Investigation Relationship between Dividend Policy and Stock Prices: An Analysis of Pakistani Banking Sector

1. Introduction

The key objective of financial management is to maximize the Stockholder's wealth; denoted by maximized stock prices. To achieve this, management (the caretakers of stockholders 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 employs. Financing decisions determine the capital structure of the firm and forms the sources on which investment decisions are made (Barman 2008). In dividend decision the management has to decide whether to distribute the profit in whole or a part of it among the shareholders or to retain it for reinvestment. 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 indicates the payout policy (Kapoor2009). Organization uses dividend policy 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 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 (Kapoor, 2009). 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 themit 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 (Sajid et al 2012).

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, 1974; Uddin, 2003; Kaleem and Salahuddin, 2006). 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, 1972; Lonie et al., 1996; McCluskey et al., 2006).But an ideal dividend policy had not yet been framed to be agreed upon. That's why due to its confusing nature black (1974) has termed it as "Dividend Puzzle".

The aim of this study is to find out whether stock prices in banking sector of Pakistan are impacted by dividend policy, and particularly to examine the relationship between dividend policy and stock prices in banking sector.

2. Literature Review

An ideal dividend policy is that one which results in maximum stock prices which leads to maximum shareholder's wealth. However, this relationship is still controversial that whether dividend policy affects stock prices or not? Research in the area of dividend policy has attracted the management scholars and economists to examine the phenomena and so it can be termed as one of the most complex aspects in finance. Black (1976) in his study on dividend stated, "The harder we look at the dividend picture the more it seems like a puzzle, with pieces that just don't fit together" (p 10). Brealey and Myers (2002) have placed the dividend policy as one of the top ten puzzles in finance. During the last fifty years several theoretical and empirical studies are done leading mainly to three outcomes: the (i) increase or (ii) decrease in dividend payout affect the market value of the firm or (iii) the dividend policy of the firm does not affect the firm value at all (Ahmad 2009).There are several evidences that supports that dividend has no effect on the firm's value e.g. Miller and

Modigliani's (1961) proposal of classic dividend irrelevance suggest that, in a world without taxes, transaction costs, or other market imperfections, dividend policy is irrelevant to the value of the firm. As far as there is no change in the dividend policy, shareholders are not concerned to receive their cash flows as dividend or in shape of capital gain. In this type of situation firm's dividend payout ratio effect their residual free cash flows and the result is when the free cash flow is positive firms decide to pay dividend and if negative firm's decide to issue shares. They also conclude that change in dividend may be conveying the information to the market about firm's future earnings i.e. the dividends also plays the role of a signaling component. Miller and Modigliani (1961) are also supported by others such as Black and Scholes (1974), Chen et al (2002), Adefila et al (2004), Uddin & Chowdhury (2005), Denis & Osobov (2008) and Adesola & Okwong (2009).

On the other hand Lintner (1962) and Gordon (1963) have developed "Bird-in-the-hand" theory in which they said that investors are interested to receive present dividends rather than future capital gains. In a survey by Farrelly, Baker, and Edelman (1985) they found that managers believe that dividend policy has an impact on firm's value and that optimal dividend payouts also exists. Another survey was conducted by Baker and Powell (1999). According to them respondents thinks that dividend policy has an impact on firm's value and shareholders wealth. They further reported that respondents have high level of agreement with dividend signaling. Other theories also develop the opinion that dividend policy is relevant because of the existence of differential taxes in the market.

The Pakistan's capital market and the economy have several important features for examining the dynamics of dividend policy. First, Pakistan is moving towards development and improving the economy position in the world since the 1980. Second, due to weak corporate governance the ownership structure of Pakistani firms is often characterized by the dominance of one primary owner who manages a large number of affiliated firms with just a small amount of shares or investment which result in the agency conflict between the shareholders and the owner, where controlling shareholders confiscate value from minority shareholders and can influence the dividend policy easily(Ahmed 2009). Third, tax scenario in Pakistan is also different from developed countries. Income generated from the sale of stocks is exempted from capital gain tax. On the other hand, 10% withholding tax is charged on the dividend incomes and these dividend incomes are taxed as an independent income block of individual shareholders. In this way, dividend income suffers from the problem of double taxation and this adverse tax system compels individual investors to prefer capital gains to dividend (Afzal 2011). Fourth, in the Pakistan the payment of dividend is voluntary. In Korea for example, it is mandatory for listed companies to pay the annual dividend divided by its face value at a level equal to the interest rate of one year time deposit (Ahmed 2009).

In Pakistan's capital market, there has been a sequence of many structural reforms since 1991. Amendments in Security and Exchange Ordinance 1969, Modaraba Companies and Modaraba Ordinance 1980, Companies Ordinance 1984 and the Securities and Exchange Commission of Pakistan Act 1997, all are the significant developments in corporate environment. In order to make the regulatory mechanism powerful and for its proper enforcement, SECP has issued the code of corporate governance in March 2002. This code makes the application of corporate governance practices compulsory for all the listed firms of Pakistan. At present, three stock exchanges are working in Pakistan, Islamabad Stock Exchange (ISE), Lahore Stock Exchange (LSE) and Karachi Stock Exchange (KSE). KSE is one of the best performing stock exchanges of Asia. It stood sixth among the best performing stock exchanges of emerging markets in year 2007 (Afzal 2011).

Specifically the Government and State Bank of Pakistan had made various reforms to promote banking sector of Pakistan e.g. privatization of NCBs (nationalized commercial banks), measures to enforce strong Corporate Governance, raising minimum paid up capital requirements to ensure a strong base, ability to compete and withstand unanticipated shocks.

Pakistan has further liberalized its foreign exchange regime and set up foreign exchange companies to meet the demands of Pakistani citizens. Pakistani Corporate sector companies have also been allowed to acquire equity abroad. Foreign registered investors can bring in and take back their capital, profits, dividends, remittances, royalties, etc. freely without any restrictions.

By removing restrictions imposed on nationalized commercial banks for consumer financing, the State Bank of Pakistan has given a big boost to consumer financing.

Legal difficulties and time delays in recovery of defaulted loans have been removed through a new ordinance i.e. The Financial Institutions (Recovery of Finances) Ordinance, 2001.

The prudential regulations in force were mainly aimed at corporate and business financing. The SBP in consultation with the Pakistan Banking Association and other stakeholders has developed a new set of regulations which cater to the specific separate needs of corporate, consumer and SME financing. The new prudential regulations will enable the banks to expand their scope of lending and customer outreach.

To provide widespread access to small borrowers particularly in the rural areas the licensing and regulatory environment for Micro Credit and Rural financial institutions have been relaxed and unlike the commercial banks these can be set up at district, provincial and national levels with varying capital requirements.

A complete revamping of Agriculture Credit Scheme has been done recently with the help of commercial banks. The scope of the Scheme which was limited to production loans for inputs has been broadened to the whole value chain of agriculture sector.

The State Bank of Pakistan has also set up a full-fledged Islamic Banking Department and a Shariah Advisory Board to help it in the promotion of Islamic banking in the country.

To sum up, banking sector reforms have brought in competition within the system, improved internal efficiency, reduced the lending rates significantly and broadened access to the middle class. While these results are encouraging, a lot more needs to be done.

3. Statement of the problem

The research aims to investigate the effect of dividend policy on stock prices in Pakistani banking sector during the period 2005-2015

4. Justification of the study

The first and most important justification underlying the study is that dividend policy is still a controversy. No unanimity had yet been achieved on a general dividend policy which leads to remain the dividend puzzle unsolved. Second, a little work has been done in this regard in developing countries especially in Pakistan. Third, the time span (2005-2013) of study is longer than previous studies conducted in Pakistan. The longer time span best addresses the problem at hand so the results will be more accurate. Fourth, the selection of a specific sector will help in results to be explicit and to avoid the deviation of results that one sector can cause to another. Fifth, payment of dividend despite the unique tax treatment (100% exemption) of capital gains also invites a detailed investigation.

5. Objective of the study

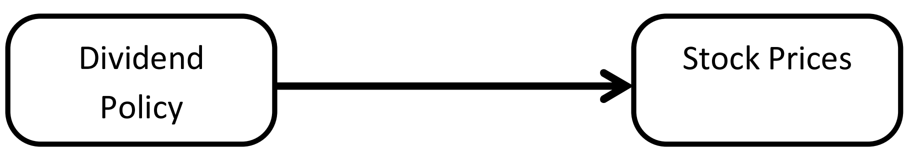
This study is undertaken with the aim to check

a. To describe the dividend policy of Pakistani Banking Sector over the period 2005-2015
b. To describe the share prices of various banks as existed over the period 2005-2015
c. To measure the relationship between dividend policy and stock prices in Pakistani Banking Sector.

6. Theoretical framework

Dividend is defined as that portion of a company's net earnings which is distributed among stockholders in proportion to their ownership in the company. Dividend policy describes the pattern that how and how much the stockholders should be paid. From this it can be seen that there is certain relationship between dividend policy and stock prices. But this relationship between dividend policy and stock prices is still controversial. Miller and Modigliani and their supporters say that dividend policy is irrelevant and it has no impact on stock prices. While Lintner and Gordon and their supporters believes in the theory of bird in hand, according to which investors prefers present dividends instead of future capital gains. A lot of research has been done in this context but it is still unresolved. This study attempts to examine it in the context of Pakistani banking sector.

Figure 1



7. Research hypothesis

$H_{0:}$ Dividend policy has no effect on stock prices in Pakistani Banking Sector.

$H_{1:}$ The dividend policy has direct/positive effect on stock prices in Banking Sector of Pakistan.

$H_{2:}$ The dividend policy has negative effect on stock prices in Banking Sector of Pakistan.

8. Significance of the study

Dividend decision is one of the three most important decisions the management has to make. Dividend policy is based on dividend decision of management which determines the payout policy that management follows in defining the scope and mode of cash distributions to the shareholders. A number of attempts have been done by researchers in finance but have failed to explain the dividend phenomenon and are lacking strong empirical support. But to come with solid conclusions a thorough study of all theoretical models together with empirical proof is needed. The far-reaching literature on dividend policy in the last fifty years have been 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. This study is in pursuit to determine or support the model that best explains the dividend policy.

This study is also important because of the fact that a little work has been done in the developing economies like Pakistan, and especially in a particular sector as banking sector in this study, as compared to developed economies of the world to see the effect of dividend policy on stock prices. Therefore it becomes important to study the dividend behavior of Pakistani banking sector in order to analyze the impact of dividend policy on stock prices in Pakistani banking sector. The study will be of interest to academics, investors, policy makers and other stakeholders.

9. Methodology

9.1 Nature of the Research

The intended research is causal by nature because it will see the cause and effect relationship of dividend announcements and stock prices in Pakistani banking sector.

9.2 Research Question

The research question raised is "Does dividend policy has any effect on stock prices in Pakistani Banking Sector?"

9.3 Sources and types of data

For analysis secondary data will be used. The data needed for the analysis is stock prices, stock exchange index (PSE 100) and dividend announcements by the firms of the selected sector i.e. banking sector. The data will be collected from Karachi stock exchange. To recheck the correctness of data, the data of banks available in state bank of Pakistan will also be used.

9.4 Research Approach

The research will use quantitative approach to investigate the effect of dividend policy on stock prices in the Pakistani Banking sector.

9.5 Research Population

The research population denoted by *N* represents all the banks operating in the Pakistani banking sector. The list of population banks is shown in table 1 provided by the Pakistan Banks Association except the 'other banks listed at KSE' and includes 55 banks. The Development Financial Institutions has also been excluded from the list.

9.6 Sampling of the Research

A sample size of 43% of the total population i.e.21 banks has been selected for the analysis. The list of sample banks is shown in table 2. The sampling method used for selecting the sample is simple random sampling.

9.7 Data Analyses

To achieve the desired results event study will be used to see whether dividend has an impact on stock prices or not. The event window used is of 21 days i.e. 10 days (t-1 up to t-10) before and 10 days (t+1 up to t+10) after the dividend announcement date (t0). The estimation window consists of 100 days before the day t-10 i.e. t-11 up to t-110. For analysis the statistical tools (descriptive analysis, t- tests) will be used to find the mean, standard deviation, and significance of the results. Moreover unexpected returns will be calculated for the event window. Unexpected returns are the difference between actual returns and expected returns. The unexpected returns are calculated as follows.

$$UR_{it} = R_{it} - E(R_{it})$$

Where Rit is the actual return of share i on day t and E(Rit) is the expected return for this security on the same day.

Expected returns can be calculated using various models such as mean adjusted returns, market adjusted returns, CAPM (Capital Asset Pricing Model), matched/control portfolio and the market model. In this study market adjusted model and market model will be used. In market adjusted model, KSE 100 index is used as proxy of expected returns. The difference between actual returns and expected returns will result in unexpected returns. The market model is used to calculate expected returns as shown in the following.

$$E(R_{it}) = \alpha + \beta\ (R_m)$$

Where $E(R_{it})$ is the expected returns, (R_m) is the market return, α is the intercept and β shows the sensitivity of market with respect to actual returns. The difference between actual returns and expected returns in the form of positive unexpected returns conveys good news i.e. increase in dividend and vice versa.

10. Thesis layout.

The general layout of the thesis will be as follows.

Chapter 1: Introduction

The first chapter gives a detailed introduction to the research study. It throws light on the concept and meaning of dividends and introduces the dividend puzzle. The primacy and importance of dividend decision has also been discussed in this chapter.

Chapter 2: Literature Review

Chapter two reviews the literature in detail and discusses the various research studies on the topic under study.

Chapter 3: Research Methodology

Chapter three traces the research methodology and discusses in detail the various tools and techniques used for analyzing the research data

Chapter 4: Data and Data Analysis

This chapter shows the data collected and analysis done during the research.

Chapter 5: Research Findings and Conclusions

This chapter shows the various findings based on analysis and draws conclusions.

Chapter 6: Recommendations

In this chapter recommendations will be given to the stakeholders according to the conclusions drawn in the previous chapter.

Tables

Table 1. **Population Banks.**

	Government Owned Banks:
1	First Women Bank Limited
2	Khushhali bank Limited
3	National Bank of Pakistan
4	SME Bank Limited
5	Sindh Bank Limited
6	The Bank of Khyber
7	The Bank of Punjab
8	The Punjab Provincial Cooperative Bank Limited
9	Zarai Taraqiati Bank Limited
	Privatized Banks:
10	Allied Bank Limited
11	Habib Bank Limited
12	MCB Bank Limited
13	United Bank Limited
	Small and Medium Enterprise (PBA subgroup under formation):
14	The First Micro Finance Bank Limited
	Private Banks:
15	Al Baraka Bank (Pakistan) Limited
16	Askari Bank Limited
17	Bank Alfalah Limited
18	Bank AL Habib Limited
19	Bank Islami Pakistan Limited
20	Burj Bank Limited
21	Dubai Islamic Bank Pakistan Limited
22	Faysal Bank Limited
23	Habib Metropolitan Bank Limited
24	JS Bank Limited
25	KASB Bank Limited
26	Meezan Bank Limited
27	NIB Bank Limited
28	Samba Bank Limited
29	Silkbank Limited
30	Soneri Bank Limited
31	Standard Chartered Bank (Pakistan) Limited
32	Summit Bank Limited (Formerly Arif Habib Bank Limited)
	Foreign Banks:
33	Barclays Bank PLC, Pakistan
34	Citibank N.A., Pakistan
35	Deutsche Bank AG, Pakistan
36	HSBC Bank Middle East Limited, Pakistan
37	HSBC Bank Oman S.A.O.G. (Formerly Oman International Bank S.A.O.G.)
	Non-Member Banks & Development Financial Institutions:
38	APNA Micro Finance Bank Limited (Formerly Network Micro Finance Bank

	Limited)
39	Bank of Tokyo Mitsubishi UFJ Limited, Pakistan
40	House Building Finance Company Limited
41	Industrial and Commercial Bank of China Limited
42	Industrial Development Bank Limited
43	KASHF Microfinance Bank Limited
44	NRSP Microfinance Bank Limited
45	Pak-China Investment Company Limited
46	Pak Oman Microfinance Bank Limited
47	Tameer Micro Finance Bank Limited
48	U Microfinance Bank Limited (Formerly Rozgar Microfinance bank Limited)
49	Waseela Microfinance Bank Limited
	Other Banks Listed at karachi Stock Exchange
50	Atlas Investment Bank
51	Escorts Bank limited
52	Ist.Dawood Bank
53	My bank
54	Orix Bank
55	PICIC Bank

http://www.pakistanbanks.org/members/listofmember.html. Retrieved 2/28/2014.

Table 2. **Sample Banks**

1	Allied Bank
2	Askari BankSPOT
3	Atlas Inv. Bank
4	Bank Al-Falah
5	Bank AL-Habib
6	Bank of Punjab
7	Escorts Bank
8	Faysal Bank
9	Habib Bank Ltd
10	Habib Metropol.Bank
11	Ist.Dawood Bank
12	KASB Bank Ltd.
13	MCB Bank Ltd.XD
14	Meezan Bank Ltd.XD
15	My bank
16	National Bank.
17	NIB Bank Limited
18	Orix Bank
19	PICIC Bank
20	St.Chart Bank
21	United Bank

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