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# DETERMINANTS OF DIVIDEND POLICY OF NON-FINANCIAL PUBLICLY TRADED FIRMS: A REVIEW

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#### **ABSTRACT**

**Purpose**: This study examines all the financial literature available on the empirical studies conducted to investigate the dominants of factors that affect the dividend policy of non-financial and publicly traded firms. In preparing this review article, Preferred reporting items for systematic reviews and meta-analysis (PRISMA) have been employed to examine the systematic review thoroughly.

Methods: The study enlists six main models that provide theoretical explanations of DIV policy: signaling theory, Agency Costs, cash flow theory, bird in hand theory, clientele effects of DIVs hypothesis, tax effect hypothesis, and DIV irrelevance theory. Furthermore, this study enlists the various empirical studies conducted to determine the factors that affect the DIV policy of non-financial publicly traded companies.

Findings: In this study total of 400 papers have been screened, and 26 of them found relevant and appropriate. The study only reviewed the studies undertaken by non-financial companies, and the financial firms have been excluded. Furthermore, only publicly traded firms are included in the study. This paper summarizes main theories that explain dividend policies including signaling theory, agency cost cash flow theory, bird in hand theory, and dividend irrelevance theory among others. Moreover, it outlines and identifies major factors that are investigated in empirical studies as determinants of dividend policies of publicly-traded non-financial firms.

*Originality/Value*: This study examines all the financial literature available on the empirical studies conducted to investigate the dominants of factors that affect the dividend policy of the non-financial and publicly traded firms.

## **INTRODUCTION**

The DIV decision is a corporate finance problem because of its enormous effect on investment and financing decisions. If a company chooses to pay less DIV or doesn't pay DIV at all, it can retain more internal earnings and be less reliant on external payments. On the other hand, paying big DIVs results in lower internal earnings, and increasing reliance on debt or external financing. The DIV policy directly impacts raising capital (Yusof& Ismail, 2016). Considering the significance of the DIV policy, making the correct decision is essential. Despite decades of

research on the variables that affect DIV payout and willingness to pay DIVs, there is no agreement on which factors affect DIV payout and tendency to pay DIVs.

"No hypothesis based on the economic paradigm produced thus far completely explains the continuation of corporate payout policy," (Frankfurter &Wood, 2002). "The more we look at the DIV picture, the more it seems like a puzzle, with pieces that just don't fit together," (Black 1976). wrote two decades ago. Today, the scenario is essentially the same. (Allen& Michaely, 2003) conclude in a recent assessment of DIV policy that "far more empirical and theoretical research on the subject of DIVs is required before a consensus can be achieved." DIVs are included among the most popular unresolved issues in finance in a major textbook-like Brealey and Myers (2002)(Graetz, Schenk, Freeland, Lathrope, Lind, Stephens, Burke, Brealey, Myers and Allen 2002), who support this view.

Various theories are present in the literature to explain the dividend policy. For example, the bird in hand theory suggests that investors prefer dividends over capital gains. Bird in hand theory gave rise to the assumption that larger dividend payouts increase a firm's value. On the other hand, the dividend irrelevance hypothesis states that dividend payout policy neither affects capital gains nor the price of a firm's share; hence it's irrelevant to the investors (DeAngelo& DeAngelo 2006). However, the tax effect hypothesis states that as dividend policy and capital gains are taxed differently, this tax can affect the dividend policy. The clientele effect discusses how a firm's stock price fluctuates in response to shareholder requests. Shareholder demands arise in response to a tax or dividend that impacts a company's stock. The signaling hypothesis is that dividend policy is used as a signaling mechanism for the inside information from management to investors. The agency cost theory of free cash flow founded by Jensen states that when managers have free cash flow at hand, they invest it in unprofitable investments.

The most common variables investigated in the financial literature include firm size, financial leverage, profitability, previous dividends, and liquidity. The association between firm size and dividend policy has been studied extensively, but no consensus has been reached. Financial leverage is another factor that is highly reviewed in the economic literature. Most studies hypothesized that dividend policy is negatively affected by financial literature. However, profitability is mainly found to be positively associated with dividend policy. Previous dividends are almost always positively impacting the dividend policy, given that the companies that are already paying divided are more likely to continue doing so. Lastly, the company's liquidity is one of the essential variables decisive for DIV policy. Even when the income statement indicates good prof, no DIV will be paid if there is a cash shortfall(Olang, Akenga and Mwangi 2015). This study attempts to give the reader a thorough grasp of DIVs and DIV policy by covering the most essential theories and empirical studies on the factors that influence the DIV policy of publicly traded firms worldwide.

## **Background of Corporate DIV Policy**

DIVs paid by corporations have an extensive history and, as Frankfurter G.M & Wood (1997) pointed out, are intertwined with the evolution of the corporate structure. Corporate DIVs extend as least as far back as the 16th century in Holland and United Kingdom when commanders of sailboats sold fiscal rights to investors, entitling them to a part of the voyages' earnings. At the end of each journey, the payments and cash were given to investors. Throughout the sixteenth century, these fiscal rights were sold on open marketplaces in Amsterdam and were eventually supplanted by ownership shares. Even back then, many stockholders would acquire shares from many captains to spread the risk involved with this sort of business. The enterprise liquidation of the venture at the end of each voyage provided a

dispersion of earnings to shareholders. It served to limit the possibility of captains engaging in deceitful behavior (Gelderblom et al., 2013). However, as the enterprises' success grew and grew increasingly consistent, the course of liquidating the assets at the end of each journey became increasingly cumbersome and expensive. The enterprises' accomplishments strengthened their legitimacy, and investors gained more confidence in their management (captains), which was done by paying "rich DIVs" to shareholders. Consequently, as a consequence, such businesses resumed trading as going concern entities, with earnings instead of the total invested capital being distributed. The fundamental practice of companies deciding what proportion of their revenue to distribute to shareholders began with the formation of firms as "going concerns." It resulted in the first DIV payout rules (Frankfurter&Wood; 1997; Frankfurter&Wood, 2002). DIV payments were steadily limited to revenues exclusively as company charters evolved. Shipping companies' ownership structure progressively developed into that of a joint-stock corporation. The joint-stock form was adopted by chartered trading businesses in The British East India Company issued the first nominally valued joint stock shares in 1613, "However, no distinction was drawn between capital and profit". In the seventeenth century, the achievement of this sort of trade firm appeared to be paving the way for its expansion into other industries, such as mining, banking, apparel, and utilities. Early on, in the 1700s, a speculative bubble formed around the potential of increased commerce and the corporate structure, which burst dramatically when the South Sea Company went bankrupt. For over a century, the 1711 Bubble Act caused a substantial delay but did not come to a halt, the growth of the corporate form in Britain. Managers understood the necessity of significant and consistent DIV payments early on during the corporate company's existence. In part, this was owing to investors' analogy with the other type of financial security traded at the time, notably government bonds. Bonds provided a consistent and predictable rate of interest, and corporate executives discovered that was favored by investors behaved similarly to bonds. For example, the Bank of North America, in 1781, having just been in business for six months, the company paid DIVs, and the bank charter authorized the board of directors to issue DIVs every month from profits. During the first half of the nineteenth century, "paying consistent DIVs remained a top priority for managers" (Frankfurter & Wood Jr, 2002). Aside from the significance put by shareholders on DIV stability, the early nineteenth-century aspect of contemporary corporate DIV policy was that DIVs became recognized as a significant kind of information. Due to the lack and instability of financial data, stockholders sometimes judge companies based on their DIV payout instead of their declared profits. In conclusion, investors were frequently given false information about a company's performance, and investors relied on DIV policy to determine management's expectations for future performance. As a result, rising stock prices represented a rise in division payments. As firms grew more aware of this tendency, it became possible for CEOs to utilize DIVs to advertise positive earnings expectations and to enhance a business's stock price, as shareholders might interpret as a proxy for DIV announcements for profits growth. To summarize, the evolution of shareholder DIV payments has been linked to the development of the corporate structure itself. The importance of DIV payouts in meeting shareholder expectations was recognized early on by corporate executives. They frequently payouts DIV that have been smoothed out through time, believing that DIV decline would have a negative impact on the price of a stock, and hence employed DIVs as a signaling device to the market. Furthermore, it is thought that the DIV payout policy affects the stock price. Since the 1950s, finance researchers have debated the impact of DIV policy on firm value and other aspects of DIV policy (Al-Malkawi, Rafferty, Pillai, 2010).

## **DIV Policy Theories**

The previous section demonstrated how the DIV payout policy was linked to the evolution of the corporate structure. The developing status of financial markets was regarded as fostering the advent of DIV policy as essential to stockholders to some extent. Investing in stocks was once considered similar to investing in bonds; therefore, payment consistency was crucial. DIVs were also favored over reinvested earnings in the lack of consistent and reliable corporate reporting. They were frequently viewed as a more robust indicator of business success than available earnings accounts. Nevertheless, some investors believed the DIV policy would become less critical as fiscal markets evolved and grew more compelling. Theoretically, it's debatable why DIV policy should continue to be so significant (Al-Malkawi, Rafferty and Pillai, 2010).

Three primary DIV hypotheses are mutually exclusive. Some believe that raising DIV payments improves a company's value. According to another viewpoint, high DIV distributions negatively impact a company's value, reducing it. The third theory deems dividend policy irrelevant. These perspectives are represented in the following DIV policy theories: bird-in-the-hand theory, tax-preference theory, and the DIV irrelevance hypothesis. However, the argument about DIVs isn't confined to these three approaches. Several different DIV policy theories have been proposed, adding to the involvedness of the DIV riddle. Other arguments are (signaling), the clientele effects, and the agency cost hypotheses(Al-Malkawi, Rafferty, Pillai, 2010).

## **Bird-In-The-Hand Theory**

Bird in hand theory is of the view that DIVs enhance firm value. DIVs are valued differently than retained earnings in a world of uncertainty and incomplete data. The "bird in the hand" of cash DIVs is preferred by investors above the "two in the bush" of future capital gains. Increases in DIV payments can be linked to higher firm value. A high payout ratio lowers the cost of capital and increases share value because a greater current DIV decreases uncertainty about future cash flows. That is, large DIV payment ratios maximize a firm's value, according to the "bird-in-the-hand" theory. Gordon & Shapiro (1956) and Lintner (1956) are some studies that support the BIHH. The BIHH has been confronted by M&M, who says that a company's risk is defined by the riskiness of its operating cash flows, not by how it allocates its revenues. As a result, M&M coined the "bird-in-the-hand fallacy" to describe this argument. Furthermore, Bhattacharya (1979) claimed that the BIHH's logic is flawed.

#### **DIV Irrelevance Hypothesis**

Before the critical work on DIV policy by Miller and Modigliani (1961, henceforth M&M), a prevalent assumption was that greater payouts improve a firm's worth. The Bird-in-the-hand theory was primarily responsible for this notion. For example, Graham and Dodd (1934) claimed that "the primary objective of the company is to pay DIVs," and therefore, companies that pay bigger DIVs have to trade their stock at a higher price (see George M. Frankfurter; Bob G. Jr, 2002). Nevertheless, in the 1960s, M&M proved that DIV policy is meaningless under specific assumptions about perfect capital markets.

Because the DIV payout policy does not influence the price of a firm's shares or cost of capital in a perfect market, investors' wealth is unaffected by the DIV choice, and DIVs or financial gains would be irrelevant to them. That's because an investor's wealth is determined by the money earned by a company's investment choices, not by how that income is distributed. As a result, DIVs are meaningless according to M&M's. M&M claimed that a company's worth is defined by its fundamental earning ability and investment decisions, independent of how it distributes its revenue. M&M goes even further, claiming that all DIV policies are the same to an investor since they may produce "homemade" payouts by changing their portfolios to their tastes.

M&M relied on the assumptions of a flawless capital market and rational shareholders to support its case. The DIV irrelevancy hypothesis is based on the following assumptions about a perfect capital market: (1) There are no differences in DIV and capital gains taxes; (2) when securities are exchanged, there are no transaction or floatation charges; (3) free, and equal access to same knowledge by all participants (4) absences of agency issues (5) market participants are price takers.

## **Tax-Effect Hypothesis**

It has long been thought that DIVs and capital gains had the same tax treatment. On the other hand, taxes do exist in the real world and can substantially affect DIV payout policy and the firm's value. Generally, DIVs and capital gains are taxed differently, and because most investors seek the after return, taxes may influence their DIV choice. Taxes can control the supply of DIVs if executives retort to this tax preference by boosting the earnings retention ratio to enhance shareholder wealth (firm value).

According to the tax-effect theory, Low DIV payment ratios decrease the price of capital and raise the stock price. Low DIV payout ratios, in other words, help to increase the firm's worth. The rationale behind this argument is that DIVs and capital gains are taxed differently.

## **Clientele Effects of DIVs Hypothesis**

M and M suggested that these deficiencies could lead shareholders to seek out assets that lower their expenses. M&M coined the "DIV clientele effect" to describe how investors are drawn to types of DIV-paying firms. However, M&M argued that, while the clientele effect may cause a business's DIV payout policy to alter to appeal to specific clienteles, in a perfect market, each clientele is "as good as the next," and therefore, the firm's value is unaffected; DIV policy, in other words, is inconsequential.

Investors frequently face various tax treatments for DIV and capital gains, and they pay transaction expenses and inconvenience (changing portfolios) when they trade securities. Taxes and transaction prices may generate investor clienteles for these reasons and based on different investor situations. These clients will be drawn to companies with DIV policies applied to individuals' circumstances. Similarly, companies' DIV policies may attract various types of customers. Firms in high-growth industries, for example, that typically pay little DIVs or none at all, interest clients who prefer price appreciation (capital gains) to DIVs. The business which pays out a significant portion of its profits as DIVs, on the contrary, attracts a clientele that values high DIVs.

According to Allen, Bernardo and Welch (2000) institutional investors are more likely to invest in DIV-paying equities than individual investors because they benefit from lower tax rates. Institutions are more aware than individual investors and have a greater capacity to monitor or discover company quality; thus, they pay higher DIVs. (Allen, Bernardo and Welch 2000) conclude that "...these clientele effects are the precise reason for the existence of DIVs.

## **Signaling Hypothesis**

One more argument for why M&M's DIH fails to explain fiscal market behavior is the existence of information asymmetry among insiders and outsiders. M&M believed that outside investors and management had free, identical, and rapid access to similar knowledge about a company's performance. On the other hand, managers generally have access to learning about the company's present and future possibilities that outsiders do not. Because of the knowledge gap between insiders and outsiders, the market may not determine the firm's actual innate value. If this is the case, the share price may not always be a reliable indicator of a company's

worth. To narrow this gap, managers may need to share their information with outsiders to understand the firm's actual value better.

Many academics and financial professionals believe that DIVs include confidential information about a prospect of the firm. Even (Miller and Modigliani 1961) show that share prices might fluctuate in response to DIV changes in imperfect markets. DIV announcements, in other words, may be interpreted as communicating details concerning the company's upcoming profit potential. The theory has now been dubbed the "information content of DIVs" or the "signaling hypothesis." M&M, on the other hand, ruled out the idea, claiming that actual data does not support the assumption that shareholders favor DIVs over retained earnings. The signaling hypothesis states that stockholders can deduce information about a company's forthcoming prof based on the signal provided by DIV declarations, both in terms of DIV constancy and fluctuations. Nevertheless, managers must have access to confidential information about a company's prospects and incentives to share such knowledge with the market for this theory to hold.

Second, a signal must be real; for example, a company with dire long-term forecasts mustn't be able to imitate and give deceptive signals to the market by raising DIV reimbursements. As a result, the market should depend on the signal to distinguish between businesses. If these requirements are met, the market should respond positively to DIV increase declarations and negatively otherwise (Ang, 1987; Koch& Shenoy, 1999).

Managers may utilize variations in DIVs to transmit information to the financial market regarding a business's forthcoming performance and progress. Outside investors can interpret DIV announcements as a reflection of a company's success and forecasts. An increase in DIV distribution might be perceived as an improvement in the company's upcoming prof (good news), causing its stock price to rise. On the other hand, DIV cutbacks may indicate that the company's prospects are bleak (bad news), and the stock price may fall. As a result, it's not unexpected that company executives are hesitant to announce a DIV cut. When managers feel that earnings have permanently grown, according to (Lintner, 1956) businesses prefer to boost DIVs. This implies that DIV surges reflect long-term revenue stability. The so-called "DIV-smoothing theory also supports this forecast." No significant DIV increases will be announced as management attempts to smooth payments unless they can sustain the higher costs shortly. "Managers do not begin payouts unless they feel that future earnings can support payments," (Lipson, Maquieira and Megginson, 1998) noted.

(Bhattacharya 1979; John and Williams 1985; Miller and Rock 1985) are the most often referenced DIV signaling models. These models are based on several assumptions in general. There is an asymmetry of knowledge between company insiders (managers) and outside investors. DIVs provide details about a company's current and future cash flows, and DIV pay motivates management to provide confidential information to the market, closing the information gap. The market will raise the share price because of the announcement of a rise in DIV. Similarly, announcing a DIV decrease implies bleak prospects and would likely result in a drop in the company's stock price.

## **Agency Costs and Free Cash Flow Hypothesis**

One of M&M's perfect capital market assumptions is that managers and stockholders have no conflicts of interest. In practice, this assumption is challenging when the business's proprietors are not the same as the management. Managers are deficient agents of investors in these situations. This is because managers' goals are not always aligned with the benefits of investors, and they may engage in behaviors that are pricey to shareholders, such as excessive consumption or excessive investment in managerially rewarding but unproductive operations.

As a result, shareholders bear (agency) costs associated with monitoring managers' behavior, an implied price coming from the possible conflict of interest between investors and corporate executives. By decreasing the discretionary money available to managers, DIVs may assist in aligning interests of management and shareholders and minimize agency conflicts among managers and investors (Alli & Ramirez, 1993; Easterbrook, 1984; Rozeff, 1982).

(Easterbrook 1984) suggested that DIVs might be utilized to limit managers' free cash flow. Furthermore, East brook believes that DIV payments will force management to seek funding from the stock market. As a result, shareholders may watch management at a cheaper cost. This implies that paying DIVs increases outside scrutiny of governance and reduces the likelihood of managers acting in their self-interest. On the other hand, raising DIV payouts may push managers to take unfavorable activities such as increasing company leverage, which can sometimes enhance the firm's riskiness, according to Easterbrook.

(Jensen 1986) following Easterbrook's lead, proposed an alternative explanation for DIV payments based on the agency costs hypothesis. Businesses with surplus cash flow offer management further freedom to use the funds in ways that profit them but not in shareholders' economic interest. He claimed that administrators had inducements to grow their companies beyond their ideal size to enhance the resources under their control and raise their remuneration, typically linked to company size. As a result, if a company has a significant cash excess, the issue of overinvestment will become increasingly severe, and administrators might pursue initiatives with negative net present value (Al-Malkawi, Rafferty and Pillai, 2010). This overinvestment problem can be alleviated by extracting surplus money from the management's free cash flow. Increasing DIV distributions may assist in reducing free cash flow within management's control, limiting them from putting money into ventures that have a negative net present value (NPV). As a result, providing more DIVs reduces agency costs between managers and shareholders.

As previously stated, M&M believes that a company's DIV payout policy is separate from its investment philosophy. The free cash flow theory, on the other hand, assumes that DIV payout policy and investment decisions are linked. It is suggested that increasing DIV payments will lessen the problem of "overinvestment," resulting in a beneficial influence on the firm's market value, ceteris paribus (Lang & Litzenberger, 1989).

#### **Determinants of Dividend Policy:**

The theoretical and empirical correlation between dividend payment and its influence factors is explained briefly.

## Firm Size

The phrase 'size of business refers to the scale of a company's organization and operations. Despite contradictory results concerning the nature of this influence, the company size is still one of the most crucial elements influencing its DIV payout policy. This association has been studied extensively, but no consensus has been reached. For example, numerous studies have found a link between the volume of cash DIVs paid out and the firm's size. According to Jensen and Meckling, managers have more influence over larger businesses because ownership is widely distributed, and shareholders have little motivation and ability to supervise. As a result, the amount of agency issues and information asymmetry grows. Alternatively, a high DIV payment ratio would assist these companies in sending expensive favorable signals on the company's prospects, management's good faith, and the small degree of agency conflicts (Lloyd et al., 1985).

Management's good faith is demonstrated in the willingness to share earnings with investors and the inclination to submit to capital market scrutiny as the demand for outside funding rises in tandem with high DIV payments (Mitton, 2004; Rozeff, 1982). Financing from the financial markets allows investors to evaluate the firm more deeply. These senior managers are more prone to work in the best interests of investors than the managers who are not subject to such scrutiny. On the other hand, other research shows an inverse link between DIV payments and business size (Al-Malkawi, Rafferty and Pillai, 2010).

They show that small companies' stock prices react more strongly to DIV announcements than more prominent ones. It is said that the larger a company is, the more publicly available information it has and the smaller the information asymmetry. The value of the information contents incorporated in DIV payments would be determined by the knowledge asymmetry between insiders and outsiders. As a result, this body of research suggests that the signaling effect of DIVs diminishes as company size grows, discouraging large companies from paying DIVs.

### **Financial Leverage**

The use of debt to fund the procurement of assets with the hope that the new asset's income or capital gain would surpass the cost of borrowing is known as financial leverage. According to chief financial officers and management surveys, capital structure impacts DIV payout policy (Baker, Veit and Powell, 2001). Several investigations back up these findings, demonstrating an inverse association between debt levels and DIV policies (Al-twaijry, 2007; Hansen & Crutchley, 1989). This connection has a variety of interpretations in the literature. For example, companies with a high amount of debt choose to reduce DIVs, either willingly or in response to creditor pressure, to have cash on hand to meet their commitments to corporate debt holders (Agrawal, 1994).

Alternatively, when businesses become riskier because of increased debt usage, their expenses of the external funding increase, and they become further reliant on retained earnings. Low DIV payments also raise the volume of equity on the balance sheet, which improves leverage ratios like the debt to equity or debt to asset ratio, and therefore the company's creditworthiness. Improvements in these ratios make debt renewal easier and reduce financing expenses. Negative covenants, limiting a company's DIV payouts, are also included in other research (Mather& Peirson, 2006). According to this research, DIV payments usually advantage owners at the expense of creditors. Another theoretical approach contends that debt is another tool for lowering cash flow agency costs (Agrawal& Knoeber, 1996).

#### **Prof**

A company's capacity to earn revenues over its costs is defined as prof. To put it another way, this refers to a company's capacity to profit from its activities. There is no difference in the importance of a company's prof in determining DIV payout policy (Amidu and Abor 2006; Baker and Jabbouri 2016). Nevertheless, the issue that should be posed is whether the firm's DIV policy is influenced by present or future earnings. Several studies, particularly in emerging nations, show a favorable association between DIV payments and prof (Ahmed, Hafeez, and Javid, 2009).

Business prefers to raise DIV payments as profits rise rather than keeping money in the company, consistent with Jensen's free cash flow argument.

#### **Past DIVs**

The role of previous payouts in determining the current DIV payout ratio has been studied from the beginning of DIV policy research. Starting with Lintner (1956), who examined

twenty-eight management executives in the United States of America and concluded that prior payouts influence DIV policy. He explained that companies are hesitant to boost DIV rates to levels that might be hard to maintain, preferring instead to preserve a lengthy track record of consistent payouts. Several studies that evaluated Linter's model in various marketplaces and over a long time agree with this conclusion and conclude that past DIV pay present payouts (McCluskey, 2007). For example, a survey of five hundred sixty-two New York Stock Exchange companies Baker, H. K., Farrelly, G. E., & Edelman (1985) supports the relevance of historical DIV patterns and reports managers' proclivity for smooth DIV increases. Nevertheless, there is evidence that the current DIV payout in growing countries is unrelated to its historical trend. DIV payments are unstable over time since they primarily depend on their current profit.

## Liquidity

The company's liquidity is one of the essential variables decisive for DIV policy. Even when the income statement indicates good prof, no DIV will be paid if there is a cash shortfall. According to previous research, corporate DIV policy is heavily influenced by the company's cash status instead of revenues (Anil, K., & Kapoor, 2008; DeAngelo et al., 2004). Deshmukh (2003) illustrates the relevance of liquidity in determining DIV payout policy using a sample of industrial businesses listed on the New York Stock Exchange and the American Stock Exchange. The author proves that the DIV payout ratio and cash position have a favorable relationship

## METHODOLOGY AND PROCEDURES

## **Research Scanning**

A thorough review of the literature was carried out to synthesize existing literature on the effects of Climate change on the agricultural sector. The most prominent catalogs for scientific literature, the Web of Science, Science Direct, research gate, related academic journals, and conference papers were reviewed. Preferred reporting items for systematic reviews and meta-analysis (PRISMA), as shown in Figure 3, have been extensively studied to prevent conflicts during systematic review (Fargnoli & Lombardi, 2020; Hutton et al., 2015). The review looks through all the reports on this subject to discover answers to a clearly defined research question. It then uses several methods to identify and synthesize the reports' findings.

The following search term was used for the screen title, abstracts, and keywords: DIV policy; developing economies; cash DIV; Financial management, etc. In addition, the search for 1990–2021 was conducted. A total of 400 papers have been screened, 26 of them found relevant and appropriate. The search included empirical studies on the determinants of DIV policy studies in Pakistan over eleven years from 2010 to 2021. Studies that focused on the effect of DIV policy on firm value or other variables have been excluded as well. Research papers published with an impact factor have been chosen, and the findings are listed here. Figure 3 depicts the processes and records of the database searches. There were 400 records examined in total. Out of these, 200 articles were left out as they did not conduct an empirical study to investigate the variables that affect DIV policy in publicly traded companies. One hundred more articles were excluded because they did not study the publicly listed firms. One hundred final articles were excluded because they studied the financial sector(banks) and not non-financial companies. Thirty publications were deemed significant in this review research and included in the qualitative synthesis. The 26 articles are listed in Table 1.

Table 1. Factors affecting dividend policy

Table 1. Factors affecting dividend policy						
Sr no.	Country	Methodology	Objective	Results	References	
1	Australia	OLS (along with robust standard errors)	Determining factor of DIV payments for Australian Multinational Businesses and native	MC(s) less likely to be DIV payers compared to DC(S)	(Akhtar 2018)	
2	Poland	Fixed effect and REM	firms Factors of DIV policy of non-FL firms traded on Warsaw Stock Exchange.	A -ve relationship among DIV payout ratio and prof and leverage Profitability,	(Kaźmierska- Jóźwiak 2015)	
3	South Africa, Nigeria, Kenya, Ghana	Generalized least square (GLS)	Investigation of the determining factor of the DIV decisions of businesses in Sub- Saharan Africa	investment opportunities, taxation, financial leverage, institutional shareholding and risk affect DIV policy	(Arko, Abor, Adjasi and Amidu 2014)	
4	Turkey	Logit regression and a fixed effects regression	To detect the DIV policy determinants of Sri Lankan firms	size, industry impact, corporate governance, free cash flow, earnings, past DIVs, prof, investment opportunities, networking capital, concentrated ownership structure and investor preference represent are most essential	(Baker, Dewasiri, Koralalage and Azeez 2018)	
5	Malaysia	Pooled least square, REM, FEM	To investigate the variables affecting the DIV policy of publicly traded firms in Malaysia	determinants earnings, debt, size, inv, and largest the shareholder has a crucial influence on DIV policy Significant	(Yusof and Ismail 2016)	
6	Pakistan	OLS Regression	To investigate the determinants of DIV payout of the Oil and Gas industry of Pakistan	relationship between prof and firm size with div	(Tahir and Mushtaq 2016)	
7	Malaysia	multivariate regression analysis	To study the determinants of DIV policy of Malaysian firms	free cash flow, return on assets, return on equity, earning per share, market to book value, and market	(Issa 2015)	

8	Sri Lanka	Binary logistic regression model and FEM	To find the determinants of DIV policy in a developing market	capitalization are significant factors Past DIV decision, earnings, investment opportunities, prof, free cash flow, corporate governance, state ownership, firm size, and industry influence as the key determinants	(Dewasiri, Koralalage, Azeez, Jayarathne, Kuruppuarach chi and Weerasinghe 2019)
9	USA	Multinomial logit regressions	Its objective is to put the lifecycle and signaling theories of DIV policy to the test in the context of non- US companies publicly traded on US stock exchanges.	firm size, growth opportunities, and the mix of earned and contributed capital partially explain observed DIV policies for ADR firms The positive	(Perretti, Allen and Weeks 2013)
10	Pakistan	OLS	To investigate the effect of Debt-to-equity ratio, Operating cash flow per share, prof, market to book value ratio, current ratio, and corporate tax on the DIV payout ratio	relationship of debt-to-equity ratio, prof, current ratio, and corporate tax while Operating cash flow per share and market to book value ratio has a negative	(Rehman and Takumi 2012)
11	Pakistan	fixed effect and random effect analysis	To evaluate the determinants of DIV policy.	relationship. Significant factors recognized in this investigation are prof, size, tax, inv and life cycle stage of a firm insider ownership,	(Arif and Akbarshah 2013)
12	Pakistan	Multiple regression with REM	To know variables affecting DIV policy of textile industry with context to Pakistan.	institutional ownership, prof and DIV paid preceding years are critical determinants of DIV policy	(Ali, Fengju, De Andrade and Saeed 2015)
13	Turkey	Levene's test, t-tests, and Wilcoxon test	This study investigates the views of managers of firms listed on the Borsa Istanbul on DIV policy	provides general support for Lintner's partial adjustment model, signaling theory, catering,	(Baker, Kilincarslan and Arsal 2018)

	D.1.			firm life cycle, and bird-in-the-hand	
14	Bahrain; Egypt; Jordan; Kuwait; Morocco; Oman; Qatar; Saudi Arabia; Tunisia; United Arab Emirates	Panel data regression with fixed effects	Identification of the main variables affecting DIV policy in MENA emerging markets	Neg (-) relationship with leverage, growth, free cash flow, positive relationship with size, current profit, and liquidity	(Jabbouri I. 2016)
15	Pakistan	GMM model	This study examines the impact of family control on the DIV policy of firms in Pakistan	family firms pay lower DIVs than non-family firms	(Yousaf I., Ali S. and hassan A. 2019)
16	Greece	Generalized Method of Moments	This paper studies the determinants of DIV policy of listed firms in Greece	size, prof, and liquidity factors increase the probability to pay DIVs	(Patra, Poshakwale and Ow-Yong 2012)
17	Ghana	Fixed effects, random effects, and OLS panel	To look at the factors that influence the DIV payout ratios of Ghana's publicly traded firms.	Positive relationships between DIV payout ratios and prof, cash flow, and tax and negative associations between DIV payout and risk, institutional holding, growth, and market-to-book value.	(Amidu and Abor 2006)
18	USA	Ordinary Least Squares model	to expand Amidu and Abor's and Anil and Kapoor's findings on the variables impacting DIV payout ratios to American service and manufacturing firms.	The DIV payout ratio is the function of profit margin, sales growth, debt-to-equity ratio, and tax.	(Gill, Biger and Tibrewala 2010)
19	Pakistan	Fixed and random effects	To objectively explore the factors that influence DIV payment choices of Pakistan's engineering sector	Previous DIV per share, earnings per share, prof, cash flow, sales growth, and size of the firm are the most critical	(Imran 2011)

			We attempt to answer	factors	
20	Pakistan	GMM, POOL, FEM, REM	We attempt to answer the following questions: Do the firms listed in the Karachi Stock exchange follow the stable DIV payout policies? And what are the main factors that determine the DIV payout policies in listed firms of the Karachi stock exchange?	DIV tends to be more sensitive to current earnings than prior DIVs.	(Ahmed and Javid 2008)
21	GCC countries	random effect Tobit models	This paper investigates the determinants of DIV policies for firms listed on Gulf Co- operation Council (GCC) country stock exchanges	DIV payments related strongly and directly to government ownership, firm size, and firm prof, but negatively to the leverage ratio	(Al-Kuwari 2009)
22	Indonesi a	OLS, panel data regression with fixed effects	We investigate how a firm's decision to hold excessive cash or overinvest could influence its DIV payout policy in Indonesia.  Additionally, we examine the association between corporate ownership structure and cash DIVs.	Excessive cash holding affects a firm's likelihood of paying DIVs. family, foreign, state and institutional ownership have significantly negative links with DIVs	(Moin, Guney and El Kalak 2020)
23	Australia	logit model, Tobit method	To interrogate corporate governance affects Australian companies' DIV payment choices.	GCR's have a substantial favorable impact on Australian businesses' decisions to pay DIVs and their average DIV payment amount.	(Yarram and Dollery 2015)
24	Pakistan	OLS	Determine the effect of various variables on DIV policy.	Return on equity, sales growth, beta, current ratio, debt to total assets, percent of insider ownership, percent of institutional ownership, expansion, an	(Kania and Bacon 2005)

26 Sourc	Morocco	The study uses a mail survey of CSE listed firms	This study aims to poll the management of companies listed on the Casablanca Stock Exchange (CSE) regarding the factors that influence DIV policy.	The evidence shows that the most critical determinants of a firm's DIV policy are the level of current earnings, stability of payments, and needs of existing shareholders.	(Jabbouri and Attar 2018)
50410	Identif	ication	(400 papers)	the research databases with keywords s) of research articles and reported in high	
	ļ	bility	impact factor	factor journals (200) ents removed: (200) Financial business	

#### RESULTS AND DISCUSSION

Not related to our objective

Documents included: 30

Quantitative Glimpses of determinants of DIV policy studies worldwide, as explained in table 3, demonstrate a quantitative analysis of empirical studies using OLS, FEM, and REM, among others. The most frequently studied variables are firm size, past DIV, prof, financial leverage, and liquidity.

We found 30 papers between 1990 and 2021 that offered helpful information through a thorough literature search on the factors that affect the publicly traded non-financial firms on various stock exchanges worldwide. Figure. 4 summarises the significant results of the review research, organized according to the review's conceptual framework.

Inclusion

The study enlists six main models that provide theoretical explanations of DIV policy: signaling theory, Agency Costs, cash flow theory, bird in hand theory, clientele effects of DIVs hypothesis, tax effect hypothesis, and DIV irrelevance theory. Furthermore, this study enlists the various empirical studies conducted to determine the factors that affect the DIV policy of non-financial publicly traded companies. Although the DIV policy has been a focus by scholars for quite some time, not many papers have investigated the dividend policy of family-owned or institutional firms separately

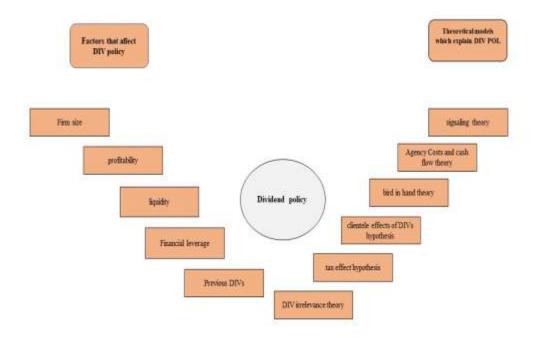


Figure 1. Theories explaining dividend policy and factors that are affecting dividend policy

#### CONCLUSION AND SUGGESTION

This study examines all the financial literature available on the empirical studies conducted to investigate the dominants of factors that affect the dividend policy of the non-financial and publicly traded firms. Using Preferred reporting items for systematic reviews and meta-analysis (PRISMA), we examined the financial literature on dividend policy and its determinants. The study enlists six main models that provide theoretical explanations of DIV policy: signaling theory, Agency Costs, cash flow theory, bird in hand theory, clientele effects of DIVs hypothesis, tax effect hypothesis, and DIV irrelevance theory. Furthermore, this study enlists the various empirical studies conducted to determine the factors that affect the DIV policy of non-financial publicly traded companies. The study only reviewed the studies undertaken by non-financial companies, and the financial firms have been excluded. Furthermore, only publicly traded firms are included in the study. This paper summarises main theories that explain dividend policies including signaling theory, agency cost cash flow theory, bird in hand theory, and dividend irrelevance theory among others. Moreover, it outlines and identifies major factors that are investigated in empirical studies as determinants of dividend policies of publicly-traded non-financial firms.

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