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ORIGINAL RESEARCH ARTICLE

Impact of rights issue on stock price fluctuations: An analysis of select scripts

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ABTRACT

The impact of right-issue announcements on stock prices is investigated here. When rights issue taken place any company which impacts on price fluctuations and attracts the new investors (it means sometimes new investors may also chance to attract and make their investment) is through a right-issue offering. The study focusing on three companies, those have announced right-issue during 2022 viz. Asian Granito, Bhagiradha Chemicals and Industries Limited, and Dynemic Products Ltd. Secondary data has been collected for a period of 45 days' window over the pre- and post-rights issue as well. In order to justify the research objectives at hand, the methods of cumulative average abnormal returns (CAAR) and autoregressive conditional heterioskedasticity (ARCH) (cumulative average abnormal returns (CAAR) it was provided in above also provide the full form of CAAR) have been applied. The findings of the study suggests that there exists either positive or negative returns in the pre-rights issue window pre-rights issue as compare to the post-rights issue. The study further demonstrates that fluctuations of the stock prices and returns during the pre-announcement period are significantly more than those in the post-announcement period. According to the results of the anomalous return study, the stock price reaction to the notification of a rights issue might be either positive or negative (this observation is contrary to the earlier observation – abnormal returns are higher during the pre-announcement periods). Announced a rights issue and have abnormal stock returns in the negative direction are likely to continue.

Keywords: Asian Granito; ARCH model; Bhagiradha Chemicals; CAAR and rights issue

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1. Prologue

Maintaining a company's stable cash flow is always an essential precondition for its sound financial health. Every business has access to an optimum of capital-raising funds the one picked will rely on factors including "profitability prospects of the project to be funded, the timeliness of the financing, the current capital structure, and the cost associated with acquiring such cash"[1]. Common stock, preferred stock, and retained earnings are common components of long- term capital structures. The true proprietors of a company are its equity shareholders, so equity capital can be utilized to its full potential[2]. External equity capital is typically raised from existing shareholders or early buyers by multinational corporations. Initial public offering refers to the process by which a company raises capital from the general public (IPO). In this regard, the public is invited to become a member and the process for distributing stock is explained. When a company needs to procure money, it may choose the option of rights issue, which gives existing shareholders the option to purchase more securities at a discount. Most closed-end companies issue rights at times of financial stress; those that don't distribute all of their profits could face shareholder anger and a subsequent drop in stock price[3].

Publicly traded corporations can secure additional equity investment through a rights issue, which is a significant funding source[4]. In these rights offers, corporations give shareholders the opportunity to purchase additional shares at a discount to the existing market price. Right issues grant existing shareholders pre-emption right proportional to their current holdings[5]. This allows shareholders to upload their ownership percentage or opt to buy or waive shares to be taken by others. Typically, rights issue share prices are set significantly lower than prevailing market prices, often at a discount of 20%–30%, to attract existing shareholders and potentially entice them to either exercise their rights or sell them to others[6]. This strategic approach ensures full subscription and adequate capital mobilization while also serving as a buffer against potential market price declines[7]. As part of the deal, the company is giving its existing shareholders the option to purchase a proportional number of newly issued shares. Commonly traded companies use this method to raise funds rather than taking on debt. Preemptive rights on new shares, often known as the "right of first refusal," belong to the current shareholders[8]. Existing shareholders can keep their stakes by invoking their preemptive rights proportion.

It is possible for shareholders to give up their stakes in a company by selling their shares, and this is done all the time. It has been observed that market dynamics enter play and share prices vary prior to the announcement of a rights offering yet, announcements of a rights issue are typically accompanied by company news justifying the need for capital. The market will thus consider and respond to this information. It is possible that stock option grants could be seen as negative news due to the stock dilution that occurs when the options are exercised. However, any negative reaction should come after the announcement that the company will use stock option plans, rather than when the options are granted[9]. Even while the possibility of additional shares has a dilutive effect, the share price may rise if the funds will be used in a truly beneficial manner[10].

Companies are rumoured to issue rights in order to raise funds for expansion or to finance internal operations. Rights issues give existing owners the chance to buy additional shares at a price to the market price[11]. The cost, among other factors, will determine the nature and origin of the finance the company pursues. According to an analysis conducted by Jurin and Fortner[12], substantial legal and filing expenditures are connected with both a rights issue and an issuance of common shares on a stock exchange. Creating a prospectus and finding potential buyers are two of the expenses associated with issuing common stock. In contrast to a rights issue, all shareholders must be contacted and a mechanism for selling rights must be established. However, the companies may prefer rights issue to increase their capital and clear the existed debts[13].

2. Literature review

Rights issues, as interpreted by Levy and Sarnat[14], combine elements of a dividend payment with those of an issue at par to current investors. About the time the news came out, there was a rise in the cumulative abnormal average returns. In fact, it rose dramatically in the run-up to the announcement time in the hope that there would be a problem, and then fell dramatically after the event. They came to the conclusion that in perfect markets, factors such as issue price and ratio of rights issue are irrelevant.

Gupta[15], discusses the effect of bonus issues on stock prices. The author noted that fluctuations in share prices began well before the date of actual allocation or the day on which the stock market quote changes from cum-bonus to ex-bonus. Although there was an indirect relationship between price movements just after an issue and bonus ratios, there was no such relationship between price movements and bonus ratios a year after the bonus was issued. In addition, they came to the conclusion that the price hike shortly after the bonus was issued was purely speculative and not based on any basic principles governing earnings or dividends.

Lakonishok et al.[16], examined what drives stock splits and dividends and why investors value such distributions. Splits, according to empirical research, are used to normalise stock prices and spread good news about a company's performance. Despite the fact that stock splits do not permanently affect trading volume, they do change the composition of shareholders. Corporations with less success are more likely to issue stock dividends than stock splits. Until cash dividends recover from their historic lows, investors will settle for stock dividends, resulting in a decrease in the frequency with which they are paid.

Liljeblom[17], found that the positive information supplied by the release of stock dividends and stock splits may be assessed apart from other newly announced information. Determine how dividends, stock splits, and earnings per share releases affect stock prices in relation to one another. we regressed excess returns for event time periods on these variables. Share prices react to news of stock splits and dividends, as well as to news of unexpected changes in earnings per share. It was also found that there is a corroboration effect between the various kinds of simultaneous disclosures.

Obaindullah et al.[18], has investigated the impact of stock prices to bonus issues by calculating CAAR for the period between 1987 to 1989. Around the time of the announcement, the cumulative anomalous average returns climbed. In reality, it increased significantly before to the announcement time in expectation of a problem and then fell somewhat following the event. Three months after the announcement date, when the stocks became "ex-bonus," the price increased again. This increase is not attributable to a lack of education, but it does lend credence to the notion that ex-bonus costs are typically more than corrected cum-bonus prices.

In the words of Millon[19], "The corporate and economic research center for business today" investigated the long-term advantages of rights and bonuses. Companies that issue rights made up for missed dividends by capital appreciation, greater stock holdings, and a higher market price. Long-term success favors corporations that issue rights rather than bonuses, as measured by the rise in median net total assets.

Phillits et al.[20] all together at Companies trading on the "New York Stock Exchange" as well as the "American Stock Exchange" were studied after they announced the termination of stock dividends. Using event research methods, an examination indicated statistically insignificant negative average anomalous returns on the day of the occurrence. Those that lowered stock dividends while boosting cash payouts experienced an increase in shareholder value, whereas companies that did not increase cash dividends suffered a significant decrease in shareholder wealth.

Bashir[21], conducted a research on the stock's reaction to the news of a rights offering using event study techniques. The study uncovered data indicating abnormally high returns on the incident date, but analysts concluded these results were not significant. The study determined that the announcement of the rights issue had no effect on stock returns on the Karachi Stock Exchange, meaning that stockholders did not maximize their capital.

Krishnan[22], developed a method for investigating stock price movements by factoring in all obtainable transaction data and other visible market activity elements. With this method, you can separate the constant slope of price changes that can't be observed from the discrete ones that can, and you won't have to limit your investigation of the factors at play to just a small portion of the detectable bid-ask spread. The author demonstrates that if the model used to estimate the reasons of stock price changes doesn't really attempt to identify the mapping between identified price changes as well as the underlying unobserved constant price change process and does not utilize all eligible trade data, then theoretically unacceptable results and biased guesstimates of cost components are generated.

Samontaray[23], impact of corporate governance on nifty 50 broad index listed company stock prices, the goal of this research is to determine whether or not corporate governance issues impact the share price of NIFTY index-listed businesses. The “Narayan Murthy Commission on Corporate Governance” is responsible for the ratings. It was found using cross-sectional regression analysis that earnings per share, sales, net fixed assets, and corporate governance all had significant effects on share price (the dependent variable).

As’ari et al.[24], intention of issuers taking action on rights offers, cash dividends, stock splits, and purchases listed on the IDX between 2016 and 2019, the research validated the effects of business activity on stock prices. The research has significant implications for the field of finance, particularly corporate action theories, and for corporate managers trying to anticipate how certain company actions would affect stock prices. Although business actions may not always result in favorable features or advantages, this is also beneficial for shareholders or investors.

Green[25], analyzed distortionary incentives and how control can be achieved through the use of conversion features and warrants. These claims can change the structure of a company’s earnings and reduce the motivation to take risks. However, under certain conditions, they can be designed to promote net present value maximization and meet the financing requirements of the firm.

Armitage[26] used data from pre-renouncements of new shares to estimate expenses of selling large blocks of shares. The estimated long-term abnormal returns following rights issues do not consistently show negativity, suggesting overvaluation is unlikely to cause placing discounts.

Deep discount offers may seem like a good deal, but they actually lead to higher costs due to additional sales tactics and high non-underwriting expenses. They are often used to sell challenging issues. Armitage[27] found that deep discount offers would be expected to have relatively low direct costs but in fact are associated with higher costs, because in practice deep discounts are rarely used on their own as a substitute for underwriting or selling in advance, and because non-underwriting costs are relatively high in these issues. This is consistent with deep discount being used to help sell difficult issues.

Ngatuni et al.[28] organised a study on the long-term effects of rights issues in the UK between 1986 and 1995. Their findings indicate that investors who bought shares from firms announcing rights issues experienced an average rate of return that was 41.8 percentage points lower than non-issuing firms of similar size and book-to-market ratios.

According to Youds et al.[29], there was a statistically significant decrease in the share price during the ten days following the initial announcement of the rights issue. Meanwhile, Van et al.[30] study suggested that the size of the rights issue does not impact the results. Additionally, resource companies tend to engage in rights issue activities more often than non-resource companies, while growth companies (as opposed to value companies) are more likely to be negatively affected.

In the period from 2003 to 2013, Alhashel et al.[31] conducted a study on the factors that influence stock prices when firms listed on the Kuwaiti Stock Exchange make announcements about rights issues. The research discovered that larger issues resulted in higher cumulative abnormal returns for firms. This was due to the availability of promising investment opportunities, which had a positive impact on the earnings of these firms.

Companies tend to choose equity finance when returns are low and debt financing when returns are high. Baker et al.[32] found that equity share is a better predictor of market returns than other factors. This suggests a preference for equity financing during economic uncertainty. Ovakimian et al.[33] suggests that firms with high market-to-book ratios tend to have lower target debt ratios. Conversely, high stock returns increase the likelihood of equity issuance but do not affect target leverage.

The majority of Indian corporations frequently issue rights, although it is unknown how this affects the stock returns of these companies. According to research by Samontaray and DP[23], Indian companies that offer rights issues typically outperform those that do not over the long term. Several researches have been done on rights issue and how they affect stock values. One study that revealed the impact of post-rights issuing on firms' share prices and trading volumes was conducted by Krishnan[34]. Author, pointed out that, at least in the very short term, the share price often falls after a rights issue for the majority of companies that announce it. Based on the above literature survey it is evident that many academicians have done extensive research in equity market in the perspective of corporate announcements, but few studies have focused on the aspect of Rights issue effect in 2022 year.

3. Design and methodology

To get the concrete inferences for the study a separate set of methodology has been developed and applied.

3.1. Objectives of the study

So as to evaluate the study the following objectives have preciously selected for the study purpose.
To examine the effect of rights issue on stock price returns performance.
To assess the comparison of volatility in pre and post period with the announcement of rights issue.

3.2. Scope of the study

The present study focused to know the impact of rights issue on the returns performance of the stocks and how their volatility nature got changed. The study considered the secondary data of the selected companies, which have raised the capital in the year 2022. The study has selected the companies such as: 1) Asian Granito Company, 2) Bhagiradha Chemicals & Industries Ltd and 3) Dynamic Product Ltd.

3.3. Sample design

The present study focused on examining the impact of rights issues on the stock price performance and volatility. It is adopted the quantitative research approach for the examination of framed. The top three stocks for the study were chosen based on the capitalization of the companies in question[35]. However, there were temporary fluctuations observed during the 45-day pre- and post-window period[36]. The study focused on three companies: Asian Granito Company, Bhagiradha Chemicals & Industries Ltd, and Dynamic Product Ltd. The study period covered 12 April 2022 to 24 May 2022 objectives. The study considered 90 days i.e., one quarter period for the study. The study classified the data into 45 days in pre and 45 days in post rights issue period.

3.4. Sample of the study

The study considered the three companies from NSE India, which have raised the capital through the rights issue in the current year i.e., 2022.

The study considered Asian Granito, Bhagiradha, and Dynamic Products Ltd from NSE India, which have raised the capital through the rights issue in the current year of 2022.

3.5. Tools and techniques

Several statistical methods were used to analyze the study for predetermined goals. The tools which have used discussed below:

3.5.1. CAAR

The study applied the cumulative average abnormal returns for the calculation of stock price returns performance. The study collected daily data for 3 companies and bifurcated in two segments i.e., 45 in pre and 45 days in post period based on the rights issue date onwards.

3.5.2. ARCH model

This article addresses heteroskedasticity by utilizing an autoregressive conditional heteroskedastic (ARCH) model during the pre- and post-rights issue period. It also examines whether the parameters of the model significantly change after the introduction of trading in the stock index future and Yan and Chen[36] utilized the autoregressive integrated moving average (ARIMA) model and the autoregressive conditional heteroskedasticity (ARCH) model to achieve accurate marketing of China Mobile's Ling Xi Voice app in the communication market. Baldauf and Santoni[37] conducted tests to detect any ARCH effects in daily stock price returns. They took measures to model these effects and then analyzed whether the estimated parameters of the model changed after the implementation of program trading. The ARCH model is based on the idea that the variance of a time series can vary over time. Specifically, significant changes are typically followed by significant changes, while minor changes usually follow minor changes. This means that changes in period t depend on changes that occurred in periods $t-1$, $t-2$, and so on. It's important to note that predicting the sign of the period t change is difficult. The model can be found in Equations (1)–(3) below.

$$(x_t x_{t-1}, \ldots, x_{t-k}) \sim N(O, \sigma_t^2) \tag{1}$$

$$\sigma_t^2 = f(x_{t-1}, \ldots, x_{t-k}) \tag{2}$$

In Equation (3), parameters are assigned and restrictions are specified for the function expressed in Equation (2) to ensure that both conditional and unconditional variances are positive.

$$\begin{gathered}\sigma_t^2 = \alpha_o + \sum_{i=1}^{k} \alpha_i x_{t-i}^2 \\ \alpha_o > 0, 0 \leq \alpha_i < 1\end{gathered} \tag{3}$$

The model suggests that the variance of x can change over time based on its past values. Additionally, if the variance of the x series follows the pattern shown in Equation (3), the overall distribution function will have thicker tails, which is similar to what has been observed in previous studies on stock price returns.

4. Result analysis and findings

The gathered secondary data has been analyzed and tested by formulating some hypotheses. The analysis has been presented as under:

4.1. Objective-1: To examine the effect of rights issue on stock price returns performance

The study evaluates the rights issue on the stock price returns performance. The study applied CAAR method in pre and post rights issue period based on the announcement date.

Table 1 shows the effect of right issues on the returns of company. By comparing rates of Pre-Asian Granite (−10.41) and Post Asian Granito (−48.60), the right issue of Pre-Asian as a negative impact on returns Post Asian. The rates of Pre BCIL 1.51 as a negative impact on returns of Post BCIL (0.42), similarly Pre-Dynamic Product Ltd (4.85) as a negative impact on returns of Post Dynamic Product Ltd (1.08). After the rights issue the company's stock prices are declining.

Table 1. Rights issue impact on returns of share prices[36–38].

Companies	CAAR
Pre-Asian Granito	−10.41
Post-Asian Granite	−48.60
Pre-Bhagiradha Chemicals & Industries Ltd	1.51

Table 1. (*Continued*).

Companies	CAAR
Post Bhagiradha Chemicals & Industries Ltd	0.42
Pre-Dynamic Product Ltd	4.85
Post-Dynamic Product Ltd	1.08

4.2. Objective-2: To assess the comparison of volatility in pre and post period with the announcement of rights issues

4.2.1. Volatility of Asian Granito Company

The study examines the volatility of the selected companies share price volatility in pre and post rights issue period. The study applied the ARCH model on the daily returns of the selected companies i.e., Asian Granito Company.

Figure 1 represents the volatility of pre and post stock price of Asian Granito Company which is having face value as Rs.10. In the figure, it is observed that the trend lines are crossing the fitted lines which implies that volatility exists in both pre and post period of price issues. The nature of volatility in both residual graphs indicate one cluster differs from the other. As a result, the ARCH model may be used to analyze the effect of rights offerings on Asian Granito Corporation stock prices.

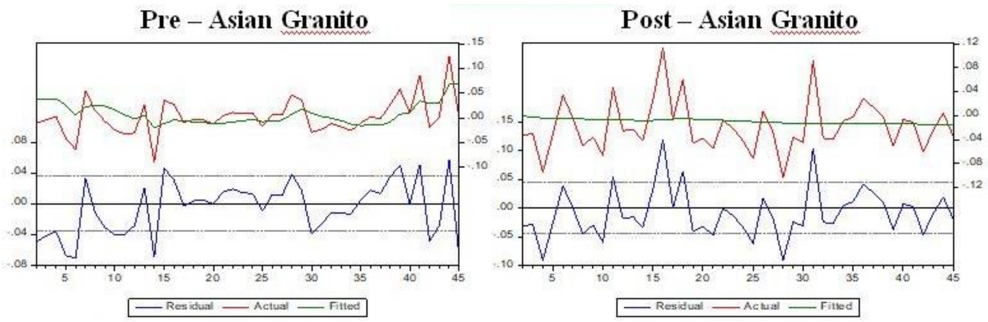

Figure 1. Represents the volatility of pre and post stock price of Asian Granito Company.

H_0—There is no effect of rights issue on the volatility of Asian Granito Company.

H_1—There is effect of rights issue on the volatility of Asian Granito Company.

The arch model is used to know the effect of rights issues on the volatility of Pre-Asian Granite Company, all these portrayed in **Table 2**. It is observed that the R-squared Pre-Asian Company is 0.06 and in post-Asian is 0.03 which indicates the model is slightly fit and probability value of pre- and post-Asian is 0.00 and 0.04 which is < 0.05 which is significant. The coefficient value (0.003) in Pre-Asian Granite is greater when compare to Post Asian Granite (0.002), which indicates that the rights issue effect on the volatility of Asian Granito is found to be lower compared to the pre rights issue. The risk of the investments observed to be lower in post right issues for the Asian Granito Company. Hence, the H_1 has been accepted and reject the H_0. So, it can be concluded that, there is effect of right issues on the volatility of Pre-Asian Granito Company.

Table 2. Arch model for AGC volatility[36–38].

"Variable"	"Coefficient"	"Std. Error"	"z-Statistic"	"Prob."
C	−0.278461	0.059015	−4.718507	0.0000
Pre-Asian	0.003549	0.000717	4.952383	0.0000
C	−0.026839	0.031599	−0.849348	0.0057
Post-Asian	0.000273	0.000451	0.604885	0.0453

Table 2. (*Continued*).

Pre-Asian		Post-Asian	
R-squared	0.065692	R-squared	−0.038999
Adjusted R-squared	0.043446	Adjusted R-squared	−0.063737
S.E. of regression	0.035468	S.E. of regression	0.044214
Sum squared	0.052836	Sum squared	0.082105
Log likelihood	88.49240	Log likelihood	81.89751
Durbin-Watson stat	1.606635	Durbin-Watson stat	1.766255

4.2.2. Volatility of Bhagiradha Chemicals & Industries Ltd

The study examines volatility of the selected companies share price volatility in pre and post rights issue period. The study applied the ARCH model on the daily returns of the selected companies i.e., Bhagiradha Chemicals & Industries Ltd.

Figure 2 represents the volatility of pre and post stock price of Bhagiradha Chemicals & Industries Ltd, which is having face value as Rs.10. In the graph, it is observed that the trend lines are crossing the fitted lines which implies that volatility exists in both pre and post period of price issues. The nature of volatility in both residual graphs indicate one cluster differs from the other. Therefore, ARCH model can be applied to know the impact of rights issue on stock price in Bhagiradha Chemicals & Industries Ltd.

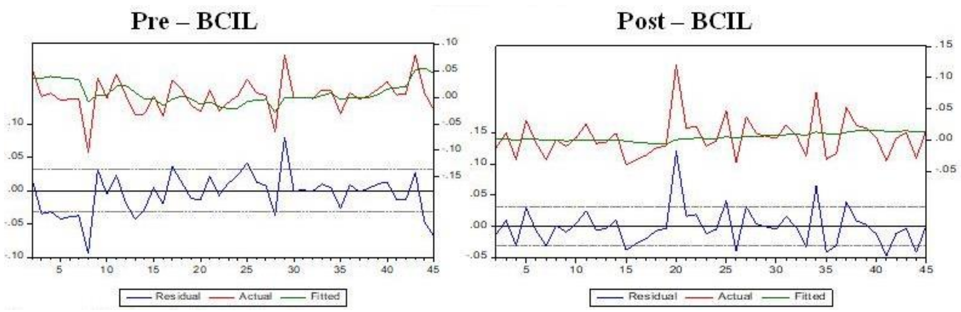

Figure 2. Represents the volatility of pre and post stock price of Bhagiradha Chemicals & Industries Ltd.

H_0—There is no effect of rights issue on the volatility of Bhagiradha Chemicals & Industries Ltd.

H_1—There is effect of right issues on the volatility of Bhagiradha Chemicals & Industries Ltd.

The arch model is used to know the effect of rights issues on the volatility of Pre-Bhagiradha Chemicals & Industries Ltd Company discussed in **Table 3**. It is observed that the R-squared Pre-Bhagiradha Chemicals & Industries Ltd Company is 0.02 and in Post-Bhagiradha Chemicals & Industries Ltd is 0.03, which indicates the model is slightly fit and probability value of Pre-Bhagiradha Chemicals & Industries Ltd is 0.00 which is < 0.05 which is significant and Post-Bhagiradha Chemicals & Industries Ltd (0.22). The coefficient value (0.0004) in Pre-Bhagiradha Chemicals & Industries Ltd is lesser when compare to Post-Bhagiradha Chemicals & Industries Ltd (0.00000831), which indicates that the rights issue does not has an effect on the volatility of Bhagiradha Chemicals & Industries Ltd., is found to be high compared to the pre rights issue. The risk of the investments observed to be high in post right issues for the Bhagiradha Chemicals & Industries Ltd Company. Hence, the H_1 has been rejected and accept the H_0. So, it can be concluded that, there is no effect of right issues on the volatility of Pre-Bhagiradha Chemicals & Industries Ltd Company.

Table 3. Arch model for BCIL volatility[36–43].

"Variable"	"Coefficient"	"Std. Error"	"z-Statistic"	"Prob."
C	−0.377089	0.046152	−8.170548	0.0000
PRE_BCIL	0.000429	5.15×10^{-5}	8.329240	0.0000
C	−0.076120	0.062824	−1.211624	0.0257
POST_BCIL	8.31×10^{-5}	6.86×10^{-5}	1.211753	0.0256
Pre-BCIL		**Post-BCIL**		
R-squared	0.024978	R-squared		0.032115
Adjusted R-squared	0.001763	Adjusted R-squared		0.009070
S.E. of regression	0.031971	S.E. of regression		0.022698
Sum squared	0.042930	Sum squared		0.021638
Log likelihood	96.08633	Log likelihood		105.2162
Durbin-Watson stat	1.609768	Durbin-Watson stat		1.371882

The study examines volatility of the selected companies share price volatility in pre and post rights issue period. The study applied the ARCH model on the daily returns of the selected companies i.e., Dynamic Product Ltd.

The **Figure 3** graph represents the volatility of pre and post stock price of Dynamic Product Ltd Company which is having face value as Rs.10. In the graph, it is observed that the trend lines are crossing the fitted lines which implies that volatility exists in both pre and post period of price issues. The nature of volatility in both residual graphs indicate one cluster differs from the other. Therefore, ARCH model can be applied to know the impact of rights issues on stock price in Dynamic Product Ltd.

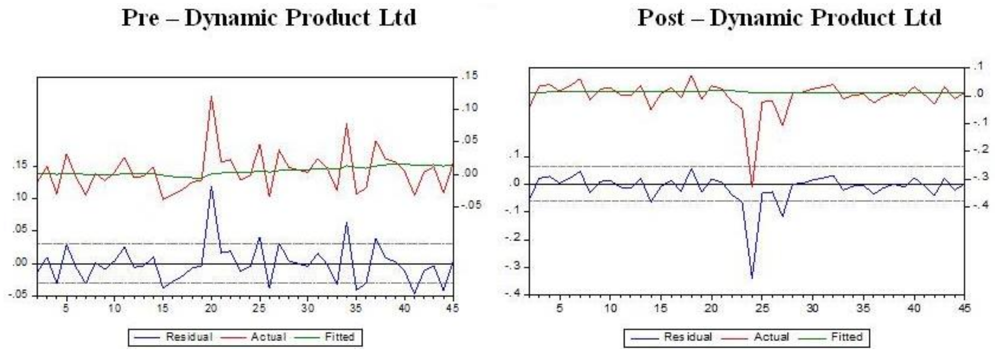

Figure 3. Represents the volatility of pre and post stock price of Dynamic Product Ltd Company.

H_0—There is no effect of right issues on the volatility of Dynemic Product Ltd.

H_1—There is effect of right issues on the volatility of Dynemic Product Ltd.

The arch model which is discussed in **Table 4** is used to evaluate the effect of rights issue on the volatility of Prem-Dynamic Product Ltd. It is observed that the R-square in Pre-Dynamic Product Ltd is 0.04 and in Post-Dynamic Product Ltd is 0.04 which indicates the model is slightly fit and probability value of Pre- and Post-Dynamic Product Ltd is 0.33 and 0.31, which is > 0.05 which is insignificant. The coefficient value (0.000) in Pre-Dynamic Product Ltd is lesser when compare to Post-Dynamic Product Ltd (2.96), which indicates that the rights issue has no effect on the volatility of Dynamic Product Ltd is found to be higher compared to the pre rights issue. The risk of the investments observed to be higher in post rights issue for the Dynamic Product Ltd Company. Hence, the H_0 has been accepted and reject the H_1. So, it can be concluded that, there is no effect of right issues on the volatility of Pre-Dynamic Product Ltd.

Table 4. Arch model for Dynamic Products Ltd volatility[36–38].

"Variable"	"Coefficient"	"Std. Error"	"z-Statistic"	"Prob."
C	−0.061803	0.063463	−0.973847	0.0301
Pre-Dynamic	0.000152	0.000140	1.084441	0.0082
C	−0.002177	0.017087	−0.127426	0.0086
Post-Dynemic	2.96×10^{-5}	2.94×10^{-5}	1.006136	0.0144
Pre-Dynamic Product Ltd		**Post-Dynamic Product Ltd**		
R-squared	0.045680	R-squared		−0.042276
Adjusted R-squared	0.022958	Adjusted R-squared		−0.067092
S.E. of regression	0.030793	S.E. of regression		0.061901
Sum squared	0.039825	Sum squared		0.160933
Log likelihood	91.98495	Log likelihood		77.70488
Durbin-Watson stat	2.221294	Durbin-Watson stat		1.575037

5. Findings of the study

Some findings could be observed through the study which is presented below:

- It reports from the CAAR model, found that there is abnormal return in the stock like Asian Granito while it is observed that Bhagiradha and Dynamic Product Ltd is found to be having positive abnormal return in pre and post rights issue.
- It found that, select rights issue pre-abnormal return is found to be high as compare to post rights issue, implies investors are incurring less returns in post as compare to pre right issues.
- The study reports that, after the rights issue the Asian Granite seems to be having low volatility effect, when it is compare to pre rights issue, Asian Granite found to be having higher volatility effect, signifies pre right issue is better than post right issue.
- It observed that, pre and post right issue of Bhagiradha Chemicals & Industries Ltd., are observed to be having low volatility effect, but states that post right issue there is no volatility effect.

6. Epilogue

The study focused on Impact of corporate action with special reference to right issues on stock prices. Secondary data is collected for a span of 45 days before and after rights issue. To justify the data the statistical tools used were CAAR, ARCH. From the calculation of CAAR identified the effect of rights issue has a negative impact on returns which implies investors should wait for returns in long term perspective rather than short term volatility and risk is low. From the ARCH model pre and post as low volatility which indicates that after the announcement the stock has incurred negative returns to the investors. Thus, it has been observed that rights issue having the significant impact on the price returns performance and also observed change in volatility.

Author contributions

Conceptualization, DSM; methodology, TNR; software, RS; validation, RS; formal analysis, RS; investigation, TNR; writing—original draft preparation, DSM; writing—review and editing, DSM, TNR and RS; supervision, TNR. All authors have read and agreed to the published version of the manuscript.

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Conflict of interest

The authors declare no conflict of interest.

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