FACTORS INFLUENCING DIVIDEND POLICY IN BANGLADESH: SURVEY EVIDENCE FROM LISTED MANUFACTURING COMPANIES IN DHAKA STOCK EXCHANGE

Mohammad Shahidul Islam[1], ATM Adnan[1]

[1] *BGMEA University of Fashion & Technology, Dhaka, Bangladesh*

ABSTRACT

A firm considers various factors when approaching a dividend policy decision. To analyze the determinants of dividend policy in the context of Bangladesh, questionnaire survey has been done from financial decision makers of sample companies. The nonparametric test and factor analysis is used for interpreting results. The research finding exhibits that in the first stage, the economic related factor, legal constraint factor, capital market related factor, residual policy factor, capital source factor and clientele factors are considered in dividend decision making. Then in the second stage, the companies follow the preceding years' pattern of dividend payment. In the next stage, dividend decision is made mainly on the level of earnings and liquidity. The observed result reveals that present earnings and liquidity are the most likely factors for the firm in deciding the payout policy.

KEY WORDS

factor analysis, EPS, DPR, MM model, Lintner model

JEL CODES

A100, A110

1   INTRODUCTION

Over the past half-century, numerous researchers have attempted to identify different factors influencing the payment of dividends. For example, in his seminal study, Lintner (1956) reports that past dividends and current earnings are the primary determinants of current dividends and managers prefer to maintain stable dividends and make periodic adjustments toward a target payout ratio. In a recent study, Brav et al. (2005) benchmark their findings to Lintner. They found that the perceived stability of future earnings still affects dividend policy but the link between dividends and earnings is weaker. They also found that managers contin-

ued to make dividend decisions conservatively but that the importance of targeting the payout ratio was not as high. Dividend payers also tend to smooth dividends from year to year and alter the amount of dividends in response to permanent changes in earnings. In their review of the literature on dividend determinants since Lintner, Baker and Nofsinger (2010) concluded that managers tend to share some commonly-held beliefs about the factors that affect dividend policy. The evidence suggests that the key determinants that influence dividend policy appear to have remained fairly stable over more than 50 years. Some of the more important and consistent determinants of payout policy are the pattern of past dividends, stability of earnings or cash flows, and the level of current and expected future earnings. Such firm-specific factors appear to be first-order determinants in making dividend decisions.

Since Black (1976b) referred to the interest in dividends by shareholders and the practice of firms paying dividends as the 'dividend puzzle,' researchers have tried to understand the determinants of dividend policy. Dividend policy remains a topic of ongoing debate among financial economists (Baker and Wurgler, 2002). Although most studies focus on US firms, a growing body of evidences exists on dividend policy outside of the US. These studies generally rely on economic modeling approaches instead of obtaining direct evidence about how investors and managers behave and perceive dividends. Researchers cannot fully identify factors influencing dividend policy by merely modeling market data, but must also use interactive tools such as interviews and surveys. To resolve the dividend puzzle, Chiang et al. (2006) concluded that the cardinal thrust of academic research must turn toward learning about the motivation for making managerial decisions and the perceptions upon which this motivation is based.

The board of directors takes the dividend decision along with other financial decision. So, their consideration about dividend decision is important. The opinion of dividend decision makers is taken with survey. The survey findings reveal the factors which are considered in dividend decision. The choice of influencing factors for questionnaire survey is based on the previous studies and opinion of the corporate top level managers. We conducted this study separately (financial sector and nonfinancial sector) to identify the factors in respective sectors.

In first world economies, the payout decision has been taken very cautiously by both investors and the administration of the business entity (Glen et al., 1995). Many prominent research works such as Lintner (1956), Miller and Modigliani (1961), Baker and Powell (2000) on the subject of the payout policy has been carried out with pragmatic proof concerning the determinants of payout strategy. Still, there is absence of uniform and cohesive clarification on what factors stimulate the dividend policy. This is known as the dividend puzzle in finance literature (Black, 1976a). Many hypotheses have been developed to solve this dilemma but the challenge still exists.

The most key question regarding dividend policy is: what are the determining factors of dividend policy? Researchers have come out with several findings regarding the determinants such as Kania and Bacon (2005), Al-Malkawi (2007), Gill et al. (2012) exhibits firm's profitability, while Anil and Kapoor (2008) shows Liquidity position as a significant determinants. In reality, determining the suitable dividend policy it is often a strenuous task of harmonizing many contradictory forces. The vital elements are not complicated to recognize but the relations involving those elements are multifaceted and complex to explain (Ross et al., 2008). Researchers have mostly concentrated on developed economies; however, further focus into the payout policy debate can be gained momentum by an assessment of developing countries, like Bangladesh. This research planned to identify the determinants of dividends payout policy for manufacturing listed companies in Dhaka stock exchange (DSE) and to verify whether the potential determinants identified in the literature applies in an emergent stock exchange like DSE.

In developing countries like Bangladesh, intensive research in this area is rare. So, this gap inspires us to conduct the primary survey for

identifying the factors which are considered in the time of dividend decision.

A number of prior studies have exhibits that dividend expenditure decision is subjective to various factors; it is sensible for the major stakeholders of a company to understand factors that influence company's dividend payout decisions. This research is projected to enhance conception of the stimulators of dividend payout within the manufacturing firms operating within the Bangladesh corporate environment.

In spite of ample amount of study, we still do not have any conclusive suggestion to the dividend dilemma (Baker et al., 2002).

There are considerable number of researches carried on the area of payout policy in context of different geography and industry but the definite driving force of dividend choice still remains inexplicable in corporate finance and advance investigation is essential to enhance the understanding of the subject (Baker and Powell, 1999). Hence lack of conclusive consensus resolution for the subject of dividend policy, result many researchers continuing to conduct investigate on this field in order to obtain a strong theoretical and pragmatic investigation on payout and solve this payout Dilemma.

Dividend distribution strategies for manufacturing companies listed at DSE differ significantly while operating under same business atmosphere. The questions how do the manufacturing companies decide on the rationality and rate of their payout impose the dilemma in dividend payout in Bangladesh context. These expose that there is no unified picture regarding dividend payout policy. Moreover it would also reasonable to argue that there are so many factors influence dividend policy and there is no certain rule of thumb for companies to decide on the rate of payout. In addition to that when pointing to the earlier experiential researches on dividend policy, most of them have been carried mainly on U. S. firms, developed countries, emerged market, Asia and western Africa but scarcely there is any proof has been recognized from Bangladesh perspective. So there is a need to observe the factors which determine the dividend payout policy for manufacturing companies listed at DSE, which may present additional insights for noteworthy factors to be evaluated.

The paper is structured as follow; the first section introduces about the dividend policy and its determinants. The second section represent the literature review (the contribution of previous researchers). The research methodology is clearly explained in Section 3. In the Section 4, analysis and its result are interpreted. The Section 5 and 6 represent conclusion and references respectively.

2   LITERATURE REVIEW

2.1   Empirical Evidence of Developed Countries

Lintner (1956) in his pioneering work on dividend policy interviewed managers from 28 enterprises and based on findings concluded that dividends are sticky, tied to long-term sustainable earnings, paid by mature enterprises, smoothed from year to year, and targeted a long-term payout ratio when determining dividend policy.

Baker et al. (1985) survey revealed that the first highly ranked determinant was the anticipated level of an enterprise's future earnings, the second factor was the pattern of past dividends and the third factor cited as important in determining dividend policy was the availability of cash. In particular, respondents were highly concerned with dividend continuity, and the respondents believed that dividend policy affects share value and dividend payments provide a signaling device of enterprise future prospects. Baker (2009) surveyed managements' views on stock dividends. The analysis was based on the responses of 121 responding enterprises. The major findings of the survey were that managers strongly agree on stock dividends which have a positive psychological impact, managers believe stock dividends enable them to express their confidence in the enterprise's

future prospects, and the dominant motive for paying stock dividends is to maintain the enterprise's historical practice.

Baker and Powell (2000) investigated the views of corporate managers of major US enterprises about the factors influencing dividend policy. They concluded that the most important determinants of an enterprise's dividend policy were the level of current and expected future earnings and the pattern or continuity of past dividends.

Dalmácio and Corrar (2007) surveyed on management views on corporate dividend policy in Portugal. This paper focuses on the dividend policy of the companies listed on the Lisbon Stock Exchange (LSE), from the viewpoint of their managers. It takes as its starting point the results obtained from a questionnaire answered by the Chief Executive Office and the Chief Financial Officer. Following Lintner (1956), which were later confirmed by the empirical studies of Fama and Babiak (1968), Baker et al. (1985) and Partington (1989), they came to the conclusion that the most significant factors were the dividend stability and the shareholders' satisfaction. The importance of signaling and clientele effects was also significant. By using the factorial analysis and the principal component analysis in their study, they tried to identify new variables, which presented positive correlation with the dividend policy. Two factors, which explain about 56% of the total variance, were found. The results suggest that the managers of the listed companies determine the respective dividend policy as passive residual, though they show concern about the signaling of the prospective profit, the quotation stability and taxes. Besides that, they seem to be worried about the dividend stability and alterations, which can be reversible, and, also, with the current practice in the sector to which the company belongs. Also, the relative importance of the amount of shares in the hands of managers and controlling groups is relevant, which can be associated with the degree of capital concentration. Finally, they can say that the fact that it is easy to obtain external capital in the future also conditions the dividend policy.

Brav et al. (2005) surveyed 384 chief financial officers and treasurers to determine key factors that drive dividend and repurchase policy. The survey unveiled that, except under extraordinary circumstances, managers have a strong desire not to cut dividends. As a result, for enterprises that pay dividends tend to be smoothed from year to year and linked to sustainable long-run changes in profitability.

Baker et al. (2006) reported the results of a 2004 survey from managers of dividend-paying Norwegian firms listed on the Oslo Stock Exchange about their views on dividend policy. Specifically, they identified the most important factors in making dividend policy decisions and managers' views about various dividend-related issues. The most important determinants of a firm's dividend policy are the level of current and expected future earnings, stability of earnings, current degree of financial leverage, and liquidity constraints. No significant correlation exists between the overall rankings of factors influencing dividend policy between Norwegian and U. S. managers. Norwegian managers express mixed views about whether a firm's dividend policy affects firm value. Respondents point to the possible role of dividend policy as a signaling mechanism. No support exists for the tax-preference explanation for paying dividends.

Mizuno (2007) surveyed the views of corporate managers on payout policy of Japanese enterprises listed in Tokyo Stock Exchange. The analysis of the responses obtained from 69 enterprises revealed that on payout policy enterprises put higher emphasis on dividends than on share repurchases, enterprises attach more importance to stable dividends than to performance linked dividends, and corporate managers recognized the relationship between dividends and an enterprise's value.

Vieira (2011b), Archbold and Vieira (2010) and Vieira (2011a) reported the empirical results of a questionnaire survey about corporate dividend policy addressed to finance directors of UK and Portuguese listed firms. Similar to other studies for example, Brav et al. (2005) in the US and Dhanani (2005) in the UK, they surveyed 313 finance directors in the UK

and 48 in Portugal to examine their views of and understanding about the dividend decision in order to compare practice with theoretical propositions to be found in the literature. Their survey results demonstrate similarities in the responses from the UK and Portugal, but also substantive differences, particularly in respect of the interaction between dividend and investment decisions and views about the signaling consequences of dividends.

Baker et al. (2011) surveyed on managers of firms listed on the Toronto Stock Exchange about their views on dividends. They found the perceptions of factors that influence dividend policy differ between managers of financial and nonfinancial firms. Industry classification also affects how managers view statements about the dividend pattern, dividend setting process, dividend policy and firm value, residual dividend theory, and explanations for paying dividends. However, they found weak, if any, multinational operations effect on manager perception of dividends. They concluded that researchers investigating dividends should partition the data by industry type and perhaps other firm characteristics to better understand the dividend puzzle.

2.2 Empirical Evidence of Developing Countries

Khurana (1985) surveyed the corporate dividend policy in India mailing structured questionnaire to the 215 enterprises. The survey and personal interviews, among others, revealed that dividend decision of enterprises was primarily governed by net profits and dividend paid in the previous year.

Manandhar (2002) surveyed the views of corporate executives on dividend policy and practice of corporate enterprises in Nepal. The major findings of the survey were that dividend decision was considered as discretionary decision, and lack of timely disclosure of relevant financial information and low rate of dividend payment were the major causes to the declining investors' confidence in the stock market.

Pradhan and Adhikari (2003) surveyed the views of financial executives of 50 large Nepalese enterprises. The survey findings, among others, revealed that major motive for paying cash dividends is to convey information to shareholders about favorable prospects of the enterprise and dividend decision is not a residual decision.

Deshmukh et al. (2013) analyzed the results of 2001 survey of 81 CFOs of bt-500 companies in India to find out the determinants of the dividend policy decisions of the corporate India. It uses factor analytic framework on the CFOs' responses to capture the determinants of the dividend policy of corporate India. Most of the firms have target dividend payout ratio and dividend changes follow shift in the long-term sustainable earnings. The findings on dividend policy are in agreement with Lintner's study on dividend policy. The dividend policy is used as a signaling mechanism to convey information on the present and future prospects of the firm and thus affects its market value. The dividend policy is designed after taking into consideration the investors' preference for dividends and clientele effect.

Basnet (2007) surveyed the views of managers on dividend policy of Nepalese enterprises listed at Nepal Stock Exchange Ltd. (NEPSE). The survey revealed that level of current and expected future earnings, liquidity constraints, projection about future state of the economy are the important factors in setting the enterprise's dividend policy in Nepal.

Adeyemi and Adewale (2010) studied on dividend policy. It is a pivot around which other financial policies rotate, hence central to the performance and valuation of listed firms. This is more because managers as decision makers are often confronted with the "dividend puzzle" – the problem of reconciling observed dividend behavior with economic incentives. This paper is motivated by the apparent dearth of empirical works on dividend policies and practices in Nigeria and hence aims to evaluate such policies and practices among selected Nigerian quoted firms. The result of the survey questionnaires shows that Nigerian investors' attitudes are consistent with those of the bird-in-the-hand theorists. Hence, Nigerian managers' beliefs are that dividend payouts have significant signaling effect both on share price and future prospects

of a firm. Consequently, they strive to maintain a consistent and uninterrupted dividend payout policy.

Asghar et al. (2011) surveyed the views of 60 financial executives on practices of dividend policy in Nepal. The results revealed that among others, stability of earnings, level of current earnings, and pattern of past dividends were the three important factors in order of their importance determining dividend policy of corporate sector.

Adhikari (2013) analyzed the perceptions of managers on dividend policy by surveying the views of 125 Managers of 66 companies listed at Nepal Stock Exchange. This survey is motivated by the observation that much of dividend policy theory is implicitly based on a capital market perspective. Out of 66 listed enterprises surveyed, 16 were from banks and 50 were from nonbanks. To examine whether views of managers on dividend policy differ between banking group and nonbanking group, chi-square analysis was used. Spearman's rank correlation coefficient was calculated to find out the degree of relationship between the responses of banking group and nonbanking group and it was tested for significance at 5 percent level of significance. Median value of responses for each statement of observation on dividend policy was computed to highlight the significance of observation. The results of this study indicate that the most important determinants of dividend policy in order are growth rate of enterprise's earnings, patterns of past dividends, availability of investment opportunities; managers have more emphasis on the stable dividend policy; and dividend policy influences the value of the enterprise in Nepal.

Haleem et al. (2011) examined the perceptions of managers of dividend-paying firms listed on Karachi Stock Exchange (KSE) on factors influencing dividend policy, issues relating dividend policy and the corporate governance practices. The survey shows that the most important factors that affect dividend policy are: the level of current earnings, the projection about the future state of the economy, the stockholders characteristics, concerns about the stock prices, need of current stockholders. From a practical perspective, there is little discrimination among the top ranked factors. All the surveyed firms formulate their dividend policies according to the theoretical model of Lintner (1956). The survey also shows that there is no difference in responses about these factors with respect to various titles of the respondents such as chief financial officer or Chief Exceptive Officer. The survey also finds strong support for the life cycling theory followed by agency theory, signaling theory and the catering theory respectively. The survey also shows the presence of corporate governance practices in the surveyed firms.

Khan et al. (2011b) surveyed the opinions of finance directors of 60 foreign listed companies out of 105 foreign listed companies on Karachi stock exchange in order to visualize their view about the dividend decision. The survey resulted into some very important points to be noted that include: the firms give importance to the dividend as it was in past and the growth is considered at time of declaration of dividend; the dividend decision is influenced by the competitor policy and the fear of signaling of shortage of profitable investment; and the results demonstrate that foreign listed companies are more concerned with dividend policy.

Alshammari (2012) surveyed the corporate managers of 123 Kuwaiti firms listed in the Kuwait Stock Exchange (KSE) in order to look into what affects dividend policies in Kuwait. The questionnaire based survey with 52.58 percent response rate led some important findings. The major findings of the survey were that future earnings was a paramount factor that affects the level of current dividends and the level of current liquidity is another important factor affecting dividends in Kuwaiti listed firms.

Baker and Powell (2012) surveyed managers of dividend-paying firms listed on the Indonesian Stock Exchange (IDX) to learn their views about the factors influencing dividend policy, dividend issues, and explanations for paying dividends. Of the 163 firms surveyed, 52 firms responded, resulting in a response rate of 31.9 per cent. The evidence showed that managers view the most important determinants of div-

idends is the stability of earnings and the level of current and expected future earnings. The evidence also showed that managers of Indonesian firms perceive that dividend policy affects firm value.

Naser et al. (2013) surveyed the managers of the companies listed on Abu Dhabi Securities Exchange. The survey based on the responses obtained through 34 filled up questionnaires revealed, among others, that external factors related to the economic conditions together with the state of the capital market and lending conditions are all important factors in formulating dividend policy, and restrictions imposed on them by debt providers together with current financial market crises are the most important factors that affect their dividend policy.

Abor and Fiador (2013) surveyed the opinions of managers on factors influencing dividends decision in Nigerian listed firms. The survey revealed, among others, that pattern of past dividends, the level of current earnings, current degree of financial leverage, availability of alternative source of capital, liquidity constraints such as availability of cash, growth and investment opportunities have a significant influence on dividend decision in Nigerian firms.

John (2018) studied to examine the opinions of managers on factors influencing dividends decision in Nigerian listed firms. The study employs survey research design and obtained primary data from selected managers through the administration of questionnaire. The result of the study reveals that pattern of past dividends, level of current earnings, current degree of financial leverage, availability of alternative source of capital, liquidity constraints such as availability of cash, growth and investment opportunities have significant influence on dividend decision in Nigeria. The study recommends that future researchers should investigate the relationship between dividend payment and firms' value.

Naser et al. (2013) studied to explore the perception of managers of companies listed on Abu Dhabi exchange about dividend policy. Thirty-four out of fifty-nine managers of companies listed on Abu Dhabi Securities Exchange were asked to reflect their experience about different aspects of dividend policy. The bird-in-the-hand theory received the highest support. The study extends limited previous research based on questionnaire and survey related dividend policy. It thus provides new evidence from an emerging and fast growing economy.

The reviews of aforementioned surveys expose that there are various surveys on dividend policy mostly in the context of developed countries, and there are very few and less comprehensive surveys of managers with inconclusive results on dividend policy conducted in the context of Bangladesh. Thus, there is a need of conducting another survey of managers' views covering the divergent aspects of dividend policy in Bangladesh. Thus, there is a need of conducting another survey of managers' views covering the divergent aspects of dividend policy in Bangladesh. The important factors of dividend policy are past dividend, earnings, competitors' dividend, types of shareholders, liquidity level, tax, availability of external fund, legal rules and regulations, economic volatility etc.

2.3 Research Gap

In above paragraphs, review of literatures illustrate that the payout determinants have been well investigated and acknowledged in first world economies, emerging markets like Malaysia, India, Pakistan and Saudi Arabia and few in Africa like Nigeria, south Africa and Ghana but there is scarcity of experiential studies in Bangladesh context. Therefore the research essential to fill the knowledge gap sustaining by practically identifying the significant factors concerning payout policy in Bangladesh for the manufacturing companies listed at DSE. Besides, a range of research from different country, economy and business context have been carried out to sort out the dividend dilemma. But due to the difference in legal, the tax and the accounting policy among the countries and across industries with mixed characteristics, there is no cohesive means to set out dividend payout strategy. These implying that dividend dilemma still exist and require research regarding determinants of dividend payout policy for the manufacturing companies

listed at DSE in Bangladesh. thus this study is modest input to resolve dividend dilemma.

At long last, most of existing research use multiple regressions but not panel data (cross sectional)/time series multiple regression. This study adopts panel data regression as well factor analysis in identifying the determinants of dividend payout policy for the manufacturing companies listed at DSE in Bangladesh.

This research has got substantial contribution in a number of ways. To begin with, it focuses on the decisive factors of managers while deciding on the dividend policy. The topic payout policy is very imperative as a lucrative and frequent corporate dividend policy followed by higher management would establish yardstick of the wellbeing of the firms thus more dividends can be dispersed to the equity holders while sustaining the inclusive wellbeing of the corporation. Secondly, the research exhibits a major part to existing academic and experiential facts concerning determinants of payout policy. Finally, the research may provide as an orientation and foundation for advance study on determinants of dividend payout policy actions in developing countries.

3   RESEARCH DESIGN

The present research is based on an empirical study of 108 listed firms from the DSE (Dhaka Stock Exchange) with the objective of identifying the determinants of dividend policy. The data have been collected through the primary mode using a structured questionnaire containing 28 statements based on 5 point likert scale where not important = 0, low important = 1, moderate = 2, important = 3, very important = 4. The respondents are asked to indicate the level of importance of the factors for determining their firm's dividend policy. The questionnaire has been prepared after reviewing the prior studies on dividend practices by decision maker. The survey follows the literature of Baker and Powell (2000), Brav et al. (2005), Baker et al. (1985) etc.

We have mailed the survey instruments to the chief financial officer (CFO) and Managing director, Chairman, Board of directors of each firm in September 2015. The mail included a cover letter and a stamped return envelope. The cover letter assured recipients that their answers would be confidential and released only in summary form. But we did not find satisfactory response. So, later, we went personally to the respondents of each firm. Finally, we have collected 108 respondents' opinion through questionnaire.

We have used a nonparametric test (χ^2 test) to determine whether the mean response for each of the 28 factors involving dividend policy differs significantly from 0 (not important). This study follows the test of Baker and Powell (2000), Baker et al. (1985) etc.

The factor analysis has been used to analyze the dividend determinants by decision maker. The Principal Components Analysis has been used to explore and confirm the interrelatedness between the occurrences of variables pertaining to dividend. The number of principal components to be retained has been decided based on Kaiser's criterion of Eigen value > 1 and Bartlett's test. The Bartlett's test of significance led to acceptance of significant principal components. The PCA with varimax rotation method has been used to maximize the sum of squared loading of each factor extracted in turn. It explained more variance than the loadings obtained from any other method of factoring. The factors loaded by variables having significant loadings of the magnitude of 0.5 and above have been interpreted.

Tab. 1: Variables used in the study

No.	Factors	No.	Factors
X_1	Pattern of past dividend	X_{15}	Preference for dividends rather than risky reinvestment
X_2	Desire to maintain a constant payout ratio	X_{16}	Cost of raising external funds
X_3	The dividend policies of competitors or other companies in the same industry	X_{17}	Availability of profitable investment opportunities for the firm
X_4	Stability of earnings	X_{18}	Availability of alternative source of capital
X_5	Level of current earnings	X_{19}	Investors opportunities for investing in another projects
X_6	Anticipated level of future earnings	X_{20}	Concern that a dividend change may provide a wrong signal to investors
X_7	A sustainable change in earnings	X_{21}	The future state of the economy
X_8	Attracting institutional investors to purchase the stock	X_{22}	Inflationary Consideration
X_9	The influence of institutional shareholders	X_{23}	Concern about maintaining a target capital structure
X_{10}	Attracting individual investors to purchase the stock	X_{24}	Legal rules and constraints
X_{11}	Concern about the stock price	X_{25}	Contractual constraints such as dividend restriction in debt contracts
X_{12}	Liquidity level	X_{26}	Accessibility to capital market
X_{13}	Tax positions of shareholders	X_{27}	Dilution of control & dilution of earnings
X_{14}	Category of shareholders and their expectations	X_{28}	Internal rate of return consideration i.e. reinvestment rate

4   RESULTS AND DISCUSSIONS

4.1   Nonparametric Test

From the Tab. 2, it is seen that the variable 3 (the dividend policies of competitors or other companies in the same industry) and variable 19 (investors opportunities for investing in another projects) are statistically insignificant at χ^2 test and the more than 40 percent respondents gave their opinion as not important and low important variables on dividend determinants.

Among the significant variables, the variables 5 (level of current earnings), 12 (liquidity level), 1 (pattern of past dividend), 4 (stability of earnings), 2 (desire to maintain a constant payout ratio) are the top five significant determinants in dividend decision. These reveal the picture of dividend determinants in our country. The companies mainly consider the current earnings and liquidity position of the company. They also maintain to follow the pattern of previous years dividend payment by paying stable dividend payout ratio. Others factors are relevant but the managers mainly consider the earlier to most significant factors. The results support the findings of Mizuno (2007), Khan et al. (2011b), Alshammari (2012), Baker and Powell (2012), Naser et al. (2013), John (2018), Manandhar (2002), Shah et al. (2010), Baker et al. (2011), Archbold and Vieira (2010).

We have conducted the factor analysis with the significant variables for identifying the relevant determinants of dividend decision.

4.2   Factor Analysis

The scale of measurement was tested using Cronbach α reliability test. It was found to be 0.810 which is considered a satisfactory level of reliability.

The tests have been conducted to know that whether the sample is adequate or not. The sampling adequacy is depicted in Tab. 4.

Tab. 2: Test of significance

	Level of importance (%)					Mean	Rank	χ^2 value	Asymp. Sig.
	Very important	Important	Moderate	Low important	Not important				
X_1	32.56	48.84	15.12	1.16	2.33	3.0706	3	72.25	0.000
X_2	16.28	26.74	47.67	19.77	0.00	2.9765	5	62.60	0.000
X_3	12.79	23.26	27.91	23.26	15.12	1.9294	23	5.51	0.239
X_4	40.70	41.86	13.95	2.33	1.16	3.1882	4	69.23	0.000
X_5	46.51	37.21	13.95	2.33	0.00	3.2941	1	42.93	0.000
X_6	15.12	39.53	30.23	13.95	1.16	2.5294	7	38.76	0.000
X_7	13.95	39.95	32.56	10.47	2.33	2.4941	9	41.20	0.000
X_8	4.65	12.79	38.37	30.23	13.95	1.6588	26	32.98	0.000
X_9	2.33	12.79	43.02	29.07	12.79	1.6353	28	44.23	0.000
X_{10}	12.79	24.42	33.72	15.12	13.95	2.0941	18	13.76	0.008
X_{11}	36.05	33.72	17.44	9.30	3.49	2.8824	6	36.09	0.000
X_{12}	50.00	34.88	8.14	5.81	1.16	3.2588	2	78.18	0.000
X_{13}	10.47	22.09	29.07	31.40	6.98	1.9647	21	20.51	0.000
X_{14}	11.63	22.09	34.88	24.42	6.98	2.0706	19	20.86	0.000
X_{15}	3.49	20.93	33.72	32.56	9.30	1.7529	25	31.55	0.000
X_{16}	6.98	19.77	39.53	25.58	8.14	1.9059	22	31.09	0.000
X_{17}	16.28	38.37	26.74	13.95	4.65	2.5059	8	30.70	0.000
X_{18}	10.47	37.21	29.07	18.60	4.65	2.2941	15	30.39	0.000
X_{19}	10.47	17.44	24.42	22.09	25.58	1.6471	27	6.55	0.161
X_{20}	12.79	37.21	30.23	15.12	4.65	2.3765	12	30.62	0.000
X_{21}	10.47	39.53	24.42	22.09	3.49	2.3412	14	33.07	0.000
X_{22}	6.98	29.07	32.56	23.26	8.14	2.0588	20	24.11	0.000
X_{23}	9.30	38.37	36.05	10.47	5.81	2.3765	13	43.07	0.000
X_{24}	20.93	26.74	26.74	20.93	4.65	2.4118	11	14.11	0.007
X_{25}	4.65	13.95	40.70	23.26	17.44	1.8588	24	27.37	0.000
X_{26}	6.98	31.40	41.86	12.79	6.98	2.1647	16	68.04	0.000
X_{27}	12.79	41.86	31.40	9.30	4.65	2.1412	17	42.83	0.000
X_{28}	12.79	41.86	31.40	9.30	4.65	2.4824	10	43.41	0.000

Tab. 3: Reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of items
0.810	0.809	26

Tab. 4: KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.632
Bartlett's Test of Sphericity:	
Approx. χ^2	940.922
df	378
Sig.	0.000

KMO recommends accepting value greater than 0.5 as barely acceptable and Bartlett recommends the accepting value less than 0.05. Since the accepting value for variables is 0.632 (more than 0.5) for KMO and 0.000 for Bartlett's test (less than 0.05), these measures indicate that the set of variables is appropriate for factor analysis and the analysis can proceed for next stage.

Factor analysis procedure is based on initial computation of a table of correlations among the variables that is, correlation matrix. This matrix is then transformed through estimation

Tab. 5: Total variance explained

Com-ponent	Initial Eigen values			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	5.122	18.294	18.294	5.122	18.294	18.294	3.004	10.729	10.729
2	3.123	11.153	29.447	3.123	11.153	29.447	2.688	9.601	20.331
3	2.421	8.648	38.095	2.421	8.648	38.095	2.620	9.358	29.688
4	2.217	7.917	46.012	2.217	7.917	46.012	2.270	8.108	37.796
5	1.568	5.601	51.613	1.568	5.601	51.613	2.023	7.226	45.022
6	1.462	5.220	56.833	1.462	5.220	56.833	1.797	6.417	51.440
7	1.410	5.035	61.869	1.410	5.035	61.869	1.777	6.347	57.786
8	1.261	4.503	66.372	1.261	4.503	66.372	1.628	5.815	63.601
9	1.124	4.015	70.387	1.124	4.015	70.387	1.514	5.407	69.008
10	1.014	3.623	74.009	1.014	3.623	74.009	1.400	5.001	74.009
11	0.790	2.821	76.830						
12	0.676	2.414	79.245						
13	0.652	2.329	81.574						
14	0.615	2.197	83.771						
15	0.579	2.068	85.839						
16	0.502	1.792	87.630						
17	0.445	1.590	89.221						
18	0.435	1.555	90.775						
19	0.415	1.484	92.259						
20	0.387	1.381	93.640						
21	0.328	1.171	94.812						
22	0.300	1.071	95.883						
23	0.274	0.980	96.862						
24	0.241	0.860	97.723						
25	0.216	0.772	98.495						
26	0.167	0.595	99.090						
27	0.138	0.492	99.582						
28	0.117	0.418	100.000						

Note: Extraction Method – Principal Component Analysis.

of a factor model to obtain the factor matrix containing the loadings for each variable on each derived factor. The Tab. 5 contains the information regarding the factors and the relative explanatory power as expressed by their eigen values. As per the latent root criteria of retaining the factors, those factors should be retained that have eigen value > 1. The Eigen values, the percentage of total variance, and rotated sum of squared loadings have been shown in Tab. 5. The factor matrix as obtained in the principal component analysis

has also been further subjected to Varimax Rotation. An examination of Eigen values has led to the retention of ten factors. These factors have accumulated for 10.72%, 9.60%, 9.35%, 8.10%, 7.22%, 6.41%, 6.34%, 5.815%, 5.40%, and 5.00% of variation. This implies that the total variance accumulated for by all ten factors is 74.00% and remaining variance is explained by other factors.

The application of Cattell (1966) Scree test (Fig. 1) resulted in acceptance of Factors. The Scree plot shows the factor eigen values in

Tab. 6: Rotated component matrix

	1	2	3	4	5	6	7	8	9	10
X_{14}	0.782	−0.048	0.152	0.166	0.080	−0.119	0.153	−0.032	0.179	−0.111
X_{13}	0.753	−0.044	0.022	0.019	0.192	0.008	−0.246	0.173	0.060	−0.010
X_8	0.609	0.098	0.045	0.200	−0.059	0.236	0.453	−0.192	−0.234	0.099
X_9	0.543	−0.113	0.119	0.086	0.183	0.526	0.100	0.108	−0.219	0.225
X_{15}	0.482	0.101	0.471	−0.026	0.254	0.001	0.163	−0.160	−0.075	0.251
X_4	0.090	0.800	0.000	0.062	−0.044	−0.101	−0.063	−0.225	0.023	0.023
X_5	−0.159	0.728	−0.171	0.130	0.040	−0.108	0.253	0.175	0.018	0.015
X_6	0.021	0.677	0.399	−0.066	0.059	0.162	0.107	0.106	−0.201	0.051
X_7	0.003	0.585	0.324	0.026	0.138	0.329	−0.022	0.216	0.210	−0.247
X_{12}	0.090	0.453	0.017	0.252	0.375	−0.445	−0.153	0.228	−0.155	−0.093
X_{21}	0.089	0.076	0.876	0.045	−0.037	0.007	0.010	0.108	0.029	0.040
X_{22}	0.132	0.026	0.658	0.362	−0.123	0.050	0.282	−0.135	−0.080	−0.095
X_{24}	−0.015	0.157	0.580	0.075	−0.034	0.248	0.209	0.162	0.146	−0.430
X_{26}	0.166	−0.117	0.100	0.803	0.054	0.118	0.102	0.201	0.058	−0.212
X_{27}	0.067	0.218	0.150	0.767	0.041	0.141	−0.060	−0.055	0.095	0.214
X_{28}	−0.241	0.330	0.169	0.468	0.077	0.150	0.088	0.266	0.273	−0.034
X_{10}	0.215	−0.078	0.053	−0.084	0.778	−0.011	0.270	−0.016	−0.133	−0.058
X_2	−0.057	0.138	−0.092	0.065	0.704	0.122	−0.244	−0.053	0.399	0.008
X_{11}	0.022	0.112	−0.137	0.471	0.644	−0.116	0.025	−0.150	−0.125	0.144
X_{25}	0.085	0.025	0.094	0.297	−0.024	0.835	0.018	0.085	−0.085	0.049
X_{16}	0.177	0.039	0.269	−0.001	0.146	0.162	0.742	−0.005	0.054	0.100
X_{17}	−0.084	0.207	0.063	0.088	−0.078	−0.195	0.629	0.495	0.062	−0.002
X_{18}	0.124	0.037	0.070	0.086	−0.088	0.119	0.052	0.643	0.096	0.085
X_1	0.074	−0.017	−0.014	0.104	−0.036	−0.124	0.035	0.096	0.857	0.134
X_{23}	−0.014	−0.312	0.374	0.332	0.131	0.243	0.282	0.075	0.481	0.126
X_{20}	−0.093	0.004	−0.008	0.019	−0.006	0.149	0.132	0.126	0.191	0.780

Notes: Extraction Method – Principal Component Analysis, Rotation Method – Varimax with Kaiser Normalization. Rotation converged in 14 iterations.

descending order. The eigen values of a factor represents the variance explained by each factor. An elbow in the Scree plot occurs at Factor 10, which indicates the point at which the inclusion of additional factors does not contribute significantly in explaining the variance of the data set. The results of the analysis are presented in the form of factor pattern matrix. Factors above the elbow of the plot are retained. A set of 10 Factors that were chosen accounts for about 74.009% of the variations in the data.

After studying the Eigen values for the components, the next step is to study the factor matrix and the respective factors loadings. The loadings above 0.45 have been considered for this study. For obtaining the rotated factor matrix, orthogonal rotation method (Varimax rotation) has been used. The results are displayed in Tab. 6.

After identifying the significant factor loadings, next step is to study the communalities of the variables, representing the amount of variance accounted for by the factor solution for each variable. It is generally assumed that variable with communalities > 0.5 should be retained for the study, the communalities of the variables have been shown in the Tab. 7.
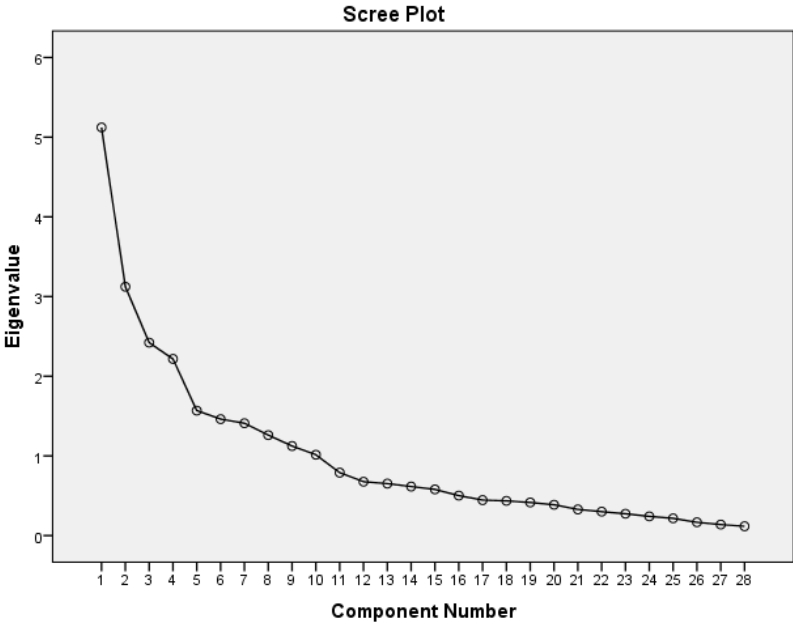
Fig. 1: Scree plot

Tab. 7: Communalities

	Initial	Extraction		Initial	Extraction
X_1	1.000	0.796	X_{15}	1.000	0.650
X_2	1.000	0.767	X_{16}	1.000	0.716
X_4	1.000	0.720	X_{17}	1.000	0.750
X_5	1.000	0.711	X_{18}	1.000	0.813
X_6	1.000	0.717	X_{20}	1.000	0.817
X_7	1.000	0.727	X_{21}	1.000	0.799
X_8	1.000	0.789	X_{22}	1.000	0.712
X_9	1.000	0.759	X_{23}	1.000	0.669
X_{10}	1.000	0.762	X_{24}	1.000	0.706
X_{11}	1.000	0.742	X_{25}	1.000	0.820
X_{12}	1.000	0.724	X_{26}	1.000	0.812
X_{13}	1.000	0.701	X_{27}	1.000	0.746
X_{14}	1.000	0.753	X_{28}	1.000	0.598

Note: Extraction Method – Principal Component
Analysis.

The principal component analysis using vari-max rotation of twenty six variables has led to the extraction of ten factors. Tab. 8 represents the final results of the study and reflects the extraction of the factors that are considered more influential by the respondents.

The rotated factor matrix has been shown in Tab. 6. This shows that variables understudy have constituted ten groups factors. These have been discussed in the following paragraphs.

Factor-I: Clientele factor. Factor-I explains 10.72% of the total variations existing in the variable set. This includes variables X_{14}, X_{13}, X_8, X_9 and X_{15}. This factor has significant factor loadings on these variables which have formed this major cluster. So, this factor provides a basis for conceptualization of a dimension, which may be identified as 'clientele factor'.

Factor-II: Earnings and liquidity factor. Factor-II explains 9.6% of the total variations existing in the variable set. This includes variables X_4, X_5, X_6, X_7 and X_{12}. This factor has significant factor loadings on these variables which have formed second important cluster. So, this factor provides a basis for conceptualization of a dimension, which may be identified as 'earnings and liquidity factor'.

Factor-III: Economic related factor. Factor-III explains 9.35% of the total variations existing in the variable set. This includes variables X_{21}, X_{22} and X_{24}. This factor has significant

factor loadings on these variables which have formed third cluster. So, this factor provides a basis for conceptualization of a dimension which may be identified as 'economic related factor'.

Factor-IV: Capital market related factor. Factor-IV explains 8.1% of the total variations existing in the variable set. This includes variables X_{26}, X_{27} and X_{28}. This factor has significant factor loadings on these variables which have formed fourth cluster. So, this factor provides a basis for conceptualization of a dimension, which may be identified as 'capital market related factor'.

Factor-V: Market price related factor. Factor-V explains 7.22% of the total variations existing in the variable set. This includes variables X_{10}, X_2 and X_{11}. This factor has significant factor loadings on these variables which have formed fifth cluster. So, this factor provides a basis for conceptualization of a dimension which may be identified as 'market price related factor'.

Factor-VI: Legal constraint factor. Factor-VI explains 6.41% of the total variations existing in the variable set. This includes variable X_{25}. This factor has significant factor loadings on these variables which have formed sixth cluster. So, this factor provides a basis for conceptualization of a dimension which may be identified as 'legal constraint factor'.

Factor-VII: Residual policy factor. Factor-VII explains 6.34% of the total variations existing in the variable set. This includes variables X_{16} and X_{17}. This factor has significant factor loadings on these variables which have formed seventh cluster. So, this factor provides a basis for conceptualization of a dimension which may be identified as 'residual policy factor'.

Factor-VIII: Capital source factor. Factor-VIII explains 5.81% of the total variations existing in the variable set. This includes variable X_{18}. This factor has significant factor loadings on these variables which have formed eighth cluster. So, this factor provides a basis for conceptualization of a dimension which may be identified as 'capital source factor'.

Factor-IX: Pattern of past dividend issue factor. Factor-IX explains 5.4% of the total variations existing in the variable set. This includes variables X_1 and X_{23}. This factor has

significant factor loadings on these variables which have formed ninth cluster. So, this factor provides a basis for conceptualization of a dimension which may be identified as 'pattern of past dividend issue factor'.

Factor-X: Signaling factor. Factor-X explains 5.00% of the total variations existing in the variable set. This includes variable X_{20}. This factor has significant factor loadings on these variables which have formed tenth clusters. So, this factor provides a basis for conceptualization of a dimension which may be identified as 'signaling factor'.

Finally, the rankings obtained on the basis of factor wise scores are shown in the Tab. 8.

Tab. 8: Rankings of the factors

Factor		Average score	Rank
I	Clientele	1.16	10
II	Earnings and liquidity	1.91	1
III	Economic related	1.59	5
IV	Capital market related	1.51	7
V	Market price related	1.85	3
VI	Legal constraint	1.54	6
VII	Residual policy	1.49	8
VIII	Capital source	1.47	9
IX	Pattern of past dividend issue	1.88	2
X	Signaling	1.84	4

Note: Data have been compiled by the researcher.

The ranking shows that Factor-II (earnings and liquidity) is most important factor that leads the dividend decision in Bangladesh. This factor includes variables X_4 (stability of earnings), X_5 (level of current earnings), X_6 (anticipated level of future earnings), X_7 (a sustainable change in earnings) and X_{12} (liquidity level). This implies that the managements of a company concern about the earnings and liquidity position of the company.

The second important factor is the 'pattern of past dividend issue' which indicates that the companies follow the previous trend of dividend payment in dividend decision. The third important factor is 'market price related factor' which implies that the companies take the dividend decision to maximize the market
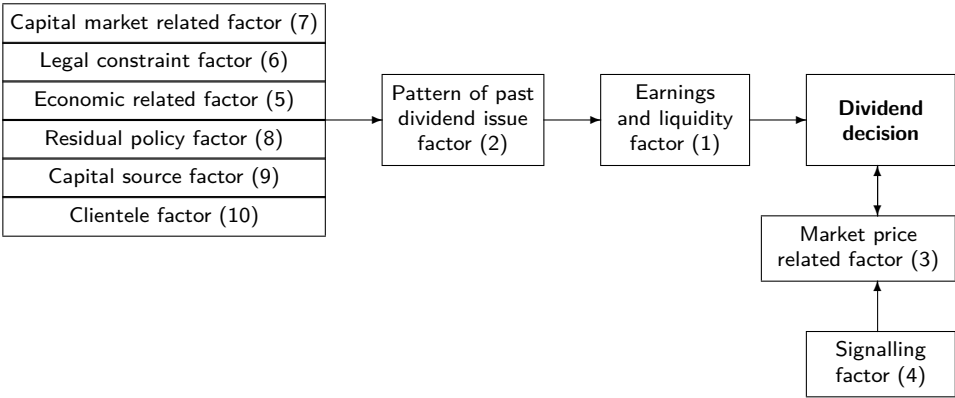
Fig. 2: Theoretical model framework

price of share. The other important factors are signaling factor and economic related factor.

But it is a great concern that the clientele issue is lowest position (10th) in ranking. The company has less concern about the categories of investors and they do not set the dividend policy to attract the specific group of investors.

On the basis of findings from χ^2 test and factor analysis, we have developed a theoretical framework which is discussed below.

We have developed this model framework on the basis of importance of the factors in determining the dividend decision. In the first stage, the factors – economic related factor, legal constraint factor, capital market related factor, residual policy factor, capital source factor, clientele factors are considered in dividend decision making. Then in the second stage, the companies follow the previous years' pattern of dividend payment. In the next stage, dividend decision is made mainly on the level of earnings and liquidity. On the other hand, dividend decision is closely related to market price of share. The market price of share is influenced by the signaling impact of dividend payment.

5   CONCLUSION

This study presents the factors of dividend decision which are considered before taking dividend policy. The companies mainly consider the current earnings and liquidity position of the company for dividend decision. They also maintain to follow the pattern of previous years dividend payment and stable dividend payout ratio. The findings support the findings of Baker et al. (1985), Baker (2009), Baker and Powell (2000), Deshmukh et al. (2013), Mizuno (2007), Khan et al. (2011a) and Alshammari (2012).

The broad literature on dividend payout strategy the US or European listed firms. But this research tries to observe whether the chosen factors have momentous roles to identify dividend payout policy for manufacturing firms listed in DSE or not. The result can be useful to other industries and have suitable recommendation for the managers.

Even though the paper uses a thorough panel data analysis for determining the variables effect payout policy, the existing factors and the number of samples entities can be further extended to other industries listed in the DSE and CSE in Bangladesh and can have new viewpoint to determine key determinants of dividend payout policy. Also, investigating the impact of other variables such as size of the firm, degree of leverage (both operating and financial), market risk and regulation may have

fascinating recommendations for policy makers. Thus, it requires profound analysis of DSE listed firms to decide what factors, in exact, have considerable roles and can be comprehensive for further study. In addition to that, the study conducted by using primary survey data from received from the chief financial officers of the selected firms and statistically analyzed. The primary data will more inclusively reveals the determinants of listed company's payout policy to their shareholders rather than secondary data which examine the variation of high or low dividend payout. Finally, the research did not include service, financial and foreign firms listed at DSE, this implies that the findings can only be generalized to firms similar to those who participated to the research and not fully reflected the dividend policy to all listed firms at DSE.

The outcome and the investigation have revealed some additional insights which need to be analyzed in future research. More firm related variables/factors than the ones incorporated in the research should have an impact on the payout rate. Hence it would be fascinating to carry out a similar research with diverse company chosen factors. For example the impacts of firm's age, business risk, ownership status, tax policy and structure formation on payouts policy. On the basis of the practical result in this study, it can be concluded that further related research would be desirable; further study including dividend paying and nondividend paying firm using other a regression techniques such as Tobit and Probit models to observe the determinant variables of dividend payment decisions of the manufacturing industry listed at DSE with using primary data from interview and questionnaires approach.

6   REFERENCES

ABOR, J. and FIADOR, V. 2013. Does Corporate Governance Explain Dividend Policy in Sub-Saharan Africa? *International Journal of Law and Management*, 55 (3), 201–225.

ADEYEMI, S. L. and ADEWALE, A. A. 2010. Evaluation of the Dividend Practices among Selected Nigerian Quoted Firms. *Maiduguri Journal of Accountancy and Finance*, 8 (1).

ADHIKARI, B. K. 2013. *Peer Influence on Dividend Policies*. Presented at the 2013 FMA Meetings.

AL-MALKAWI, H.-A. N. 2007. Determinants of Corporate Dividend Policy in Jordan: An Application of the Tobit Model. *Journal of Economic and Administrative Sciences*, 23 (2), 44–70.

ALSHAMMARI, T. Dividend Policies in Kuwait. In *Proceedings of the Las Vegas International Academic Conference*, pp. 356–361.

ANIL, K. and KAPOOR, S. 2008. Determinants of Dividend Payout Ratios: A Study of Indian Information Technology Sector. *International Research Journal of Finance and Economics*, 15, 55–63.

ARCHBOLD, S. and VIEIRA, E. F. S. 2010. Corporate Dividend Policies in Bank-based and Market-based Systems: Survey Evidence from UK and Portugal. *Portuguese Journal of Management Studies*, 15 (1), 35–64.

ASGHAR, M., SHAH, S. Z. A., HAMID, K. and SULEMAN, M. T. 2011. Impact of Dividend Policy on Stock Price Risk: Empirical Evidence from Equity Market of Pakistan. *Far East Journal of Psychology and Business*, 4 (1), 45–52.

BAKER, H. K. 2009. *Dividends and Dividend Policy.* John Wiley and Sons.

BAKER, H. K., DUTTA, S. and SAADI, S. 2011. Management Views on Real Options in Capital Budgeting. *Journal of Applied Finance*, 21 (1), 18–29.

BAKER, H. K., FARRELLY, G. E. and EDELMAN, R. B. 1985. A Survey of Management Views on Dividend Policy. *Financial Management*, 14 (3), 78–84.

BAKER, H. K., MUKHERJEE, T. K. and PASKELIAN, O. G. 2006. How Norwegian Managers View Dividend Policy. *Global Finance Journal*, 17 (1), 155–176.

BAKER, H. K. and NOFSINGER, J. R. (eds.). 2010. *Behavioral Finance: Investors, Corporations, and Markets.* John Wiley and Sons.

BAKER, H. K. and POWELL, G. E. 1999. How Corporate Managers View Dividend Policy. *Quarterly Journal of Business and Economics*, 38 (2), 17–35.

BAKER, H. K. and POWELL, G. E. 2000. Determinants of Corporate Dividend Policy: A Survey of NYSE firms. *Financial Practice and Education*, 10, 29–40.

BAKER, H. K. and POWELL, G. E. 2012. Dividend Policy in Indonesia: Survey Evidence from Executives. *Journal of Asia Business Studies*, 6 (1), 79–92.

BAKER, H. K., POWELL, G. E. and VEIT, E. T. 2002. Revisiting the Dividend Puzzle: Do All of the Pieces Now Fit? *Review of Financial Economics*, 11 (4), 241–261.

BAKER, M. and WURGLER, J. 2002. Market Timing and Capital Structure. *The Journal of Finance*, 57 (1), 1–32.

BASNET, S. K. 2007. *Dividend, Earnings and Stock Prices: A Case of Nepal*. PhD Dissertation, Tribhuvan University, Kathmandu.

BLACK, F. 1976a. The Dividend Puzzle. *Journal of Portfolio Management*, 2 (2), 5–8.

BLACK, F. 1976b. Studies of Stock Price Volatility Changes. In *Proceedings of the 1976 Meeting of the Business and Economic Statistics Section*, pp. 177–181.

BRAV, A., GRAHAM, J. R., HARVEY, C. R. and MICHAELY, R. 2005. Payout Policy in the 21st Century. *Journal of Financial Economics*, 77 (3), 483–527.

CATTELL, R. B. 1966. The Scree Test for the Number of Factors. *Multivariate Behavioral Research*, 1 (2), 245–276.

CHIANG, K., FRANKFURTER, G. M., KOSEDAG, A. and WOOD, B. G. 2006. The Perception of Dividends by Professional Investors. *Managerial Finance*, 32 (1), 60–81.

DALMÁCIO, F. Z. and CORRAR, L. J. 2007. A concentração do controle acionário e a política de dividendos das empresas listadas na Bovespa: uma abordagem exploratória à luz da teoria de agência. *Revista de Contabilidade e Organizações*, 1 (1), 16–29.

DESHMUKH, S., GOEL, A. M. and HOWE, K. M. 2013. CEO Overconfidence and Dividend Policy. *Journal of Financial Intermediation*, 22 (3), 440–463.

DHANANI, A. 2005. Corporate Dividend Policy: The Views of British Financial Managers. *Journal of Business Finance and Accounting*, 32 (7–8), 1625–1672.

FAMA, E. F. and BABIAK, H. 1968. Dividend Policy: An Empirical Analysis. *Journal of the American Statistical Association*, 63 (324), 1132–1161.

GILL, A., BIGER, N. and MATHUR, N. 2012. Determinants of Equity Share Prices: Evidence from American Firms. *International Research Journal of Finance and Economics*, 90, 176–192.

GLEN, J. D., KARMOKOLIAS, Y., MILLER, R. R. and SHAH, S. 1995. *Dividend Policy and Behavior in Emerging Markets: To Pay or Not to Pay*. IFC Discussion Paper No. 26.

HALEEM, F., IJAZ-UR-REHMAN and JAVID, A. Y. 2011. The Dividend Policy in Manufacturing Sector of Pakistan: The Perception of Corporate Managers. *Journal of Economics and Behavioral Studies*, 3 (1), 63–75.

JOHN, A. O. 2018. Managers' Perception of Factors Influencing Dividends Decision in Nigeria. *International Journal of Advances in Management and Economics*, 2 (2), 135–140.

KANIA, S. L. and BACON, F. W. 2005. What Factors Motivate the Corporate Dividend Decision? *ASBBS E-Journal*, 1 (1), 97–107.

KHAN, K. I., AAMIR, M., QAYYUM, A., NASIR, A. and KHAN, M. I. 2011a. Can Dividend Decisions Affect the Stock Prices: A Case of Dividend Paying Companies of KSE. *International Research Journal of Finance and Economics*, 76, 69–74.

KHAN, N. U., BURTON, B. M. and POWER, D. M. 2011b. Managerial Views About Dividend Policy in Pakistan. *Managerial Finance*, 37 (10), 953–970.

KHURANA, P. K. 1985. *Corporate Dividend Policy in India*. Panchsheel Publishers.

LINTNER, J. 1956. Distribution of Incomes of Corporations Among Dividends, Retained Earnings, and Taxes. *The American Economic Review*, 46 (2), 97–113.

MANANDHAR, K. D. 2002. *Corporate Dividend Policy and Practice in Nepal*. PhD Dissertation, Tribhuvan University, Kathmandu.

MILLER, M. H. and MODIGLIANI, F. 1961. Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business*, 34 (4), 411–433.

MIZUNO, M. 2007. Payout Policy of Japanese Firms: Analysis on the Survey of Four Industries Listed on the Tokyo Stock Exchange. *Pacific Economic Review*, 12 (5), 631–650.

NASER, K., NUSEIBEH, R. and RASHED, W. 2013. Managers' Perception of Dividend Policy: Evidence from Companies Listed on Abu Dhabi Securities Exchange. *Issues in Business Management and Economics*, 1 (1), 1–12.

PARTINGTON, G. H. 1989. Variables Influencing Dividend Policy in Australia: Survey Results. *Journal of Business Finance and Accounting*, 16 (2), 165–182.

PRADHAN, R. S. and ADHIKARI, N. 2003. A Survey of Dividend Policy and Practices of Nepalese Enterprises. In PRADHAN, R. S. *Research in Nepalese Finance*, pp. 220–250. Buddha Academic Pub.

ROSS, S. A., WESTERFIELD, R. and JORDAN, B. D. 2008. *Fundamentals of Corporate Finance*. Tata McGraw-Hill Education.

SHAH, S. Z. A., YUAN, H. and ZAFAR, N. 2010. Earnings Management and Dividend Policy: An Empirical Comparison between Pakistani Listed Companies and Chinese Listed Companies. *International Research Journal of Finance and Economics*, 35, 51–60.

VIEIRA, E. F. S. 2011a. Investor Sentiment and the Market Reaction to Dividend News: European Evidence. *Managerial Finance*, 37 (12), 1213–1245.

VIEIRA, E. F. S. 2011b. Firm-Specific Factors and the Market Reaction to Dividend Change Announcements: Evidence from Europe. *Marmara Journal of European Studies*, 19 (1), 1–25.

AUTHOR'S ADDRESS

Mohammad Shahidul Islam, Department of Business Administration, BGMEA University of Fashion & Technology (BUFT), Nishatnagar, Turag, Dhaka-1230, e-mail: mohammadshahidul.islam@buft.edu.bd

ATM Adnan, Department of Business Administration, BGMEA University of Fashion & Technology (BUFT), Nishatnagar, Turag, Dhaka-1230, e-mail: atmadnan@buft.edu.bd