Emergence, Expansion and Contribution of Capital Market in Bangladesh: Internal Factor Analysis

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Abstract

This paper assesses the emergence, expansion and contribution of stock market in Bangladesh based on Dhaka Stock Exchange (DSE) & Chittagong Stock Exchange (CSE). Capital market plays a significant role in the economy as a source of long term financing. But the existing status of the capital market in Bangladesh is hardly in a position to play in mobilizing the resources for economic development. Therefore, the country's capital market needs structural change as well as proper regulation, uses of accounting standard which are likely to improve the confidence of investors and boost the functions of capital market. The author evaluated the existing performance of the two bourses by applying KMO. The value of KMO >0.50 to <0.70 represents the Mediocre, value of KMO >0.70 represents the Good Performance, value of KMO >0.80 represents the Very Good Performance. In this case, result shows that KMO reveals the sampling adequacy indicating i.e. 0.512 for Dhaka Stock Exchange (DSE) & 0.615 for Chittagong Stock Exchange (CSE) i.e. mediocre performance. The author identified the obstacles rising the capital market and analyzed the influential factors to overcome barriers as well as develop the capital market and also return the past recovering market capitalization in Bangladesh. The author also suggests the few recommendations to minimize the market crash.

Introduction

A mature and large stock market is perceived across the world as a barometer of the economic health and prospect of a country as well as a register of the confidence of domestic and global investors. A capital market plays as a strong catalyst in the industrialization and economic development of the country. Among developing countries , the contribution of the capital market have lately been recognized. The capital market in Bangladesh is still at a developing stage. Bangladesh capital market is one of the smallest in Asia but the third largest in the south Asia region. It has two full fledged automated stock exchanges

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namely Dhaka stock exchange and Chittagong stock exchange. The Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) has undergone significant changes contributing towards the development of Bangladesh capital market. The development of the capital market is crucial for capital accumulation, efficient allocation of resources and promotion of economic growth. Capital markets of different countries of the world collapsed in the face of global recession, the capital markets of Bangladesh remained quite buoyant at that time. Given the growing number of ordinary investors in capital markets, limited supply of securities and investors' expectations for more profit at times made the market volatile. Nevertheless, various steps have been taken to maintain market stability and to establish a transparent and vibrant capital market while deepening it. The Government has also started off-loading state-owned companies' shares. 5 state-owned companies have already completed off-loading of shares. As a result, confidence on capital market of local and foreign investors has increased. The Securities and Exchange Commission (SEC) has strengthened its surveillance on securities transactions and supervision on market intermediaries so that market can be operated in transparent manner. The stock market was in turbulence throughout much of 2009, with the long bullish trend starting to turn grim. The bullish trend was initiated by the end of the two-year political crisis and re-emergence of democracy via the December 2008 polls, and was largely unaffected by the BDR Mutiny. The market was heavily aided by the entrance of Grameenphone into the capital market, when the index rose by 22% over a single day on November 16, 2009. Share prices continued to fluctuate, reaching the annual high in mid 2009 before plummeting by the end of 2009. The market continued to be turbulent throughout 2010, with the DSE hitting its all time high revenue and the largest fall in a single day since the 1996 market crash, within the space of a month. By the end of 2010, it was well known that the capital markets of Bangladesh well overvalued and overheated. The central bank had taken measures to cool the market down and control inflation by putting a leash on the liquidity. The conservative monetary measures adversely affected the capital market, with the market falling once on December 13 by 285 points, over 3% of the DGEN Index which stood at around 8,500 points. The capital markets suffered a second fall on December 19, with the index falling a further 551 points, or about 7%.

This 7% fall in the Dhaka Stock Exchange's index on a single day was the largest fall in the 55 year history of the Exchange, surpassing the fall of the 1996 market crash.[10] This fall was deemed 'normal' by analysts, who believed the market, was overvalued. Any information known to the public or a private source should be fully reflected in the security's current price for the Effective Market Hypothesis (EMH) to hold. That bubble episode showed a stronger correlation between the surge in the DGEN index and the private sector credit growth, which increased to 28 percent in the FY 2009-2010.

Objectives of the Study

Against the above background, this paper examines the present scenario of capital market in Bangladesh and tried to identify the internal factors, if any; that may influence their capital.

Thus the specific objectives of the Study are as follows:

- To review the existing trading operational status and brief history of the capital market in Bangladesh.
- To explore the present scenario of the capital market in Bangladesh.
- To identify for the the major influencing factors in turned Dhaka Stock Exchange & Chittagong Stock Exchange (DSE & CSE) in Bangladesh.
- To find out the obstacles and solution of the capital market in Bangladesh.
- To provide few recommendations for the development of capital market in Bangladesh.

Literature Review

Generally, it is believed that the markets in the developing and less developed countries are not efficient at all. Keeping the objectives in mind of the present study, we had reviewed the existing literatures. The Capital Market Development in Bangladesh: problems and prospects (Mahmood Osman Imam, October 5, 2000), Capital Market: An Overview (Md. Hasan Imam,2005), An Overview of Bangladesh Capital Market (AZM Nazimuddin, 2007), Emerging Stock market and the Economy: The Case of Bangladesh (Ahmed, M. Farid, 2000), Equity Market Performance in Bangladesh: An Evaluation Savings and Development (Ahmed.M.Farid, 1998). The importance of the capital market lies in the fact that it is the primary source of external funds for corporate investment (Jensen and Murphy,1990).[11] A number of recent theoritical contributions suggest that stock markets promote long term growth. Well-developed stock markets give due return to prudently-managed firms in the form of rising shareholders, wealth which may increase payment of managers. The stock market contributes to economic development as it facilitates equity finance , spreads ownership among a large set of investors and thus mobilize the saving of the population , provides a mechanism for allocating capital to productive use and facilitates a link between the capital markets of a particular country and the markets of the industrial world (Ryrie, 1991).[12] Bencivenga et al. (1995)[13] formulate models where more liquid stock market (less expensive to trade equities) encourages investors to fund long duration projects because investors can easily sell their stakes in the projects if they need their savings before the projects matures. Investors in Bangladesh became increasingly interested in equity markets because many enterpreneurs look for requirements from the equity markets for many reasons and DSE and CSE play an integral role in the pace of industrialization of the country (Akhter S et al, 2005).[14] Dermirguc-Kunt and Levine (1996)[15], Singh (1997) and Levine and Zervos (1998) found that stock market growth plays an important role in predicting future economic growth in situations where the stock markets are active12. The proponents of stock market emphasize the importance of having a "developed" stock market in enhancing the efficiency of investment. A well functioning stock market is expected to lead a lower cost of equity capital for firms and allow individuals to more effectively price and hedge risk (Bepari M.K. and Mollik A, 2006).[16] In contrast, Stiglitz (1993)[17] argues that stock market liquidity does not enhance incentives for acquiring information about firms or improving corporate governance. Shleifer and Vishny (1986) and Bhide (1993) argue that more liquidity reduces the incentives of shareholders to undertake the costly task of monitoring managers resulting in weaker corporate governance and slowdown in effective resource allocation decelerating productivity growth.[18] Corbett and Jenkinson (1994), while discussing the contribution of stock market to corporate investment financing , suggest that it was negative in the United Kingdom and only marginally positive in the United States during the 1970's and the 1980's.[19] Analysis reveals that the Bangladesh stock market is growing in terms of market capitalization to GDP, turnover ratio and turnover to GDP but market is not still stable enough.[14]Although the controversy relating to the random walk behavior of stock prices started after the submission of Ph.D thesis of Bachelier (1900), the issue is still an unsettled vicinity of finance literature . Subsequent to Bachelier (1900) Cowels (1933) also studied the behavior of stock market prices and strongly supported the findings of Bachelier. Kumar and Makhija (1986) investigated the efficiency of non stationary stock price time series and concluded that non stationary time series conforms to the Efficient Market Hypothesis.

Methodology

The study considers quantitative data collected from the secondary sources . Data used in the study include daily closing values of the indices of Dhaka Stock Exchange (DSE), and Chittagong Stock Exchange (CSE). Information has been collected from the offices of the respective stock exchanges. As an automatic source, data are collected from different variables of the share market , annual reports of Bangladesh Security and Exchange Commission (BSEC) of Bangladesh, Dhaka Stock Exchange (DSE), and Chittagong Stock Exchange (CSE), relevant Articles, Journals, Bangladesh Economic Survey during 2004-2011, Bangladesh Economic Review during 2004-2011, Statistical Year Book during 2004-2011, and daily newspapers etc. For analyzing the data, major statistical tools like factor analysis, Keiser Mayer Olkin (KMO) Bartlestt's Test, Total Variance Explained, Eigenvalues, Extraction Sum of Squared Loadings R2, Rotation Sum Squared Loadings R2, Adjusted R2, F Change, Durbin-Watson Model & regression analysis etc. have been used for the study using the software Statistical Package for Social Science (SPSS) information regarding Turnover, No. of Listed Securities, Initial Public Offering (IPOs), Market Capitalization, Market Capitalization (as % of GDP), Issued Capital, Price Index, Cash Dividend & GDP. This study covered Eight years i.e. 2004 - 2011.

Limitations of the Study

Millions & Billions of dollars worth of capital can be raised from millions of investors, small and large with voluntary participation. Some well founded theories have been established by scholars after studying the operation of stock markets in the developed world. In recent years, monetary policy is directed towards maintaining price stability, keeping money supply at the optimum level in the productive sectors of the economy as well as accelerating economic growth. The Government of Bangladesh always gets low return from GDP as the level of productivity is very poor. Similarly Government revenue is also very poor as compared to the expenditure status of the country. The factors like unfavourable balance of payment & trade, high level of poverty & low level of savings, unemployment, frequent natural disaster, industrial sickness, high level of dependence on import, unfair competition etc are the main causes for declining efficiency of the capital market in Bangladesh and hence the status of the capital market is yet underdeveloped. While conducting the study, we were confronted with the some limitations. There was a little scope for research on this crucial subject as all the data was secondary and no way to collect primary data was available. Lack of a wider coverage due to time constraint. We did not have much time to visit all the relevant places and meet respective personnel. Only secondary data was used, but there is no alternative of primary data to ensure the accuracy and effectiveness of the study. Considering these the present study is planned.

Capital Market in Bangladesh: A Brief Description

Capital market concepts started in USA at Wall Street in 1653. It came to South Asia in 1890. The Bangladesh capital market operations in this part of the country started in mid fifties with the establishment of East Pakistan Stock Exchange Association Limited on 28April 1954, which started trading in 1956 with 196 securities listed on the EPSE(now DSE) with a total paid up capital of about Rupees 4 billion (Chowdhury 1994).It was renamed as Dhaka Stock Exchange (DSE) Limited on June 23, 1962. Initially it was a mutual organization (cooperative body) which was corporatized in recent activity of the Dhaka Stock Exchange (DSE) in term of turn over in the name of Dacca Stock Exchange Ltd. During those early periods until 1971, all trades in the exchange were conducted using trading data collected over telephone from Karachi Stock Exchange. After independence of Bangladesh, the operations of the stock exchange remained suspended until August 1976. At that time market trading started with only 14 listed companies having market value of only taka 90 million. The trade volume was very thin and could not attract investors. Over time some reform initiatives were taken to strengthen the market. First time Tk. 10 million daily trades were recorded in April 1992. Government adopted the Securities and Exchange Commission Act 1993 and established the SEC as the regulatory authority for the market and the Securities and Exchange Commission (SEC), established in 1993 under this Act, as the central regulatory agency oversees the activities of the entire capital market including issue of capital, monitoring the issue of stocks and operation of the stock markets including regulating of portfolio market. A big wing of Bangladesh capital market, Chittagong Stock Exchange (CSE) incorporated in 1995. Bangladesh Capital Market products are as Shares, Debentures, Mutual Funds, Bonds, Derivates, Future and Options etc. On the other hand Capital Market Players are as Securities and Exchange Commission (SEC), Stock Exchange (DSE & CSE), Private Limited Company, Brokers and Dealers, Merchant Banks, Investors, and Central Depository Bangladesh Limited (CDBL). At Present Bangladesh has two stock exchanges i.e. Dhaka Stock Exchange (Number of registered trading Members/Brokers is 195) and Chittagong Stock Exchange (Number of registered trading Members/Brokers is 124). Bangladesh Capital market is growing day by day , now there are two exchanges with 276 companies, 17 mutual funds, 8 debentures and 112 bond. The market capitalization of Dhaka Stock Exchange is BDT 104700 million and the market capitalization of Chittagong Stock Exchange is BDT 800000 million.[20]

Present Scenario of Capital Market in Bangladesh

The capital markets of Bangladesh were buoyant during 2009-10, but it became volatile from the second half of 2010-11.The capital market in Bangladesh had showed an upward trend since the fiscal year 2006-2007 when the DSE General Index (DGEN),the benchmark of the Dhaka Stock Exchange (DSE), started going up at a faster pace and reached its peak in December 2010. During that time the broad money growth rate increased from 17 percent to 22 percent. The market capitalisation of the Dhaka Stock Exchange (DSE) rose from 39.00 percent of GDP at the end of 2009-10, which was 21.4 percent of GDP at the end of 2008-09. During this period, the DSE general index increased by 98.43 percent from 3,010.26 to 6,153.68 indicating keen interests showed by the investors in the capital market. By the end of June 2010, the number of BO (Beneficiary Owner) accounts increased to 25.64 lakh from 14.15 lakh at the end of June 2009. At the beginning of 2010-11, the capital market showed buoyant. The DSE general index stood at 8,290.41 in December 2010, up by 34.72 percent compared to June 2010. Similarly, market capitalisation stood at 44.1 percent at that time. However, the overheated capital markets undergone sharp price correction in January 2011 and was in process of recovery and stabilization during the last quarter of 2010-11. Market capitalisation and general index of DSE stood at 36.24 percent of GDP and 5,093.19 at the end of 2010-11.[21] Albeit Bangladesh economy is not more integrated with the global economies, Global Financial Crisis 2008 has dented every sphere of Bangladesh. Bangladesh economy has also been limping since being dented by the blow of financial meltdown. On the other hand, Bangladesh economy has been gaining benefits from the crisis and it has lost. Because of income declination of developed countries' citizen low-priced garments of Bangladesh has been very popular registering more growth in the country's apparel sector. But financial collapse in many developed countries has slowed down the infrastructural development especially construction works in Middle East which have pushed many Bangladeshi workers to come back. Remittance inflow has risen but the number of workers going abroad has fallen drastically. Country s foreign currency reserve hit new record of $11.35 billion recently because of low import expenditure and rising trend of export earnings. But still 44 percent people are under poverty level; the Government and other concerned organizations should take comprehensive efforts to eradicate poverty. But to achieve desired level of growth to turn Bangladesh into a middle income country by 2021, growth rate should be accelerated. To do that more investment in infrastructure especially power sector, roads and highway, modern and sophisticated port facilities are badly needed. Cost of doing business should also be reduced along with the removal of redtops in commencing business. Public-Private Partnership has been incorporated in the budget for 2010-11 but success will depend on time bound implementation. Instead of eying towards foreign countries, multi-lateral donors and agencies Government should choose country's capital market to raise fund for development projects especially for the construction of Padma Bridge, elevated express way and other big projects which will also ensure people's association in profitable Government properties. Associating general people in lucrative Government venture means to create the way of ensuring equitable distribution of wealth and this is only possible through strong and vibrant capital market. Because of sluggish economic activities investment has not gotten momentum in recent years but for the sake of rapid economic growth more savings and investment are also necessary. Another important issue is that tax to GDP (Gross Domestic Product) is very poor in Bangladesh, which has been another cause of fiscal deficit in almost every year. The Government has been regularly depending upon the borrowing both from internal and external sources. Because of huge Government borrowing from the country's formal banking sector, private industrial ventures and other commercial set ups have been on declining trend. Instead of borrowing from banking sources and other foreign lenders Government should depend on raising fund from the country's capital market. The average turnover of both exchanges is now around BDT 5000 million per day. As a result , at the end of 1996 , 2010 , 2011 & 2012 , few local and foreign investors got a huge gain . On the other hand, general investors was trended to invest and faced a huge loss.

Findings and Analysis of the Study

Capital market of Bangladesh is one of the smallest in Asia but the third largest in the South Asia. It has two full fledged automated stock exchanges: Dhaka Stock Exchange(DSE) and Chittagong Stock Exchange (CSE). Capital market plays a significant role in the economy as a source of long term financing.

Internal Factor analysis for Dhaka Stock Exchange (DSE): Factor analysis is to identify the influential factors of Dhaka Stock Exchange (DSE) during 2004-2011. Factor analysis provided by the use of data of Table 1. This is shown below:

Table 1. Trading Operation in Dhaka Stock Exchange Ltd. during 2004-2011.

Year	Turnover (In crore Tk.)	No. of Listed Securities	Initial Public Offering (IPO)	Isssued Capital (In crore Tk.)	Market Capitalisation (In crore Tk.)	GDP (In crore Tk.)	Market Capitali -sation (as % of GDP)	Price Index	Cash Dividend
2004	5318.11	256	2	4953.20	22492.30	332973.70	6.75%	1971.31	153.20
2005	6483.48	286	22	7031.30	22829.00	370707.10	6.16%	1275.05	133.10
2006	6506.93	310	12	11843.70	31544.60	415728.60	7.59%	1321.39	125.25
2007	32282.01	350	14	21447.00	74219.60	472477.80	15.71%	2535.9	130.20
2008	66796.47	412	12	37215.60	104379.00	545822.20	19.12%	2309.96	135.00
2009	147530.08	415	18	52209.90	190322.80	614795.40	30.96%	3747.53	139.00
2010	400991.30	445	18	66434.00	350800.60	692380.50	50.67%	6877.70	141.10
2011	156091.20	501	14	87890.50	261679.10	701254.10	37.32%	4383.90	140.00

Source: Dhaka Stock Exchange (DSE).

KMO and Bartlett's Test (a)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.512
Bartlett's Test of Sphericity	Approx. Chi-Square	230.13
	df	36
	Sig.	0.000

a. Only cases for DSE are used in the analysis phase.

Above the table shows the results of Kaiser–Meyer-Olkin (KMO) & Bartlett's Test of factors of Dhaka Stock Exchange (DSE) based on the information of selected variables during 2004-2011. High values (between 0.50 and 1.00) indicate that factor analysis is appropriate. The value of KMO >0.50 to <0.70 is represent the Mediocre, value of KMO >0.70 is represent the Good Performance, value of KMO >0.80 is represent the Very Good Performance. In this case, KMO reveals the sampling adequacy indicating i.e. 0.512 for Dhaka Stock Exchange (DSE) i.e. mediocre performance for the same. Bartlett's Test of Sphericity indicates that the approximate chi-squire value is 230.13 of Dhaka Stock Exchange (DSE) with 36 (df) for at 0.000 levels of significance. Hence, the factor analysis is considered as an appropriate technique for analyzing the data, which shows the satisfactory results for the same. Results of Internal Factor Analysis: From the analyze of Table No. 1 we found that only 5 indicators that highly influence the capital market operations, on which the present study has been analyzed in order to obtain the research goal.

Total Variance Explained (a)

Com ponent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumu lative %	Total	% of Variance	Cumu lative %	Total	% of Variance	Cumu lative %
1	6.15	68.35	68.35	6.15	68.35	68.35	5.92	65.82	65.82
2	1.83	20.37	88.72	1.83	20.37	88.72	2.06	22.89	88.72
3	0.49	5.44	94.16						
4	0.31	3.52	97.69						
5	0.18	2.06	99.75						
6	0.01	0.14	99.90						
7	0.00	0.06	99.96						
8	0.00	0.02	99.98						
9	0.00	0.01	100.00						

Extraction Method: Principal Component Analysis. a Only cases for DSE are used in the analysis phase.

According to the Total Variance Explained (a), we find that the Eigen Values are greater than 1 (One), these five factors are being extracted for Dhaka Stock Exchange (DSE). These imply that performance of Dhaka Stock Exchange (DSE) depends on five major factors. Cumulative percentage rates i.e. 68.35, 88.72, 94.16, 97.69 & 99.75 percent for Dhaka Stock Exchange (DSE) and the remaining variables collectively explain the balance like 99.90, 99.96, 99.98 & 100.00 percent of total variance. Hence we can reduce the number of variables to 5 out of 9 for the selected variables under the study. Extraction Sums of Squared Loadings indicates the percentage of variance shows only two factors i.e. 68.35 & 20.37 including total position of the same was 6.15 & 1.83 respectively. Rotation Sums of Squared Loadings also indicates the percentage of variance shows only two factors i.e. 65.82 & 22.89 including total position of the same was 5.92 & 2.06 respectively.

Regression Analysis: After identifying the major influencing selected variables, we further proceed for regression analysis considering turnover as dependent variable. The regression analyses have been done using the software SPSS and the results of the regression analyses have been shown by the following table:

Model Summary

Model	R		R 2	Adjusted edR2 Estimate	Std. Error the	Change Statistics					Durbin-Watson	
	DSE (Selected)	DSE (Unsel.)				R2 Change	F Change	df1	df2	Sig. Change	DSE (Sel.)	DSE (Unsel.)
1	0.99(a)	0.88	0.99	0.98	2741.22	0.99	124.51	8	6	0.00	2.55	0.20

a Predictors: (Constant), Initial Public Offering (IPOs), Price Index, Cash Dividend, Issued Capital, GDP, No. of Listed Securities, Market Capitalization. b Unless noted otherwise, statistics are based only on cases for DSE. c Dependent Variable: Turnover

Regression Analysis reveals that Turnover has a significant relation with independent variables i.e. Turnover, No. of Listed Securities, Initial Public Offering (IPOs), Issued Capital, Market Capitalization, Price Index, Cash Dividend, Market Capitalization (as % of GDP), GDP of the Dhaka Stock Exchange (DSE) during the period 2004-2011. The Regression analysis tool performs linear regression analysis by using the "least squares" method to fit a line through a set of observations. Model summary indicates that, R= 0.99 % (selected) & 0.88% (Unselected) i.e. near about 1, so it is a favorable sign for the same. This indicates the high degree of linear association between dependent & independent variables as a whole. The R Square value is 0.99 indicates the goodness of fit of the regression model. Estimated regression model shows that about 99% of the total variation of the dependent variable is explained by the selected explanatory variables and the result is significant for the study. The calculated value of F is greater that than that of the tabulated value at 5% level of significance for df 1 (8) & df 2 (6) degrees freedom. Here also indicates the Durbin-Watson Static which represents the values i.e. 2.55 (Selected) & 0.20 (Unselected) position during the study period.

Internal Factor Analysis for Chittagong Stock Exchange (CSE): Factor analysis is to identify the influential factors of Chittagong Stock Exchange (CSE) during 2004-2011. Factor analysis provided by the use of data of Table 2 which is shown in below:

Table 2. Trading Operation in Chittagong Stock Exchange Ltd. during 2004-2011.

Year	Turnover (In crore Tk.)	No. of Listed Securities	Initial Public Offering (IPO)	Isssued Capital (In crore Tk.)	Market Capitalisation (In crore Tk.)	GDP (In crore Tk.)	Market Capitali -sation (as % of GDP)	Price Index	Cash Dividend
2004	1755.13	195	3	4697.87	21501.08	332973	6.46%	3597.70	142.00
2005	1404.27	210	16	5551.93	21994.28	370707	5.93%	3378.68	149.00
2006	1589.31	213	6	6937.84	27051.07	415728	6.51%	3724.39	145.00
2007	5259.03	227	13	8917.39	61258.00	472477	12.97%	7657.06	142.00
2008	9980.37	238	12	12160.32	80768.40	545822	14.80%	8692.75	149.00
2009	16256.26	217	18	15512.49	147080.70	614795	23.92%	13181.37	151.00
2010	21520.40	232	18	20111.56	253439.33	642380	39.45%	18116.10	150.00
2011	18633.80	241	6	32212.90	197242.30	681242	28.95%	14880.40	152.00

Source: Chittagong Stock Exchange.

KMO and Bartlett's Test (a)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.615
Bartlett's Test of Sphericity	Approx. Chi-Square	241.05
	df	36
	Sig.	0.000

a. Only cases for DSE are used in the analysis phase.

This table shows the results of Kaiser–Meyer-Olkin (KMO) & Bartlett's Test of factors of Chittagong Stock Exchange (CSE) based on the information of selected variables during 2004-2011. High values (between 0.50 and 1.00) indicate that factor analysis is appropriate. The value of KMO >0.50 to <0.70 represents the Mediocre, value of KMO >0.70 represents the Good Performance, value of KMO >0.80 represents the Very Good Performance. In this case, KMO reveals the sampling adequacy indicating i.e. 0.615 for Chittagong Stock Exchange (CSE) i.e. mediocre performance for the same. Bartlett's Test of Sphericity indicates that the approximate chi-squire value is 241.05 of Chittagong Stock Exchange (CSE) with 36 (df) for at 0.000 levels of significance. Hence, the factor analysis is considered as an appropriate technique for analyzing the data, which shows the satisfactory results for the same. Results of Internal Factor Analysis: From the Table No. 2 we found that only 4 indicators that highly influence the capital market operations, on which the present study has been analyzed in order to obtain the research goal.

Total Variance Explained (a)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.81	75.68	75.68	6.81	75.68	75.68	6.75	75.09	75.09
2	1.47	16.34	92.02	1.47	16.34	92.02	1.52	16.93	92.02
3	0.47	5.22	97.25						
4	0.10	1.10	98.36						
5	0.07	0.79	99.15						
6	0.04	0.46	99.61						
7	0.02	0.32	99.94						
8	0.00	0.03	99.97						
9	0.00	0.02	100.00						

Extraction Method: Principal Component Analysis. a. Only cases for CSE are used in the analysis phase.

According to the Total Variance Explained (a), we find that the Eigen Values are greater than 1 (One), these four factors are being extracted for Chittagong Stock Exchange (CSE). These imply that performance of Chittagong Stock Exchange (CSE) depends on four major factors. Cumulative percentage rates i.e. 75.68, 92.02, 97.25 & 98.36 percent for Chittagong Stock Exchange (CSE) and the remaining variables collectively explain the balance like 99.15, 99.61, 99.94, 99.97 & 100.00 percent of total variance. Hence we can reduce the number of variables to 4 out of 9 for the selected variables under the study. Extraction Sums of Squared Loadings indicates the percentage of variance shows only two factors i.e. 75.68 & 16.34 including total position of the same was 6.81 & 1.47 respectively. Rotation Sums of Squared Loadings also indicates the percentage of variance shows only two factors i.e. 75.09 & 16.93 including total position of the same was 6.75 & 1.52 respectively. Regression Analysis: After identifying the major influencing selected variables, we further proceed for regression analysis considering turnover as dependent variable. The regression analyses have been done using the software SPSS and the results of the regression analyses have been shown by the following table:

Model Summary for Regression

Model	R		R 2	Adjusted edR2 Estimate	Std. Error the	Change Statistics Statistic					Durbin-Watson	
	DSE (Selected)	DSE (Unsel.)				R2 Change	F Change	df1	df2	Sig. Change	DSE (Sel.)	DSE (Unsel.)
1	0.97(a)	0.99	0.95	0.90	1004.59	0.95	17.4	8	6	0.01	2.27	0.26

a. Predictors: (Constant), Initial Public Offering (IPOs), Market Capitalization, Cash Dividend, No. of Listed Securities, Issued Capital, Price Index, GDP. b Unless noted otherwise, statistics are based only on cases for CSE. c Dependent Variable: Turnover

Regression Analysis reveals that Turnover has a significant relation with independent variables i.e. No. of Listed Securities, Initial Public Offering (IPOs), Issued Capital, Market Capitalization, Price Index, Cash Dividend, Market Capitalization (as % of GDP), GDP of the Chittagong Stock Exchange (CSE) during the period 2004-2011. The Regression analysis tool performs linear regression analysis by using the "least squares" method to fit a line through a set of observations. You can analyze how a single dependent variable is affected by the values of one or more independent variables. Model summary indicates that, R= 0.97% (Selected) & 0.99% (Unselected) i.e. near about 1, so it is a variability of the dependent variable is explained by the predictors and also favourable sign for the same. This indicates the high degree of linear association between dependent & independent variables as a whole. The

R Square value is 0.95 indicates the goodness of fit of the regression model. The calculated value of F is greater than that of the tabulated value at 5% level of significance for df 1 (8) & df 2 (6) degrees freedom. Here also indicates the Durbin-Watson Static which was represents the values i.e. 2.27 (Selected) & 0.26 (Unselected) position during the study period.

Major Barriers of Capital Market in Bangladesh

After analysing the internal influential factors of both Dhaka Stock Exchange (DSE) & Chittagong Stock Exchange (CSE) we found the following major barriers of capital market in Bangladesh:

Lack of full disclosure

Full disclosure facilities the functioning of an efficient capital market by providing additional information about items included in basic financial statements. Inadequate disclosure, concealment of facts or some-times fabricated disclosures appear in the annual report. This additional information may be useful in making investment decision.

Lack of rules and regulations

Lack of enforcement with the compliance of rules and regulations and also lack of ethical orientation, insufficient information, education about capital & securities market.

Lack of trust of investment

Lack of trust self respect amongst interest groups to building up a healthy and investment friendly market atmosphere and also lack of potential securities and narrow options for the investors. Rumour and fake shares involved in our capital market. Because most of the investor are unsophisticated.

Lack of book building method

Lack of occupied steps to identify the problems of book building method and make correction of the system.

Lack of infrastructure facilities

Lack of physical and infrastructure facilities of the capital market in Bangladesh. The environment of investment is not suitable for the existing capital market in Bangladesh due to high risk and uncertainty. This uncertainty controllable & uncontrollable factors like high risk and uncertainty, political unrest (Strick, Hartal, lockout etc), financial statements of the company are not prepared in time, poor saving due to poverty, irregular declaration of dividend, industrial sickness, trade-union pressure, highly interest rate, lack of full disclosure facilities, price level changes, changing monetary policy, natural disaster (Flood, Cyclone, Monga, Nargis, Tsunami etc) etc.

Lack of training & development

Unskilled, incompetent and unqualified people always avoid investing their funds in the capital market of Bangladesh.

Major Contributions of Capital Market in Banglades

The stock market can work as the best cost effective alternative source of industrial finance by attracting institutional saving and channeling them into productive sectors. Usually industrial units require a long term commitment of capital but investors are often reluctant to relinquish control of their savings for long term periods. A liquid stock market induces investors to keep their savings in shares to make investment less risky and more attractive because they allow savers to acquire and asset equity and sell it quickly at the least cost if they need access to their savings or want to alter portfolios. A vibrant stock market can also lead to more investment by making investment less risky and more profitable. Stock market is considered as one of the vital macroeconomic indicators of a country. The capital market of Bangladesh have been contributing immensely to the economy with strong positive impact on growth , employment , reserve and balance of payments. Capital market contributes to our national economy is a large scale by increasing life style, per head income and employment opportunities. Capital market have been continuously playing and increasing large role to the economic growth and the livelihoods of people in Bangladesh. It has been continuously lifting-up the Gross Domestic Product (GDP) of Bangladesh. The percentage of Market Capitalization (MC) in GDP increased continuously from 2006 to June in 2010 (that is, increased from 6.5% to 36.6%.). As of June 2010, Market Capitalization (MC) of securities reached Tk.253439.99 crore (36.6% of GDP) which is 1078.73% higher than that of 2004. Capital market is positively the socio-economic condition of our families. Capital market income makes more strong local currency (Bangladesh) against US dollar. The government of Bangladesh is using capital market income to build schools, colleges, universities, hospitals, roads & highways, bridges, culverts, etc. Capital market income helps the government of Bangladesh to prepare or calculation of GDP. Capital market has been continuously keeping the contribution to alleviate the poverty of Bangladesh through micro-enterprise development, generating substantial employment and income.

Conclusion

The stock market can work as the best cost effective alternative source of industrial finance by attracting institutional saving and channeling them into productive sectors.Capital market in Bangladesh is now going through a hard time currently as there are some upheavals in the market and there exists an upsetting condition in the stock markets. But as per the past occasions, it is evident that our current capital market has a good ground now for future developments. We should take this opportunity to boost up the market as well as contribute to our economy. In addition, our mindset needs to be changed regarding earning profit from the capital market overnight. Foreign investments also need to be increased to ensure a sound capital and along with this, the government should make an authentic list of the companies that has credibility and accountability. Both Dhaka Stock Exchange (DSE) & Chittagong Stock Exchange (CSE) are operated capital market in Bangladesh with more contribution in economy of Bangladesh. Both are most essential part of the country's developing. But after analyzing we found that Dhaka Stock Exchange (DSE) are more contributor than Chittagong Stock Exchange

(CSE) for the economic development of Bangladesh. Hence, at present capital market has been facing huge market crash & decreasing the price index during the last two years. So, a strong capital market acts as a vehicle for growth of the economy. Therefore, it should be the joint responsibility of the regulators, the exchanges, Securities and Exchange Commission and the government to properly discharge their due roles. At the same time, there must also be adequate, update and relevant information flow from the listed companies & joint initiatives of the SEC to the investors at the after checking and re-checking them properly. Concerned agencies should also educate the investors. In addition, investment facilities and law and order situation of the country need improvement. These issues are important to security analysts, investors and security regulatory exchange bodies in their policy making decision to improve the market conditions. Although, the government has sophisticated plan but it has not been that effective for the revival of foreign investment. Last but not the least, the market intermediaries including the financial intermediaries must discharge their responsibilities to boost the capital market. Keeping in view the objectives of capital market, the regulators need to be more cautious. Specific recommendations for improving the roles of regulators as provided in this paper to improve long way in activating capital market and ensuring on, they are to build their image as a necessary alternative by maintaining a smooth relation public confidence. Ensuring effective monetary management and developing an efficient and reliable financial market are the prerequisites for achieving the goals of macroeconomic stability. Monetary policy should be geared towards maintaining low level of inflation and price stability, promoting low rate of interest in the banking system and changeling increasingly larger volume of financial resources to the productive sectors of an economy. In recent years; monetary policy is directed towards maintaining price stability, keeping money supply at the optimum level in the productive sectors of the economy as well as accelerating economic growth. Finally, developing countries which accounts for 75% of the world's population, have an enduring need to attract capital and technology to improve their infrastructure and standard of living. Developing economies, thus, look forward to their capital markets as the engine for future growth as its existence ensures mobilization of surplus funds to the ones suffering from deficit. In addition, there is an initiative to frame Financial Reporting Act to maintain stability in capital market. The government has been considering a plan to establish a Financial Reporting Council to oversee the audit and accounting standards and their transparency. It is expected that these initiatives will regain investors' confidence in the capital market. Capital market of Bangladesh separately to find out their contribution towards the national income of Bangladesh. Continuous research on this area is very essential to reach at a conclusion about the level of efficiency in emerging markets.

Recommendations

If we can develop our capital market, it will definitely enhance our national economy. The following recommendations can be made to improve the operational activities of the capital market in Bangladesh.

Minimum profit

Minimum profit should be declared by the Government for each investment to attract the positive attention of the risk avoider persons & Institutions.

Special initiative by the Government

Government should be taken special initiative for the establishment of capital market functioning in the district level, so that the market become easy accessible to the general people which will encourage & influence them in investing in the capital market. Financial statements of the company should be prepared in time according to Securities and Exchange Commission Ordinance 1969 and the Securities and Exchange Commission Act 1993.

Correction of book building method

Steps should have take to identify the problems of book building method and make correction of the system. It will also provide corrective measures to rumours and fake reports and thus making the trading of securities smooth and uninterrupted.

Infrastructure facilities

Merchant banks (MBs) should be allowed to deal in secondary securities on their own account, which are not currently allowed. Quick transformation is expected to reduce workload of physical deposit and withdrawal of securities.

Good dividend declaration

Each & every company should arrange the AGM in due time & declare dividend to their shareholders considering the controllable factors.

Increase of Share Supply

The government should off load its equity holdings in SOEs and MNCs through stock market. This will improve the supply of securities in the market. Unlisted companies and unscheduled Bank Should be incorporated in the Securities and Exchange Commission providing incentives and extra facilities.

Practices of Accounting Standard

To represent the real status in terms of every aspect of the company, audit reports should be prepared according to the International Accounting Standards (IAAS).

Establishment of separate judicial

Establishment of a separate judicial security tribunal for dealing with cases related to securities market.

Training & development

Training & research activities should be developed for the development of the capital market in Bangladesh.

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