

A Comparative Study on Corporate Diversification and Firm Performance across South Asian Countries

Ume Salma and Anwar Hussain*

Faculty of Management Science, The University of Lahore - Sargodha Campus, Sargodha, Pakistan

Abstract

This study has thoroughly studied the previous literature on corporate diversification and firm's performance in different countries like, USA, EU, China, Malaysia and Bangladesh. To investigate the effects of different factors those affected the diversification decision/strategy of firms we have taken data of 465 firms from India, Sri Lanka and Pakistan in order to check how different factors affected the diversification decision of manufacturing firms across south Asian countries. Data was collected from financial statements of different firms and stock exchanges which is available at their websites and also from data banks. Present study is secondary in nature and 16-years data is collected from 2001 to 2016 of different firms. A two stage regression analysis is used with the dependent variable of "MAR, BOR SIZE GROW etc.". Results showed that variables i.e., managerial ownership, director ownership, size, and grow, debt ratio and firm risk found significant association with corporate diversification and firm performance. It is evidence found that all these variables have significant impact on the corporate diversification and firm performance across south Asian countries. From whole study and results we can say that diversification is deployed as strategy to reduce firm specific business risk. The increased volatility and aggressiveness of the industry has made the industry more endangered to fluctuations in demand, thereby aggravating the situation and making survival more pivotal. In order to survive in such aggressive environment, manufacturing industries must have resonated strategic planning and management frameworks. A firm's survival is dependent upon its ability to adjust successfully to the changing environment, whereas strategic planning and managerial capabilities are tools to survive in such challenging environment.

Keywords: Diversification; Firm performance; Capital; Market

Introduction

Diversification comes from the word "diverse" who means "different" or "varied". When this concept is applied to a company, it can be interpreted as a variation in the performed activities of a firm. In some way, every firm is diversified to a certain extent as it diversified in different departments like finance, marketing and the logistic area [1]. Moreover, Pitts and Hopkins [1] argue that researchers use the term "diversity" to indicate business diversity, rather than functional diversity. Another definition of diversification was given by Ansoff [2] who defined diversification as "a simultaneous departure from the present product line and the present market structure".

The need for privatization and the impact of globalization have made the manufacturing sector much volatile, more aggressive and less profitable, thus making survival in the industry very exigent [3]. This increased volatility and aggressiveness of the industry has made the industry more endangered to fluctuations in demand, thereby aggravating the situation and making survival more pivotal. In order to survive in such aggressive environment, manufacturing industries must have resonated strategic planning and management frameworks [3]. A firm's survival is dependent upon its ability to adjust successfully to the changing environment, strategic planning and managerial capabilities are tools to survive in such challenging environment [4].

Diversification allows firms to maximize value by enhancing the scope of markets and industries in which they compete and supply product offering to newer customer [5]. Erunza and Senbet [6,7] reported that diversified firms gain value by controlling systematic risk. Kogut and Kulatilka [8] added that diversified firms that may be nationally, internationally or geographically are more profitable than domestic firms because diversified firms have more financial and operational flexibility. Birgonul et al. [9] said therefore diversification is not a trend instead it has a logical reason behind it. These reasons may

be of profitability, reduction in risk, increased market share, increased debt capacity, higher growth, and extension of business cycle, and productive utilization of human, capital and financial resources. Amit and Livnat [10] reported that firms that are efficiently manage their operating risk at low level and gain all benefits of related diversification. They further indicated firms that deployed diversification have higher profit and high market value of equity than other firms. Diversification refers to the extension of the span of goods made and sold in order to reduce any commercial risk. Moreover, diversification might be a strategy of reducing risk but not a development strategy to offers trade [11].

Chandler [12] argued that diversification is beneficial due to increased managerial economies of scale and reduce the overall cost of an organization. In addition, Lewellen [13] added that diversified firms have more access to debt than non-diversified firms. Moreover, diversified firms allot resources in well-organized manner than non-diversified firms through internal capital markets [14]. As per some researchers diversified firms deployed its firm specific assets more efficiently in external markets [15,16].

Additionally diversification is one of the important strategies for

*Corresponding author: Anwar Hussain, Lecturer, Faculty of Management Science, The University of Lahore - Sargodha Campus, Sargodha, Pakistan, Tel: +92-336-5887742; E-mail: anwaar.arid@gmail.com

Received January 02, 2018; Accepted January 12, 2018; Published January 17, 2018

Citation: Salma U, Hussain A (2018) A Comparative Study on Corporate Diversification and Firm Performance across South Asian Countries. J Account Mark 7: 263. doi: 10.4172/2168-9601.1000263

Copyright: © 2018 Salma U, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

corporate growth and good financial performance [9]. Furthermore, diversification refers to firm's strategy of entering and competing in new product market [17]. So, a firm undergoes corporate diversification if it increases the number of type of business it operates. And, this incrimination process is a way, in which a firm can grow; it involves changes in administrative structure, system and managerial process of a firm [18].

Besides this, corporate diversification is a strategy whereby firms try to maximize profits by diversifying their business operations. As diversification decisions may influence a firm's performance, it is interesting to investigate the relationships between, corporate diversification and firm performance. Diversification has been defined as "the entry of a firm or business unit into new lines of activity" [19]. Finally, corporate diversification is a strategy in which a firm enters in new sector, industry, and segment or in new line of business in order to reduce risk and seek growth opportunities [20]. Li and Zhang [21] stated that corporate diversification is old but forever new topic in corporate finance. Diversification is a powerful business strategy and its impact on corporate performance has long been an interesting topic. They also reported that diversification also characterized as complex multiple unit organization structure that include different industries under common control of one firm and has been a popular strategy of business expansion and reducing risk. Jonchi and Yen [22] diversification as one of the strategies for reducing risk of firm or seeking growth opportunities to continue firm are life. Similarly Doaei and Shavazipour [23] corporate diversification as firm enter new sector [24], or new industry [25], or new segment [26] or a new line of business [27]. Eventually, in recent years a special interest of the researchers has risen in relating the corporate diversification with the performance at different life cycle stages [28].

As the current research is a comparative study across south Asian countries and the previous research scope was limited to single country firms or stock exchange. By investigating the impact of cross border diversification on firm performance, the study highlights the principal agent problem, resource based view of diversification, converting modern portfolio theory into the domain of diversification and diversification under transaction cost theory contributing in emerging markets. As the effects of diversification on firm performance is unexplored in south Asian listed firms, this study examines the effect of corporate diversification decisions on firm performance. Moreover the study can be a useful for investor to make optimum investment decisions.

Many researchers have evaluated the impact of corporate diversification on firm financial performance. Shyu and Chen [22] had analyzed the diversification and performance relationship at different life cycle stages in Taiwanese firms. Moreover, Birgonul et al. [9] evaluated the impact of corporate diversification on performance for Pakistani firms. Further, Purkayastha and Lahiri [17] examined the impact of industry sector on corporate diversification and performance for Indian business group. Additionally, Adner et al. [29] have also evaluated the diversification and performance relationship by linking relatedness, market structure and decision to diversify. There is no study yet that has addressed the diversification and performance relationship across south Asian countries, as these countries have almost same economy and business standard. So, considering these gap the current research will evaluate diversification, performance relationship across south Asian countries. After reviewing the comparative literature and to the best of my knowledge the present research will be a new insight.

Literature Review

Diversification has crooked into a significantly controversial issue in business globe in current area [30]. Additionally, diversification is one of the important strategies for corporate growth and good financial performance [9]. So, corporate diversification is a strategy in which a firm enters in new sector, industry, and segment or in new line of business in order to reduce risk and seek growth opportunities [20].

Birgonul et al. [9] addressed the diversification and firm performance. Furthermore, that study evaluated that managers have to be careful while selecting the degree of diversification since the diversified firm may capture more market share but it can reduce its profitability.

Seifi et al. [31] evaluated the conceptual framework for new business opportunities for corporate diversification. The study found that the decision to enter into a new line of business is strategic one and involve high risk due to competition. Moreover, study proposed a systematic process for identification and evaluation of new investments for corporate diversification. The process involve three steps the initial identification of investment opportunities, assessment of market attractiveness and elimination of unattractive opportunities, and evaluation of corporation competencies and capabilities against key success factors for each of the new businesses.

Adner et al. [29] addressed the degree of relatedness and firm's diversification choices. Study gave results that a no monotonic effect of relatedness on performance, whereas greater relatedness increases the competitiveness of diversified firms. Shyu and Chen [22] evaluated the extent of diversification and performance. Further, study examined that firms in their growing stage experienced a significant diversification discount, and unrelated diversification leads to trading at a discount in all growing and mature firms. Purkayastha and Lahiri [17] evaluated the impact of industry sector on corporate diversification and firm performance. Additionally, result of the study indicated that the influence of corporate diversification on firm performance is greater for affiliated service firms than affiliated manufacturing firms. Lyandres et al. [18] addressed the systems view of global economy to corporate diversification. Moreover, the study concluded that it is necessary to combine these two types of linkages and take into account the volatility of the environment in order to provide a dynamic and full account of corporate diversification.

Meysam and Babooshka [23] determined the impact of corporate diversification on the technical efficiency. Results of the study showed that by increasing in the product and international diversification may leave a positive effect on efficiency and move up the efficiency score of corporations. Gao and Chou [32] suggested that multinational firms have low level of innovation efficiency as compared to domestic firms, and innovation inefficiency could somewhat explain the negative valuation effect of global diversification. Young [33] determined corporate diversification and production efficiency. Results addressed that after controlling for product diversification, industry and firm size, the degree of international diversification was positively related to production efficiency. Watson and Dickinson [34] contended that diversified firms allocate resources more efficiently because of more efficient internal capital markets.

Stulz [35] extend this literature by showing that as diversified firms have efficient internal capital market so these firms reduce the problem of underinvestment and make investments with more positive net present value. Caves [36] found that diversified firms are able to

exploit superior information to make better resource allocation choices through their internal capital markets than could financial markets. And one view is that diversified firms are plagued by inefficiencies due to agency problem and that resources would be better allocated between businesses by financial markets. Rumelt [37], Christensen and Montgomery [38] showed that the firms that undergo related diversification are more profitable than other type of diversification. Chandler [39] argued that diversified firms with multiple business division create level of concerned management with coordination of specialized division. Such specialization of skills allowed firms to be more efficient and profitable.

Bettis [40] studied performance differences of related and unrelated diversified firms. Performance has been measured with the help of return on assets ROA and found that differences in performance are associated with advertisement expenditure, accounting determined risk, research and development expenditures and capital intensity. Moreover, it is also reported that research and development expenditures are an important determinant in the performance advantage enjoyed by related diversified firms.

Bettis and Hall [41] and Bettis and Mahajan [42] have examined that a trade-off exist between firm diversification and risk, they shown that firm that have unrelated diversification have low profitability but also have lower risk. While Figenbaun and Thomas [43] have found that in most of the industries a negative co-relation exists between profitability and firm's risk. Bettis and Mahajan [44] have examined the risk/return performance of related and unrelated diversified firms at the level of accounting data by applying accounting ratios and taking the period of (1973-77). It was found that on average the related diversified firms outperform unrelated diversified firms, related diversification offer no guarantee of favorable risk/return performance.

Kogut [45] argued that firms that undergo international diversification are more valuable than Des because of flexibility options under uncertain circumstances like change in government policies, rivals decisions and arrival of new technologies in some other parts of worlds. Amit and Livnat [10] have examined efficient corporate diversification, methods and implications by applying accounting measures and taking the period of (1973-77). It was found that efficient diversification manage to reduce the variability of their returns without sacrificing profitability. Chan et al. [46] has examined global diversification measures and found that by expanding Jacquemin-Berry entropy measures of diversification measures to global context, business strategy researchers are able not only to maintain computational simplicity and objectivity but also to decompose global diversification into managerially meaningful element.

Hill and Hensen [47] examined the impact of diversification on performance in pharmaceutical industry taking the period of (1977-86). They used diversification as a measure to reduce risk. Chatterjee and Wernerfelt [48] examined the link between resources and diversification under resource based view. However, it is found that firm diversifies in part to utilize productive resources which are surplus to current operations. Knowledge of these resources allow us know about the direction of expansion of firm. Physical resources, knowledge based resources and external financial resources are associated with related diversification while internal financial resources are associated with unrelated diversification. Datta et al. [49] uses an integrative framework to review existing empirical literature on the diversification-performance relationship along three different research streams. The article highlights the diversity in each stream and identifies some key

theoretical and methodological issues which might help to explain the observed diversity.

Baker [50] examined the impact of related and unrelated diversification on firms value. It was reported that related diversification of firms produce firm value while unrelated diversification could not contribute in term of value addition. Chatterjee [51] took 246 Fortune 500 firms to analyze the relationship of risk and return with diversification. They found S-shaped relationship among these variables and conclude that diversification can reduce risk and return without obstructing economic performance of a firm. Lang et al. [52] determined the performance and diversification relationship by market based ratio Tobin's q and found that the diversified firm has lower average and median q ratios than single segment firms.

Michel et al. [53] extended the modern portfolio theory into the domain of corporate diversification for the period of 1975-80 and find that corporate diversification and both forms of stock return risk generates a U-shaped graph. Thus, an important way for corporations to minimize risk is to diversify into similar businesses rather than identical or very different business. Markides and Williamson [54] examined the corporate diversification and organizational structure and found that strategy of related diversification increase performance only when it allows a business to obtain preferential access to strategic assets and resources of these businesses. In addition relatedness must be measured at strategic asset level. Pandya and Rao [55] studied difference in performance among diversified and non-diversified firms and found that non-diversified firms perform better than the diversified firm. However, non-diversified firms have greater risk than the diversified firms.

Corporate diversification literature reports that almost 96% of the research papers published with single country analysis [56-62]. Considering this gap, the current research will be conducted for south Asian countries, including Pakistan, India, Bangladesh, Sri-Lanka. The south Asian countries are focused in the current study, because firm information, language of business, the accounting practices and standards are same in these countries.

H_1 . There is a significant relationship between corporate diversification and performance across south Asian countries.

H_0 . There is not a significant relationship between corporate diversification and performance across south Asian countries.

Method

Data and sample

In the current research convenient sampling is used for evaluation of cross border diversification and performance across south Asian countries. Data is collected for the 456 non-financial companies listed in each PSX, BSE and CSE of south Asian Countries, and these firms are selected on the basis of their market capitalization.

The data for the selected performance variables diversification (TD), managerial ownership (MAR), ownership of director (BOR), firm size (SIZE), growth opportunity (GROW) and debt ratio (DA) and for extent of diversification variables (MAR, BOR, SIZE, GROW, STD, RE/TE) and a dummy variable for whether a firm pays dividends or not. DD as control variables is gathered from annual reports of the firms which are available on the company website or the SBP site and SBP financial statement analysis reports. Time period for the present study is 16 years (2001-2016).

In the present research descriptive statistic will be applied for the normality of data. Additionally correlation will be applied for evaluating the relationship among different variable. Moreover 2SLS will be applied to evaluate the relationship between corporate diversification and performance at different life cycle stages of a firm across south Asian countries.

465 companies are registered in Pakistan, 2667 are in India, 289 in Sri-Lanka and 554 in Bangladesh. Companies are registered in Bangladesh according to their stock exchanges annual report of 2014. There are out of 557 firms, 437 are non-financial in Pakistan, out of 2662 firms, 2170 are non-financial in India, out of 289 firms, 213 are non-financial in Sri-Lanka and out of 554 firms, 183 are non-financial in Bangladesh. In addition, a sample of 110 non-financial firms from Pakistan, 225 non-financial firms from India represent 75% of the market capitalization of their stock exchanges.

Model proposed for present study

Model 1:

$$Q_{it} = \alpha_{it} + \beta_1(TD_{it}) + \beta_2(MAR_{it}) + \beta_3(BOR_{it}) + \beta_4(SIZE_{it}) + \beta_5(GROW_{it}) + \beta_6(DA_{it}) + v_{it} \dots (1)$$

Where $i=1,605$ and $t=2001 \dots 2016$. v_{it} is the white-noise error term. Table 1 defines all variables used in the model. Tobin's q is a common measure of firm performance [63-68]. In addition, to the extent of diversification (TD), we use managerial ownership (MAR), ownership of directors (BOR), firm size (SIZE), growth opportunity (GROW), and debt ratio (DA) as control variables.

Model 2: Next, the current study constructs an equation that depicts why firms diversify [22]

$$TD_{it} = \alpha_{it} + \beta_1(Q_{it}) + \beta_2(MAR_{it}) + \beta_3(BOR_{it}) + \beta_4(SIZE_{it}) + \beta_5(GROW_{it}) + \beta_6(STD_{it}) + \beta_7(RE/TE_{it}) + \beta_8(DD_{it}) + \tau_{it} \dots (2)$$

Where $i=1 \dots 400$ and $t=2001, \dots, 2016$. τ_{it} is the white-noise error term. Current study uses the entropy measure developed by Jacquemin and Berry [25] to calculate the extent of product diversification. This equation uses managerial ownership (MAR), ownership of directors (BOR), firm size (SIZE), growth opportunity (GROW), firm risk (STD), earned/contributed capital (RE/TE), and a dummy variable for whether a firm pays dividends or not (DD) as control variables.

Results and Discussions

Two stages least square (2SLS) results of Pakistan are given in Table 2, where Q is Tobin's q , measured by the ratio of the sum of the market value of equity and the book value of debt to the book value of assets. TD is the extant of the diversification measured by the HHI

index. MAR is the common shares held by the managers divided by the common share outstanding. BOR is the common shares held by the directors divided by the common share outstanding. $SIZE$ is the firm size measured by the natural logarithm of the total assets. $GROW$ is the growth opportunities measured by dividing the capital expenditure by sales. DA is the debt ratio measured by dividing total debt by the total assets, and STD is firm risk measured by the natural logarithm of standard deviation of EBIT. RT is the earned/contributed capital measured by the ratio of retained earnings to common equity.

Present study applied two stages least square regression to evaluate the impact of corporate diversification on firm performance and impact of firm performance on corporate diversification in Pakistan. On the basis of above results researcher evaluated that overall model is significant on the basis of p -value. Moreover, the relationship of dependent variable with independent variables is strong with the value of R-Square. Further, researcher used the lag value of the independent variable as instruments variables as mentioned [22].

On the basis of above values the corporate diversification, firm risk, growth opportunities and size of the firms have significant impact on performance over the period of 2000-2016 in Pakistan. In this regard, the first question of the study is addressed here and researcher meet the first objective of the study, that is corporate diversification has significant impact on firm performance. Researcher analyzed that with the proper management of above mentioned variables significant organization can enhance their performance. Further, this result is also consistent [22]. In contrast; managerial ownership and debt ratio has insignificant impact on firm performance. Eventually, on the basis of above discussion, present study concluded that corporate diversification can influence firm performance across manufacturing sector of Pakistan.

Two stages least square (2SLS) results of Sri Lanka are given in Table 3, where Q is Tobin's q , measured by the ratio of the sum of the market value of equity and the book value of debt to the book value of assets. TD is the extant of the diversification measured by the HHI index. MAR is the common shares held by the managers divided by the common share outstanding. BOR is the common shares held by the directors divided by the common share outstanding. $SIZE$ is the firm size measured by the natural logarithm of the total assets. $GROW$ is the growth opportunities measured by dividing the capital expenditure by sales. DA is the debt ratio measured by dividing total debt by the total assets, and STD is firm risk measured by the natural logarithm of standard deviation of EBIT. RT is the earned/contributed capital measured by the ratio of retained earnings to common equity.

Present study applied two stages least square regression to evaluate

S. No.	Name of variable	Proxy/formula of variable	Data source
1.	Tobin's q (Q)	(Market value of equity+book value of liability)/book value of total assets	Birger [57]
2.	Corporate diversification (TD)	(NON/NETOP) ² +(NET/NETOP) ² (HHI Index)	Aisha et al. [58]
3	Managerial ownership (MAR)	Common share held by manager/common share outstanding	Jensen [59], Jensen and Murphy [60]
4	Ownership of director (BOR)	Common share held by board of director/common share outstanding	Williamson [61]
5	Size (SIZE)	N(log) total asset	Chatterjee and Wernerfelt [62], Aggarwal and Samwick [63]
6	Growth opportunity (GROW)	Capital expenditure/Sale	Berger and Ofek [64], Hyland and Diltz [65]
7	Debt ratio (DA)	Total debt/total asset	Lewellen [13]
8	Firm risk (STD)	N(log) SD of EBIT	DeAngelo et al. [66]
9	Earned/contributed capital (RE/TE)	Retained earnings/common equity	DeAngelo et al. [66]
10	Dummy variable (DD)	1=if firms pays dividend 0=if firms pays no dividend	Lang and Stulz [67]

Table 1: Variables used in models.

Variable	Coefficient	Std. Error	t-statistic	Probability
C	-3.40895	1.74874	-1.94938	0.0514
DA	0.149023	0.107844	1.381838	0.1672
TD	70.1996	2.67607	26.23235	0
STD	3.065569	0.263239	11.64557	0
MAR	0.001231	0.004495	0.273724	0.7843
GROW	-11.324	0.218524	-51.8205	0
SIZE	9.201507	0.320125	28.74349	0
R-squared	0.795104	Mean dependent var		12.99746
Adjusted R-squared	0.794286	S.D. dependent var		11.81308
S.E. of regression	5.357906	Sum squared resid		43146.86
F-statistic	972.4375	Durbin-Watson stat		0.564366
Prob (F-statistic)	0	Second-Stage SSR		43133.91
Instrument rank				7

Table 2: Two stages Least Square (2sls) (Pakistan).

Variable	Coefficient	Std. Error	t-statistic	Probability
C	-4917115	479748.4	-10.24936	0
BOR	-6895.206	3332.887	-2.068839	0.0388
DA	-96410.28	173571.5	-0.55545	0.5787
STD	9573.218	22661.75	0.42244	0.6728
MAR	-213.8387	1235.881	-0.173025	0.8627
GROW	-48332.48	22584.71	-2.140053	0.0325
SIZE	416766.7	25483.3	16.3545	0
Q	1.567406	0.023276	67.33878	0
R-squared	0.859941	Mean dependent var		1449102
Adjusted R-squared	0.859059	S.D. dependent var		3178920
S.E. of regression	1193434	Sum squared resid		1.81000
F-statistic	974.7017	Durbin-Watson stat		3.32549
Prob (F-statistic)	0	Second-Stage SSR		1.81000
Instrument rank				9

Table 3: Two stages least square (2sls) (Sri Lanka).

the impact of corporate diversification on firm performance in Sri Lanka. On the basis of above results researcher evaluated that overall model is significant on the basis of p-value. Moreover, the relationship of dependent variable with independent variables is strong with the value of R-Square. Further, researcher used the lag value of the independent variable as instruments variables as mentioned [22].

On the basis of above values the firm performance, ownership of director, growth opportunities and size of the firm have significant impact on performance over the period of 2001-2016 in Sri Lanka. In this regard, the first question of the study is addressed here and researcher meet the first objective of the study, that corporate diversification has significant impact on firm performance. Researcher analyzed that with the proper management of above mentioned variables significant organization can enhance their performance. Further, this result is also consistent with Jonchi and Yen [22]. In contrast, managerial ownership, firm's risk, and debt ratio have insignificant impact on firm performance. Eventually, on the basis of above discussion, present study concluded that corporate diversification can influence the firm performance across south Asian countries.

Two stages least square (2SLS) results of India are given in Table 4. As noted, Tobin's q , measured by the ratio of the sum of the market value of equity and the book value of debt to the book value of assets. TD is the extant of the diversification measured by the HHI index. MAR is the common shares held by the managers divided by the common share outstanding. BOR is the common shares held by the directors divided by the common share outstanding. SIZE is the firm size measured by the natural logarithm of the total assets. GROW is

Variable	Coefficient	Std. Error	t-statistic	Probability
C	-1.4095	1.7487	-1.9494	0.0514
DA	0.2190	0.1078	1.3818	0.2720
Q	7.9600	2.6761	26.2324	0.0000
STD	2.0656	0.2632	11.6456	0.0000
MAR	0.0212	0.0045	0.2737	0.0040
GROW	-7.3240	0.2185	-51.8205	0.0000
SIZE	7.2015	0.3201	28.7435	0.0000
R-squared	0.655	Mean dependent var		12.997
Adjusted R-squared	0.794286	S.D. dependent var		11.813
S.E. of regression	5.357906	Sum squared resid		43146.860
F-statistic	972.4375	Durbin-Watson stat		0.564
Prob (F-statistic)	0	Second-Stage SSR		43133.910
Instrument rank				7

Table 4: Two stages least square (2sls) (India).

the growth opportunities measured by dividing the capital expenditure by sales. DA is the debt ratio measured by dividing total debt by the total assets, and STD is firm risk measured by the natural logarithm of standard deviation of EBIT. RT is the earned/contributed capital measured by the ratio of retained earnings to common equity.

Present study applied two stages least square regression to evaluate the impact of corporate diversification on firm performance in Sri Lanka. On the basis of above results researcher evaluated that overall model is significant on the basis of p-value. Moreover, the relationship of dependent variable with independent variables is strong with the value of R-Square. Further, researcher used the lag value of the independent variable as instruments variables as mentioned [22].

On the basis of above values the firm's performance, firm's risk, managerial ownership growth opportunities and size of the firm have significant impact on corporate diversification over the period of 2001-2016 in India. In this regard, the first question of the study is addressed here and researcher meet the first objective of the study, that corporate diversification has significant impact on firm performance. Researcher analyzed that with the proper management of above mentioned significant organization can enhance their performance. Further, this result is also consistent with Jonchi and Yen study [22]. In contrast, debt ratio has insignificant impact on firm performance. Eventually, on the basis of above discussion, present study concluded that corporate diversification can influence on firm performance across manufacturing sector of Sri Lanka.

Conclusion

Business sector has got more attention in recent decades because it directly impact on country's economic growth. Because of its role in an economy it is necessary to constantly monitor and evaluate the performance of any business organization/industry or firm. Investor is also looking for different researches before investing their money. So it is important to compare time to time different organization that is more profitable for them. Similarly government is also monitoring these banks and makes action for the betterment of the economy.

The main focus of this study was to evaluate the impact of corporate diversification on firm performance and impact of firm performance on corporate diversification across south Asian countries. For this purpose the present study used three countries i.e., Pakistan, India and Bangladesh by targeting the manufacturing sector of these countries. Data is collected from 456 listed firms having a market capital of 75% overall for the period of 2001-2016. The present study draws following conclusions.

Firstly, diversification activities of south Asian countries have significant impact on firm performance which is consistence with modern portfolio theory. As modern portfolio theory states the optimal approach regarding minimizing the systematic risk and maximization of expected return through diversification in different investment projects. Secondly, agency theory explains diversification; the managers of the firms are engage in diversification activities in order to minimize the exposure to professional risk and not to gain the private benefits. As in the south Asia most of the businesses are family owned because being less developed economies they enjoy less opportunities of foreign/outer investment. Moreover the investors are also reluctant to invest there because of default risk.

Finally, result of the study states that size of the firm has significant impact on diversification as well as on firm's performance. Most of the south Asian economies tend to increase their product lines with the increase in their assets to make the best utilization of the surplus. This business expanding brings an increase in the firm's performance ultimately. To avoid the recession phase in business cycle, firms follow the growth based approach. To stay in the market organizations pursue diversification strategies.

Limitations

The scope of the study is limited to only three south Asian countries i.e., Pakistan, India and Sri Lanka and the focus of the study was developing economies. Moreover, many other measures are available for performance evaluation but the current study used Tobin's Q. In addition to this, only one sector, i.e., manufacturing sector, is targeted. It could be more comprehensive with consideration of others sectors. The impact of diversification on performance is viewed in general context without keeping the view of business life cycle stages. Further this study does not include the type of diversification i.e., related and unrelated diversification.

Practical Implications

Research in the thesis may inform investors about the diversification on firm level and its impact on firm value, and therefore help investors make appropriate investing decisions. This study may help to explain the diversification motives of firms in emerging markets like Pakistan, Sri Lanka, and India. The result of the study will be fruitful for investor, banker, stake holder, regulator, policy maker, government as diversification spreads risks across many securities or stocks, so those that perform well offset those that do poorly. Diversification protects from devastating losses by picking the right group of investments, investors may be able to limit their losses and reduce the fluctuations of investment returns without sacrificing too much potential gain.

Recommendations for Future Study

As the focus of current study is only the manufacturing sector of developing economies in south Asian countries so in future the same study can be replicated in wide scope by considering financial sector or developed economies of other regions. The performance and diversification are measured by Tobin's Q ratio and HHI index respectively. While many other ratios such as ROA ROE can be used to measure performance whereas diversification can also be measured through entropy measures. The study used regression analysis to obtain the results while other statistical methodologies can also be opted for this purpose.

References

1. Pitts RA, Hopkins HD (1982) Firm diversity: Conceptualization and measurement. *Academy of Management Review* 7: 620-629.

2. Ansoff HI (1957) Strategies for diversification. *Harvard Business Review* 35: 113-124.

3. Sanda MA (2006) Four case studies on commercialisation of government R&D agencies: An organizational activity theoretical approach. *Luleå University of Technology*.

4. Robert Baum J, Wally S (2003) Strategic decision speed and firm performance. *Strategic Management Journal* 24: 1107-1129.

5. Purkayastha S, Manolova TS, Edelman LF (2012) Diversification and performance in developed and emerging market contexts: A review of the literature. *International Journal of Management Reviews* 14: 18-38.

6. Errunza VR, Senbet LW (1981) The effects of international operations on the market value of the firm: Theory and evidence. *The Journal of Finance* 36: 401-417.

7. Errunza VR, Senbet LW (1984) International corporate diversification, market valuation, and size-adjusted evidence. *The Journal of Finance* 39: 727-743.

8. Kogut B, Kulatilaka N (1994) Operating flexibility, global manufacturing, and the option value of a multinational network. *Management Science* 40: 123-139.

9. Birgonul MT, Dikmen I, Ergon S, Artuk U (2004) Organizational effectiveness in construction companies: A conceptual framework. In *Proceedings of 6th International Congress on Advances in Civil Engineering, Istanbul, Turkey*.

10. Amit R, Livnat J (1989) Efficient corporate diversification: Methods and implications. *Management Science* 35: 879-897.

11. Mayer J (1996) Implications of new trade and endogenous growth theories for diversification policies of commodity-dependent countries. *United Nations Conference on Trade and Development*.

12. Chandler GN (1996) Business similarity as a moderator of the relationship between pre-ownership experience and venture performance. *Entrepreneurship Theory and Practice* 20: 51-65.

13. Lewellen WG (1971) A pure financial rationale for the conglomerate merger. *The Journal of Finance* 26: 521-537.

14. Brendel M, Rudolph C, Schwetzler B (2013) Diversification discount revisited: An application of the Oaxaca-Blinder decomposition. *SSRN manuscript*.

15. Wernerfelt B, Montgomery CA (1988) Tobin's q and the importance of focus in firm performance. *The American Economic Review*, pp: 246-250.

16. Bodnar GM, Tang C, Weintrop J (1997) Both sides of corporate diversification: The value impacts of geographic and industrial diversification. *National Bureau of Economic Research*.

17. Purkayastha S, Lahiri S (2016) Do diversified business groups help organizational performance? An industry-wise analysis. *International Studies of Management & Organization* 46: 24-34.

18. Lyandres E, Marchica MT, Michaely R, Mura R (2015) Owners' portfolio diversification and firm investment: Evidence from private and public firms. *SSRN Working Paper*.

19. Ramanujam V, Varadarajan P (1989) Research on corporate diversification: A synthesis. *Strategic Management Journal* 10: 523-551.

20. Shavazipour B (2013) Ranking efficient DMUs using the ideal point and norms. *International Journal of Data Envelopment Analysis* 12: 75-83.

21. Li H, Zhang Y (2007) The role of managers' political networking and functional experience in new venture performance: Evidence from China's transition economy. *Strategic Management Journal* 28: 791-804.

22. Shyu J, Chen YL (2009) Diversification, performance, and the corporate life cycle. *Emerging Markets Finance and Trade* 45: 57-68.

23. Doaei M, Shavazipour B (2013) Corporate diversification's effects on efficiency and productivity: Case study of manufacturing firms listed in Bursa Malaysia

24. Iacobucci D, Rosa P (2005) Growth, diversification, and business group formation in entrepreneurial firms. *Small Business Economics* 25: 65-82.

25. Jacquemin AP, Berry CH (1979) Entropy measure of diversification and corporate growth. *The Journal Of Industrial Economics*, pp: 359-369.

26. Denis DJ, Denis DK, Sarin A (1999) Agency theory and the influence of equity ownership structure on corporate diversification strategies. *Strategic Management Journal*, pp: 1071-1076.

27. Montgomery CA (1994) Corporate diversification. *Journal of Economic Perspectives* 8: 163-178.
28. Hsu CW, Liu HY (2008) Corporate diversification and firm performance: The moderating role of contractual manufacturing model. *Asia Pacific Management Review* 13: 345-360.
29. Adner R, Ruiz-Aliseda F, Zemsky P (2016) Specialist versus generalist positioning: Demand heterogeneity, technology scalability and endogenous market segmentation. *Strategy Science* 1: 184-206.
30. Carney M, Gedajlovic ER, Heugens PP, Van Essen M, Van Oosterhout JH (2011) Business group affiliation, performance, context, and strategy: A meta-analysis. *Academy of Management Journal*. 54: 437-460.
31. Seifi A, Moosavi SV, Ardestani E (2012) A Conceptual Framework for Evaluating New Business Opportunities for Corporate Diversification. *Journal of Enterprise Transformation* 2: 105-129.
32. Gao W, Chou J (2015) Innovation efficiency, global diversification, and firm value. *Journal of Corporate Finance* 30: 278-98.
33. Young AR (2004) The incidental fortress: The single European market and world trade. *JCMS: Journal of Common Market Studies* 42: 393-414.
34. Watson J, Dickinson JP (1981) International diversification: an ex post and ex ante analysis of possible benefits. *Australian Journal of Management* 6: 125-134.
35. Stulz R (1990) Managerial discretion and optimal financing policies. *Journal of Financial Economics* 26: 3-27.
36. Caves RE (1971) International corporations: The industrial economics of foreign investment. *Economica* 38: 1-27.
37. Rumelt RP (1974) *Strategy, structure, and economic performance*. Harvard University Press: Cambridge, MA.
38. Christensen HK, Montgomery CA (1981) Corporate economic performance: Diversification strategy versus market structure. *Strategic Management Journal* 2: 327-343.
39. Chandler AD Jr (1977) *The visible hand: The managerial revolution in American business*. Cambridge, Mass: Belknap Press of Harvard University Press.
40. Bettis RA (1981) Performance differences in related and unrelated diversified firms. *Strategic Management Journal* 2: 379-393.
41. Bettis RA, Hall WK (1982) Diversification strategy, accounting determined risk, and accounting determined return. *Academy of Management Journal* 25: 254-264.
42. Bettis RA, Mahajan V (1985) Risk/return performance of diversified firms. *Management Science* 31: 785-799.
43. Figenbaum A, Thomas H (1986) Dynamic and risk measurement perspectives on Bowman's risk-return paradox for strategic management: An empirical study. *Strategic Management Journal* 7: 395-407.
44. Bettis RA, Mahajan V (1985) Risk/return performance of diversified firms. *Management Science* 31: 785-799.
45. Kogut B (1985) European industry: Public policy and corporate strategy.
46. Chan Kim W, Hwang P, Burgers WP (1989) Global diversification strategy and corporate profit performance. *Strategic Management Journal* 10: 45-57.
47. Hill CW, Hansen GS (1991) A longitudinal study of the cause and consequences of changes in diversification in the US pharmaceutical industry 1977-1986. *Strategic Management Journal* 12: 187-199.
48. Chatterjee S, Wernerfelt B (1991) The link between resources and type of diversification: Theory and evidence. *Strategic Management Journal* 12: 33-48.
49. Datta DK, Rajagopalan N, Rasheed A (1991) Diversification and performance: Critical review and future directions. *Journal of Management Studies* 28: 529-558.
50. Baker GP (1992) Incentive contracts and performance measurement. *Journal of Political Economy*. 100: 598-614.
51. Chatterjee S (1997) Regression Analysis resource-based and diversification. *Statistical Models for Strategic Management*, pp: 185-199.
52. Lang L, Poulsen A, Stulz R (1995) Asset sales, firm performance, and the agency costs of managerial discretion. *Journal of Financial Economics* 37: 3-7.
53. Hiatt MA, Hoskisson RE, Harrison JS (1991) Strategic competitiveness in the 1990s: Challenges and opportunities for US executives. *The Executive* 5: 7-22.
54. Markides CC, Williamson PJ (1996) Corporate diversification and organizational structure: A resource-based view. *Academy of Management Journal* 39: 340-367.
55. Pandya AM, Rao NV (1998) Diversification and firm performance: An empirical evaluation. *Journal of Financial and Strategic Decisions* 11: 67-81.
56. Gaur AS, Kumar V, Singh D (2014) Institutions, resources, and internationalization of emerging economy firms. *Journal of World Business* 49: 12-20.
57. Wernerfelt B (1997) On the nature and scope of the firm: An adjustment-cost theory. *The Journal of Business* 70: 489-514.
58. Sissy AM (2015) *The effects of revenue diversification and cross border banking on risk and return* (Doctoral dissertation, University of Ghana).
59. Jensen MC (1986) Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review* 76: 323-329.
60. Jensen MC, Murphy KJ (1990) Performance pay and top-management incentives. *Journal of Political Economy* 98: 225-264.
61. Williamson OE (1983) Organization form, residual claimants, and corporate control. *Journal of Law and Economics* 26: 351-366.
62. Chatterjee S, Wernerfelt B (1991) The link between resources and type of diversification: Theory and evidence. *Strategic Management Journal* 12: 33-48.
63. Aggarwal RK, Samwick AA (2003) Why do managers diversify their firms? Agency reconsidered. *Journal of Finance* 1: 71-118.
64. Berger PG, Ofek E (1995) Diversification's effect on firm value. *Journal of Financial Economics* 37: 39-65.
65. Hyland DC, Diltz JD (2002) Why firms diversify: An empirical examination. *Financial Management* 1: 51-81.
66. DeAngelo H, DeAngelo L, Stulz RM (2006) Dividend policy and the earned/contributed capital mix: A test of the life-cycle theory. *Journal of Financial Economics* 81: 227-254.
67. Lang LH, Stulz RM (1994) Tobin's q, corporate diversification, and firm performance. *Journal of Political Economy* 102: 1248-1280.
68. Himmelberg CP, Hubbard RG, Palia D (1999) Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics* 53: 353-384.