

Share Price Reactions to Setting the Record Straight Press Releases: Evidence from the Johannesburg Stock Exchange

Philip Kotze*

University of South Africa, 1 Preller Street, Muckleneuk, Pretoria, 0003, South Africa.

Abstract: Past studies have considered the effect of a variety of different types of press releases on share returns. None could be identified that studied press releases that set the record straight regarding a corporate event, thereby disseminating information seemingly new to investors. How the market digests such information should be reflected in share prices and significant abnormal returns would indicate that such press releases do indeed influence share prices. A content analysis of press releases was performed to identify press releases. Using a market model based on the capital asset pricing model, the cumulative abnormal return was then calculated. The study was carried out on the Johannesburg Stock Exchange's largest 40 companies. Previous studies have considered the exchange to be weak form efficient. The results of the paper indicate that setting the record straight press releases do not influence share prices. An implication of this is that the Johannesburg Stock Exchange, under certain conditions, shows more efficiency than would be expected from a weak-form efficient market. The paper contributed to the literature by finding that setting the record straight press releases seemingly do not convey new information to investors in general while also contributing to the literature on market efficiency.

Keywords: Capital asset pricing model (CAPM), event study, efficient market hypothesis (EMH).

INTRODUCTION

Companies often release information into the public domain through corporate communications. These communications often take the form of news about earnings expectations, product innovations, investor relations, new strategies and more (Oltarzhevskiy, 2019). While various studies have been conducted to study the effects that various corporate communication events have on share prices, none could be found that delved into the effect of corporate press statements that sets the record straight about corporate incidents. Setting the record straight regarding corporate failures, negative operational incidents or inaccurate information circulating in the public sphere, ostensibly, is done to furnish investors with the correct context to such an event and is meant to convey more (or correct) information to investors. Corporate incidents in this context could be any potentially damaging event due to a mistake, negative corporate action such as corruption, or even damaging bad press due to past non-compliance or unethical behavior by the corporation. Such events are reported into the public domain by news agencies. Likely to mitigate against negative sentiment, companies routinely issue press releases that provide explanations for the failure, a statement setting the record straight, an action plan to address a failure or an apology, or in most cases a combination of the three. Press releases correcting what a company perceives as misinformation regarding its operations is, at least from the viewpoint of a company, meant to convey

information regarding the company to investors that is not considered to be in the public domain. Effectively, such releases could be seen as augmenting news reports to correct or provide context to the news. In terms of the efficient market hypothesis (EMH), where a market is relatively efficient, it could be reasonably expected that the investors of a company would have considerable knowledge of the company's operations so that such a release would not introduce much new information into their price expectation for a company (Fama, 1970). Where the market is less efficient, it may be expected that such news would be somewhat new to investors and the security price would change to reflect this over some time. The Johannesburg Stock Exchange (JSE) is considered weak form efficient (Heymans & Santana, 2018). It provided a suitable environment for the study because in a weak-form efficient market, it would be expected that information not yet in the public domain would not be priced into security values.

BACKGROUND

Daly, Poudier and McNeil (2016) find that companies facing allegations of labor abuse impact upon a company's share price and that the type of response offered by said company affects the impact on its share price. They find specifically that explanations and justifications of the corporate actions have a moderating effect on the negative share price reaction while denials have the opposite effect. Kleinnijenhuis, Schultz, Utz and Oegema (2015) found, similarly, that during the BP Gulf oil spill crisis of 2010 that the corporate press releases by the company had a positive effect on the company's share price during the crisis. Many previous stud-

*Address correspondence to this author at the University of South Africa, 1 Preller Street, Muckleneuk, Pretoria, 0003, South Africa; E-mail: kotzepn@unisa.ac.za Tel: +2712 429 2040.

ies set out to determine the effects of a variety of corporate event-based communication on share prices (Asamoah & Nkrumah, 2010; Henry, 2006; Mlonzi, Kruger & Nthoesane, 2011; Cassidy, Constand & Corbett, 1990, *inter alia*). None, however, addresses general share price movements after a company puts out a press release to address what the company would perceive as incorrect information parleyed in the public domain and resultantly, in the markets. Daly et al (2016) and Kleinnijenhuis et al (2015) addresses specific types of incidents and each time one specific case, which, while offering interesting insights into the market reaction to such press releases, do not go as far as to generalize the reaction to a wide range of reactionary press releases. Studying the effect is significant and relevant in terms of corporate communications and asset pricing. In terms of asset pricing, it provides evidence of market efficiency while for corporate communication, it provides evidence regarding the perceived effectiveness of damage control, or setting the record straight, type of press releases from the perspective of investors. Specifically in terms of market efficiency, the paper provides evidence regarding the efficiency of the JSE.

Returns are widely accepted to be mostly gaussian (or randomly distributed) with temporal deviations which lead to marginal temporary predictability (Fama, 1965, 1970; Fama & French, 1988). The efficient market hypothesis in its strong form describes a perfectly liquid and mostly frictionless market where all market participants have the same information regarding a company and thus the price reflects this with no investors or insiders having an advantage over another, leading to essentially random short term price behavior based primarily on noise trading (Fama, 1970, 1991). Markets are mostly, however, best categorized as weak or semi-strong where market frictions influence prices while informational efficiency is high, but not perfect (Fama, 1970). In other words, prices incorporate all publicly available information. Subsequently, the behavior exhibited by returns are an effect of a fundamental or intrinsic value trajectory, affected by large buying and selling episodes, and news innovations (Fama, 1970). The reasons for buying and selling causing price changes are likely related to the liquidity of the stock in the market and can be characterized as investors selling and buying in relation to their investment needs. However, news innovations are shocks to the price path brought about by company, market or other applicable new information becoming available to investors that have a bearing the intrinsic valuation of the stock (Allen, 1983). Hence, the influence of news on the price of a security provides some indication of the efficiency of the market.

News regarding financial information, such as earnings or dividend announcements, significantly affect returns (Bartov, Givoly & Hayn, 2002). Feuerriegel & Prollochs (2021) shows that other types of news and even corporate press releases regarding strategy can significantly affect returns. Neurierl, Scherbina and Schusche (2013) studied a large set of corporate press releases and revealed that corporate press releases discussing customers, new products, or legal issues, *inter alia*, affect returns and that post many press releases, informational uncertainty regarding the stock seems to increase together with volatility.

Frank and Sanati (2018) apply textual analysis to a large sample of news stories to find that, in line with previous studies, positive- news- related- share- price- shocks are followed by reversals while negative shocks are followed by drift, and they interpret it as stock market overreaction (to positive news) and underreaction (to bad news). Carvalho, Klagge and Moench (2011) studied an event where a six-year-old news story led to a severe negative price shock that took seven days to reverse despite the false nature of the news and it not being an innovation. A negative shock due to news is clearly consequential and markets, while tending to seemingly underreact to negative shocks, may in some cases overreact to negative news. Informational efficiency would be expected to mitigate this overreaction. Sharing insights that are not available to the markets that may shed light on a negative event, would be expected to lead to a quicker rebound to the intrinsic value of the share price. Daly et al (2016) found that accompanying negative news (regarding labor abuses) with a justification, explanation or excuse leads to a smaller negative shock to the share price over an eleven-day window surrounding the breaking of the negative news. In a similar vein, Kleinnijenhuis et al (2015), published an event study about the BP Gulf oil spill disaster showing that corporate press releases describing the actions taken by the company during the crisis led to positive impacts on the company's share price, thereby mitigating the negative shock. Again, this is likely an increase in informational efficiency brought about by the press releases and considering the findings of Neurierl et al (2013), it would follow that such press statements would likely decrease informational uncertainty by providing the market with insights from within the company.

While previous studies explored the effects of various events, such as management buyouts, operational and financial corporate disclosures (Bhana, 2005; Frank & Sanati, 2018; Bartov, et al, 2002; Neurierl et al, 2013) and specific cases of mitigating press releases (Kleinnijenhuis, et al, 2015; Daly et al., 2016), none of the prior literature (to the best knowledge of the author) describes the more general behavior of returns subsequent to press releases addressing negative news events specifically. This present study was conducted to address this gap in the literature by investigating the stock price reaction to such press releases over an event window for a varied, substantial sample of companies to determine what effect mitigating statements have on returns due to the tightening of the perceived information gap between the company and the market. This phenomenon is of significance in terms of market efficiency and corporate communication. A clear pattern of large movements, post such press releases, would provide evidence of market inefficiency (or weak for efficiency) due to the presence of information asymmetry between management and the markets, while of course the opposite would also be true. While the paper is not quite a stand-alone test of efficiency, the study provides evidence of a specific mechanism that contributes to the phenomena. In terms of corporate communication, it adds to the literature by providing empirical evidence of the effectiveness (or ineffectiveness) of such press releases.

MATERIALS AND METHODOLOGY

In this section the choice and composition of the methodology is discussed. A description of the data is presented before the method is discussed.

DATA COLLECTION AND SOURCES

Corporate websites and the IRESS Library module for the current JSE top 40 companies are consulted for press releases over the period, 2018 to 2023. The top 40 companies were used due to the possibly increased mainstream news coverage that they attract, when compared to smaller companies. The top 40 companies are also more liquid, and it is argued that this would lead to a more visible and relevant change in share price while also ensuring a fair test of market efficiency where inefficiency is not observed due to illiquid shares being studied (Cubbin, Eidne, Firer & Gilbert, 2006). One would expect the more liquid shares to be more efficient and it can thus be seen as a measure of robustness that a study regarding possible market inefficiency uses the sample likely to be the most efficient stocks. Share price data was collected from the IRESS Price module for two days before the release and three days after the press releases. This allows sufficient time to determine whether a significant change in share prices is evident due to the press release, or not. The share price data for 200 days preceding each event together with the related market index data was also collected for the calculation of the market risk indicator (alpha and beta) necessary for the cumulative abnormal return calculation.

METHOD

In this present paper, the effect of “setting the record straight” press releases on share price movement were studied. To do so, a content analysis had to be performed on corporate press releases and then an analysis on associated returns to determine whether the releases led to a significant reaction from investors.

Content analysis entails analyzing the content of data with the end goal of classifying the data into a predefined category, in this case, the press release data was classified as setting the record straight (Harwood & Garry, 2003). In a similar manner to Choi (2012), the author searched for press releases where the release clearly has the intention of conveying information unknown to the public regarding a recent event or setting the record straight on an issue affecting the company. For a press release to have been considered as such, it had to be released in response to an event already known to the public and therefore the market. Where some press releases took the tone of a “setting the record straight” type of release but it was unclear whether it was issued in response to an event, a Google search (including through the “news” tool) was conducted for the company name and the related date. Where no directly related prior results were found, the press release was not classified, as a measure of robustness.

Each press release over the period of 2018 to 2023 for the sample companies were considered. The press releases which fell into this category were recorded together with the date it was issued. Furthermore, the release was categorized as either being about litigation, operation issues, COVID-19 related issues, corruption allegations, bad press coverage or

investor relations. The industry affiliation of every entity in the sample was also noted.

Share price data was collected around these dates for the abnormal return calculation. To account for market related price fluctuations, the share price data was normalized against the all-share index (ALSI) movement for the days under study. In this manner, abnormal returns are identified. Formally stated below is the structure of the returns in real terms (Strong, 1992):

Equation 1: Return structure in an event study

$$f(\bar{R}_j | y_j) - f(\bar{R}_j) \neq 0 \text{ for any value of } y_j \quad (1)$$

Where R is the marginal return distribution of the share j while y is an information signal influencing R . The equation states that where a value of y has an influence on R , an abnormal return will be present. Measuring the presence of abnormal returns is a popular tool in event studies to determine whether some event has an influence of corporate value (Strong, 1992; Borges & Gairifo, 2012). The event window used for the study of the abnormal returns is five days. Following Neuhierl et al (2013), we keep the event window rather short to capture the immediate aftermath of the announcements and to avoid overlap with other events as far as possible. The event window starts the day before the announcement as per prior studies (Johnson & Zhou, 2012; Strong, 1992). The event window included the day of the announcement and the following three days to measure the impact of the press release.

The abnormal return was measured over the event window using the market model (which is based on the capital asset pricing model):

$$AR_{jt} = R_{jt} - \hat{\alpha}_j - \hat{\beta}_j R_{mt} \quad (2)$$

Where AR is the abnormal return, R_{jt} denotes the return of stock j on day t while alpha and beta are estimated coefficients and R_{mt} is the market return on day t . Alpha and Beta are estimated from the company's prior 200 trading days data leading up to the event window (Neurhierl et al, 2013). As per equation 1, if the abnormal returns are not zero, the press announcements influenced the company's returns. The Wilcoxon-signed-rank test was performed to determine whether the abnormal returns are statistically significantly different from zero, which would provide an indication of the effectiveness of setting the record straight press releases (Rey & Neuhäuser, 2011).

RESULTS

The results from the content analysis are presented in Table 1. In the analysis, 83 press releases were identified from the 40 companies in the sample over a five-year period. The sample of companies were allocated to four broad industry-based categories, namely, financial services and real estate, mining and other primary industries, consumer goods/ food/ retail and ICT and media. Press releases were coded into the broad categories of operational incidents, COVID-19 related releases, corruption or fraud related releases, investor relation related releases and finally, bad press as a catch all for all negative press not related specifically to the other catego-

Table 1: Results from the Press Release Content Analysis.

	Operational Incident	COVID-19	Corruption	Bad Press	Investor Relations	Litigation	Total
Financial/ real estate	4	1	1	6	0	3	15
Mining/ primaries	17	1	6	11	4	8	47
Consumer goods/ food/ retail	0	2	0	6	0	0	8
ICT/ media	0	0	0	5	5	3	13
Total	21	4	7	28	9	14	83

ries. Most of the press releases were recorded in the mining and primaries category. Twelve of the 40 companies in the sample were mining companies while 14 were consumer goods, food or retail companies, 10 were financial services or real estate companies while four were ICT or media companies. Press releases were therefore more prevalent for mining or primary industry companies in comparison to those in other industries. In turn, operational incidents and bad press made up many of the releases for mining companies. Often, environmental catastrophes and concerns were addressed in these releases but loss of life on mines was also addressed in many. COVID- 19 related releases mostly took the form of clarification of media reports regarding recorded incidents and spread of the virus. Corruption related releases were mostly found to be related to allegations of bribing government officials while litigation was often related to environmental and societal claims against mines, amongst others. Bad press was more widespread and related to practices of companies in the sample or certain actions. This was widespread across industries and in all cases, companies attempted to provide clarifying information to the public or to deny the reported negative allegations.

The event dates from the content analysis were studied for abnormal returns. In this analysis, 58 of the 83 identified events possessed the necessary data to perform the analysis. Some companies were omitted due to a lack of data for the preceding 200 days for the market risk calculation, in some cases the share price was flat, and no discernable abnormal return was obvious and negated the calculation. This resulted in a smaller sample, omitting 25 events, but the sample was sufficient to still calculate the Wilcoxon signed rank test. The test was performed on the abnormal return results, therefore on a one-dimensional sample, which provides confirmation of a sample being significantly different from zero or not. The p- value for the statistic was well above the rejection hurdle of 0.05, which indicates that the abnormal return in the wake of a “setting the record straight” press release is not statistically different from zero. While not reported here for the sake of brevity, for robustness an event window starting on the day of the release was tested with a window of two subsequent days and the test still indicated that the cumulative abnormal return is not statistically different from zero. A longer event window of nine days after the press release was also tested but the result remained similar.

The implication of this is that such press releases do not seem to convey marginal information to shareholders or the markets that were not already previously priced into valuations efficiently. However, while it is clear from the analysis that such press releases do not in general terms seem to in-

fluence market valuations of the issuer’s value, it is less clear whether there may be some nuanced cases as the analysis indicated that while generally, the abnormal return deviation from the market model employed was marginal, there were some cases that exceeded two standard deviations from the mean abnormal return, both negative and positive. In the sample of 58 events, 30 led to positive abnormal returns while 28 led to negative abnormal cumulative returns. The abnormal returns were skewed slightly to the right and an inspection of the data supports the use of the Wilcoxon rank test rather than the simple standard deviation test due to the evident skewness of the data and the seemingly non-normal distribution thereof as evidenced in Figure 1. Of the abnormal returns, six values exceeded a standard deviation of two deviations from the mean. For the sake of robustness, these six extreme events were studied qualitatively to ascertain whether any sort of pattern was driving the extreme changes in returns, however, there was no identifiable commonality between the events that drove the extreme returns. The types of recorded events and the industries of the six extreme events were all distributed seemingly randomly, as were the associated event dates.

Table 2: Results from the abnormal returns analysis.

Result	Value
n	58
Positive abnormal returns recorded	30
Negative abnormal returns recorded	28
Wilcoxon test (p-value)	0.856
Cumulative abnormal returns	-4.71%
Cumulative negative abnormal returns	-168%
Cumulative positive returns	164%

DISCUSSION

From the results, it was established that “setting the record straight” press releases do not seem to introduce information that is unexpected to the market and do not have a significant effect on the returns of the sample studied. The results to the analysis showed that, robust to different event windows, there is no statistically significant effect on returns due to press releases “setting the record straight” with investors. The evidence provides confirmatory evidence for the efficient market hypothesis and specifically of semi- strong form efficiency, at least conditionally so (Fama, 1970). The paper

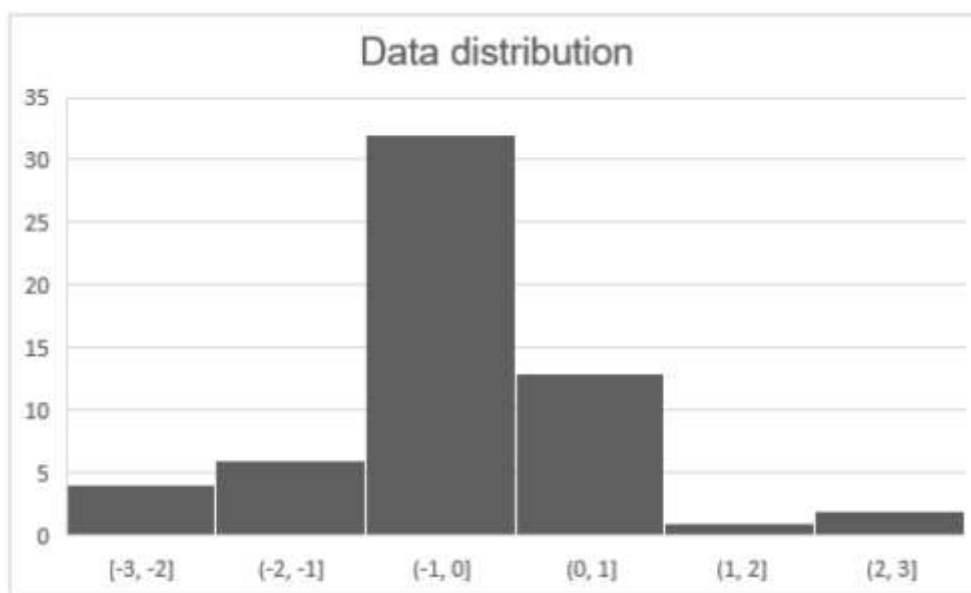


Fig. (1). Distribution of the standard deviation of cumulative abnormal returns.

provided some evidence of explicit cases of semi-strong form market efficiency on the JSE. This may have been influenced by due to the study of mostly large companies where prior studies on smaller companies found weak form efficiency (Mlonzi et al, 2011). Heymans and Santana (2018) discuss the JSE to be weak form efficient but with the top 40 companies being shown to be more efficient than smaller companies. The evidence presented in this paper provides confirmatory evidence that the larger stocks on the JSE seemingly are more efficiently priced than would be expected under weak form efficiency, at least under certain conditions. It is interesting, novel, evidence of participants on the JSE having already priced information that may be thought of as being solely in the hands of management, into their price estimates. This implies that the market has an in-depth understanding of the operations of the companies studied in that what may be considered insider information, was already taken into consideration because news innovations were priced into their expectations.

Specific press releases that provided new clarifying information to investors has been shown to impact returns in prior studies (Kleinnijenhuis, et al, 2015; Daly et al., 2016). This paper, however, studied such press releases in general terms and found that generally, issuing such press releases do not affect returns significantly. While there may be specific cases where such press releases do convey new information to the markets, no evidence could be obtained that this is the case for the substantial sample studied. It may be that the sample of large, liquid companies studied affected the results, however, this can also be construed as a measure of robustness. It is possible that on a less efficient exchange or for specific types of press releases that set the record straight, there may be evidence of significant effects on returns under specific conditions. One such possible avenue may be to study the effect from companies listed on an exchange in one country while having its operations mostly in another country; possibly it may be that the market being less familiar with the company may lead to a different outcome.

CONFLICT OF INTEREST

The author of the paper declares that there is no conflict of interest that he is/was aware of while undertaking the study. No funding was obtained to carry out the research.

REFERENCES

- Allen, D.E., 1983. *Finance. A theoretical introduction*. Martin Roberston & Company Ltd, Oxford.
- Asamoah, G.N. and Nkrumah, K., 2010. The impact of dividend announcement on share price behaviour in Ghana. *Journal of Business & Economics Research*, 8(4), pp.47-58.
- Bartov, E., Givoly, D. and Hayn, C., 2002. The rewards to meeting or beating earnings expectations. *Journal of accounting and economics*, 33(2), pp.173-204.
- Bhana, N., 2005. The share price reaction to management buyout announcements of companies listed on the JSE Securities Exchange. *Investment Analysts Journal*, 34(62), pp.19-30.
- Borges, M.R. and Gairifo, R., 2013. Abnormal returns before acquisition announcements: Evidence from Europe. *Applied Economics*, 45(26), pp.3723-3732.
- Carvalho, C., Klagge, N. and Moench, E., 2011. The persistent effects of a false news shock. *Journal of Empirical Finance*, 18(4), pp.597-615.
- Cassidy, S.M., Constand, R.L. and Corbett, R.B., 1990. The market value of the corporate risk management function. *Journal of risk and insurance*, pp.664-670.
- Choi, J., 2012. A content analysis of BP's press releases dealing with crisis. *Public Relations Review*, 38(3), pp.422-429.
- Cubbin, E., Eidne, M., Firer, C. and Gilbert, E., 2006. Mean reversion on the JSE. *Investment Analysts Journal*, 35(63), pp.39-47.
- Daly, J.P., Pouder, R.W. and McNeil, C.R., 2017. Effects of explanations communicated in announcements of alleged labor abuses on valuation of a firm's stock. *Corporate Communications: An International Journal*.
- Fama, E.F. and French, K.R., 1988. Permanent and temporary components of stock prices. *Journal of political Economy*, 96(2), pp.246-273.
- Fama, E.F., 1965. The behavior of stock-market prices. *The journal of Business*, 38(1), pp.34-105.
- Fama, E.F., 1970. Efficient capital markets: A review of theory and empirical work. *The journal of Finance*, 25(2), pp.383-417.
- Fama, E.F., 1991. Efficient capital markets: II. *The journal of finance*, 46(5), pp.1575-1617.

- Feuerriegel, S. and Pröllochs, N., 2021. Investor reaction to financial disclosures across topics: An application of latent Dirichlet allocation. *Decision Sciences*, 52(3), pp.608-628.
- Frank, M.Z. and Sanati, A., 2018. How does the stock market absorb shocks?. *Journal of Financial Economics*, 129(1), pp.136-153.
- Harwood, T.G. and Garry, T., 2003. An overview of content analysis. *The marketing review*, 3(4), pp.479-498.
- Henry, E., 2006. Market reaction to verbal components of earnings press releases: Event study using a predictive algorithm. *Journal of Emerging Technologies in Accounting*, 3(1), pp.1-19.
- Heymans, A. and Santana, L., 2018. How efficient is the Johannesburg Stock Exchange really?. *South African Journal of Economic and Management Sciences*, 21(1), pp.1-14.
- Johnson, W.B. and Zhao, R., 2012. Contrarian share price reactions to earnings surprises. *Journal of Accounting, Auditing & Finance*, 27(2), pp.236-266.
- Kleinnijenhuis, J., Schultz, F., Utz, S. and Oegema, D., 2015. The mediating role of the news in the BP oil spill crisis 2010: How US news is influenced by public relations and in turn influences public awareness, foreign news, and the share price. *Communication research*, 42(3), pp.408-428.
- Mlonzi, V.F., Kruger, J. and Nthoesane, M.G., 2011. Share price reaction to earnings announcement on the JSE-ALtX: A test for market efficiency. *Southern African Business Review*, 15(3), pp.142-166.
- Neuhierl, A., Scherbina, A. and Schlusche, B., 2013. Market reaction to corporate press releases. *Journal of Financial and Quantitative Analysis*, 48(4), pp.1207-1240.
- Oltarzhevskiy, D.O., 2019. Typology of contemporary corporate communication channels. *Corporate Communications: An International Journal*, 24(4), pp.608-622.
- Rey, D. and Neuhäuser, M., 2011. Wilcoxon-signed-rank test. In *International encyclopedia of statistical science* (pp. 1658-1659). Springer, Berlin, Heidelberg.
- Strong, N., 1992. Modelling abnormal returns: A review article. *Journal of Business Finance & Accounting*, 19(4), pp.533-553.

Received: May 02, 2023

Revised: May 10, 2023

Accepted: Sep 04, 2023

Copyright © 2023– All Rights Reserved

This is an open-access article.