MEASURING FIRMS’ INTRINSIC VALUES IN AN EMERGING ECONOMY: EVIDENCE FROM BANGLADESH

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ABSTRACT

This study considered three parameters to measure firms’ intrinsic values: corporate governance, paid-up capital size, and dividend payout policy. These were used as independent variables, and market interest rate was used as the control variable. To measure these parameters, daily trade data was observed from both the Dhaka Stock Exchange (DSE) and the Chittagong Stock Exchange (CSE) data repositories and covered a total of 1475 firm years’ disclosures from 2013 to 2017 to conclude the analysis. The study revealed that there is a significantly negative correlation with firms’ intrinsic values and corporate governance due to the majority of firms failing to adhere to corporate governance guidelines and therefore generate higher intrinsic values. Also, firms in emerging economies are characterized by a high level of family ownership and lack of transparency. Similarly, there is a significant negative relationship with firms’ intrinsic values and higher capital-based firms, and there is no significant relationship with the firms’ intrinsic values and dividend payout policies in the emerging economy.

Contribution/Originality: This study contributes to the existing literature on firms’ intrinsic values by using new estimation methodology to investigate the intrinsic values of two different capital-based firms. This study is one of very few that has investigated firms’ intrinsic values by considering corporate governance, paid-up capital, and dividend payout policy.

1. INTRODUCTION

Intrinsic value refers to the value of a stock based on the analytical judgment of perceived characteristics inherent in the investment and the amount that an investor considers based on the evaluation of an organization’s available information (Lai & Wong, 2015; Tiwari, 2016). Corporate governance is a mechanism that attempts to ensure shareholder’s rights (e.g., Gompers, Ishii, & Metrick, 2003), their roles, and equitable treatment by maximizing shareholders’ wealth that leads to enhancing firms’ intrinsic values over the period. Moreover, the intrinsic value of a stock can also be controlled by a firm’s capitalization and number of floating stocks (e.g., Huang & Cheng, 2015) as well as their dividend payout policy. Thus, the question is whether corporate governance has the power to increase the intrinsic value of the stock? If it does, then how are the capital size and dividend payout policies associated with intrinsic values?
According to the Board (2010), the principal objective of financial reporting is to circulate economic information to stakeholders to support their investment decision making. The reported earnings in the financial statements are the key source of information for investors, analysts and managers. Importantly, theoretical argument advocates that by producing quality financial reporting, corporate governance diminishes information asymmetry and reduces the risk of misinformation (e.g., Latif, Bhatti, & Raheman, 2017).

Managers possess more internal information than the shareholders due to the isolation of ownership and control, which leads to information asymmetry. According to Watts & Zimmerman (1986), the theory of positive accounting infers that managers act according to their own interests, which instigates opportunistic behavior. Good governance can restrain opportunistic behavior, reduce the risks of degraded earnings quality (Akileng, 2014) and motivate managers to report quality earnings, which can potentially lead to higher intrinsic values. Also, the corporate governance in emerging countries offers weaker protection for investors (e.g., Aldamen & Duncan, 2016; Gaio & Raposo, 2014), which hampers firms’ intrinsic values.

In emerging economies, most of the bourses are flawed due to lack of proper implementation of corporate governance guidelines, disassembly of market regulators, and economic conditions (e.g., Cheung et al., 2014; Saleh, 2010). Corporate governance is a regulatory structure that directs and controls all activities of an organization relating to corporate goals and shareholders’ values. Seemingly, good corporate governance practices provide proper incentives to shareholders, directors, and managers. Also, the presence of an effective corporate governance system within companies and across the economy as a whole helps to provide a degree of confidence that is necessary for the efficient functioning of a market economy (Gompers et al., 2003).

In an efficient capital market, investors can trust stock prices due to the availability of comprehensive information that reflects equity price (e.g., Goedhart, Koller, & Wessels, 2015). However, the determination of the price depends on mutual agreement between buyers and sellers and the market portfolios. Additionally, the price valuation approach of a market portfolio depends on an individual investor’s valuation and acceptance (Jiang, Lee, & Zhang, 2005; Lai & Wong, 2015). The valuation system depends on information disclosure and expectation that leads to investment in a particular stock. Thus, investment returns depend on the firm’s value and corporate governance practices (Gompers et al., 2003) as well as market perfection (Ang, Goetzmann, & Schaefer, 2011). Investors compare the current market price and the estimated future price of a stock by considering corporate performance, future growth potential, and dividend payout policy of a particular company. Conversely, in an inefficient capital market in an emerging economy, such as Bangladesh, the valuation approaches and expectations are significantly different to those of an efficient market.

Emerging economies consist of unsophisticated and less developed financial markets as well as inefficient capital markets where commercial banks play a pivotal role in financing (Al-Najjar & Clark, 2017). These economies are also characterized by high information asymmetries, high concentration of family ownership (Zulfiqar, Yousaf, Islam, & Ghafoor, 2021), less developed legal markets, and political and economic instability. Claessens & Yurtoglu (2013) argued that emerging markets have low institutional ownership, less diversified financial resources, and inadequate advancement of financial markets. However, the distinctive features of emerging economies might influence investors and lenders to distinguish themselves from investment in stock decisions of developed countries.

Emerging countries’ stock markets have gone through a radical reformation with the introduction of corporate governance guidelines and the implementation of regulatory bodies and regulations. For example, China went through a radical reform of board independence in 2001, a stock restructure in 2005 (Li, Lu, Mittoo, & Zhang, 2015) and renewed corporate governance guidelines in 2006. Following this, Bangladesh adopted corporate governance guidelines in 2006 to establish a better governance system to ensure shareholders’ rights, directors’ accountability and responsibility, and protection of investors’ interests. Moreover, emerging countries possess a higher rate of information asymmetry that significantly increases agency costs, which leads to opportunistic behavior and the engineering of earnings by managers. This, in turn, may promote inflation of stock prices.
targeting an artificial shortage of floating shares or showing higher dividend prospects of firms and exploiting investors (Ball & Shivakumar, 2008; Chen, Francis, & Jiang, 2005). However, studies on the relationship between corporate governance and a firm’s intrinsic value are in their infancy meaning that extensive research is yet to be carried out in this area (Grove & Lockhart, 2019; Hassouna & Ouda, 2017; Tiwari, 2016).

Many research studies have been conducted separately on corporate governance, firm capital size, and dividend payout policies to measure a firm have or stocks intrinsic values. However, none of the research has been conducted by merging these three aspects to evaluate the intrinsic values of the firms or stocks across the global economy. In this respect, the objective of this study is to investigate the relationships among three variables, i.e., corporate governance, firm capital size, and dividend payout policies, and create significant influences to determine the intrinsic values of firms or stocks in an emerging economy such as Bangladesh.

To conduct the study, researchers considered 295 out of 345 listed instruments on the Dhaka and Chittagong stock exchanges from 2013 to 2017, and a total of 1475 firm years were observed to carry out the study. The remaining 50 listed instruments, such as mutual funds, corporate bonds and debentures, were omitted as these are not relevant to this research. The reasons for considering this particular time period were because major restructuring processes had been initiated in both of these bourses, the number of stocks increased due to stock splits bringing down the face value of each stock to equalize prices, the introduction and implementation of the demutualization act, and the introduction and implementation of corporate governance.

This contribution of this research to the corporate governance and corporate finance literature is threefold. First, by using 1475 observations of emerging market data we extend the previous research on intrinsic values in the context of corporate governance infancy, provide valuable insight into the usefulness of good corporate governance, and curb information asymmetry to produce a higher intrinsic value for firms. Second, we investigate how lower or higher paid-up capital (floating stock) can influence stock prices and impact intrinsic values. Finally, we show how firm’s dividend payout policy is associated with firm intrinsic value.

Our paper is constructed as follows: In the next section we present the literature review and explain our principal research hypotheses. In section three, we discuss the sample and methodology employed to conduct the research. Section four contains the analysis of the empirical results, and we conclude with remarks and implications of the investigation.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Corporate Governance and Firm Intrinsic Value

Agency theory predicts that information asymmetry can fuel managers’ opportunistic behavior (Jensen, 1986; Jensen, 1994) and instigate them to report abnormal earnings, which may influence a firm’s intrinsic value in the short run in both emerging and advanced economies. However, the monitoring role of corporate governance ensures an efficient board and enhances earnings quality (Karamanou & Vafeas, 2005). For example, Chinese independent directors disclosed important board decisions to the public (Habib & Jiang, 2015), which reduced information asymmetry and managers’ opportunistic behavior (Alves, 2014) and may also help firms to achieve better intrinsic value in the long run. Diverse ownership concentration also helps to reduce information asymmetry and managers’ opportunistic behavior (Bao & Lewellyn, 2017; Vintilă, Gherghina, & Nedelescu, 2014), which may affect firms’ intrinsic values. Board diversity also plays an important role in producing and reporting quality earnings. For example, female directors on the board provide better oversight over executives and assist in improving the quality of earnings (Adams & Ferreira, 2009; Srinidhi, Gul, & Tsui, 2011). Also, female directors show more attentiveness in monitoring and take positions on audit and corporate governance committees, which leads to transparent reporting and improved earnings quality (Srinidhi et al., 2011). Consequently, investors become optimistic about the firm’s activities and could influence the firm’s intrinsic value. Ownership concentration is also a part of the governance mechanism. It can motivate firms to report better quality earnings and assist firms...
in financial policy concerning the optimum capital structure and better dividend policy. For example, foreign ownership of firms in emerging countries is considered as sophisticated investment. Investors possess better skills and knowledge to analyze financial statements and they can play a better monitoring role regarding managers’ opportunistic behavior (Bao & Lewellyn, 2017; Vintilă et al., 2014), thus foreign ownership contributes to better reporting of quality earnings (Vintilă et al., 2014). However, external ownership concentration plays a significant role in reporting quality earnings through monitoring the information (Ajinkya, Bhojraj, & Sengupta, 2005; Chung & Zhang, 2011). Similarly, the role of the audit committee as a component of corporate governance improves the earnings quality by selecting a trusted and ethical auditor, ensures high quality of audits, examines the adequacy of internal controls, oversees the internal audit activities, and appraises accounting disclosure and policy choices (Sulaiman, Yasin, & Muhamad, 2018). Additionally, directors’ independence and expertise together with interaction with audit reports lead to better earnings quality (Srinidhi et al., 2011). Under these conditions, a firm’s intrinsic value needs to be justified in emerging economies.

Corporate governance in Bangladesh was initially established for listed companies in 2006 based on “comply or explain”, which the Bangladesh Securities and Exchange Commission (BSEC) is also based on. This regulation came due to the stock exchange failures in 1996 and a series of corporate failures in 2002 following the Sarbanes Oxley Act (SOX) of 2002 in the USA (e.g., Safiuddin, 2018). The corporate governance guidelines (CGG), however, initially contained 37 conditions under five different heads. The five heads include the Board of Directors (BOD); Chief Financial Officer (CFO); Head of Internal Audits and Company Secretary; Audit Committee, External or Statutory Auditor; and Reporting and Compliance of Corporate Governance in Bangladesh. The Corporate Governance Guidelines 2006 was replaced by the Corporate Governance Guidelines 2012 with 95 conditions set as mandatory instead of “comply or explain” to improve the corporate governance status of listed companies. The application of the word compliance by the CGG was stated to make it compulsory to issue the right shares in 2013 and an initial public offering in December 2015 (Bala, 2018). Recently, the CGG 2012 was replaced by the new Corporate Governance Code 2018, which contains 166 conditions to ensure four aspects of good corporate governance – fairness, accountability, transparency and responsibility.

The corporate legal framework of Bangladesh comprises different rules, regulations, acts, ordinances, orders, and notifications issued by other government agencies such as the Bangladesh Bank, the Securities and Exchange Commission of Bangladesh (BSEC), the National Board of Revenue (NBR) and other government agencies, and private sector organizations such as the stock exchanges, Chamber of Commerce, and other self-regulatory agencies in addition to legal and regulatory frameworks of corporate governance in Bangladesh.


The presence of effective corporate governance helps to provide a degree of confidence among different stakeholders (Gompers et al., 2003; OECD, 2004b). It also augments shareholders’ economic wealth by disseminating timely and accurate corporate information, corporate accountability to shareholders, management, and other stakeholders (Healy, 2002). The term “effective corporate governance” is the culmination of sufficient shareholders rights, which include independent voting, active participation and responsibility; quality of accounting
standards, the professionalism of auditors; the ability to write effective rules and regulations; and monitoring the process of governing corporate financial practices by legislators (van der Walt & Ingley, 2003).

However, a tendency to practice corporate governance in emerging economies is not as prominent as it is in western economies as firms in emerging economies are characterized by high family ownership and lack of transparency (Cheung et al., 2014). Empirical research conducted in the East Asian capital market by Cheung et al. (2014) revealed that the majority of firms practiced poor corporate governance that led to reduced investment and financing decisions leading to low or no intrinsic value to shareholders. Asian capital markets are also quite different from their western counterparts (Cheung et al., 2014; Gompers et al., 2003). Market disciplinary mechanisms cannot function properly in an emerging market because of the concentration or the level of family ownership that leads to a slower implication of CG in an emerging economy (Cheung et al., 2014). As another complication, the enforcement mechanisms in many Asian economies are relatively weaker than those in western countries (Zhuang, Edwards, & Capulong, 2001).

Effective corporate governance can generate a good public image that can diminish short-term profit (Kim, Lee, & Yang, 2013; OECD, 2004b). Conversely, increasing public image policy through improving corporate governance practices can generate long-term earnings (Jo & Kim, 2008; Kim et al., 2013; Vander & Willekens, 2008) that can generate a higher intrinsic value of the firm (Letza, Sun, & Kirkbride, 2004).

Adopting good corporate governance practice strongly improves shareholders’ rights and leads to an increase in firm value and profits, sales growth, and a decrease in capital expenditures (Cheung et al., 2014; Gompers et al., 2003) resulting in more dividend distribution among investors (Chong, Guillen, & Lopez-de-Silanes, 2009). Moreover, a firm with good governance has a tendency to enhance its intrinsic value and has a positive impact on the value of stocks (Chong et al., 2009; Parigi, Pelizzon, & Von Thadden, 2015). Conversely, poor shareholder rights create agency conflicts, which, in turn, lead to low firm value in the long run (Cheung et al., 2014; Gompers et al., 2003). Thus, we developed the following hypothesis to support our argument:

**H**: Corporate governance (CG) practice can increase the intrinsic value of a firm.

### 2.2. Firm Capital Size and Intrinsic Value

Traditionally, an economy offers more significant investment opportunities to younger and small capital firms to secure growth in the long term as younger and lower capital firms provide higher returns than their capital cost. For that reason, the firms’ stock prices move faster than their earnings (Irons, 2014). Also, firms with smaller floating capital revealed higher sensitivity. This is due to easy manipulation, where a group of investors can create artificial demand for the stocks in the short term for higher return, which generates a high intrinsic value of the stocks (Huang & Cheng, 2015; Tookes, 2008). Empirical research was conducted by Saleh (2010) on the Amman stock market, which revealed that small capital-based firms’ stock delivered a higher return than large capital-based firms. According to Lynch & Rothchild (2012), firms with little capital provide a greater return than higher capital-based firms due to the low volume of shares that can incur unexpected price hikes.

Conversely, there is a lower possibility of manipulating the stock prices of mature firms as a result of higher capital size (Igan & Pinheiro, 2012).

In general, a firm’s capital size increases over a long period of the corporate life cycle because of the continued retention of profit for future growth momentum. Moreover, an investor makes investment decisions based on a firm’s disclosure and previous stock prices and estimates the future intrinsic value. However, manipulation of stocks happen when the disclosers send unclear messages to investors (Allen & Gale, 1992). In addition, small floating common stocks and low capital-based firms’ stocks can be managed to create additional demand and potential manipulation as speculators speculate future demand and price of a stock to make a profit (Allen & Gale, 1992) resulting in high intrinsic value. Conversely, it is challenging to manipulate the high volume of floating common
stock prices as a supply of stock is high compared to demand (Huang & Cheng, 2015) leading to low or no intrinsic value. Therefore, we hypothesize that:

**H:** A firm’s capital size has an impact on intrinsic value.

### 2.3 Dividend Payout Composition and Firm Intrinsic Value

Dividend payments signal the potential value of the stocks (Bhattacharya, 1979; Crawford, Franz, & Lobo, 2005; Dewri & Islam, 2015). The dividend signaling theories predict that in the presence of information asymmetry between investors and managers, investors value firms and the stock price based on future profitability, cash flows and managerial performance, where dividend policy acts as an effective channel to convey operating performance (Dewri & Islam, 2015).

According to Besley & Brigham (2008), dividend payout policy can provide information about an investor’s behavior concerning wealth maximization of their investment. The dividend payout policy creates a positive impact on the valuation of stock prices (e.g., Bar-Yosef & Kolodny, 1976). Empirical research was conducted by Ivanovski, Ivanovska, & Narasanov (2015) on the Macedonian Stock Exchange, which revealed that dividend payment significantly influences the stock prices of the firms in the emerging markets and were staggered over the stocks’ intrinsic values. Mei, Scheinkman, & Xiong (2005) carried out psychological research on the Chinese capital market and identified that stock price exceeds its fundamental values when the investors can predict the future dividend based on historical information.

Another study was conducted by Swarnalatha & Babu (2017) on the Indian Stock Market, which revealed a positive correlation between dividend payment policy and share price movement. In this respect, a firm’s intrinsic value is the current value of all cash payments to the stocks, including the dividend and the proceeds from the sale of stocks and discounted from the adjusted risk level (Lehmann (1993). If the intrinsic value exceeds the current market price, that stock is considered an undervalued stock and can be regarded as a good investment (Baginski & Wahlen, 2003). Conversely, firms with lower intrinsic values generate underpriced stock returns compared to the current market price that discourages investors from investing in that particular stock and attempting to buy at discounted prices (Bodie, Kane, & Marcus, 2014).

**H:** The dividend payout has an impact on the intrinsic value.

### 3. EMPIRICAL METHODOLOGY

This research attempts to gauge the effect of corporate governance, capital size, and dividend payout on the intrinsic value of a firm. The study focuses on a firm’s intrinsic value based on the practice of corporate governance, firm capital size, and dividend payout policy. To conduct the study, researchers considered 295 out of 345 listed instruments on the Dhaka and Chittagong stock exchanges from 2013 to 2018, and a total of 1475 of firm years (2013 to 2017) were observed to carry out the study. The remaining 50 listed instruments, such as mutual funds, corporate bonds and debentures were omitted as they are not relevant to this research. The main reasons for considering this particular time period were because major restructuring processes had been initiated in both of these the number of stocks increased due to stock splits bringing down the face value of each stock to equalize prices, the introduction and implementation of the demutualization act, and the introduction and implementation of corporate governance. This study also investigates whether dividends (stock or cash) have the power to influence share price increases and intrinsic values of the stocks. Figure 1 shows the logical relationship between the variables.
3.1. Variables and Their Measurements

3.1.1. Intrinsic Value Measurement

There is no consensus regarding a specific technique for measuring intrinsic value. Extant literature shows that there are several widely used intrinsic valuation models (e.g., Tiwari, 2016). These valuation models are based on accounting income, which is also fragmented into discounted cash flow models (Berkman, Bradbury, & Ferguson, 2000) and dividend discounting models (Bernard, 1995) as well as abnormal earnings or residual income models (Tiwari & Singla, 2015). Also, there are some market-oriented models such as price earnings multiples (e.g., Demirakos, Strong, & Walker (2010)) and book value multiples (e.g., Deng, Easton, & Yeo (2012)). However, the researchers used a model to estimate past information as well as market information, which suggests combining value estimates that include both accounting income and market information (Vardavaki & Mylonakis, 2007; Yee, 2004).

To determine a firm’s intrinsic value, it was necessary to calculate last year’s average stock price, the previous year’s dividend, dividend growth, and future expected dividend. To approach the practical implication of dividend and stock price, the study adopted the theory of the dividend growth model. A similar process was adopted by Ivanovski et al. (2015) to evaluate the intrinsic values of the firms listed on the Macedonian Stock Exchange. However, to calculate growth rate, 100 shares were considered as a base. The last year’s dividend ($D_0$) is calculated by an average gain from the stock dividend plus the amount of cash dividend. Dividend growth ($g$) is calculated by the average dividend gain per share ($D_0$) of the selected years (2013–2017) and divided by the number of years (Besley & Brigham, 2008). As a result, average growth rate can then be calculated, which, as expected, changes each year. The future expected dividend ($D_1$) is calculated by the $D_1 = D_0 \times (1 + g)$. However, $R_e = (D_1/P_0) + g$ where $R_e$ is the cost of equity; whereas the intrinsic value of a stock is the future expected price ($P_t$) of the stock calculated as $P_t = P_0 \times (1 + R_e)$. Following Berkman et al. (2000), the intrinsic value of the listed firms of both bourses is calculated as $Intrinsic\ Value_{tot} = \sum_{t=1}^{\infty} \frac{CF_t}{(1+k)^t}$ where $CF$ is the cash flow of time $t$ and $k$ is the market interest rate.

3.1.2. Identification of Dividend and Paid-up Capital

All the dividends (both stock and cash) were arrayed according to the companies’ last five years of dividends. The cash dividends were converted accordingly (10% of a stock dividend), as the face value of a single stock is BDT 10. After the payment of dividends share prices will increase, and the extent to which the price will grow is calculated by the dividend discount model theory. If the actual value grows according to the growth model, then it can be said the intrinsic value grows, which is symbolized as 1; if the intrinsic value doesn’t grow, it is 0.
All the companies were categorized according to their market capitalization. Companies with BDT 400 million or more are considered as large companies as almost 70% of companies have high market capitalization, which is denoted by 1, whereas companies that have less than BDT 400 million as market capitalization are considered small companies and are indicated by 0. This is because the minimum market capitalization requirement is BDT 150 million for general listing and BDT 300 million for direct listing.

3.1.3. Measurement of Corporate Governance

Corporate governance practice is measured as per the OECD and Bangladesh Securities and Exchange Commission Corporate Governance Guidelines. To recognize corporate governance practices, this study used the companies’ annual reports, corporate disclosure on the bourses’ webpages, and daily business news from the last five years. Corporate disclosure can have an impact on stock prices and create firms’ intrinsic values. The study used the Bangladesh Securities and Exchange Commission Corporate Governance Guidelines with the constancy of the OECD (2004b) corporate governance principle to justify the corporate governance practices undertaken by firms. Cheung, Connelly, Limpaphayom, & Zhou (2007) examined the relationship between corporate governance and firm value using a single year of data from major companies listed on the Hong Kong Stock Exchange. Their corporate governance index was based on the OECD (1999). To symbolize this, a firm following corporate governance practices was denoted by 0, and a firm not following the corporate governance was denoted by 1 (e.g., Kim et al., 2013).

3.2. Empirical Model

\[ \hat{Y}_{(\text{int})} = \beta_0 \text{ (constant)} + \beta_1 \text{ (Div)} + \beta_2 \text{ (CG)} + \beta_3 \text{ (PuC)} + \beta_4 \text{ (M int rate)} + \infty \]

Where, \( \hat{Y} \) = intrinsic value, \( \beta_0 \) = constant, \( \beta_1 \) (Div) = dividend, \( \beta_2 \) (CG) = corporate governance, \( \beta_3 \) (PuC) = paid-up capital, \( \beta_4 \) (M int rate) = market interest rate (as the control variable), and \( \infty \) = error term. The market interest rate was used as the control variable of the data set that was collected from the Bangladesh Bank data repository, where the highest and lowest market interest rates were 16% in 2013 and 12% in 2018, respectively.

4. EMPIRICAL RESULTS AND DISCUSSION

4.1. Descriptive Statistics

According to Table 1, the firm’s intrinsic value was determined as a minimum of 0 and a maximum of 1 with a standard deviation of 0.72. As per the DSE and CSE data repositories in December 2018, the lowest to the highest values of the market capitalization was BDT 4.60 million for Monno Jute Stafflers Limited to BDT 19753.80 million for National Bank Ltd. Dividends were declared by listed firms on both bourses from 2013 to 2018 ranging from 0% by low paid-up firms up to 5.50%.

4.2. Test of Goodness of Fit and Calculation of Intrinsic Value

Table 2 provides information about the regression line’s ability to account for the total variation in the dependent variable and refers to whether the independent variables can judge the dependent variable. Table 1 shows that 0.200 is the R-squared value, and the value of adjusted R-squared (0.198) is close to the R-squared value. Therefore, the data set is considered to be appropriate. Similarly, the deviation between the R-squared and adjusted R-squared scores is 0.002, which is less than 0.05 and is minimal with a more appropriate variability. The model specifies that 19.2% of the total variability in intrinsic value is explained by dividends, market capitalization, and corporate governance.
A coefficient determines the extent of the relationship between the specific factor's variables. This analysis shows both positive and negative relationships among intrinsic value, dividend payout policy, corporate governance, and size of capital, and how these three variables create an impact on intrinsic value. According to the above table, if the dividend payout percentage declined. On the other hand, firms did not practice corporate governance within their organizations. These levels of inconsistency among capital size, dividend payout systems.

### Table 1. Descriptive Statistics.

<table>
<thead>
<tr>
<th></th>
<th>N.</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic Value</td>
<td>295</td>
<td>0</td>
<td>1</td>
<td>0.33</td>
<td>0.472</td>
</tr>
<tr>
<td>Market Capitalization</td>
<td>295</td>
<td>4.60(BDT million)</td>
<td>19753.80(BDT million)</td>
<td>1881.9294</td>
<td>2990.00231</td>
</tr>
<tr>
<td>Dividend2018 (percentage)</td>
<td>310</td>
<td>0.00</td>
<td>6.00</td>
<td>0.1532</td>
<td>0.42939</td>
</tr>
<tr>
<td>Dividend2017 (percentage)</td>
<td>295</td>
<td>0.00</td>
<td>6.00</td>
<td>0.1042</td>
<td>0.31959</td>
</tr>
<tr>
<td>Dividend2016 (percentage)</td>
<td>295</td>
<td>0.00</td>
<td>5.50</td>
<td>0.0891</td>
<td>0.31944</td>
</tr>
<tr>
<td>Dividend2015 (percentage)</td>
<td>295</td>
<td>0.00</td>
<td>5.50</td>
<td>0.1056</td>
<td>0.32602</td>
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<tr>
<td>Dividend2014 (percentage)</td>
<td>295</td>
<td>0.00</td>
<td>5.50</td>
<td>0.0884</td>
<td>0.32159</td>
</tr>
<tr>
<td>Dividend2013 (percentage)</td>
<td>295</td>
<td>0.00</td>
<td>4.50</td>
<td>0.0916</td>
<td>0.26410</td>
</tr>
<tr>
<td>Corporate Governance</td>
<td>295</td>
<td>0.00</td>
<td>1.00</td>
<td>0.8305</td>
<td>0.37582</td>
</tr>
<tr>
<td>Marketinterestrate2018</td>
<td>295</td>
<td>0.10</td>
<td>0.12</td>
<td>0.1100</td>
<td>0.00000</td>
</tr>
<tr>
<td>Marketinterestrate2017</td>
<td>295</td>
<td>0.12</td>
<td>0.12</td>
<td>0.1200</td>
<td>0.00000</td>
</tr>
<tr>
<td>Marketinterestrate2016</td>
<td>295</td>
<td>0.14</td>
<td>0.14</td>
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<td>0.00000</td>
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<tr>
<td>Marketinterestrate2015</td>
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<td>0.15</td>
<td>0.1500</td>
<td>0.00000</td>
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<tr>
<td>Marketinterestrate2014</td>
<td>295</td>
<td>0.15</td>
<td>0.15</td>
<td>0.1500</td>
<td>0.00000</td>
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<tr>
<td>Marketinterestrate2013</td>
<td>295</td>
<td>0.16</td>
<td>0.16</td>
<td>0.1600</td>
<td>0.00000</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>294</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Table 2. The relationship among dividends, corporate governance, size of capital and firm intrinsic value.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Squared</th>
<th>Adjusted R-Squared</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.805&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.604</td>
<td>0.198</td>
<td>77.199</td>
</tr>
</tbody>
</table>

Note:  
<sup>a</sup> Dependent Variable: Intrinsic Value.

### Table 3. Coefficients.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.805</td>
<td>0.040</td>
<td>25.160</td>
<td>0.000&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Paid-up Capital</td>
<td>-0.606</td>
<td>0.000</td>
<td>-0.044</td>
<td>-1.221</td>
</tr>
<tr>
<td></td>
<td>Dividend2018</td>
<td>0.349</td>
<td>0.429</td>
<td>0.280</td>
<td>1.302</td>
</tr>
<tr>
<td></td>
<td>Dividend2017</td>
<td>0.062</td>
<td>0.307</td>
<td>0.046</td>
<td>0.202</td>
</tr>
<tr>
<td></td>
<td>Dividend2016</td>
<td>0.291</td>
<td>0.389</td>
<td>0.217</td>
<td>0.748</td>
</tr>
<tr>
<td></td>
<td>Dividend2015</td>
<td>-0.141</td>
<td>0.208</td>
<td>-0.107</td>
<td>-0.676</td>
</tr>
<tr>
<td></td>
<td>Dividend2014</td>
<td>-0.189</td>
<td>0.488</td>
<td>-0.306</td>
<td>-0.836</td>
</tr>
<tr>
<td></td>
<td>Dividend2013</td>
<td>0.230</td>
<td>0.450</td>
<td>0.142</td>
<td>0.509</td>
</tr>
<tr>
<td></td>
<td>Corporate Governance</td>
<td>-1.999</td>
<td>0.041</td>
<td>-0.797</td>
<td>-22.312</td>
</tr>
</tbody>
</table>

Note:  
<sup>a</sup> Dependent Variable: Intrinsic value.
corporate governance, and intrinsic values occurred due to lack of formulation and implementation of rules and regulations by the regulators. Hence, the above table represents that dividends, corporate governance, and size of capital have a great impact on a firm’s intrinsic value of stocks.

The research model regression equation is as follows:

\[
\hat{Y}_{(iv)} = \beta_0 (\text{constant}) + \beta_1 (\text{Div}) + \beta_2 (\text{CG}) + \beta_3 (\text{PuC}) + \infty
\]

<table>
<thead>
<tr>
<th>Year</th>
<th>Intrinsic Value</th>
<th>Constant Value (B)</th>
<th>Paid-up Capital (B)</th>
<th>Dividend (B)</th>
<th>Corporate Governance (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>-0.738</td>
<td>1.805</td>
<td>-0.606</td>
<td>0.062</td>
<td>-1.999</td>
</tr>
<tr>
<td>2016</td>
<td>-0.509</td>
<td>1.805</td>
<td>-0.606</td>
<td>0.291</td>
<td>-1.999</td>
</tr>
<tr>
<td>2015</td>
<td>-0.941</td>
<td>1.805</td>
<td>-0.606</td>
<td>-0.141</td>
<td>-1.999</td>
</tr>
<tr>
<td>2014</td>
<td>-0.989</td>
<td>1.805</td>
<td>-0.606</td>
<td>-0.189</td>
<td>-1.999</td>
</tr>
<tr>
<td>2013</td>
<td>-0.57</td>
<td>1.805</td>
<td>-0.606</td>
<td>0.23</td>
<td>-1.999</td>
</tr>
</tbody>
</table>

Table 4 shows that the intrinsic values of all firms were negative in 2015 and 2014, which were -0.941 and -0.989, respectively. When the dividend payment is negative, i.e., -0.141 in 2015 and -0.189 in 2014, and the other two values remain constant as per years, the relationship among the dependent variables indicate negative correlations in these years. This means that the majority of firms during 2014 and 2015 were not able to create negative intrinsic values as almost all firms offered stock dividends rather than cash dividends. The dividend offering was not able to fulfill the investors’ expectations during that period and, as a result, the majority of firms failed to create intrinsic values for investors. On the other hand, the intrinsic values of all firms were negative in 2017, 2016 and 2013, which were -0.738, -0.509 and -0.57, respectively, though the majority of firms offered both stock and cash dividends. As a result, firms offering dividends failed to create intrinsic value for investors. But due to the semi-efficient market, the relationships between intrinsic values and the dependent variables are insignificantly correlated.

Standard errors are associated with the coefficient value. Table 2 reveals that every unit increase in the intrinsic value sees a decrease in market capitalization, dividend, and corporate governance. All three variables’ beta becomes negative, which indicates that there is low or no relation with the intrinsic value.

### 4.3. Relationship between Corporate Governance and Firm Intrinsic Value

Table 5 reports the results of corporate governance (CG) practice and the firm’s intrinsic value.

<table>
<thead>
<tr>
<th>Year</th>
<th>Constant</th>
<th>PuC</th>
<th>CG</th>
<th>Div.</th>
<th>CG Practiced</th>
<th>Intrinsic Value</th>
<th>CG Not Practiced</th>
<th>Intrinsic Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>1.805</td>
<td>-0.606</td>
<td>-1.999</td>
<td>0.062</td>
<td>1</td>
<td>-0.738</td>
<td>0</td>
<td>1.261</td>
</tr>
<tr>
<td>2016</td>
<td>1.805</td>
<td>-0.606</td>
<td>-1.999</td>
<td>0.291</td>
<td>1</td>
<td>-0.509</td>
<td>0</td>
<td>1.49</td>
</tr>
<tr>
<td>2015</td>
<td>1.805</td>
<td>-0.606</td>
<td>-1.999</td>
<td>-0.141</td>
<td>1</td>
<td>-0.69</td>
<td>0</td>
<td>1.058</td>
</tr>
<tr>
<td>2014</td>
<td>1.805</td>
<td>-0.606</td>
<td>-1.999</td>
<td>-0.189</td>
<td>1</td>
<td>-0.70</td>
<td>0</td>
<td>1.01</td>
</tr>
<tr>
<td>2013</td>
<td>1.805</td>
<td>-0.606</td>
<td>-1.999</td>
<td>0.23</td>
<td>1</td>
<td>-0.96</td>
<td>0</td>
<td>1.429</td>
</tr>
</tbody>
</table>

The above computation shows that the firms that do not practice corporate governance can generate higher intrinsic values over the period compared to their counterparts. Moreover, the beta reflects a negative value, which indicates the majority of the firms are lagging in practicing corporate governance in Bangladesh, resulting in higher augmented intrinsic values as firms in emerging economies are characterized by high family ownership and lack of transparency (Lam & Lee, 2012). Empirical research was conducted on the East Asian region capital market by...
Zhuang et al. (2001), which revealed that the majority of firms practiced poor corporate governance which led to moderate intrinsic values by firms, such as in Bangladesh.

### 4.4. Relationship between Dividend Payout and Firm Intrinsic Value

Table 6 represents the firms’ intrinsic values concerning dividend payout, and the computation indicates that firms either paying or not paying dividends does not have any impact on share price or intrinsic value.

<table>
<thead>
<tr>
<th>Year</th>
<th>Constant</th>
<th>PuC</th>
<th>CG</th>
<th>Div.</th>
<th>Dividend Paid</th>
<th>Intrinsic Value</th>
<th>Dividend Not Paid</th>
<th>Intrinsic Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>1.805</td>
<td>-0.606</td>
<td>-1.999</td>
<td>0.062</td>
<td>1</td>
<td>-0.738</td>
<td>0</td>
<td>-0.8</td>
</tr>
<tr>
<td>2016</td>
<td>1.805</td>
<td>-0.606</td>
<td>-1.999</td>
<td>0.291</td>
<td>1</td>
<td>-0.509</td>
<td>0</td>
<td>-0.8</td>
</tr>
<tr>
<td>2015</td>
<td>1.805</td>
<td>-0.606</td>
<td>-1.999</td>
<td>-0.141</td>
<td>1</td>
<td>-0.941</td>
<td>0</td>
<td>-0.8</td>
</tr>
<tr>
<td>2014</td>
<td>1.805</td>
<td>-0.606</td>
<td>-1.999</td>
<td>-0.189</td>
<td>1</td>
<td>-0.989</td>
<td>0</td>
<td>-0.8</td>
</tr>
<tr>
<td>2013</td>
<td>1.805</td>
<td>-0.606</td>
<td>-1.999</td>
<td>0.23</td>
<td>1</td>
<td>-0.57</td>
<td>0</td>
<td>-0.8</td>
</tr>
</tbody>
</table>

An empirical study conducted by Rizwan, Khan, Nadeem, & Abbas (2016) on the Pakistan stock exchange revealed that dividend policy has no impact on return on equity due to lack of corporate governance. Mitton (2004) examined the impact of corporate governance on the dividends on 19 emerging markets, which revealed that there is a negative investment opportunity effect on dividend payment to some extent. However, the beta shows a negative relationship between intrinsic value and dividend payment. This may happen due to prevailing inefficient market conditions where regulators fail to implement proper rules and regulations to regulate the market. Moreover, the dividend payment depends on the amount of surplus cash held by firms; if the market interest rate goes down, that leads to the low cost of borrowing. The low cost of borrowing for firms can lead to the generation of higher profits and the ability to offer a dividend to investors, which will help to enhance the firms’ intrinsic values. If the market interest rate falls from 12% to a single digit in 2017, then the firms can gain higher profits and generate higher or positive intrinsic values. Similarly, the interest rates of the previous years were low and firms could gain more net profits; they could offer more dividends to investors and increase the possibility to enhance the firms’ intrinsic values.

\[
\hat{Y}(2017) = 1.805 + (-0.606) + (-1.999) + .90 = .1
\]

### 4.5. Relationship between Firm Paid-up-Capital Size and Intrinsic Value

Table 7 illustrates whether the floating capital size of the firms generates intrinsic value or not, and reports that the high capital-based firms have less intrinsic value, which is .128%.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.806</td>
<td>0.031</td>
<td>26.233</td>
</tr>
<tr>
<td></td>
<td>Corporate Governance</td>
<td>-0.431</td>
<td>0.030</td>
<td>-14.591</td>
</tr>
<tr>
<td></td>
<td>Dividend 2017</td>
<td>-0.176</td>
<td>0.023</td>
<td>-7.608</td>
</tr>
<tr>
<td></td>
<td>High Paid-up-capital</td>
<td>-0.071</td>
<td>0.024</td>
<td>-2.948</td>
</tr>
</tbody>
</table>

Note:  
1. **Dependent variable:** Intrinsic value.

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Low paid-up capital (0): \( \hat{Y} = 0.806 + ( -0.431 \times 1 ) + ( -0.176 \times 1 ) + ( -0.071 \times 0 ) = 0.199 \)

High paid-up capital (1): \( \hat{Y} = 0.806 + ( -0.431 \times 1 ) + ( -0.176 \times 1 ) + ( -0.071 \times 1 ) = 0.128 \)

Conversely, low capital-based firms have greater intrinsic values (.199) due to small volumes of stock and easily manipulated price hikes (Huang & Cheng, 2015). However, the beta shows the negative relationship between them, meaning that small capital-based firms have higher intrinsic values compared to the firms that have a higher capital. Empirical research was conducted by Saleh (2010) on the Amman Stock Exchange, which revealed that small firms’ stocks performed better than the large firms’ stocks. This may be caused by small firms’ tendency to retain most of their earnings for reinvestment, resulting in lower dividend payouts and decreases in intrinsic value. However, due to the possibility of manipulation, it has a reverse effect (Saleh, 2010). According to Lynch & Rothchild (2012), firms with a small capital base provide a greater return than higher capital-based firms due to the low volume of shares that can experience unexpected price hikes.

4.6. Further Analysis

Table 8 shows the empirical relationship between corporate governance, paid-up capital, dividends, market interest rates, and the firm’s intrinsic value. The corporate governance and firm intrinsic value are negatively significantly related to the emerging economy showing a coefficient of \( \beta = -0.913 \) and a p-value < 0.001, which indicate that with a 1% change in corporate governance a firm’s intrinsic value is reduced by 0.913%. Also, the firms’ paid-up capital shows significant negative results with the intrinsic values, reporting a coefficient of \( \beta = -0.002 \) and a p-value < 0.001, which infers that with changes of 1% in firms’ paid-up capital their intrinsic values are reduced by 0.002%.

<table>
<thead>
<tr>
<th>Independent and Control Variables</th>
<th>Dependent Variable</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intrinsic Value</td>
<td>Intrinsic Value</td>
<td>Intrinsic Value</td>
<td></td>
</tr>
<tr>
<td>CG</td>
<td>-0.913***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-50.47)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIR</td>
<td>0.072</td>
<td>0.108</td>
<td>0.086</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.12)</td>
<td>(0.11)</td>
<td>(0.09)</td>
<td></td>
</tr>
<tr>
<td>Paid-up Capital</td>
<td>-0.002***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-5.83)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend</td>
<td></td>
<td>-0.037</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-1.03)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>_cons</td>
<td>0.990***</td>
<td>0.268*</td>
<td>0.254</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(11.84)</td>
<td>(1.98)</td>
<td>(1.71)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>1436</td>
<td>1436</td>
<td>1436</td>
<td></td>
</tr>
</tbody>
</table>

Note: t statistics in parentheses. * p < 0.05 ** p < 0.01 *** p < 0.001.

However, dividend payout shows insignificant results on intrinsic value indicating the coefficient between dividend payout and intrinsic value of \( \beta = -0.371 \) in the emerging economy.

5. CONCLUSION

In the imperfect market, there is prevailing inadequate implementation of corporate governance, lack of control, and lack of implementation of rules and regulations by regulators creating market volatility. The most crucial part of an investment decision is the intrinsic value that provides an ultimate price that stocks could reach a decision time. Corporate governance is a mechanism that attempts to ensure good governance and shareholder rights (Gompers et al., 2003), their roles, and equitable treatment. It also provides disclosure and transference as well as
board responsibility (OECD, 1999). The question is whether corporate governance has the power to increase the intrinsic value of stocks. This research investigated the effect of corporate governance practice on the intrinsic value of listed companies’ stocks and concluded that good corporate governance can generate low intrinsic value. Conversely, firms that do not practice corporate governance achieve high intrinsic values for investors and shareholders.

Stock mispricing happens when the disclosers present unclear messages to investors. Usually, a small number of floating stocks can create additional demand due to price manipulation as speculators forecast future demand for profit resulting in high intrinsic value. On the contrary, stock price manipulation is more difficult due to the high volume of floating stock and the supply of stock being higher than demand, which leads to low or no intrinsic value. This research investigated the effect that a firm’s capital has on its intrinsic value and revealed that the firms with high paid-up capital have less intrinsic value, and the firms with low market capitalization have more intrinsic value.

Earning power and the dividend payout policy of a firm has an insignificant relationship with its intrinsic value. However, continuous dividend payout has a positive effect on the valuation of the stock price. This research also revealed that the effect of dividend payout policy does not have a significant impact on a firm’s intrinsic value in an emerging economy.

6. LIMITATIONS AND POLICY IMPLICATIONS

The corporate governance indicators are considered based on the corporate disclosure in the bourses, annual reports, and semi-structured interviews conducted with individual investors. However, good corporate governance can be judged once researchers have access to a firm’s internal corporate governance affairs, which, alongside the participation of institutional investors as well as market makers, could provide more articulated information on corporate governance practices and firm intrinsic value as these investors possess substantial funds, knowledge, and skills that have intrinsic value.

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REFERENCES


