

A detail analysis on the relationship between Group's diversification into the financial services industry and its impact on their financial performance

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Abstract

Diversification has become a common strategy of corporate risk management along with availing other potential benefits. The intent of this study is to identify and analyze the relationship between diversification and its positive impact on financial performance of the Group. For this purpose we use the 12 years (1985 to 1996) data of Nishat Group of Companies, to test the relationship before and after diversification into financial services industry. We find that the diversification into financial services industry proved to be more profitable for the Group, while the overall risk has been increased. Using independent variable in terms of profitability, operational efficiency and Growth we used EBITDA Margin, Total Assets Turnover and Growth, respectively, and for measurement of return we used Dependent Variables ROE & ROA, and the risk is measured with Coefficient of Variation, the results show that there is a strong relationship between dependent and independent variables and we reject Null Hypothesis that diversification does not have positive impact on financial performance of the Group. The other major finding of the research is that because of unrelated diversification the overall risk of the Group increased after diversification, whereas related diversification reduces risk.

Key Terms: Diversification, Financial Services, ROA, ROE, TATO, EBIDA

1. Introduction:

Diversifying into same product line or into entirely different business is the strategy made by the management at corporate level. Today, when the uncertainty in the internal and external environment has been increased, diversification is used to reduce risk element in the day to day business activities. Diversification strategies are most commonly used to expand business activities into a wide range by expanding operations either by adding new markets, products, services or stages of production to the existing business. In the words of (Aaker 1980, Andrews 1980, Berry 1975, Chandler 1962, Gluck 1985) Diversification has been defined as a means by which a Company expands its core business into other product markets. Diversification is simply defined as, "A strategy that is used to reduce risk and involves adding products, services, markets, customers and locations to the business portfolio."

It is evidenced from various research papers that diversification has been encouraged from all around the world; Rumelt (1986) found that by 1974 only 14 percent of the Fortune 500 firms operated as single businesses and 86 percent as diversified businesses. Corporate managers from U.S and European countries not only support diversification but also encourage and favor to actively pursue diversification (Kerin, Mahajan and Varadarajan 1990). The Corporate Managers before taking decision to diversify or merge their activities with other business make huge investment in R&D, since the financial crunch has taken place in U.S and European countries the zeal for diversification has been decreased and they are more heavily consolidating around their core businesses, however the trend in Asian countries continue to remain highly diversified in order to reduce risk and increased market share.

There are four ways that helps the business to grow and increase market share and increase overall wealth of shareholders, which includes; market penetration, market development, product development and diversification. Diversification in financial terms means reducing risk by investing in a variety of assets i.e. making a portfolio of products which includes both high risk and low risk securities. Diversification of a Company can be classified as, concentric, conglomerates, horizontal and vertical diversification.

1.1. The Problem:

Financial services industry has been facing changes that have resulted in deregulation, developments in information and communications technology and changes in the overall economic environment. These developments have resulted in introduction of many nontraditional players; such as non financial companies (i.e. firm's having different core business has started providing financial services, such as Nishat Group' MCB Bank, Lakson Group of Companies offering investment and insurance services etc.) and financial conglomerates, into the financial services industry. Such diversifications offers a number of benefits, such as synergy, economies of scope, reduced transaction costs, increased borrowing capacity, and reduced tax burdens; however, empirical

studies fail to confirm whether diversification provides these benefits. This thesis will investigate whether the Group who had diversified has derived any financial benefit by doing so or not.

1.2. Problem Statement:

“A detail analysis on the relationship between Group’s diversification into the financial services industry and its impact on their financial performance”

1.3. Objectives of the Study

The main research objective is to discover the need for diversification for a business, and its impact on financial performance before and after diversification. To conduct this research we shall have the following objectives:

- To explore the relationship between Group’s diversification into financial services industry and its impact on financial performance.
- To identify the key factors that affects businesses to take diversification decisions if their core business activities are suffering (means if a firm is unable to continue its core business activities efficiently then why they feel a need to diversify).

1.4. Significance / Justification of the Study:

The study will be helpful to all the research participants and the Group who had diversified or who are planning to diversify into financial services industry. As this research will determine what impacts does diversification have on the financial performance of the business, both successful and unsuccessful cases will be studied. The study will also recommend future course of action to the companies who are planning to diversify, to take into consideration for the implementation of diversification initiatives. The importance of research to the author will be exposure to the detail analysis of financial data of the Group under review and increase in knowledge and a good learning experience.

1.5. Limitations:

Within the valid scope of the research, following are the limitations of the research:

- Data Collection might become the limitation as the Time Period of study under review is very old and we might not have access to the published data.
- Our research would be restricted to the companies who have diversified into financial services industry mainly a bank.
- Unavailability of data could limit our research.

1.6. Scope:

- The research will be limited to the analysis of financial data available and does not require detail interviews of the companies, the research would be extended to the city of Karachi and if the need for interviews arises the companies who are in Karachi will be contacted and interviewed.
- Only that Group will be contacted who had already diversified into financial services industry.

1.7. Definition of Key Terms:

a. Diversification:

The dictionary meaning of Diversification is to distribute (investments) among different companies or securities in order to limit losses in the event of a fall in a particular market or industry. In the Context of this study diversification means that a Company with entirely different Core business diversifies into other industries e.g. Nishat Group of Company Diversify from textile to cement and then to financial services industry.

b. Financial Services:

It can be defined as the products and services offered by institutions like banks of various kinds for the facilitation of various financial transactions and other related activities in the world of finance like loans,

insurance, credit cards, investment opportunities and money management as well as providing information on the stock market and other issues like market trends.

c. Return on Assets (ROA):

An indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage.

d. Return on Equity (ROE):

The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

e. Total Assets Turnover (TATO):

TATO indicates the amount of sales generated against Rupee worth of Assets. Assets turnover are used to measure firm's efficiency at using its assets for generating sales. The higher the number the better, it also indicates the pricing strategy of the company with low profit margins tend to have high TATO while those with high profit margins have low TATO.

f. EBITDA Margin:

A measurement of a company's operating profitability. It is equal to earnings before interest, tax, depreciation and amortization (EBITDA) divided by total revenue. Because EBITDA excludes depreciation and amortization, EBITDA margin can provide an investor with a cleaner view of a company's core profitability.

g. Growth: $G=RR*ROE$

RR= Retention Rate = % of total Net Income reinvested in the company

ROE= Return on Equity = Net Income/ Total Equity

The annual rate at which a variable, such as a firm's earnings, has been or is expected to grow. One common method of estimating future growth rate is simply to measure a variable's past growth rate and then project a continuation of the trend.

2. Literature Review:

2.1. Foreign and Local Literature: (Empirical Data Study)

Over the last 50 years extensive research has been conducted by various researchers on business diversification Strategy and Firm's performance. The most prominent and comprehensive work has been performed by Rumelt (1974 & 1982), Christensen & Montgomery (1981), Berger and Ofek (1995). Rumelt (1974) adopted the methodology of sampling Fortune 500 firms and tested the relationship between firm's diversification and financial performance. He classified the firm's into two categories: related diversified and unrelated diversified, and analyzed their performance over a selected period. At the core Rumelts' argument is a focus on the individual firm and its various patterns of diversifications; they are as follows:

Rumelt's Classification System:

Table 2: Specialization Ratio:

95 – 100%	Single Business Firms that are basically committed to a discrete business area.	<ul style="list-style-type: none"> ▪ Single Business ▪ Single vertical
70 – 94%	Dominant Business Firms that have diversified to some extent but still obtain the preponderance of their revenues from a discrete business area.	<ul style="list-style-type: none"> ▪ Dominant vertical ▪ Dominant Constrained ▪ Dominant Linked ▪ Dominant unrelated
Less than 70%	Related Business Firms that are diversified and in which more than 70% of the diversification has been accomplished by relating new activities to old.	<ul style="list-style-type: none"> ▪ Related constrained ▪ Related linked
	Unrelated Business Firms that have diversified and in which less than 70% of the diversification is related to firm’s original skills or strengths.	<ul style="list-style-type: none"> ▪ Multibusiness ▪ Unrelated portfolio

Using a carefully conceptualized categorical measure of diversification, Rumelt was able to demonstrate a linkage between diversification and performance. Rumelt used the single measure of return on invested capital to test the relationship between strategy of diversification and financial performance of firms. The study concluded that the related diversified firms outperformed the unrelated diversified firms.

“Diversification reduces value of the firm and results in lower operating profitability than single business” Berger & Ofek (1995). No evidence has been found in support of the view that diversification provides firms with a valuable intangible asset; the study by Lang & Stulz. Grant (1988) identified that “diversified firm’s trade at a discount in comparison to a purely specialized firm”. Markides (1995), describes the nature of diversification as, it increases firm’s performance up to a certain level, then after diversification results in declining performance of the firm. “Does corporate diversification have any influence on firm’s value and how? Does it create or destroy value of the business?” The study by Erdorf, Wendels, Heinrichs, & Matz (2012), raised the questions and tried to find out possible answers to these questions. The conclusion drawn from the research was that the effect on value varies from firm to firm, and there is no sole impact of diversification that dominates the discount or premium rather, there is a heterogeneous effect across certain industry setting, economic conditions and governance structure of the firms.

The local literature reveals the work of Talat Afza, Salahuddin & S. Nazir, with the study on diversification and corporate performance with the perspective of Pakistan’s economy, tried to find out the relationship between diversification and financial performance, the measures of corporate performance used by them included; Return on Asset (ROA), Return on Equity (ROE), Market rate of return and Tobin’s q, and the Coefficient of Variation (CV). The paper concludes that managers have to be careful while selecting the level of diversification since the diversified firms may capture more market share but it can reduce its profitability. The study also concludes that the average performance of non diversified firm is better than diversified firms in an under developed economy like Pakistan.

On the contrary, Anil M. Pandya & Narender V. Rao (1998), in their study showed that diversified firms perform better than non diversified firms on both risk and return criterion. Their research tests the strength of these results by classifying firms by performance class. The study design was mainly based on Specialization Ratio (SR) defined by Rumelt, in which he categorize the firm’s into fully diversified, moderately diversified and undiversified. The results of the research included that undiversified firms have higher returns as compare to diversified firms and they are among the best performing class of firms, and their returns are of high variance. On the other hand it was noted that the firms who have diversified have low returns with low variance on risk and return dimensions. The paper concluded that the diversified firms are able to reduce their financial and business risk but the returns to shareholders also decrease proportionately, and it was concluded that undiversified firms may perform better than diversified firms on both risk and return. Diversification strategy allow firms to tradeoff between risk and return, lower the risk lower returns and higher risk yields higher returns to shareholders.

The Theorem of Modigliani (1980) explains, “... with well-functioning markets (and neutral taxes) and rational investors, who can ‘undo’ the corporate financial structure by holding positive or negative amounts of debt, the market value of the firm – debt plus equity – depends only on the income stream generated by its assets. It follows, in particular, that the value of the firm should not be affected by the share of debt in its financial structure or by what will be done with the returns – paid out as dividends or reinvested (profitably).” The decision of diversification also has an impact on capital structure of the group, Modigliani and Miller, were of the view that capital structure of firm does not have any impact on overall business, but the research proves that when a firm decides to diversify its business it has to increase its debt level in order to match its financing needs.

The research by Irfan and Nishat (2002), states that “although the capital markets in Pakistan are less developed but the market sentiments are such severe that small news about the company allows the share prices to increase and decrease instantly”. The less or no empirical evidence on diversification in the developing market of Pakistan provides a justified base for our present research study. We have selected Nishat Group of Companies to evaluate the effect of diversification on their financial performance. Hypothesis developed for this research are as follows:

Ho: Diversification does not have positive impact on the financial performance of firm.

Ha: Diversification does have positive impact on the financial performance of firm.

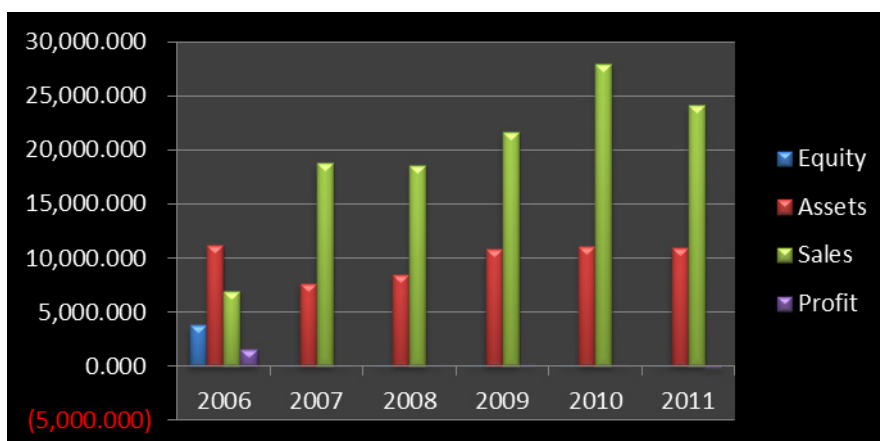
2.2. Company Literature:

2.2.1. Nishat Group of Companies:

Nishat Group of Companies is one of the diversified business groups in South East Asia with Assets over Rs. 300 billion, as reported by the company; it ranks amongst the top five business houses of Pakistan. The Group’s presence is most prominent in Textiles, Cement and Financial Services industry of Pakistan; additionally it also has presence in Insurance, Power Generation, Paper Products and Aviation. It is one of the biggest player in each sector, whether its textile or financial services. The group has its presence both locally and internationally, its products and services are admired all around the world in terms of quality, management skills and leader etc. Mian Muhammad Mansha is the chairman of Nishat Group of Companies, he is well known for his good management and leadership style. Nishat Group of Companies diversified into financial services industry by acquiring MCB Bank in 1991.

2.2.1.1. Adamjee Insurance Company Limited (AICL):

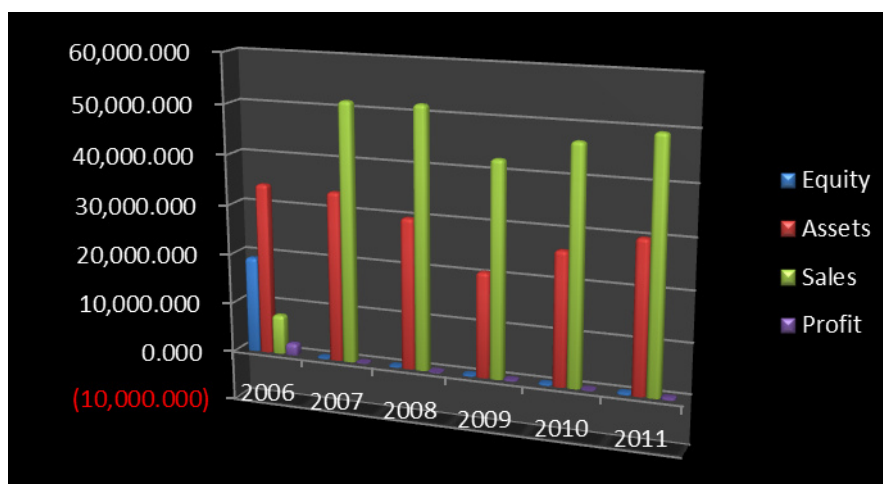
Adamjee Insurance Company Limited (AICL) was incorporated as a Public Limited Company on September 28, 1960 and is listed on all three stock exchanges of Pakistan, as reported in the Annual Report. The Company is also registered with the Central Depository Company of Pakistan Limited (CDC) and is involved in the business of general insurance. Adamjee Insurance offers general insurance, risk management and underwriting services to large, medium and small industries including commercial organizations, real estate, financial services, commercial cargo and individuals, helping identify control and transfer risk. The company started its operations with a paid-up capital of Rs. 2.5 Million, which has grown in the past 5 decades. As of Annual Report for the FY-2011 shows the Paid-up Capital of the Company is Rs. 1.237 billion, which is the highest amongst all the General Insurance companies in Pakistan. Adamjee Insurance enjoys a competitive position in the insurance industry, but during the year 2011 its sales dropped because of law & order situation of the country and uncertainties in the external environment. AICL has a strong asset base, paid-up capital, substantial reserves, balanced portfolio mix and steady growth in gross premium. The company faced a net loss of Rs. 174.75 million in the fiscal year 2011.



Source: AICL, Karachi Stock Exchange, Analysis Report (2006-

2.2.1.2. DG Khan Cement (DGKC):

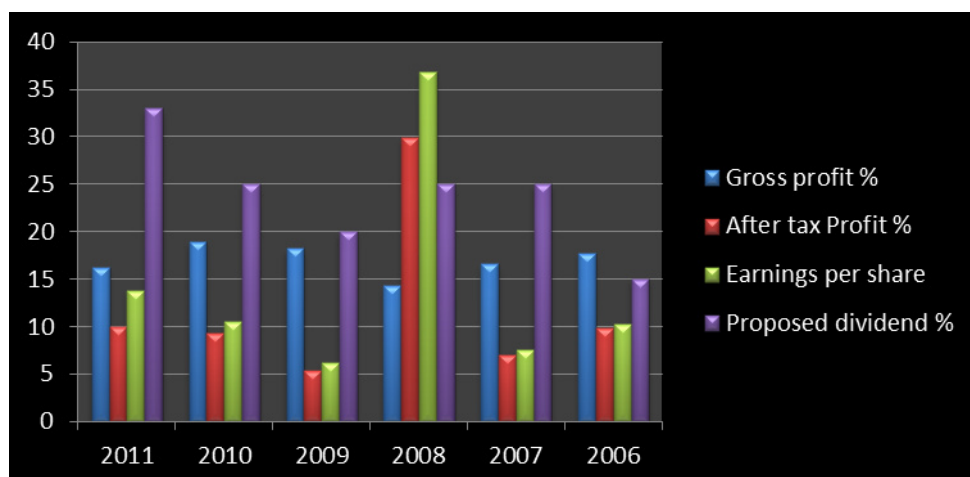
D. G. Khan Cement Company is a public limited company incorporated in Pakistan under the Companies Ordinance 1984, and is listed on all three Stock Exchanges of Pakistan as stated in the Annual Report of FY-2011. It is principally engaged in production and sale of Clinker, Ordinary Portland and Sulphate Resistant Cement. The Company commenced its operations with a Paid-up Capital of Rs. 2.5 million, which has grown phenomenally in the past 5 decades. As of 2011 the Paid-up Capital of the Company is Rs. 3.650 billion. The sales of the company was witnessing a declining trend after 2008, but now its increasing and has shown better results in the fiscal year 2011. The company made Rs. 125.38 Million net profit after taxes in year 2011 which was 50% less as compared to 2010.



Source: DGKC, Karachi Stock Exchange, Analysis Report (2006-

2.2.1.3. Nishat Mills Limited (NML):

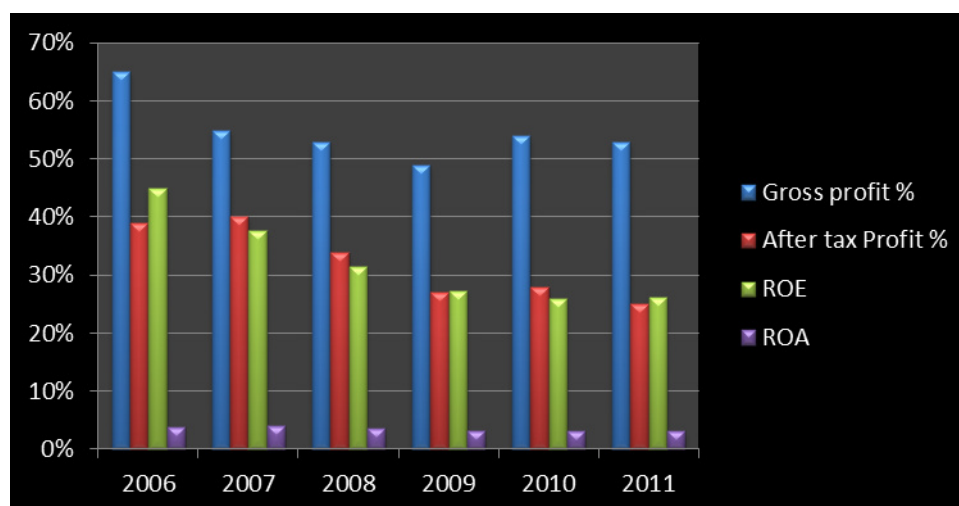
Nishat Textile Mills Limited is a public limited Company incorporated in Pakistan under the Companies Ordinance, 1984 and listed on all Stock Exchanges in Pakistan. As stated on the official website, the Company is engaged in the business of textile manufacturing and of spinning, combing, weaving, bleaching, dyeing, printing, stitching, apparel, buying, selling and otherwise dealing in yarn, linen, cloth and other goods and fabrics made from raw cotton, synthetic fiber and cloth and to generate, accumulate, distribute, supply and sell electricity. The Company's net profit during the fiscal year 2010-11 was Rs. 4.83 Million, with gross profit of Rs. 7.846 Million; the Earning per Share was Rs. 13.78, as represented in the Annual Reports. The Gross Profit of the company increased substantially and resulted in good Profit and dividends to shareholders. The overall financial performance of the company is witnessing a declining trend since 2008, but it has been able to pay out dividends to shareholders to give a positive signal in the market and increase morale of the shareholders. One major reason for this declining trend is the increase in competition in textile industry of Pakistan.



Source: NML. Annual Report FY 2010-11

2.2.1.4. MCB Bank Limited:

MCB Bank Ltd. is a banking company incorporated in Pakistan and is engaged in commercial banking and related services. The bank's ordinary shares are listed on all the stock exchanges in Pakistan where as its Global Depository Receipt (GDR) are traded in International Order Book (IOB) system of the London Stock Exchange. The Annual Reports of MCB bank shows that it is Operating 1,165 branches including 22 Islamic banking branches within Pakistan and 8 branches outside the country. Mansha and 11 other entrepreneurs formed National Group in 1991, which won the right to acquire Muslim Commercial Bank, today's MCB. The bank was acquired on the basis of a vision, to be the leading financial services provider, partnering with customers for a more prosperous and secure future, and it has been providing good performance to satisfy customers. The Bank made a profit of Rs. 12 Billion, with Earning per Share of Rs. 23.23. MCB Bank has total market share of 8.96% in conventional banking sector in Pakistan which has increased from FY 2010 it was 8.29%.



Source: MCB Bank Ltd. Annual Report FY 2010-11

2.3. Areas of Further Studies:

Existing literature remained inconclusive on the effect of diversification on corporate performance. The study on Nishat Group of Companies will allow us to find out some insights of diversification on financial performance of companies. Although there are some costs and benefits associated with every strategy, but the question arises whether the size of group influences the strategy or it also has to face the same consequences as a small business faces from such business strategy.

3. Research Methodology:

The population of interest is the conglomerates that are operating in Pakistan as listed by Karachi Stock Exchange and are public limited companies. The sample population was constructed by taking all five big groups namely, Nishat Group, Atlas Group, Dawood Group, Hashoo Group and Lakson Group of Companies. The sample size is then narrow down to the Group of companies that is having a bank in its business portfolio, Atlas Bank has now been acquired and merged into Summit bank, so it has been dropped from our sample, Lakson Group and Hashoo Group does not have any bank in their portfolio so they are not included in our sample. Dawood group and Nishat Group of Companies are running banks; 1st Dawood investment bank and MCB Bank respectively. Dawood Group was dropped because of lack of adequate descriptive information. The Companies that are running under Nishat Group of Companies are listed in KSE and are wholly owned companies by Nishat Group, resulting in a sample population of one conglomerate for our research.

Table 1: Outline of Sample Selection:

5 Groups	Conglomerates in Pakistan: (Nishat, Atlas, Dawood, Lakson & Hashoo Group)
-1	Due to merger of Atlas Bank in Summit Bank
4	
-2	Groups with no Bank in their Portfolio (Lakson & Hashoo Group)
2	
-1	Due to unavailability of reliable data (Dawood Group)
1	Comprise the Sample (Nishat Group)

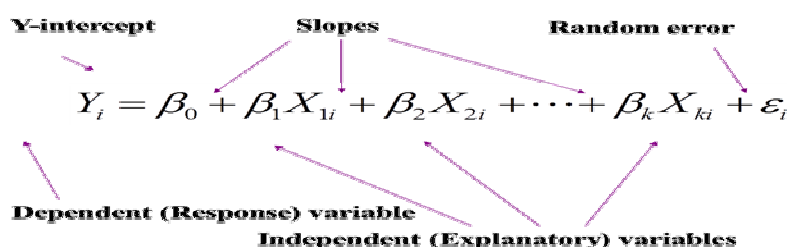
The primary and secondary data will be collected from annual reports, Karachi Stock Exchange (KSE), online publications, State Bank of Pakistan spanning from 1985 to 1996. The diversification history of the group has been studied over the selected period. The research attempts to measure the relationship between diversification and financial performance of the group in terms of profitability, operational efficiency and growth of the Group companies. The impact of diversification into financial services industry on financial performance will be measured by using dependent and independent variables.

3.1.1. Performance Measures

For our research we will be using “Multiple Regression Model” to test the relationship and significance of variables used to measure the relationship between diversification and firm’s value. ‘Multiple Regression Model’ tests the relationship between 1 dependent and 2 or more independent variables, where Y is dependent variable and X is Explanatory (independent variables), e is Random Error and B is slope. The model is as follows:

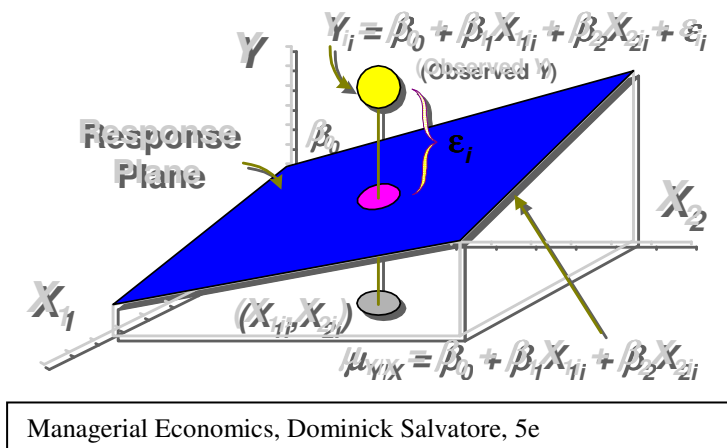
Multiple Regression Model:

$$Y = a + b_1 X_1 + b_2 X_2 + \dots + b_k X_k$$



Managerial Economics, Dominick Salvatore, 5e

Graphical Presentation of the Model:



Managerial Economics, Dominick Salvatore, 5e

Variables used for the research are as follows:

α = Return on Assets

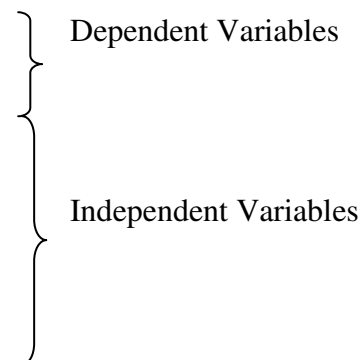
α = Return on Equity

β_1 = EBITDA Margin

β_2 = Total Assets Turnover

β_3 = Growth Potential

ϵ_i = Error Term



The study attempts to measure the impact of diversification on firm’s performance measured by EBITDA Margin, Total Assets Turnover, and Growth. The dependent variables are assumed to be ROA and ROE, as they are the true predictors of financial performance, and these factors are checked by EBITDA, TATO and Growth which are independent variables. Past studies have used Rumelt’s specialization ratio to measure the firm’s performance, the study under review is on Nishat Group of Companies, Nishat Textile Mills is the business related to textile industry, Adamjee insurance is a General insurance company, DG khan cement is a company from cement industry and MCB bank is a financial institution. The overall business portfolio of Nishat Group is an example of unrelated diversification. Therefore the SR ratio of Rumelt’s study is not applicable for this research. The dependent and independent variables would allow us to check the financial performance of Nishat Group of companies and evaluate whether the diversification strategy has yield any positive impact on the overall business of the company or not.

First the sample t-test, F-Statistics and Analysis of Variance, will be carried out to find the impact on the Group Companies. As a second test, the above mentioned regression model will be used to find out the relationship between financial performance and diversification Strategy of Nishat Group of Companies. After the analysis errors and problems in regression analysis will be identified. Parameters that are selected are assumed to be accurate measures of the relationship between the diversification strategy of a Group of Companies and its Financial Performance.

4. Statistical Analysis:

The data gathered for the research includes annual reports of Nishat Group from 1985 to 1996, the dependent and independent Variables were calculated and then average values were calculated of the data including; Adamjee Insurance, DG Khan Cement and Nishat Mills Limited, the Group data excludes MCB Bank’s Financials solely for the purpose of identifying the Group’ Performance before and after diversification, (The Table can be seen in Appendix III for reference). The descriptive statistics of the sample Group has been

reported in Table3, to observe the behavior of financial performance of the group before and after diversification. The first panel of the table describes the performance of Nishat Group of Companies before diversification into financial services industry; ROE has the highest mean value with the maximum variation and Growth is lowest before diversification with relatively minimum risk. Total assets turnover shows lowest variations which is relative to its mean value. On the other hand, the after diversification results, are quite change with ROE having highest mean value and Growth is having lowest value with relatively low risk. EBITDA has zero variance, meaning that the operations of business are certain and yielding low risk and stable returns. On average overall performance of the group has been improved after diversification with low risk and returns. ROE being the dependant variable has greater variation in terms of risk and returns among all variables.

Table 3: Descriptive Statistics						
	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness
Before Diversification						
EBITDA	0.34	0.53	0.42	0.08	0.01	0.75
TATO	0.49	0.59	0.54	0.04	0.00	-0.20
Growth	0.03	0.32	0.19	0.11	0.01	-0.51
ROA	3.77	6.1	4.95	0.87	0.75	-0.30
ROE	26.98	37.27	30.88	4.44	19.73	0.82
After Diversification						
EBITDA	0.49	0.64	0.57	0.07	0.00	0.09
TATO	0.37	0.56	0.43	0.08	0.01	1.38
Growth	0.02	0.21	0.12	0.09	0.01	-0.31
ROA	4.52	10.44	8.09	2.15	4.61	-0.77
ROE	33.03	52.28	44.12	7.20	51.77	-0.70
Average Performance Before and After Diversification						
EBITDA	0.05	0.64	0.46	0.16	0.03	-1.36
TATO	0.37	0.59	0.48	0.08	0.01	-0.16
GROWTH	0.01	0.32	0.15	0.11	0.01	0.09
ROA	1.22	10.44	6.11	2.62	6.86	0.09
ROE	2.44	52.28	34.81	12.97	168.19	-1.08

4.1. Correlation Matrix Analysis:

See the table in Appendix 1:

- a. **EBITDA & TATO:** The Correlation matrix shows that the relationship between EBITDA and TATO before diversification is negatively correlated which indicates the managerial inefficiency. Increased assets leads to lower sales means managers are unable to handle large amount of assets and they can't produce higher sales meaning TATO. The results are similar after diversification that EBITDA and TATO are negatively correlated, it also indicates the pricing strategy of the company with low profit margins tend to have high TATO while those with high profit margins have low TATO.
- b. **EBITDA & Growth:** There is positive correlation between EBITDA and Growth meaning that high growth companies needs to invest more in operations and share less returns to the shareholders. After diversification the negative correlation between Growth and EBITDA proves that when growth slows down the less profit is retained and more is shared with the shareholders in the form of Dividends.
- c. **Growth & TATO:** "A firm's operating value is equal to the value of its assets in place plus its growth options, and this mix varies considerably across different firms." firms with growth prospects must have

high financial flexibility as compare to high assets in place. The negative correlation between growth and TATO proves the above statement that when a firm is operating in an industry with high growth prospects will have low investments in assets because financial flexibility is more important at this stage. After diversification results of Growth and TATO remains the same.

- d. EBITDA & ROE:** The negative correlation supports the hypothesis that before diversification EBITDA was negatively predicting ROE. Negative correlation between ROE and EBITDA proves that the firm is earning operating profit but that profit is generated from outsiders money i.e. Debt and the company has very minimal Shareholders Equity on average. But after diversification shareholders value has been created and the relationship between ROE and EBITDA is positively correlated, meaning that more value is now being shared with the SHE and less is being paid out as financial charges because of reduced leverage.
- e. EBITDA & ROA:** Positive correlation exists between ROA & EBITDA high value indicates that they are strongly correlated. Positive relationship between ROA and EBITDA means that the company is using optimal quantity of assets that are yielding equal returns or the average assets of the company is unchanged. The results of correlation between ROA and EBITDA remain same after diversification, both are positively correlated if one increases the other will also increase and vice a versa.
- f. Growth & ROE:** Negative correlation between growth and ROE arises because when growth is there, firms need more capital from shareholders so Share Holders Equity increases and because of increase in Share Holders Equity ROE decreases. As in growth period income is inconsistent and growing.

Growth has positive correlation with ROA, if growth increases ROA will also increase and vice a versa, whereas relationship of ROA with TATO is concerned it was significantly correlated with each other before diversification but after diversification it had mild negative correlation, which indicates that assets turnover is negatively related to ROA, and both are inversely proportional. On the other hand the relationship of TATO and ROE was positively correlated but after diversification it had a mild effect and is directly proportional to each other.

Table 4 contains the detail analysis of risk and financial performance of the Nishat Group on the basis of Average Return on Assets. The ROA of Nishat group before diversification was 4.95% which has been increased almost to 100% after diversification and is 8.09% after diversification with more than 100% increase in risk. The SD and CV values are representing risk in the analysis which was 0.87 and 0.75 respectively before diversification and after diversification it rose to 2.15 and 4.61.

Category	N	AROA	SD	CV
Before Diversification	6	4.95	0.87	0.75
After Diversification	6	8.09	2.15	4.61

Table 4: Average Return on Assets Summary

The behavior of risk and profitability of AROE has been reported in Table 5, the results are similar to AROA, before diversification it was 30.88 and after diversification it is 44.12 with more than double increase in risk. The higher risk is the result of high return, diversification in reality is used to reduce the overall risk of the business, but in this case it has resulted in increase of risk.

Category	N	AROE	SD	CV
Before Diversification	6	30.88	4.44	19.73
After Diversification	6	44.12	7.20	51.77

Table 5: Average Return on Equity Summary

The trends of EBITDA, is reported in Table 6, which shows different results that after diversification returns has been increased with reduction in risk factor. Thus it is concluded that the operating profitability of the Group is improved with diversification and the associated risk has been reduced to zero.

Category	N	Avg. EBITDA	SD	CV
Before Diversification	6	0.42	0.08	0.01
After Diversification	6	0.57	0.07	0.00

Table 6: Average EBITDA Summary

The results of growth has been shown in Table 7, which states that the overall growth of the Group has declined and the SD value decreases while the CV value remaining constant. The results proves that when a company is on its initial stages it retains more and growth rate is high, but after it has reached a stable position growth slows down and the associated risk also reduces.

Category	N	Avg. Growth	SD	CV
Before Diversification	6	0.19	0.11	0.01
After Diversification	6	0.12	0.09	0.01

Table 7: Average Growth Summary

TATO indicates the amount of sales generated against Rupee worth of Assets. Assets turnover are used to measure firm's efficiency at using its assets for generating sales. The higher the number the better, it also indicates the pricing strategy of the Group with low profit margins tend to have high TATO while those with high profit margins have low TATO. The results of TATO are summarized in Table 8, which indicates that it has decreased after diversification and the risk associated with the assets have been increased.

Category	N	A. TATO	SD	CV
Before Diversification	6	0.54	0.04	0.00
After Diversification	6	0.43	0.08	0.01

Table 8: Average Total Assets Turnover Summary

4.2. Analysis of Variance and F-Statistics:

	Before Diversification	After Diversification
R Squared	0.724	0.946
Adjusted R Squared	0.309	0.864
SE of Regression	0.72023	0.79073
Durbin Watson Stat	2.146	2.938
Mean of Dependent Variable	4.9533	8.09
SD of Dependent Variable	0.73695	2.089
Sum of Squared Residual	1.037	1.251
F Statistic	1.745	11.632

Table 9: Overall Summary

The summarized form of data has been presented in Table 9, which contains the detail analysis of the dependent variables i.e. ROE and ROA, the data suggests that the adjusted R Square for the multiple variables is 30.9% before diversification and 86.4% after diversification, this concludes that there is a strong relationship between dependent and independent variables that are selected for the study. The standard Deviation among dependent variables has been increased from 0.736 to 2.089 after diversification. Mean of dependent variables has also increased from 4.95 to 8.09 after diversification. Thus the overall results prove that there is a relationship between Group's diversification and its financial performance.

Ho: Diversification does not have positive impact on financial performance of the Group.

Ha: Diversification does have positive impact on financial performance of the Group.

F calculated = 1.745 & 11.632

F tab = 7.01 with 1% level of significance

Degrees of Freedom (df) = 4 and 8

F Statistics is use to test the hypothesis that the variation in the independent variable explains a significant proportion of the variation in the dependent variables. Since the calculated value of F statistic of 11.632 exceeds the critical value of 7.01 for the F distribution with df 4 and 8, we reject the null hypothesis that there is no statistically significant relationship between the independent variables and dependent variable. I.e. we accept the alternative hypothesis at the 1% level of significance that not all coefficients are equal to zero.

Error:

The Durbin Watson test indicates the presence of Autocorrelation error, the adjustment of error may involve inclusion of time as an additional explanatory variable to take into consideration the trend that may exist in the data, the inclusion of an important missing variable into the regression or the re-estimation of the regression in non linear form.

4.3. MCB Bank Analysis Before and After Diversification:

Capital Adequacy Ratio (CAR) is used to measure a bank's capital. It is expressed as a percentage of a bank's risk weighted credit exposures. The CAR of MCB Bank before diversification was 0.347 which after diversification increased to 0.371, which indicates that bank's risk weighted credit exposure has been increased after diversification. The other ratio which is used to check performance of MCB Bank after the diversification includes Average amount of Deposits which has been increased from 0.009 to 0.021, which shows that average amount of deposits have increased over the period. Profit Growth of the bank remains negative due to heavy losses in the year 1989 and 1995. Return on Invested capital shows upward trend and has increased from 36.24 to 48.89 over the period.

	Average Capital Adequacy Ratio	Average amount of deposit	Average Profit Growth	Average Return on Invested Capital	Average Advances to Deposit Ratio	AROA
Before Diversification	0.347	0.009	(0.026)	36.241	0.619	0.676
After Diversification	0.371	0.021	(0.115)	48.897	0.530	0.553

Table 10: Summary of MCB Bank Average Profitability Before and After Diversification.

The other indicators of Bank's profitability includes Advances to Deposits ratio, a bank's main function is to collect deposits and invest them efficiently in giving out loans and earn interest on them, one of the main source of income for banks is the mark up earned on loans. The Advances to deposits ratio of MCB is showing downward trend, which indicates that over the period of 13 years the bank's deposit ratio has been improved but the advances has decreased which means that the Bank is not efficiently maintaining its treasury role; it might be due to large number of branches and expansion of banking services. In the end Average ROA has been calculated which also shows the downward trend before diversification it was 0.676% and after diversification it is 0.553%, although the movement is very slight but it also indicates inefficiency of management to utilize its assets efficiently to generate appropriate returns.

4.4. Risk Analysis of MCB Bank Ltd.

Category	Before Diversification		
	Mean	SD	CV
CAR	.01375	.03368	.001
Average deposits	.00239	.00586	.000
Growth	4.06636	9.96051	99.212
ROE	7.37188	18.05734	326.068
Advance to Deposits	.01705	.04176	.002
ROA	.08616	.21104	.045
Category	After Diversification		
	Mean	SD	CV
CAR	.01238	.02476	.001
Average deposits	.00048	.00096	.000
Growth	14.28838	28.57675	816.631
ROE	3.40095	6.80190	46.266
Advance to Deposits	.02323	.04646	.002
ROA	.08217	.16435	.027

Table 11: Risk Analysis of MCB Bank Ltd. Before and After Diversification.

The above table shows complete risk analysis of MCB Bank Ltd. Before and after diversification, the CAR concludes that the risk was high before diversification, 0.03368 and after diversification it is reduced to 0.02476 and the CV remains the same. Average Deposits also shows the same trend in terms of risk it was 0.00586 before and came down to 0.00096. Growth has the highest volatility in terms of risk and it has increased to three folds although net profit of the firms are negative and shows greater volatility which is proved here with increase in SD and CV. ROE, ROA and Advances to Deposits ratio also shows downward trend in terms of risk and sounds better after diversification. The Overall profitability ratios of MCB Bank Ltd indicates that the diversification has proved useful for them as the overall risk of the bank has been reduced but with greater volatility in Net Profits.

5. Conclusion:

The research contains a detail analysis on the financial performance of the Nishat Group of Companies before and after diversification, the motivation behind this study was to explore the performance of highly diversified group, how diversification results when a non financial Group enters into a financial services industry e.g. acquisition of a bank. Nishat Group of Companies acquired MCB Bank in 1991; the research tests the financial performance of the group before and after diversification. The results concluded that the overall financial position of the Group became stronger after diversification. As more wealth is now being shared with the Shareholders of the Group and less is paid out as financial charges.

The results suggests that the average performance of the group became stable after diversification into financial services industry whereas, the analysis of risk measures of the study reveal that the weak performance was witnessed after diversification with the high risk and higher return in comparison with before diversification, lower risk and return. The diversification into financial services industry was more profitable for the Nishat Group because the need for debt borrowing became less for the Group and more finances were generated from Equity. Although Debt financing is cheaper than equity financing but the addition of financial charges makes it more risky. However equity financing is more reasonable than debt financing and it generates more revenues for the shareholders.

The research concluded that usually in related diversification risk reduces, but Nishat Group of Companies is highly unrelated diversified Group which shows that the overall risk of the Group had increased after diversification. Diversification into unrelated industry brings in more risk with more returns, however the

related diversification results in synergies which reduces risk, but there are other advantages of unrelated diversification apart from reduction in risk. The main advantages of unrelated diversification includes; Profitability and size are key for unrelated diversification, Business risk is scattered over different industries, Capital resources invested in those industries offering best profit prospects, Stability of profits (Hard times in one industry may be offset by good times in another industry), If management is exceptionally astute at spotting bargain-priced firms with big profit potential then unrelated diversification is more suitable, and Shareholders' wealth can be enhanced, all these advantages can be witnessed in the diversification of Nishat Group.

Apart from advantages there are some major disadvantages of unrelated diversification which includes the inefficiency of the management in using its Assets at optimal level, which results in negative correlation between TATO and EBITDA ratios. The bigger the size of the Group becomes the management become less efficient in utilizing its assets at its full capacity. However the overall research concludes that the diversification of Nishat Group of Companies into financial services industry proves to be profitable for the whole Group and the overall financial performance of the group became sound after diversification.

Thus it is concluded that the Diversification does have positive impact on the financial performance of the Group, we reject null hypothesis, the overall financial performance of the Group improved after diversification. The empirical investigation of diversification and firms' financial performance undertaken herein is Causal in nature with reference to Pakistan and still leaves many doors open for further research in this area. Some of these areas may include the nature of corporate diversification whether it is related one or unrelated, level of related diversification, influence of group size on nature of diversification. The answer to these questions would, undoubtedly, help make investment decisions more accurate and establish the body of knowledge-based on strong empirical evidences.

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Appendix:

Appendix I:

Before Diversification:					
	EBITDA	TATO	Growth	ROE	ROA
Pearson					
Correlation		(0.56)	0.73	(0.56)	0.77
Sig. (2-tailed)		0.25	0.10	0.24	0.08
Pearson					
Correlation	(0.56)		(0.47)	0.56	(0.64)
Sig. (2-tailed)	0.25		0.34	0.25	0.17
Pearson					
Correlation	0.73	(0.47)		(0.52)	0.76
Sig. (2-tailed)	0.10	0.34		0.29	0.08
Pearson					
Correlation	(0.56)	0.56	(0.52)		
Sig. (2-tailed)	0.24	0.25	0.29		
Pearson					
Correlation	0.77	(0.64)	0.76		
Sig. (2-tailed)	0.08	0.17	0.08		

** . Correlation is significant at the 0.01 level (2-tailed).

After Diversification:					
	EBITDA	TATO	Growth	ROE	ROA
Pearson Correlation		(0.71)	(0.05)	0.52	0.70
Sig. (2-tailed)		0.12	0.92	0.29	0.12
Pearson Correlation	(0.71)		0.66	0.16	(0.01)
Sig. (2-tailed)	0.12		0.16	0.77	0.98
Pearson Correlation	(0.05)	0.66		0.80	0.58
Sig. (2-tailed)	0.92	0.16		0.06	0.23
Pearson Correlation	0.70	(0.01)	0.58		
Sig. (2-tailed)	0.12	0.98	0.23		
Pearson Correlation	0.52	0.16	0.80		
Sig. (2-tailed)	0.29	0.77	0.06		

** . Correlation is significant at the 0.01 level (2-tailed).

Appendix II:

Before Diversification:

Model	Coefficients ^a			
	Unstandardized Coefficients		T Statistic	Sig.
	B	Std. Error		
ROA (Constant)	5.35	9.14	0.59	0.66
EEBITDA	4.36	8.22	0.53	0.69
TATO	-8.69	14.22	-0.61	0.65
Growth	3.46	5.39	0.64	0.64
ROE	0.06	0.12	0.49	0.71

After Diversification:

Model	Coefficients			
	Unstandardized Coefficients		T Statistic	Sig.
	B	Std. Error		
ROA (Constant)	-23.10	5.03	-4.59	0.14
EBITDA	18.66	8.87	2.10	0.28
TATO	20.41	6.32	3.23	0.19
Growth	-18.10	8.05	-2.25	0.27
ROE	0.32	0.11	2.91	0.21

Appendix III:

Nishat Group of Companies (1985 – 1996):

	EBITDA	ROE	TATO	Growth	ROA
1985	0.34	35.57	0.55	0.03	3.77
1986	0.35	30.01	0.59	0.08	4.10
1987	0.39	37.27	0.57	0.22	5.39
1988	0.39	26.98	0.51	0.28	5.09
1989	0.53	27.52	0.54	0.32	5.27
1990	0.50	27.95	0.49	0.21	6.10
1991	0.49	46.16	0.56	0.21	8.61
1992	0.52	45.58	0.48	0.18	7.46
1993	0.64	52.28	0.39	0.20	10.03
1994	0.64	49.45	0.37	0.10	10.44
1995	0.60	38.24	0.38	0.03	7.48
1996	0.50	33.03	0.39	0.02	4.52
1997	0.05	2.44	0.37	0.01	1.22

MCB Bank Limited: (1985 – 1996):

MCB Bank Limited						
	CAR	ROE	ROA	Advances to Deposit Ratio	Profit Growth	Average amount of deposit
1985	-	-	-	-	-	-
1986	-	-	-	-	-	-
1987	0.364	34.549	0.695	0.580	0.123	0.008
1988	0.357	39.410	0.800	0.598	0.092	0.008
1989	0.356	43.403	0.769	0.614	-0.572	0.009
1990	0.310	27.604	0.438	0.686	0.254	0.010
1991	0.301	36.979	0.471	0.600	0.196	0.012
1992	0.397	46.007	0.425	0.567	0.234	0.014
1993	0.378	52.187	0.459	0.490	0.511	0.018
1994	0.378	63.327	0.718	0.510	0.238	0.022
1995	0.380	61.239	0.776	0.512	-2.466	0.024
1996	0.364	14.717	0.198	0.517	0.783	0.027
1997	0.399	67.820	0.823	0.517	-0.304	0.029