

Earnings Announcements and Stock Returns among Listed Firms at the Nairobi Securities Exchange, Kenya

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Abstract: *Corporate announcements, particularly earnings announcements, significantly influence stock returns by providing critical information on a firm's profitability, revenue trends, and financial health, thereby shaping investor decisions and market dynamics. However, investor reactions are not always uniform, as behavioral biases, firm-specific characteristics, and prevailing market conditions may amplify or delay stock price adjustments, highlighting the complex role of earnings announcements in influencing stock return volatility. This study examined the effect of earnings announcements on stock returns among firms listed at the Nairobi Securities Exchange. The study was anchored on the Adaptive Market Hypothesis, which posits that market efficiency evolves over time based on investor learning, adaptation, and changing economic conditions. A causal research design and event study methodology were adopted to examine stock price reactions to earnings announcements. The target population comprised all 60 firms listed on the Nairobi Securities Exchange, with 19 earnings announcement events identified between 2014 and 2024. A census approach was employed, whereby all identified events were included in the analysis. Secondary data on earnings announcements and daily share prices were obtained from the Nairobi Securities Exchange and analyzed using time-series quantitative techniques. The study computed actual returns, expected returns, abnormal returns, cumulative abnormal returns, and standardized cumulative abnormal returns using the market model and Capital Asset Pricing Model, with statistical significance tested using t-statistics at the 5% significance level. Event windows of 15 days before and after the announcement date were analyzed to capture immediate market reactions and assess the influence of earnings announcements on stock performance. The findings revealed that earnings announcements have a statistically significant negative effect on stock returns among firms listed at the Nairobi Securities Exchange. In the short term, stock prices decline following earnings announcements as investors respond to signals of lower-than-expected performance, declining profitability, or increased uncertainty regarding future cash flows. The study recommends that firms, particularly smaller firms, should proactively manage investor expectations by providing detailed explanations of financial performance drivers to minimize market overreactions. In addition, investor education initiatives should be strengthened to enhance shareholders' ability to interpret earnings disclosures more rationally and reduce reactionary volatility during periods of financial uncertainty.*

Key words: Earnings Announcements, Stock Returns, Corporate Announcements, Investors, Nairobi Securities Exchange, Kenya

Introduction

Stock markets are central to global financial systems, facilitating billions of dollars in daily transactions. Investors rely on stock markets as a primary source of income or long-term wealth accumulation (Pandey & Tiwari, 2022). Stock returns reflect all publicly available information and serve as a key indicator of market efficiency, as postulated by Fama's Efficient Market Hypothesis. Fluctuations in stock returns influence investment decisions, consumer spending, and overall economic stability, highlighting the critical role of stock market performance in national economies (Syed & Bajwa, 2018). Moreover, investors' decisions are heavily influenced by the availability and accessibility of relevant market information, as it shapes expectations about potential risks and returns.

Information plays a critical role in stock market decision-making, as it provides investors with the data needed to assess potential risks and returns (Pandey & Tiwari, 2022). Accurate, timely, and comprehensive information allows investors to make informed choices regarding buying, holding, or selling securities, thereby minimizing uncertainty and reducing the likelihood of losses (Kaszniak & Sridharan, 2022). Financial reports, market news, economic indicators, and corporate announcements are key sources of information, as they offer insights into a company's performance, strategic direction, and potential growth. According to Fama's Efficient Market Hypothesis, markets incorporate all publicly available information into stock prices, meaning that investment decisions are directly influenced by the accessibility and interpretation of this information (Tosun & Eshraghi, 2022).

Earnings announcements provide critical information that shapes investor sentiment and influences stock price movements (Stankevičiene & Akelaitis, 2017). These reports offer insights into a firm's profitability, revenue trends, and overall financial performance, enabling investors to make informed decisions regarding stock valuation and portfolio adjustments. Regulatory authorities require such disclosures to enhance transparency, promote accountability, and reduce information asymmetry between management and stakeholders (Marisetty & Madasu, 2021). In well-functioning markets, stock prices are expected to adjust promptly to earnings announcements, reflecting the firm's current financial health and anticipated future performance. However, investor reactions to corporate announcements are not always rational, as behavioral biases and market inefficiencies often distort stock price

movements (Owusu et al., 2017). While positive earnings surprises may drive stock price appreciation, negative surprises can trigger sell-offs, with the signaling effect shaping investor expectations and making it essential to examine their influence on stock returns in emerging markets like Kenya.

Earnings announcements have been shown to significantly influence stock returns across different markets. In Lithuania, Stankevičiene and Akelaitis (2017) found that high-quality earnings disclosures led to notable stock price movements, with positive announcements increasing returns and negative announcements causing declines. In India, Rani et al. (2025) established that economic uncertainty and market-related announcements significantly influence investor sentiment and stock price movements, with market reactions varying depending on prevailing economic conditions. In Africa, particularly South Africa, Ramakau et al. (2025) observed that stock market volatility and investor reactions to financial and economic information adjusted rapidly during periods of uncertainty, although larger firms tended to experience lower volatility due to stronger market visibility and investor confidence. At the Nairobi Securities Exchange, earnings announcements play a critical role in guiding investor decisions and maintaining market efficiency, reflecting both firm performance and broader market dynamics (Nairobi Securities Exchange, 2020).

Statement of the Problem

Stock return remains a defining feature of the Nairobi Securities Exchange (NSE), with persistent fluctuations that undermine investor confidence and market efficiency. Over the past decade, the NSE All-Share Index has exhibited irregular movements, falling from 3.457% in 2014 to 0.968% in 2017, with brief rebounds to 1.852% in 2018 before dropping again to 1.289% by 2020. In 2021 a steady increase was experienced up to 3.145%, after that there has been a steep decline up to the year 2024 (NSE, 2025). This indicates there is continued volatility in Kenya's stock market, underscoring the need for further research into how corporate announcements shape stock return behavior. Corporate announcements are designed to reduce information asymmetry and guide investor behavior.

These fluctuations occur despite frequent earnings announcements, which represented 48% of corporate disclosures by listed firms between 2014 and 2024. Earnings announcements are intended to reduce information asymmetry and guide investor behavior. However, empirical evidence on their effects is mixed. Wainaina (2017) found no significant relationship between earnings announcements and stock returns, whereas Ahmed (2016) reported negative impacts. These inconsistencies highlight the need to examine how earnings disclosures influence stock return in the evolving market conditions.

The following null hypothesis guided this study:

H₀₁: Earnings announcements have no statistically significant effect on stock return among firms listed at the Nairobi Securities Exchange.

Literature Review

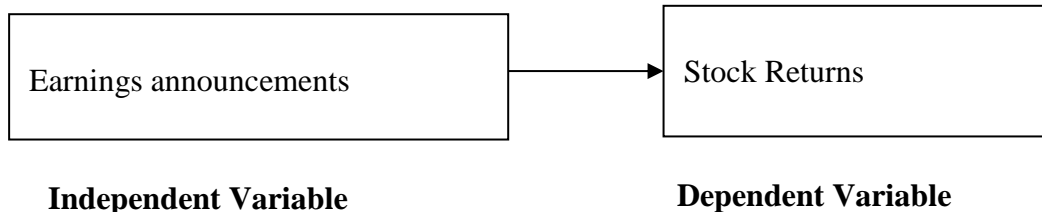
Theoretical Review

The study is anchored on The Adaptive Market Hypothesis (AMH), which was developed by Lo (2004). It is an extension of the Efficient Market Hypothesis (EMH), integrating insights from behavioral finance. While EMH assumes that stock prices always reflect all available information and that markets are perfectly efficient, AMH posits that market efficiency is not constant but evolves over time. The theory assumes that investor behavior, learning processes, and institutional frameworks influence how information is incorporated into prices. AMH recognizes that financial markets adapt to changing economic conditions, technological developments, and behavioral patterns, meaning that investor reactions can vary across different periods. Emphasizing adaptability and learning, AMH provides a more realistic framework for understanding stock price dynamics in complex, real-world markets (Lo, 2019).

The Adaptive Market Hypothesis is particularly useful in explaining the effects of earnings announcements on stock returns among firms listed at the NSE. According to AMH, stock price reactions to earnings announcements are not uniform or immediate; they depend on how investors process new financial information, assess firm-specific performance, and adjust their trading strategies over time. Larger or more sophisticated investors may interpret earnings surprises differently than smaller investors, resulting in variations in stock price movements. Market conditions, including liquidity, volatility, and investor sentiment, further influence the magnitude and direction of these responses. Application of AMH enables the study to capture the dynamic and evolving nature of stock return reactions to earnings announcements, highlighting the combined role of behavioral and contextual factors (Zheng, 2020).

Conceptual Framework

A conceptual framework refers to the diagrammatical visualization of theoretical aspects of particular research so as to show existing association between variables (Babbie, 2017). Figure 1 shows the hypothesized relationship between the independent variables and the dependent variable. The independent variable was earnings announcements and dependent variable was stock returns among listed firms in Kenya.



Independent Variable
Figure 1: Conceptual Framework

Empirical Review

Earnings announcements are considered significant information events that directly influence investor expectations and stock price behavior. These disclosures provide insights into a firm's profitability, revenue trends, and overall financial performance, enabling investors to reassess the firm's value and adjust their investment strategies accordingly. Positive earnings surprises, where reported earnings exceed market expectations, often lead to increased investor confidence and upward movements in stock prices, while negative surprises can trigger sell-offs as investors revise their forecasts. Studies have examined how markets incorporate earnings information into stock prices, with mixed findings depending on market efficiency, investor sentiment, and firm characteristics.

Eleke-Aboagye and Opoku (2013) examined the impact of earnings announcements on stock returns in the Ghana Stock Exchange (GSE) between January 2010 and June 2013, using event study methodology. Their findings indicated insignificant abnormal stock returns around earnings announcements, suggesting that earnings news had already been factored into stock prices. This contradicts classical efficient market assumptions, implying that investor reaction in emerging markets is more nuanced and context-dependent. Similarly, Sare et al. (2018) investigated 57 earnings announcements across 19 firms in the GSE from 2009 to 2012, adopting a market model approach. Their study found that earnings announcements influenced investor decisions, though stock returns exhibited pre- and post-event price drifts, suggesting the presence of information asymmetry and market inefficiencies.

In the Kenyan context, Kalui and Garang (2018) assessed the impact of quarterly and annual earnings announcements on stock returns of 64 NSE-listed firms (2012–2016) using descriptive analysis. The study revealed a significant relationship between earnings announcements and stock returns, highlighting that quarterly announcements had a stronger effect than annual ones. These findings suggest that frequent financial disclosures may improve market efficiency by reducing information gaps. However, contradictory results have been found in other studies. Olang and Akenga (2017), in a study of 61 NSE-listed companies (2011–2015), used an event study methodology and found no significant abnormal returns around earnings announcements. Their results implied that earnings announcements do not necessarily trigger immediate stock price adjustments in emerging markets like Kenya, possibly due to delayed investor reaction or regulatory inefficiencies.

Despite extensive research on earnings announcements and stock returns, several gaps remain. Many studies assume rational investor behavior under efficient market theory, neglecting market inefficiencies, psychological biases, and investor sentiment, which can significantly influence stock price reactions. Additionally, most research focuses on short-term event windows, overlooking the long-term impact of earnings disclosures on stock return volatility. Firm-specific factors, such as firm size, are also underexplored; larger firms with greater analyst coverage and institutional scrutiny may experience muted reactions, whereas smaller firms often exhibit higher volatility due to limited information. Addressing these gaps is essential for understanding how earnings announcements shape stock market dynamics over time, particularly in emerging markets, where information asymmetry and gradual price adjustments are more pronounced.

Research Methodology

The study adopted a positivist research philosophy, a causal or explanatory research design, and applied the event study methodology. The unit of analysis comprised all companies listed on the NSE, which currently has 60 firms, while the unit of observation consisted of profit warnings announcements made between 2014 and 2024 (NSE,2025). This design showed the impact and explanation of causes of such effect between variables. Based on data from the exchange, a total of 19 earnings announcements were identified during the study period, and these events formed the basis for examining how corporate disclosures influence stock returns. The study employed a census approach; therefore all 19 earnings announcements were included in the analysis. The research relied on secondary data covering the period from 2014 to 2024, which were collected using a data extraction checklist.

The study employed quantitative methods to examine the effect of corporate announcements on share prices using the event study methodology. Daily average share price data were collected to compute normal returns, abnormal returns (AR), and cumulative abnormal returns (CAR) within an event window of -15 to +15 days around the announcement date ($t = 0$). If an announcement occurred on a non-trading day, the next available trading day was treated as day 0, and a 30-day estimation period prior to the event window was used to avoid data overlap.

The daily stock return at any given period is the market model residual. This was computed as below;

$$\text{Actual stock returns} = \frac{\text{Actual stock price} - \text{previous stock price}}{\text{previous stock price}}$$

Whereas the actual stock price is the average of the lowest and highest stock price at a given day as expressed from the securities exchange.

Abnormal Returns (AR) are most of the times used in estimating the impact of the profit warning, earnings, financial distress, dividends, mergers and acquisition and change in board announcements. In this study, the actual share returns were calculated by use of the following formula;

$$R = \frac{(MP_t - MP_{t-1})}{MP_{t-1}}$$

Where; MP represents shares market price at time t and R is the actual share returns. In this study.

Expected/normal returns were calculated by use of the following formula;

$$ER_{xt} = \alpha_x + \beta_x Rm_t$$

Where; ER_{xt} represents expected returns at time t, on stock x; Rm_t represents market returns at time t; α_x represents a constant of stock x and $\beta_x Rm_t$ represents the stock x price volatility relative to the overall market. Both α and β was calculated by use of ordinary least squares (OLS) method depending on the historical stock data and the market index for the estimation period.

The expected returns were then estimated using the following equation and the values of α and β obtained from the equation above.

$$ER_t = \alpha + \beta Rm_t$$

Abnormal returns were then measured by obtaining the difference between expected/normal return rate and the actual return rate. The following formula was used in the calculation of abnormal returns;

$$AR_{it} = R_{it} - (\alpha_i + \beta_i RM_t)$$

Where; AR_{it} = Abnormal return of stock i at time t; R_{it} = Return of stock at time t; RM_t = Market return at time t and α and β = constants.

The cumulative abnormal return was computed as:

$$CAR_{it} = \sum_{t=0}^n AR_{it}$$

Where; CAR_{it} – cumulative abnormal return on stock i obtained in the event window n, n – The event window

Standardized cumulative abnormal returns (SCAR) were computed as:

$$SCAR_{it} = \frac{(CAR_{it})}{\sigma(CAR_{it})}$$

Where; $\sigma(CAR_{it})$ - The standard deviation of CAR's adjusted for forecast error.

T-test statistic was used to measure the statistical significance of the ARs and CARs, and SCARs reported during the event window at 5% significance level. T-test statistic assumes a normal distribution of data.

Research Findings and Discussions

Descriptive Analysis

The section shows descriptive statistics of abnormal returns and cumulative abnormal returns after earnings announcements among firms listed at the Nairobi Securities Exchange.

Abnormal Returns

Table 1 shows the number of companies, average abnormal returns (AARit), standard deviation of abnormal returns (σ ARit), and standardized abnormal returns (SARit) for each day within the event window, providing an overview of market reactions to earnings announcements.

Table 1: Descriptive Statistics of ARit Following Earnings Announcement

Days	Number of Companies	Average ARit	σ ARit	SARit
-15	19	-0.00050	0.01886	-0.02651
-14	19	0.00192	0.01907	0.10076
-13	19	0.00016	0.00950	0.01662
-12	19	-0.00402	0.01529	-0.26306
-11	19	-0.00464	0.01720	-0.26988
-10	19	-0.00106	0.01431	-0.07392
-9	19	0.00231	0.01046	0.22042
-8	19	-0.00112	0.01322	-0.08442
-7	19	-0.00119	0.01569	-0.07614
-6	19	0.00425	0.01979	0.21460
-5	19	0.00540	0.01604	0.33665
-4	19	0.00077	0.01414	0.05433
-3	19	0.00063	0.01796	0.03488
-2	19	0.00048	0.02383	0.02032
-1	19	-0.00248	0.01585	-0.15676
0	19	0.00014	0.01369	0.01000
1	19	0.06105	0.13288	0.45943
2	19	-0.01673	0.02586	-0.64698
3	19	-0.01406	0.02626	-0.53552
4	19	-0.00331	0.03766	-0.08791
5	19	-0.01283	0.03428	-0.37433
6	19	0.00085	0.03301	0.02583
7	19	-0.00535	0.04240	-0.12611
8	19	-0.00309	0.03233	-0.09572
9	19	-0.01886	0.04526	-0.41682
10	19	0.00283	0.05102	0.05539
11	19	-0.01014	0.02296	-0.44178
12	19	0.00364	0.03354	0.10859
13	19	0.00361	0.02574	0.14028
14	19	-0.00643	0.02099	-0.30648
15	19	-0.00312	0.02260	-0.13785

As shown in Table 1, the average abnormal returns (AARit) show how stock prices, on average, deviated from expected returns for the 19 companies around the earnings announcement. Before the announcement ($t = -15$ to $t = -1$), AARit fluctuates slightly around zero, with both small positive and negative values (e.g., $t = -12$: -0.00402; $t = -5$: 0.00540), indicating that the market had minimal pre-announcement reaction. On the announcement day ($t = 0$), AARit is almost zero (0.00014), showing little immediate response. However, on the first day after the announcement ($t = +1$), AARit rises sharply to 0.06105, suggesting a notable positive market reaction. In the following days, AARit alternates between small negative and positive values, reflecting minor corrections and heterogeneity in market responses. Overall, the earnings announcements triggered moderate but short-lived abnormal returns, with the most pronounced reaction occurring immediately after the release.

The standard deviation of abnormal returns (σ ARit) measures how dispersed the abnormal returns were across the 19 firms each day. A higher σ ARit indicates more variability in how different firms' stocks reacted to earnings announcements. In this table, σ ARit ranges from 0.00950 ($t = -13$) to 0.05102 ($t = +10$). The relatively low σ ARit before the announcement suggests that market reactions were fairly consistent across firms. Post-announcement, σ ARit increases substantially ($t = +1$: 0.13288; $t = +10$: 0.05102), indicating that some firms experienced larger price changes than others, reflecting diverse investor perceptions and varying market sensitivity to earnings news.

The standardized abnormal returns (SARit) express abnormal returns in units of their standard deviation, showing the statistical significance of the price changes. Before the announcement, SARit values remain small (e.g., $t = -15$: -0.02651; $t = -5$: 0.33665), suggesting insignificant price movements. On $t = +1$, SARit peaks at 0.45943, indicating the largest standardized market response

following the earnings announcement. Negative SARit values on certain post-announcement days (e.g., $t = +2$: -0.64698; $t = +3$: -0.53552) suggest some market correction or price adjustment after the initial reaction. Overall, SARit confirms that the immediate market reaction was strongest right after the earnings announcement, while reactions in other days were moderate and mostly not statistically significant.

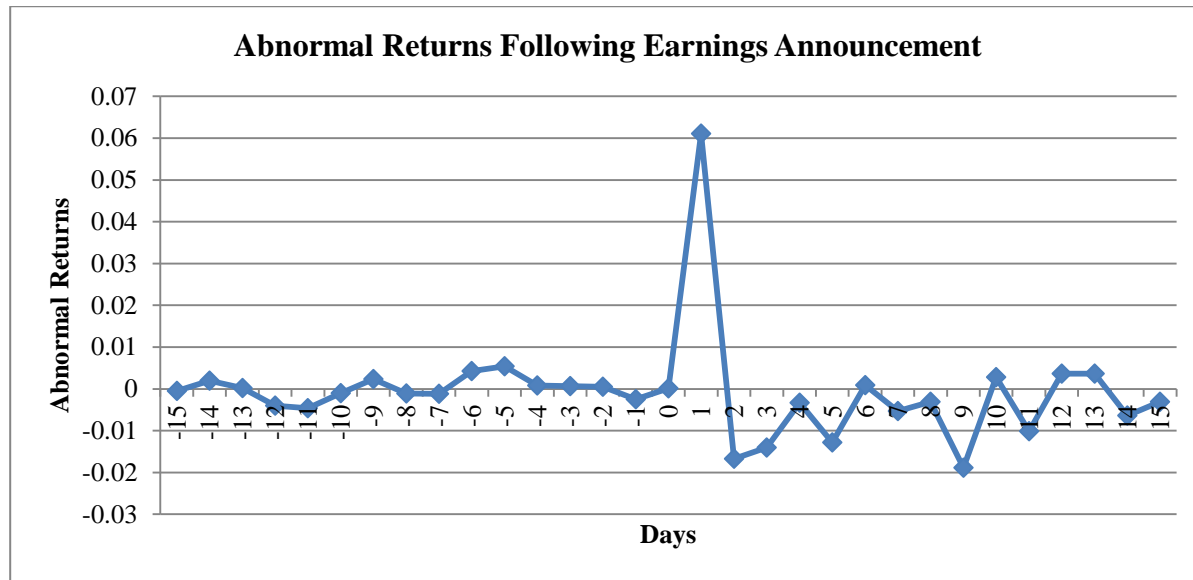


Figure 2: Trend of ARit Following Earnings Announcements

As shown in Figure 2, the trend of abnormal returns (ARit) for the 19 firms indicates how stock prices reacted around earnings announcements. In the pre-announcement period ($t = -15$ to $t = 0$), ARit fluctuates slightly around zero, with small positive and negative values (e.g., $t = -12$: -0.00402; $t = -5$: 0.00540), suggesting minimal market anticipation of the earnings news. On the announcement day ($t = 0$), ARit is 0.00014, indicating that the market reaction on the day of the earnings release is almost negligible. In the post-announcement period ($t = +1$ onward), ARit exhibits more pronounced movements. There is a sharp positive spike on $t = +1$ (0.06105), showing that investors reacted positively to the earnings information, potentially reflecting better-than-expected results. However, the subsequent days show mixed reactions, with negative ARit values on $t = +2$ (-0.01673), $t = +3$ (-0.01406), and $t = +5$ (-0.01283), indicating some market corrections or profit-taking after the initial reaction. Smaller fluctuations continue through $t = +15$, reflecting moderate volatility in investor response over the two-week post-announcement window.

Cumulative Abnormal Returns

The descriptive statistics of cumulative abnormal returns (CARit) following earnings announcements among firms listed at the NSE are presented in Table 2. The table shows the number of companies, CARit, standard deviation of CARit (σ CARit), and standardized cumulative abnormal returns (SCARit) for each day within the event window, highlighting the overall market response to earnings announcements over time.

Table 2: Descriptive Statistics of CARit Following Earning Announcement

Days	Number of Companies	CARit	σ CARit	SCARit
-15	19	-0.00050	0.01885	-0.02647
-14	19	0.00143	0.03372	0.04226
-13	19	0.00157	0.03370	0.04657
-12	19	-0.00246	0.03161	-0.07793
-11	19	-0.00711	0.03656	-0.19457
-10	19	-0.00816	0.03985	-0.20489
-9	19	-0.00586	0.04286	-0.13670
-8	19	-0.00698	0.04508	-0.15478
-7	19	-0.00817	0.04192	-0.19501
-6	19	-0.00392	0.03552	-0.11042
-5	19	0.00147	0.03648	0.04040
-4	19	0.00224	0.04517	0.04952
-3	19	0.00286	0.04944	0.05791

-2	19	0.00334	0.04439	0.07534
-1	19	0.00087	0.03795	0.02300
0	19	0.00101	0.04002	0.02516
1	19	0.09206	0.14740	0.62451
2	19	0.08874	0.13637	0.65077
3	19	0.07592	0.13213	0.57455
4	19	0.02919	0.13290	0.21964
5	19	0.01513	0.13070	0.11575
6	19	0.01598	0.11290	0.14153
7	19	0.01063	0.09033	0.11772
8	19	0.00753	0.08029	0.09378
9	19	-0.01134	0.08041	-0.14108
10	19	-0.00851	0.08631	-0.09858
11	19	-0.01866	0.09317	-0.20029
12	19	-0.01502	0.10365	-0.14491
13	19	-0.01141	0.11848	-0.09630
14	19	-0.01786	0.13140	-0.13589
15	19	-0.02098	0.13950	-0.15038

As shown in Table 2, the cumulative abnormal returns (CARit) reflect the aggregated deviation of stock prices from their expected returns for 19 companies around earnings announcements. In the pre-announcement period ($t = -15$ to $t = -1$), CARit fluctuates slightly around zero, ranging from -0.00817 ($t = -7$) to 0.00334 ($t = -2$). This indicates minimal cumulative market reaction before the earnings release, suggesting that investors had limited anticipation of the announcement's effect on stock prices.

Following the earnings announcement, CARit rises sharply, peaking on $t = +2$ at 0.08874 , indicating that the market responded positively to the earnings information over the first few days. The positive CARit trend persists through $t = +6$, though the magnitude gradually declines, reflecting short-term accumulation of gains following the announcement. Beyond $t = +6$, CARit begins to decline, turning negative on $t = +9$ (-0.01134) and further decreasing to -0.02098 by $t = +15$, which suggests profit-taking or market corrections after the initial reaction.

The standard deviation of cumulative abnormal returns (σ CARit) highlights the dispersion of CARit across the 19 firms. Pre-announcement σ CARit ranges from 0.01885 to 0.04944 , indicating relatively small variability among firms. Post-announcement, σ CARit rises significantly, peaking at $t = +2$ (0.13637), suggesting greater heterogeneity in firm-level responses, as some firms experienced larger cumulative gains than others.

The standardized cumulative abnormal returns (SCARit) provide a measure of the statistical significance of CARit. Before the announcement, SCARit values are very small (e.g., $t = -15$: -0.02647 ; $t = -7$: -0.19501), indicating insignificant market reactions. Immediately after the announcement, SCARit peaks at $t = +2$ (0.65077) and remains positive through $t = +6$, confirming that the cumulative market reaction to earnings announcements was statistically significant during the early post-announcement period. After $t = +6$, SCARit declines, reflecting the reduced significance of cumulative returns as the market adjusts.

Overall, earnings announcements elicited positive cumulative abnormal returns concentrated within the first few days after the announcement, followed by a gradual decline, highlighting the short-term market adjustment and correction after the initial response.

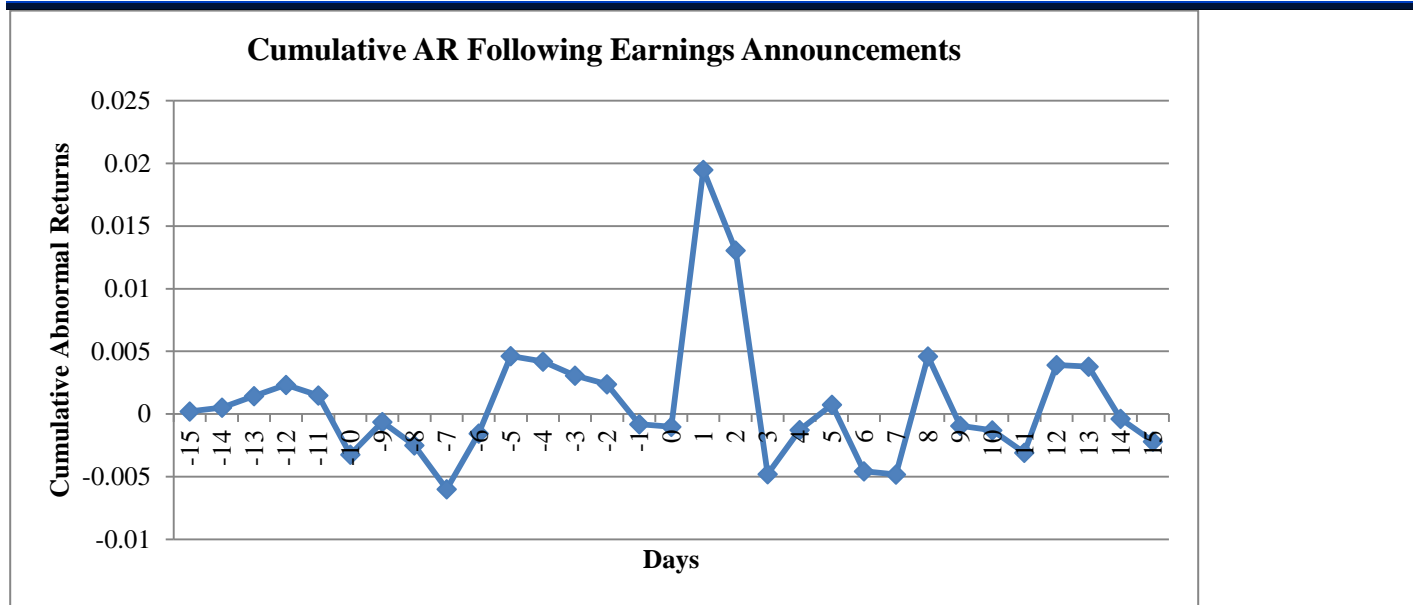


Figure 3: Trend of CARit Following Earnings Announcements

As illustrated in Figure 3, the trend of cumulative abnormal returns (CARit) for the 19 firms provides a broader view of how the market aggregated the stock price reactions over time around earnings announcements. During the pre-announcement period ($t = -15$ to $t = 0$), CARit fluctuates close to zero, with minor negative values on several days (e.g., $t = -11$: -0.00711; $t = -10$: -0.00816) and slight positive values on other days ($t = -5$: 0.00147; $t = -4$: 0.00224), indicating that there was no significant market anticipation prior to the earnings announcements. On the announcement day ($t = 0$), CARit is 0.00101, showing minimal immediate cumulative effect. However, in the post-announcement period ($t = +1$ to $t = +15$), CARit rises sharply on $t = +1$ (0.09206) and remains elevated through $t = +3$ (0.07592), reflecting a strong positive market reaction, likely due to better-than-expected earnings. Following this initial spike, CARit gradually declines, showing small gains or even minor losses from $t = +4$ onward, with negative cumulative returns appearing from $t = +9$ (-0.01134) and continuing through $t = +15$ (-0.02098). This pattern suggests that while the market initially reacted positively to the earnings announcements, subsequent corrections and profit-taking gradually offset earlier gains.

Inferential Analysis

The significance of market reactions to earnings announcements was tested using a one-sample t-test on average abnormal returns (AARit) to determine whether they differ significantly from zero. Table 3 presents the t-values, degrees of freedom, p-values, mean differences, and 95% confidence intervals, indicating whether the observed price changes around earnings announcements were statistically meaningful.

Table 3: One-Sample Test for Earnings Announcement ARit

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
-15	-.116	18	.909	-0.0005	-0.0096	0.0086
-14	.439	18	.666	0.0019	-0.0073	0.0111
-13	.072	18	.943	0.0002	-0.0044	0.0047
-12	-1.147	18	.267	-0.0040	-0.0114	0.0033
-11	-1.176	18	.255	-0.0046	-0.0129	0.0036
-10	-.322	18	.751	-0.0011	-0.0080	0.0058
-9	.961	18	.349	0.0023	-0.0027	0.0073
-8	-.368	18	.717	-0.0011	-0.0075	0.0053
-7	-.332	18	.744	-0.0012	-0.0088	0.0064
-6	.935	18	.362	0.0042	-0.0053	0.0138
-5	1.467	18	.160	0.0054	-0.0023	0.0131
-4	.237	18	.815	0.0008	-0.0060	0.0076
-3	.152	18	.881	0.0006	-0.0080	0.0093
-2	.089	18	.930	0.0005	-0.0110	0.0120

-1	-.683	18	.503	-0.0025	-0.0101	0.0052
0	.044	18	.966	0.0001	-0.0065	0.0067
1	2.003	18	.061	0.0610	-0.0030	0.1251
2	-2.820	18	.011	-0.0167	-0.0292	-0.0043
3	-2.334	18	.031	-0.0141	-0.0267	-0.0014
4	-.383	18	.706	-0.0033	-0.0215	0.0148
5	-1.632	18	.120	-0.0128	-0.0294	0.0037
6	.113	18	.912	0.0009	-0.0151	0.0168
7	-.550	18	.589	-0.0053	-0.0258	0.0151
8	-.417	18	.681	-0.0031	-0.0187	0.0125
9	-1.817	18	.086	-0.0189	-0.0407	0.0029
10	.241	18	.812	0.0028	-0.0218	0.0274
11	-1.926	18	.070	-0.0101	-0.0212	0.0009
12	.473	18	.642	0.0036	-0.0125	0.0198
13	.611	18	.549	0.0036	-0.0088	0.0160
14	-1.336	18	.198	-0.0064	-0.0165	0.0037
15	-.601	18	.555	-0.0031	-0.0140	0.0078

As shown in Table 3, the one-sample t-test results for earnings announcement average abnormal returns (AARit) indicate that most daily abnormal returns before and on the announcement day ($t = -15$ to $t = 0$) are not statistically significant, with p-values well above 0.05. This suggests that the market generally did not react significantly to earnings announcements prior to or on the day of the release, reflecting minimal pre-announcement or immediate reaction in stock prices. Mean differences are close to zero, and the confidence intervals include zero, further supporting the lack of statistically significant abnormal returns during this period.

However, following the announcement, certain days show significant abnormal returns. Specifically, $t = 2$ (AARit = -0.0167, $p = 0.011$) and $t = 3$ (AARit = -0.0141, $p = 0.031$) exhibit statistically significant negative abnormal returns, indicating a delayed negative market reaction to the earnings information. Other post-announcement days have marginally significant or suggestive results (e.g., $t = 1$, $p = 0.061$; $t = 11$, $p = 0.070$), implying some variability in investor response. The results demonstrate that the market reaction to earnings announcements is mostly delayed and moderate, with significant negative adjustments occurring within the first few days after the announcement.

The following section presents Table 4, which shows the results of a one-sample t-test conducted to assess the significance of cumulative abnormal returns (CARit) surrounding earnings announcements. This analysis tests whether the observed CARs differ significantly from zero, helping to determine if earnings announcements have a measurable impact on stock prices over the event window.

Table 4: One-Sample Test for Earnings Announcement CARit

t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference		
				Lower	Upper	
-15	.115	18	.909	-0.0005	-0.0096	0.0086
-14	.184	18	.856	0.0014	-0.0148	0.0177
-13	.203	18	.841	0.0016	-0.0147	0.0178
-12	-.340	18	.738	-0.0025	-0.0177	0.0128
-11	-.848	18	.408	-0.0071	-0.0247	0.0105
-10	-.893	18	.384	-0.0082	-0.0274	0.0110
-9	-.596	18	.559	-0.0059	-0.0265	0.0148
-8	-.675	18	.508	-0.0070	-0.0287	0.0148
-7	-.850	18	.406	-0.0082	-0.0284	0.0120
-6	-.481	18	.636	-0.0039	-0.0210	0.0132
-5	.176	18	.862	0.0015	-0.0161	0.0191
-4	.216	18	.832	0.0022	-0.0195	0.0240
-3	.252	18	.804	0.0029	-0.0210	0.0267
-2	.328	18	.746	0.0033	-0.0181	0.0247
-1	.100	18	.921	0.0009	-0.0174	0.0192
0	.110	18	.914	0.0010	-0.0183	0.0203
1	2.835	18	.033	0.0621	-0.0090	0.1331
2	2.878	18	.037	0.0587	-0.0070	0.1245

3	2.515	18	.021	0.0459	-0.0178	0.1096
4	.957	18	.351	0.0292	-0.0349	0.0932
5	.505	18	.620	0.0151	-0.0479	0.0781
6	.617	18	.545	0.0160	-0.0384	0.0704
7	.513	18	.614	0.0106	-0.0329	0.0542
8	.409	18	.688	0.0075	-0.0312	0.0462
9	-.615	18	.546	-0.0113	-0.0501	0.0274
10	-.430	18	.673	-0.0085	-0.0501	0.0331
11	-.873	18	.394	-0.0187	-0.0636	0.0262
12	-.632	18	.536	-0.0150	-0.0650	0.0349
13	-.420	18	.680	-0.0114	-0.0685	0.0457
14	-.592	18	.561	-0.0179	-0.0812	0.0455
15	-.656	18	.520	-0.0210	-0.0882	0.0463

The results from Table 4 indicate that cumulative abnormal returns (CAR_{it}) around earnings announcements are mostly insignificant before the announcement ($t = -15$ to $t = 0$), with p-values well above 0.05. This suggests that the market shows little to no anticipatory reaction, reflecting that investors did not significantly adjust stock prices in expectation of the earnings information. CAR_{it} values remain close to zero, indicating minimal cumulative deviation from expected returns in the pre-announcement period.

After the earnings announcement, significant positive cumulative abnormal returns are observed in the early days ($t = 1$: $p = 0.033$; $t = 2$: $p = 0.037$; $t = 3$: $p = 0.021$), implying that the market reacts gradually to incorporate the new information. Following this initial adjustment, CAR_{it} values stabilize and become statistically insignificant, showing that most of the market's adjustment occurs within the first three days after the announcement. The results suggest a moderate and delayed market response to earnings announcements, with information gradually reflected in stock prices.

The hypothesis H_{01} , which posits that earnings announcements have no statistically significant effect on stock returns among firms listed at the Nairobi Securities Exchange, is rejected. The analysis of abnormal returns (AR_{it}) shows that statistically significant negative reactions occur on days t_2 and t_3 following the earnings announcements, indicating a delayed market response where investors adjust stock prices after processing the new information. When considering cumulative abnormal returns (CAR_{it}), the significant effect is observed slightly earlier, from t_1 to t_3 , reflecting that the market begins to incorporate the earnings information immediately after the announcement, and the effect accumulates over the first three days. These results indicate that earnings announcements have a statistically significant negative effect on stock returns in the post-announcement period.

These results align with prior studies in the Kenyan context, such as Kalui and Garang (2018), who found a significant relationship between earnings announcements and stock returns, particularly for quarterly disclosures, highlighting the importance of timely financial information in shaping investor decisions. Similarly, Sare et al. (2018) observed post-event price drifts in the Ghana Stock Exchange, suggesting that markets may adjust gradually to earnings information pattern consistent with the delayed abnormal returns observed in this study.

However, the findings also diverge from studies reporting insignificant market reactions to earnings announcements. For instance, Eleke-Aboagye and Opoku (2013) found no significant abnormal returns in the GSE, and Olang and Akenga (2017) similarly reported negligible reactions for NSE-listed firms, implying that earnings announcements may already be anticipated or that investor response may be muted in some emerging markets. The contrast with the present study could be attributed to differences in the event windows analyzed, market efficiency, or investor sentiment, as behavioural factors often play a significant role in how quickly stock prices adjust to new information.

Conclusion

The study concludes that earnings announcements have a statistically significant negative effect on stock returns among firms listed at the Nairobi Securities Exchange. In the short term, stock prices decline following earnings announcements as investors respond to signals of lower-than-expected performance, declining profitability, or potential risks to future cash flows. This negative post-announcement response reflects the NSE's sensitivity to corporate disclosures, highlighting the importance of timely and transparent reporting. The findings demonstrate that investors quickly assimilate and interpret earnings information to adjust stock valuations, leading to observable short-term price corrections.

Recommendation

Based on the finding that earnings announcements have a statistically significant negative effect on stock returns, firms listed at the Nairobi Securities Exchange should prioritize transparent and timely financial reporting to reduce market uncertainty. Companies could implement investor education initiatives to help shareholders better interpret earnings results and avoid overreactions to short-

term fluctuations. Additionally, management should provide clear forward-looking guidance alongside earnings releases to mitigate negative investor sentiment and support more stable stock price adjustments.

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