and examined. The combined descriptive statistics are depicted in table 1.

Table 1: Descriptive Statistics (Diversified and Non-Diversified Firms)

Variables	Min.	Max.	Mean		St. Dev.	Variance	Skewness	
	Statistic	Statistic	Statistic	St. Er.	Statistic	Statistic	Statistic	Std. Error
AAR	-3.00	45.59	10.2977	1.45580	11.27659	127.161	1.051	0.309
AER	-6.21	63.68	18.4390	2.41756	18.72635	350.676	0.794	0.309
ABVE	0.63	17.80	6.3917	0.58659	4.54371	20.645	0.426	0.309
ATOQ	0.24	4.39	1.4025	0.14808	1.14700	1.316	1.393	0.309
ALGE	0.17	0.89	0.5000	0.02307	0.17868	0.032	0.117	0.309
DIV	0.00	1.00	0.4167	0.06418	0.49717	0.247	0.347	0.309

Table 2-6 are related to the descriptive statistics of performance and risk evaluation of individual variables included in this study. AAR for the

firms is depicted in table 2 which shows the performance as well as the risk factor associated with these firms. The AAR is 10.79% and 9.60% for NDF and DF's respectively which confirms that NDF has greater capacity and better returns compared to DF. It means that the non-diversified firms show better results with respect to performance as well as in the scenario of risk. These results represent that the DF have volatile earnings and risk compared to NDF.

Table 2: Performance and Risk Factor of Average Return on Assets (AAR)

Type	AAR	SD	CV
Non-Diversified Firms	10.79	11.65	1.08
Diversified Firms	9.60	10.92	1.14

Table 3: Performance Risk Factor of Average Return on Equity (AER)

Type	AER	SD	CV
Non-Diversified Firms	15.70	16.99	1.08
Diversified Firms	22.27	20.65	0.92

The AER for NDF and DF are depicted in table 3 in case of performance and risk measures. However, the results of ARE reported in table 3 are very much opposite to the table 2. The result reveals that DF are good in their dealing comparing to the NDF with a low intensity of risk as the values of ARE for NDF's is 15.70% and 22.27% for DF. Moreover, the result of table 3 depicts that the diversified firms have better performance compared to the non-diversified firms, with respect to average return on equity (AER).

Table 4: Performance Risk Factor of Average Market to Book Value of Equity (ABVE)

Type	ABVE	SD	CV
Non-Diversified Firms	7.60	4.76	0.63
Diversified Firms	5.52	4.23	0.77

Table 4 provides information about ABVE related to both diversified and non-diversified firms which ultimately describes the performance and risk volatility of both groups and compares their results at the bottom line. Accordingly, the NDF have higher ABVE compared to that of the DF which are 7.60 & 5.52 respectively. Moreover, in the case of ABVE the risk of NDF's is also lower than the DF which shows that NDF have better performance than the DF.

Table 5: Performance Risk Factor of Average Tobin's q (ATOQ)

Type	ATOQ	SD	CV
Non-Diversified Firms	1.68	1.41	0.84
Diversified Firms	1.01	0.37	0.37

Tobin's *q* is calculated for the data of selected firms which ultimately measures the performance and risk association of the aforementioned firms. However, the findings demonstrate that the value of NDF in case of Tobin's *q* is 1.68 and 1.01 of DF which clearly indicates that the NDF outperforms the DF. The results in table 5 also confirm the traditional mindset related to risk theorem that higher the risk higher will be the returns because the value of NDF in case of SD and CV are also greater than DF. However, the association of risk and return is confirmed at the bottom line.

Table 6: Performance Risk Factor of Average Leverage (ALGE)

Type	ALGE	SD	CV
Non-Diversified Firms	0.45	0.16	0.36
Diversified Firms	0.56	0.18	0.32

Table 6 depicts the results which are purely risk assessing measure that is leverage (ALGE). The non-diversified firm's shows better results in this regard over its counter group that is diversified firms group. The group of firms with poor performance shows high leverage.

Table 7: Descriptive Statistics Related to Paired Sample T-Test

	Variables	Min.	Max.	Mean	Std. Deviation	Variance	Skewness
		Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Non-Diversified Firms	AAR	-3.00	37.11	10.7900	11.65222	135.774	0.643
	AER	-6.21	55.00	15.7006	16.99968	288.989	0.697
	ABVE	2.10	17.80	7.6000	4.76454	22.701	0.730
	ATOQ	0.34	4.39	1.6823	1.41166	1.993	0.759
	ALGE	0.21	.89	.4509	0.16101	0.026	0.857
	TYPE	0.00	0.00	0.0000	0.00000	0.000	.
Diversified Firms	AAR1	-0.41	45.59	9.6084	10.92749	119.410	1.820
	AER1	-1.35	63.68	22.2728	20.65022	426.432	0.772
	ABVE	0.63	12.30	5.5286	4.23805	17.961	0.049
	ATOQ1	0.24	1.52	1.0108	0.37029	0.137	-0.722
	ALGE1	0.17	.76	0.5688	0.18249	0.033	-0.861
	TYPE	1.00	1.00	1.0000	0.00000	0.000	.

Table 8: Paired Sample T-Test

Statistics	AAR	AER	ABVE	ATOQ	ALGE
Mean for Non-Diversified Firms	10.79	15.70	7.60	1.68	0.45
Mean for Diversified Firms	9.60	22.27	5.52	1.01	0.57
T-Test	0.548	-0.732	-1.190	2.214	-3.053
Significance	0.588	0.471	0.246	0.037*	0.005**

**Shows Significance at 5% and ** Shows Significance at 1%*

Table 7 and 8 represents the results related to the descriptive statistics of paired sample T-test and empirical results of that test respectively. Empirical results of Table 10 show that there is a difference between

diversified and non-diversified firms in case of working capacity, services and assessment of risk and that is depicted through the results of ATOQ and ALGE respectively and the difference is also significant in nature. However, the findings show no significant difference in case of AAR, AER and ABVE measures of performance. The findings also highlight the importance of nondiversified firms over diversified firms as the return, economies of scale and better results are associated with non-diversified firms and have prestige over diversified firms. Non-diversified firms have less market share compared to the diversified firms but at the same time, non-diversified firms have a competitive edge over risk as it is evident in table-8. So the two variables ATOQ and ALGE show significance at 5% and 10% with the significance figure of 0.037 and 0.005 respectively.

There was no significant difference among the diversified and non-diversified groups in terms of AAR, AER and ABVE as the results of paired sample T-Test in Table 8 reveal that AAR, AER, and ABVE show 0.588, 0.471 and 0.246 respectively which are neither significant at 1% nor at 5%.

Table 9: General Linear Multivariate Model

Dep. Variables	F-Value	Sig.
AAR	0.158	0.693
AER	1.821	0.182
ABVE	3.141	0.082
ATOQ	5368	0.024*
ALGE	7.000	0.010*

**Shows Significance at 5%*

Table – 9 depicts the statistical results of GLMM model to prove the flagged objectives of the research. Findings of this analysis reveal that the GLMM confirm the relationship between diversification in case of working capacity and economies of the scale of an organization. The significance is limited up to the measures of related to ATOQ and ALGE. Moreover, the bottom line of the results are consistent with Table 8 that the ATOQ and ALGE have relevance with the diversification strategy of the firm, whereas no significant relation could be observed with the diversification strategy of the firm except to ALGE. As reported above, AAR, AER and ABVE did not show any significant result as regard to the diversified and non-diversified group evolution related to performance and risk.

Findings and Conclusion

The aim of the current study was to highlight the empirical evidence in case of firm diversification and its role on corporate performance and risk management in case of Pakistan. For the accomplishment of the

purpose of this study secondary data of the non-financial firms listed in Karachi Stock Exchange was taken into consideration over the period 2011-2015, since there was no empirical study available on this core issue in Pakistan within the last five years. Mean of the sample firms were compared to the variables included in this study to ascertain the performance difference between diversified and non-diversified firms. Moreover, SD and CV were considered as the risk determining factors in this study. The Paired Sample T-test was applied on the variables included in this study as the data on the dependent variable further two groups of independent variables were in paired form – diversified and nondiversified pair. The findings of this study depict that the average performance of non-diversified firms are better. However, this was on the basis of different analysis and measures which confirms the authenticity of nondiversified firms along with the high intensity of risk. Moreover, this research is in line with the phenomenon of the higher returns, higher risk, whereas the diversified firms accused with the low return and performance compared to the non-diversified firms.

The empirical investigation to assess the statistical difference between the pairs which are under discussion reveals that there is a significant difference between the two groups – diversified and non-diversified – on the basis of market measures of performance and risk factors. However, it is evident from the empirical results that the ATOQ and ALGE that are statistically significant and shows a significant difference that is prevailing among these two groups. Moreover, by applying the regression model in case of GLMM test, the study validates the slogan of its objectives. The empirical findings of this test confirm the results of paired sample T-test that depicts the significance of theme on the basis of ATOQ and ALGE only and the remaining variables show no significance either at 1% and 5% level of significance.

Considering the implications of this study, the findings guide the investors on firm's performance in case of diversified and non-diversified firms. By bridging the findings and literature of this research the non-diversified firms are better than the earlier case because the element of risk cannot be eliminated but can be controlled up to some extent. In sum, the investors who are the believers of "higher the risk higher the return", should go for the investment in case of non-diversified firms. However, the investors who want to play safe or are the believer of traditional phenomena "do not put all eggs in one basket" may go for diversified firms. This is while the diversified firms may not get economies of scale because they invest in a variety of ways and do not excel in the pace of one field, which increases the cost of doing business and which results in a reduction of profits of the diversified

firms. Consequently, the non-diversified firm outperforms the diversified firms, particularly in Pakistan.

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