Determinants of Dividend Policy: A Case of Banking Sector in Pakistan

Hashim Zameer, Shahid Rasool, Sajid Iqbal and Umair Arshad

Iqra University Islamabad Pakistan,
BZU Bahadur Sub Campus Layyah, Pakistan

Abstract: The aim of the study is to investigate the determinants of dividend policy of Pakistani banking sector. For this purpose, we used data of 27 foreign and domestic banks operating in Islamic and conventional banking in Pakistan listed at different stock exchanges as a sample. Applying stepwise regression analysis, these four variables liquidity, profitability, last year dividend and ownership structure show highly significant relationship with the dividend payout of Pakistani banks. Profitability, last year dividend and ownership structure show positive impact on the dividend payout and liquidity show negative impact on the banking industry. Size, leverage, agency cost, growth and risk show insignificant relationship and have no impact on the dividend payout.

Key words: Banking • Dividend • Leverage • Payout • Risk • Ownership • Pakistan

INTRODUCTION

Almost each company earns profit each year and that profit is reinvested in business or distributed to shareholders. The process that how much and in which way profit is distributed among shareholders is called dividend policy.

Dividend policy is one of the most debatable issues in modern corporate finance and still a puzzle. Dividend policy is one of the top ten unsolved issues in corporate finance [1]. In 1976, [2] gave a statement about the dividend policy that “the harder we look at dividend the more it seems like a puzzle with pieces that just don’t fit together”.

Dividend policy can be different for different countries because of different tax policies, rules, regulations and different institutions and capital markets. There are three different views about the dividend policy. First view is of [3], who argued that dividend policy increases the shareholders wealth. The second view is of [4] and [5], their view is that dividend policy is irrelevant and the third view about the dividend policy is that it decreases the shareholders wealth, this view is given by [6] in 1979.

There is limited research on determinants of dividend policy of Pakistani firms, no doubt the debate that is there any difference between banks and non financial firms is very old, as [7] left a question in 1985 that “Are banks different” and from the latest literature [8] states that the existence of regulations constraining the actions of banks may make the governance of these institutions different from non financial firms. But there is limited research on determinants of dividend policy of banking or financial sector all over the world, as for my knowledge, this is the first research on “Determinants of dividend policy of Pakistani banking industry”. This research will prove a milestone for future researches on dividend policy of banking sector.

The purpose of this study is to investigate the determinants of dividend policy of Pakistani banking sector. This study will examine what are those factors which affect the dividend policy of banks in Pakistan. In Pakistan there is no capital gain tax in Pakistan till 2012. Government has given extension till 2012, but there is 10% withholding tax on dividend income. There is another law that if a firm has earned profit but announces dividends to its shareholders then government will charge 35% income tax. In Pakistan many investors prefer capital gains over cash dividends; investor preference may be a factor which influences the dividend policy of Pakistani firms. As described by [8] that regulations may banks different, in Pakistan Securities and Exchange Commission has implemented many changes in the capital market of Pakistan. This paper will examine that is there any effect of size, profitability, growth and cash flows of banks on dividend policy. Is there any impact of ownership
structure, last year dividends, risk, agency cost and corporate taxes? This study also examine that does dividends act as signaling device and also checks that does banks in Pakistan smooth their dividends?.

What Is Dividend and Why Companies Pay Dividend?: Dividends are distribution of a company’s profits which it distributes to its shareholders, the amount of dividend is depends upon the shares on own. Dividends may be in form of cash dividends in which the company pays some cash amount per share to share holder, or it may be in terms of stock dividends, in which the company issues new stocks to existing shareholders in proportion of their existing shares. For investors dividends are return on their investment.

There are many reasons that why companies pay dividends, it may be the reason to reduce the agency cost arise between managers and share holders or to reduce the uncertainty of investor. As one goal of the investor to receive returns on continuous basis, so they prefer to invest in firms paying dividends. Firms paying more dividends have easy access to capital market. Dividends also effect the stock valuation.

Banking Sector in Pakistan: Banking system in Pakistan was started with the idea of founder of Pakistan “Quaid-e-Azam Muhammad Ali Jinnah”. He proposed that State Bank of Pakistan (SBP) will play a pivotal role in elevating the Pakistan’s economy. There are two type of restructuring mechanism: one is market based solutions such as liquidation without deposit compensation, sale or merger, shareholder capital injection etc. and the other one involves the government intervention like formation of asset recovery trust, liquidation with deposit insurance, supply side solution. Both types of restructuring mechanisms have been used for the development of banking industry, sometimes market base system and sometimes government intervention in this sector.

[9] Proposed two types of restructuring mechanisms: operational and financial restructuring. According to them the function of restructuring mechanism is to return the profitability and solvency of the banks. The bank solvency would stem from shorter-term financial restructuring measures such as long-term borrowing, capital injection, swapping bonds for NPLs etc. While increasing the profitability involves more tricky and long term operational restructuring such as cost reduction, effective risk management and improved internal governance etc. Hence, the level of bank’s insolvency deals with the financial restructuring, while poor profitability results from high operating costs. These problems deal with operational restructuring, [10]. To improve the poor performance of banking sector, banking reforms were launched. These reforms can be divided into three categories.

- First generation of reforms (1988-1996)
- Second generation of reforms (1997-2001)

In early 1990s; in order to establish more market-based monetary management system, SBP introduced financial reforms. These reforms were introduced to increase the competition, allow free entry of private banks, standardize accounting and auditing system, strengthen SBP supervision and manage the financial sector more efficiently. In these reforms government partially privatized the banks and liberalized the interest rates.

The SBP was granted greater power in February 1994. The 1997-98 reforms initiative was aimed to improve bank regulators and management, the markets and the courts to confer effective regulations and governance in order to enhance the efficient financial intermediation. To grow faster, increase their share in the market, make easier for the customers to take loans; partially private banks were completely privatized.

In third stage of reforms, focus was on improving and strengthening the banking sector structure. It aims at privatization, minimum capital requirement, prudent regulation and technical enhancement. SBP strengthened banks audit and supervision. SBP established standard for rating overall banks.

Increasing the profitability requires effective policies, hardworking and efficient management and a strong institutional infrastructure. However, Pakistan restructured its financial sector effectively within a very short span of time, but the profitability and sustainability of financial sector depends heavily on strong corporate governance, effective risk management and mitigation system, macroeconomic stability, prudent supervisory and regulatory framework, reorientation of banking industry and a well diversified and competitive financial system [11].

Review of Literature
Types of Dividend Policies
Residual Policy: This theory states that firm will only pay dividends from the earnings left after financing all positive NPV projects. In this policy, the main concern of the
managers is to invest more and more and in this case dividend policy becomes irrelevant. Firms adopts this type of policy because they more rely on internally generated funds and are not willing to raise new capital for saving floatation and other costs associated with issuing debt and the managers think that high retention cause more growth to the company.

**Constant Payout Residual Dividend Policy:** In this type of policy, firms pay a fix percentage of its earning to the share holder each year called dividend payout ratio calculated by dividend per share divided by firm earning per share. If the earning of the firm reduces or firm face loss in any year, the dividends will be reduced or diminished, so this is the problem with this type of policy and rare firms chose this policy.

**Smooth Residual Dividend Policy:** Many firms adopt this type of policy. In this type of policy, firms pay fixed amount of dividend to shareholder each year, firms don’t cut dividend after announcing the dividend. Firm using this policy only increase the dividends when they are sure that firms earning have increased.

**Small Quarterly Dividend with Annual Bonus:** Some firms chose this type of policy. In this type of policy firms pay low regular dividends, if the earning increases than normal earning then firms pay additional dividend designated as extra or special dividends. By designating the additional amount of dividends as special dividends firms avoid giving investor false hope. This type of policy is chosen by those firms who have temporary shifts in their earnings.

**Theoretical Background**

**Overview:** In his seminal work of dividend policy, [12] conducted a research and makes interviews of to management of 28 US firms and concluded that dividend decision are mostly dependent on current year profits and past year dividend. He also found that managers have long term dividend payout policy and managers change dividend when they are certain about future earning and they are reluctant to reverse the decision in near future. He also concluded that managers don’t make sudden changes in dividends they make partial adjustments in dividends to target payout ratio. Linter has given following mathematical model for partial adjustment relationship.

\[ \Delta D_i = a + c_i (D^*_i - D_{i,t-1}) + u_i \]

where,

- \( \Delta D_i \): The change in dividend per share of firm i from time t-1 to t (i.e. \( D_{i,t} - D_{i,t-1} \))
- \( D^*_i \): The target dividend of firm i in period t
- \( D_{i,t-1} \): The actual dividend of firm i in period t-1
- \( c_i \): The speed of adjustment in dividend to the difference between the target dividend and last period's dividend
- \( a_i \): Intercept and
- \( u_i \): A zero mean, constant variance, non-auto correlated error term.

Work of [7] and [13] are example of early work on dividend policy. [7] Used [12] model and they have also same view as [12] had. They said that Linter model can be improved by adding last year earnings; they argued that last year profits have a strong influence on the dividend policy. [13] used model of [14] and argued that earning effect more on the dividend policy instead of last year dividends.

**Dividend Irrelevance Theory:** [4] give irrelevance theory, in which they state that “In perfect capital market, where there is no transaction cost, no taxes, no bankruptcy cost, investor are rational, all investors have same opportunities and information symmetry is there, dividend policy is irrelevant. Dividend policy has no impact on market value of firm or its cost of capital. It means that it doesn’t matter that firm pay dividends or retain cash. But in real world there is no concept of perfect capital market, there are transaction costs, investor and firms have to pay taxes, there is information asymmetry. This theory is foundation of modern corporate finance. MM irrelevance theory suggests that value of firms is dependent on present and future cash flows and dividend doesn’t affect the value of firm. [15] and [5] also has view same to the [4].

**Bird In Hand Theory:** In 1963, [3] presented the bird in hand theory. This theory states that dividends are relevant and they affect the firm’s value. As from the name of theory we can guess the old proverb “A bird in hand is worth than two in the Bush”, most investors are risk averse, so they prefer the prefer cash in hand instead of future capital gains, here bird is referred to cash dividend and bush is referred to future capital gain. He also discussed that dividend paying firms are seem to be more profitable and have easy access to capital market and paying dividends effect the valuation of the stock.
Dividend Signaling and Information Asymmetry Theory: In 1961, [4] found that dividends have a signaling effect; giving dividends transmit information to the market. Generally, increases in dividends transmit positive signal to the market and increase the price of stock and cuts in dividends transmit negative signal to the market and it will reduce the share price [16]. Also concluded that companies use dividends as signaling device to the market. He also discussed that managers can forecast the firm's future earning and they have proper knowledge about the earnings of the firm and all the insiders have the proper knowledge but the outsiders don't have the proper knowledge about the firm's earning and it creates information asymmetry, so for information symmetry between the insiders and outsiders managers announce dividends.

Tax Preference Theory: [17] Was the first scholar who research dividend policy with context to the taxes and concluded that higher pretax returns are the compensation for the investors for facing tax disadvantage. Tax preference theory states that investors consider taxes and it plays an important role for personal investment decisions as well as corporate investment decisions. Capital gains are taxed at lower rate and it is taxed when realized (when the asset is sold) but cash dividends are taxed at higher rate and taxed when the company gives dividend to the shareholder so many investors prefer capital gains.

Pecking Order Hypothesis: Pecking order hypothesis states that firms prefer internally generated funds for investment opportunities and for issuing dividends and if internally generated funds are less then firms prefer debt over external equity.

There are two different views about “why firms prefer pecking order hypothesis”

First view is given by [18] in 1961, he argues that firms prefer internally generated funds over debt because they want to avoid floatation and other cost associated with the debt and firms prefer debt over external equity because the cost of external financing is higher than the cost of debt.

The other view is given by [19] and [20] they have view that total benefits of debt financing are greater than the floatation and other costs associated with debt in terms of tax shield and financial distress risk. They argue that firms depend upon internally generated funds because firms want to maximize the wealth of existing shareholders. And their view about the external funds is that firms prefer debt over external funds because due to sale of new shares, price of existing shares decreases and it is against the existing shareholders and they have view that risk free debt has no impact on shareholders wealth. If the debt is risky it has less effect on the existing shareholders rather than the effect of issuing new shares.

Free Cash Flow Theory / Agency Theory: The concept of this theory starts from agency problem and agency cost. Agency problem refers to the problem arise between principal and agent, principal are shareholder and agents are managers. Main duty of managers is to run the business efficiently and increase the shareholder wealth. The agency problem arises when managers have excess cash flow, they invest in low or negative NPV projects and uses that cash for their leisure and comfort and this is agency problem. So shareholders have to monitor the managers, cost of monitoring is referred to agency cost. To reduce the agency cost [21] give explanation that to reduce the agency cost dividends are given to the shareholders, when dividends are issued then managers has less cash in hand and they can’t misuse it. [22] argued that when managers have less cash in hand, so for financing new projects managers will move towards the capital market and capital market impose some restrictions to the managers for misusing the money and capital markets also monitor the managers.

Share Repurchase: Share repurchase are also used as signals but it transmit different information as dividend do, shares are repurchased by firms when they have no profitable investment opportunity and it shows that earning will be reduce in near future [23]. [24] States that share repurchase will cause change in capital structure and firm is fully financed by debt and its leverage ratio will increase and also chances of bankruptcy also increases.

Clientele Effect: Preference of investor to receive a cash dividend capital gain is referred to clientele effect. In the clientele effect tax rate matters. The investors who are paying heavy taxes want to invest in the stock that retain cash and pay fewer dividends because they want capital gains but the investors who are paying less tax want return in form of dividends and they invest in high dividend paying stocks. Mostly old age or retired investors invest in dividend paying stocks. We are studying Pakistani context, in Pakistan government has given extension that no capital gain tax will be collected till 2010.
Banking Dividend Studies: Financial sector has some different characteristics, so research on dividend policy is less and from the sample research on dividend policy banking sector also excluded. In 1999, [25] find the effect of announcement of dividend cut by money center banks has a contagion effect in stock returns and they concluded that on stock of non announcing money center banks there are abnormal negative returns and on stock of large regional banks it has lesser effect. The main factor which influence the dividend policy of North American banks are growth of profit and number of shareholders and there is no significant impact of past growth level, beta and insider ownership on dividend policy of North American banks, but these variables have significant impact on the dividend policy of other industries [26]. In 2005 [27] worked in Nigerian banking industry and show the tax effect on that industry, they identified following determinants which affect the dividend policy of Nigerian banking industry, current profits, financial leverage, capital structure, past dividends and legal restrictions. Share repurchase has strong influence for reducing agency cost and a signal for future profits for North American banks but for non financial sector these results are opposite [28].[29] worked on public and private banks and concluded that private banks give more dividend than public sector banks and also concluded that dividend policy is affected by control structure.[30] surveyed the NASDAQ listed firms and identified four determinants which affect the dividend policy, but their weights for financial and non financial sector are different. For financial sector the sequence of impact is profit stability, past dividends, current year profits and projected profits, for non financial sector their sequence is past dividends, profit stability, projected profits and current year profits.[31] found that for Indian banking industry past dividends and current profits are the most important determinants of dividend policy.

Empirical Literature
Overview: “The harder we look at dividend the more it seems like a puzzle with pieces that just don’t fit together” [2].

Numerous literatures on dividend policy provide no evidence about generally accepted rules for the level of payout ratios that maximize shareholders wealth [2]. Concluded his study with the question: “what should the firms do about dividend policy? We don’t know” [12]. Argued that last period dividends and current year earning has positive influence on the dividend policy. It is argued that there is no effect of dividend policy on the firm share price or its capital cost. If there is no significant impact of dividend policy, then it means it is irrelevant [4]. Suggest that value of firm is only affected by its business risk and basic earning power. From the previous studies we have identified the following factors that affect the dividend payout policies of the firms.

Leverage: High debt means that firms have high interest expense, which will lead to a low net income and thus less earning will be available for shareholders. Dividend payments to shareholders may suffer the financing and investment plans especially in case of high leveraged firms. Earnings of highly leveraged firms are more risky and volatile and accordingly pay low dividends [32], [33]. [21], [34] found negative relationship between financial leverage and dividend payout ratios, providing support to the free cash flow hypothesis of [21] that in case of free cash flow managers prefers to pay dividends. Highly leveraged firms tend to low dividends payouts in order to reduce transaction cost of external capital [35], [36] found negative relationship between leverage and dividend payout ratios of firms listed in kualalumpur stock exchange and concluded that highly leveraged firms retain more instead of distributing profits to shareholders. [37] also found negative relationship of leverage with dividend payout In Jordan, concluding that firms using more debt commits itself to fixed financial charges in forms of interest payments, failure to pay these periodic interest payments leads to business liquidation- so a risk is associated with highly leveraged firms that results in low dividend payments. [38] found negative and insignificant relationship of leverage with dividend payout ratio of companies listed on Karachi stock exchange and concluded that leverage has no impact on firms’ dividend policy. In order to fund increasing dividend payments firms are willing to increase the level of debt in their capital structure, as dividends act as signaling device to the investors [39]. [40] explored positive relationship of leverage and dividend payout, arguing that these findings are consistent with the expected return pattern at different levels of economic stability. [41] also found positive relationship between leverage and dividend payout ratios.

Size: [42], [43] concluded that size plays a prominent role in explaining firms’ dividend policy. As firm grow, they mature, have easy access to financial market and become less dependent on internally generated funds which allows them to pay higher dividends. Larger firms pay lower transaction cost as compared to smaller ones for raising new financing and pay more dividends [44]. [41] also found positive relationship between firm size and
dividend payments. Investor perceive that larger firms less risky hence these firms have a better position in the market and can raise more funds as compared to the smaller ones and pay higher dividends. Additionally, the management of large firms is inclined to pay higher dividends [45]. [37] has concluded that size positively correlate with dividend payout ratio. His study supports the agency cost explanation, in large firms excessive cash flow results in significant agency cost. Thus dividend could play important role in reducing agency cost. Size plays significant negative impact on dividends reasoning that large firms reinvest their profits into assets instead of paying dividends to shareholders [46]. [47] using the data of 245 non financial companies found positive impact of size on the dividend payout ratio. Making comparison of Pakistani and Chinese listed firms concluded that in Pakistan larger firms pay dividends where as in china smaller firms offer more dividends [48].

**Liquidity:** [49] Found positive relation between the liquidity and profitability explaining that firms earning stable cash flow (high liquidity) are in position to pay higher dividends as compared to firms facing unstable earning. [50] also found positive relationship between liquidity and dividend payout policy suggesting that due to shortage of cash, poor liquidity results in less generous dividend payout policies. [51] argued that firms having improved financial position initiates dividend increments while companies facing financial problems triggered by decreasing profitability and low liquidity levels are forced to cut dividends. [46] also concluded that dividend reducing firms face liquidity problems. [39] found negative relationship between liquidity and payout ratio, suggesting that increasing dividend payout ratios reduce the liquidity and higher return on equity stimulates the firm need to retain more to reinvest or lower the dividend. In case of Indian firms [52] also found opposite relation between liquidity and dividend payout ratios. [41] explored that liquidity does not have a significant impact on dividend policy.

**Growth:** [37] found negative relationship between growth and dividend payout, suggesting that firms in growth phase has investment opportunities, to finance these opportunities from internally generated funds, firms have to retain more and to pay very little or no dividend. These findings are providing support to the pecking order hypothesis. [53] found that mature companies are likely to be in low growth phase and less attractive investment opportunities, these firms don’t have any incentive to retain more as a result of less capital expenditure firms follow a generous dividend payout policy. On contrary young and new firms need cash reserves to finance investment plans and pay lower dividends.

As dividends payments and investments both are linked to the firm’s cash flow, so firms in growth stage have investment opportunity, following pecking order hypothesis pay low dividends [54]. [55] Suggested that dividends announcements as a way for stock price evaluation, because dividend announcements serve as signal for growth and lack of investment opportunity. [56] using America stock market data found that higher dividend payouts were associated with higher future growing firm. [21] suggested that highly growing firms have relative lower amount of free cash flow (cash in excess of funds required for all the projects having positive NPV) as compared to firms having few growth opportunities- having lower amount of free cash flow reduces the agency cost and ultimately the need to pay dividends. [57] Indicated that there is a direct relationship between growth opportunity and financing needs, reasoning that normally working capital needs exceed the incremental cash flows from additional cash flows from new sales. So dividend payout ratio is inversely related to firm’s financial need to fund growth opportunities. [58] stated that investment and dividends depend on each other, In case of growth opportunities investment need arises and dividend payments fall, on the other hand in absence of growth opportunities firms pay dividends to reduce agency cost. [46] found no relationship between growth and dividend payout of listed firms of Karachi stock exchange.

**Profitability:** The decision about paying dividends starts with firms profits; therefore it seems logical to think profitability as threshold factor and profitability level as one of the most significant variable in explaining dividend payout decision.

The pecking order hypothesis provides some explanation for the interrelationship of dividend payout and profitability, taking into consideration the cost associated with issuing debt and equity financing less profitable firms find it difficult to pay dividends, while highly profitable firms are in the situation to internally generate funds to finance investment needs and pay dividends. The classical work on dividend policy was of [12]. After consulting 28 well established us firms he developed a model for “How managers make dividend decision”. His study concluded that dividends pattern of a firm are influenced by its current year earning and past year dividends. [59] surveyed the financial managers of US firms and reported that both current and past year
The agency theory by [24] focus on the ratios. means to reduce agency cost. Profitability is irrelevant in explaining the dividend payout ownership and external debt financing are substitute rapid growth, low dividend may results. [41] found that as dividend payout ratios increase. Second, higher insider plough back a major proportion of its profits to supports transaction cost resulting from need of external financing. [30] stated that in case when a firm needs to of tradeoff between agency cost reduction and increased firm profitability is negatively correlated to the dividend variation. First firm’s dividend payout ratio is the function and tendency to pay dividend decrease. [39] found that literature, two perspectives explain dividend payout the opportunity cost of holding dividends will increase [68] viewed that in agency costs and dividends payout linear when firms profitability achieve a certain point, [43] validate the view that high insider ownership is sensitive to firm’s profitability, but this relationship is non linear when firms profitability achieve a certain point, reinvesting profits again can return more profits in future, the opportunity cost of holding dividends will increase and tendency to pay dividend decrease. [39] found that firm profitability is negatively correlated to the dividend payout. [30] stated that in case when a firm needs to plough back a major proportion of its profits to supports rapid growth, low dividend may results. [41] found that profitability is irrelevant in explaining the dividend payout ratios.

Agency Cost: The agency theory by [24] focus on the conflict of interest between the owners and managers and proportion of assets controlled by insiders. When there is separation of ownership and control, managers tend to invest much part of free cash flow prerequisite/self interest that results in significant agency cost. To reduce the agency cost owners may feel it in their interest to incur bonding cost and distribute more individuals. [35] supports the preposition that firms whose insiders have a low proportion of equity; significant agency cost results- ultimately firm spay dividends to reduce the agency cost. [37] using firms common stock held by the insider as the proxy for agency cost found significant impact on dividend payout, arguing that agency cost will decrease when insiders executives, managers and directors increase their ownership because in this case interest of both managers and shareholder will align and there will be no need to use dividends as a device to alleviate agency cost. [65] stated that high agency cost result in high dividend payout and its solution is firm’s ownership structure. [66] suggest that firms having more collateralize assets have lower agency cost between stockholder and bondholder, as these assets cab be used as collateral against the money borrowed. Managerial efficiency of the firm can have influence on the dividend payments trend with the agency cost framework. Firms where management is more efficient, assets turnover will be high and more value will be paid to share holders- shareholders will prefer to reinvest because agency cost will be low and less dividend payment will result. [55] surveying the previous studies, concluded possible reasons for why firms prefer to pay dividends. There are resulting decrease in agency cost, market signal of dividend payment (signaling theory) and bird in hand theory. [67], in their study found that high dividend payment in case of principal agent problem forces management to move towards the capital market to fulfill the financing need. In such environment high dividend payout minimizes the agency cost. [58] found negative relationship between agency cost and dividend payout. [43] validate the view that high insider ownership (lower agency cost), lower dividend payments will result. [68] viewed that in agency costs and dividends payout literature, two perspectives explain dividend payout variation. First firm’s dividend payout ratio is the function of tradeoff between agency cost reduction and increased transaction cost resulting from need of external financing as dividend payout ratios increase. Second, higher insider ownership and external debt financing are substitute means to reduce agency cost.

Last Year Dividend: [69] Conducting a research on Greek banking industry concluded that previous year dividend are not predictor of current year dividend. They argued that due to high earning volatility in banking industry, managers don’t follow the long term dividend payout ratio that is unaffected by the firm’s financial performance. [70], in case of Nigerian firms found that last year dividend significantly affect the current period payout and firms strive not to cut dividends payment from the preceding years, instead they try to increase the payout ratio. [71] viewed that firms usually set a target dividend payout ratio and try to adjust dividend payments to this target. Furthermore firms follow a stable dividend payout policy and gradually increase the dividend according to.
These findings point out that current year dividends are also affected by previous year dividends. [72] found that Indian firms set a lower target payout ratio and face high level of adjustment.

**Risk:** Generally it seems to exist a negative relationship between risk and profitability because firms in risk conditions are not able to distribute earning rather preferred to retain [73]. measuring risk a year to year fluctuations in earning, found inverse relationship. He concluded that these firms which have relatively stable earning can easily predict their future earnings. Such firms have relatively low risk and pay higher proportion of its earnings then the firms facing high variation in earnings.

[35] using beta value as a measure of risk found negative and statistically significant relationship of risk with the dividend payout. His findings also suggest that firms facing high market risk payout lower dividends. [49] Also found negative relationship between risk and profitability, suggesting that it difficult for the firms to pay high dividends experiencing high volatility, such firms prefer to pay either low or no dividends. In case of Nigerian banks [27] concluded that firms dividend payment announcement convey information to the market about the firms risk. [39] and [58] found that greater the firms risk, lower will be its payout ratio. [74] proposed that managers formulate change in corporate policies when they anticipate changes in corporate earnings or business risk. Two lines of managerial decisions have a significant impact on stock prices, these are, 1. choice of capital structure and 2. How much earnings to distribute as dividends.

**Ownership Structure:** Ownership has been discussed widely in context of dividend puzzle, literature yields mixed findings. [37] And [35] viewed that greater the percentage of insider ownership, lower will be the dividend payout ratio. The plausible explanation is that firms pay higher dividends to reduce cost associated with the agency problem. In case of higher insider ownership agency cost will be lower and firms will retain more. Insider ownership serves as substitute for dividends to reduce agency cost. [75] analyzing the data of 4000 firms in 33 countries found that firms operating in those countries where government legislation provides greater shield to minority shareholder, pay more dividends and dividends payments are the result of legal protection of investors instead of agency problem. [76] In case of Tunisians firms found no relationship between ownership concentration and dividend payout ratio. Due to less principal agent problem in Tunisians firms, owners don’t have choice to distribute earnings in order to minimize manager’s discretion and shield their own interest. [38] using the data of Pakistani firms listed at Karachi stock exchange found positive relation between insider ownership and dividend payout. Because in such a strategy dividends will go to pockets of directors, the chance of dividend payout will be low if significant amount of distributed earnings is paid to the outsiders. [77] found strong negative relationship between insider ownership and dividend payout ratios. This relationship may be interpreted in different ways: first banks have higher level of managerial ownership may choose to pay lower dividends because owners/managers want to avoid penalty cost of double taxation, second higher level of insider ownership may lead financial institutions to retain more money to invest in other opportunities. [78] found that firms with higher level of institutional holdings and high rate of return on equity distribute more earnings in dividends. [43] found that greater the insider ownership lower will be the dividends, while in case of large number of shareholders firms will pay high dividends to overcome the agency problem. [79] concluded that higher institutional holding have no impact on the firm’s dividend payout ratio. [47] Ramli (2010) concluded that payout ratio increases as percentage of ownership of large shareholders increases.

**MATERIALS AND METHODS**

**Research Design:** Our study is exploratory in nature that we want to investigate the determinants of dividend policy in context of Pakistani banking industry, which is based on secondary data collected from annual reports of the firms.

**Population and Sampling:** Our population is banking industry of Pakistan listed at different stock exchanges. Our sample size is the data of 27 banks (foreign and domestic) listed at different stock exchanges of Pakistan. For the purpose of this study we develop the database using annual reports collected from the concerned banks and library of state bank of Pakistan. The coverage is restricted to the period of 2003 to 2009. We have selected all those banks whose annual reports for at least 3 years were available. There is a limitation in data that some banks came late in Pakistan and annual reports of some banks were missing.

**Sampling Technique/Procedures:** We use the convenient sampling as the data of as much banks was easily available, we have included in our sample.
Research Instrument /Tools: We have used stepwise regression analysis. Using this regression method, each variable is being added to the model in view of its estimation power over the dependent variable. Every time a variable enters to the model, all the others are reexamined. Those that lose their estimation power in function of the new variable entered are being excluded of the analysis and so on, until we have a set of significant variables.

Data Collection: Data for the thesis is collected from the concerned bank’s websites, their head offices and from the library of State Bank of Pakistan.

Methodology: Variables and their proxies are selected on the basis of past studies. We have selected following variables which affect the dividend decisions of firm. These variables are size, leverage, liquidity, profitability, agency cost, growth, last year dividend, risk and ownership structure.

For the size [43] used natural log of sales as a proxy and [46] used natural log of total assets as a proxy. For leverage, debt to equity ratio is used as proxy by [37] and debt to total assets ratio is used by [80, 39, 69, 36]. For liquidity natural log of cash from operation is used by [50], log natural of net cash flow of firm by [81, 80] and current ratio is used by [39]. EPS is used by [37, 46] as a proxy for profitability, ROA (EBIT / T.A) is used by [41, 82, 30]. Another proxy for profitability, ROE (Net income / Equity) is used by [39]. For agency cost free cash flow is used as proxy by [43] and other proxy which is used for agency cost is operating expense ratio. For growth, annual sales growth is used by [50, 39] and investment opportunity is used by [46]. Last year dividend is used as proxy for Last year dividend by [12, 80, 69, 82, 39]. Beta (variability in profitability) is used as proxy for risk in by [58, 50, 49, 80] and other proxy for risk is variability of earning which is used by [39]. For ownership structure natural log of number of shareholders is used by [37] and number of shareholders having more than 5% shares is used as proxy by [46, 43]. %age of total shares held by insiders is used by [43, 39], whereas %age of institutional holding is also used as proxy for by [49].

We used natural log of sales as a proxy for size, debt to equity as proxy for leverage, natural log of cash from operations as a proxy for liquidity, EPS as proxy for profitability, free cash flow as proxy for agency cost, annual sales growth as a proxy for growth, last year dividend as proxy for last year dividend, beta (variability in profitability) is used as proxy for risk and natural log of number of shareholders is used as proxy for ownership structure.

Model and Variable Selection: We developed the following statistical model using stepwise regression analysis.

\[
\text{Div} = \alpha + \beta_1 \text{sz} + \beta_2 \text{lvrg} + \beta_3 \text{liq} + \beta_4 \text{prof} + \beta_5 \text{agnc} + \beta_6 \text{grth} + \beta_7 \text{div}_{t-1} + \beta_8 \text{risk} + \beta_9 \text{own}
\]

where,

- Div = Dividend per share and it is dependent variable
- \(\alpha\) = Constant
- \(\beta_1, \beta_2, \ldots, \beta_9\) = Coefficients of the independent variables

whereas sz, lvrg, liq, prof, agnc, grth, div, risk, own represents size, leverage, liquidity, profitability, agency cost, growth, last year dividend, risk and ownership structure and all these variables are dependent variables.

We have generated following hypothesis:

- \(H_1 = \) There is positive relationship between size and dividend payout.
- \(H_2 = \) There is negative relationship between leverage and dividend payout.
- \(H_3 = \) There is positive relationship between liquidity and dividend payout.
- \(H_4 = \) There is positive relationship between profitability and dividend payout.
- \(H_5 = \) There is positive relationship between agency cost and dividend payout.
- \(H_6 = \) There is positive relationship between growth and dividend payout.
- \(H_7 = \) There is positive relationship between last year dividend and dividend payout.
- \(H_8 = \) There is negative relationship between risk and dividend payout.
- \(H_9 = \) There is positive relationship between ownership structure and dividend payout.

418
RESULTS AND DISCUSSIONS

Following are the results of stepwise regression analysis obtained by using “SPSS”.

Table 2 represent the overall model output. Value of $R^2$, .782 shows that overall model explains the 78.2% variation in the dependent variable, dividend payout. Value of $R^2$ shows that suggested model provides the substantial explanation about the dependent variable.

In ANOVA table (Table 3), model p-value is .000 that depicts that relationship is highly significant. Overall, figures shows that results are quite explanatory. Table 4 and Table 5; results about the different independent variables shows that; profitability, last year dividend and ownership structure have strong positive relationship with the dividend payout, while liquidity has strong negative impact on dividend payments. Future more, effect of size, leverage, agency cost, growth and risk is observed insignificant.

Coming towards the explanation of individual variable, last year dividend has a positive impact and its p-value .000, depicts highly significant relationship. These findings reflect that previous dividend payment records of any firm serve as a signal about future time period. If past records show that firms pay high dividend, then such a payment behavior can be expected about the future and vice versa. Considering the dividend payout policies, such a dividend payment behavior provides support to the smooth dividend payout policy. These firms don’t cut but try to increase the payout ratio. Such findings about the last year dividends are conformed by [70] that firms strive not to cut the dividend payments from the previous year, rather they trend to increase it. Sustaining/ losing the previous dividends payment pattern also suggest about the stability/volatility of the earning. These findings suggest that in Pakistani context, till 2009, earnings of banking industry was quite high, resulting from flexible lending and leasing policies that generates huge income in form of interest receipts. The second most important variable that has highly significant (p-value .000) and positive relationship with the dependent variable is the profitability. The plausible explanation behind the profitability level of banking industry is discussed above. So, the firm earning high also distribute more. Such findings about the profitability are confirmed by [60, 61]. Another explanation about the positive relationship of profitability and dividend payout was provided by [35], that firms that are highly profitable have easy access to external market, can raise funds at lower cost as compared to less profitable firms and ultimately distribute more as dividends. Discussing positive relationship of both last year dividend and profitability with the current and future dividend payments in context of signaling theory and information asymmetry, insiders/managers have more information about the current situation and future prospects for the company. This case is severe in medium and large size firms where mangers are controlling on the behalf of shareholders. Little information to the shareholders may result in low investment from outsiders or under valuation. Dividend signaling occurs only when firm increases or decreases dividend payments. Last year dividend or distributing current year profits as dividends serve as a signal for the investors about the company financial conditions and future growth opportunities. When a signal goes to the market, level of information asymmetry reduces and investors act according to their perception about the signal. In this way, last year dividend payment/current profits distribution result in overvaluation and ultimately increased investment in the company. As the investment level rises, future expectation about high level of profits rises and a relationship of high profits and increased dividend payments is expected.

According to our findings liquidity is the single variable that has a highly significant (p value = .005) but negative relationship with the dividend payout, suggesting that the firms that have a better liquidity position pay low dividends. These findings are confirmed by [39] that high return on equity stimulates the firms to reinvest more, as dividend payment reduce the amount of funds available for reinvestment, so firms pay low dividends. Another explanation for this relationship may be that banks have high need of liquid cash as compared to any other industry, because their total operations involve either payment are receipts of cash. Moreover, banks try to lend more in order to increase their returns. So in order to achieve smooth flow of operations and increase the future return, banks tend to maintain high level of liquidity. So, in such scenario negative relationship between the liquidity and dividend payout can be expected. Ownership structure also has high significant (p-value=.014) and positive relationship with the dividend payout we have used “Log natural of number of shareholders” as a proxy for ownership structure. When ownership is divided into large number
Table 1: Variables Description

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Proxy Used By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>Natural log sales</td>
<td>Holder, Langrehr, Hexter (1998)</td>
</tr>
<tr>
<td>Leverage</td>
<td>Debt / equity</td>
<td>Al Malkawi (2007)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>In Cash from operations</td>
<td>Kanwal and Sujata (2008)</td>
</tr>
<tr>
<td>profitability</td>
<td>EPS</td>
<td>Al Malkawi (2007), Hafez and Attiya javed (2009)</td>
</tr>
<tr>
<td>Agency cost</td>
<td>Free cash flow</td>
<td>Holder, Langrehr, Hexter (1998)</td>
</tr>
<tr>
<td>Growth</td>
<td>Growth rate</td>
<td>Kanwal and Sujata (2008), Kania and Bacon (2005)</td>
</tr>
<tr>
<td>Last year dividends</td>
<td>Last year dividend</td>
<td>Linter (1956), Baker, Farrellay and Edelman (1985), Eriotis, Vasiliou and Zisis (2007), Aivazian, Booth, Cleary (2003), Kania and Bacon (2005),</td>
</tr>
<tr>
<td>Ownership structure</td>
<td>Insider ownership</td>
<td>Al Malkawi (2007)</td>
</tr>
</tbody>
</table>

Table 2: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.884</td>
<td>.782</td>
<td>.774</td>
<td>2.314</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), last year dividend, Profitability, Liquidity, ownership structure
e. Dependent Variable: dividend

Table 3: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>4</td>
<td>110.996</td>
<td>89.840</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>100</td>
<td>1.235</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>104</td>
<td>1.235</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), last year dividend, Profitability, Liquidity, ownership structure
e. Dependent Variable: dividend

Table 4: Significant coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>T</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.586</td>
</tr>
<tr>
<td></td>
<td>last year dividend</td>
<td>.699</td>
</tr>
<tr>
<td></td>
<td>Profitability</td>
<td>.144</td>
</tr>
<tr>
<td></td>
<td>Liquidity</td>
<td>-.235</td>
</tr>
<tr>
<td></td>
<td>ownership structure</td>
<td>.088</td>
</tr>
</tbody>
</table>

a. Dependent Variable: dividend

Table 5: Excluded variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>In</th>
<th>T</th>
<th>Sig.</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Size</td>
<td>.066</td>
<td>.886</td>
<td>.378</td>
<td>2.554</td>
</tr>
<tr>
<td></td>
<td>Leverage</td>
<td>-.013</td>
<td>-.255</td>
<td>.800</td>
<td>1.117</td>
</tr>
<tr>
<td></td>
<td>Agency cost</td>
<td>.023</td>
<td>.387</td>
<td>.699</td>
<td>1.539</td>
</tr>
<tr>
<td></td>
<td>Annual Sales growth</td>
<td>.019</td>
<td>.397</td>
<td>.692</td>
<td>1.057</td>
</tr>
<tr>
<td></td>
<td>Risk</td>
<td>-.014</td>
<td>-.297</td>
<td>.767</td>
<td>1.014</td>
</tr>
</tbody>
</table>

e. Dependent Variable: dividend
of shareholders then each shareholder has only small proportion of total ownership, referred to as small investor. These small investors require and prefer current period dividends instead of future period increased returns, so a positive relation between ownership structure and dividend payout is expected. Another explanation may be that, in case of large number of shareholders, level of insider ownership falls and firms prefer to pay more dividends in order to reduce resulting agency cost. These findings are confirmed by [83]. Our findings about the ownership structure are in contrast with another study in Pakistan context by [46], that firms where insider ownership is high pay more dividends because in such a strategy large proportion of dividends will go into the pockets of insiders.

Size, leverage, agency cost, growth and risk do not have any significant impact on the dividend behavior of Pakistani banks and stepwise regression excluded these variables from the model [84-86].

CONCLUSION

So many studies have been conducted on determinants of dividend policy and have suggested different findings about the determinants of dividend policy. The question of our study was to investigate the determinants in context of Pakistani banking industry. Our findings reveal that last year dividend is an important variable in predicting future dividend payment behavior. The positive relation of last year dividend provide the support to the smooth dividend payout policy that firms try to maintain previous dividend payout pattern and try to increase not decrease. Profitability also shows positive relationship with the dividend payout ratio. Profitable firms have an easy access to the external market and can raise funds at a lower cost, due to their market reputation because profitability serves as signal for the investor. So highly profitable firms also distribute more in form of dividends. Positive relationship of last year dividend and current profits to current period dividends can explained in context of signaling theory and information asymmetry. To reduce the level of information asymmetry and to increase the investment level, last year dividend and current profit distribution act as a signal for the investors about future growth opportunities. That result in increases future profits and ultimately higher dividend payments. Another variable, ownership structure, proxied by log natural of number of shareholders, also has positive impact on the dividend payout because as ownership base is diversified, small investors require current period dividends instead of future returns and firms pay more dividends to control the agency problem resulting from reduced insider ownership. Impact of Liquidity is negative as it can be expected in banking industry because their total operations are based on liquid cash so even in case of high liquidity banks prefer to maintain a substantial amount of liquid cash to smooth out operations. Size, leverage, agency cost, growth and risk do not have any significant impact on the dividend behavior of Pakistani banks.

REFERENCES


