FACTORS INFLUENCING SUBSCRIPTION OF IPO IN BANGLADESH

Md. Tahidur Rahman[a], Syed Zabid Hossain[b], and Normah Omar[c]

[a]Department of Business Administration, EXIM Bank Agricultural University Bangladesh, Chapainawabganj, Bangladesh. (Email: towhidais@gmail.com)

[b]Department of Accounting and Information Systems, University of Rajshahi, Rajshahi, Bangladesh. (Email: syed6205@gmail.com)

[c]Accounting Research Institute (ARI), Universiti Teknologi MARA, Selangor, Malaysia. (Email: normah645@salam.uitm.edu.my)

ABSTRACT

Due to huge loss in the secondary market during the 2010-2011 stock market crash, small investors in Bangladesh involved themselves in IPO investment. This study, based on secondary data, depicts the IPO market in Bangladesh and also identifies the factors influencing IPO subscription times. The study documented 85% growth in the listed companies on the Dhaka Stock Exchange (DSE) through IPO during the last decade with an average number of 14.80 IPOs per year. Fixed price method was followed in most of the IPOs; whereas the book building method was followed in only 2.70% of IPOs. Earnings forecast, a very common phenomenon of IPO prospectus in developed countries, was hardly ever found in the IPO prospectus in Bangladesh. Multiple regression model indicates that market lot has significant positive, whereas EPS and offer price have insignificant negative influence on IPO subscription times. The current study has explored the existing scenario of IPOs in Bangladesh that will help regulators to undertake proper course of action in developing the stock market in Bangladesh. The study will help issuers assessing the potential subscription condition of an IPO candidate company and also contribute to the existing stock of knowledge.

JEL Classification: G01, G11, G24, G28, K22

Key words: IPO, Subscription times; Primary market; Book building, Bangladesh capital market

1. INTRODUCTION

Having an experience of six decades the capital market of Bangladesh is now the third largest market in South Asia though it is still one of the smallest markets in Asia. The market is running with a large number of small investors who have very little access to information for their investment decision and also with a very insignificant contribution of institutional investors (Faisal and Ridwan, 2012; Faruqui and Rahman, 2013). To date the market has experienced two remarkable crashes that have caused havoc in the lives of many small investors: the first one in 1996 and the last one in 2011. The Bangladesh capital market, after the 1996 crash, attracted the attention of regulators as well as the policy planners, resulting in many investment-friendly reforms by the Bangladesh Securities and Exchange Commission (BSEC) in rights issue, public issue, merger and acquisition (Rahman and Moazzem, 2011). But the market again crashed in 2011mainly due to asset bubble, discretionary accruals by management, earnings management, and rumors. Consequently, about one million investors in the two Bangladeshi stock exchanges have become affected seriously and nowadays stock market crash has become a national, political and social issue of the country (New Age, 2014).

Although the Bangladesh stock market consists of both primary and secondary markets, being frustrated with huge loss in the secondary market in the 2011 share market crash and owing to very insignificant or almost no improvement in stock prices, small investors have become interested and active in the primary market – synonymous with Initial Public Offerings (IPO). An IPO, a company's first sale of stock to the public, provides the company with access to equity capital required to stimulate growth and liquidity. Through this process, a privately held company is transformed into a public company and thus, the process is known as 'going public' for equity capital. An IPO allows more rapid expansion than would be possible with the limited revenue available to the company. After the IPO, when shares are traded freely in the open market, money passes between investors.

Dhaka Stock Exchange (DSE), through the summary prospectuses in the IPO archive section of its website, has continually been disclosing the subscription times along with some core information about IPOs since the subscription of MJL Bangladesh Limited (MJLBD) that started subscription from 1 January 2011. Since then a total of 67 companies have become listed on the DSE through the IPO process till 30 June 2015.[1] Subscription times, also

known as over subscription ratio (OSR), indicate the public's appetite for the shares of an IPO candidate company and has a significant impact on the immediate past IPO performance of its shares. It is calculated as the number of IPO shares applied for divided by the number of shares offered for public subscription by a particular company (Rahim et al., 2013). A high subscription time indicates high demand of the new issue (IPO) to the investors and is expected to be influenced by investor confidence and optimism about the issue. It is, therefore, a matter of interest for the researchers as well as the stakeholders of the Bangladesh capital market to identify the factor(s) influencing IPO subscription times.

In Bangladesh, it is commonly observed that the volume of IPO subscription for shares is relatively higher than the number of shares offered. As a result, most of the companies are experiencing higher subscription times. IPO candidate companies are compelled to publish a prospectus disclosing a lot of information required by the regulations; whereas stock exchanges disclose the summary prospectus, in addition to the full prospectus, containing some key information. But the subscribers do not respond to all the IPOs in the same manner. Therefore, a question may arise regarding what factor(s) contribute to influence subscribers, and thus the subscription times in Bangladesh. To the best of our knowledge, however, no research has yet been conducted to investigate the forces influencing IPO subscription times in Bangladesh. This research gap has led us to undertake the current study with the following objectives: (i) to scrutinize the regulatory environment of IPOs in Bangladesh; (ii) to explore the IPO practices in Bangladesh; and (iii) to identify the factors influencing IPO subscription times in Bangladesh.

The whole article has been structured into six sections. Section 2 gives the review of literature; section 3 describes the IPO market in Bangladesh and the regulatory environment; section 4 outlines the methodology of the study; section 5 presents analysis of empirical results relating to the factors influencing subscription times, and section 6 presents the concluding notes.

2. REVIEW OF LITERATURE

Research studies on IPO are not new in accounting and finance. During the last few decades, many research works have been done in international and national (Bangladesh) levels on different aspects of IPO. A study conducted on 110 IPOs floated in Hong Kong during 1990-1992 found that among different kinds of publicly available

information for assessing the quality of IPO candidates, prospectus earnings forecasts (PEF) were significant (Chan, Sit and Tong, 1996). Similarly, another study found that companies making IPOs in Hong Kong often include a forecast of the next year's profit in the prospectus which investors use to measure the value of the company, decide whether to subscribe to the new issue, and also decide whether to invest on the first day of trading (Chena, Firtha and Krishnanb, 2001). Another study found information asymmetry existing between current owners and potential IPO investors that creates a context wherein the legitimacy of the top management team (TMT) may serve as a valid signal of value to potential investors (Cohen and Dean, 2005). It is evident from the study conducted on UK firms that IPO firms used to report their earnings more conservatively (Ball and Shivakumar, 2008). It was argued that higher earnings reporting by public firms would attract the attention of a large variety of stakeholders, which consequentially may increase monitoring by regulators and policy makers. The study on IPOs in the Athens Stock Exchange found three factors that contributed to accuracy of earnings forecast, namely company age, inside ownership, and industry classification (Gounopoulos, 2011). But the Malaysian study used seven variables including offer size and over subscription ratio (OSR) as explanatory variables; and also found significant influence of offer size on aftermarket flipping (Rahim et al., 2013). A study on the reliability of management earnings forecasts in 102 IPO prospectuses published on the New York Stock Exchange (NYSE) found optimistic forecast of earnings (Hammami and Sioud, 2014). The study also found earnings variability and financial leverage as significant explanatory variables for ex post bias. Every year, many companies float public issues through IPO in Bangladesh. Most of those are genuine, while a relatively a small number might have the intention to exploit investors (Dube, 2012; Share Market Inquiry Committee, 2011). Therefore, it is very important for both individual and institutional investors to identify the genuineness as well as the potentiality of the corporate entity before applying for its IPO and also for post IPO purchase. Though the issue is very common in developed markets, there is a dearth of research studies on different aspects of IPO in Bangladesh. To date, only a few studies have been undertaken on this issue in an emerging economy such as Bangladesh. The primary focus of those studies was on underpricing, initial return, and flipping (Hoque and Musa, 2001; Islam,1999, 2014; Islam, Ali and Ahmad, 2010a, 2010b; Islam and Munira, 2004).

In an attempt to analyze the behavior of IPO underpricing in Bangladesh, Islam (1999) found an initial average return of 116%,

which was quite high as compared to the secondary market. The study used 'size of the issue' as an explanatory variable for IPO underpricing. Hoque and Musa (2001) also found that the IPOs in Bangladesh were largely underpriced, which was analogous to the finding of Islam (1999). According to the Hoque and Musa (2001), IPOs in Bangladesh yield abnormal initial return to the investors because of the restriction on issue price by the BSEC. The study of Islam and Munira (2004) focused on the flipping of IPOs in Bangladesh and the factors influencing it. They found a flipping of 177% in the first quarter after the first trading and also found a negative influence of the issue size on flipping. Another study on IPO underpricing from the Bangladesh perspective was conducted by Islam, Ali and Ahmad (2010a) who found 87% of the IPOs were underpriced and only 11% were overpriced. They also found significant positive influence of offer size and company size on underpricing, and insignificant influence of company age and IPO timing on the same. Islam, Ali and Ahmad (2010b) conducted a similar study on the Chittagong Stock Exchange (CSE) where they found almost identical results except 'offer size' having significant negative influence on underpricing. They also found a very high degree of underpricing in Bangladesh compared to other Asian and advanced countries. The study of short run IPO underpricing on the DSE by Islam (2014) found significant positive influence of offer size, method of issue, market capitalization, over subscription rate, float, underwriter's reputation and ownership retention, but insignificant influence of size and offer timing on the level of IPO underpricing. They also noticed signaling theory as the most influential one in deciding IPO underpricing.

3. IPO MARKET IN BANGLADESH AND THE REGULATORY ENVIRONMENT

IPOs in Bangladesh are governed by a number of statutes such as the 'Securities and Exchange Ordinance, 1969', 'Securities and Exchange Rule, 1987', 'Bangladesh Securities and Exchange Commission Act, 1993', 'The Companies Act 1994', and 'Securities and Exchange Commission (Public Issue) Rules, 2006'. Among the statutes, 'Securities and Exchange Commission (Public Issue) Rules, 2006' is the prominent one playing the key role in the aforesaid issue. According to SEC (Public Issue) Rules, 2006, for any public issue of securities, BSEC approval is required. It also states that upon receiving BSEC approval for new issue of capital under these Rules,

the abridged version of the prospectus, as approved by the Commission, shall be published by the issuer in four national daily newspapers (two Bengali and two English) within the time specified in the letter of approval issued by the Commission. The full prospectus shall, however, be posted on the websites of BSEC, stock exchanges, issuer and the issue manager. The timelines at different stages of the IPO process in Bangladesh, after submission of draft prospectus along with relevant document to BSEC and stock exchanges, have been shown in Table 1. Stockbrokers/merchant bankers are required to preserve the instructions for application up to 6 months from listing of the company with exchanges.

Companies have two methods of getting regulatory approval of IPO in the world, namely 'disclosure based' and 'merit based'. Keeping harmony with the stock exchanges in the developed world, disclosure based IPO is practiced in Bangladesh where BSEC gives approval of an IPO based on the disclosure of required information by the issuer company but does not conduct any physical verification before approving the same [Rule 8B (1) and (20) of SEC (Public Issue) Rule, 2006].

TABLE 1
IPO Timeline in Bangladesh

Sl. No	Particulars	Required Time
01.	Observation of stock exchanges to BSEC	within 15 days
02.	Issue deficiency letter by BSEC	within 28 days
03.	Issuer's reply against BSEC query	within 30 days
04.	Letter of approval or rejection by BSEC	within 60 days
05.	Issuer's appeal to BSEC for review if rejected	within 90 days from the date of rejection
06.	Publication of the abridged prospectus	within 5 working days of approval
07.	Submission of printed prospectus to BSEC	within 5 working days from the date of publication of the abridged prospectus
08.	Sending prospectus and forms to Bangladesh Embassies and Missions abroad	within 5 working days of the publication
09.	Submission of paper clipping to BSEC/Exchanges	within 24 hours of the publication thereof
10.	Listing application to the Stock Exchanges	within 7 working days from the date of approval

TABLE 1 (*continued*)

Sl. No	Particulars	Required Time
11.	Subscription closing date/cut-off date	with 25 working days from the date of publication of abridged version of prospectus
12.	Subscription, Lottery, Allotment and Refund process	within 47 working days from the date of publication of abridged version of prospectus
13.	Approval of listing by stock exchanges	within 75 days from the closure of subscription
14.	Refund of subscribed money to successful applicant if listing application is rejected	within 15 days from the date of refusal, or from the date of expiry of the said 75 days, as the case may be
15.	Report on refund, in case of listing rejection, to the Commission/Exchange	within 7 days of expiry of the aforesaid 15 day-time period

Source: DSE Website.

Voluntary or mandatory disclosure of earnings forecast for the next year(s) is a common part of the IPO prospectus in many countries. It is considered an extremely important signal for company valuation in those countries (Chan et al., 1996; Gounopolus, 2011; Hammami and Sioud, 2014). Examination of prospectus in the current study has found this feature absent in the IPO disclosure in Bangladesh except in a few companies.

With regard to the IPO offer prices, both 'fixed price' and 'book-building' methods coexist in Bangladesh. Although the book-building method is the most popular method worldwide, it is still in the experimental stage in Bangladesh. The book-building method was introduced in Bangladesh on 5 March 2009 to ensure fair price of IPOs for entrepreneurs (Rashida, 2013). Out of 148 IPOs floated in the market during the period under study, only four (2.2%) IPOs were completed following the book-building method, whereas 144 IPOs (97.8%) were completed following the fixed price method. Since it is the main regulator of the stock market, the BSEC is believed to have the most significant impact on IPO practices as well as on the IPO subscription times in Bangladesh.

Table 2 shows the cross tabulation of industry categories in the rows and years of subscription in the columns. It is evident from the table that 148 IPOs were completed during the 10 years under

study ranging from 1 July 2005 to 30 June 2015 with an average number of 14.8 IPOs per year. The maximum number of IPOs (19) was completed in the financial year 2009-2010 against the lowest number of IPOs (8) completed in 2007-2008. As for category, the highest number of IPOs (32) was completed under the Mutual Fund (MuF) category followed by the Insurance category with 24 IPOs and Textile in the third position with 22 IPOs. During 2009-2010 the Bangladesh stock market registered an abnormal growth due to market manipulation by a few market players including regulators and consequently, a massive market crash happened in 2011 (Share Market Inquiry Committee, 2011).

TABLE 2
Cross Tabulation of Industry Category and Year of Subscription
(01 July 2005 – 30 June 2015)

Industry Category[2]	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	Total
BANK	1	3	1	1	0	0	0	0	0	0	6
CEM & CER	0	0	0	0	1	1	0	1	0	0	3
ENGIN	1	1	0	1	0	2	2	1	3	5	16
FI	4	6	3	2	0	0	1	0	1	0	17
FOOD&ALL	0	0	0	0	0	0	1	1	2	0	4
FUEL&POW	1	0	0	0	0	1	1	1	1	1	6
INSURAN	9	1	3	6	3	0	1	1	0	0	24
IT&TELE	0	0	0	0	1	0	1	0	0	0	2
JU, PA & PRIN	0	0	0	0	0	0	0	0	1	0	1
MISC	1	0	0	0	0	0	0	0	0	1	2
MuF	1	1	1	3	8	10	5	2	0	1	32
PHAR & CHEM	0	0	0	0	2	2	0	3	1	0	8
SE, TR & LE, R	0	0	0	1	1	0	1	0	1	1	5
TEXTILE	0	0	0	1	3	0	2	4	6	6	22
Total	18	12	8	15	19	16	15	14	16	15	148

Source: Compiled by the authors for the study period 2005-2015.

    The sector-wise growth of companies listed through IPO is shown in Table 3. The highest growth was observed in the mutual fund (MuF) category (4.6 times) followed by the financial institutions category 3.8 times, service, travel & leisure and real estate category 2.7 times, textile category 2.2 times, insurance

category 2.1 times, and engineering category 2.1 times. The combined growth of IPOs of all the sectors was 1.9 times.

TABLE 3
Sectoral Growth of Companies on DSE Listed through IPO

Industry Category	No. of Company (1/7/2005)	No. of IPOs	Sectors' contribution in %	No. of Company (30/6/2015)	Growth over initial year
BANK	24	6	4.05	30	1.3
CEMENT& CER	9	3	2.03	12	1.3
ENGIN	15	16	10.81	31	2.1
FI	6	17	11.49	23	3.8
FOOD & ALL	14	4	2.70	18	1.3
FUEL & POW	12	6	4.05	18	1.5
INSURAN	22	24	16.22	46	2.1
IT & TELECOM	6	2	1.35	8	1.3
JU, PA & PRIN	9	1	0.68	10	1.1
MISC	9	2	1.35	11	1.2
MuF	9	32	21.62	41	4.6
PHAR & CHEM	19	8	5.41	27	1.4
SE, TR & LE, R	3	5	3.38	8	2.7
TEXTILE	19	22	14.86	41	2.2
Total	175	148[3]	100.00	324	1.9

Source: Compiled by the authors for the study period 2005-2015.

4. METHODOLOGY OF THE STUDY

In order to attain the study objectives, secondary sources of data especially data disclosed in the prospectus published by the IPO companies during 2005-2015 were used. In addition, some data were extracted from the DSE website. Firm-specific data were collected from annual reports, company websites, and other publications of the respective companies. The study was based on the sample IPOs subscribed and listed during the period between 1 July 2005 and 30 June 2015. A total of 148 IPOs entered the market during the period under study.[4] All of these companies were primarily considered for the general discussion and analysis. Among the companies, 32 mutual funds were excluded because of divergence with the variables of the study, whereas 60 IPOs were excluded due to non-availability of data relating to subscription times, and finally 56 IPOs were selected for regression analysis to identify the factors influencing subscription times. Like some other previous studies such as Tajuddin et al. (2015) and Rahim et al.

(2013) the study has applied the Multiple Regression model to explain the relationship between dependent and independent variables. For the purpose of our analysis and discussion 22 DSE categories have been rearranged into 14 modified categories as shown in Table 4.[5]

TABLE 4

Number of Listed Securities under different Categories on DSE up to 30 June 2015

Serial	Industry Category	No. of Companies
1	Bank	30
2	Cement & Ceramics	12
3	Engineering	31
4	Financial Institutions	23
5	Food & Allied	18
6	Fuel & Power	18
7	Insurance	46
8	IT &Telecom.	8
9	Jute, Paper &Printing, Tannery	10
10	Miscellaneous	11
11	Mutual Funds	41
12	Pharmaceuticals & Chemicals	27
13	Service, Trav.& Lei., Real Est.	8
14	Textile	41
	Total	324

Source: DSE Website

4.1 CRITERION VARIABLE

Subscription times, also known as over-subscription rate (OSR), is the only criterion variable of the current study. It is calculated as the number of IPO shares applied for divided by the number of shares offered for public subscription by the IPO candidate company (Rahim et al., 2013).

4.2 EXPLANATORY VARIABLES

Many micro and macro level variables may influence IPO subscription times in a country which may include initial return on IPOs, size of the issue, institutional investment, lock-in period, stabilization efforts of regulators, existence of hot-issue market, quality of IPOs, investors' response and so forth. In this study, based on the previous research studies and our own judgment, eight

explanatory variables were primarily selected that might influence the IPO subscription times in Bangladesh.[6] They were company age (years), earnings per share (EPS), IPO size, lot size, premium, subscription gap (days), net asset value (NAV), and offer price. After the test of normality, correlation, and also taking into consideration the data size, we finally took only three predictor variables for regression analysis which were lot size, EPS, and offer price per share. Each of these variables and their corresponding null hypothesis are briefly explained in the following paragraphs.

4.2.1 LOT SIZE

Several previous studies considered offer size to explain the influence on subscription time (Rahim et al., 2013). Unlike the existing literature, the current study considers lot size as an explanatory variable. Lot size indicates the number of primary shares that can be purchased or issued against an application. In Bangladesh, the minimum market lot for secondary shares is currently one share and there is no upper limit but there are restrictions in the lot size of IPO shares which are usually 100, 200, 250 or 500 shares. It requires more money to apply for an IPO, if its lot size is large and thus it might create liquidity problem for small investors which may reduce subscription times of an IPO.

H_1: *Lot size has no significant influence on IPO subscription times.*
4.2.2 EARNINGS PER SHARE (EPS)

The signaling theory states that managers consider strong historical earnings as the most positive signal to IPO investors (Brau and Fawcett, 2006). EPS is considered the best yardstick for measuring firm profitability. A few of the previous studies used EPS as an independent variable to explain the factors influencing IPO subscribers (Bateni and Asghari, 2014; Lai and Lo, 2012; Sahoo and Rajib, 2012). Bateni and Asghari (2014) found insignificant influence wheras Sahoo and Rajib (2012) found significant positive influence of EPS on investor IPO valuation. The current study considers the last year's EPS just before the starting of IPO subscription.[7] IPO investors are assumed to be influenced by the EPS disclosure in the prospectus of respective companies; therefore, the companies having higher EPS may have high opportunity to attract more subscribers.

H_2: *EPS has no significant influence on IPO subscription times.*

4.2.3 OFFER PRICE

Offer price per share may be an influential factor for IPO subscription times. In most of the cases, for the shares offered at par value or with a very little amount of premium, IPO investors get higher initial return. On the other hand, higher premium indicates good condition of a company and, therefore, may attract more subscribers and vice versa. If the offering price is too high, the investors might reject the offering due to an inferior expected return (Ibbotson, Sindelar and Ritter, 1994). Low and Yong (2011) found over-subscription as negatively correlated with offer price. According to the demand and supply theory model, it is argued that a company with lower offer price is related to increasing demand of investors. Investors, with the expectation of earning abnormal return, are interested to buy the IPOs where prices are normally set lower as they believe it as undervalued (Tajuddin et al., 2015). But from liquidity perspective of the IPO investors, higher premium per share may create liquidity problems and thus, may reduce subscription times and vice versa.

H_3: *Offer price of IPO has no significant influence on IPO subscription times.*

Considering the above variables, the empirical regression model can be symbolized as follows:

Subscription Times $= \alpha + \beta_1$ Lot Size $+ \beta_2$ EPS $+ \beta_3$ Offer Price

Collected data, for the purpose of accomplishing the objectives, have been analyzed with the help of the statistical software IBM SPSS version 22 applying the univariate, bivariate, and multivariate techniques.

5. FACTORS INFLUENCING SUBSCRIPTION TIMES IN BANGLADESH

Table 5 shows that the sample IPO companies had an average age of 13.2 years with average EPS and NAV per share of BDT 3.3 and BDT 27.6 respectively. The average size of public issue was BDT 784.6 million at issue price. The average lot size and subscription gap were 326.8 shares and 28.4 days respectively, whereas the average premium collected by the companies was BDT 446.6 million. Descriptive statistics with regard to subscription times were in between minimum 1 time and maximum 74 times with average 20.3 times during the period under study.

TABLE 5
Descriptive Statistics of the Variables

Variable	Minimum	Maximum	Mean	Std. Dev
Age	3.3	55.1	13.2	9.5
EPS	0.4	16.2	3.7	2.8
IPO Size (million BDT)	120.0	4200.0	784.6	837.0
Lot Size	100.0	500.0	326.8	161.8
NAV per Share	10.8	100.6	27.6	17.2
Premium (million BDT)	0.0	3048.0	446.5	623.5
Subscription Times	1.0	73.9	20.2	20.2
Subscription Gap	6.00	189.00	28.37	33.11
Offer price per share	10.00	115.00	27.72	22.860

Source: Compiled by the authors for the study period 2005-2015

All the correlations in Table 6 are significant at the 1% level except one. As the values of all the correlation coefficients are less than 0.80, we can assume that multicollinearity is not a problem in the variables.

TABLE 6
Correlations among the Dependent and Independent Variables

	Lot Size	EPS	Offer Price	Subscription Times
Lot Size	1			
EPS	-0.244[*]	1		
Offer Price	-0.583[**]	0.435[**]	1	
Subscription Times	0.686[**]	-.367[**]	-0.513[**]	1

Note: *, ** and *** indicates correlation is significant at the 0.1, 0.05, and 0.01 level, respectively (Pearson Correlation Significance, 2-tailed).

In order to test the normality of the dependent variable, a histogram of the residuals with a normal curve superimposed has been drawn as shown in Figure 1. The plot of the residuals versus predicted Y shows that the residuals look close to normal indicating no problem with the assumption that the residuals are normally distributed.
    The empirical results of the regression model have been furnished in Table 7. Variance inflation factor (VIF) and tolerances (T) have also been used to test the multicollinearity in the regression model. According to the decision rule, if VIF is greater than 10, it should be an indication of harmful multicollinearity, whereas if the tolerance is less than 0.20, there might be multicollinearity in the data (Arif and

Tuhin, 2013). As the VIFs of all the independent variables are less than 3 and the tolerance of all the values is greater than 0.20 it can be assured that multicollinearity is not a problem in this model. The results of the multiple regression analysis show that the R value is 0.719, which represents the simple correlation. The R^2 value indicates how much of the dependent variable 'Subscription Times (ST)' can be explained by the independent variables. In this case, 51.7% can be explained, which is also satisfactory. The ANOVA table indicates that the regression model predicts the outcome variable significantly well. Here, $p = 0.000$, which suggests the model applied can significantly predict the outcome variable.

FIGURE 1
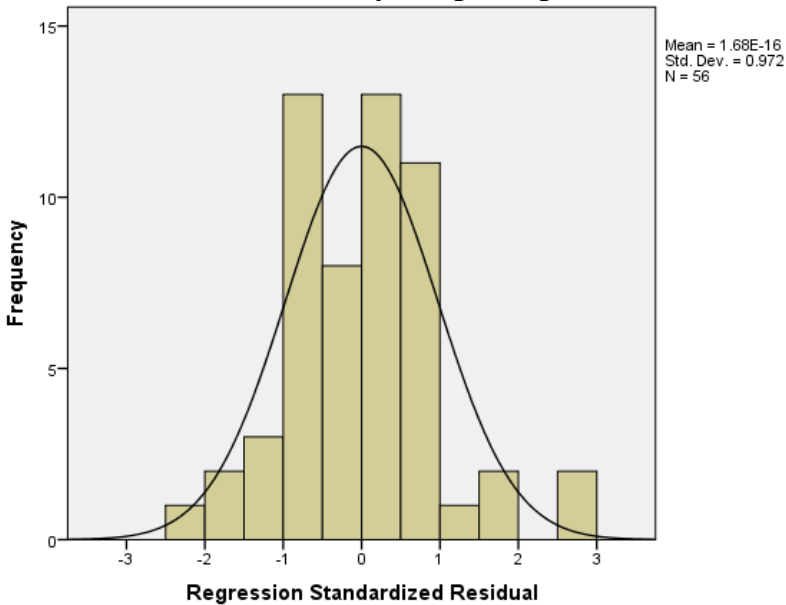Test of Normality Using Histogram

Table 7 also shows that lot size of the issue had significant positive influence on IPO subscription times. This implies that IPOs of relatively larger lot size have higher subscription times, which is true at the 1% level of significance. The variable EPS has negative influence on the subscription times, although it fell short of the significance level. The implication of this result is that subscription times decline as the EPS increase, which is not consistent with the general expectation. The coefficient of offer

price is also negatively associated with subscription times but the level is statistically insignificant.

TABLE 7

Results of Multiple Regression Model

	Nonstanndardized Coefficients				Collinearity Statistics	
	Beta	Std. Error	*t*	Sig.	Tolerance	VIF
Constant	3.248	7.125	0.456	0.650		
Lot size	0.072	0.014	4.964	0.000	0.660	1.515
EPS	-1.308	0.758	-1.726	0.090	0.811	1.233
Offer price	-0.078	0.112	-0.700	0.487	0.569	1.757
R	.719		Adjusted *R* Square			0.489
R Square	.517		*p*-value (Sig.)			0.000

Note: Dependent variable is subscription times.

6. CONCLUSION

Commercial banks and influential market players had been involved heavily in the stock market in Bangladesh before the crash in 2011. When the bubble burst, small investors lost their confidence in the secondary market. They became fearful of further investments in the secondary market and also became disappointed with the government for not providing as much as necessary support to bail out the market and also with the regulator for the weak market surveillance. They moved to the primary market as it is generally profitable, hence, a very rewarding business in Bangladesh. The study confirmed that an average number of 14.8 IPOs were completed per year during the study period, usually through the fixed price method, and IPOs contributed around 85% growth in total listed companies during the same period. The highest growth was observed in the mutual fund (MuF) category, which was about 3.6 times. As per the regression analysis, market lot has significant positive influence on IPO subscription times, while EPS and offer price per share have statistically insignificant impact on IPO subscription times.

IPOs in Bangladesh are approved under the 'disclosure based' method, which requires transparency in disclosure. But in the absence of any stringent law, many IPO companies are disclosing fabricated information to accomplish the ill motives of the founder shareholders. The Bangladesh parliament, after much delay, has passed the Financial Reporting Act (FRA) 2015. But for fair play of

IPOs as well as for fair financial reporting by the listed companies, the Financial Reporting Council (FRC) should start functioning as soon as possible.

Although the book building method is widely used in developed markets, only 2.7% of the companies under study have floated their shares using this method. Allegations were found about abuse of the method. Consequently, the BSEC had to impose barriers on the method shortly after its introduction. But instead of imposing a ban on the book-building method, the regulators should have taken proper initiatives to customize and popularize the method which might attract the attention of the good companies and influence them to be listed in the stock exchanges through IPO.

Sufficient number of mutual funds is badly needed for sustainable growth and stability of any capital market. But the study found that about 50% of the mutual funds became listed in the stock exchanges within a very short span of time. As a result, the market experienced a massive insertion of fund within a short period that might have caused the share market to go up rapidly and finally to crash more rapidly.

It can be concluded that the study gives a thorough idea about the current IPO practices and the guiding statutes in Bangladesh. The study will help corporate entities (that want to go public through IPO), stock exchanges, regulators, brokers, issuers, and other stakeholders in a variety of ways, especially to identify the factors influencing the subscription times.

ENDNOTES

1. The number 67 is including MJLBD but excluding the Repeat Public Offerings (RPO) of Bangladesh Shipping Corporation (BSC) and Golden Son Limited. The two RPOs were excluded because of their different nature.

2. CEM&CER = Cement & Ceramics, ENGIN = Engineering, FI = Financial Institutions, FOOD&ALL = Food & Allied, FUEL&POW = Fuel & Power, INSURAN = Insurance, IT&TELE = IT & Telecommunication, JU, PA & PRIN = Jute, Paper &Printing and Tannery, MISC = Miscellaneous, MuF = Mutual Fund, PHAR&CHEM = Pharmaceuticals & Chemicals, SE, TR & LE, R = Services, Travel & Leisure and Real Estate.

3. In addition to the 148 companies (excluding 3 bonds), a total of 10 companies became listed in the DSE during 2006-2010 through

direct listing. The direct listing method which was previously allowed for both private and public sector companies is now allowed for government owned companies only. The Repeat Public Offerings (RPO) of Golden Son Limited and Bangladesh Shipping Corporation (BSC), have not been considered in the current study because of their different nature.

4.   The number is exclusive of two RPOs namely Golden Son Limited and Bangladesh Shipping Corporation (BSC) and three corporate bonds namely IBBL Perpetual Bond, ACI Zero Coupon Bond, and BRAC Bank Subordinated Bond, which have been excluded in this study because of their different nature.

5.   22 DSE industry categories have been rearranged into 14 industries where corporate bond, debenture, and treasury bond were totally excluded because of their unique characteristics whereas the other five industry categories such as Ceramic, Paper & Printing, Tannery, Telecommunication, and Travel & leisure have been merged with related categories because of their very insufficient numbers.

6.   Though the current study is unique in nature, it has some similarities with IPO flipping or IPO underpricing.

7.   As per regulatory instruction, all the companies that have face value of BDT 100 or BDT 1,000 have converted their face value at BDT 10 during the period under study. Accordingly, we have converted IPO data related to our study on the basis of face value of BDT 10; as a result, the figures of EPS, NAV, Number of shares offered, and the Size of market lot have changed.

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