

Investment Trend Analysis of Dhaka Stock Exchange: A Comparative Study

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Abstract—Capital market is a crucial financial market place where companies and the government can raise long-term funds and, at the same time, investors get the opportunity to invest in the listed companies. Capital markets play a vital role not only in shifting the funds from surplus entity to deficit for investment, but also in the overall economic development of any developing country like Bangladesh. Being the first and biggest capital market of Bangladesh, Dhaka Stock Exchange (DSE) is the prime bourse of the country. The differences in the investment preference— among three broad categories of investors in DSE including individual investors, institutional investors, and government— are easily observed. Authors of this article have used five categories of investors such as sponsors or directors of the company, institutional investors, foreign investors, government, and the general public in order to present a comparative analysis of their investment patterns. Obtaining data on the percentage of investment by these five types of investors in different sectors from the DSE website, this study aims to analyze the sector-wise investment preference of these investors using August 2018 data. The study has found that the sponsors or directors of the company have the highest percentage of investment in the textile industry which is close to 16%. The Bangladesh government, as an investor, has the highest percentage of investment in the fuel & power sector, approximately 32%. It has also found that the mutual funds' sector is mostly financed by institutional investors, nearly 28%. Foreign investors have their most investments in the banking sector, which is close to 22%. It has also revealed that the textile sector is mostly financed by the general public, close to 17%. Nevertheless, general public, surprisingly, has the lowest percentage of investment in the telecommunication sector, which is 0.10%.

Keywords—Stock market investment, Dhaka stock exchange, capital market, Bangladesh.

I. INTRODUCTION

CAPITAL market— a financial market place where companies and the government can raise long-term funds— plays an important role in economic development of Bangladesh, shifting the funds from surplus entity to deficit for investment and proper utilization [1]. Capital markets, including both primary market where new securities are issued and secondary market where existing securities are traded, are unquestionably crucial for the smooth functioning of the economic activities of any nation [2]. Industrialization in a country, therefore, significantly depends on the investment pattern in the capital market of that country—being one of the

key factors for the long run economic growth and sustainability [3]. The Bangladesh stock market, after the severe crash in 1996, started rising from 2006 as a result of listing a few profitable government entities and some promising multinational companies (MNCs) [4]. Despite its significant growth during the last decade, the size of the market is relatively small compared to that of other Asian Markets [2]. Moreover, the stock market trend has always been fluctuating, having bubble and busts with stock price mismatching [3]. Although the Securities and Exchange Commission (SEC)—the regulatory body for the stock exchanges in Bangladesh— has incessantly tried to control the abnormal behavior observed in the market, very often it is argued that lack of appropriate and timely decisions from the regulator's side has led to make the market more unstable rather than to reduce it [5]. However, the market is becoming mature day by day due to the intense involvement of nearly all commercial banks and other institutional investors in stock market [4]. Recognizing the importance of a strong capital market to uphold the stability of the financial system in the country, the Bangladesh government also takes various steps to increase the confidence of the investors, encouraging to invest in the capital market [3]. Sometimes, investors complain about the lack of market information on the percentage of investments by the different investors. Having found limited research on this topic, this article aims to present a comparative study on the percentage of investment by different investors in the DSE.

II. CAPITAL MARKET OF BANGLADESH

The Bangladesh capital market comprising two full-fledged automated stock exchanges— the DSE and the Chittagong Stock Exchange (CSE)— is controlled and monitored by the Bangladesh Securities and Exchange Commission (BSEC). DSE Limited was established in the year of 1954 and CSE Limited was established in 1995. Of these two capital markets, DSE is the biggest stock exchange in the country in terms of market capitalization.

III. AN OVERVIEW OF DSE

DSE, the premier and oldest bourse of Bangladesh, was established as East Pakistan Stock Exchange Association Limited on April 28, 1954. The name of the Exchange changed to DSE Ltd. on May 13, 1964. Its trading started in 1956. Through 238 of Member Companies, DSE at present offers trading facilities of 750 securities and worth US\$50.28 million, which accounts for 19.74% of the GDP of the country. Table I shows the total number of listed securities

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currently in the DSE stood at 582 at the end of January 2019, which comprises 312 companies, 38 mutual funds, 221 government bonds, eight debentures, and one corporate bond. The number of companies consists of 30 banks, 23 financial Institutions, 47 insurance companies and 214 other companies.

TABLE I
 SECTOR-WISE NUMBER OF SECURITIES IN DSE

	Industry	Quantity
1	Bank	30
2	Cement	7
3	Ceramics Sector	5
4	Corporate Bond	1
5	Debenture	8
6	Engineering	37
7	Financial Institutions	23
8	Food & Allied	17
9	Fuel & Power	19
10	Insurance	47
11	IT Sector	9
12	Jute	3
13	Miscellaneous	13
14	Mutual Funds	38
15	Paper & Printing	3
16	Pharmaceuticals & Chemicals	31
17	Services & Real Estate	4
18	Tannery Industries	6
19	Telecommunication	2
20	Textile	54
21	Travel & Leisure	4
22	Treasury Bond	221
	Total Companies:	582

IV. OBJECTIVE OF THIS ARTICLE

The main objective of this study is to explore the behavioral aspect of the investors by comparing the ratio of their investment in different sectors and categories of stock in the biggest capital market of Bangladesh.

V. DATA AND METHODOLOGY

This article uses the company specific data from the DSE website to find out the industry-wise investment percentage by different types of investors. For simplicity, this article classifies the investors into five different groups such as government, public, institutional investor, foreign investors, and sponsors or directors. In addition, the available stocks have been categorized into five distinct classes—as also done by BSEC — namely A, B, N, G, Z.

“A” category companies are regular in holding the annual general meetings (AGMs) and able to declare dividends at the rate of 10% or more. “B” category companies are also regular in holding the AGMs but not able to declare dividends at least at the rate of 10%. “G” category or green-field companies are listed with the DSE before the company goes into commercial operation and declares the first-year dividend prior to listing with the DSE. However, this category of share is not available in the DSE. “N” category or newly listed companies which shall be transferred to other categories in accordance with their

first dividend declaration and respective compliance after listing of their shares. Finally, “Z” category companies refer to those who have failed to hold the annual general meeting when due or have failed to declare any dividend based on annual performance or which are not in operation for more than six consecutive months or whose accumulated loss after adjustment with retained earnings, if any, exceeds its paid-up capital.

VI. FINDINGS AND ANALYSIS

The analysis segment has been divided into three parts. In the first part, a comparative analysis of the percentage of investment by different types of investors has been presented (Figs. 1-5). A sector-wise investment analysis has been rendered in the second part of the analysis (Figs. 6-24). Finally, a relative proportional analysis of investment in different category of stock— mentioned above— by the five types of investors has been presented (Figs. 25-29).

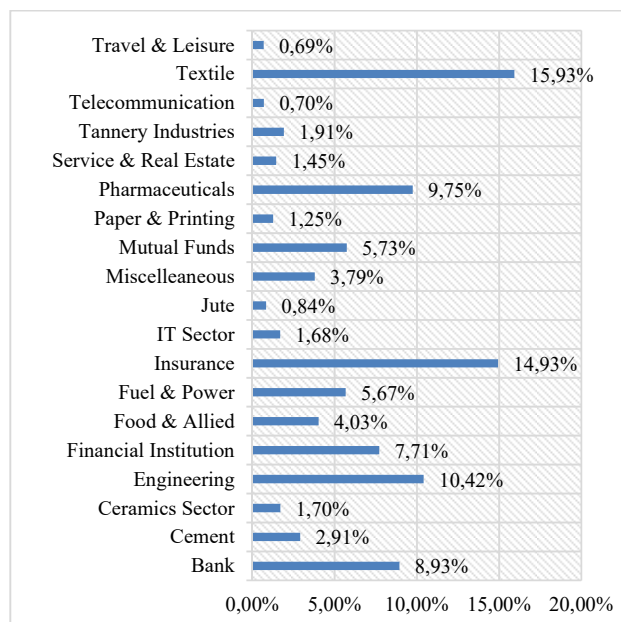


Fig. 1 Investment by the sponsors or directors of the company

Fig. 1 shows the percentage of investment by the sponsors or directors of the company in the DSE listed companies, based on 2018 stock market data. It can be seen that the textile sector is mostly financed by their sponsors, close to 16%. Whereas, the travel & leisure sector has lowest percentage of investment from their directors compared to that of in the other sectors, which is 0.69%. The second highest percentage of investment by the sponsors or directors of the company is in the insurance sector, approximately 15%. The third and fourth highest percentage of investment by the sponsors or directors of the company is in the engineering and the banking sectors, respectively.

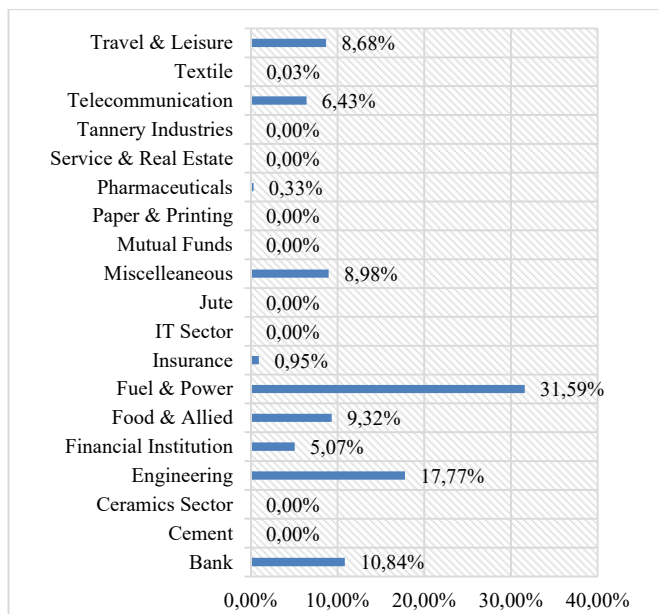


Fig. 2 Investment by the government

Fig. 2 shows the percentage of investment by the government, based on 2018 stock market data. It can be seen that fuel & power sector is mostly financed by the government, close to 32% whereas; most of the sectors has lowest percentage of investment from government compared to that of in the other sectors. The second highest percentage of investment by the government is in the engineering sector, approximately 18%. The third and fourth highest percentage of investment by the government is in the banking and food & allied sectors, respectively.

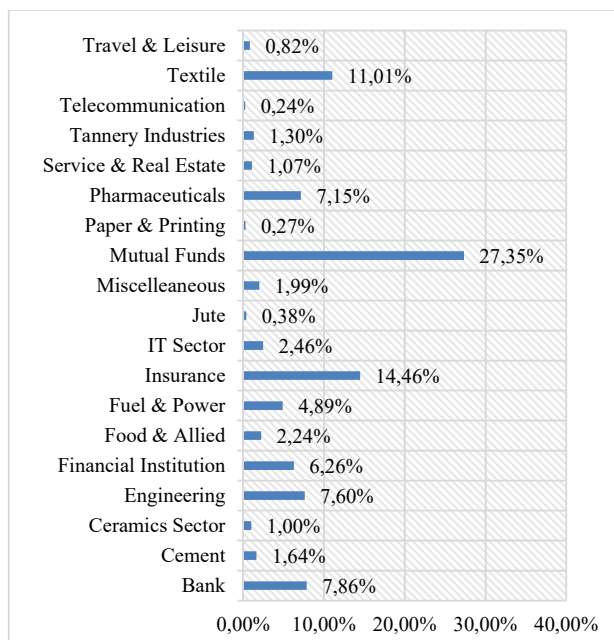


Fig. 3 Investment by the institutional investors

Fig. 3 shows the percentage of investment by the different

institutional investor, based on 2018 stock market data. It can be seen that mutual funds sector is mostly financed by institutional investor, nearly to 28%. Whereas, the telecommunication sector has lowest percentage of investment from institutional investor compared to that of in the other sectors, which is 0.24%. The second highest percentage of investment by the institutions is in the insurance sector, approximately 15%. The third and fourth highest percentage of investment by the institutional investor is in the textile and banking sectors, respectively.

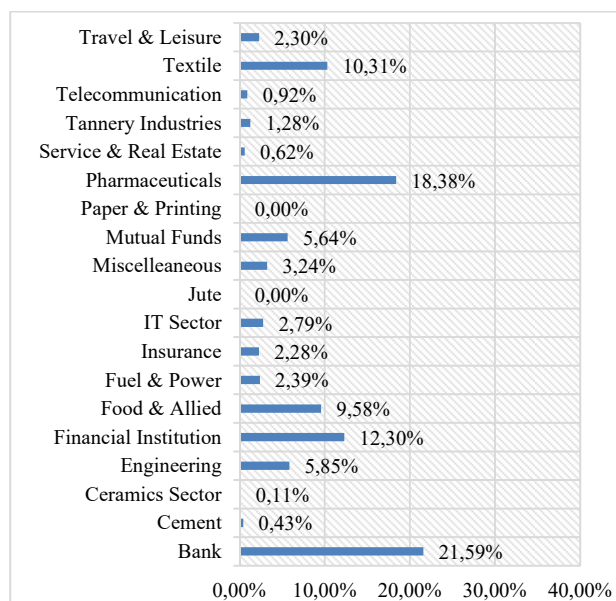


Fig. 4 Investment by the foreign investors

Fig. 4 shows the percentage of investment by the foreign investor, based on 2018 stock market data. It can be seen that the banking sector is mostly financed by the foreign investor, close to 22%. Whereas, two sectors have lowest percentage of investment from their foreign investor compared to that of in the other sectors which is 0.00%. These two sectors are jute and paper & printing. The second highest percentage of investment by the foreign investor is in the pharmaceuticals sector, approximately 19%. The third and fourth highest percentage of investment by the foreign investor is in the financial institution and textile sector, respectively.

Fig. 5 shows the percentage of investment by the general public, based on 2018 stock market data. It can be seen that the textile sector is mostly financed by the general public, close to 17%. Whereas, the telecommunication sector has the lowest percentage of investment from general public compared to that of in the other sectors which is 0.10%. The second highest percentage of investment by the public investor is in the insurance sector, approximately 14%. The third and fourth highest percentage of investment by the general public is in the engineering and bank sector, respectively.

In the banking sector, the highest percentage of investments is done by the foreign investors, close to 22%. Government and company directors have the second and third highest percentage of investment, approximately 11% and 9%,

respectively. Institutional investors surprisingly have the lowest percentage of investment in the banking sector of Bangladesh. The general public accounts for approximately 9% investment in this sector.

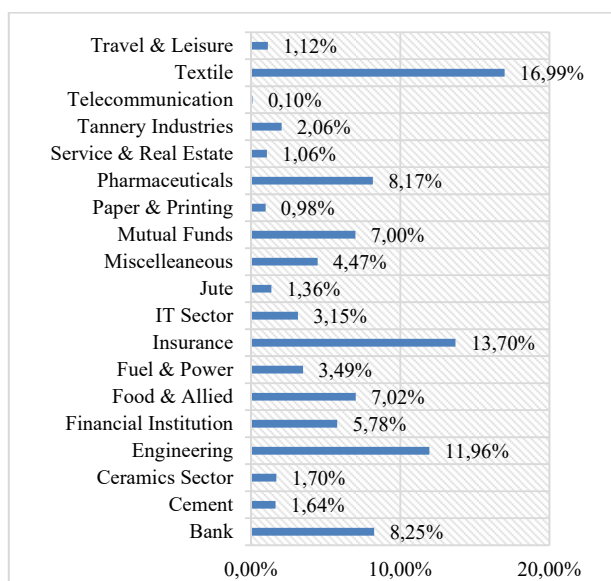


Fig. 5 Percentage of investment by the sponsors or directors of the company

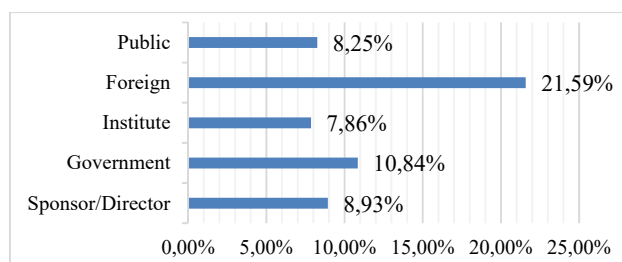


Fig. 6 Banking Sector

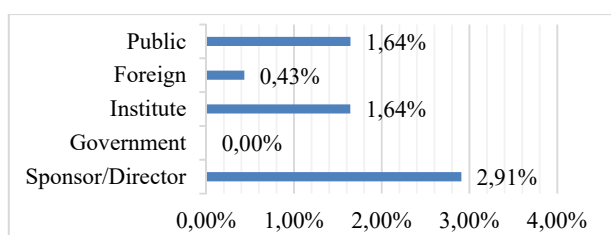


Fig. 7 Cement Industries

In the cement sector, the highest percentage of investments is done by the foreign investors, close to 3%. Institution and general public investors have the same percentage of investment, approximately 1.64%, that is the second highest. Government has the lowest percentage of investment in the cement sector of Bangladesh.

In the ceramics sector, the highest percentage of investments is done by the directors of the company and general public, close to 2%. Institution and foreign investors have the second and third highest percentage of investment,

approximately 1% and 0.11%, respectively. Government has the lowest percentage of investment in the ceramics sector of Bangladesh which is 0%.

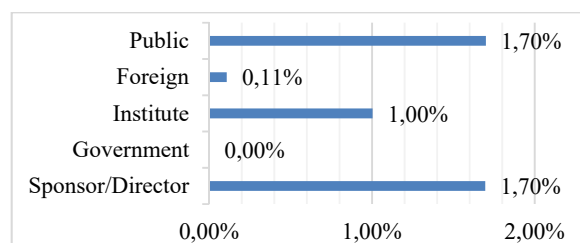


Fig. 8 Ceramic Industries

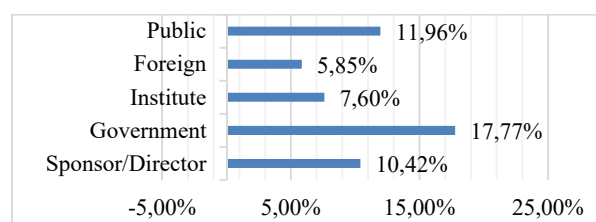


Fig. 9 Engineering Sector

In the engineering sector, the highest percentage of investments is done by the government, close to 18%. The general public and company directors have the second and third highest percentage of investment, approximately 12% and 11%, respectively. Foreign investors surprisingly have the lowest percentage of investment in the engineering sector of Bangladesh, which is 5.85%.

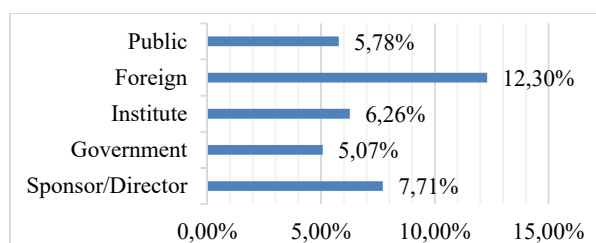


Fig. 10 Financial Institutions

In the financial institution sector, the highest percentage of investments is done by the foreign investors, close to 13%. Company directors and institutional investors have the second and third highest percentage of investment, approximately 8% and 7%, respectively. Institutional investors surprisingly have the lowest percentage of investment in the financial institution sector of Bangladesh. The general public accounts for approximately 6% investment in this sector.

In the food & allied sector, the highest percentage of investments is done by the foreign investors, close to 10%. Government and general public have the second and third highest percentage of investment, approximately 9.32% and 7.02%, respectively. Institutional investors surprisingly have the lowest percentage of investment in the food & allied sector of Bangladesh, which is 2.24%.

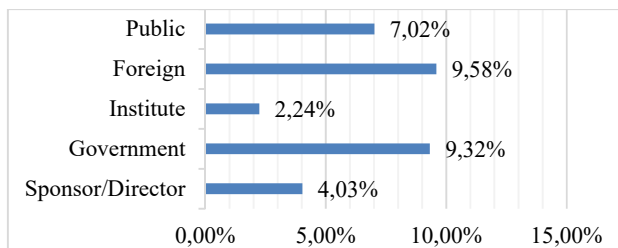


Fig. 11 Food and Allied Industries

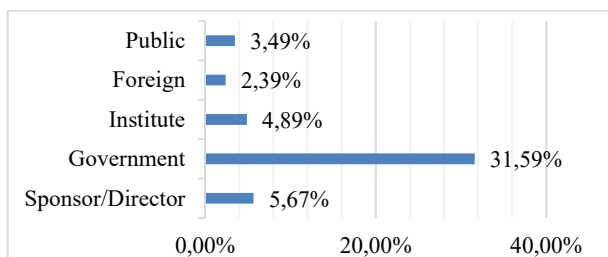


Fig. 12 Fuel & Power

In the fuel & power sector, the highest percentage of investments is done by the government, close to 32%. Company directors and institutional investors have the second and third highest percentage of investment, approximately 6% and 5%, respectively. Foreign investors surprisingly have the lowest percentage of investment in the fuel & power sector of Bangladesh. The general public accounts for approximately 4% investment in this sector.

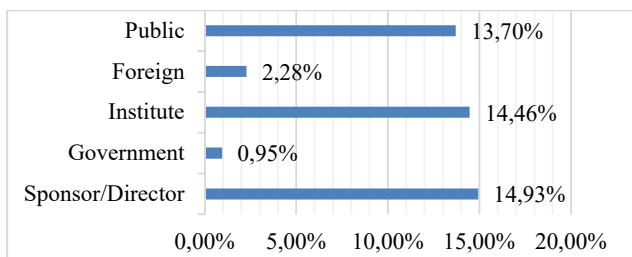


Fig. 13 Insurance industries

In the insurance sector, the highest percentage of investments is done by the company directors, close to 15%. Institutional investor and general public have the second and third highest percentage of investment, approximately 14.46% and 13.70%, respectively. Government surprisingly has the lowest percentage of investment in the insurance sector of Bangladesh, which is 0.95%.

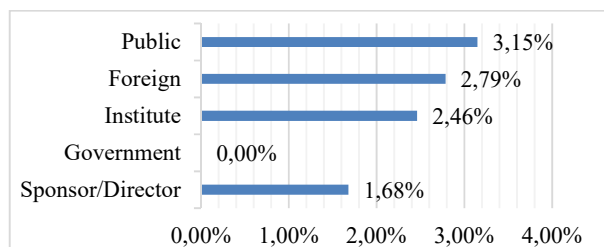


Fig. 14 IT Sector

In the IT sector, the highest percentage of investments is done by the general public, close to 4%. Foreign and institutional investors have the second and third highest percentage of investment, approximately 2.79% and 2.46%, respectively. Government surprisingly has the lowest percentage of investment in the IT sector of Bangladesh, which is 0%.

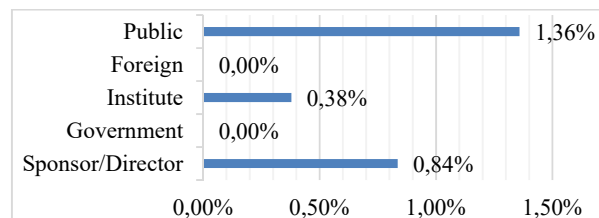


Fig. 15 Jute

In the jute sector, the highest percentage of investments is done by the general public, which is 1.36%. Company directors and institutional investors have the second and third highest percentage of investment, approximately 0.84% and 0.38%, respectively. Government and foreign investors surprisingly have the lowest percentage of investment in the jute sector of Bangladesh which is 0.00%.

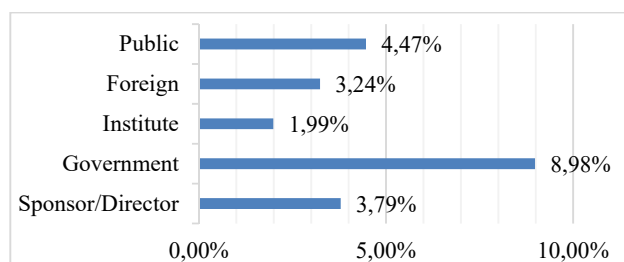


Fig. 16 Miscellaneous

In the miscellaneous sector, the highest percentage of investments is done by the government, close to 9%. The general public and company directors have the second and third highest percentage of investment, approximately 5% and 4%, respectively. Institutional investors surprisingly have the lowest percentage of investment in the miscellaneous sector of Bangladesh.

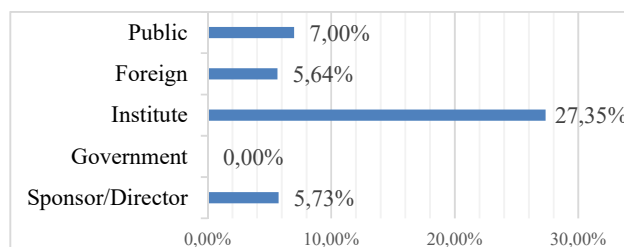


Fig. 17 Mutual Funds

In the mutual funds sector, the highest percentage of investments is done by the institutional investors, close to 28%. General public and company directors have the second

and third highest percentage of investment, approximately 7% and 5.73%, respectively. Government surprisingly has the lowest percentage of investment in the mutual fund sector of Bangladesh which is 0%.

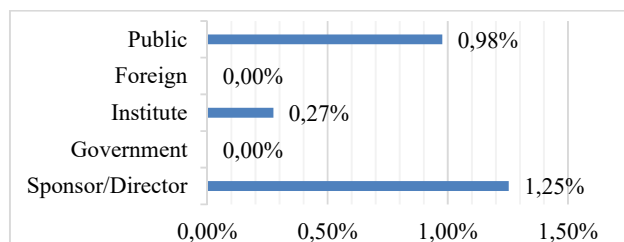


Fig. 18 Paper & Printing

In the paper & printing sector, the highest percentage of investments is done by the company directors, close to 1.25%. General public and institutional investors have the second and third highest percentage of investment, approximately 0.98% and 0.27%, respectively. Government and foreign investors surprisingly have the lowest percentage of investment in the paper & printing sector of Bangladesh which is 0%.

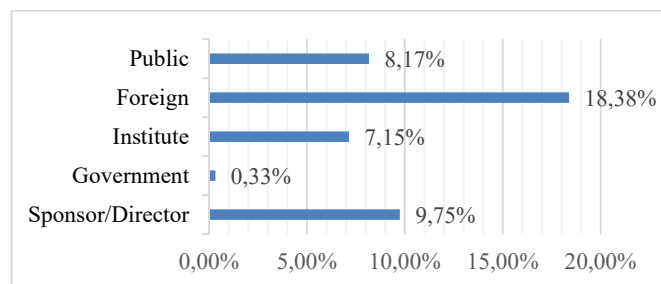


Fig. 19 Pharmaceuticals

In the pharmaceuticals sector, the highest percentage of investments is done by the foreign investors, close to 19%. Company director and general public have the second and third highest percentage of investment, approximately 10% and 8.17%, respectively. The general public surprisingly have the lowest percentage of investment in the pharmaceuticals sector of Bangladesh.

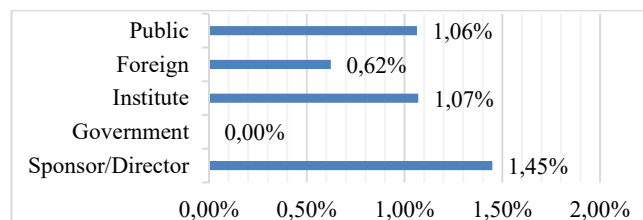


Fig. 20 Service & Real Estate

In the service & real estate sector, the highest percentage of investments is done by the company directors, close to 1.45%. Institutional investors and general public have the second and third highest percentage of investment, approximately 1.07% and 1.06%, respectively. Government surprisingly has the lowest percentage of investment in the service & real estate

sector of Bangladesh.

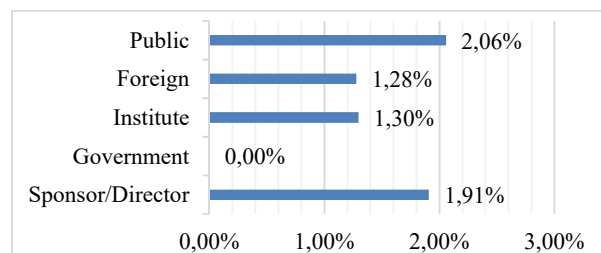


Fig. 21 Tannery Industries

In the tannery industries sector, the highest percentage of investments is done by the general public, close to 2.06%. Company directors and institutional investors have the second and third highest percentage of investment, approximately 1.30% and 1.28%, respectively. Government surprisingly has the lowest percentage of investment in the tannery industries sector of Bangladesh, which is 0%.

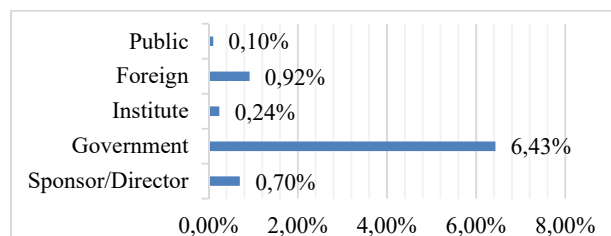


Fig. 22 Telecommunication

In the telecommunication sector, the highest percentage of investments is done by the government, close to 6.43%. Foreign investors and company directors have the second and third highest percentage of investment, approximately 0.92% and 0.70%, respectively. The general public surprisingly have the lowest percentage of investment in the telecommunication sector of Bangladesh, which is 0.10%.

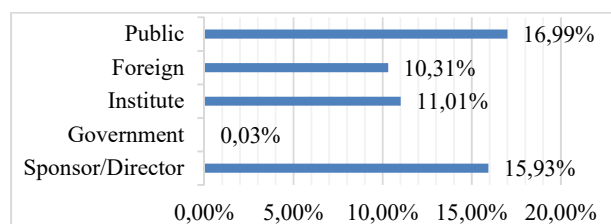


Fig. 23 Textile

In the textile sector, the highest percentage of investments is done by the general public, close to 17%. Company directors and institutional investors have the second and third highest percentage of investment, approximately 16% and 11%, respectively. Government surprisingly has the lowest percentage of investment in the textile sector of Bangladesh, which is 0.03%.

In the travel & leisure sector, the highest percentage of investments is done by the government, close to 9%. Foreign investors and the general public have the second and third

highest percentage of investment, approximately 2.30% and 1.12%, respectively. Company directors surprisingly have the lowest percentage of investment in the travel & leisure sector of Bangladesh which is 0.69%.

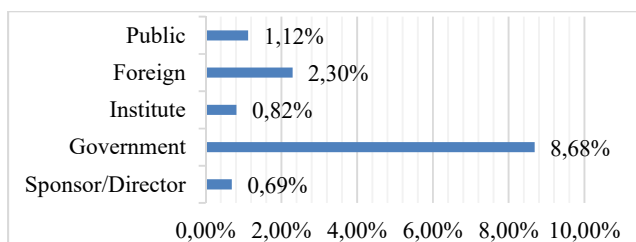


Fig. 24 Travel & Leisure

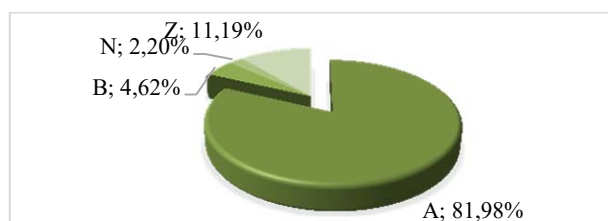


Fig. 25 Sponsor/Director's investment by stock category

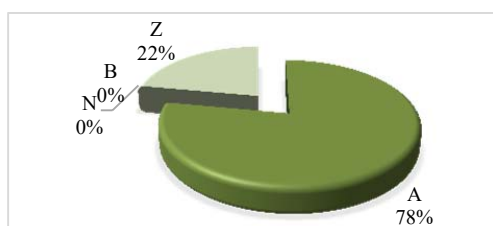


Fig. 26 Government investment by stock category

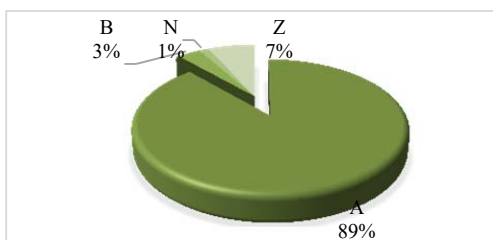


Fig. 27 Investment by institutional investors by stock category

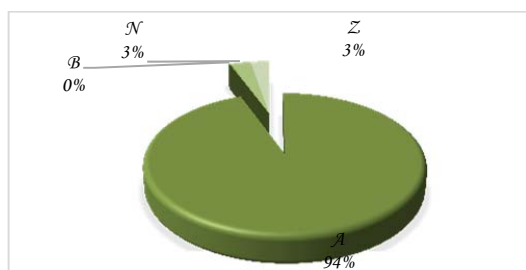


Fig. 28 Investment by foreign investors by stock category

Figs. 25-29 show the proportional investment of five types of investors in different categories of stocks including A, B, G, N, and Z category. The pie charts reveal that most of the

investors have the highest percentage of investment in the A category shares followed by Z category.

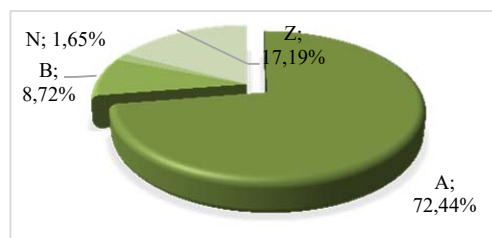


Fig. 29 Public investment by stock category

VII. CONCLUSION

Stock markets nowadays unequivocally play a vital role in economic development, promoting the movement of capital across regions. The Capital Market of Bangladesh likewise backs the overall economy by creating growing investment opportunities and encouraging optimum financing for firms irrespective of where the entity resides. Although the capital market of Bangladesh is passing tough times since December 2010, as high volatility is eroding the capital of thousands of investors that might turn into social instability, the market is getting better day by day. Investor's greed and irrational behavior plays a big role to make the stock prices sky rock, as they —most of the time—buy shares without judging the company fundamentals. Although the DSE is relentlessly working to enlist companies with highest growth in their profit, market shares and EPS, the effort is not enough according to the market experts. This article provides valuable insights for policy makers to take the necessary steps to attract more investors in the industries where their participation is low. Moreover, the increasing level of investment in the Z category shares casts many questions, such as whether the market is becoming a suitable place for manipulation or not.

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