DETERMINANTS OF SHARE PRICE AMONG NON-FINANCIAL LISTED FIRMS ACROSS SECTORS IN PAKISTAN

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DEDICATION

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ABSTRACT

Share price performance is considered as one of the most important area of financial research by investors, managers, financial analysts and government as share price is a centre of gravity for the investment decisions. Previous studies have identified several determinants of share price. Most of these studies have focused on firm-level determinants. The recent developments emphasized on the effect of multi-level determinants (i.e. firm-level, sector-level and country-level) on share price. However, there is scare research focusing on examining the impact of financial sustainability on share price. Financial sustainability is relatively a new concept that demands further exploration as it can be beneficial for the firms. For this reason, this study included financial sustainability as one of the variables in firm-level determinants affecting share price. Thus, this study aims to identify the multi-level determinants of share price across non-financial listed firms and sectors in Pakistan. The present study contributes to the existing body of literature from three distinctive manners. Firstly, the current study examines the impact of multi-level determinants on share price. Secondly, this study investigates the mediating effect of dividend policy on the relationship between firm-level variables including firm's financial sustainability and share price. Thirdly, this study highlights the relative significance of each level of variables that best explains the share price. The current study performs analysis on 181 non-financial firms across sectors listed on Pakistan Stock Exchange (PSX) from year 2000 to 2017. Moreover, the presents study utilizes different estimators such as descriptive statistics, correlation matrix, diagnostic tests, and ordinary least square (OLS) regression model including fixed-effect method to estimate the relationship between dependent and independent variables. Additionally, Process Macros is used to test the mediating effect. In order to test nested effect, this study employs artificial nested testing procedure (ANTP) and nested model statistics. The findings of this study reveal that the effect of firm-level, sector-level and country-level determinants varies across non-financial listed firms and sectors in Pakistan due to unique nature of each sector. Moreover, dividend policy mediates the relationship between firm-level variables and share price across non-financial firms and sectors in Pakistan. Furthermore, firm-level determinants are the best explanatory variables for share price followed by sector-level and country-level determinants across non-financial firms in Pakistan, which differs across sectors due to sectoral behaviour. The outcomes of this study provide policy direction and practical implications to firm's management, stakeholders and policymakers to pinpoint the important factors and its implications on share price in order to safeguard all stakeholders from potential losses. Several limitations that may extend prospects for future research need to be acknowledged. The major limitation is about limited data availability of all non-financial firms listed at PSX. As financial sustainability is a primary challenge for financial sector especially in developing countries, therefore investigation of financial sustainability as firm-level determinants along with sector-level determinants on the share price behavior of financial sector firms is a promising agenda for future research.

ABSTRAK

Prestasi harga saham dianggap sebagai bidang penyelidikan kewangan yang paling penting oleh pelabur, pengurus, penganalisis kewangan dan kerajaan kerana harga saham adalah asas untuk keputusan pelaburan. Kajian terdahulu telah mengenal pasti beberapa penentu harga saham. Sebilangan besar kajian ini tertumpu pada penentu tahap firma. Perkembangan baru-baru ini menekankan pada pengaruh penentu pelbagai peringkat (iaitu tahap firma, tahap sektor dan tahap negara) terhadap harga saham. Walau bagaimanapun, penyelidikan yang menumpukan pada mengkaji kesan kelestarian kewangan terhadap harga saham adalah amat terhad. Kemampanan kewangan adalah konsep baru yang menuntut penerokaan lebih lanjut kerana manafaatnya kepada syarikat. Atas sebab ini, kajian ini memasukkan kelestarian kewangan sebagai salah satu pemboleh ubah dalam faktor penentu tahap perusahaan yang mempengaruhi harga saham. Oleh itu, kajian ini bertujuan untuk mengenal pasti penentu harga saham pelbagai peringkat di seluruh syarikat dan sektor tersenarai bukan kewangan di Pakistan. Kajian ini menyumbang kepada tiga bidang keilmuan yang tersendiri. Pertama, kajian semasa mengkaji kesan penentu pelbagai peringkat terhadap harga saham. Kedua, kajian ini menyiasat kesan mediasi dasar dividen terhadap hubungan antara pemboleh ubah peringkat perusahaan termasuk kesinambungan kewangan syarikat dan harga saham. Ketiga, kajian ini menyoroti kepentingan relatif setiap tahap pemboleh ubah yang paling baik menjelaskan harga saham. Kajian ini melakukan analisis terhadap 181 firma bukan kewangan di seluruh sektor yang tersenarai di Bursa Saham Pakistan (PSX) daripada tahun 2000 hingga 2017. Lebih-lebih lagi, kajian ini menggunakan penganggar yang berbeza seperti statistik deskriptif, matriks korelasi, ujian diagnostik, model regresi kuadrat minimum (OLS) termasuk kaedah kesan tetap untuk mengira hubungan di antara pemboleh ubah bersandar dan bebas. Selain itu, *Process Macros* digunakan untuk menguji kesan perantaraan. Untuk menguji kesan bersarang, kajian ini menggunakan prosedur ujian bersarang buatan (ANTP) dan statistik model bersarang. Dapatan kajian ini menunjukkan bahawa pengaruh faktor penentu peringkat syarikat, sektor dan tahap negara berbeza di antara firma dan sektor tersenarai bukan kewangan di Pakistan kerana sifat unik setiap sektor. Lebih-lebih lagi, polisi dividen memediasi hubungan di antara pemboleh ubah peringkat syarikat dan harga saham di seluruh firma dan sektor bukan kewangan di Pakistan. Selanjutnya, penentu tahap firma adalah pemboleh ubah penjelasan terbaik untuk harga saham diikuti oleh penentu peringkat sektor dan negara di seluruh firma bukan kewangan di Pakistan, yang berbeza di seluruh sektor kerana tingkah laku sektoral. Hasil kajian ini memberikan arahan dasar dan implikasi praktikal kepada pengurusan syarikat, pihak berkepentingan dan pembuat dasar untuk menentukan faktor penting dan implikasinya terhadap harga saham untuk melindungi semua pihak yang berkepentingan dari kemungkinan kerugian. Beberapa batasan yang dapat memperluas prospek penyelidikan masa depan perlu diakui. Batasan utama adalah mengenai ketersediaan data terhad dari semua firma bukan kewangan yang disenaraikan di PSX. Oleh kerana kelestarian kewangan adalah cabaran utama bagi sektor kewangan terutama di negara-negara membangun, penyelidikan mengenai kelestarian kewangan sebagai penentu tahap firma bersama dengan penentu tahap sektor mengenai tingkah laku harga saham firma sektor kewangan adalah agenda yang menjanjikan untuk penyelidikan masa depan.

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LIST OF ABBREVIATIONS

SP	-	Share Price
EPS	-	Earnings per Share
P/E	-	Price-earnings Ratio
BVS	-	Book Value per Share
SIZ	-	Firm Size
FS	-	Financial Sustainability
HHI	-	Herfindahl-Hirschman Index
MUNIF	-	Munificence
DYNM	-	Dynamism
GDP	-	Gross Domestic Product
INF	-	Inflation
IR	-	Interest Rate
PI	-	Political Instability
COC	-	Control of Corruption
ROL	-	Rule of Law
ANTP	-	Artificial Nested Testing Procedure
DPS	-	Dividend per Share
PSX	-	Pakistan Stock Exchange
SGR		Sustainable Growth Rate
AGR		Actual Growth Rate
WGI		World Governance Indicators
FDI		Foreign Direct Investment
IMF		International Monetary Fund
HSD		Honest Significant Difference
SECP		Security and Exchange Commission of Pakistan
KSE		Karachi Stock Exchange
OLS		Ordinary Least Square
ANTP		Artificial Nested Testing Procedure
ANOVA		Analysis of Variance

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CHAPTER 1

INTRODUCTION

1.1 General Overview

The primary objective of the firm is to maintain the financial position and achieve favorable performance every year, in turn, to increase the shareholders' wealth by paying them dividends, which eventually increases the share price. The stock market performance is considered as the most important area of financial research by investors, managers, financial analysts and government. Moreover, share prices and the trend of movements have always been of interest in the financial world and capital market as investors give critical importance in understanding why prices move up and down (Wang and XU, 2010; Aroni, 2011; Arkan, 2016). In this context, buyers (demand) and sellers (supply) give importance to the information about the firm, industry, general environment and their own investment objectives (NYSE, 2006; Healy and Palepu, 2012).

Morck and Yeung (2002) noted that the puzzle of share price performance is more affected in developing economies as compared to developed, where shares in the country tend to rise and fall together. The major reason behind this phenomenon is that developing economies may be small and tends to group in a few industries. These industries may be influenced by few key companies and can also be prone to macroeconomic shocks. The previous studies have made several attempts to explain the key factors that affect the share price of companies. Nonetheless, the companies and investors are still facing the issue of share price performance puzzle across the globe.

1.2 Background of the Study

Share price determination is a paradoxical task. Since, it is extremely sensitive to several internal or firm-specific and external factors. Previous studies have revealed that changes in share prices are due to these varying factors (Oyama, 1997; Irfan and Nishat, 2002; Sharma, 2011a; Eita, 2012; Srinivasan, 2012; Bhattarai, 2014; Enow and Brijlal, 2016; Dissanayake and Biyiri, 2017; Subing and Kusumah, 2018; Manual, 2020). In this context, the pioneering work on the firm-level determinants of share price such as dividends, book value, net profit and operating earnings was performed by Collins (1957) in the US market. Following Collins (1957) study, there have been several efforts to determine the link between firm-specific variables and stock prices. The empirical studies Banz (1981); Kothari and Shanken (1997); Lam (2002); Cooper, Jackson, and Patterson (2003); Jiang and Lee (2007); Morelli (2007); Malhotra and Tandon (2013); Rjoub, Civcir, and Resatoglu (2017) in developed markets stated that micro variables and the stock return have a significant relationship, though, sign and magnitude may vary among variables. These studies identified micro variables like book to market equity, size, earning price ratio, dividend per share and dividend yield etc. Most of these variables have a significant effect on stock return except for a few variables in different markets. Thus, determinants of share price vary and are inconsistent because different researchers have attributed different factors to share price changes. Moreover, Malhotra and Tandon (2013) suggested that further research is required to identify those factors which can precisely explain the share price determinants.

On the other hand, a few studies have been conducted at firm-level of developing countries to evaluate the relationship between share prices and firm-specific factors. The empirical studies revealed that numerous factors in different developing markets determine the share price (Chawla and Srinivasan, 1987; Irfan and Nishat, 2002; Sunde and Sanderson, 2009; Al-Shubiri, 2010; Sharma, 2011a; Srinivasan, 2012; Uwuigbe, Olusegun, and Agu, 2012; Almumani, 2014; Bhattarai, 2014; Enow and Brijlal, 2016; Aveh and Awunyo-Vitor, 2017; Singh, 2018; Manual, 2020). These studies have documented a significant relationship between micro variables and stock prices in developing countries but the direction and casual link might not hold equal for all the studies because the magnitude and significance of these factors may vary from time to time, firm to firm, industry to industry and country to country (In'airat, 2018). Thus, determining the share price is a conflicting and complicated task. Shiller (1983) discovered that share prices are not stable and change excessively relative to the news concerning fundamentals (as dividends) mainly because of market irrationality. Therefore, it affirmed that understanding the effect of numerous fundamental variables on share price determination is essential. Moreover, the literature concerning developing and emerging economies of the world reported mixed results in contrast to developed countries because factors that determine the share prices vary across different markets (Bhattarai, 2014). The literature failed to offer a definitive explanation for such varying and puzzling results. Thus, the question to identify the factors that precisely determine the share price remained unanswered.

In the context of external factors, several studies documented that macroeconomic variables have a significant effect on the share price in developed and developing economies (Wang and XU, 2010; Hsing, 2011; Eita, 2012; Khan and Yousuf, 2013; Nkechukwu, Onyeagba, and Okoh, 2013; Sabau-Popa, Bolos, Scarlat, Delcea, and Bradea, 2014; Ali, Abdelnabi, Iqbal, Weni, and Omer, 2016; Mugambi and Okech, 2016; Peiro, 2016; Rjoub et al., 2017; Chang, Meo, Syed, and Abro, 2019). This issue has been long debated among academicians and professionals. According to Fama (1970) efficient market hypothesis (EMH), "all the relevant information currently known about the changes in macroeconomic factors such as interest rate and money supply are fully reflected in the current stock prices in an efficient market", so that abnormal profits could not be earned by investors in such markets (Maysami, Howe, and Hamzah, 2004; Pramod Kumar and Puja, 2012; Ligocka, Prazak, and Stavarek, 2016). If the conclusion of EMH is to be considered, then stock returns should not be much impacted by variations in any macroeconomic variables. However, many scholars and subsequent studies by Nelson (1976) and Fama and Schwert (1977) have critically inspected the conclusion drawn from EMH, which asserts that macroeconomic variables do affect the stock returns by affecting share prices. In this connection, several empirical studies have analysed this relationship starting from the 1980s on developed countries. Fama (1981), Chen, Roll, and Ross (1986) and Fama (1990) tested the correlation between share prices and macroeconomic variables in the US market and found a significant correlation between them. Likewise, Mukherjee and

Naka (1995); Kim (2003); Maysami et al. (2004); Ratanapakorn and Sharma (2007) found the similar results but each study may contrast based on the sign and casual connection in the developed markets.

Moreover, the studies conducted in different emerging economies of the world like, Malaysia, India and Nigeria etc. mostly reported the mixed results in contrast to developed countries. Some studies conjectured that share prices do respond to the changes in macroeconomic fundamentals (Wongbangpo and Sharma, 2002; Rahman, Sidek, and Tafri, 2009; Asaolu and Ogunmuyiwa, 2011; Pramod Kumar and Puja, 2012; Nkechukwu et al., 2013; Mugambi and Okech, 2016; Chandrashekar, Sakthivel, Sampath, and Chittedi, 2018; Chang et al., 2019) while, other inferred that there is no causal association between macroeconomic variables and stock prices in less developed countries (Harasheh and Abu Libdeh, 2011). Subsequently, a few studies reported that relationship between macroeconomic variables and share prices in long-run is significant, whereas in short-run there is no significant relationship (Hunjra, Ijaz, Chani, and Mustafa, 2014; Megaravalli and Sampagnaro, 2018). Therefore, in general, there has been inconsistent and varying result within developing countries. Henceforth, the question of whether the macroeconomic variables affect the share prices remains valid.

Based on the viewpoint discussed, the literature in the field of determinants of share prices has acknowledged the fact that firm-level variables investigated in previous studies do not conclude an acceptable explanation in different countries of the world. Moreover, past studies only focused on economic variables and little attention is given to non-economic variables (governance indicators) at country-level, which boost confidence in stock market investments/performance and subsequently, impacts share prices (Ajide, 2014; Eita, 2015).

More recently, the research in the field of share price is now diverted to examine other aspects such as industry-level/sector-level and other country-level factors besides macroeconomic factors to note its consequences behind puzzling and varying results. Hawawini, Subramanian, and Verdi (2003) inferred that industry-level factors are more significant for performance. The sector and country factors keep significant importance as variations in sector-level and country-level environment may drive and affect share prices (Moerman, 2008; Shafana, 2014). Mohammad Khan Ghauri (2014) suggested that future research should focus on using different firm, industry and country-level variables in a whole market or different sectors/industries because these different level factors influence the share prices and supported by Sharif, Ahmad, and Ali (2017).

1.3 Background of the Problem

The phenomenon of share price performance has always been of great interest for many academicians and researchers since it helps to examine the overall strength and financial health of a firm. Share prices play a significant role in the development of an economy, it acts as a leading economic indicator in an economic activity. As discussed in the background of the study, several studies have attempted to explain the various factors and their possible influence on share prices in different markets. Still, there is disagreement regarding which factors significantly affect the firm's share price, which indicates varying and inconsistent results in the literature. The past studies evaluated several factors in different periods to see any change (increase/decrease) in the share price. Most of the work on the behavior of share price performance is mostly carried out in developed countries, mainly the US and European markets as discussed in the background of the study. Moreover, emerging and developing countries also remained an appealing area for most of the academicians and researchers. The literature mainly reported the mixed results in contrast to developed countries as debated in the background of the study. Therefore, in general, there has been no clear consensus on the factors that influence the share price of the firm, which indicates inconsistent and varying results in developing countries. Henceforth, the question of which factors affect share price remains valid.

Firm-level factors/variables are the value drivers as they can be measured based on the analysis of the firms' financial statements. Numerous studies have revealed that firm-level variables are assumed as significant factors in describing shareholder's wealth, which impacts the share price (Bhandari and Arora, 2016).

Additionally, most previous studies have been performed on the different sets of industries/sectors rather than single sector, wherein firm-level factors may differ from one sector to another, which may be a reason behind the variation in share price or returns (Houthoofd and Hendrickx, 2012).

The issue of firm's financial sustainability is a concern and challenge for all natures and sizes of the firms as it affects the overall financial system (Acemoglu, Ozdaglar, and Tahbaz-Salehi, 2015; Al-Dirawi and Dahash, 2018). It is one of the areas of the modern corporate world, which is gaining more consideration by policymakers and investors in the 21st century. Though, financial sustainability is comparatively a new and less studied variable in terms of corporate financial performance. However, this concept is gaining importance as serious financial problems occurred due to unrestrained growth of revenue and firm's operations can affect the financial performance of the companies (Gomez-Bezares, Przychodzen, and Przychodzen, 2017). The managers of the firm always face challenges that how to set the financial policies to facilitate the firm's growth. Though, most of the managers believed that high growth would be better. While too much growth could be bad for the firm as excessive/unmanageable growth that may lead the firm towards financial difficulties in turns of the financial burden and high cost. This will results in decreasing share prices in the market because of the poor outlook of the firm (Fonseka, García Ramos, and Tian, 2012). In line, Higgins (1977) argued that growth is gainful only to a certain level, but after that level, it may not be healthy and exert financial pressure on the firm.

The prior studies documented that financial sustainability of the firm affects their financial performance both in developed (advanced) and developing markets (Amouzesh, Moeinfar, and Mousavi, 2011; Przychodzen and Przychodzen, 2013; Rahim, 2017; Subbareddy and Reddy, 2017; Laskar and Maji, 2018; Molla, Ibrahim, Ishak, and Malaysia, 2019). Moreover, Przychodzen and Przychodzen (2013) examined the influence of corporate sustainability practices on stock price volatility. The findings of these studies suggest that the unsustainable growth of firms may exert tremendous pressure on the firm's operational and financial characteristics, which may lead to affect the stock price of the firm. Moreover, the problems related to financial sustainability may appear to become more severe when it comes to developing markets. The political, social and financial dynamics of developing economies are different from those of advanced economies (Cuervo-Cazurra and Genc, 2008; Manrique and Martí-Ballester, 2017). In addition, the developing markets as compared to developed markets are less efficient, having weaker regulations and are more risky and volatile (Edwards and Lawrence, 2010). The varying nature of developing economies may result in increasing agency and overinvestment problems along with limited potential value-creating prospects and opportunities for growth. This generates concerns for different capital providers that their finances are not properly managed (sustained) in a value-adding way, which impacts shareholders wealth. Furthermore, Rezaee (2017) suggested that examining the impact of financial sustainability on market performance (stock prices) can be beneficial for the companies. Thus, financial sustainability should be included as one of the variables in firm-level factors affecting the share price.

In Pakistan, the stock market performance is less explored as compared to other markets of the world because the stock exchange of Pakistan was almost inactive before 2000 and market capitalization of the companies listed on the stock exchange was very low (Khan, Anuar, Choo, and Bokhari, 2014). In the current century, the trend of share price performance in Pakistan started to take momentum. Empirically, there are few studies conducted on the determinants of share prices in Pakistan. Most studies documented that factors such as dividend policy (yield and payout ratio), earning per share, return on equity, profit after tax and book value per share etc., affects share price in Pakistan (Mehr-un-Nisa and Nishat, 2011; Malik, Qureshi, and Azeem, 2012; Tahir, Sabir, Alam, and Ismail, 2013; Hunjra et al., 2014; Jatoi, Shabir, Hamad, Iqbal, and Muhammad, 2014; Mohammad Khan Ghauri, 2014; Zubair and Kijboonchoo, 2017; Khan, Idrees, and Khan, 2020). Though, direction and magnitude of relationship may vary, which indicates mixed and contradictory results. These can be attributed to various reasons like a limited amount of indicators, short time period and small sample size etc. Moreover, the stock market of Pakistan is assumed to be highly volatile as it is very sensitive and reactive to unanticipated news and shocks (Iqbal, 2012; Ghufran, Awan, Khakwani, and Qureshi, 2016). Based on this, there exist fair chances of expropriation of stockholders because of weaker regulations, chances of leakage of news, speculation and rumours, which impacts the stock prices to vary abruptly.

Further, the past literature proposes that financial sustainability is relatively a new phenomenon, however, the importance and awareness concerning corporate sustainability factors is gradually and slowly improving in the country (Naeem and Welford, 2009; Sajjad and Eweje, 2014; Ikram, Zhou, Shah, and Liu, 2019). Nowadays, the concept of financial sustainability may be one of the fundamental concerns for big corporations. The leading businesses in Pakistan are focusing on the financial sustainability for efficient and optimize utilization of scarce resources as the financial sustainability disclosure index is 58% (Rustam, Wang, and Zameer, 2019). The corporate sectors of Pakistan both financial and non-financial have shown rapid and significant growth in the last decade. For instance, the GDP rate was grown on an average 7% per annum during the last 5 years and the income per capita in current dollar position has raised to approximately 1000 dollar. Additionally, there was a significant improvement in GDP growth rate from 3.1% to 7% in 2001/2002 and 2006/2007 respectively (Ministry of Finance, 2008; Ramakrishnan, Nabi, Daud, and Anuar, 2016). However, after 2008, especially non-financial sectors of Pakistan are subject to serious challenges of long-term financial sustainability as the growth rate of GDP decreased from 7% to 1.7% in 2008/2009 (Ramakrishnan et al., 2016; Nabi, 2017). In addition to GDP growth rate undergoing a continuous dip, other significant economic factors including the current deficit, currency performance and tax to GDP ratio also demonstrate unstable track records (Ali and Rehman, 2015; Ikram et al., 2019).

Due to unstable condition in Pakistan, the non-financial firms are facing serious financial sustainability challenges concerning different financial problems such as insolvency or bankruptcy and failure to continue its operation as a going concern (Inam, Inam, Mian, Sheikh, and Awan, 2019). Instead, financial sustainability is a prime concern for every firm because the major priority of the firms is to enhance their financial position to achieve their objective of “going concern” (Nikolaou, Tsalis, and Evangelinos, 2019). Moreover, the management of default/credit risk is a primary concern for financial sustainability of corporation because bankruptcies or financial failures not only impact the organizational sustainability and stakeholders of the firm but also build an atmosphere that is susceptible to the entire economy (Inam et al., 2019). Therefore, financial sustainability is an interesting variable to analyse in the scenario of Pakistan, as firms are coping their operations with the downward and unbalanced trend of economic condition. Hence, the variable financial sustainability is included as one of the main determinants at firm-level affecting the share price of the firms.

In addition to firm-level factors, very less consideration has been given to the sector-level factors in the literature of share price. Several studies in the relevant literature have suggested that share prices cannot only be determined through firm-level characteristics but other factors like sector-specific factors and/or country-specific factors also play a vital role (Grinold, Rudd, and Stefek, 1989; Beckers, Grinold, Rudd, and Stefek, 1992; Beckers, Connor, and Curds, 1996). Sector-level factors are linked with risk measures that are identified to describe the cross-section of stock returns (Hou and Robinson, 2006). Moreover, Cavaglia, Brightman, and Aked (2000) and Baca, Garbe, and Weiss (2000) asserted that the sector effect has been increased in describing the stock return variations. Based on the prominent theories and empirical results, the studies documented that Herfindahl-Hirschman index is used to compute concentration level in the industry, which may influence share price or return (Ignatieva and Gallagher, 2011). The firms working in industries with high concentration may earn significantly lesser returns (Hou and Robinson, 2006; Sharma, 2011b), while other inferred that firms functioning in industries with higher concentration may produce higher returns due to exercising market power (Ignatieva and Gallagher, 2011; Gallagher, Ignatieva, and McCulloch, 2014; Grullon, Larkin, and Michaely, 2019). Further, Yao, Haris, and Tariq (2018) also supported this fact that market power leads to more profits because market concentration arises from the competition, where companies with less cost structure increase profits, which may result in increasing share price. However, a contradictory viewpoint is that firms operating in concentrated industries engage in less level of investment and innovation due to high barriers as compared to competitive industries and hence, results in lower stock returns (Hashem and Su, 2015).

Likewise, munificence represents to “the scarcity or abundance of critical resources needed by firms operating within an environment” (Staw and Szwajkowski, 1975; Dess and Beard, 1984; Randolph and Dess, 1984; Tushman and Anderson, 1986). Companies functioning in higher munificence environment will have high levels of profitability due to plenty of financial resources as compared to the companies functioning in lower munificence environment (Chen, Zeng, Lin, and Ma, 2015). In addition, high level of opportunities are provided by higher munificence environment, which can ultimately augment the firm’s financial performance (Almazan and Molina, 2005; Hanif, Naveed, and Rehman, 2019). Consistent with Castrogiovanni (1991), the abundant resources and opportunities afforded to firms in munificent environments tend to enable firms to enjoy heightened levels of competitive success and growth by exploiting present business strengths. Thus, the firms belonging to the munificence industry may send positive information to the market, which in turn reduces the uncertainty and subsequently may affect the firm’s share price.

Similarly, industry dynamism is described as the rate of volatile change in a company’s external environment (Child, 1972; Duncan, 1972; Tosi, Aldag, and Storey, 1973; Dess and Beard, 1984; Simerly and Li, 2000; Smith, Chen, and Anderson, 2014; Hanif et al., 2019). In addition, dynamism reflects the instability and unpredictability of the changes within the industry that enhance the uncertainty of the firm’s valuation (Aldrich, 1979; Dess and Beard, 1984; Aldrich, 2008). Prior studies exhibit that uncertainty for companies is linked with a greater amount of dynamism (Duncan, 1972; Milliken, 1987, 1990). The uncertainty inherent within the industry dynamism may impart investor’s perception, which in turns influence the related information asymmetry and subsequently affects the share price.

From the last two decade, the corporate sectors of Pakistan both financial and non-financial have shown rapid and significant growth as it contributes almost 20.8% of its total GDP to its national income (Ministry of Finance, 2014; Amjed and Shah, 2016). However, after 2008 serious long-term financial viability challenges are faced by corporate sector of Pakistan especially non-financial sectors as the annual GDP growth from 2008/2013 on average was 3.61% as compared to approximately 7% per annum between 2003/2007 (Ministry of Finance, 2008; Ramakrishnan et al., 2016; Khan, 2017; Nabi, 2017). Consistent with Nishat (2001), the economy of Pakistan has encountered many ups and downs because of frequent changes in the government structure, policies and economic reforms that directly impact industries/sectors. Sector-specific policies were observed as a measure to boost the investments in priority sectors or as a part of the reforms package during economic stability and economic downturn (Nishat, 2001; Ahmad, Shahzad, and Rehman, 2014).

During the 21st century before the happening of the global financial crisis and political instability, the economy of Pakistan has encountered widespread reforms, particularly in the manufacturing sector (Ministry of Finance, 2015). During the fiscal year 2014 / 2015, the manufacturing sector posted a growth rate of 4.16% as compared to the prior fiscal year 2013 / 2014 which was 2.5%. The electricity is also the main issue of concern for all the sectors as the load shedding in Pakistan is forming a disaster situation for all the sectors. For instance, Textile sector, which is assumed as number one industry that contributes around 60 percent of the total export, is also severely impacted by the electricity through which it is going for more borrowing (Afzal, 2012). Likewise, the automobile industry is also severely impacted by the hike in prices as well as imported cars from different countries and hike in petrol prices. Thus, sectors in Pakistan had shown a high degree of recession impact due to the global economic crisis in 2008 and frequent changes in government structure, policies and economic reforms.

Further, Ahmad et al. (2014) conferred that financial reforms and changing sector-related policies may also be another reason causing the change in sector-level risk. These frequent changes in sector-related policies trigger the change in sector-level uncertainties. Additionally, some sectors have indicated a high level of uncertainties due to the effect of the overall economic condition of the country. For instance, the growth of the textile sector was rapidly declined after the global financial crisis in 2008. The textile exports witnessed decline in growth rate of -0.70% in 2009 and -1.78% in 2010 (Memon, Aziz, and Qayyum, 2020). In addition, the financial ratios of textile sector also showed negative trend in year 2008 and 2009 due to financial crises such as ROA was -1.93% and -1.28%, respectively and net profit margin was -2.50% and -1.64%, respectively (Abbas, Rehman, and Perviz, 2012). This risk premia differently impacted Pakistani companies across the sectors. The energy, automobile and textile sectors have perseverance in volatility movements throughout different economic periods (Ministry of Finance, 2012). Likewise, Nasir (2013) debated that industry's growth and technological flows within the sector in Pakistan impact the survivability of the company. Nevertheless, the survivability of a private company is less in the low concentrated industry because of high competition within the sector (Burki and Khan, 2010; Nasir, 2013). However, industries in Pakistan are probable to grow due to companies functioning in high concentration industries have more opportunities of investment and innovative activities, which increases firm's profitability and financial performance, which may result in increasing share price.

In terms of country-level factors, previous studies documented that country-level characteristics are better capable in describing stock returns than industry factors (Roll, 1992; Heston and Rouwenhorst, 1995; Griffin and Karolyi, 1998). Country-level factors keep significant importance as variations in the country-level environment may drive and affect share prices (Moerman, 2008; Saona and San Martín, 2018). This finding confirms the conclusion of La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) who asserted that country-level factors differ across countries and that these differences are significant for the stock markets. In literature, the prior studies focused on country-level macroeconomic variables. However, less attention has been given to other country-level governance factors such as political instability, control of corruption and rule of law, which may have equal importance due to their vital impact on share prices.

In relation to political instability, it is a situation that arises due to political events and frequent government changes. Empirical studies concluded that political instability has a negative effect on stock market performance and eventually on economic growth by affecting investments, savings and corporate decisions (Alesina and Perotti, 1996; Asteriou and Siriopoulos, 2000; Durnev, 2010; Chen and Rodden, 2013; Gul, Khan, Saif, Rehman, and Roohullah, 2013; Khan, Baig, and Shaikh, 2017; MengYun et al., 2018). Conversely, there is a contradictory perspective that investors feel that sometimes business opportunities are created by political instability, which has a positive effect on the stock market performance (Alt and Chrystal, 1983; Alesina, Cohen, and Roubini, 1993; Botero, Djankov, Porta, Lopez-de-Silanes, and Shleifer, 2004; Irshad, 2017). The studies hold that frequent changes in governments can positively affect share prices because the government with investor-friendly policies coming into power are preferable than the government having strict and stringent policies towards investors.

Similarly, corruption changes the investor level of trust on the financial system of a country, which consequently reshapes the investment decision. In this concern, Guiso, Sapienza, and Zingales (2008) reveal that investor trust more on the financial system of a country with less corruption perception. Moreover, Shao (2010) states that companies in less corrupt countries trade at bigger market premiums and have higher market valuations than those believed as more corrupt. According to Ahlin and Pang (2008), corruption control shows a positive impact on the stock market growth, which was supported by Brooks (2016). Likewise, control of corruption has a positive effect on foreign direct investment (FDI) and FDI affects stock market growth positively (Hussain, Sabir, and Meo, 2017). Conversely, Lee and Ng (2006) affirmed that corruption decreases the share prices by raising the firm's borrowing cost and eventually share prices influence the stock market growth. However, recent literature in associated fields increasingly stresses on the significance of control of corruption, which is an untapped area.

Likewise, the rule of law specifies that government authority is restricted and individuals' rights are secure. The rule of law is not just rules and regulations by law but the confidence of freedom, rights and equal treatment before the law (Watson, 2003). Stocks are affected by the confidence placed in the rule of law of a country. Thus, investors should feel as they are in a fair environment and everyone follows the rule in a country (Brancaccio, 2017). The better the rule of law situation in the country, enable investors to reduce the risk of uncertainty by making an anticipated, efficient and stable system (Peng, 2016), which subsequently may result in improved stock prices of the firm.

In reference to the Pakistani scenario, several researchers have mostly focused on three country-level (economic) indicator i.e. GDP, inflation and interest rate. Iqbal (2012), states that the GDP growth rate of the economy is high that will result in increasing share price. Moreover, Khan, Rizwan, Islam, Ahmed, and Rasheed (2016) reveals that inflation has a positive effect on stock price in Karachi Stock Exchange (KSE). Furthermore, Ali (2014), reveals that interest rate and stock price are inversely associated with each other i.e. one decreases other increases and vice versa. On the other hand, country-level (governance) indicators i.e. corruption, political instability and rule of law are given less attention and are still untapped. Transparency International (2018) has ranked Pakistan at 117th position among 180 countries concerning most corrupt nations in the world where corruption is extremely enhanced in all levels of the society. Similarly, frequent changes in governments from democratic to military regime brings positive variation in stockholders' returns. Finally, Khan and Rizwan (2008) revealed that law enforcement initiatives had shown phenomenal growth in Pakistan's equity market during the year 2000 to 2007, which brought efficiency in trade volume and stock returns. Furthermore, MengYun et al. (2018) revealed that Pakistan's military operation in June 2014 against terrorism have improved the law and order condition in the country, which results in improving stock market performance and stock market index touched the value of 5000 in 2017.

In summary, the inconsistent nature of socio-economic and socio-political atmosphere of Pakistan postulates a more profound understanding of sector-level and country-level factors along with firm-level factors on the share price. In addition, Sharif et al. (2017) also suggested that a composition of earnings per share along with other economic, sector-specific or country-specific factors may drive a better model for determining stock market value. Furthermore, Tahir et al. (2013); Hunjra et al. (2014); Iqbal, Ahmed, Zaidi, and Raza (2015); Sharif et al. (2017); Ahmed (2018); and Khan et al. (2020) are the recent studies conducted on the share price in Pakistan. The present study is unique as compared to stated studies in several ways. Firstly, the present study incorporated sector-level and country-level variables in relation to firm-level variables including financial sustainability. Secondly, majority of the previous studies adopted small sample size and period, whereas, the present study adopts census sampling and considers all non-financial listed firms in Pakistan according to the availability of data for the sample period. Thirdly, this study analyses firm-level, sector-level and country-level factors across different sectors of Pakistan, which is less explored. Sectors play an important role in explaining the national market volatility, as similar information can affect the sectors differently across the whole market (Nishat, 2001). Since, the sector's response to political instability differs, the sector-specific behavior may also affect the share price of firms differently across sectors. Therefore, to capture the real impact of sectors, the current study warrants the need to examine the sectors' behavioral effect on the share price of firms. Thus, the first issue of the present study is to identify overall significant determinants that affect the share price at firm-level, sector-level and country-level across non-financial listed firms and sectors in Pakistan.

In relation to firm-specific variables that influence the dividend policy, many studies have already been undertaken in different countries and economies (Al-Twaijry, 2007; Adesola and Okwong, 2009; Gill, Biger, and Tibrewala, 2010; Appannan and Sim, 2011; Naser, Nuseibeh, and Rashed, 2013; Ahmed and Murtaza, 2015; Khan, Naeem, Rizwan, and Salman, 2016; Khan and Ahmad, 2017; Al-Najjar and Kilincarslan, 2018; Masry, Sakr, and Amer, 2018; Singla and Samanta, 2019; Ullah, Bagh, and Arif, 2019). Most of the studies found that firm-level variables have a significant relationship with dividend policy. Despite previous studies, the question as what factors determine dividend policy of corporation is still unresolved because magnitude and sign of factors may vary from one country to another.

Another strand of literature focused on studies that have different views concerning the association between dividend policy and share prices at the firm level. With regard to US market Fama, Fisher, Jensen, and Roll (1969), Jahnke (1975), Asquith and Mullins Jr (1983), Baker and Powell (1999) and Howatt, Zuber, Gandar, and Lamb (2009) discovered a positive association between dividend and share price. The findings of these studies were consistent with (Kamyabi and Nazemi, 2014; Sharif, Ali, and Jan, 2015; Ullah, Saqib, and Usman, 2015; Jahfer and Mulafara, 2016; Hamid, Khurram, and Ghaffar, 2017; Kamali and Neysi, 2017; Ahmed, 2018; Yanuarti and Dewi, 2019) conducted in different developing countries. However, these studies were inconsistent with Hashemijoo, Mahdavi-Ardekani, and Younesi (2012) and Shah and Noreen (2016). Moreover, a few studies found no relationship between dividend policy and share price in developing countries (Adefila, Oladipo, and Adeoti, 2004; Abrar-ul-haq, Akram, and Imdad-Ullah, 2015; Pekkaya and Acikgoz, 2016). According to Asquith and Mullins Jr (1983) and Miller and Rock (1985), when a firm announces dividends, it gives information to its stockholders to predict the financial position and the earning ability of the firm. However, this prediction depends on the source of information whether it is reliable or not. Different researchers have conflicts and disagreements regarding the association between share price and dividend policy, which is still unexplained and considered as a controversial issue in corporate finance.

Instead, numerous studies have already documented that there exists an association between firm-level variables and share price in developed and developing markets. (Kothari and Shanken, 1997; Irfan and Nishat, 2002; Jiang and Lee, 2007; Al-Shubiri, 2010; Sharma, 2011a; Srinivasan, 2012; Malhotra and Tandon, 2013; Almumani, 2014; Bhattarai, 2014; Enow and Brijlal, 2016; Aveh and Awunyo-Vitor, 2017; Singh, 2018; Manual, 2020). The results of the literature suggest that there is a significant (positive/negative) association between firm-level variables and share price in the studies reviewed but sign and magnitude of association might not hold equal for all studies. In literature, the previous studies focused on firm-level variables such as earnings per share, price-earnings ratio, book value per share, firm size etc. However, less attention has been given to firm-level variable like financial sustainability, which is gaining attention by firms from the last few decades. It is one of the most important issues encountered by companies in the twenty-first century because investor seeks for a profit as dividends are paid from it, which eventually affects the share price. The financial health of the firm creates a huge amount of problems for those firms that are not sound to meet the requirements of developing /growing market, which will affect dividends and causes the firm to underperform in the stock market. According to Elmirzaev (2017), financial soundness and stability lead to sustainability is the key driver for dividend policy and market performance (share price).

With reference to the stock market of Pakistan, prior studies documented that firm-level variables affect share price (Malik et al., 2012; Mahmood and Waheed, 2014; Arshad, Arshaad, Yousaf, and Jamil, 2015; Iqbal et al., 2015; Asif, Arif, and Akbar, 2016; Bashir and Amir, 2018; Khan et al., 2020). However, financial literature also provides evidence that firm-level variables also impact dividend policy, which eventually signals share price to move up or down (Ahmed and Javid, 2008; Nazir, Nawaz, Anwar, and Ahmed, 2010; Ahmed and Murtaza, 2015; Khan, Naeem, et al., 2016; Khan and Ahmad, 2017; Ahmed, 2018; Ullah et al., 2019). In Pakistan, the pattern of dividend varies in terms of size of firm. The firms which are larger in size tend to pay more dividend as compared to the firms which are smaller in size. Moreover, the dividend pattern also differs across sectors due to the different nature and business environment of sectors. For instance, those firms might payout more dividend which operates in a mature and saturated sector as compared to those firms which operates in higher growth sector. The textile sector which is considered as a largest and mature sector pays dividend 1.5 billion rupees and 8.5 billion rupees in 2009 and 2017, respectively. Whereas, sugar sector is the second largest growing sector, which pays dividend 0.89 billion rupees and 2.5 billion rupees in 2009 and 2017, respectively.

The total assets of all non-financial listed firms on Pakistan stock exchange (PSX) increase from 3575.80 billion rupees in 2009 to 7497.11 billion rupees in 2017. In addition, earnings after interest and tax raise from 134 billion rupees in 2009 to 438 billion rupees in 2017 and cash dividend also increase from 117 billion rupees to 334 billion rupees in 2009 and 2017, respectively (State Bank of Pakistan, 2014, 2017). Since, size of firms in terms of total assets and earnings increased, which enables firms to pay dividends and ultimately lead to an increase in the share price of non-financial listed firms. In addition, a continuous increase in earnings indicates that firms are financially stable and sustainable. When firms have a sound financial position, it pays more dividends and provides a positive signal for investors, which result in the increased share price of non-financial listed firms.

Moreover, Azam (2010) documented that earnings growth and dividend payout are positively related to the price-earnings ratio. When firms have a higher price-earnings ratio, it signifies firms to pay more dividends, which raises the demand for firms' shares and results in increasing the share price of the firms. Furthermore, the book value of equity of all listed non-financial firms showed significant growth, which indicates that firms are earning more profit. As book value of equity is positively related to profitability (Malik, 2011). When firms are earning higher profit then it pays more dividends, which signals the share price of firms to move upwards. Thus, the attempt is made to see whether firm-level variables (i.e. earnings per share, price-earnings ratio, book value per share, firm size and financial sustainability) increase or decrease the share price and whether dividend policy mediates this relationship. Besides, sectors play a significant role in the firms' performance as the firms operating under different sectors tend to have dissimilar dynamics, growth opportunities, riskiness, competitive environment and different level of access to capital markets. Due to unique characteristics of each sector, the mediating effect of dividend policy between the relationship of firm-level variables and share price of firms under different sectors' environment may have an indirect impact on sign and magnitude of relationship across sectors. Therefore, the second issue of the current study is to investigate the mediating effect of dividend policy on the relationship between firm-level variables (i.e. earnings per share, price-earnings ratio, book value per share, firm size and financial sustainability) and share price across non-financial listed firms and sectors in Pakistan.

Furthermore, in literature, the direct impact of firm-level and country-level macroeconomic variables on the share price has been considered in detail. Though, very little attention has been given to the relative significance of each level of variables (firm-level, sector-level and country-level) that best explain the impact on the share price. As discussed earlier, firm-level, sector-level and country-level factors are important in determining the share price. Therefore, the present study employs multilevel factors, where the firms are nested in the sector and sectors are nested in the country. This form of multilevel factors and their influence may lead to several violations of the statistical assumptions, which are made by OLS regression and generate biased parameter estimators (Luke, 2004; Bamiatzi, Bozos, Cavusgil, and Hult, 2016; Lazega and Snijders, 2016; Hair Jr and Fávero, 2019). Thus, the present study tends to use the artificial nested testing procedure (ANTP) and nested model statistics to access the relative significance of each level of factors on the share price. The ANTP compares restricted models against unrestricted models. The restricted models are the one that can be reduced by imposing a set of linear restrictions on the parameter vector (Clarke, 2001). However, the unrestricted models are the one that cannot be reduced by imposing a set of linear restrictions on the parameter vector.

Moreover, the present study employs nested model statistics based on a preferred model to evaluate the explanatory power of each level determinants in explaining the share price. The nested model statistics in sequence add blocks of each level of determinants and then displays the comparison statistics between nested models (Acock, 2012). These method helps in identifying the different level of factors that are most important and relevant that best explains the paradoxical phenomena of share price and adds empirical and methodological contribution to the existing body of knowledge. Furthermore, Kayo and Kimura (2011) revealed that the firms operate under different sectors have distinctive nature. Hence, the external environment factors that have the power to influence the firm-level factors should not be ignored as higher-level sector characteristics may affect the firm's characteristics differently across sectors. Therefore, the third issue of the present study is focusing on identifying the different level of factors that best explains the share price across non-financial listed firms and sectors in Pakistan.

1.4 Problem Statement

The puzzling and paradoxical phenomena of share price remain mystified from the inception. The studies conducted to determine the share price of firms are inconclusive, with the existence of contradictory and mixed results about the determinants of share price in different countries of the world (Enow and Brijlal, 2016). Although, these inconsistencies have motivated several researchers to examine the factors that affect the share price of firms, still numerous puzzles remain. As discussed in background of the study, most of the prior studies are conducted in developed economies, although few of them have focused on developing economies. In addition, the findings from these studies reveal that share price determination is very diverse and conflicting. Researchers have put different theories and hypotheses to explain the factors affecting share price, but no single theory is sufficient to explain the puzzling phenomena of share price performance.

In light of the background of the study and background of the problem, the present study intends to highlight the issue related to share price in the following three distinctive viewpoints. Firstly, till date research has tended to focus on firm-level and country-level (macroeconomic) factors on the share price (Al-Shubiri, 2010; Wang and XU, 2010; Hsing, 2011; Sharma, 2011a; Eita, 2012; Srinivasan, 2012; Khan and Yousuf, 2013; Nkechukwu et al., 2013; Almumani, 2014; Bhattarai, 2014; Sabau-Popa et al., 2014; Ali et al., 2016; Enow and Brijlal, 2016; Mugambi and Okech, 2016; Peiro, 2016; Rjoub et al., 2017; Chandrashekar et al., 2018; Chang et al., 2019). However, according to the best of researcher's knowledge, very less attention has been given to inspect the influence of sector-level variables (industry concentration, munificence and dynamism) and other country-level variables (governance indicators such as; political instability, corruption and rule of law) on the share price in literature. Therefore, the study recognizes the need to consider sector-level and country-level (macroeconomic and governance) factors along with firm-level factors including financial sustainability to cater the problem of share price performance in Pakistan in the best possible way. Hence, this study has a unique contribution to the existing body of literature.

Secondly, firm-level variables are considered as the most important factors affecting share price, which also impacts dividend policy. Moreover, previous studies documented that dividend policy influences share price (Al-Hasan, Asaduzzaman, and Karim, 2013; Iqbal, Waseem, and Asad, 2014; Ullah et al., 2015; Jahfer and Mulafara, 2016; Kamali and Neysi, 2017; Ahmed, 2018; Ullah et al., 2019). This arises a question of whether dividend policy plays a mediating role in the relationship between firm-level variables and share price. Though, few studies have already used dividend policy as a mediator (Nazir et al., 2010; Hussain, 2013; Jacob, Msi, and Msi, 2017; Guizani, 2018; Widiyanti, Adam, and Isnurhadi, 2019; Akhmadi, Nurohman, and Robiyanto, 2020). However, the relationship between firm-level variables (i.e. earnings per share, price-earnings ratio, book value per share, firm size and financial sustainability) to share price using dividend policy as a mediating factor has not been assessed and remained unexplored in literature. Therefore, the attempt is made to see whether firm-level variables (i.e. earnings per share, price-earnings ratio, book value per share, firm size and financial sustainability) affects the share price and whether dividend policy mediates this relationship. Thus, this study brings novelty and contribute to the existing body of literature.

Thirdly, the direct effect of firm-level and country-level variables on the share price has been discussed in detail in prior literature. Though, very less concern has been shown towards determining the relative significance of each level of factors (firm-level, sector-level and country-level) that best explain the paradoxical phenomena of share price performance. Thus, this study highlights which level of factors best explain share price in Pakistan by using artificial nested testing procedure (ANTP). The use of ANTP not only highlights the relative significance of each level variables but also add methodological contribution to share price literature.

1.5 Research Questions

1 (a) What are the overall significant determinants that affect the share price at firm-level, sector-level and country-level across non-financial listed firms in Pakistan?

1 (b) What are the overall significant determinants that affect the share price of non-financial listed firms at firm-level, sector-level and country-level across sectors in Pakistan?

2 (a) Does dividend policy mediates the relationship between firm-level variables (i.e. earnings per share, price-earnings ratio, book value per share, firm size and financial sustainability) and share price across non-financial listed firms in Pakistan?

2 (b) Does dividend policy mediates the relationship between firm-level variables (i.e. earnings per share, price-earnings ratio, book value per share, firm size and financial sustainability) and share price of non-financial listed firms across sectors in Pakistan?

3 (a) Which level of variables (i.e. firm-level, sector-level and country-level) best explains the share price across non-financial listed firms in Pakistan?

3 (b) Which level of variables (i.e. firm-level, sector-level and country-level) best explains the share price in each sector within the group of Pakistani non-financial listed firms? Do they differ across sectors?

1.6 Objectives of the Study

1 (a) To examine the overall significant determinants that affect the share price at firm-level, sector-level and country-level across non-financial listed firms in Pakistan.

1 (b) To identify the overall significant determinants that affect the share price of non-financial listed firms at firm-level, sector-level and country-level across sectors in Pakistan.

2 (a) To investigate the mediating effect of dividend policy on the relationship between firm-level variables (i.e. earnings per share, price-earnings ratio, book value per share, firm size and financial sustainability) and share price across non-financial listed firms in Pakistan.

2 (b) To examine the mediating effect of dividend policy on the relationship between firm-level variables (i.e. earnings per share, price-earnings ratio, book value per share, firm size and financial sustainability) and share price of non-financial listed firms across sectors in Pakistan.

3 (a) To identify which level of variables (i.e. firm-level, sector-level and country-level) best explains the share price across non-financial listed firms in Pakistan.

3 (b) To discover which level of variables (i.e. firm-level, sector-level and country-level) best explains the share price in each sector within the group of Pakistani non-financial listed firms.

1.7 Significance of the Study

In general, the present study provides noteworthy contributions towards twofold, particularly, the body of knowledge and policy implications. In relation to the body of knowledge, the current study fills the gap in the literature development by seizing the multi-level factors and its influence on the share price performance. Prior literature mostly focused on firm-level factors in relation to macroeconomic (country-level) factors. However, according to the researcher's best knowledge, very little attention has been given to the firm-level factor like financial sustainability, sector-level and country-level (governance) factors in the literature of share price. Thus, the present study also serves to fill this gap by uniquely combines and group the firm-level, sector-level and country-level factors to determine its direct impact on the share price.

Additionally, this study also contributes to the growing body of literature in order to highlight the relative significance of each level of factors (firm-level, sector-level and country-level) that best explains the share price. Furthermore, this study utilizes artificial nested testing procedure, which is new to the literature of share price. This method helps in identifying the most important and significant factors that best explain the paradoxical phenomena of the share price. The use of artificial nested testing procedure not only highlights the relative significance of each level variables but also add methodological contribution to share price literature. Since, majority of the studies have focused on the developed countries, however, the present study seems to fill the gap in the perspective of Pakistan as a developing and emerging market. Pakistan is a unique market as compared to developed markets due to its distinctive nature of the political and economic environment. Though, share prices in Pakistan have been given less attention and explored by the researchers. Therefore, the present study will extend the share price literature related to Pakistan.

Moreover, firm-level variables are assumed as the most significant determinants affecting share price, which also affects dividend policy. In addition, prior studies acknowledged that dividend policy affects the share price. Besides, in the twenty-first century, the foremost firm-level factor, which firms are exhibiting attention towards is financial sustainability. The financial sustainability of the firm creates a huge amount of problems for those firms that are not sound to meet the requirements of developing /growing market, which will affect dividends and causes the firm to underperform in the stock market. Therefore, the present study attempts to discover whether firm-level variables including financial sustainability increases or decreases the share price and whether dividend policy mediates this relationship. Thus, this study finds out the mediating effect of dividend policy between the relationship of firm-level variables (i.e. earnings per share, price-earnings ratio, book value per share, firm size and financial sustainability) and share price across firms and sectors. Hence, this study brings novelty and contributes to the existing body of share price literature.

Furthermore, the present study focuses on the across sector analysis, which is essential to identify the unique behavior of each sector in responding to the influence of multi-level factors on the share price. In addition, the current study further reveals the uniqueness of share price performance that may vary across sectors due to different institutional settings of each industry. To the researcher's best knowledge, this is the first extensive study that considers the multi-level factors impact on share price across sectors in Pakistan. Thus, the contribution towards empirical development can be seen in numerous phases, as the study focuses on sector analysis, mediating effect and multi-level factors influencing share price across firms and sectors.

From a policy implications point of view, this study intends to provide guidelines to the managers and investors more clarity to invest in which non-financial sector particularly in Pakistan. For firm's managers, this study highlights the important factors through which they can control and improve their firm's share price in Pakistan. This study also extends important policy direction for the financial managers because this is a comprehensive and extensive study related to share price on sectoral basis by examining multi-level factors of share price by using a large set of variables, large sample size and extended study period particularly in non-financial sectors especially in the context of Pakistan. Similarly, for investors, this study points out the factors that investors should consider before investing in the firm's stocks. Moreover, this study offers investors, creditors and the general public who participate in stock market being armed with the knowledge that financially sustainable firms significantly generates higher stock prices and returns which allow them to make more informed decisions on where the investment should be made. Furthermore, the outcome of this research facilitates the academicians, researchers, policymakers, and investors to identify factors and formulate strategies that can support firms to respond effectively and efficiently in different conditions.

1.8 Scope of the Study

The scope of this research is to gain the significance of firm-level, sector-level and country-level factors on the share price of non-financial listed firms in Pakistan across sectors. This study measures the impact not only through firm-level factors but will also consider sector-level and country-level factors. Sector-level factors such as industry concentration, munificence, dynamism and country-level factors such as macroeconomic indicators (GDP, inflation and interest rate) and governance indicators (political instability, control of corruption and rule of law) may have a significant influence on the share price. Moreover, the aim of the researcher is to investigate the effect of firm-level variables (i.e. earnings per share, price-earnings ratio, book value per share, firm size and financial sustainability) on share price and whether dividend policy mediates this relationship across firms and different non-financial sectors of Pakistan. In addition, the current study highlights the relative significance of each level of factors (firm-level, sector-level and country-level) that best explain the share price of Pakistani non-financial listed firms across sectors.

Furthermore, the present study employs 18 years of data from 2000 to 2017. The sample period from 2000 to 2017 (both years inclusive) is selected due to several reasons. Firstly, in the year 2000, the Security and Exchange Commission of Pakistan (SECP) officially operationalize all the three stock exchanges in Pakistan under the SECP act 1997 (Kernal, 2002). Secondly, the Karachi Stock Exchange (KSE) was almost inactive before 2000 and the market capitalization of the companies listed on the stock exchange was very low (Khan et al., 2014). Thirdly, the sample period is selected based on the availability of the firms' data from various sources like Pakistan official website of Stock Exchange (PSX), State Bank of Pakistan (SBP), annual reports and DataStream, which only provide data starting from the year 2000 and thereafter. This study performs sector-wise analysis of non-financial Pakistani listed firms in Pakistan Stock Exchange across six sectors (automobile, cement, chemical, fuel and energy, sugar and textile). These sectors are selected because of high contribution to Pakistan's economy. Moreover, for the robustness of the results, this study employs pooled ordinary least square regression model, fixed-effect model, mediation analysis and artificial nested testing procedure.

1.9 Operational Definitions

The operational definitions of different terms used in the present study are as follows.

1.9.1 Share Price

Share price is an amount for which a stock of a company is offered in the stock exchange market by using the natural logarithm of the yearly share price.

1.9.2 Financial Sustainability

Financial sustainability is measured using difference between actual growth rate (AGR) and sustainable growth rate (SGR). The firm is considered as financially sustainable when there is no or less deviation of the actual growth rate from the sustainable growth rate.

1.9.3 Dividend Policy

A dividend policy is a company's approach to distributing profits back to its owners or shareholders and is measure by dividend per share in this study. Dividend per share measures the dividends paid out to the shareholders relative to the shares they owned.

1.9.4 Earnings per Share

Earnings per share serve as an indicator of a company's profitability. It is measured by net profit after tax (annual earnings) divided by the number of shares outstanding.

1.9.5 Price-earnings Ratio

Price-earnings ratio serves as a useful metric for assessing relative attractiveness of a firm's share price compared to the company's per share earnings. It is measured by share price divided by earnings per share.

1.9.6 Book Value per Share

Book value per share indicates how much a single share is a worth based on its equity. It is measured by shareholders' equity divided by the number of shares outstanding.

1.9.7 Firm Size

The larger the size of the firm, the more investment opportunities will be available for investors and stockholders. This study uses the natural logarithm of total assets to measure the firm size.

1.9.8 Industry Concentration (Herfindahl-Hirschman Index)

It deals with the industry concentration of high and low. It is calculated by taking a square of market shares.

1.9.9 Munificence

The ability to preserve the constant atmosphere is called munificence. It is calculated by regressing time against sales.

1.9.10 Dynamism

Dynamism assesses the degree to which an environment is either stable or unstable. It is calculated by taking standard error of munificence and average sales.

1.10 Organizations of the Study

The chapter one introduces the thesis, which begins with the general overview, the background of the study and problem, problem statement, research questions and objectives, the significance of the study, the scope of the study, operational definitions and finally the sketch of the thesis. Chapter two deals with broad theoretical and empirical literature about share price and its determinants at firm-level, sector-level and country-level from the recent past literature on developed, emerging and developing countries respectively. Chapter three outlines the research methodology. This chapter describes the data, explanation of methodological practices and statistical tools being employed for investigation purpose. Chapter four deals with the results and analysis of the data based on research questions and objectives. Finally, chapter five describes the probable answers of the research questions systematically and further shed light on conclusions, future recommendations and implications.

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