

Mehmood, Rashid; Hunjra, Ahmed Imran; Chani, Muhammad Irfan

Article

The impact of corporate diversification and financial structure on firm performance: Evidence from South Asian countries

Journal of Risk and Financial Management

Provided in Cooperation with:

MDPI – Multidisciplinary Digital Publishing Institute, Basel

Suggested Citation: Mehmood, Rashid; Hunjra, Ahmed Imran; Chani, Muhammad Irfan (2019) : The impact of corporate diversification and financial structure on firm performance: Evidence from South Asian countries, Journal of Risk and Financial Management, ISSN 1911-8074, MDPI, Basel, Vol. 12, Iss. 1, pp. 1-17, <https://doi.org/10.3390/jrfm12010049>

This Version is available at:

<https://hdl.handle.net/10419/239008>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.


If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

Article

The Impact of Corporate Diversification and Financial Structure on Firm Performance: Evidence from South Asian Countries

Rashid Mehmood ¹, Ahmed Imran Hunjra ^{1,*}  and Muhammad Irfan Chani ²

¹ University Institute of Management Sciences, PMAS-Arid Agriculture University Rawalpindi, Punjab 46000, Pakistan; rashidm1005@gmail.com

² COMSATS University Islamabad, Vehari Campus, Islamabad 45550, Pakistan; irfanchani@gmail.com

* Correspondence: ahmedhunjra@gmail.com

Received: 29 January 2019; Accepted: 21 March 2019; Published: 25 March 2019



Abstract: We examined the impact of corporate diversification and financial structure on the firms' financial performance. We collected data from 520 manufacturing firms from Pakistan, India, Sri Lanka, and Bangladesh. We used panel data of 14 years from 2004–2017 to analyze the results. We applied a two-step dynamic panel approach to analyze the hypotheses. We found that product diversification and geographic diversification significantly affected the firms' financial performance. We further found that dividend policy and capital structure had a significant impact on the firm's financial performance.

Keywords: corporate diversification; financial structure; corporate governance; audit quality; firm financial performance

1. Introduction

Managers tend to diversify their business to get more benefits from the current market with minimum risk. Globalization provides an opportunity to expand their business across the border for profit maximization. Thus, corporate diversification strategy becomes important for the expansion and growth of firms in competitive and dynamic environments. The objective of corporate diversification is to increase profitability, market share, debt capacity, growth opportunity, risk reduction, and the need to use human and financial resources efficiently (Afza et al. 2008). Changes in economic or industrial conditions force management to diversify their business (Phung and Mishra 2016). Diversification also helps firms to explore different markets (Gomes and Livdan 2004).

When firms go for diversification, they need extra capital. According to Lewellen (1971), diversified firms need more debt financing than non-diversified firms. The effective financial structure maximizes the value for shareholders. There are three types of financial structure in finance theory: investing, financing, and dividend policies (Zulkafli et al. 2015). Corporate governance plays an important role to improve the firms' financial performance (Yermack 1996; Erickson et al. 2005). We take corporate governance into consideration and how corporate governance affects the firms' financial performance. Claessens and Yurtoglu (2013) explain that a good governance system is beneficial for the firms through better access to finance, good financial performance, and more desirable treatment of stakeholders.

In this complex world, survival of the manufacturing industry becomes more challenging. Given the complex, globalized, and challenging environment, there is a need for survival and better financial performance of the manufacturing sector. Therefore, this sector has to diversify its businesses into different products and different markets. However, the corporate diversification,

financial structure (investment, financing, and dividend policies), and corporate governance are the important factors to enhance the firms' financial performance. We find that product diversification, geographic diversification, and financial structure significantly affect the firms' financial performance. The outputs of our study suggest that financial policies are important determinants of firms' financial performance. In addition, our findings are beneficial for firms in emerging markets engaging in diversification operations.

There are five sections of the study. We discuss the introduction in Section 1 followed by literature in Section 2. The methodology is explained in Section 3. Section 4 deals with the empirical analysis and we conclude our study in Section 5.

2. Review of Literature

A corporate diversification strategy deals with business expansion and profit maximization of a firm. The modern portfolio theory of [Markowitz \(1952\)](#) states that diversification in various investment projects leads to minimize risk and maximize expected return. In agency theory, the literature shows that managers work for their personal benefits at the expense of shareholders by using diversification strategies ([Jensen and Meckling 1976](#); [Denis et al. 1997](#)). [Lins and Servaes \(2002\)](#) explain that the utilization of internal capital is an attraction for diversification due to imperfection in the external capital market. The concept explains a positive relationship between corporate diversification and firms' value because a firm has informational advantages in raising capital and it can avoid the costs of external financing, which is greater than the cost of internal financing.

To meet challenges and survive in the markets, firms make diversification decisions. Management of the firms decide whether to go for related or unrelated diversification. If firms opt for related diversification, that provides good output and reduces total risk. However, if management goes for unrelated diversification, it may have a negative impact on firm value. Corporate diversification strategy helps firms to expand business activities and get maximum profit ([Phung and Mishra 2016](#)). According to [Pandya and Rao \(1998\)](#), diversified firms perform better on risk and return basis. According to [Phung and Mishra \(2016\)](#), there is a negative impact of diversification on financial performance. This negative impact is due to a weak and inefficient corporate governance system, which motivates firms to diversify and ultimately negatively affects the firms' financial performance. Furthermore, inefficient diversification strategy negatively affects the firms' financial performance ([Berger and Ofek 1995](#)). The literature states that diversification is important and has the potential to increase the firms' financial performance. Therefore, the impact of diversification on the firms' financial performance depends on its effective management.

Hypothesis 1 (H1). *Corporate diversification positively affects the firm's financial performance.*

When firms make diversification decisions, financial structure is an important factor which affects the firms' financial performance. [Zulkafli et al. \(2015\)](#) consider financing, investment, and dividend policies as corporate financial structure. Proper management of financial decisions (investment, financing, working capital, and dividend policy) is essential for the firms' financial performance ([Butt et al. 2010](#)). However, we investigate the impact of capital structure on the firms' financial performance. Based on some assumptions, [Modigliani and Miller \(1958\)](#) state that capital structure does not affect the firm's value. Later, [Modigliani and Miller \(1963\)](#) suggest that with an increase in taxes and deductible interest expenses, a firm prefers debt financing instead of equity financing. It shows that they have a different opinion when they consider the effects of tax shield and capital market imperfection. They revise their arguments and explain that capital structure affects the value of the firm due to the cost of debt. [Myers and Majluf \(1984\)](#); [Myers \(1984\)](#) explain Pecking Order Theory when a firm opts for internal rather than external sources of financing. Equity and debt financing bear the capital cost; therefore, it is not a cheap source of financing. A firm opts debt financing as it bears less cost as compared to equity financing. Dividend payments also give information to shareholders about firms'

financial performance. This is among the major financial decisions that top management takes (Baker et al. 2001). The business activities and growth depend on the financial structure of a firm. Firms need to make an investment decision with great care as this demands the estimation of the value of certain projects based on timing, size, and estimation of the cash flow of the future.

Butt et al. (2010) suggest that capital structure and dividend payments are important elements of firm growth and they find the positive impact of capital structure on the firms' financial performance. Safieddine and Titman (1999) state a positive impact of debt financing on the firms' financial performance. According to Gleason et al. (2000), capital structure and firms' financial performance have a negative relationship. Yat Hung et al. (2002); Salim and Yadav (2012) find a negative impact of capital structure on the firms' financial performance because the increase in leverage enhances the chances of bankruptcy cost which in turn decreases financial performance. Firms face financing obstacles, which slow down the firms' growth (Beck and Demircug-Kunt 2006). The negative impact of capital structure on the firms' financial performance confirms the Pecking Order Theory of Myers and Majluf (1984) which explains that when firms go for more debt financing, they earn less profit. Literature leads us to think that the relationship between capital structure and firms' financial performance and shareholders' wealth is still present. The firms should generate optimal capital structure in order to maximize wealth for shareholders.

Hypothesis 2 (H2). *Capital structure negatively affects the firm's financial performance.*

Does the dividend payment policy affect the value of a firm? There are different views in the literature about dividend policy and the value of a firm. Literature states that when firms buy back their stock, it gives a signal about undervaluation of stock prices of firms. This ultimately positively influences the firms' return because it creates wealth for stockholders along with an increase in share prices. The bird in hand theory of Gordon (1963) and the dividend growth model of Walter (1963) explain the relevance of dividend payment and further explain that dividend payment affects the value of the firms. Butt et al. (2010); Ali et al. (2015) find that dividend policy positively affects the firm's financial performance. Hunjra (2018) proves a significant role of dividend payments towards the firm's financial performance and support the relevancy school of thought. The concepts describe that dividend is less risky as compared to capital gain. Therefore, investors prefer dividend instead of receiving capital gain. This means that dividend payments increase the value of the firm. Titman et al. (2004); Cooper et al. (2008) state that dividend payment has a negative impact on firms' financial performance.

Hypothesis 3 (H3). *Dividend policy positively affects the firm's financial performance.*

Investment decision-making is another important component of the financial structure of the firm. The purpose of every investment is to earn the profit. Thus, investment decision-making directly affects the firms' financial performance. Miller and Modigliani (1961) present irrelevance proposition of dividend and explain that dividend payment does not affect the value of the firms rather investment decision affects the firm's value. Chen and Ho (1997); Chung et al. (1998); Jiang et al. (2006) show a positive impact of investment plans on the firm's financial performance. Titman et al. (2004) and Cooper et al. (2008) state investment decision has a negative impact on financial performance. The firms having an investment in fixed assets are less likely to have liquid assets. Therefore, firms having more liquid assets are likely to capitalize on long-term investment opportunities.

Hypothesis 4 (H4). *Investment policy positively affects the firm's financial performance.*

We have incorporated a set of control variables in our study (i.e., corporate governance, firm age, and firm size and growth). Firms can generate more capital for investment and improve their financial performance by applying good corporate governance practices. In a competitive environment,

effective corporate governance is important for economic development (Boubaker and Nguyen 2015). Jensen and Meckling (1976) present agency theory which explains that in a corporate governance system, managers work for their self-interest instead of owners' interest which results in inefficient allocation of resources and a decrease in financial performance. Due to availing personal benefits, management makes a decision like diversification. The theory supports the fact that agency conflicts negatively affects the firms' financial performance. Corporate governance minimizes the agency problem as individual and institutional investors prefer firms which are well governed. On the contrary, Stewardship theory explains that managers focus only on the collective wellbeing of the firms regardless of the self-interest of the managers (Donaldson and Davis 1991). Therefore, this theory suggests that firms can increase their financial performance if the top-level management possesses more power and they develop trust in running business affairs.

The literature explains the impact of corporate governance on firm's financial performance. Board of directors is a fundamental element of a firm's corporate governance structure (Black et al. 2009). Yermack (1996) finds a negative impact of board size on the financial performance of large firms in USA. Mak and Kusnadi (2005) find a negative impact of board size on firms' financial performance. Kiel and Nicholson (2003); Dar et al. (2011) find a positive impact of board size on the firm's financial performance. The literature states that board size is an important element of a good corporate governance practice. Bhagat and Bolton (2008); Ehikioya (2009) reveal a negative and significant relationship between CEO duality and firm's financial performance. The positive relationships between corporate governance mechanisms and financial performance show efficient management of corporate governance system. The negative relationship validates Agency Theory and indicates the situations where management performs for their own best interest with the investment of owners.

The auditor's full independent opinion after audit leads to audit quality (DeAngelo 1981). An audit committee performs an important and monitoring part to ensure the quality of the firm's accountability and financial statements (Carcello and Neal 2003). Resource dependence theory suggests that the large size of the audit committee can bring good resources into the firm like experience and skills. This shows the effectiveness of audit work while monitoring the operations of management that improves the firms' financial performance (Pearce and Zahra 1992). External audit quality in terms of big audit firms is also an important element of the audit committee. DeAngelo (1981) argues that the big four firms provide better audit quality which enhances the firms' financial performance. Bauer et al. (2009) find a positive impact of large audit committee size on the firms' financial performance. The frequency of audit committee meetings ensures the activeness of the audit committee, which improves the financial performance of the firms. Vafeas (1999); Xie et al. (2003) find the frequency of audit committee meetings has a positive impact on firms' financial performance. Considering the above studies, we take an audit committee and audit quality in our study to check their impact on the firms' financial performance as they enhance the quality of financial reporting and financial performance.

Large board size enhances the utilization of the firm's useful resources (Boubaker and Nguyen 2012). Hence, large firms have more opportunities to gain economies of scale and economies of scope. Firm size has a positive impact on the firm's financial performance (Titman and Wessels 1988; Frank and Goyal 2003; Hunjra et al. 2014). It is argued that firms with large size faceless financial distress and generate more profit (Titman and Wessels 1988). The firms' financial performance also depends on growth opportunities and the firms' age. Firm age is important in a way that it explains about the experience of the firm in its operations. Muritala (2012); Hunjra et al. (2014); Lazar (2016) find that firm growth and firm age have a positive impact on firms' financial performance. The positive impact of growth indicates the opportunities for the firms to expand business and earn more profit. Pervan et al. (2017) present a theoretical discussion about the positive and negative impact of age on financial performance. Firms with old age have more abilities, experience, good technology, skilled labor, and learning environment, which help them to increase financial performance. On the contrary, older firms

face the situation where there is a reduction in flexibility and ability to make immediate changes and take quick decisions. With the increase in age, firms also avoid taking the risk.

3. Methodology

3.1. Data

We use panel data for the period of 2004 to 2017. We collect the data from the financial statements of the manufacturing industry firms listed on Pakistan Stock Exchange (PSX), Bombay Stock Exchange (BSE), Colombo Stock Exchange (CSE) and Dhaka Stock Exchange (DSE) for the countries Pakistan, India, Sri-Lanka and Bangladesh respectively. For analysis, we use the data of 520 firms from manufacturing sector because this sector is positively opting the diversification strategy that needs management of operations and financial activities. Table 1 describes number of firms of selected countries. We follow [Campa and Kedia \(2002\)](#) for the selection of sample in our study while considering the product diversification. We categorize firms as diversified when they produce more than one products, whereas we categorize firms as specialized when they produce single product. In addition, out of overall 520 sample firms, we classify 415 firms as diversified while 105 firms as single product firms.

Table 1. Categories of the Firms.

Countries	Diversified Firms	Single Product Firms	Total
Pakistan	225	38	263
India	87	30	117
Sri Lanka	74	21	95
Bangladesh	29	16	45
Total	415	105	520

3.2. Statistics

We use both accounting measures like Return on Assets (ROA) and Return on Equity (ROE) and market measures that is Tobin's Q (TQ) of profitability. We classify the firms producing a single product as specialized with a value of 0 and firms producing more than one product as diversified firms with a value of 1. [Afza et al. \(2008\)](#) apply the same criteria to measure product diversification. The proxy for geographic diversification is the proportion of foreign sales to total sales. [Schmid and Walter \(2012\)](#) also use this proxy in their study. We measure capital structure as a ratio of total debts to total assets of the firm. [Bhaduri \(2002\)](#) uses the same measure of capital structure. We calculate dividend per share as the proxy of dividend policy. [Oloidi and Adeyeye \(2014\)](#) use the same proxy in their study. We use the proxy for investment policy as a change in investment in fixed assets. [Aivazian et al. \(2005\)](#) apply this measure of investment in their study.

We measure board size as a number of board members. [Bhagat and Bolton \(2008\)](#) use this proxy in their research. For CEO duality, we use value 1 if the CEO is also a director of the firm, otherwise, it is 0 ([Bhagat and Bolton 2008](#)). Audit quality characteristics include audit quality, audit committee size and audit committee activity. We take value 1 if the firm is audited by big four audit firms, otherwise, 0 followed the approach of [Francis and Yu \(2009\)](#). We measure audit committee size as a total number of members in audit committee ([Azim 2012](#)). We calculate the audit committee activity as the frequency of audit committee meetings in a financial year ([Xie et al. 2003](#)). We calculate the firms' size as the natural log of total assets. In our study, we measure growth as the percentage change in sales. Further, we measure the firms' age as the difference between the year in which a firm starts and the year in which it exists in the sample. [Hunjra et al. \(2014\)](#); [Muritala \(2012\)](#) apply similar calculations of size, growth and age for analysis. The description of variables is given in Table 2.

Table 2. Tabular summary of definitions of variables.

Study Issue	Variable/s	Symbols	Definition/Calculation	Reference/s
Firms' Financial Performance	Return on Assets	ROA	Net income Available to Common Shareholders/Book value of assets	Afza et al. (2008) ; Iqbal et al. (2012)
	Return on Equity	ROE	Net income/Shareholders equity	Afza et al. (2008) ; Iqbal et al. (2012)
	Tobin's Q	TQ	The market value of equity plus book value of liabilities divided by book value of Assets	Wernerfelt (1997) ; Afza et al. (2008)
Corporate Diversification	Product Diversification	PD	Value 1, if a firm operates in more than one product, otherwise 0.	Afza et al. (2008)
	Geographic Diversification	GD	Foreign sales divided by Total sales.	Schmid and Walter (2012)
Financial Structure	Investment Policy	IP	Change in Investment in Fixed Assets	Aivazian et al. (2005)
	Capital Structure/Financing Policy	CS	Total debts divided by total assets	Bhaduri (2002)
	Dividend per share	DP	Total dividends paid out in a year/outstanding common shares	Oloidi and Adeyeye (2014)
Corporate Governance and Audit Quality Characteristics as Control Variables	Board Size	BSIZE	Number of Members in Board	Bhagat and Bolton (2008)
	CEO duality	CEOD	Value 1 if the CEO also acts as chairman of the board, otherwise 0.	Bhagat and Bolton (2008)
	Audit quality	AQ	Value 1, if the firms get their accounts audited with big four audit professionals (Deloittee Touche Tohmatsu, PwC, Ernst & Young and KPMG), otherwise 0.	Francis and Yu (2009)
	Audit Committee Size	ACSIZE	Total number of members in the audit committee	Azim (2012)
	Audit Committee Activity	ACA	The frequency of audit committee meetings in a financial year.	Xie et al. (2003)
Other Control Variables	Size	SIZE	Natural Log of Total Assets	Hunjra et al. (2014)
	Growth	GRTH	Percentage change in sales	Muritala (2012) ;
	Age	AGE	Difference between the year in which the firm starts and the year in which the firm exists in the sample	Muritala (2012) ; Hunjra et al. (2014)

We use the following equations to analyze the results:

$$ROA_{i,t} = \alpha_{i,t} + \beta_1 PD_{i,t} + \beta_2 GD_{i,t} + \beta_3 CS_{i,t} + \beta_4 DP_{i,t} + \beta_5 IP_{i,t} + \beta_6 BSIZE_{i,t} + \beta_7 CEOD_{i,t} + \beta_8 AQ_{i,t} + \beta_9 ACSIZE_{i,t} + \beta_{10} ACA_{i,t} + \beta_{11} AGE_{i,t} + \beta_{12} GRTH_{i,t} + \beta_{13} SIZE_{i,t} + \varepsilon_{i,t}, \quad (1)$$

$$ROE_{i,t} = \alpha_{i,t} + \beta_1 PD_{i,t} + \beta_2 GD_{i,t} + \beta_3 CS_{i,t} + \beta_4 DP_{i,t} + \beta_5 IP_{i,t} + \beta_6 BSIZE_{i,t} + \beta_7 CEOD_{i,t} + \beta_8 AQ_{i,t} + \beta_9 ACSIZE_{i,t} + \beta_{10} ACA_{i,t} + \beta_{11} AGE_{i,t} + \beta_{12} GRTH_{i,t} + \beta_{13} SIZE_{i,t} + \varepsilon_{i,t}, \quad (2)$$

$$TQ_{i,t} = \alpha_{i,t} + \beta_1 PD_{i,t} + \beta_2 GD_{i,t} + \beta_3 CS_{i,t} + \beta_4 DP_{i,t} + \beta_5 IP_{i,t} + \beta_6 BSIZE_{i,t} + \beta_7 CEOD_{i,t} + \beta_8 AQ_{i,t} + \beta_9 ACSIZE_{i,t} + \beta_{10} ACA_{i,t} + \beta_{11} AGE_{i,t} + \beta_{12} GRTH_{i,t} + \beta_{13} SIZE_{i,t} + \varepsilon_{i,t}. \quad (3)$$

We use descriptive statistics to check the normality of data and correlation is used to check the multicollinearity. We apply the Generalized Method of Moments (GMM), as this method performs consistent parameter estimation for the small time period and for a large cross-section. The GMM estimators enable asymptotically efficient inferences employing a relatively minimal set of assumptions (Arellano and Bond 1991; Blundell and Bond 1998). We deal with the unobserved heterogeneity by applying a fixed effect or by taking the first or second difference. The ability of first or second difference to remove the unobserved heterogeneity is developed for two-step dynamic panel data models. Furthermore, these models contain one or more lagged dependent variables and allow modeling of a partial adjustment mechanism.

4. Empirical Analysis

In Table 3, the mean value of financial performance represents the same trend and we find a lesser variation in values of financial performance measures which proves there is no outlier in our data. We further find that most of the firms are producing more than one product. In this competitive environment, it is necessary for manufacturing firms to expand their business for their survival. The firms do not pay a regular dividend to their investors as well as the average per share dividend is also very low. Results also indicate that this sector relies more on debt financing as compared to equity financing. In addition, an increase in debt structure results in the lowest return on assets. Therefore, opting for the diversification strategy, this sector needs to take a risk by increasing debt financing which helps to increase value. This sector is also growing in terms of fixed asset investments. Corporate governance is still at a growing stage in South Asian countries. The audit committee meets four times in a year. In addition, the average number of members of an audit committee are three. We find that more than one-third of the firms get their accounts audited with the big four audit firms. The average board size is around eight members and that shows a weak governance system. We further found that a lesser percentage of CEOs are acting as chairperson of the board. Sales growth shows a growing trend in the sales volume of this sector. Table 4 represents the correlation values to check the multicollinearity.

Table 3. Descriptive Statistics.

	Pakistan		India		Sri Lanka		Bangladesh		Overall	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
ROA	0.039	0.124	0.051	0.197	0.079	0.191	0.087	0.106	0.051	0.155
ROE	0.138	0.385	0.177	0.458	0.137	0.334	0.190	0.383	0.150	0.396
TQ	1.224	0.978	0.712	0.465	0.575	0.359	0.537	0.276	0.962	0.831
PD	0.835	0.371	0.747	0.435	0.770	0.421	0.656	0.476	0.794	0.405
GD	0.155	0.258	0.124	0.233	0.079	0.239	0.128	0.310	0.135	0.255
CS	0.587	0.286	0.566	0.243	0.442	0.229	0.434	0.217	0.550	0.271
DP	4.930	20.215	0.007	0.039	0.105	0.823	0.208	1.565	2.760	15.232
IP	0.137	0.503	0.154	0.556	0.146	0.598	0.184	0.728	0.145	0.547
BSIZE	7.854	1.345	8.234	3.340	8.159	2.524	8.274	2.566	8.014	2.230
CEOD	0.282	0.450	0.550	0.498	0.137	0.344	0.081	0.273	0.307	0.461
AQ	0.460	0.498	0.082	0.275	0.843	0.364	0.065	0.246	0.409	0.492
ACSIZE	3.243	0.597	3.531	1.339	2.843	0.779	3.780	1.191	3.280	0.921
ACA	4.169	0.599	4.191	1.614	4.093	1.439	4.215	1.285	4.165	1.104
AGE	34.445	18.860	38.245	28.112	47.449	36.822	28.481	23.069	36.960	25.434
GRTH	0.164	0.690	0.163	0.455	0.146	2.068	0.238	0.986	0.169	1.065
SIZE	21.764	1.557	15.519	1.553	14.917	1.520	16.028	1.683	18.914	3.545

Note: ROA is Return on Assets, ROE is Return of Equity, TQ is the Market Return, PD is Product Diversification, GD is Geographic Diversification, CS is Capital Structure, DP is Dividend Policy, IP is Investment Policy, ACA is Audit Committee Activity, ACSIZE is Audit Committee Size, AQ is Audit Quality, BSIZE is Board Size, CEOD is CEO Duality, AGE is Years of Activity of the Firm, GRTH is Sales Growth, SIZE is the Natural Log of Total Assets.

Table 5 explains the hypotheses testing through two-step dynamic panel regression. We categorize corporate diversification into two parts; product diversification and geographic diversification; therefore, we run three models for each one of the dependent variable in the analyses. In the first model, we analyze the impact of independent variables on firms' financial performance with product diversification. In the second model, we investigate the impact of independent variables on firms' financial performance with geographic diversification, whereas, in the third model, we run the analysis with product diversification as well as geographic diversification. We find that product diversification has a significant and positive impact on Return on Equity and Tobin's Q while it only has an insignificant impact on Return on Assets in the third model. An insignificant relationship suggests that highly diversified firms may not attract shareholders. Adamu et al. (2011) explain that if firms want to enhance financial performance, they should adopt a focused strategy. We find that geographic diversification has a significant and positive impact on Return on Assets, whereas it has a significant and negative impact on Tobin's Q. In addition, geographic diversification has an insignificant impact on ROE. The insignificant impact of corporate diversification is due to the reason that revenues from diversification are offset by extra expenses with respect to diversification (Hengartner 2006).

Varying results of diversification strategy justify the inefficient utilization of resources (Gao and Chou 2015). The reason for the negative impact of geographic diversification on Tobin's Q is that an inefficient corporate governance system induces managers to expand their business for personal benefits that have a negative impact on the firms' financial performance (Phung and Mishra 2016). This reason is in line with the Agency Theory of Jensen and Meckling (1976). We find that dividend policy significantly influences the firms' financial performance, which is according to the Bird in Hand Theory of Gordon (1963). The theory explains that dividend policy affects the firm's value. We find that dividend policy has a significant and positive impact on Return on Assets, whereas, it has a significant and negative impact on Tobin's Q. Negative impact shows that dividend payments reduce retained earnings of the firms. Further, dividend policy has an insignificant impact on Return on Equity in second and third models. The positive impact of dividend policy on financial performance is similar to the results of Butt et al. (2010) and Ali et al. (2015).

Table 4. Correlation Analysis.

	ROA	ROE	TQ	PD	GD	CS	DP	IP	BSIZE	CEOD	AQ	ACSIZE	ACA	AGE	GRTH	SIZE
ROA	1															
ROE	0.325	1														
TQ	0.052	0.102	1													
PD	−0.010	0.019	0.074	1												
GD	0.007	−0.009	−0.076	0.030	1											
CS	−0.147	−0.017	0.092	0.017	0.034	1										
DP	0.132	0.125	0.317	0.066	−0.025	−0.009	1									
IP	0.039	−0.010	0.008	0.008	−0.013	−0.002	0.009	1								
BSIZE	0.053	0.019	0.031	−0.083	−0.057	−0.042	0.028	0.051	1							
CEOD	−0.116	0.000	−0.017	0.018	0.057	0.125	−0.033	−0.019	0.062	1						
AQ	0.172	0.028	0.157	0.039	−0.079	−0.170	0.162	0.027	0.111	−0.261	1					
ACSIZE	0.053	0.017	0.062	−0.024	−0.010	−0.046	0.050	0.047	0.508	0.074	0.009	1				
ACA	−0.048	−0.001	0.005	0.014	0.024	0.000	0.003	0.042	0.359	0.110	0.050	0.366	1			
AGE	0.051	−0.016	−0.010	−0.017	−0.031	−0.104	0.058	0.011	0.125	−0.015	0.127	0.099	−0.026	1		
GRTH	0.035	0.007	−0.008	−0.030	−0.013	−0.018	−0.005	0.033	−0.006	−0.017	0.006	0.011	−0.010	0.026	1	
SIZE	−0.046	−0.010	0.341	0.092	0.101	0.156	0.201	0.021	0.043	−0.070	0.179	0.069	0.069	−0.045	0.015	1

Note: ROA is Return on Assets, ROE is Return of Equity, TQ is the Market Return, PD is Product Diversification, GD is Geographic Diversification, CS is Capital Structure, DP is Dividend Policy, IP is Investment Policy, ACA is Audit Committee Activity, ACSIZE is Audit Committee Size, AQ is Audit Quality, BSIZE is Board Size, CEOD is CEO Duality, AGE is Years of Activity of the Firm, GRTH is Sales Growth, SIZE is Natural Log of Total Assets.

Table 5. Two-step System Dynamic Panel Regression (Overall Sample).

	Dependent Variable (ROA)			Dependent Variable (ROE)			Dependent Variable (TQ)		
L1.	0.241 *** (0.000)	0.243 *** (0.000)	0.244 *** (0.000)	0.163 *** (0.000)	0.165 *** (0.000)	0.165 *** (0.000)	0.393 *** (0.000)	0.391 *** (0.000)	0.390 *** (0.000)
L2.	0.143 *** (0.000)	0.133 *** (0.000)	0.134 *** (0.000)	0.039 *** (0.000)	0.042 *** (0.000)	0.044 *** (0.000)	−0.047 *** (0.000)	−0.047 *** (0.000)	−0.049 *** (0.000)
PD	0.026 * (0.085)	–	0.017 (0.264)	0.124 *** (0.005)	–	0.091 ** (0.033)	0.184 *** (0.001)	–	0.207 *** (0.000)
GD	–	0.030 *** (0.003)	0.026 *** (0.008)	–	0.066 (0.103)	0.056 (0.157)	–	−0.086 *** (0.003)	−0.103 *** (0.001)
CS	−0.040 *** (0.000)	−0.044 *** (0.000)	−0.043 *** (0.000)	−0.040 (0.252)	−0.060 * (0.090)	−0.060 * (0.089)	0.292 *** (0.000)	0.274 *** (0.000)	0.277 *** (0.000)
DP	0.0002 *** (0.007)	0.0002 *** (0.004)	0.0002 *** (0.004)	−0.001 * (0.065)	0.000 (0.147)	−0.000 (0.136)	−0.001 *** (0.008)	−0.001 ** (0.010)	−0.001 *** (0.007)
IP	0.000 (0.861)	−0.001 (0.620)	−0.002 (0.493)	−0.001 (0.878)	−0.001 (0.828)	−0.003 (0.687)	−0.007 (0.189)	−0.011 ** (0.037)	−0.010 * (0.054)
BSIZE	0.000 (0.978)	0.000 (0.834)	0.000 (0.810)	−0.001 (0.858)	0.001 (0.799)	0.001 (0.881)	0.005 (0.250)	0.004 (0.389)	0.005 (0.313)
CEOD	0.007 (0.230)	0.004 (0.473)	0.005 (0.436)	0.012 (0.566)	0.002 (0.939)	0.006 (0.779)	−0.040 * (0.071)	−0.030 (0.191)	−0.036 (0.110)
AQ	0.006 (0.322)	0.004 (0.481)	0.004 (0.493)	−0.010 (0.653)	−0.001 (0.960)	−0.009 (0.686)	0.171 *** (0.000)	0.166 *** (0.000)	0.162 *** (0.000)
ACSIZE	0.005 ** (0.049)	0.002 (0.285)	0.003 (0.243)	0.008 (0.458)	−0.003 (0.801)	−0.003 (0.823)	0.033 *** (0.002)	0.033 *** (0.001)	0.034 *** (0.001)
ACA	0.000 (0.835)	−0.001 (0.526)	−0.001 (0.533)	0.004 (0.377)	0.005 (0.336)	0.006 (0.249)	0.001 (0.807)	0.002 (0.680)	0.001 (0.810)
AGE	−0.002 *** (0.000)	−0.003 *** (0.000)	−0.003 *** (0.000)	−0.006 *** (0.000)	−0.005 *** (0.000)	−0.005 *** (0.001)	−0.011 *** (0.000)	−0.011 *** (0.000)	−0.011 *** (0.000)
GRTH	0.008 ** (0.024)	0.008 ** (0.024)	0.007 ** (0.028)	0.014 (0.107)	0.016 * (0.052)	0.015 * (0.064)	0.000 (0.980)	0.000 (0.948)	0.000 (0.999)
SIZE	−0.018 *** (0.000)	−0.014 *** (0.000)	−0.013 *** (0.000)	0.008 (0.463)	−0.003 (0.730)	−0.004 (0.679)	0.060 *** (0.000)	0.066 *** (0.000)	0.063 *** (0.000)
C	0.436 *** (0.000)	0.407 *** (0.000)	0.386 *** (0.000)	0.041 (0.827)	0.357 ** (0.030)	0.283 * (0.097)	−0.676 *** (0.000)	−0.624 *** (0.001)	−0.715 *** (0.000)

Note: ***, ** and * represent levels of significant at 1%, 5% and 10%. *p*-values are shown in parentheses. ROA is Return on Assets, ROE is Return of Equity, TQ is the Market Return, PD is Product Diversification, GD is Geographic Diversification, CS is Capital Structure, DP is Dividend Policy, IP is Investment Policy, ACA is Audit Committee Activity, ACSIZE is Audit Committee Size, AQ is Audit Quality, BSIZE is Board Size, CEOD is CEO Duality, AGE is Years of Activity of the Firm, GRTH is Sales Growth, SIZE is the Natural Log of Total Assets.

The reason for the insignificant impact of dividend on financial performance variables is that manufacturing firms do not follow a regular pattern of dividend payments. Capital structure has a significant and negative impact on Return on Assets while it has a significant and positive impact on Tobin’s Q. In addition, capital structure has a significant and negative impact on Return on Equity in the first and third models. Investment policy shows an insignificant impact on Return on Assets and Return on Equity while it has a significant and negative impact on Tobin’s Q in the second and third models. The insignificant impact of investment policy is similar to the results of [Kotšina and Hazak \(2012\)](#). The reason for the insignificant impact is that firms fix the new selling prices of their goods by considering the changes in variable expenses and ignoring fixed expenses. There is also a general phenomenon that firms produce their products in large volume. As a result, there is a decrease in the unit cost of production. Due to this, any change in investment does not affect financial performance.

The analysis shows mixed results regarding the impact of corporate governance and audit quality on firms’ financial performance. This is due to the weak and inefficient governance system in South Asian countries. The board size has an insignificant impact on firms’ financial performance. The insignificant results of board size are similar to the results of [Hunjra et al. \(2016\)](#). We find that CEO duality has insignificance but a negative impact on financial performance. We find that the audit committee size has significance and a positive impact on Tobin’s Q in the second and third model only. Positive effects of audit committee size on financial performance follow the Resource

Dependence Theory that states a positive relationship between audit committee size and the firms' financial performance (Pearce and Zahra 1992). Audit committee activity has an insignificant impact on the firms' financial performance. Reasons for the inconsistent and insignificant impact of audit committee activity and audit committee size are the very small variation in audit committee activity and audit committee size of the firms that do not affect financial performance. We find that audit quality has significance and positive impact on Tobin's Q only. For the other two measures of financial performance, audit quality has an insignificant impact. The reason for varying results is that each one of the selected countries has a different quality of audit professionals.

Tables 6 and 7 deal with the analysis of an individual country. It states that product diversification has a significant and positive impact on all measures of financial performance for Pakistan and that shows improvement in product development of firms in Pakistan. The positive effects also follow Markowitz (1952) portfolio theory which explains that firms can reduce risk and increase output if they diversify their resources. In addition, product diversification significantly but negatively affects the financial performance of the firms in India which shows agency issues are more prevailing in firms as well as underutilization of assets of the firms. For Sri Lanka and Bangladesh, product diversification shows mixed and inconsistent outputs but the general trend shows that product diversification has a significant impact on financial performance. Geographic diversification has a significant impact on financial performance for the firms of all individual countries of our study. Generally, the impact is positive which shows improvement in product quality and more acceptability in foreign markets. Furthermore, the impact is negative when we measure financial performance as Return on Equity. The reason for the negative impact of geographic diversification on financial performance is that multinational firms have inefficient innovation as compared to domestic firms and this low level of innovation explains adverse effect of geographic diversification on financial performance (Gao and Chou 2015).

There are inconsistent results with respect to dividend policy and capital structure for all selected countries. This is because the stock market is not efficient and the debt market is also in developing phase in these countries. There is inconsistent pattern of paying the dividend as well as generating long-term loans. Firms mostly rely on bank loans. Therefore, the capital structure of firms in Pakistani and Sri Lanka shows significant impact on the firms' financial performance, but the impact is negative. The negative impact of capital structure on the firms' financial performance is in line with the results of Vatavu (2015). The capital structure of Indian firms has a significant impact on all measures of financial performance. The results show that firms in India implement capital structure decisions properly. For Bangladesh, the impact of capital structure on firm's financial performance is significant and positive that shows a development of the loan market in Bangladesh.

Investment policy shows mixed results in all selected countries. For Pakistani firms, investment policy has a significant and negative impact on Return on Assets, but the impact is significant and positive on Tobin's Q. For Indian firms, investment policy has a significant and positive impact on Return on Assets, while it has a significant and negative impact on Tobin's Q. The investment decision is a significant determinant of financial performance for Sri Lanka, but the impact is negative on Return on Equity. For firms in Bangladesh, investment policy has a significant and positive impact on Tobin's Q. For the other two measures of financial performance, investment policy has varying outputs for each one of the models of the analysis. The negative impact of CEO duality follows Resource Dependence Theory, which explains the lack of concentration. In general, corporate governance and audit quality mechanisms show mixed findings. We can link these findings with Institutional Theory, which argues that firms might follow regulations or practices of corporate governance in order to increase financial performance. The insignificant effects of corporate governance variables are similar to the results of Chen et al. (2008) and Dar et al. (2011).

Table 6. Two-step System Dynamic Panel Regression (Pakistan and India).

	Pakistan									India								
	Dependent Variable (ROA)			Dependent Variable (ROE)			Dependent Variable (TQ)			Dependent Variable (ROA)			Dependent Variable (ROE)			Dependent Variable (TQ)		
L1.	0.223 *** (0.000)	0.224 *** (0.000)	0.223 *** (0.000)	0.098 *** (0.000)	0.103 *** (0.000)	0.099 *** (0.000)	0.340 *** (0.000)	0.338 *** (0.000)	0.338 *** (0.000)	0.293 *** (0.000)	0.290 *** (0.000)	0.291 *** (0.000)	0.145 *** (0.000)	0.143 *** (0.000)	0.144 *** (0.000)	0.616 *** (0.000)	0.617 *** (0.000)	0.616 *** (0.000)
L2.	0.119 *** (0.000)	0.118 *** (0.000)	0.119 *** (0.000)	0.050 *** (0.000)	0.056 *** (0.000)	0.049 *** (0.000)	-0.074 *** (0.000)	-0.073 *** (0.000)	-0.076 *** (0.000)	0.229 *** (0.000)	0.229 *** (0.000)	0.229 *** (0.000)	0.057 *** (0.000)	0.057 *** (0.000)	0.058 *** (0.000)	-0.159 *** (0.000)	-0.164 *** (0.000)	-0.163 *** (0.000)
PD	0.026 ** (0.020)	-	0.022 * (0.053)	0.144 *** (0.000)	-	0.121 *** (0.001)	0.318 *** (0.001)	-	0.384 *** (0.000)	-0.031 *** (0.000)	-	-0.032 *** (0.000)	-0.086 *** (0.003)	-	-0.078 *** (0.004)	-0.009 (0.181)	-	-0.011* (0.086)
GD	-	0.027 *** (0.003)	0.024 *** (0.007)	-	0.168 *** (0.000)	0.151 *** (0.000)	-	-0.185 *** (0.000)	-0.246 *** (0.000)	-	0.006 *** (0.003)	0.008 *** (0.000)	-	-0.017 *** (0.000)	-0.019 *** (0.000)	-	-0.025 *** (0.006)	-0.027 *** (0.004)
CS	-0.087 *** (0.000)	-0.089 *** (0.000)	-0.089 *** (0.000)	-0.079 *** (0.003)	-0.073 *** (0.007)	-0.074 *** (0.006)	-0.071 * (0.069)	-0.096 ** (0.010)	-0.086 ** (0.027)	0.020 *** (0.000)	0.020 *** (0.000)	0.021 *** (0.000)	-0.343 *** (0.000)	-0.353 *** (0.000)	-0.350 *** (0.000)	0.522 *** (0.000)	0.518 *** (0.000)	0.520 *** (0.000)
DP	0.0004 *** (0.000)	0.0004 *** (0.000)	0.0004 *** (0.000)	0.000 (0.272)	0.000 (0.294)	0.000 (0.362)	0.000 (0.212)	0.000 (0.140)	0.000 (0.353)	0.319 *** (0.000)	0.320 *** (0.000)	0.321 *** (0.000)	0.564 *** (0.000)	0.541 *** (0.000)	0.550 *** (0.000)	0.408 *** (0.000)	0.432 *** (0.000)	0.447 *** (0.000)
IP	-0.005 *** (0.008)	-0.005 *** (0.002)	-0.005 *** (0.002)	-0.012 * (0.070)	-0.007 (0.347)	-0.009 (0.194)	0.037 *** (0.000)	0.030 *** (0.001)	0.034 *** (0.000)	0.020 *** (0.000)	0.021 *** (0.000)	0.021 *** (0.000)	0.004 (0.119)	0.001 (0.693)	0.001 (0.584)	-0.041 *** (0.000)	-0.040 *** (0.000)	-0.041 *** (0.000)
BSIZE	-0.002 (0.186)	-0.002 (0.124)	-0.002 (0.175)	0.004 (0.542)	0.005 (0.426)	0.006 (0.329)	0.026 * (0.071)	0.024 * (0.089)	0.025 * (0.080)	0.003 *** (0.000)	0.003 *** (0.000)	0.003 *** (0.000)	0.003 ** (0.020)	0.002 * (0.070)	0.003 * (0.050)	0.025 *** (0.000)	0.024 *** (0.000)	0.025 *** (0.000)
CEOD	-0.004 (0.456)	-0.005 (0.441)	-0.005 (0.412)	-0.012 (0.491)	-0.009 (0.616)	-0.015 (0.446)	-0.188 *** (0.000)	-0.183 *** (0.000)	-0.177 *** (0.000)	-0.059 *** (0.000)	-0.061 *** (0.000)	-0.063 *** (0.000)	0.042 *** (0.000)	0.052 *** (0.000)	0.048 *** (0.000)	-0.153 *** (0.000)	-0.159 *** (0.000)	-0.160 *** (0.000)
AQ	-0.002 (0.706)	-0.001 (0.845)	-0.002 (0.742)	-0.137 *** (0.000)	-0.130 *** (0.000)	-0.131 *** (0.000)	0.566 *** (0.000)	0.561 *** (0.000)	0.545 *** (0.000)	-0.006 *** (0.000)	-0.009 (0.244)	-0.008 (0.254)	-0.027 * (0.057)	-0.025 * (0.067)	-0.023 (0.112)	0.661 *** (0.000)	0.654 *** (0.000)	0.667 *** (0.000)
ACSIZE	0.012 *** (0.000)	0.012 *** (0.000)	0.012 *** (0.000)	0.035** (0.018)	0.029** (0.049)	0.032** (0.035)	0.209 *** (0.000)	0.204 *** (0.000)	0.208 *** (0.000)	0.014 *** (0.000)	0.013 *** (0.000)	0.013 *** (0.000)	-0.015 *** (0.000)	-0.015 *** (0.000)	-0.015 *** (0.000)	-0.007 * (0.057)	-0.006 * (0.097)	-0.006 (0.114)
ACA	-0.00 * (0.073)	-0.005 * (0.054)	-0.005* (0.062)	0.004 (0.482)	0.001 (0.835)	0.001 (0.884)	-0.001 (0.926)	0.004 (0.780)	0.002 (0.876)	-0.011 *** (0.000)	-0.011 *** (0.000)	-0.011 *** (0.000)	0.009 *** (0.000)	0.010 *** (0.000)	0.009 *** (0.000)	0.023 *** (0.000)	0.024 *** (0.000)	0.024 *** (0.000)
AGE	-0.003 *** (0.000)	-0.003 *** (0.000)	-0.003 *** (0.000)	-0.002 * (0.051)	0.000 (0.879)	-0.001 (0.422)	0.022 *** (0.000)	0.020 *** (0.000)	0.022 *** (0.000)	-0.001 *** (0.000)	-0.001 *** (0.000)	-0.001 *** (0.000)	-0.007 *** (0.000)	-0.008 *** (0.000)	-0.007 *** (0.000)	-0.012 *** (0.000)	-0.012 *** (0.000)	-0.012 *** (0.000)
GRTH	0.019 *** (0.000)	0.019 *** (0.000)	0.019 *** (0.000)	0.028 *** (0.000)	0.030 *** (0.000)	0.029 *** (0.000)	0.014 ** (0.022)	0.015 *** (0.006)	0.016 *** (0.009)	0.022 *** (0.000)	0.021 *** (0.000)	0.022 *** (0.000)	0.075 *** (0.000)	0.072 *** (0.000)	0.073 *** (0.000)	-0.043 *** (0.000)	-0.043 *** (0.000)	-0.042 *** (0.000)
SIZE	0.019 *** (0.000)	0.018 *** (0.000)	0.017 *** (0.000)	-0.003 (0.808)	-0.008 (0.548)	-0.007 (0.624)	-0.450 *** (0.000)	-0.430 *** (0.000)	-0.444 *** (0.000)	-0.051 *** (0.000)	-0.050 *** (0.000)	-0.051 *** (0.000)	-0.090 *** (0.000)	-0.086 *** (0.000)	-0.087 *** (0.000)	0.184 *** (0.000)	0.184 *** (0.000)	0.184 *** (0.000)
C	-0.255 *** (0.000)	-0.223 *** (0.000)	-0.234 *** (0.000)	0.070 (0.781)	0.230 (0.380)	0.120 (0.656)	8.561 *** (0.000)	8.515 *** (0.000)	8.410 *** (0.000)	0.871 *** (0.000)	0.848 *** (0.000)	0.875 *** (0.000)	2.025 *** (0.000)	1.922 *** (0.000)	1.989 *** (0.000)	-2.569 *** (0.000)	-2.592 *** (0.000)	-2.583 *** (0.000)

Note: ***, **, and * represents levels of significant at 1%, 5%, and 10%. p-values are shown in parentheses.

Table 7. Two-step System Dynamic Panel Regression (Sri Lanka and Bangladesh).

	Sri Lanka									Bangladesh								
	Dependent Variable (ROA)			Dependent Variable (ROE)			Dependent Variable (TQ)			Dependent Variable (ROA)			Dependent Variable (ROE)			Dependent Variable (TQ)		
L1.	0.430 *** (0.000)	0.400 *** (0.000)	0.393 *** (0.000)	0.084 *** (0.000)	0.106 *** (0.000)	0.112 *** (0.000)	0.390 *** (0.000)	0.391 *** (0.000)	0.402 *** (0.000)	0.122 *** (0.000)	0.103 *** (0.000)	0.094 ** (0.021)	0.124 *** (0.000)	0.073 *** (0.000)	0.088 *** (0.000)	0.466 *** (0.000)	0.507 *** (0.000)	0.479 *** (0.000)
L2.	0.370 *** (0.000)	0.277 *** (0.000)	0.274 *** (0.000)	0.056 *** (0.000)	0.001 (0.317)	0.011 *** (0.000)	-0.144 *** (0.000)	-0.122 *** (0.000)	-0.146 *** (0.000)	0.170 *** (0.000)	0.132 *** (0.000)	0.163 *** (0.000)	-0.229 *** (0.000)	-0.203 *** (0.000)	-0.189 *** (0.000)	-0.134 *** (0.000)	-0.147 *** (0.000)	-0.102 *** (0.004)
PD	-0.006 (0.362)	-	-0.073 *** (0.000)	0.599 *** (0.000)	-	0.224 *** (0.000)	-0.292 *** (0.000)	-	-0.312 *** (0.000)	0.204 *** (0.000)	-	0.209 *** (0.000)	1.505 *** (0.000)	-	1.471 *** (0.000)	0.063 (0.482)	-	-0.157 (0.130)
GD	-	0.217 *** (0.000)	0.201 *** (0.000)	-	-0.575 *** (0.000)	-0.508 *** (0.000)	-	0.018 * (0.061)	-0.005 (0.498)	-	0.018 *** (0.003)	0.017 *** (0.007)	-	-0.187 *** (0.000)	-0.152 *** (0.000)	-	0.035 *** (0.006)	0.031 ** (0.011)
CS	-0.201 *** (0.000)	-0.201 *** (0.000)	-0.196 *** (0.000)	-0.493 *** (0.000)	-0.477 *** (0.000)	-0.473 *** (0.000)	0.989 *** (0.000)	0.972 *** (0.000)	0.989 *** (0.000)	0.027 ** (0.019)	0.005 (0.544)	0.030 ** (0.025)	1.021 *** (0.000)	0.599 *** (0.000)	0.519 *** (0.000)	0.492 *** (0.000)	0.479 *** (0.000)	0.508 *** (0.000)
DP	-0.003 *** (0.000)	-0.003 *** (0.000)	-0.003 *** (0.001)	0.029 *** (0.000)	0.020 *** (0.000)	0.019 *** (0.000)	-0.007 *** (0.000)	-0.001 *** (0.000)	-0.007 *** (0.000)	-0.001 (0.220)	0.001 (0.281)	0.000 (0.935)	-0.018 *** (0.000)	-0.023 *** (0.000)	-0.019 *** (0.000)	-0.021 *** (0.000)	-0.017 *** (0.000)	-0.016 *** (0.000)
IP	0.049 *** (0.000)	0.053 *** (0.000)	0.053 *** (0.000)	-0.066 *** (0.000)	-0.075 *** (0.000)	-0.075 *** (0.000)	-0.004 *** (0.000)	0.004 *** (0.000)	-0.006 *** (0.000)	-0.002 (0.498)	-0.004 * (0.070)	-0.002 (0.234)	0.009 (0.111)	-0.027 *** (0.000)	-0.018 ** (0.026)	0.030 *** (0.000)	0.035 *** (0.000)	0.029 *** (0.000)
BSIZE	0.001 (0.161)	0.005 *** (0.000)	0.004 *** (0.000)	-0.028 *** (0.000)	-0.021 *** (0.000)	-0.020 *** (0.000)	0.008 *** (0.000)	0.010 *** (0.000)	0.007 *** (0.000)	0.002 * (0.099)	0.004 (0.008)	0.005 *** (0.002)	0.046 *** (0.000)	-0.030 *** (0.000)	0.011 ** (0.031)	-0.001 (0.832)	0.005 (0.436)	-0.007 (0.242)
CEOD	-0.001 (0.848)	0.050 *** (0.000)	0.051 *** (0.000)	-0.064 *** (0.000)	-0.068 *** (0.000)	-0.064 *** (0.000)	0.101 *** (0.000)	0.103 *** (0.000)	0.094 *** (0.000)	-0.034 ** (0.014)	-0.014 (0.269)	-0.030 ** (0.048)	-0.192 *** (0.000)	-0.190 *** (0.000)	-0.192 *** (0.000)	0.029 (0.490)	0.175 ** (0.024)	0.126 (0.130)
AQ	0.036 *** (0.001)	-0.173 *** (0.000)	-0.177 *** (0.000)	0.483 *** (0.000)	0.429 *** (0.000)	0.366 *** (0.000)	-0.193 *** (0.000)	-0.270 *** (0.000)	-0.178 *** (0.000)	0.047 *** (0.000)	0.040 *** (0.000)	0.044 *** (0.000)	-0.024 (0.661)	-0.003 (0.918)	0.047 (0.376)	-0.033 (0.569)	-0.018 (0.188)	0.001 (0.943)
ACSIZE	0.013 *** (0.000)	0.029 *** (0.000)	0.033 *** (0.000)	-0.134 *** (0.000)	-0.130 *** (0.000)	-0.134 *** (0.000)	0.004 (0.481)	-0.016 *** (0.000)	0.003 (0.624)	0.019 *** (0.000)	0.020 *** (0.000)	0.022 *** (0.000)	0.084 *** (0.000)	0.036 *** (0.000)	0.072 *** (0.000)	-0.009 (0.331)	-0.004 (0.526)	-0.017 ** (0.021)
ACA	-0.004 *** (0.000)	-0.006 *** (0.000)	-0.005 *** (0.000)	0.017 *** (0.000)	0.001 (0.675)	0.005 ** (0.018)	0.001 (0.221)	0.001 (0.324)	0.000 (0.837)	-0.006 *** (0.008)	-0.005 *** (0.006)	-0.005 * (0.093)	-0.012 (0.471)	0.066 *** (0.000)	0.033 ** (0.022)	-0.022 *** (0.000)	-0.030 *** (0.000)	-0.028 *** (0.000)
AGE	-0.013 *** (0.000)	-0.010 *** (0.000)	-0.009 *** (0.000)	0.006 *** (0.000)	0.005 *** (0.000)	0.006 *** (0.000)	0.011 *** (0.000)	0.012 *** (0.000)	0.011 *** (0.000)	-0.003 *** (0.000)	-0.0005 * (0.074)	-0.002 *** (0.002)	-0.032 *** (0.000)	-0.023 *** (0.000)	-0.039 *** (0.000)	0.000 (0.925)	0.004 *** (0.000)	0.004 ** (0.017)
GRTH	0.003 *** (0.000)	0.004 *** (0.003)	0.004 *** (0.006)	0.002 *** (0.628)	0.004 (0.226)	0.005 (0.220)	0.004 *** (0.000)	0.003 *** (0.002)	0.003 *** (0.000)	0.012 *** (0.000)	0.009 *** (0.000)	0.020 *** (0.000)	0.047 *** (0.000)	-0.037 *** (0.000)	0.021 *** (0.004)	0.003 (0.519)	-0.003 (0.276)	-0.007 (0.106)
SIZE	0.019 *** (0.000)	-0.025 *** (0.000)	-0.026 *** (0.000)	-0.140 *** (0.000)	-0.161 *** (0.000)	-0.160 *** (0.000)	-0.019 *** (0.000)	-0.035 *** (0.000)	-0.016 *** (0.000)	0.004 (0.475)	-0.022 *** (0.000)	-0.008 (0.189)	0.139 *** (0.000)	0.130 *** (0.000)	0.094 *** (0.001)	-0.019 ** (0.044)	-0.018 ** (0.047)	-0.026 *** (0.001)
C	0.386 *** (0.000)	0.966 *** (0.000)	1.027 *** (0.000)	1.834 *** (0.000)	2.726 *** (0.000)	2.536 *** (0.000)	0.025 (0.533)	0.124 *** (0.000)	0.030 (0.553)	-0.149 * (0.071)	0.325 *** (0.000)	-0.030 (0.747)	-3.231 *** (0.000)	-1.610 *** (0.000)	-1.782 *** (0.000)	0.528 *** (0.004)	0.398 ** (0.037)	0.734 *** (0.000)

Note: ***, **, and * represents levels of significant at 1%, 5%, and 10%. *p*-values are shown in parentheses.

Control variables show that firm age has a significant and negative effect on firms' financial performance. It shows that when firms get older, they start losing concentration of managing their assets, hence they start devastating their financial performance. Results show that in general, firm growth has a significant and positive impact on financial performance. Firm size has a negative and significant and negative relationship with Return on Assets but it has a significant and positive impact on Tobin's Q. Further, size has an insignificant impact on Return on Equity. Negative and insignificant impact of size shows that manufacturing firms of South Asian countries fail to utilize economies of scale, and they do not meet market requirements of economic efficiency. In a separate analysis of each country, control variables show varying findings but in the majority of the analyses, it shows significant outputs. However, the use of different measures of financial performance and three models for each one of the financial performance measure in our study reconciles the varying outputs.

5. Conclusions

The manufacturing sector plays a substantial role in the economic development of a country. This sector is opting for diversification strategies for growth and survival in a competitive business environment. The objective of our study is to analyze the impact of corporate diversification and financial structure on the financial performance of the manufacturing firms of South Asian Countries. Financial structure describes financing, dividend, and investment policies. We categorized corporate diversification as product and geographic diversification. Therefore, we ran three models for each one of the independent variable; two separate models for product diversification and geographic diversification and one overall model for both. Although some results relating to product diversification and geographic diversification follow Agency Theory, where managers prefer diversification strategy for their personal benefits, which adversely affects financial performance but still we found mixed output. The varying results are the reasons of different circumstance and economic condition of the respective countries. We found dividend policy is a determinant of financial performance of the firms. Investment plans show a general trend of insignificant impact on the firms' financial performance. Corporate governance and audit quality characteristics on the firm's financial performance revealed varying outputs in our study.

Based on the results, we drew several policy implications including that the manufacturing sector needs to apply efficient financial structure to improve its financial performance. In general, our results suggest that diversification improves firms' financial performance but still there is a need of proper management of diversification decisions as excessive diversification can lead to a decrease in firms' financial performance. There is a need to efficiently utilize the firms' resources to apply proper diversification strategies. The capital structure showed significant impact on firms' financial performance which suggests that there is need for an efficient mix of debt and equity in order to decrease the capital cost, which can increase the profitability, and value of the firms. We suggested firms follow a proper dividend policy to attract investors. In addition, effective management of corporate diversification with good corporate governance and proper implication of financial structure can improve the financial performance of manufacturing firms.

Author Contributions: R.M. worked on conceptualization, writing—original draft preparation, resources, data curation and formal analysis. A.I.H. contributes in writing—review and editing, supervision whereas M.I.C. handles the methodology, software and formal Analysis.

Funding: We received no funding for this project.

Conflicts of Interest: We declare there is no conflict of interest.

References

- Adamu, Nasiru, Ibrahim Khalil Zubairu, Yahya Makarfi Ibrahim, and Aliyu Makarfi Ibrahim. 2011. Evaluating the Impact of Product Diversification on Financial Performance of Selected Nigerian Construction Firms. *Journal of Construction in Developing Countries* 16: 91–114.

- Afza, Talat, Choudhary Slahudin, and Mian Sajid Nazir. 2008. Diversification and Corporate Performance: An Evaluation of Pakistani Firms. *South Asian Journal of Management* 15: 7–18.
- Aivazian, Varouj A., Ying Ge, and Jiaping Qiu. 2005. The Impact of Leverage on Firm Investment: Canadian Evidence. *Journal of Corporate Finance* 11: 277–91. [\[CrossRef\]](#)
- Ali, Adnan, Farzand Ali Jan, and Maryam Atta. 2015. The Impact of Dividend Policy on Firm Performance under High or Low Leverage; Evidence from Pakistan. *Journal of Management Information* 8: 50–83. [\[CrossRef\]](#)
- Arellano, Manuel, and Stephen Bond. 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies* 58: 277–97. [\[CrossRef\]](#)
- Azim, Mohammad I. 2012. Corporate Governance Mechanisms and their Impact on Company Performance: A Structural Equation Model Analysis. *Australian Journal of Management* 37: 481–505. [\[CrossRef\]](#)
- Baker, H. Kent, E. Theodore Veit, and Gary E. Powell. 2001. Factors influencing Dividend Policy Decisions of Nasdaq Firms. *The Financial Review* 36: 19–37. [\[CrossRef\]](#)
- Bauer, Rob, Piet Eichholtz, and Nils Kok. 2009. Corporate Governance and Performance: The Reit Effect. *Real Estate Economics* 38: 1–29. [\[CrossRef\]](#)
- Beck, Thorsten, and Asli Demirguc-Kunt. 2006. Small and Medium-Size Enterprises: Access to Finance as a Growth Constraint. *Journal of Banking and Finance* 30: 2931–43. [\[CrossRef\]](#)
- Berger, Philip G., and Eli Ofek. 1995. Diversification's Effect on Firm Value. *Journal of Financial Economics* 37: 39–65. [\[CrossRef\]](#)
- Bhaduri, Saumitra N. 2002. Determinants of Corporate Borrowing: Some Evidence from the Indian Corporate Structure. *Journal of Economics and Finance* 26: 200–15. [\[CrossRef\]](#)
- Bhagat, Sanjai, and Brian Bolton. 2008. Corporate Governance and Firm Performance. *Journal of Corporate Finance* 14: 257–73. [\[CrossRef\]](#)
- Black, Bernard, Antonio Gledson de Carvalho, and Erica Gorga. 2009. The Corporate Governance of Privately Controlled Brazilian Firms. *Revista Brasileira de Finanças* 7: 358–428.
- Blundell, Richard, and Stephen Bond. 1998. Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics* 87: 115–43. [\[CrossRef\]](#)
- Boubaker, Sabri, and Duc Khuong Nguyen. 2012. *Board Directors and Corporate Social Responsibility*. Houndmills: Palgrave Macmillan.
- Boubaker, Sabri, and Duc Khuong Nguyen. 2015. *Corporate Governance and Corporate Social Responsibility: Emerging Markets Focus*. Hackensack: World Scientific.
- Butt, Babar Zaheer, Ahmed Imran Hunjra, and Kashif-Ur Rehman. 2010. Financial Management Practices and their Impact on Organizational Performance. *World Applied Sciences Journal* 9: 997–1002.
- Campa, Jose Manuel, and Simi Kedia. 2002. Explaining the diversification discount. *The Journal of Finance* 57: 1731–62. [\[CrossRef\]](#)
- Carcello, Joseph V., and Terry L. Neal. 2003. Audit Committee Independence and Disclosure: Choice for Financially Distressed Firms. *Corporate Governance* 11: 289–99. [\[CrossRef\]](#)
- Chen, Sheng-Syan, and Kim Wai Ho. 1997. Market Response to Product-Strategy and Capital Expenditure Announcements in Singapore: Investment Opportunities and Free Cash Flow. *Financial Management* 26: 82–88. [\[CrossRef\]](#)
- Chen, Chia-Wei, J. Barry Lin, and Bingsheng Yi. 2008. CEO Duality and Firm Performance—An Endogenous Issue. *Corporate Ownership & Control* 6: 58–65.
- Chung, Kee H., Peter Wright, and Charlie Charoenwong. 1998. Investment Opportunities and Market Reaction to Capital Expenditure Decisions. *Journal of Banking and Finance* 22: 41–60. [\[CrossRef\]](#)
- Claessens, Stijn, and B. Burcin Yurtoglu. 2013. Corporate governance in emerging markets: A survey. *Emerging Markets Review* 15: 1–33. [\[CrossRef\]](#)
- Cooper, Michael J., Huseyin Gulen, and Michael J. Schill. 2008. Asset Growth and the Cross Section of Stock Returns. *Journal of Finance* 63: 1609–51. [\[CrossRef\]](#)
- Dar, Laiba, Muhammad Akram Naseem, Ghulam Shabbir Khan Niazi, and Ramiz Ur Rehman. 2011. Corporate Governance and Firm Performance: A Case Study of Pakistan Oil and Gas Companies Listed in Karachi Stock Exchange. *Global Journal of Management and Business Research* 11: 1–10.
- DeAngelo, Linda Elizabeth. 1981. Auditor Size and Audit Quality. *Journal of Accounting and Economics* 3: 183–99. [\[CrossRef\]](#)

- Denis, David J., Diane K. Denis, and Atulya Sarin. 1997. Agency Problems, Equity Ownership and Corporate Diversification. *Journal of Finance* 52: 135–60. [\[CrossRef\]](#)
- Donaldson, Lex, and James H. Davis. 1991. Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns. *Australian Journal of Management* 16: 49–64. [\[CrossRef\]](#)
- Ehikioya, Benjamin I. 2009. Corporate Governance Structure and Firm Performance in Developing Economies: Evidence from Nigeria. *Corporate Governance* 9: 231–43. [\[CrossRef\]](#)
- Erickson, John, Yun W. Park, Joe Reising, and Hyun-Han Shin. 2005. Board Composition and Firm Value under Concentrated Ownership: The Canadian Evidence. *Pacific-Basin Finance Journal* 13: 387–410. [\[CrossRef\]](#)
- Francis, Jere R., and Michael D. Yu. 2009. Big 4 Office Size and Audit Quality. *The Accounting Review* 84: 1521–52. [\[CrossRef\]](#)
- Frank, Murray Z., and Vidhan K. Goyal. 2003. Testing the Pecking Order Theory of Capital Structure. *Journal of Financial Economics* 67: 217–48. [\[CrossRef\]](#)
- Gao, Wenlian, and Julia Chou. 2015. Innovation Efficiency, Global Diversification, and Firm Value. *Journal of Corporate Finance* 30: 278–98. [\[CrossRef\]](#)
- Gleason, Kimberly C., Lynette Knowles Mathur, and Ike Mathur. 2000. The Interrelationship between Culture, Capital Structure, and Performance: Evidence from European Retailers. *Journal of Business Research* 50: 185–91. [\[CrossRef\]](#)
- Gomes, Joao, and Dmitry Livdan. 2004. Optimal Diversification: Reconciling Theory and Evidence. *The Journal of Finance* 59: 507–35. [\[CrossRef\]](#)
- Gordon, Myron J. 1963. Optimal Investment and Financing Policy. *The Journal of Finance* 18: 264–72.
- Hengartner, Lukas. 2006. Explaining Executive Pay: The Roles of Managerial Power and Complexity. Ph.D. dissertation, University of St Gallen, Sankt Gallen, Switzerland.
- Hunjra, Ahmed Imran. 2018. Mediating role of dividend policy among its determinants and organizational financial performance. *Cogent Economics and Finance* 6: 1–16. [\[CrossRef\]](#)
- Hunjra, Ahmed Imran, Muhammad Irfan Chani, Sehrish Javed, Sana Naeem, and Muhammad Shahzad Ijaz. 2014. Impact of Micro Economic Variables on Firms Performance. *International Journal of Economics and Empirical Research* 2: 65–73.
- Hunjra, Ahmed Imran, Hadia Naeem, Ayesha Noor, and Amna Saleem. 2016. Does Corporate Governance Play Role In Firms' Performance? A Comparative Study of Pakistan, India and Bangladesh. *International Journal of Economics and Empirical Research* 4: 450–64.
- Iqbal, Athar, Irfan Hameed, and Majid Qadeer. 2012. Impact of Diversification on Firms' Performance. *American Journal of Scientific Research* 80: 42–53.
- Jensen, Michael C., and William H. Meckling. 1976. Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics* 3: 305–60. [\[CrossRef\]](#)
- Jiang, Ching-Hai, Hsiang-Lan Chen, and Yen-Sheng Huang. 2006. Capital Expenditures and Corporate Earnings: Evidence from the Taiwan Stock Exchange. *Managerial Finance* 32: 853–61. [\[CrossRef\]](#)
- Kiel, Geoffrey C., and Gavin J. Nicholson. 2003. Board Composition and Corporate Performance: How the Australian Experience Inform Contrasting Theories of Corporate Governance. *Corporate Governance* 11: 189–205. [\[CrossRef\]](#)
- Kotšina, Svetlana, and Aaro Hazak. 2012. Does Investment Intensity Impact Company Profitability? A Cross-Country Empirical Study. Paper presented at the 2nd International Conference on Economics, Trade and Development, Bangkok, Thailand, April 7–8; pp. 157–161.
- Lazar, Sebastian. 2016. Determinants of Firm Performance: Evidence from Romanian Listed Companies. *Review of Economic and Business Studies* 9: 53–69. [\[CrossRef\]](#)
- Lewellen, Wilbur G. 1971. A pure Financial Rationale for the Conglomerate Merger. *The Journal of Finance* 26: 521–37. [\[CrossRef\]](#)
- Lins, Karl V., and Henri Servaes. 2002. Is Corporate Diversification Beneficial in Emerging Markets? *Financial Management* 31: 5–31. [\[CrossRef\]](#)
- Mak, Yuen Teen, and Yuanto Kusnadi. 2005. Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance Journal* 13: 301–18. [\[CrossRef\]](#)
- Markowitz, Harry. 1952. Portfolio selection. *The Journal of Finance* 7: 77–91.
- Miller, Merton H., and Franco Modigliani. 1961. Dividend policy, Growth, and the Valuation of Shares. *The Journal of Business* 34: 411–33. [\[CrossRef\]](#)

- Modigliani, Franco, and Merton H. Miller. 1958. The cost of capital, corporation finance and the theory of investment. *The American Economic Review* 48: 261–97.
- Modigliani, Franco, and Merton H. Miller. 1963. Corporate Income Taxes and the Cost of Capital: A Correction. *The American Economic Review* 53: 433–43.
- Muritala, Taiwo Adewale. 2012. An Empirical Analysis of Capital Structure on Firms' Performance in Nigeria. *International Journal of Advances in Management and Economics* 1: 116–24.
- Myers, Stewart C. 1984. The Capital Structure Puzzle. *Journal of Finance* 39: 575–92. [[CrossRef](#)]
- Myers, Stewart C., and Nicholas S. Majluf. 1984. Corporate Financing and Investment Decisions when firms have Information that Investors do not have. *Journal of Financial Economics* 13: 187–221. [[CrossRef](#)]
- Oloidi, Adebayo G., and Patrick O. Adeyeye. 2014. Determinants of Dividend per Share: Evidence from the Nigerian Stock Exchange. *International Journal of Economics and Empirical Research* 2: 496–501.
- Pandya, Anil M., and Narendar V. Rao. 1998. Diversification and Firm Performance: An Empirical Evaluation. *Journal of Financial and Strategic Decisions* 11: 67–81.
- Pearce, John A., and Shaker A. Zahra. 1992. Board Composition from a Strategic Contingency Perspective. *Journal of Management Studies* 29: 411–38. [[CrossRef](#)]
- Pervan, Maja, Ivica Pervan, and Marijana Ćurak. 2017. The Influence of Age on Firm Performance: Evidence from the Croatian Food Industry. *Journal of Eastern Europe Research in Business and Economics* 2017: 1–9. [[CrossRef](#)]
- Phung, Duc Nam, and Anil V. Mishra. 2016. Corporation Diversification and Firm Performance: Evidence from Vietnamese Listed Firms. *Australian Economic Papers* 55: 386–408. [[CrossRef](#)]
- Safieddine, Assem, and Sheridan Titman. 1999. Leverage and Corporate Performance: Evidence from Unsuccessful Takeovers. *Journal of Finance* 54: 547–80. [[CrossRef](#)]
- Salim, Mahfuzah, and Raj Yadav. 2012. Capital Structure and Firm Performance: Evidence from Malaysian Listed Companies. *Procedia-Social and Behavioral Sciences* 65: 156–66. [[CrossRef](#)]
- Schmid, Markus M., and Ingo Walter. 2012. Geographic Diversification and Firm Value in the Financial Services Industry. *Journal of Empirical Finance* 19: 109–22. [[CrossRef](#)]
- Titman, Sheridan, and Roberto Wessels. 1988. The determinants of capital structure choice. *Journal of Finance* 43: 1–19. [[CrossRef](#)]
- Titman, Sheridan, Kuo-Chiang John Wei, and Feixue Xie. 2004. Capital Investments and Stock Returns. *Journal of Financial and Quantitative Analysis* 39: 677–700. [[CrossRef](#)]
- Vafeas, Nikos. 1999. Board Meeting Frequency and Firm Performance. *Journal of Financial Economics* 53: 113–42. [[CrossRef](#)]
- Vatavu, Sorana. 2015. The Impact of Capital Structure on Financial Performance in Romanian Listed Companies. *Procedia Economics and Finance* 32: 1314–1322. [[CrossRef](#)]
- Walter, James E. 1963. Dividend policy: Its influence on the value of the enterprise. *The Journal of Finance* 18: 280–91. [[CrossRef](#)]
- Wernerfelt, Birger. 1997. On the Nature and Scope of the Firm: An Adjustment-Cost Theory. *The Journal of Business* 70: 489–514. [[CrossRef](#)]
- Xie, Biao, Wallace N. Davidson III, and Peter J. DaDalt. 2003. Earnings Management and Corporate Governance: The Role of the Board and the Audit Committee. *Journal of Corporate Finance* 9: 295–316. [[CrossRef](#)]
- Yat Hung, Chiang, Chan Ping Chuen Albert, and Hui Chi Man Eddie. 2002. Capital Structure and Profitability of the Property and Construction Sectors in Hong Kong. *Journal of Property Investment and Finance* 20: 434–53. [[CrossRef](#)]
- Yermack, David. 1996. Higher Market Valuation of Companies with a Small Board of Directors. *Journal of Financial Economics* 40: 185–213. [[CrossRef](#)]
- Zulkafli, Abdul Hadi, Ahmad Husni Hamzah, and Norhidayah Abu Bakar. 2015. Board Governance and Financing Policy: Evidence Form Public Listed Company in Malaysia. *Advanced Science Letters* 21: 961–65. [[CrossRef](#)]

