SECTORIAL ANALYSIS ON DIVIDEND POLICY ACROSS NON-FINANCIAL PAKISTANI LISTED FIRMS

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DEDICATION

This thesis work is dedicated to my parents, who have always love me unconditionally and who have taught me to work hard for the things that I aspire to achieve. I would also like to dedicate this work to my siblings. I would also like to dedicate this work to my lovely wife Dr. Shamaila Ali, who has been a constant source of support and encouragement during this challenging time.

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ABSTRACT

In corporate finance, dividend policy is considered as one of the most challenging area of strategic financial decision. The earlier studies on dividend policy have primarily focused on dividend policy theories, firm, and country level factors which influence the dividend policy of firms. The development of sectors is an important factor to economic development of any country. As such, in-depth analysis on the impact of sector-level factors, sectors different behavior and different political regimes on dividend policy of firms is vital. Moreover, in the horizon of sector level variables, political risk, stock market development, debt market development, and different political regimes, the dividend policy remained less investigated, particularly unique and comprehensive studies in the emerging market. This study contributes to prevailing body of literature by exploring these unique issues in the perspective of emerging economy from three distinctive ways. Firstly, this study investigated the impact of firm, sector, and country level variables on dividend policy across Pakistani non-financial listed firms. Secondly, keeping in view the significance of sectors and political regimes, this study examined the significant determinants of dividend policy across sectors and different political regimes. Thirdly, this study explored the relative importance of each level factor that best explain the nested effect of higher-level factors on the lower-level factors. This study adopts the census sampling and performed analysis of 134 non-financial listed firms on Pakistan Stock Exchange (PSX) during the 18-year period of 2000-2017 covering two political regimes; from 2000 to 2008 as dictatorship period and from 2009 to 2017 as democratic period. This study employed two estimators namely pooled ordinary least square (OLS) and fixed effect model to investigate the significant determinants of dividend policy. To examine the relative importance of each level factor, this study used artificial nested testing procedure and nested model statistics. The results demonstrated that the sector level variables such as industry concentration, munificence, and dynamism as well as country level variables such as political risk, stock market development, and debt market development play important roles in dividend policy. In addition, findings revealed that significant determinants of dividend policy vary across the overall sample, sectors, and political regimes. Furthermore, sector level and country level variables characteristics explained about 3% and 4% variations in dividend policy of non-financial listed firms. The findings of the study also offer policy direction and practical implications to the investors, managers, and researchers. The focus of investors and managers should be on the significant determinants identified by this study when making investment decision. Future researchers should focus on propensity to pay dividend, and qualitative studies to produce comprehensive understanding of dividend policy. Future research should also focus on triangulation approach to investigate the significant determinants of dividend policy.

ABSTRAK

Dalam kewangan korporat, polisi dividen dianggap sebagai salah satu elemen yang paling mencabar dalam membuat keputusan kewangan strategik. Kajian terdahulu tentang polisi dividen telah memberi tumpuan utama kepada teori-teori polisi dividen, firma, dan faktor-faktor yang mempengaruhi polisi dividen firma. Pembangunan sektor-sektor merupakan faktor yang amat penting untuk pembangunan ekonomi bagi sesebuah negara, Oleh itu, kajian yang mendalam terhadap kesan tahap sektor, tingkah laku sektor dan rejim politik yang berbeza mengenai polisi dividen firma adalah penting. Di samping itu, di peringkat pembolehubah tahap sektor, risiko politik, pembangunan pasaran saham, pembangunan pasaran hutang, rejim politik yang berlainan dan polisi dividen kekal kurang disiasat, terutamanya kajian yang unik dan komprehensif dalam pasaran baru. Kajian ini menyumbang kepada badan literatur yang sedia ada dengan meneroka isu-isu unik dari tiga aspek tersendiri dalam perspektif ekonomi baru. Pertama, kajian ini menyelidik kesan terhadap pembolehubah pada tahap firma, sektor dan negara di kalangan firma-firma bukan kewangan yang tersenarai di Pakistan. Kedua, dengan mengambil kira kepentingan sektor dan rejim politik, kajian ini mengkaji penentu penting polisi dividen di kalangan sektor-sektor dan rejim politik yang berbeza. Ketiga, kajian ini mengkaji kepentingan relatif bagi setiap faktor tahap yang paling jelas menerangkan kesan bersarang daripada faktor tahap yang lebih tinggi kepada faktor tahap yang lebih rendah. Kajian ini menggunakan persampelan bancian dan analisis dilakukan terhadap 134 firma yang tersenarai di Bursa Saham Pakistan (PSX) selama tempoh 18 tahun (2000-2017) yang meliputi dua rejim politik iaitu dari tahun 2000 hingga 2008 semasa tempoh pemerintahan berkuasa mutlak dan daripada 2009 hingga 2017 semasa tempoh demokrasi. Kajian ini menggunakan dua penganggar iaitu *pooled ordinary least square* (OLS) dan model *fixed effect* untuk menyelidik penentu penting polisi dividen. Untuk mengkaji kepentingan relatif setiap tahap faktor, kajian ini menggunakan prosedur ujian *artificial nested* dan model statistik bersarang. Hasil menunjukkan bahawa pembolehubah tahap sektor seperti konsentrasi industri, *munificence*, dan dinamisme serta pembolehubah tahap negara seperti risiko politik, pembangunan pasaran saham, dan pembangunan hutang pasaran memainkan peranan penting dalam polisi dividen. Di samping itu, penemuan menunjukkan bahawa penentu signifikan polisi dividen adalah berbeza dalam sampel keseluruhan, merentasi sektor dan merentasi rejim politik yang berlainan. Selain itu, ciri-ciri pembolehubah tahap sektor dan negara menjelaskan 3% dan 4% variasi dalam polisi dividen firma bukan kewangan yang tersenaraikan di Pakistan. Hasil kajian juga memberi implikasi praktikal dan cadangan polisi kepada pelabur, pengurus dan penyelidik. Para pelabur dan pengurus polisi dividen firma hendaklah memberi tumpuan kepada penentu signifikan yang telah dikenal pasti oleh kajian ini dalam pembuatan keputusan pelaburan. Para penyelidik pada masa hadapan harus memberi tumpuan kepada kecenderungan untuk membayar dividen, dan kajian kualitatif untuk menghasilkan pemahaman yang menyeluruh mengenai polisi dividen. Penyelidikan masa depan juga perlu memberi tumpuan kepada pendekatan triangulasi untuk mengkaji penentu-penetu penting polisi dividen.

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ANTP	-	Artificial Nested Testing Procedure
GDP	-	Gross Domestic Product
PSX	-	Pakistan Stock Exchange
SBP	-	State Bank of Pakistan
FE	-	Fixed Effect
OLS	-	Ordinary Least Square
UTM	-	Universiti Teknologi Malaysia
FCF	-	Free Cash Flow
PPP	-	Purchasing Power Parity
HHI	-	Herfindahl-Hirschman Index

CHAPTER 1

INTRODUCTION

1.1 General Overview

Dividend policy plays a vital role in the corporate finance due to its capabilities of dealing with the decision-making strategies. Development of dividend policy is based on four main decisions, such as, financing, investment, working capital management, and dividend decision. It is one of the most significant decisions which forecasts the amount of capital transferred to shareholders and retained earnings of the firm for future investment (Ross, Westerfield & Jaffe, 2002). It also provides information for shareholders about the performance of the company and helps in stabilizing the stock's market price (Gill, Bigger & Tibrewala, 2010). Moreover, it continues to attract attention due to its linkage with corporate financing and investing decisions and its impact on shareholder's wealth.

Over the past few decades, the research in the dividend policy has witnessed significant developments. The main developments were in establishing and improving the theoretical foundations for the determinants of the dividend policy. The seminal studies of Lintner (1956) and Miller and Modigliani (1961) has led to the development of an extensive body of corporate finance literature mainly in the area of dividend policy. The diversity of dividend policy patterns is well explained by a variety of theoretical models. These models have been tested and materialized using assumptions grounded on various dividend policy theories. However, recent studies highlighted and developed the consensus that neither a single theory nor a determinant can explain the dividend policy as a whole (Baker, Dewasiri, Koralalage & Azeez, 2019; Dewasiri et al., 2019). Moreover, there are many issues and challenges associated with the dividend policy that remained untapped. Therefore, in particular, determinants of dividend policy have been a topic of discussion and debate, yet there is no consensus on which factors affect the dividend policy.

1.2 Background of the Study

The pioneer research work in the dividend policy is considered by William (1938), Lintner (1956) and Gordon (1959) who identified dividend as a significant determinant to the value of firm. Among these pioneer work, the study of Lintner (1956) leads to the evolution of the Lintner model that reflect the idea that dividend policy is a valuable determinant of the firm. However, there are another school of thought that claimed and supported that dividend policy is irrelevant to the firm value and perhaps value-destroying (Miller & Modigliani, 1961). The argument is based on the signalling theory that the announcement of the dividend policy possesses the company's performance information that can be used by shareholders to take the appropriate actions according to the announcement. Such information might not positively reflect the image of the company (Miller & Modigliani, 1961). Further research in dividend policy introduced the concept of agency cost theory that put emphasis on the reducing costs which may arise from the principal agent issues. Additionally, agency theory advocates that payment of dividend is a possible activity to reduce the agency costs associated to free cash flows, investment opportunities, and size of the firm (Jensen, 1986; Easterbrook, 1984; Jensen & Meckling, 1976).

The extensive literature documented the work of Black (1976) who identified the dividend payout as a dividend puzzle. The dividend puzzle position is much attractive and appealing on dividend policy as stated by Allen and Michaely (1995), who reported that ample empirical and theoretical research on dividend policy is needed till getting universal unanimity. This puzzling phenomenon "the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just do not fit together " was widely studied by researchers (Dewasiri et al., 2019; Al-Najjar & Kilincarslan, 2019; Brahmaiah, Srinivasan and Sangeetha, 2018; Hanifa, Hamdan & Hafar, 2018; Adjaoud & Hermassi, 2017; Dewasiri & Yatiwella, 2016; Bhattacharyya, 2007; Aivazian, Booth & Cleary, 2003a; Baker, Powell & Veit, 2002; Allen, Bernardo & Welch, 2000; Bernstein, 1996). Simultaneously, the researchers had formulated empirical explanations and a variety of theories to show that why, when and how a firm should pay dividend to shareholders, even though dividend are charged with heavy tax as compare to the capital gains. Thus, the diversified and conflicting findings of past studies on dividend policy motivates the researchers to further investigate the significant determinants of dividend policy. In spite of the extensive investigation on dividend policy for many decades, no universally accepted explanation is achieved (Jabbouri & Attar, 2018; Dewasiri & Weerakoon, 2016; Baker, Singleton & Veit, 2011). In addition, Brealey, Myers, Allen and Mohanty (2012) highlights the dividend policy issue as one of the top ten important unsolved problems in finance.

The extensive empirical studies conducted in a developed country documented the profitability as imperative factor in determining the variations in dividend policy. In general, the companies' ability to pay dividend to shareholders provides signal about firm's profitability. Additionally, when firms increase the amount of dividend payout that ultimately shows the increase in profitability of that firm (Bahreini & Adaoglu, 2018; Byrne & O'Connor, 2017; Benavides, Berggrun & Perafan, 2016; Forti and Peixoto, 2015). Dividend announcement signals the stability of a company's future cash flows (Kale & Noe, 1990). A number of studies reported significant impact of cash flows on dividend payout (Al Shabibi & Ramesh, 2011; Gill et al., 2010; Juma'h & Pacheco, 2008; Kowalewski, Stetsyuk & Talavera, 2007; Charitou, 2000). Since then, a large and g rowing body of literature has investigated other factors in determining the variations in dividend policy (Byrne & O'Connor, 2017; Forti & Peixoto, 2015; Baker, Chang, Dutta & Saadi, 2013; Von Eije & Megginson, 2008; Baker & Smith, 2006; Brav, Graham, Harvey & Michaely, 2005; Baker, Veit & Powell, 2001).

Furthermore, past studies also reported growth and investment as important factors of dividend policy determination (Bahreini & Adaoglu, 2018; Benavides, Berggrun & Perafan, 2016; Forti & Peixoto, 2015; Denis & Osobov, 2008). In such case, the companies with no growth or less investment opportunities have to experience agency costs issues (Souza & Saxena, 1999; Jensen, Solberg & Zorn, 1992; Rozeff, 1982). In mitigating the agency costs issue, firms will have to pay higher dividend to the stockholders in comparison of firms having high growth and more investment opportunities (Jensen, 1986). Moreover, some studies identified that the firm size has an impact on dividend payout (Bahreini & Adaoglu, 2018; Byrne &

O'Connor, 2017; Forti & Peixoto, 2015). Particularly, larger companies have a tendency to pay more dividend than smaller companies. Besides, literature documented that more leveraged firms looks to retain their internal cash flows for accomplishing duty rather than to distribute existing cash to shareholders and protecting their creditors (Byrne & O'Connor, 2017; Forti & Peixoto, 2015; Al-Malkawi, 2005; Gugler & Yurtoglu, 2003; Faccio, Lang & Young, 2001). Shao, Kwok and Omrane, (2010) highlighted that dividend policy could be influenced by multiple factors such as firm size, investment opportunities, and cash flows.

Meanwhile, a considerable amount of literature from developing economies demonstrated that cash flows have a significant impact on dividend policy of the firm (Pinto & Rastogi, 2019; Labhane & Mahakud, 2016; Cheng, Cullinan & Zhang, 2014; Al-Ajmi & Hussain, 2011; Baker, Saadi, Dutta & Gandhi, 2007). In addition, the past literature reported significant impact of growth and investment on dividend policy (Pinto & Rastogi, 2019; Arko, Abor, Adjasi & Amidu, 2014; Abor & Bopkin, 2010; Amidu & Abor, 2006). Furthermore, studies found significant impact of firm size on dividend policy (Dewasiri et al., 2019; Singla & Samanta, 2019; Khan & Shamim, 2017; Jabbouri, 2016; Yusof & Ismail, 2016; Huda & Farah, 2011; Ahmed & Javid, 2009). Thus, the past studies conducted in developing economies reported that dividend policy decisions are affected by firm-level factors (Aivazian, Booth & Cleary, 2003a). In relation to firm level variables, much of the literature on dividend policy pays particular attention to country level variables (Brahmaiah, Srinivasan & Sangeetha, 2018; Ofori-Sasu, Abor & Osei, 2017; Batool & Javid, 2014; Elly & Hellen, 2013).

The past studies on country-level variables documented that dividend policies have revealed substantial variation across developed countries (Denis & Osobov, 2008). The cross-country research on dividend policy is based on agency explanations (Shao et al., 2010). Past researchers in this stream have shown that dividend policy is affected by formal institutions focused on investor protection (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000), inflation (Basse & Reddemann, 2011; Basse, 2009), and GDP (Abor & Bopkin, 2010). Countries are composition of governance mechanisms that defines and facilitate the way in which managers can distribute resources for different organizational actions and it may also facilitate the way in which governance is managed (Ward, Brown & Rodriguez, 2009). Furthermore, in developing economies, changes among governance bundles cause deviation in information asymmetries across economies (Millar, Eldomiaty, Choi & Hilton, 2005). In addition, past study found that firms from emerging markets exhibit different dividend pattern from those of developed economies (Aivazian et al., 2003a).

The recent literature demonstrated that companies with well-known history of stable dividend payments can be negatively affected by reducing or omitting dividend distributions. On the other hand, companies can be positively affected by growing dividend payments or making further payments of the same dividends. Moreover, companies that have not well-known dividend history are in general viewed positively when they declare new dividends (Luvembe, Njangiru & Mungami, 2014). However, there is no uniform acceptable explanations (Baker et al., 2011; Samuel & Edward, 2011; Baker et al., 2002). The studies in the developed and developing economies failed to support the acceptable explanation for such inconsistency and mixed results. Therefore, controversy regarding the dividend payment has made dividend policy as one of the topics that need continuous discussion and debate in both developed and developing economies (Williams & Ayodele, 2017; Ahmed & Javid, 2009).

1.3 Background of the Problem

The determinants of dividend policy remained an open question throughout the literature. The in-depth analysis of the literature highlighted that the dividend policy has been extensively investigated by the researchers. Based on the background of the study discussion, over the years, a large strand of literature on dividend policy has focused on firm level determinants such as profitability, free cash flow, firm size, liquidity, financial leverage, investment opportunities and corporate tax. The empirical research on dividend policy is usually restricted to firm-level determinants by arguing that firms have greater degree of impact on financial performance of company (Tahir & Mushtaq, 2016; Ghasemi, Madrakian & Keivani, 2013; Franklin & Muthusamy, 2010; Chen & Dhiensiri, 2009). In addition, internal and external environment factors affect the performance of a firm. Internal factors exist within the firms and under the control of management. Nevertheless, the external environment factors exist outside the firms and not under the control of management. These external environment factors such as, country level and sector level factors, are considered equally important for the dividend policy decisions. Despite the importance of external environment factors, very little attention has been paid to country level and sector level factors.

There is a recent shift in the paradigms of the dividend policy toward the country-level variables over the traditional firm level variables. Country level variables deals with the performance, structure, and decision making of the economy as a whole (Sullivan & Sheffrin, 2003). Country level factors exist outside the firm and not under the control of management, including macroeconomic variables, political conditions, social, environmental, suppliers, competitors, government regulations and policies (Adidu & Olanye, 2006). Past studies highlighted that a change in country-level factors have a great impact on future dividend payments (Chen, Cheung, Stouraitis & Wong, 2005). The key country level factors regarding dividend policy decision includes macroeconomic variables and political conditions (Ofori-Sasu et al., 2017; Goel, 2016; World Bank Group, 2015; Broadstock, Shu & Xu, 2011).

The significant studies considered macroeconomic variables such as GDP and inflation as important determinants of dividend policy (Ofori-Sasu et al., 2017; Batool & Javid, 2014). The firms make several operational and strategic decisions which are usually moderated by the macroeconomic variables (Owolabi, 2017). Taher, Uddin and Shamsuddoha (2010) opined that macroeconomic variables can influence the operations of the firm. The macroeconomic variables can pose a positive or negative threat to the performance of a firm. Thus, the performance of firm is gauged from stability of the macroeconomic variables. The researchers discussed that the macroeconomic variation not only impact the firm's level variables, but also affect the managerial decision-making of dividend policy (Ofori-Sasu et al., 2017; Batool and Javid, 2014). The country's macroeconomic situation induces the management to modify their dividend policy to either convey signals to investors or adjust the firm's dividend policy to the prevailing economic conditions (Salminen & Martikainen, 2008). The signaling power of dividend varies under different economic conditions (Farooq, Saoud & Agnaou, 2012).

Besides the macroeconomic variables, political risk is also considered as an important determinant of country level factors for dividend policy decision making. Political risk deters not only firm's performance, but also affect the economic conditions of a country. Roe & Siegel (2011) discussed that political risk strongly affects overall economic development. In addition, Julio & Yook (2012) highlighted that political risk is an important antecedent through which the political process affects economic conditions of the country. On the other hand, political risk usually results from severe economic inequalities which influence the financial development and overall economic development. Thus, the dividend policy of every country is based on the macroeconomic condition and political environment in the country. These conditions are significantly different across the countries (developed and developing). Hence, every country's dividend policy is also visibly different than other countries.

Additionally, political risk is one of the dynamic factors that affect the country's capital market and economic condition as well (Abdelbary & Benhin, 2019; Ahmad, Khan, Usman, Ahmad & Khalil, 2017). Considering the fact, the ambiguous and unstable economic and financial position of a country have strong negative influence on the capital market development of an economy. The capital market development generally consists of stock market development and debt market development. Sulong, Saleem and Ahmed (2018) demonstrated that capital market development might directly affect the firm's performance. In addition, Kajola, Adewumi and Oworu (2015) highlighted that firm performance influences the dividend policy of firms. Hence, capital market development of the country is affected by the local and global instability that ultimately affect dividend policy of the firm. The detailed discussion shows that capital market development is affected by political risk that may affect the dividend policy. However, the majority of past research has ignored the effects of political risk and capital market on dividend policy. Thus, this study warrants the needs to investigate the impact of political risk, stock market development, and debt market development on firm's dividend policy in emerging economies due to strong influence of political risk in these economies.

Based on the discussion of country level variables, the study further substantiates the uniqueness of dividend policy decisions and practices that differ across countries due to their different business environment. Beside the firm and country level variables, sector level variables are considered important determinants that provide the significant contribution in dividend policy decision making. According to Simerly and Li (2000) and Mackay and Philips (2005), the similarities in the sector are due to several factors which relate it to the environmental characteristics within an industry. The sector's characteristics influence the firm's financial structure due to differences in sectors' size, product type, technology, and competition level. In addition, Jong, Kabir and Nguyen (2008) demonstrated that the intra-industry variation in financial competitive sectors could be better explained by sector specific factors. In addition, Kayo and Kimura (2011) have emphasized that sector-level factors should not be neglected, because these factors may potentially influence the firm-level factors.

The past studies highlighted that the sectors dummies are used for capturing the effects of sectors on the firm's dividend policy (Dewasiri et al., 2019; Tran, Alphonse & Nguyen, 2017; Al-Najjar & Kilincarslan, 2017; Al-Najjar, 2011; Gill et al., 2010). Although the indirect impact through dummy variables provides insights about the nature of particular sector and its impact on the decision making of dividend policy, but there is a need to capture the direct impact of sector level variables on dividend policy in developed and developing economies. Most of the researchers faced problems in constructing the sector specific models due to data limitations especially in developing countries. In the recent past, there is a shift in the research paradigms towards sector analysis based on specific sector level factors (Rafiq, Iqbal & Atiq, 2008; Shah & Kausar, 2012). The extensive literature of strategic management, corporate social responsibility and other areas of finance has identified three sector level variables, such as industry concentration, dynamism, and munificence (Chen, Zeng, Lin & Ma, 2017; Ramakrishnan, Nabi, Daud & Anuar, 2016; Bilal et al., 2014; Kayo & Kimura, 2011; Goll & Rasheed, 2004; Simerly & Li, 2000; Keats & Hitt, 1988).

In addition, past studies mostly focused on the sector level variables impact on firm's capital structure. The prominent study proposed by Kayo and Kimura (2011) highlighted the industry concentration, dynamism, and munificence impact on firm's capital structure. The study demonstrated that firms operating in lower concentration sectors are more exposed to higher risks and higher volatility in profitability's on capital structure of firm. The result implies that the higher volatility in profitability may adversely impact the dividend policy of firms operating in highly competitive environment. In addition, Mirzaei (2015) revealed that the firms operate in higher dynamism sector tends to have more uncertainties in their earnings and cash flows in comparison of lower dynamism sector. Hence, the firms operating in higher dynamism sector might adversely affect dividend policy, as firms are uncertain about future earnings and cash flows.

Moreover, the firms generates more profits that are operating in sectors with high level of munificence (Ramakrishnan et al., 2016). In general, the sectors with high munificence have abundant resources, high profitability, and low level of competition. The firms operating in high munificent environment generates more profit and as a result might impact the dividend policy of firm. Thus, the firms operating in more competitive sectors tend to face more dynamic, uncertain, and complex environment. Based on the consideration, the extensive literature explained that sector level variables impact on firms' capital structure. In addition, the past studies also provide the comprehensive literature to explain the dynamic connection between capital structure and dividend policy. Al-Najjar (2011) explained that capital structure and dividend policy are influenced by the same market imperfections, such as signaling theory, agency cost theory. This implies that sector level variables also play influential role in examining the firm's dividend policy decision making. Due to the importance of industry concentration, dynamism and munificence, there is a dire need to highlight the sector level variables to capture the direct impact of sector characteristics on firms' dividend policy.

The extensive discussion concluded that there are many factors that can affect dividend policy decision-making either directly or indirectly. The firm's dividend policy decision is based on the performance of the firm. The firm's sound performance is influenced by internal factors and external environment factors. The internal factors consist of firm level determinants that is managed by the firms' internal activities and operations. The external environment factors refer to the factors outside of a firm that are taken into consideration by firm in its decision making i.e. sector level and country level factors. Beside the firm level factors, little attention has been given to country level and sector level variables to investigate the significant determinants of dividend policy. Past studies ignored the impact of country level variables especially political risk, stock market development and debt market development on firm's dividend policy. In addition, there is limited evidences found to show the impact of sector level variables i.e. industry concentration, munificence, and dynamism on dividend policy. Therefore, based on the existing body of knowledge, there is a dire need to investigate the significant determinants of firm's dividend policy at firm, country, and sector level variables in developed and emerging economies.

The determinants of dividend policy may differ across developed, emerging and developing economies in different economic environments (Ofori-Sasu et al., 2017). The detailed analysis reveals that dividend policy appear to become more conservative when it comes to emerging economies (Sarig, 2004; Aivazian et al., 2003a; Frankfurter & Wood, 2002). Additionally, firms operate in emerging economies are subjected to more financial constraints than their counterparts in developed markets (Glen & Singh, 2004). These emerging economies are more volatile, having weaker economic environment, less efficient and are riskier (Edwards & Lawrence, 2010). Since a comprehensive literature review specifies that dividend policy have been wide area of interest to researchers, academicians, and practitioners around the globe. However, this area could not attract much of the attention in the emerging economies, particularly in Pakistan.

Among the emerging countries, Pakistan is the best choice for the study in hand due to various reasons. Pakistan's political history since freedom has been characterized by periods of military rule, political risk, and issues with neighbouring country. The armed forces involvement in political affairs and the war on terrorism have drastically affected the economic condition of Pakistan. The world's perception of Pakistan after the incidence of 9/11, had a severe impact on the economic performance of the country and resulted in decreased participation in the financial markets by foreign investors (Nazir, Younus, Kaleem & Anwar, 2014). This brought the connection that political risk is an important determinant that would impact on capital market in Pakistan.

Pakistan is considered to have 42nd world's largest economy and 24th largest by purchasing power parity. Population of Pakistan is over 207 million which is the world's 6th-largest, providing it with a nominal GDP per capita of $1,629, which is ranked 147th around the globe for 2016. The economy of Pakistan is semi-industrialized and primary export commodities of economy included textiles, leather products, carpets/rugs, chemicals, sports items, and medical instruments. Currently country is undergoing through a process of economic liberalization, which includes privatization of all government companies, aimed to attract foreign investment, and decrease of budget deficit. In October 2016, according to Standard & Poor's, the foreign currency reserves of Pakistan had crossed $24.0 billion that has led to stable country position in the long-term. A report of BMI Research has named Pakistan as one of the ten emerging economies with a particular focus on its manufacturing hub (BMI Research, 2016).

Pakistani capital market is among the emerging capital markets. The capital market in Pakistan consists of stock and debt markets. The first stock market of Pakistan is Karachi Stock Exchange (KSE), was founded in 1947 (KSE Annual Report, 2012). On Jan 2016, three stock exchanges were merged into one stock exchange now called as Pakistan Stock exchange from Karachi Stock Exchange, Lahore Stock Exchange, and Islamabad Stock Exchange. It has been done to provide a single platform to investors in Pakistan, particularly to foreign investors. The capital market has been undergoing a major restructuring program. To liberalize investment procedures, various measures have been taken and capital formation is encouraged through stock exchanges, enlarge size, and capital markets depth in Pakistan (Arif, 2007). The capital market of Pakistan accounts for over 60% of the shares traded and majority of the debt and equity listings during 2002-2003 (State Bank of Pakistan, 2012). In May 2017, Pakistani market was improved by Morgan Stanley Capital International's (MSCI) from the status of frontier economy to emerging economy

(Economic Survey of Pakistan, 2017). To rise and achieve the demands of new status, the SECP and PSX, both institutions continuously worked together with MSCI delegates and foreign investors to focus on recent capital market achievements and the reforms.

In 2016, Pakistan Stock Exchange (KSE 100 Index) was ranked as best market in Asia and 5th best performing stock market in the world by Bloomberg and have provided total return of 46% for the year. The total return of 46 percent was also best in MSCI frontier markets and compared positively with the PSX average return of 20 percent over the last 10 years and average gain of 24 percent over the past 20 years (Economic Survey of Pakistan, 2017). The duration of July 1, 2016 to May 08, 2017, it was observed an overall positive and bullish trend for the capital market in Pakistan. The KSE 100 Index demonstrated outstanding performance of capital market mainly due to progress of macroeconomic indicators, wide-ranging reform measures undertaken by the SECP, improved security situation and Pakistan's upgradation in MSCI EM Index. During the FY 2017, the index reached its highest point at 50,935.91 on May 08, 2017, whereas the lowest point was at 37,966.76 on July 4, 2016.

In Pakistan, the debt capital market has mostly remained underdeveloped and a variety of effective measures needs to be taken to bridge the gap with other modern and regional economies. The Capital Market Development Plan (CMDP) focuses on the implementation of number of policies and measures for the development of debt capital market in Pakistan (Economic Survey of Pakistan, 2017). Pakistan Stock Exchange has achieved significant developments in its history, having a small existence of 5 listed companies in start with market capitalization of Rs 37 Mn. In 1960, it was increased to 81 companies with total paid-up capital of Rs 1.8 Bn whereas currently 546 companies are listed in the bourse with a market capitalization of Rs 7.692Tn as of Dec 31st, 2018 (Pakistan Stock Exchange). All the listed firms are distributed amongst different sectors. Figure 1.1 shows top economic groups of Pakistan as per PSX.

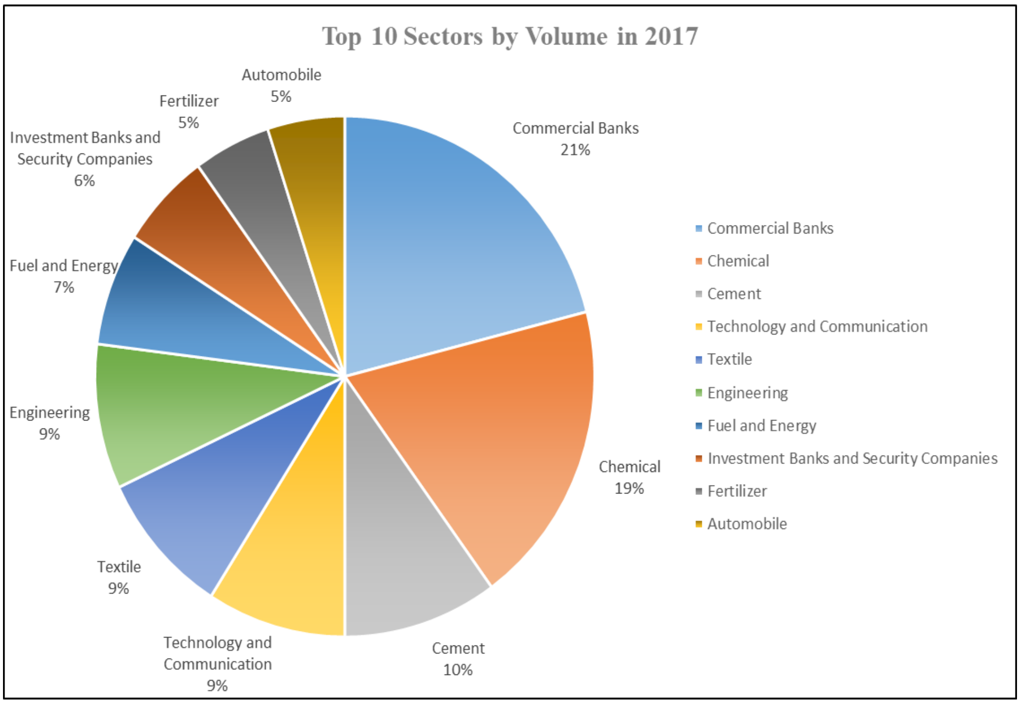

Figure 1.1 Top Economic Groups
Source: Pakistan Stock Exchange (2017)

The Pakistan's capital market and the economy has several important features for examining the dynamics of dividend policy. Therefore, Pakistan would be a unique example and better choice for a number of reasons. Firstly, Pakistan Stock Exchange (PSX) listed firms have complete power to decide their dividend policy except the Section 241 of Companies Act of 2017, binds them to pay dividends only out of firm's profit. There are no specific policies, set by Security and Exchange Commission of Pakistan (SECP) or any other legal body for the corporate sector that stipulates the dividend policy. Secondly, the tax environment in Pakistan is totally different as compared to developed markets. Until June 2010, Pakistan had a highly unusual tax system where the capital gains were completely exempted from taxation. There was no capital gain tax on stocks in Pakistan, while 10% withholding tax was charged on dividend incomes. Further, if the firms earned the profit and not announced the dividend then 35% of the income tax is charged by the Government of Pakistan. There is a possibility of differences in the tax system that may influence the dividend policy, since this adverse tax treatment of dividend income is a serious issue than the developed countries like United States (Khan, Burton & Power, 2013; Arif & Akber, 2013; Ahmed & Javid, 2009).

Thirdly, the dividend payout depends on firm policy and financial position of firm. There are no specific rules in Pakistan that make dividend payout mandatory (Bushra & Mirza, 2015). In addition, there is no specific regulatory body to make it binding for the firms to pay dividend in Pakistan. In fact, majority of the investors in Pakistan, are still not agreed with dividends and consider stock value appreciation as the most important element of stock returns. Hence, it is assumed that investor attitude towards dividends is anticipated to have an influence on the way in which firms set their dividend policy in Pakistan (Ahmed & Javid, 2008). Fourthly, the non-financial firms in Pakistan did not follow any stable dividend policy which created a lot of problems (Arif & Akbar, 2013). Fifth, the emerging economies are confronted with the issue of political risk that influence the capital market. In addition, past studies on dividend policy does not consider political risk within the emerging economies, particularly in the rapid growing emerging economies. Thus, to capture the impact of political risk within the emerging economies, Pakistan's market as a growing emerging economy is the best market for the current study due to frequent changes of political governments and political instability. Sixth, Pakistan Stock Exchanges is more volatile and entail a certain degree of information asymmetry, in addition to an expectation that high agency costs will be incurred (Rafique, 2012). Finally, there is no evidence that focused on direct impact of sector level and country level determinants on firm's dividend policy in emerging economies, particularly Pakistan.

The existing research on dividend policy has identified different firm and country level variables as determinants of dividend policy. The previous studies have frequently used firm level determinants, macroeconomic variables and sectorial dummies to capture its effect on dividend policy (Singla & Samanta, 2019; Brahmaiah et al., 2018; Al-Najjar & Kilincarslan, 2018; Ofori-Sasu et al., 2017; Buchanan, Cao, Liljeblom & Weihrich, 2017; Batool & Javid, 2014). To the best of researcher's knowledge, the country level factors, such as political risk, stock market development, and debt market development and direct impact of sector level variables such as industry concentration, munificence, and dynamism on dividend policy is under explored in emerging economies, especially Pakistan. Therefore, the first issue of the current study is to investigate the firm level variables (i.e., profitability, free cash flow, firm size, liquidity, financial leverage, investment opportunity, and corporate tax), country level variables (i.e., GDP, inflation, political risk, stock market development, and debt market development), and sector level variables (i.e., industry concentration, dynamism, and munificence) impact on dividend policy across Pakistan Stock exchange listed firms.

Moreover, the sectors are considered as generators of economic growth for the financial and economic development of any country. The sectors provide a proper base which is essential for the sound and financial structure of the firm. The sectorial effects might influence the firms' corporate dividend policy and investors' perception about the dividend and firms in sector. The important reason for such sectoral impact is that the firms belong to a sector have similar characteristics such as incomes prospects, investment prospects, and availability of resources. Consequently, the firms operating in the same sector have similar dividend payout policy (Dempsey, Laber and Rozeff, 1993; Baker 1988; Michel 1979). In addition, Mohamed et al. (2012) have suggested that the study of dividend policy can be widened to include sectoral analysis as well as adding other characteristics that influence dividend policy. However, little evidences have been found which investigated the variances in dividend policy across sectors (Pinto & Rastogi, 2019). Furthermore, these studies have focused on developed markets (Bremberger, Cambini, Gugler & Rondi, 2016; Emery, Finnerty & Stowe, 2004; Barclay, Smith & Watts, 1995; Baker, 1988; Michel, 1979). Based on the extensive review of past studies, little evidences have been found in the context of emerging markets, particularly in Pakistan.

From the last two decades, Pakistan's economy has faced several ups and down due to changes in governments structure, policies, and economic reforms that directly affects the sectors (Nishat, 2001). In addition, sectors specific policies are observed as a measure to enhance the investments in priority sectors, or as a part of the reforms package during economic stability and economic downturn (Ahmad et al., 2014). The incentives include tax immunities to the priority sectors, facilitation of investment, banking sector procedures, and easy access to sponsorship. The recent developments in literature have emphasized the significance of sectors in explaining the firm's financial behaviour (Naveed, 2015). The sectors play a significant role in explaining the risk volatility as firms are nested in sectors that are exposed to different level of risk (Nishat, 2001). In line with sector's riskiness, Nishat (2001) discussed that financial reforms and changes in the sector's specific policies could be another reason causing the change in sectors risk level. Therefore, the firms operating in sectors subject to different policies and reforms have higher risk (Ramakrishnan et al., 2016). Despite the importance of sectorial analysis, very little attention has been given to examine the significant determinants of dividend policy across sectors in Pakistan. Therefore, to the best of researcher's knowledge, to serve this gap in the existing body of knowledge, the second issue need to ascertain that how significant determinants of dividend policy differ across sectors in Pakistan.

Furthermore, Pakistan has a long history of involvement in politics and gone through two different political regimes i.e. dictatorship regime and democratic regime (Ramakrishnan et al., 2016). Since, the independence of Pakistan, the country had gone through four takeovers of dictators that brought dramatic changes of business and financial activities in Pakistan. At the end of year 1999, the military led government removed the elected democratic government and took over the charge of the country affair (Hussain, 2008). After coming to power, the military dictator suspended all the policies of previous government and introduced new economic and financial reforms. During the dictatorship regime (2000-2008), the economy experienced tremendous growth as sectors were growing in a standard rate (Yaqub, 2011). However, soon after the 2008, with the change of military government to democratic government, the economy of Pakistan once again experienced drastic decrease in macroeconomic fundamentals and started experiencing serious pressures in fiscal and balance of payment situations (Amjad, 2013). Political risk in Pakistan is much severe and can be judged through the frequent changes in different political government (dictatorship and democratic). This may resultantly discourage the investors to execute business transactions, which subsequently not only deter firms' performance but also affect overall economy.

According to State Bank of Pakistan (2012), the capital market of Pakistan accounts for more than 60% of the shares traded and majority of the debt and equity listing during financial year 2002/2003. The economy of Pakistan has experienced tremendous growth during the mid-2000s, between the 2003/2007 period which is 7%

annual GDP growth. The GDP growth of manufacturing sector of Pakistan showed a remarkable double-digit growth from 2000-2007. According to the survey of International Monetary Fund (2011), Pakistan economy has enjoyed relatively strong economic growth and performance until the outbreaks of democratic regime and global financial crisis in 2008. In early 2008, warning signs of economic downfall emerged as rate of inflation begin to rise. The conditions significantly worsened in mid-2008 when there was global financial crisis and political instability, and the democratic government could not handle the crisis pressure and brisk increase in interest rate (Economic Survey of Pakistan 2012-2013). As a result of high interest rate, limited access to leverage, acute energy crisis, high production cost, global financial crisis and poor industry infrastructure, the economy of Pakistan witnessed major commotion in normal economic patterns in the last few years.

Since the occurrence of political instability in first decade of 21st century, the Pakistan economy has experienced wide-ranges reforms in manufacturing sector. During the fiscal year 2014/2015, the manufacturing sector posted growth rate of 4.16 percent as compared to previous fiscal year 2013/2014, which was 2.5 percent (Pakistan Economic Survey, 2014-2015). Electricity is also the major concern as the load shedding in Pakistan is creating a disaster situation for all the sectors. Textile sector is considered as one of the most important sectors which contributes about 60 percent of total exports, is badly affected by electricity (Afzal, 2012). Similarly, automobile sector is also badly affected by hike in petrol prices as well as imported cars from Japan. This political uncertainty affects the Pakistani firms with different magnitude. For instance, the growth of textile sector has rapidly due to sudden ups and down in political environment of Pakistan. Additionally, the textile and fuel and energy sectors have endurance in volatility movements during political instability (Ministry of Finance, 2012). Thus, this risk premia differently affected the firms in Pakistan.

Based on discussion, it is obvious that there are significant effects of political regimes on firm's business operations and investments. In case of Pakistan, it is evident in World Bank Report (2011) that low investment trend in Pakistan is due to political risk that hampers the firm performance and development of country. To the best of researcher knowledge, no formal study to date tended to focus on examining the significant determinants of dividend policy across different political regimes in Pakistan. Therefore, third issue of this study is to investigate the significant determinants (i.e. firm, sector and country) of dividend policy across the different political regimes (democratic and dictatorship) in Pakistan.

Furthermore, in the literature, the direct impact of firm level and country level factors are discussed in detail. However, very little attention has been given to the determination of relative importance of each level factor that best explain the puzzling phenomena of dividend policy determinants. As such, the country level factors to a certain extent affect the firm level performance and the optimal operation within each firm (Tran & Jeon, 2011). Whereas the limited evidences found to show the direct impact of sector level factors on dividend policy. Moreover, Kayo and Kimura (2011) demonstrated that the characteristics of higher-level variables (country level and sector level variables) may directly or indirectly influence the characteristics of lower level variables (firm level variables). In line with this argument, there is need to ascertain that which level of determinants best explain the dividend policy of the firm. Moreover, this study used multilevel variables such as firm level, sector level, and country level variables, where the firms nested in sector and sectors nested in the country. These multilevel factors and their effects may lead to several violations of the statistical assumptions, which are made by OLS regression (Luke, 2004). Therefore, the fourth issue of this study used the artificial nested testing procedure and nested statistics in order to specify the degree of importance of each level factors that best explains the dividend policy decision making in Pakistan.

1.4 Problem Statement

The puzzling phenomena of dividend policy decision making remain mystified from its inception. The past studies emphasized on the traditional firm level factors and country level factors (Goldszmidt, Brito & Vasconcelos, 2011; Mcgahan & Victer, 2010; Short, Ketchen & Palmer, 2007). However, limited evidences are found to identify the country specific factors and sector level factors to examine the impact on dividend policy decision making. The extensive literature concluded that country level variables, such as political risk, stock market development, and debt market development, and sector level determinants, such as industry concentration, dynamism, and munificence are the promising factors that might have the significant tendencies towards affecting the firms' dividend policy. The current study examines the issues of dividend policy from four distinctive dimensions. Firstly, this study examines the significant determinants of dividend policy across Pakistan Stock Exchange (PSX) non-financial listed firms. Secondly, keeping in view the sectors' importance, this study highlights the differences in significant determinants of the dividend policy across each sector. Thirdly, this study investigates the impact of different political regimes on dividend policy's determinants across PSX non-financial listed firms. Finally, the study highlights the relative importance of each level variable on dividend policy.

In the light of background of the study and background of the problem, the current study aims to highlight the issue related to significant determinants of dividend policy decision making. Firstly, till date research has tended to focus on the influence of firm level and country level factors on dividend policy (Le, Nguyen & Tran, 2019; Tran et al., 2017; Aivazian et al., 2003a; La Porta et al., 2000). However, very little attention has been given to examine the effect of sector level factors on the dividend policy. The firm operates in sectors which have different business environment and carrying different level of growth, risk, and competitiveness. These requires firms to look into sector level factors that can influence the dividend policy. Therefore, the first issue deals the significant impact of firm level (profitability, free cash flow, firm size, liquidity, financial leverage, investment opportunities, and corporate tax), sector level (industry concentration, munificence, and dynamism), and country level variables (GDP, inflation, stock market development, debt market development, and political risk) on dividend policy of non-financial listed firms in Pakistan.

Secondly, Ahmad et al. (2014) and Shah and Hijazi (2004) demonstrate that the distinctive nature of the sectors requires different business environments. The sectors might be influencing the firm's corporate dividend policy and investors' perception about the dividend and firms in sectors. For instance, a firm that operates in a saturated and matured sector might pay-out more dividend as compared to the firms operating in higher growth sector. Hence, in line with arguments, the impact of sector environment is visible, the firms generates more profits that are operating in sectors with high level of munificence (Ramakrishnan et al., 2016). However, the past studies do not address the impact of significant determinants of dividend policy across sectors. Therefore, the focus of the second issue is to examine the significant impact of firm level (profitability, free cash flow, firm size, liquidity, financial leverage, investment opportunities, and corporate tax), sector level (industry concentration, munificence, and dynamism), and country level variables (GDP, inflation, stock market development, debt market development, and political risk) on dividend policy across sectors in Pakistan.

Thirdly, political regimes of the country also have influential effect on the firms' performance. In addition, the past studies found significant effects of political regimes on firm's business operations and investments (Ramakrishnan et al., 2016). The devastating political regimes affected the financial and sectors of Pakistan (Zahid, Khan & Tariq, 2012; Ali & Afzal, 2012). The firms operating in sectors may have different temperaments in different political regimes. However, the effect of political regimes on dividend policy determinants across PSX listed firms remained untapped. Thus, the study highlights the differences in significant determinants of dividend policy across different political regimes. Therefore, the third issue examine the significant impact of firm level (profitability, free cash flow, firm size, liquidity, financial leverage, investment opportunities, and corporate tax), sector level (industry concentration, munificence, and dynamism), and country level variables (GDP, inflation, stock market development, debt market development, and political risk) on dividend policy across different political regimes (dictatorship regime and democratic regime) in Pakistan.

Fourthly, the extensive literature identifies the direct impact of firm level and country level variables on dividend policy. However, very little attention has been given to determine the relative importance of each level factors (firm level, sector level, and country level). Hence, the study highlights which level of factors best explain the puzzling phenomena of dividend policy by using artificial nested testing procedure. The artificial nested testing procedure not only highlights the relative importance of each level factors, but also add methodological contribution of dividend policy decision making. Thus, for the robustness of the results, this study utilizes artificial nested testing procedure and nested statistics to examine the dividend policy. Therefore, the fourth issue investigate the relative importance of each level factor of firm level, sector level and country level on dividend policy of non-financial listed firms in Pakistan.

1.5 Research Questions

1. What is the significant impact of firm level, sector level and country level variables on dividend policy of non-financial listed firms in Pakistan?
2. What is the significant impact of firm level, sector level and country level variables on dividend policy across sectors in Pakistan?
3. What is the significant impact of firm level, sector level and country level variables on dividend policy across different political regimes in Pakistan?
4. What is the relative importance of each level factor of firm level, sector level and country level on dividend policy of non-financial listed firms in Pakistan?

1.6 Objectives of the Study

1. To examine the significant impact of firm level, sector level and country level variables on dividend policy of non-financial listed firms in Pakistan.
2. To investigate the significant impact of firm level, sector level and country level variables on dividend policy across sectors in Pakistan.
3. To explain the significant impact of firm level, sector level and country level variables on dividend policy across different political regimes in Pakistan.
4. To identify the relative importance of each level factor of firm level, sector level and country level on dividend policy of non-financial listed firms in Pakistan.

1.7 Significance of the study

The current study provides several worthy contributions towards empirical and methodological development and policy implications on dividend policy. In relation to the empirical development, this study fills the gap in literature by capturing the direct impact of sector level and country level variables on dividend policy. Previous literature mainly focused on the firm level factors in relation with the country level variables on dividend policy. However, this study contributes in the body of knowledge to examine the impact of sector level variables (i.e., industry concentration, munificence, and dynamism) and country level variables (i.e., stock market development, debt market development and political risk) on dividend policy, over and above the traditional firm level variables and macroeconomic variables. Furthermore, in corporate finance literature, the significant determinants of dividend policy across sectors and across different political regime remained untapped. Thus, the current study also serves to fill this gap by to investigate the impact of firm level (profitability, free cash flow, firm size, liquidity, financial leverage, investment opportunities, and corporate tax), country level (GDP, inflation, stock market development, debt market development and political risk), sector level (industry concentration, munificence, and dynamism), variables on dividend policy across sectors and across different political regimes (dictatorship regime and democratic regime) of non-financial listed firms.

Furthermore, this study also contributes to the growing body of literature in order to highlights the relative importance of each level of factors on the dividend policy. In fact, this is the comprehensive study that considers the effect of multi-level factors on the determination of dividend policy. Additionally, the current study also adds methodological contribution by using artificial nested testing procedure and nested model statistics to highlight the relative importance of each level factors on dividend policy of non-financial listed firms in Pakistan. This study will encourage the future researchers to examine the dividend policy by using different econometric models (i.e., pooled OLS, fixed effect models, and artificial nested testing procedure) to test the methodological arguments in dividend policy research. Since, most of the studies have focused on the developed markets, however, this study appears to fill the gap in the empirical indication in the perspective of Pakistan as an emerging market. Pakistan is an emerging market due to its unique nature of political and economic environment (Yar & Javid, 2014). Nevertheless, dividend policy in Pakistan are less explored by the researchers, particularly the determinants of dividend policy. Thus, this study extends the dividend policy literature pertinent to Pakistan by investigating the significant determinants of dividend policy.

From the practical implications point of view, this study will provide valuable strategies to financial managers, investors, and policy makers in planning for future investments. For financial manager of the firm, this study will shed light on the important factors (i.e. capital market development and political risk) through which managers can control the relative information asymmetry in order to minimize the agency problem in Pakistan. Similarly, for the shareholders, this study will highlight the factors that investor should consider before making investment decision. Moreover, if investors are interested in higher dividend payout, they should consider political situation, capital market development with significant firm level factor like profitability and size of firms, noticing that higher investment opportunities and larger firm size will lower payout. Management should also consider profitability when making the decision to pay dividends. Thus, when deciding on dividend payout, it is important to consider country level factors, and sector level factors with firm level factors.

1.8 Scope of the study

The aim of this study is to gain the impact of significant determinants of dividend policy in Pakistan. The current study will gauge the impact of significant determinants of firm level variables (profitability, free cash flow, firm size, liquidity, financial leverage, investment opportunities, and corporate tax, sector level variables (industry concentration, munificence, and dynamism), and country level variables (GDP, inflation, stock market development, debt market development, and political risk) may on dividend policy. Based on this perspective, this study examines the significant determinants of dividend policy of non-financial listed firms in Pakistan across sectors and across different political regimes. This study scrutinizes the variation in dividend policy across sectors and across different political regimes.

Furthermore, this study employs 18 years' panel data from 2000 to 2017 of 134 non-financial firms listed in Pakistan Stock Exchange (PSX). The sample period from 2000 to 2017 is selected due to various reasons. Firstly, the study used the overall sample of study from 2000 to 2017 representing two different political regimes i.e., dictatorship regime from 2000 to 2008, and democratic regime from 2009 to 2017. Secondly, Security and Exchange Commission of Pakistan (SECP) formally operationalize in 2000, due to which strict and prevalent guidelines formulated by SECP to protect investor interest. Thirdly, the sample period from 2000 to 2017 is characterized by a significant amount of change in economic and political environment which inevitably have an impact on dividend policy in Pakistan. Considering the facts, this study adopted the sample period from 2000 to 2017 in order to investigate the significant determinants of dividend policy in Pakistan. In addition, this study performs sector wise analysis of non-financial firms listed in Pakistan Stock Exchange (PSX) across six sectors. The selected sectors were chosen from a dataset, including automobile, cement, chemical, fuel and energy, sugar, and textile. The sectors are chosen because of high contribution to Pakistan's economy. The political risk outbreak diverse effects on financial and non-financial sectors of Pakistan (Ali & Afzal, 2012). Therefore, it permits the need to scrutinize how different political conditions affect dividend policy of Pakistani listed firms across sectors. Since, annual financial statements are available only at the end of every year, thus present study cannot go further beyond this limit.

1.9 Operational Definitions

The following are the different operational definitions of the different terms used in the current study.

1.9.1 Dividend Yield

Dividend yield explains the association between cash dividend and the market price of the firm's equity and thus reflects in return that investors expect to earn for the equities they hold.

1.9.2 Firm level Variables

Firm specific variables used as a determinants of dividend policy in this study are as follows:

1.9.2.1 Profitability

Profitability is a company's capability of generating profits from its operations. Profitability provides information that how much profit firm generates by utilizing the money which shareholders have invested in the firm.

1.9.2.2 Free Cash Flow

The cash flow of a firm demonstrates the amount of cash that a firm can generates from its operations.

1.9.2.3 Firm Size

The size of a firm is the amount and variety of production capacity and ability a firm possesses.

1.9.2.4 Liquidity

Liquidity refers to the availability of cash or cash equivalents to meet short-term operating needs.

1.9.2.5 Financial Leverage

Financial leverage is the use of debt by a company to fund its operations and expansion of projects in an effort to generate a return for shareholders.

1.9.2.6 Investment Opportunities

Investment opportunities captures the firm's potential future investment opportunities.

1.9.2.7 Corporate Tax

Corporate tax is a direct tax imposed by the jurisdiction on the net income of the company.

1.9.3 Sector level Variables

Sector specific variables used in this study as a determinants of dividend policy are as follows:

1.9.3.1 Industry Concentration

Industry concentration is famous as the Herfindahl-Hirschman index. It is a statistical measurement tool of concentrations of each firm in markets.

1.9.3.2 Munificence

Munificence may be defined as the capability of an environment for supporting the continuous growth.

1.9.3.3 Dynamism

The environmental dynamism describes the uncertainty and fluctuation within a sector that makes higher the unpredictability of firm's valuation.

1.9.4 Country level Variables

Country specific variables used in this study as a determinants of dividend policy are as follows:

1.9.4.1 Gross Domestic Product

Gross domestic product is a monetary measure of the market value of all final goods and services produced in a period (quarterly or yearly) of time.

1.9.4.2 Inflation

Inflation is the increase in the overall price level of the goods and services in a country over a period of time

1.9.4.3 Stock Market Development

The stock market development is improvement in stock markets ability to fulfil the needs of economy of the country.

1.9.4.4 Debt Market Development

Debt market is a monetary marketplace where in investors deal with the government and corporate issued debt instruments.

1.9.4.5 Political Risk

Political risk is a type of risk faced by investors, corporations, and governments that political decisions, events, or conditions will significantly affect the business.

1.10 Organization of the study

The rest of the study is organised as, Chapter 2 deals with broad theoretical and empirical literature regarding dividend policy and its determinants at firm level, sector level, and country level factors. Moreover, the study presents an insight into the effects of political regimes on dividend policy determinants. In addition, it gives an overview of the sector-wise performance on dividend policy. Chapter 3 presents data and the methodology being employed for investigation purpose. Chapter 4 deals with the results and analysis of data. Finally, chapter 5 presents the answers to the research questions and deals with the conclusion, future recommendations, and implications of study. Also, the limitations of the study and further recommendations are given in this chapter.

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