

## An Analytical Review of Dividend Policy Theories

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### ABSTRACT

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A storm had been brought in the unidirectional thinking regarding dividends since its evolution when Miller and Modigliani [54] put forward their proposition of dividend irrelevance. The storm further intensified as further theories added to the discussion. Based on their evidence different researchers have different opinions about dividend policy. However, despite the intensive literature on dividend policy in the last sixty years, still, the researchers are unable to achieve unanimity on a general dividend theory that can either explain the process of dividend decision making or forecast an ideal dividend policy. At this point, one is compelled to accept the term "Dividend Puzzle" introduced by Black [17] by saying, "The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just don't fit together".

#### Keywords:

Dividends, dividend policy, theories

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## 1. Introduction

The main object of financial management is to maximize the Stockholder's wealth; denoted by maximized stock prices. To achieve this objective, management (the caretakers of stockholder's interests) have to make three important decisions namely, (i) investment (ii) financing and (iii) dividend decisions. Investment decisions determine the total value and types of assets a firm employ. Financing decisions determine the capital structure of the firm and forms the sources on which investment decisions are made. In dividend decision the management has to decide whether to distribute the profit wholly or a part of it among the shareholders or to retain it for reinvestment and development of the organization. Dividends are commonly defined as the distribution of earnings (past or present) in real assets among the stockholders of the firm in ratio to their ownership. Dividend policy is policy that the organization uses to decide how much it will pay out from the profit to shareholders in dividends. Dividend policy has two kinds: managed and residual dividend policy. A managed dividend policy is one in which management attempts to achieve a specific pattern of dividend payments i.e. it pays the same dividend until the management feels that it can maintain a different (increased) level of dividend. The residual dividend policy is a means of calculating dividends that are based on the amount of equity that remains after capital expenditures associated with the

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investment have been met. This approach uses the company's cash flow to meet its current financial obligations, then issuing dividends to investors based on the residual, or what is left after those obligations are fulfilled. The ideal dividend policy is the one that results in maximum stock price, which leads to growth of stockholders' wealth and increased economic growth. Managers follow dividend policy in determining the shape and magnitude of cash delivery to shareholders over time. Dividends are usually paid out of the current year's profit and sometimes from reserves and are normally paid in cash known as cash dividend. Other options available to the company for distributing the profits are stock dividend, stock splits and share repurchases. When dividends are paid in cash, it effects negatively on the liquidity and reserves of the firm as it reduces both.

Dividend policy of a firm has its individual importance for many parties such as managers, investors, lenders and other stakeholders. With dividends investors can also evaluate a company and for them it is not only the income whenever the company declares it whether on the spot or delayed. Dividend policy is also important for managers. They have to decide that whether to use managed or residual dividend policy depending on the situation. For lenders, the less a firm announces dividends the more amounts will be available for their claims [34].

Among the above dividend policy is the most broadly researched one. Different theories and empirical explanations have been given about it. A number of financial researchers claim that dividend policy has no impact on stock prices, leading to the hypothesis that dividends are irrelevant (e.g. Black and Scholes [18], Kaleem and Salahuddin, [41]). Another group of researchers argue that a rise in dividend payout increases the value of a company because dividends convey information to investors about the future prospects of the firm (e.g. Pettit [59]). But an ideal dividend policy had not yet been framed to be agreed upon. That's why due to its confusing nature Black *et al.*, [18] has termed it as "Dividend Puzzle".

## 2. Historical Background

The dividend phenomenon arose after the fifteenth century when the commanders of marine boats in Holland and Britain began to sell the economic rights of having a share in the earnings of the journey. These earnings were then distributed among the right holders at the end of the journey and the contract will be terminated [8]. The termination of the agreement after each journey not only safeguarded the sharing of earnings to its right holders but also assisted in the reduction of possible fraud and deception by the management [15]. For the diversification of these risks investors also started to buy from several commanders instead of one. In the late sixteenth century these rights started to be dealt in the open markets of Amsterdam and were slowly replaced by proprietorship stakes [8]. As these contracts gained popularity and became stable, termination of each contract at the end of every journey seemed to be more difficult [14]. This resulted in the formation of businesses as "going concern" units, which distributed only earnings of the business. These units started to decide that what part of the firm's earnings will be paid back to the shareholders and hence the first dividend payment rules were introduced [30]. The capital needs of these units for trading with overseas nations then increased greatly and gradually evolved into joint stock companies [46]. Typically those firms which inclined towards joint stock companies were most of the chartered trading firms [8]. The Eastland trading company was the earliest in Great Britain chartered in the 15th century and was permitted monopoly rights to trade with northern Europe. After that in 1553 the Muscovy company was chartered to trade with Russia and in 1581 Levant company to trade with Turkey [64]. The Dutch East India Company was established in 1602 in Holland and was allowed to dominate the trade with Indo-Pak subcontinent [50]. This company issued first joint-stock shares of the history. It was the 1st permanently structured company [46]. Most of the assets of this company

were obtained from the traders of Amsterdam. Initially, the company paid 75 percent of the profits. On average 25 percent dividends were paid by the East India Company to the shareholders in the initial fifteen years [64]. The following table shows the dividend paid by the East India Company to its shareholders during various periods.

**Table 1**

Trading Price Range, Cash Dividends, and Stocks Dividends of the British East India Company (1662-1720)

Year	Trading price range	Cash dividend (percent)	Stock dividend (percent)
1662-1667	60-80	150	
1668-1674	80-130	90	
1675-1682	130-520	200	100
1683-1691	150-500	200	
1692-1699	60-316	0	
1700-1708	116-278	66	
1709-1720	208-898	100	

Source: Scott, William Robert [64]

In table 1 we can see that that how successful the company was, even the gap of eight years of not paying dividends didn't downcast the investors and the share prices increased up to eight hundred percent in the next 20 years after recommencing dividends in the 17th century [64].

The period from 1700 to 1720 was a period of the boom when the share price of East India and most other companies increased significantly. In 1711 the charter of south sea company was approved. This company issued shares against government debt. The prospects of high returns from these government-backed securities led to increase in its prices [14]. Further selling of shares for a small portion of the initial payment, up to five or ten percent of the market price and calls for remaining amount resulted in a speculative bubble [46].

According to Walker, 1931, in 1720 the collapse of the South Sea company and the passing of the Bubble Act adversely affected and bottled-up the expansion of joint stock companies for approximately ten decades in Great Britain (as cited in Al-Malkawi *et al.*, [8].)

After that in late eighteenth and nineteenth century comes the era of joint stock companies for the formation of canals and railroads. The canals and railroads became important because of an easy and convenient method for transportation of coal and other heavy merchandise as compared to roads. During the period 1791-1794 above eighty canal and other related acts were approved and 42 additional canals were constructed costing 6.5 million pounds and about 600 railway acts were passed during the second quarter of the nineteenth century [46].

Different types of businesses emerged in the 19th century including new methods for acquiring finance e.g. the issue of "preferred stock" to dividends [14]. Clark [22] posited that the banking companies paid remarkable amounts of dividend soon after their establishment, the dividends paid by cotton manufacturers averaged 5.5% while textile manufactures offered 10 to 20 percent dividends during the war of 1812 (as cited in Frankfurter *et al.*, [30]). After the financial panic of 1873 different kinds of firms appeared including industrial organizations, large departmental stores and oil companies that paid large amounts of dividends e.g. Standard oils offered 5 to 30 percent dividend of the investment [29].

At the beginning of the 20th century, the investors were attracted primarily by the industrial stocks, because of the increased dividends paid by the industrialists as compared to railroad securities [65]. Dividends became important because of the only measure to assess the future earnings of the firm based on the past dividends as Frankfurter *et al.*, [30] states "The general lack of publicly available information required investors to value industrial securities using solely their

dividend history". Though the beginning of this century was prosperous but doesn't remain for long and was disturbed by the great depression of 1929. Dividend payments fluctuated after the 1929 crash of the stock market as there was an overall descending movement during the 1930s [45].

From the above discussion, it can be concluded that dividends have developed along with the development of corporate history. The managers recognized that dividends were the best way to attract investors. Dividends were an immediate response to satisfying investor's expectations so the managers started to use it as a signalling tool about organizational performance. Besides, it was believed that dividend policy has an impact on stock prices. After the 1950s dividend policy had become a debate for its impact on various issues primarily stock prices. The next section deliberates the contemporary developments in the dividend policy.

After the 1960s, researchers are generally categorized into three schools of thought based on their opinions about dividend policy. The first school of thought is of the opinion that dividends convey positive signals to the stakeholders' i.e. any increase in paying dividends will result in an increase in the firm value represented by increased share prices. This school believes in the theory of bird in hand, which postulates that investors prefer current dividends as to future prospect thus any increase in dividends will lead to increase in share prices. The second school holds opposite opinion and says that dividends convey negative signals to the stakeholders i.e. increase in dividends result in decrease in share prices because of the perception that the organizations have lack of projects with positive net present values which needs investments and also that taxes on dividends are more as compared to capital gains in most of the instances thus leading to high tax payments. The third school of thought has presented the theory of dividend irrelevance and believes that dividends are irrelevant of the firm value and any resources invested in this regard are squandered [54].

The discussion of dividend phenomena is not just limited to these theories. A number of theories have been presented in recent research in this respect; the most common of which are the clientele effect, the information content (signalling) and the agency cost hypothesis, which further supplements the "dividend puzzle" as recognized in Fischer Black (1976). Each of these is discussed in detail below beginning with the hypothesis of dividend irrelevance as the debate started with the presentation of this theory by Miller *et al.*, [54].

### 3. Theories Contributing to the Dividend Puzzle

#### 3.1 Dividend Irrelevance Theory

Earlier it was thought that the purpose of existence of organizations is only for dividend payments as Graham and Dodd [8] posited "the only motive for the presence of the organization is the payment of dividends" and with more dividends the organization should trade its shares at high rates. But the inspiring effort of Miller and Modigliani (also known as MM) had placed a new chapter in the history of dividend by putting forward the proposition that dividends are irrelevant of the firm value keeping in view certain assumptions.

According to MM, given in world where the behavior of investors is not irrational i.e. the investors constantly desire to have extra wealth instead of less and don't care whether it is in the shape of cash or capital gain and there exists "perfect certainty" on behalf of investor's that they will invest and their returns are also certain and that the market is perfect i.e. no single entity can influence the market, the firm value does not depend upon the dividend policy, hence it is irrelevant of the firm value. This statement is proved by the following equation derived in Miller *et al.*, [54].

$$V(t) = n(t)p(t) = \frac{1}{1+\rho(t)} [X(t) - I(t) + V(t + 1)] \quad (1)$$

In the above equation of firm value, it can be clearly seen that dividend is not present in any form at any place and the operating cash flows, investments and the required rate of return all are independent of the dividend. Since dividends are irrelevant, so the investors are not concerned as to whether they receive their return in the form of cash or capital gain that is to say that they are concerned with firm value in the form of expected future values of their investments. They are unconcerned because according to MM the value of the firm is affected by revenues produced by investment policy of the organization and not by how these revenues are disbursed to the stakeholders.

The proposition of Miller *et al.*, [54] is supported by many researchers e.g. Black *et al.*, [18], Merton *et al.*, [53], Kaleem *et al.*, [41]. Black *et al.*, [18] supported MM by studying the impact of dividends on stock prices. Their analysis shows insignificant results with t-value of 0.94 (table 3, p16). They say that a firm might increase its dividends, but keeping in view that it will have no effect on stock prices and any changes occurred there in price will be temporary and will vanish as the investors become aware of the fact that the increase in dividends wasn't due to any future prospects. They further say that if the firm has capital needs, a drop in dividends would be the least expensive way as it won't affect the stock prices and also will save the costs of borrowings.

Allen *et al.*, [10] in their paper studied the relationship between dividend policy and stock prices by taking a sample 173 firms from Australia during the period 1972-1985. They used Baskin [15], as a benchmark but found results contrary to it. They didn't find evidence of any association amongst dividend policy and price unpredictability, thus backing up the MM proposition of dividend irrelevance.

A similar study conducted by Ali *et al.*, [9] in Bangladesh brought results which show that stock prices increased only by 1.84% after the dividend announcement as compared to 7.09% before the dividend announcement date thereby supporting MM. Despite the theoretical proof by MM and empirical support by others of the dividend irrelevance theory, it has been opposed by many researchers with their own arguments and supporting evidence. These opposing views are discussed in detail in the next section.

### 3.2 Bird-In-Hand Theory

Before the introduction of the theory of "Bird in Hand," it was generally believed that dividends are relevant and play an important role in the development of organization but John Lintner and M. J Gordon were the first to present these beliefs in the form of a theory. Lintner studied the connection amid dividends and firm's worth, while conducting a field study by taking interviews with officials of twenty-eight corporations in the United States. Considering dividend as a primary assessing variable his research arrived at two conclusions. First, the administration drilled cautionary measures while paying dividends to the shareholders, which resulted in smoothing of dividends. The motive behind such measures was that the administration does not want to decrease dividends at some future time as it may deliver bad indications towards stakeholders regarding the future options of the organization. Second, most of the management interviewed was of the view that, as far there were no other compelling reasons, they were required to issue a portion of any sizeable increase in earnings to shareholders via dividends. This means that organizations paid dividends according to their earnings. As Lintner [49] says "we found that the level of current earnings was almost invariably the opening fact in management's attention of whether dividends should be altered". By putting the between-wars statistics from 1918-1941 into their model Lintner [49] found that his model described 85% of dividend decisions of the firms. For forecasting the after war dividends Lintner's model also produced favourable results i.e. a 6.4 mean absolute error as compared to 7.8 of other naïve models.

Gordon [32] has presented his own hypothesis about why an investor buys a share(s) of common stock. The hypothesis presented by him has three parts. He says that when an investor buys a common stock he actually pays for acquiring i) both dividends and earnings ii) the earnings and iii) the dividends. He took data from four industries i.e. steel, chemicals, machine tool and food for two years (1951 and 1954). In his results, Gordon [32] discovered that the prices of stock were affected more by a change in dividend as compared to retained earnings.

Since Lintner's provided a benchmark for studying the dividend policy, different researchers then used it with slight changes to find more accurate results e.g. Darling [24] added two extra elements i.e. current investments and external finance to develop an enhanced form of Lintner's model. Based on his results he declared that besides present earnings and preceding years dividend, the current dividend is also dependent on current investments and the availability of funds. Also, Brittain [21] has presented a modified version of Lintner's model where the lagged payout ratio and liquidity had been taken as primary decision variables.

The proposition of dividend relevance forwarded by Lintner and Gordon had been supported by a number of researchers' e.g. the results of Ramadan [62] supported them by taking as sample all the firms i.e. 77 firms listed on Amman stock exchange for a period of twelve years (2000-2011). The methods of analysis he used were descriptive, correlation and multiple regression analysis.

Aamir *et al.*, [1] obtained similar results while using standard event study methodology. Their analysis showed significant results with t-value of 7.10795 for the dividend announcement date. The t-values for all 21 days in an event window before the announcement date were positive while negative for only five days after the dividend announcement date, thus showing a positive reaction of stock prices to dividend announcement.

Similarly, the result of Azhagaiah and Priya [12] partially supports the Bird-in-Hand hypothesis. From their analysis, they conclude that dividends were concerned in the case of the organic chemical industry while share prices were not affected by dividend policy in the inorganic chemical industry of India. Further, they said that dividends were thought of an important element in deciding shareholder's wealth, especially in the case of low-income personnel e.g. salaried, pensioners and other people with limited income to cover their short run expenses.

Under the light of the above studies, Al-Deehani [7] conducted a survey in Kuwait. The primary tool utilized during the survey to collect data was a questionnaire. Keeping in view the limitations as identified in Baker *et al.*, [14], the CEO's were approached instead of CFO's of all the firms in the selected sectors except real estate. Among the different conclusions drawn from the survey one is that dividend policy does matters and managers are normally encouraged to pay dividends.

### 3.3 The Tax Preference Hypothesis

One of the assumptions of the MM world of the perfect capital market is that tax has no bearing on share prices that's why they have not included tax in their model assuming that dividends and capital gains are treated equally. However, coming out of the imaginary world of MM and entering the real world situation, one can see that taxes do matter and have a bearing on dividend policy and the shareholder's wealth. The reason behind that is the difference between how dividend policy and capital gains are treated while they are taxed and the concern of investors of how much they actually receive as net earnings and not to how much is announced as dividends i.e. they are concerned with after-tax returns. Taxes also affects the dividend payout ratio when managers consider the effect that taxes have on dividend policy thus leading them to increase the retained earnings.

The tax preference hypothesis states that a decrease in dividend payments tend to increase the firm's value. The rationale behind that is first that tax on dividends is usually larger than capital gains

and second that dividends are taxed straightaway, while capital gain taxes are postponed to the actual sale of stock. These advantages of tax treatment are likely to attract people who have a preference for gains in tax treatment. It is also worth mentioning here that the tax preference hypothesis is opposite to bird-in-hand hypothesis which suggests that a bird in hand worth more than two in the bush.

Farrar *et al.*, [28] were one of the first to use the MM model. They extended the model while placing a provision for composite tax arrangement including personal, capital gain, and corporate taxation. They described in their study that under the consideration of these taxes, share prices are seen to be affected by the financial policies of the firm. They say that if taxes on dividends are more than capital gains, an “optimal” dividend policy for a firm is that it should be zero. Particularly, they concluded that it is best for the firm to repurchase shares with their residual income instead of paying dividends to shareholders provided that the marginal tax of every stockholder is more than that of capital gains.

Research has been conducted by different researchers to check the relationship between dividend yield and stock returns before and after taxes. Litzenberger and Ramaswamy [72] developed an extended form of Brennan’s model to integrate the income and wealth-related limitations along with the progressive taxes. The income-related limitations act as a balancing entity to balance for the consequences of personal taxes which it can cause to the equilibrium formation of the shares. Results exhibited that the dividend yield coefficient under different tests (OLS, GLS, MLE) was positive and highly significant. Their data showed that “for a dollar rise in return as dividends, depositors needed an extra 23 cents in beforehand tax return” (p190)

Contrary to the results of Litzenberger and Ramaswamy [72], the outcomes of Black and Scholes [18] did not support the argument that investors want higher before tax returns to balance for the tax disadvantage while using monthly data for listed firms on the New York stock exchange. They acquainted a new variable i.e. dividend yield into the CAPM model and saw that it was insignificant and different from zero. The authors concluded that no difference was seen between low dividend and high dividend paying shares neither in pre-tax nor in the post-tax situation.

Kalay *et al.*, [40] pointed out the variation amongst the opposing views of Black *et al.*, [18] and Litzenberger and Ramaswamy (1979). They said that the differences occurred due to the difference between methods used and the difference between time series and cross-section yields. They showed that that the difference particularly occurred due to different time limits to assess and describe the dividend periods.

Elton *et al.*, [27] concluded that, in a situation where taxes are larger over dividends as compared to capital gains, the ex-dividend stock prices decrease by a lower amount than that of dividend and that decline shows the difference amongst capital gains and dividends.

### 3.4 The Clientele Effect Hypothesis

The clientele effect hypothesis was first devised by Miller *et al.*, [54] as a means to sustain their proposition of dividend irrelevance. They suggested that the pre-existing theory of dividend clientele effect might be important in devising the dividend policy of a firm but under certain conditions and that some marketplace flaws like transaction costs and dissimilarity of the taxation among dividends and capital gains might have an effect on the organization of investors portfolio. MM argued that all these can occur provided that the market is imperfect but in a perfect market every clientele performs “as good as another” thus having no impact on share prices and company’s worth.

Contrary to MM perfect market conditions, in a real-world situation, based on their preferences and objectives, investors are divided into different clienteles. Some investors prefer riskless securities

while some accept greater risk for greater return, some manage their portfolios to minimize the tax payment due to different tax treatment amongst dividends and capital gains while others try to minimize the transaction costs of reshuffling their portfolios. Some prefer cash dividends, while others favour capital gains by retaining their income in the firms. Here each group following a specific policy is known as a clientele.

A study was conducted by Poterba *et al.*, [61] to examine the impact of two major, 1965 and 1973, and some minor tax reforms over investor's preference for dividends and capital gains. For analysis, they collected daily data from sixteen large UK based firms for a period 1955-1981. The analysis period comprised of three tax regimes. First from 1955 to 1965, second 1965 to 1973 and third from 1973 to 1981. The results of their analysis show that before 1965 i.e. in the first regime the tax burden was 0.5 which decreased to 0.36 in the second regime and again decreased to -0.187 in the third regime. The decrease in the third regime was found to be significant suggesting that taxes have an effect on the balanced association between dividends and market return.

A similar study was conducted by Scholz *et al.*, [63] in 1992. For analysis, he used a sample of 4,144 equity holders obtained from the Survey of Consumers Finance which represented a population of 84,748,382 households in the US in 1983. While taking into consideration the criticisms that price changes are motivated by short-term dealers, his results deliver evidence that investors consider tax as an active variable while constructing their portfolios.

Pettit [60] found that age of investors is directly proportional to that of investor's consumption needs, while income is negatively related to dividend yield. He asserted that as the age of the investor's increases their consumption from wealth also increases, thus they prefer high dividend securities. He also concluded that the differential tax tariffs on dividends and capital gains are the very reason that investors choose different security combinations.

Bajaj *et al.*, [13] established evidence that expected yield bears impact on the price response to dividend declarations in the same manner as dividend clienteles does. In their sample, the price response for low yield cluster to dividend declaration is merely -0.53% but for high yield cluster, it is -2.57%. the minus sign represents the decrease in dividend group. They established that dividend alterations impacted greatly the stock prices and that the clientele effect is more strong in case of low price stocks and minor organizations.

Kawano [42] conducted a study to analyze the influence of the 2003 tax act on the portfolio dividend yields of households in the US. Their estimations provide evidence that a 1% decrease in the tax charges amongst capital gains and dividend resulted in 0.038% increase in short-term portfolio yields while 0.042% increase in the long run. Similarly, Auerbach *et al.*, [11] opted to examine the effect of the same 2003 act on the firm value using an event study methodology.

They found that with the execution of the act, firms with higher dividend yield profited more than lower ones while the non-dividend payers and those who just initiated profited even more.

Blackburn *et al.*, [19] used the traded options for five Growth and five Value indices to check for the risk-taking choices of different clienteles. In the study, the examiner put forward a model that allowed for different investors to change their investment style (i.e. Growth and Value investment styles) subject to the development of risk and return. Among the various findings of their study are, that there exist different clienteles of investors and that risk-taking choice is a vital property that distributes investors into risk takers and risk averters.

### 3.5 The Signaling Hypothesis of Dividends

Miller *et al.*, [54] in their seminal paper assumes that in a perfect capital market all the stakeholders (management and external financiers) had equivalent and free of cost approach to the



presiding prices and all other important information about the shares. However in the practical market situation, as insiders managers have more information than outside investors. Due to this unavailability of current information, investors may not be aware of the true value of the firm. To convey certain information about the firm, management uses dividend policy as a signal while the investors also use the dividend announcements as an assessment tool to gauge the current position and future prospects of the firm, because they can't totally rely on the published information as Pettit [59] posits that there are motives to consider that dividends contain important information e.g. important. declarations regarding firms performance and the future potential difference between published earnings and long-run stable earnings. The belief that dividend announcements contain information is known as the 'signalling or information content hypothesis' of dividend declarations. As per signalling hypothesis, in an imperfect market where management has more information than investors, any variation in dividends may deliver knowledge regarding the prospected potential of the organization.

However, for the correct implications of the signalling hypothesis, there are certain conditions to be met i.e. information should be unique and should be a true representative of the firm's current position [47]. So as a signalling tool, any growth in dividends may be supposed as 'good news' about the future of the firm and any decrease in the amount of dividend may convey 'bad news' about the firm [5]. Consequently, it won't be astonishing to say that managers are hesitant to declare decrease in dividends. That's why Lintner [49] says that managers took care while declaring an increase in dividends and initiated such increases only after they were completely sure that they can sustain dividends at the increased level. This means that increase in dividends signals sustained profits for the long run. This estimation is adjacent to dividend the "dividend smoothing" proposition. According to which managers try to avoid unnecessary ups and downs in dividends until they can maintain the new level.

From the above discussion on can see that managers use dividends as signals and any increase in dividends is perceived as a good signal and decrease as bad signal, but this may not be the case all the times. Soter *et al.*, [66] in their paper have put forward the case of Florida Power & Light group. Where the company announced a 32% decrease in its quarterly dividends. According to the information content or signalling hypothesis, it was supposed by the investors as bad signal and the market price of its securities dropped by 20%. But actually the management decided to keep the funds for future investments and as the investors realized the fact, the share prices of FPL recovered to its original position. Though at first, the investors misjudged the signals, however, it was all a new experience of the possible outcomes of the signalling effect of dividends.

To empirically scrutinize the signalling capacity of dividend declarations, different studies have been conducted by the researchers to analyze the reaction of stock prices to dividend announcements. Pettit [59] undertook a study to see the stock price reactions to dividend announcements of firms registered at New York stock exchange. He collected monthly and data of the sample firms for analysis. Their results provided evidence that investors make a substantial use of the information conveyed in dividend changes and that market responded intensely to these changes. The author also concluded that dividend announcements convey more information than earnings announcements.

Acker [22] found evidence that shows when dividends are cut, the interim announcement is supposed to be more significant than the final, while the opposite is true when dividends are enlarged. Implicit standard deviations propose that volatility is expected to be highest on the day of final announcements. A topmost is also expected after interim announcements of a cut in the dividend, but not after the declarations of an increase.

Contrary to the above the study of Ali *et al.*, [9] shows results that oppose the proposition of information content of dividends. During analysis, using 'event study' methodology they tried to find the behaviour of share prices, during the 44 (30 pre and 14 post-event) days event window. Their results provide evidence that share prices didn't respond significantly to dividend announcements. The reason they put forward for that is the insider's trade in the market.

Mahmood *et al.*, [51] tended to explore the impact of cash dividends on stock prices in Pakistan. Their results show that stock prices are positively affected by the dividend announcements and reject the dividend irrelevance hypothesis. Their results also indicate the presence of inside dealers in the market in the form of market involvement in the pre-event window. Finally, the arbitrage chances are also evident from the results.

Khan *et al.*, [45] investigated the opinions of business administrators and financial experts about the signalling effect of dividends over stock prices in Pakistan. During the interview, most of the respondents strongly supported the belief that in Pakistan the increase in stock prices occurs due to increase in the amount of dividends. The number of people that supported the signalling hypothesis of dividends is 87% of the total sample size. In response to the combined effect of dividends and earnings in terms of signalling effect, all the 39 respondents believed that both the dividends and earnings are important but the most important considered were the Earnings Per Share.

### 3.6 The Agency Cost Hypothesis

Among the different stakeholders of an organization, two main stakeholders are the management and shareholders. Shareholders are the owners of the firm while managers control the affairs of the firm and usually there is the difference between the interests of these two groups. Managers want to get maximum reimbursement for their services while shareholders want increased return on their investments. If management gets increased reimbursement, it costs to shareholders in the form of a decrease in return on their investments and if shareholders get an increased return, it cost to management a decrease in their service charges and there occurs a conflict between the interests of managers and shareholders. This cost of the clash between the interests of the investors and managers has been termed as the agency costs. Jensen *et al.*, [39] advanced in their paper that agency costs also occurs because of the difference between interests of bondholders and shareholders i.e. when shareholders get increased return from their shares, there lefts a little for bondholders claims and when bondholders receive increased payments against their claims, it cost to shareholders in the form of a reduction in their return on securities.

In order to find a solution to these conflicting interests different researchers had tested the phenomenon and presented their suggestions e.g (Easterbrook [26]) posits that dividend payments can be used as a tool to limit the availability of free funds with managers. Further, he said that due to dividend payments managers will also be bound to borrow funds from external sources. In such a situation the managers will be monitored by fund providers e.g. bankers, financial analysts etc. and the monitoring costs of investors will be least. However the author said that dividends may increase the inspection of management by external parties, it might lead the management to take certain decisions such as increased debt financing which might increase the insecurity of the firm.

Jensen [38] asserted that the availability of free funds might allow the managers to invest in such projects with negative Net Present Value (NPV) that are managerially rewarding but are not in the best interest of shareholders. In such a case the author suggests that pulling out the extra funds can control the problem of this overinvestment and dividend policy is the best strategy for extracting the excess funds. In this way, dividends can play a great role in reducing the agency problems between management and investors. Further, the author says that external financing also plays a role

analogous to dividends in decreasing the agency costs of free cash flows by decreasing the funds under the command of managers.

The subject of agency costs hypothesis as a clarification of dividend policy had been broadly addressed in empirical research. D'Souza *et al.*, [23] brought results which imply that firms globally pay dividends to diminish agency costs and that investment and dividend decisions do not depend upon each other. Additionally, firms that are considered to be riskier in relation to the market will have a low payout ratio.

Manos [52] studied the theory of agency costs of dividends from the perspective of Indian economy. Their results illustrate that group affiliation has a significant bearing on the transaction cost structure and agency clashes confronted by firms in Indian economy. Finally, the author concluded that Indian firms set their target payouts at the level at which both the expenditures of debt financing and agency costs are least.

Mukesh *et al.*, [56] tended to analyze the relationship between ownership structure, agency costs and dividend policy. Their results showed that with the increase in managerial ownership (insider ownership), the agency costs of free cash flow decreases. They also found that agency costs decrease when a single family acquires a large portion of the firm's equity. In addition, the authors also suggested that a 5% managerial ownership is sufficient to avoid manager from overinvestment, thus leading to a reduction in agency conflicts. Taleb [68] intended to examine the effect of the existing level of agency costs on the dividend and leverage policy of the organization. The results showed the negative but significant impact of the agency cost of free cash flows on dividend policy whereas the results were positively significant in the case of leverage of the firm.

Ghosh *et al.*, [31] inspected the association between dividend policy, agency costs and growth of the firm. For a sample to be used in their analysis they chose a total of 519 observations to represent 107 Real Estate Investment Trusts. Their results depict that Growth sponsored by external resources is positively associated with that of excess dividends. They also showed that this relationship is robust amongst firms that dispensed public debt or equity than those who didn't. Finally, the authors concluded that dividends have a significant but negative effect on the cost of debt and equity dispensed by sample firms confirming that their results are interrelated with the notion that excess dividends reduce the charges of outside capital. A systematic review of studies with different results regarding dividend policy is given in the following table.

The above literature constructs a good theoretical framework regarding the dividend puzzle where some say that dividend is irrelevant and have no impact on firm's value [10, 16, 18], while others say that dividends are relevant and is an important factor in determining the stock prices [7, 12, 1, 62]. Several other aspects such as the tax preference hypothesis, the clientele effect hypothesis, the signalling hypothesis of dividends, and the agency cost hypothesis have also been discussed that further increases the complexity of the dividend phenomenon. However, despite the far-reaching literature regarding dividend policy in the last five decades still, researchers are unable to achieve unanimity on a general dividend theory that whether elucidates the procedure of dividend decision-making or forecast an ideal dividend policy. At this point, one is compelled to accept the term "Dividend Puzzle" introduced by Black [17] by saying,

"The deeper we gaze at the dividend phenomenon, the further it looks like a puzzle, with parts that just do not apt together".

#### 4. Recommendations for Future Works

A number of efforts have been done by scholars but have failed to describe the dividend phenomenon and are lacking strong empirical support. However, to come with solid conclusions a

thorough study of all theoretical models together with empirical proof is needed. Efforts can be made to solve the dividend puzzle in order to devise a unanimous and optimal dividend policy. It can also be analyzed both as cause and effect i.e. determinants and effects of dividend policy. Further, it can be analyzed in new markets and with longer time frames to bring comparability component in the studies. Most importantly studies of qualitative nature can be conducted to find the underlying reasons for this clash of interests.

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**Table 2**  
**Studies with Different Results Regarding Dividend Policy**

Author(s)	Sample	Industry/Sector	Method(s)	conclusions
Troudi & Milhem, (2013)	390 Firms	Jordanian Stock Market	Unbalanced Panel Data Method	Dividends are Relevant and have a significant impact on stock prices
Javed & Ullah, (2014)	53 Firms	Karachi Stock Exchange	Regression Model	Significant and positive relationship between cash dividend, earnings per share, retained earnings and stock prices but not significant for financial leverage and share price
Jecheche, (2012)	60 firms	Zimbabwe Stock Exchange	Cross-sectional regression analysis	Both dividend policy measures i.e. dividend yield and payout ratio have a significant impact on the share price volatility.
Masum, (2014)	30 Banks	Dhaka Stock Exchange	Panel Data Method	Overall results of the study indicate that Dividend Policy has a significant positive effect on Stock Prices.
Kaleem & Salahuddin (2006)	24 firms	Lahore Stock Exchange	MAAR, CAR	Results showed that investors did not gain value from dividend announcements thereby supporting MM theory of dividend irrelevance
Okafor & Warsame, July (2012)	TSX listed Canadian firms	Toronto Stock Exchange		Results of their study show that clientele effect persists across different measures of drop ratio.
Taleb (2012)	60 firms	Amman Stock exchange	regression analysis	The result shows negative but significant impact of the agency cost of free cash flows on dividend policy but are positively significant in the case of leverage of the firm.