Forecasting on DSE General Index and Identifying the Main Reasons Behind the Recent Market Crash

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Abstract

The Capital Market of Bangladesh has been passing tough times since December 2010 as high volatility is eroding the capital of thousands of investors that might turn into social instability. This fall is caused by many factors that I tried to identify and tried to forecast some reasons behind the market crash. Primary issue related problems was faulty listing methods and IPO overpricing, few numbers of new listings, revaluating assets before company listing, high premium in issuance of right share/Repeat IPO etc. while secondary market related problems was stock splits and stock price manipulations through block trading, circular trading and insider trading. Investor's greed and irrational behavior played a big rule to make the stock prices sky rocking as they were crazy to buy shares without judging the company fundamentals. Shares of the companies with closed operations and big accumulated losses were rising constantly due to investors high risk appetite that caused them to loss everything. Government had already taken many steps (including SEC reforms) to stabilize the market but failed as investors confidence is in the bottom level.

Keywords: Excess Money Supply, Stock Market, Book Building System, Bangladesh Stock Market Crash, Regulators, DSE etc.

Introduction

Sound Capital Market is an indispensible part of an economy. Without sound and efficient capital market which provides long term funds to the entrepreneurs, rapid economic development will be hampered. Capital Market of Bangladesh is still highly speculative and lacks transparency due to poor regulatory framework. In Bangladesh, The financial sector was historically driven by banks and capital market had fewer rules to play as people had mixed perception about the risk pattern in capital market that discouraged them mostly to invest there. But in the mid of ninetieths of last century capital market started to show vibrant behavior that make people interested about the stock exchanges. As the index was rising sharply and everyone was making money, many people started to invest their money to the heated market that made a bigger bubble and finally the bubble bursts. Dhaka Stock Exchange was first incorporated as East Pakistan Stock Exchange Association Ltd in 28 April 1954 and started trading from year 1956. After the Liberation War in 1971 the trading was discontinued for five years. DSE again started its activities in 1976 with only 9 listed companies, having a total paid up capital of Tk. 137.52 million. The actual growth of the stock exchange in Bangladesh (the DSE) started since 1983, when the market capitalization was Tk. 812 million. In the Dhaka Stock Exchange (DSE), there were 412 securities listed as on

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December 2008, Dec'10, and October'2013 there were 445 and 527 listed securities. Since its inception DSE faces tremendous ups and down, two market crashes, and so on. Regulators tried to improve its condition by imposing different rules and regulation. Along with recent crashes in capital market, DSE is not considered as efficient market and investors tend to lose their confidence on it. My interest of writing this article originated from the market crash of 2011 and the relevant context of the subsequent events of market in Bangladesh. There are two stock exchanges in Bangladesh: 'Dhaka Stock Exchange' and 'Chittagong Stock Exchange'. In 1996, there was a similar crash in the market. After that market was dull for a few years but gradually gained the momentum with occasional downturn but with no major day crash. In previous years to 2011, stock price increased at a level which seemed unsustainable. Already, many common people – salaried men, housewives, jobless people, small businessmen, students – all poured in their savings into market.

Objectives of the study

- The broad objective of the study is **"**To see the forecasted pattern of The GENERAL INDEX and also to see the reasons for huge market fluctuation in recent days**."**

Specific objective of the study

- To find out the hidden reasons that play a vital affect on the stock price.
- Overview on the Book building method and its limitations.
- Effect of the faulty policy of the Securities and Exchange Commission.
- To see whether Government policy is affecting the SEC's policy.
- To see the effect of market correction.

Methodology

- **Data Collection Method:** In my research, I have depended mainly on secondary data. Direct survey will be the first consideration of my research.
- **Questionnaire Pattern:** I developed my questionnaire focusing specially on finding out the basic reasons for the market failure. There was close ended question in my questionnaire. To avoid the risks, I tried to make my questionnaire more close-ended. I tried my best to make all the questions easy to understand.
- **Population:** Since my research topic is to find out the reasons for market crush, my target population will be DSE officers, authorize representatives of brokerage houses and general investors and the area is Motijil, Shyamoli and Mirpur in Dhaka City.
- **Sample Size:** The sample size was 120. As we know that the minimum sample is 120, I will try to make it as large as possible for accuracy of my hypothesis testing.
- **Target population:** The target population for this study has been defined as retail investors (students, salaried men, retirees, small businessman etc) who have been active in Dhaka Stock Exchange (DSE) before and after the market crash of 2010.

- **Sampling Method*:*** Data collection was based on random sampling.
- **Secondary Research*:*** I also tried to collect data and necessary information from the website of Dhaka Stock Exchange, Bangladesh Bank, Securities and Exchange Commission and so on.
- **Software:** For my report, I used statistical software SPSS 17 and ANOVA.

Literature Review

Although volatility is regarded as a major challenge for sustainable development of the stock markets, yet for a number of countries, capital market development has been accompanied by increased volatility (Wei, 2005). The lack of efficient regulation over the securities market and business, is viewed as a major reason which is hindering the healthy development of the securities market. The volatility of the securities market is also associated with governance problems of the market. The market regulators all over the world consider market bubbles exhibiting "irrational exuberance" to have a potential for economic disruptions and distortions. Besides, the perception of speculative behavior works against creating trust and a sense of fairness in financial markets. When combined with allegations of market manipulations, insider trading, and outright scams, the speculative nature of the market can be a serious impediment to capital formation, and efficient functioning of the financial markets (Krishnamurti et. al., 2003).

The regulators seek to find the right blend of regulation, disclosure and enforcement, and consultation between the public, the industry and the relevant stakeholders. Different jurisdictions have adopted different systems of securities regulation. The divergence of securities regulation and practices illustrates that different social, political, economic, and historical environments foster different systems of securities, regulation and practice, suitable to the specific circumstances (Fagan, 2003).

Over the last few years' the country's major stock market namely the Dhaka Stock Exchange (DSE) has witnessed very high growth. The DSE all share price index (DSI) has reached at 3747.53 at the end of the year 2009, which is about 199 per cent higher compared to that of year 2005. This rally of increasing trend is also visible for other major indicators such as the DSE general index (DGEN), the blue chip companies (DSE20) and their positive influence on increasing market capitalization. The recent vibrant nature of the capital market might be due to the increased interest in the market by a large number of individual investors which has been influenced by the government's decision to reduce the bank interest rates for its different types of savings instrument. But the perturbing aspect of this sharp rise is the accompanying increase of "Price Earnings (P/E) Ratio", which is causing investment in the capital market risky over a short period of time.

After the crash of 1996, the capital market of Bangladesh has attracted a lot more attention, importance and awareness and a number of investment-friendly regulatory reforms relating to public issue, rights issue, acquisition, and mergers have been implemented by the Securities and

Exchange Commission (SEC). Strict rules and guidelines, trading circuit breakers, international standard surveillance and disclosure requirements for both listed scripts and IPOs, have been introduced to protect investor rights and ensure fair play (Rashid, 2008). Even after all these initiatives from the regulator's side, the market is yet to be labeled as a secure place for the general investors due to the presence of irregularities. The SEC has intended to correct the irregular market behavior in the short run by using its limited instruments such as changing Margin Loan Ratio, discouraging trade of overvalued shares, (by taking them in 'over the counter' or 'spot market') changing settlement period and separation of counter for trading based on their counter, which the SEC has used more or less in a timely manner so far. But, in some cases the lack of proper and firm decisions from the regulator's side e.g. face value harmonization have made the market more unstable. However, to manage the market successfully in the long run, it is felt that these are not enough rather the regulator should go for more prudent and timely decisions. In the current state of market growth, the role of regulators has been questioned in two accounts, firstly, whether regulators act promptly to address the short-term volatility in the DSE or not and secondly, whether frequent changes in regulators' decisions contribute negatively in the way of sustainable development of the market or not.

The United States experienced the Nasdaq bubble in the late 1990s. The fluctuations beliefs generated by overconfidence among the Bangladesh investors led to larger speculative component in stock prices, and the technical bubble of the U.S. market was identified as the result of "exuberance" (Shiller, 2000; Chen, Hong, and Stein, 2002). Given that markets in the advanced economies seemed to be more susceptible to speculative bubbles and crashes, and many emerging markets also display similar evidence, it seems reasonable that no one should look forward to these phenomena disappearing from the Bangladesh markets (Ahmed et al., 2006).

There are many literatures investigating market valuations. Traditionally, stock valuation literature in accounting focuses on the fundamental value measures that address simultaneous prices and returns. Prior researches in the accounting literature such as Abarbanell and Bernard (1995) investigated the empirical properties of the residual income formula to explain cross-sectional prices. Empirical studies by Frankel and Lee (1998) show that better pricing fits than the traditional dividend discount model as well as better predictive power than financial ratios analysis can be realized by the multi-stage residual income model. For example, Dong, Hirshleifer, and Teoh's (2007) misevaluation as the deviation of market price from the fundamental value. They believe intrinsic value reveals a discounted value of analyst's forecasts of future earnings that reflects growth prospects and opportunities. Thus, normalizing market price by intrinsic value which sorts out the extraneous effects of the firm's growth provides a purified measure of misevaluation. Their measure of market misevaluation minimizes the confounding of misevaluation effects and growth opportunities existing in many market and investment studies. Their findings indicate that firms respond to overvaluation by investing more. On the whole the authors applied a forward-looking fundamental measure and obtained a general measure of market misevaluation which sorts out growth effects.

The stock valuation literature in finance focuses on the ability of the fundamental measures to forecast future returns. For example, Fama and French (1988, 1989), and Campbell and Shiller (1988) examined relationship between market multiples, such as book-to-market ratio or dividend yield (dividend/price) and subsequent market returns. The authors emphasized on forecasting returns by simple valuation measures predictability of market returns.

Glassman and Hassett (1999) questioned the reason why the stock prices keep increasing when the market was thought to be fully valued or on the verge of a crash. The authors believed the incredible returns that stocks produced came from recognizing that stocks had been far riskier than bonds and as a result has generated more returns. Glassman and Hassett (1999) think that stocks are terrific investments and investors are gradually shrinking the risk premium toward where it should be. They believed that investors are bidding up the prices of stocks because they are catching on to the true riskiness of stocks and hoping to have a higher return to compensate for that risk. Their anticipation of the Dow Jones Industrial Average to end up at 36,000 was considered extremely dangerous because people would get irrationally exuberant when they see the news and jump into the market without proper preparation.

The present study has attempted to find out answers to through the likeaid scale question of these questions Basic Descriptive Analysis.

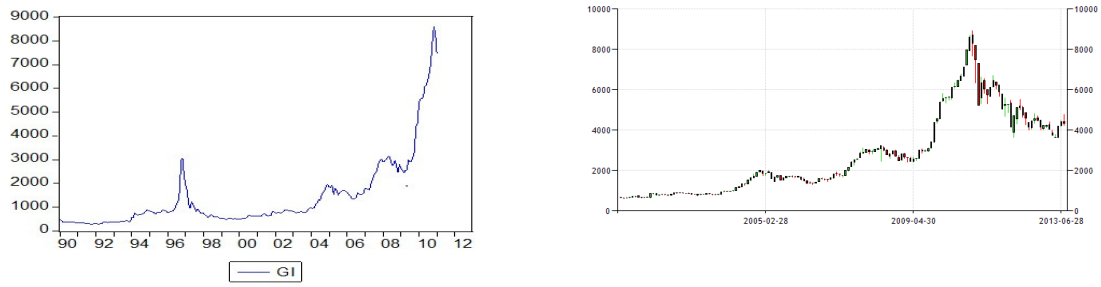
- **Forecasting part:**
  In the forecasting part, I tried to forecast on the DSE general index and to see it exact pattern and then to forecast on it.
- **Main project**:
  In the main project part I tried to find out the basic reasons behind the recent market crash during November-January 2010-2011.

Forecasting General Index

Forecasting is the process of making statements about events whose actual outcomes (typically) have not yet been observed. A commonplace example might be estimation of some variables of interest at some specified future date. Prediction is a similar, but more general term. Both might refer to formal statistical methods employing time series, cross-sectional or longitudinal data, or alternatively to less formal judgmental methods. Usage can differ between areas of application: for example in hydrology, the terms "forecast" and "forecasting" are sometimes reserved for estimates of values at certain specific future times, while the term "prediction" is used for more general estimates, such as the number of times floods will occur over a long period. Risk and uncertainty are central to forecasting and prediction; it is generally considered good practice to indicate the degree of uncertainty attaching to forecasts. The process of climate change and increasing energy prices has led to the usage of gain forecasting of buildings. The method uses Forecasting to reduce the energy needed to heat the building, thus reducing the emission of greenhouse gases. Forecasting is used in the practice of Customer Demand Planning in everyday business forecasting for manufacturing companies. The discipline of demand planning, also sometimes referred to as supply chain forecasting, embraces both statistical forecasting and a consensus process. An important, albeit often ignored aspect of forecasting, is the relationship it holds with planning. Forecasting can be described as predicting what the future *will* look like,

whereas planning predicts what the future *should* look like. There is no single right forecasting method to use. Selection of a method should be based on your objectives and your conditions (data etc.). A good place to find a method is by visiting a selection tree. The first step for forecasting on DSE index is to see the pattern of the monthly data set of the DSE General Index.

Figure: 1 DSE General Index 1990-2013



If I see the diagram, there is a big fluctuation in the area 1996. That's the area of the market crash of 1996. It is an upper trend graph. I can also see that there is also a huge fluctuation in the end of the year 2010. That's the area of my internship report. In the year 2010 I can see that the DSE general index moved down from 3000 point to almost 800 point. It seems to be quit abnormal. And in 2013 the general index drastically fell to 4000 point.

Forecasting of DSC General Index

Last of all here I want to judge the accuracy of my forecasting. On the following diagram we see that the pattern of the actual index and the forecasted index are not following the same pattern. Both of them are positively sloped, but the overall forecasted line does not perfectly match with each other. There are major deviations in the graph. So I can say that my forecasting is not perfect.

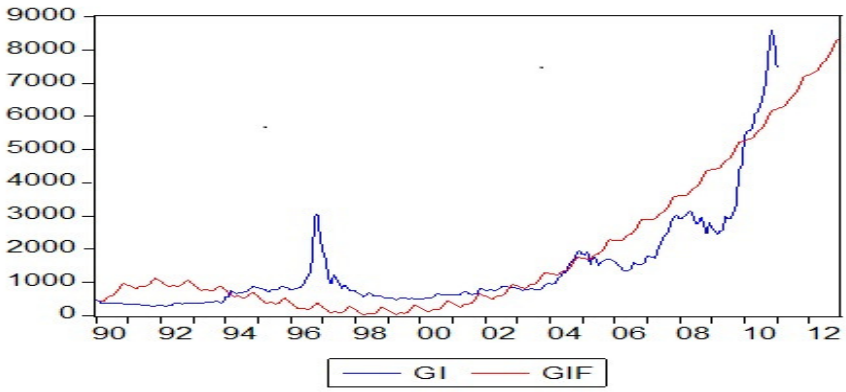


Figure: 2 Actual and Forecasted Graph of DSE General Index

Findings and Data Analysis

Objective of the Part:
In this part I will do my statistical analyses on the data that I have collected on the recent market crash.

- At first I will show what the variables in my analysis are and why they are important.
- I will present the data sheet on the variables on which I will do my statistical analyses.
- My first course of action will be to show some descriptive statistics of the variables.
- With the data, I will conduct estimations of population means of each of the variables using confidence level technique.
- I will then analyze the correlation among the independent variables with the dependent variable.
- Finally I will show the multiple linear regression models and carry out F-test, Durbin Watson auto correlation test and individual t-test for beta coefficients.

Basic Descriptive Analysis:
It is important to know some of the basic descriptive statistics of the variables that I am including in my model. Although they are not the key focus of this report as inferential statistics are, nevertheless they are very important in knowing the central tendency of their distribution and also the degree of dispersion. Understanding such statistics help me to determine the Skewness of the distribution of the variables and hence will help me infer more about the distribution of the population means.

Table: 1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Overvaluation of shares is another prime reason for the recent market crash	120	2.00	5.00	4.1750	.68185
Faulty policies and frequent decision changes of SEC are another prime reason for the recent market crash.	120	3.00	5.00	3.8667	.75519
Most of the recent investor does not have proper knowledge about the capital market	120	2.00	5.00	3.7500	.84266
Manipulation is the prime reason for the recent market crash	120	1.00	5.00	4.2917	.82397
Recent market crash is the result of faulty Book Building system	120	3.00	5.00	3.7667	.79635
Abnormal price increase in the capital market is the result of decrease in the interest rate of the bank	120	3.00	5.00	3.8167	.60784
Valid N (listwise)	120				

Table:2 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
The supervisory capability of DSE and SEC cause the rapid fluctuation in the capital market	120	3.00	5.00	3.8417	.73331
People who are acting like a speculator rather than an investor are more vulnerable toward rumors	120	3.00	5.00	4.0750	.76874
Lack of cooperation among DSE, SEC and Bangladesh Bank causes the appropriate application of the policy	120	3.00	5.00	3.5583	.74242
Private placement is a prime reason for the overvaluation of the share price as well as the recent market crash.	120	1.00	5.00	3.3333	.98162
Do you think Government Should take more strong steps to overcome the present situation?	120	1.00	5.00	3.3333	.98162
Valid N (listwise)	120				

Interpretation: In this table I have shown the mean, standard deviation of different factors of each of the variables. The mean shows us the central tendency and the standard deviation shows us the dispersion.

ANOVA Test:

Hypothesis 1:
Null hypothesis, H_o: Excess money supply throughout the last couple of years is not a prime reason for the recent market crash.
Alternative hypotheses, H_1*:* Excess money supply throughout the last couple of years is a prime reason for the recent market crash.

Table:3 ANOVA[s]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.859	1	.859	1.363	.245[a]
	Residual	74.341	118	.630		
	Total	75.200	119			

a. Predictors: (Constant), Excess money supply throughout last couple of years is a prime reason for the recent market crash.

b. Dependent Variable: Recent market crash

Interpretation: The above ANOVA table reveals that the F value (1.363) is identically greater than the significant value (.254). It indicates that my hypothesis is correct. Here null hypothesis is rejected. In this analysis I would like to say the prime reason for the market crash is excess money supply in the share market of the last couple of years. There is a strong and significant relationship between excess money supply and the reason of recent market crash.

Hypothesis 2:
Null hypothesis, H_o: Overvaluation of shares is not a prime reason for the recent market crash.
Alternative hypotheses, H_1: Overvaluation of shares is another prime reason for the recent market crash.

Table: 4 ANOVA[s]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.464	1	1.464	1.526	.219[a]
	Residual	113.203	118	.959		
	Total	114.667	119			

a. Predictors: (Constant), Overvaluation of shares is another prime reason for the recent market crash

b. Dependent Variable: Recent market crash

Interpretation: The above ANOVA table reveals that the F value (1.526) is identically greater than the significant value (.219). It indicates that my hypothesis is correct. Here null hypothesis is rejected. In this analysis I would say the prime reason behind the market crash is the higher share price in market. There is a strong and significant relationship between overvaluation of share price and reason of recent market crash.

Hypothesis 3:
Null hypothesis, H_o: Faulty policies and frequent decision changes of SEC are not prime reason for the recent market crash.
Alternative hypotheses, H_1: Faulty policies and frequent decision changes of SEC are another prime reason for the recent market crash.

Table: 5 ANOVA[s]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.284	1	1.284	1.336	.250[a]
	Residual	113.383	118	.961		
	Total	114.667	119			

a. Predictors: (Constant), Horrible policies and frequent decision changes of SEC are another prime reason for the recent market crash.

b. Dependent Variable: Recent market crash

Interpretation: The above ANOVA table reveals that the F value (1.336) is identically greater than the significant value (.250). It indicates that my hypothesis is correct. Here null hypothesis is rejected. In the light of this analysis, I would say that the prime reasons for the market crash are the horrible policies and frequent decision changes by DSE. There is a strong and significant relationship between horrible policies and SEC's frequent decision changes and the reason of recent market crash.

Hypothesis 4:
***Null hypothesis, H_o*:** Most of the recent investors have proper knowledge about the capital market.

***Alternative hypotheses, H_1*:** Most of the recent investors do not have proper knowledge about the capital market.

Table: 6 ANOVA[s]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.047	1	.047	1.049	.626[a]
	Residual	114.619	118	.971		
	Total	114.667	119			

a. Predictors: (Constant), Most of the recent investors do not have proper knowledge about the capital market

b. Dependent Variable: Recent market crash

Interpretation: The above ANOVA table reveals that the F value (1.049) is identically greater than the significant value (.626). It indicates that my hypothesis is correct. Here null hypothesis is rejected. In this analysis I can say the prime reason for the market crash is that the investor doesn't have proper knowledge of the share market. It means the investor has a week efficiency over the share market. There is a strong and significant relationship between investor having week efficiency over the share market and the reasons of recent market crash.

Hypothesis 5:
Null hypothesis, H_o: Manipulation is not the prime reason for the recent market crash.
Alternative hypotheses, H_1*:* Manipulation is the prime reason for the recent market crash.

Table: 7 ANOVA[s]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.436	1	.436	.689	.408[a]
	Residual	74.764	118	.634		
	Total	75.200	119			

a. Predictors: (Constant), Manipulation of the market.

b. Dependent Variable: Recent market crash

Interpretation: The above ANOVA table reveals that the F value (.689) is identically greater than the significant value (.408). It indicates that my hypothesis is correct. Here null hypothesis is rejected. In this analysis I would say that the prime reason for the market crash is that all the investors don't have enough inside company's information. One who has enough information can manipulate the market.

Hypothesis 6:
Null hypothesis, H_o: Recent market crash is not the result of faulty Book Building system.
Alternative hypotheses, H_1: Recent market crash is the result of faulty Book Building system.

Table: 8 ANOVA[s]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.991	1	.991	1.575	.212[a]
	Residual	74.209	118	.629		
	Total	75.200	119			

a. Predictors: (Constant), Recent market crash is the result of inefficient book building system.

b. Dependent Variable: Recent market crash

Interpretation: The above ANOVA table reveals that the F value (1.575) is identically greater than the significant value (.212). It indicates that my hypothesis is correct. Here null hypothesis is rejected. In this analysis I would say that another prime reason behind the market crash is the inefficient Book Building system. There is a strong and significant relationship between DSC's inefficient Book Building system and the reason of recent market crash.

Hypothesis 7:
Null hypothesis, H_o: Abnormal price increase in the capital market is not the result of decrease in the interest rate of the bank.
Alternative hypotheses, H_1: Abnormal price increase in the capital market is the result of decrease in the interest rate of the bank.

Table: 9 ANOVA[s]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.730	1	.730	.756	.386[a]
	Residual	113.936	118	.966		
	Total	114.667	119			

a. Predictors: (Constant), Abnormal price increase in the capital market is the result of decrease in the interest rate of the bank

b. Dependent Variable: Recent market crash

Interpretation: The above ANOVA table reveals that the F value (.756) is identically greater than the significant value (.386). It indicates that my hypothesis is correct. Here null hypothesis is rejected. In this analysis I would say that the prime reason for market crash is that the investors have week form efficiency in the market. One who has a more inside information about specific share will make abnormal profit in the market. There is a strong and significant relationship between DSC's inefficient Book Building system and the reason of recent market crash.

Hypothesis 8:
Null hypothesis, H_o: The supervisory capability of DSE and SEC did not cause the rapid fluctuation in the capital market.
Alternative hypotheses, H_1: The supervisory capability of DSE and SEC cause the rapid fluctuation in the capital market.

Table: 10 ANOVA[s]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.627	1	.627	.649	.422[a]
	Residual	114.040	118	.966		
	Total	114.667	119			

a. Predictors: (Constant), The supervisory capability of DSE and SEC cause the rapid fluctuation in the capital market

b. Dependent Variable: Recent market crash

Interpretation: The above ANOVA table reveals that the F value (.649) is identically greater than the significant value (.422). It indicates that my hypothesis is correct. Here null hypothesis is rejected. In this analysis I would say another prime reason for the market crash is that the capital market rapidly fluctuated because it is speculative market. There is a strong and significant relationship between the supervisory capability of DSE and SEC and the rapid fluctuation in the capital market.

Hypothesis 9:
Null hypothesis, H_o: People who are acting like a speculator rather than an investor, are not more vulnerable toward rumors.
Alternative hypotheses, H_1: People who are acting like a speculator rather than an investor are more vulnerable toward rumors.

Table: 11 ANOVA[s]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.128	1	.128	.932	.717[a]
	Residual	114.539	118	.971		
	Total	114.667	119			

a. Predictors: (Constant), People who are acting like a speculator rather than an investor are more vulnerable toward rumors

b. Dependent Variable: Recent market crash

Interpretation: The above ANOVA table reveals that the F value (.932) is identically greater than the significant value (.717). It indicates that my hypothesis is correct. Here null hypothesis is rejected. In this analysis I would say another prime reason is for the market crash is that the people who are acting like a speculator rather than an investor are more helpless toward rumors. There is a strong and significant relationship between people's attitude to the capital market and the market crash.

Hypothesis 10:
Null hypothesis, H_o: Lack of cooperation among DSE, SEC and Bangladesh Bank did not cause the appropriate application of the policy.
Alternative hypotheses, H_1: Lack of cooperation among DSE, SEC and Bangladesh Bank caused the appropriate application of the policy.

Table: 12 ANOVA[s]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.083	1	.083	1.085	.771[a]
	Residual	114.584	118	.971		
	Total	114.667	119			

a. Predictors: (Constant), Lack of cooperation among DSE, SEC and Bangladesh Bank causes the appropriate application of the policy

b. Dependent Variable: Recent market crash

Interpretation: The above ANOVA table reveals that the F value (1.085) is identically greater than the significant value (.771). It indicates that my hypothesis is correct. Here null hypothesis is rejected. In this analysis I would say that the prime reason for the market crash is that the capital market lacks cooperation among DSE, SEC and Bangladesh Bank's cause they don't provide proper information on the proper time for investors. Even DSE SEC and Bangladesh bank doesn't have the appropriate application of the policy for investors in the share market. There is a strong and significant relationship among DSE, SEC and Bangladesh Bank and the appropriate policy should be follwed.

Hypothesis 11:
Null hypothesis, H_o: Private Placement is not a prime reason for the overvaluation of the share price as well as the recent market crash.
Alternative hypotheses, H_1*:* Private placement is a prime reason for the overvaluation of the share price as well as the recent market crash.

Table: 13 ANOVA[s]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.451	1	5.451	9.221	.003[a]
	Residual	69.749	118	.591		
	Total	75.200	119			

a. Predictors: (Constant), Private placement is a prime reason for the overvaluation of the share price as well as the recent market crash.

b. Dependent Variable: Recent market crash

Interpretation: The above ANOVA table reveals that the F value (9.221) is identically greater than the significant value (.003). It indicates that my hypothesis is correct. Here null hypothesis is rejected. In this analysis I would say the prime reason for the market crash is that the proposal of private placement because big investors come for private placement (to buy a cheaper price of the

share) and sale at overvalue of share price. There is a strong and significant relationship between private placement and the recent market crash.

After analyzing all the SPSS outputs and the hypothesis testing, I can conclude that-

- The dataset that I had used was valid because it had passed the validity test.
- There is no seasonal pattern in the General Index of Dhaka Stock Exchange.
- It is really tough to forecast on the General Index of Dhaka Stock Exchange as the market is inefficient.
- There is also no trend found.
- After conducting all the tests, I found that the null hypotheses were rejected.
- This indicates the validity of all the assumptions that I took for the report.
- The result of all the statistical outputs have proved that in Dhaka Stock Exchange stock prices do not follow the traditional demand supply theory of stock price valuation.
- There are many other factors that play a vital role in deciding the stock price in Dhaka Stock Exchange.

Recommendations

According to the topic described above some recommendations are stated below-

- First of all the monitoring capability of DSE and SEC should be strong enough to match the demand and the supply in the capital market.
- Rumor and manipulation should be controlled by the authority.
- DSE and SEC should provide training program for the investors as most of them have no sufficient knowledge about the capital market.
- Frequent decision changing criteria of SEC should be minimized.
- Overvaluation of shares should be investigated.
- DSE and SEC should be more active in the case of the supervisory.
- Cooperation between DSE and SEC is essential.
- In our capital market there is no financial analyst so it is an important factor for the capital market.
- Syndicate and manipulation should be controlled strictly.
- Bangladesh Bank should be more active about the capital market.
- All B/O accounts should be monitored by efficient team.
- Awareness among the investors should be increased.
- Number of investors should be controlled.

Conclusion

In the present days, Dhaka Stock Exchange suffers from some serious problems which have worked behind the recent market crash. There are some problems with DSE and SEC decision making. In conclusion one thing is clear about the market crash. Manipulation, frequent decision changing criteria, excess money supply, and overvaluation, proper training program for the investors, syndicate and some other factors played vital role in the recent market crash. Regulatory authority was also inactive. Cooperation from the Bangladesh Bank and the Government of Bangladesh was insufficient. So, proper policy and strict management are needed to comeback from the current situation.

References

Abarbanell J., and Bernard V., 1995), "Is the U.S. Market Myopic?" University of Michigan Working Paper.

Ahmed E., Li H., Rosser J. B., and Eastern Jr., 2006) "Nonlinear Bubbles in Chinese Markets in the 1990" Economic Journal, Vol. 32, No. 1.

Allen and Gale Asset price bubbles and market interlink ages-Working paper, Wharton school, university of Pennsylvania.usa. 2002.

Ashraf and Rodriguez, Estimated Long Memory Fractional Parameter and impacts on the volatility of the financial Markets: some specualtions' North south Business review, 1(1) 1-16, 2006.

Campbell, John Y., and Robert J. Shiller (1998, 2001), "Valuation Ratios and the Long-Run Market Outlook: An Update." NBER Working Paper 8221, April 2001.

Chapman, Evedence for a speculative Bubble in the clean energy Sector: an event study, Master thesis, Department of Economics, University of Shaffield, UK., 2007.

Chen J., Hong H., and Stein, J. C., "Breadth of Ownership and Stock Returns", Journal of Financial Economics, Vol. 66, pp. 171–205. 2002.

Chowdhury, A. & Chowdhury, S. P. (2010). Impact of capital structure on firm's value: Evidence from Bangladesh. Business and economic horizon, 3 (3), 111-122.

Chowudhury, R.A & Abdullah M.N. (2011) "Overheated stock market: remedial measures for soft landing"; Journal of the institute of cost & management accountants of Bangladesh, volume xxxix, and number 5, page-28.

Cooray, AV and Wickramasighe, G, the Efficiency of Emerging Stock Markets: Empirical Evidence from the South Asian Region. Journal of Developing Areas, 41(1), 2007, 171-183.

Craven and Islam, (2008) A Model for Market Returns: Non- Gaussian Fluctuations and Financial Factors' Review of quantitative Finance and accounting, 30,355-370.

Dong M, Hirshleifer, D., and Teoh, S. H. (2007), "Market Misvaluation and Corporate Investment", Unpublished MPRA Paper, at http://mpra.ub.uni-muenchen.de/3109/

Fama E. and French K., (1988), "Dividend Yields and Expected Stock Returns", Journal of Financial Economics, Vol. 22, pp. 3-25.

Fama E., and French K., (1989), "Business conditions and expected returns on stocks and. Bonds", Journal of Financial Economics 25, pp. 23–49.

Frankel R. and Lee C. M. C., (1998), "Accounting Valuation, Market Expectation and Cross-Sectional Stock Returns", the Journal of Accounting and Economics, Volume 25, pp. 283-319.

Foerster S. R. and Sapp S., (2006), "Dividends and Stock Valuation: A Study from the Nineteenth to the Twenty-First Century", retrievable at SSRN: http://ssrn.com/abstract=890445.

Ghazi and Khoda, (2010) An Empirical Examination of Random Walk Hypothesis for Dhaka Stock Exchange: Evidence from Pharmaceutical Sector of Bangladesh International Research Journal of Finance and Economics ISSN 1450-2887 Issue 33 (2009) © Euro Journals Publishing, Inc. 2009http://www.eurojournals.com/finance.htm

Glassman, James, and Kevin Hassett (1999) Dow 36000: The New Strategy for Profiting from the Coming Rise in the Market. New York: Times Business, l999.

Zaman, S. (2011). Is Dividend Policy An Important Determinant Of Market Performance: Focus On Private Banks Of Bangladesh? World Review of Business Research, 1(4), 135-144.

Rahman (2010) Bubble is DSE, Worg Press, and Dhaka.

Kindleberg Bubbles in J.Eatwell, M.Milgate and p.Newman (Eds), the new Palgrave: A Dictionary of Economics, Vol.1.Stockholm press, Newyork. 1987.

Knight, A Bubble in the Mighty Mississippi: An application of a general Model of speculative bubbles of 1716 1720.Major themes in Economics spring. 2002.

Lewis et al, Was the 2008 financial crisis caused a lack of corporate ethics? Global Journal of business research, 4(20), 77-84, 2010

Mansur and Hoque, 2010) Market: A ticking Bomb, the Financial Express, February, 19.

Shiller, Robert J., exuberance (Princeton, N.J.: Princeton University Press, 2000.

Appendix

1. How long you do trade in or you are an employee of DSE (Dhaka Stock Exchange)? Please Mention_____.
2. Please categorize yourself.
   A) Investor
   B) Speculator
   C) Employee plus Investor
   D) Employee plus Speculator
3. Do you think stock price in Bangladesh follow a stable trend?
   A) Yes
   B) No
4. Excess money supply throughout last four years is a prime reason for the recent market crash.
   A) Strongly Disagree
   B) Disagree
   C) Neutral/Moderately Agree
   D) Agree
   E) Strongly Agree

5. Overvaluation of shares is another prime reason for the recent market crash.
   A) Strongly Disagree
   B) Disagree
   C) Neutral /Moderately Agree
   D) Agree
   E) Strongly Agree
6. Faulty policies and frequent decision changes of SEC are another prime reason for the recent market crash.
   A) Strongly Disagree
   B) Disagree
   C) Neutral /Moderately Agree
   D) Agree
   E) Strongly Agree
7. Most of the recent investor does not have proper knowledge about the capital market.
   A) Strongly Disagree
   B) Disagree
   C) Neutral /Moderately Agree
   D) Agree
   E) Strongly Agree
8. Manipulation is the prime reason for the recent market crash.
   A) Strongly Disagree
   B) Disagree
   C) Neutral /Moderately Agree
   D) Agree
   E) Strongly Agree
9. Recent market crash is the result of faulty Book Building system.
   A) Strongly Disagree
   B) Disagree
   C) Neutral /Moderately Agree
   D) Agree
   E) Strongly Agree
10. Abnormal price increase in the capital market is the result of decrease in the interest rate of the bank.
    A) Strongly Disagree
    B) Disagree
    C) Neutral /Moderately Agree
    D) Agree
    E) Strongly Agree
11. The supervisory capability of DSE and SEC cause the rapid fluctuation in the capital market.
    A) Strongly Disagree
    B) Disagree
    C) Neutral /Moderately Agree
    D) Agree
    E) Strongly Agree

12. People who are acting like a speculator rather than an investor are more vulnerable toward rumors.
    A) Strongly Disagree
    B) Disagree
    C) Neutral /Moderately Agree
    D) Agree
    E) Strongly Agree
13. Lack of cooperation among DSE, SEC and Bangladesh Bank causes the appropriate application of the policy.
    A) Strongly Disagree
    B) Disagree
    C) Neutral /Moderately Agree
    D) Agree
    E) Strongly Agree
14. Private placement is a prime reason for the overvaluation of the share price as well as the recent market crash.
    A) Strongly Disagree
    B) Disagree
    C) Neutral /Moderately Agree
    D) Agree
    E) Strongly Agree
15. Do you think Government Should take more strong steps to overcome the present situation?
    A) Strongly Disagree
    B) Disagree
    C) Neutral /Moderately Agree
    D) Agree
    E) Strongly Agree