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The Effects of Rights-Offering Announcements on Market Reaction in Saudi Arabia

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Abstract

This study investigates the impact of rights issue announcements on the market reaction in Saudi Arabia when the rationale behind the issuance is an investment opportunity or debt payment. The event study was applied using market and capital asset pricing models (MM and CAPM) to a sample of 65 Saudi-listed companies that made rights issue announcements between January 1, 2013, and December 31, 2023. The findings suggest that a firm's rights issue announcement negatively impacts the market reaction when the rationale is debt payment. The price during the first trading date was notably lower than that during the eligible date. Finally, rights-offering activities occurred during the COVID-19 pandemic to help firms meet their obligations.

JEL classification numbers: G12, G14, G40.
Keywords: Right Issue, Investment Opportunity, Debt Payment, CAPM.

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1. Introduction

Rights offering is a strategy that companies use to increase their equity, an approach more commonly employed in Asian and European countries than in the United States (Bobenhausen & Salzmann, 2021). The process involves giving existing shareholders the right, without imposing an obligation, to purchase an equivalent number of shares equal to the fraction of their current holding (Pathak & Gupta, 2018). This initiative aims to enhance and provide investors with various new tradable investment tools, as well as expand the available investment channels.

Companies can raise capital through a rights issue, which is often more profitable than issuing debt securities or relying on bank loans with high interest rates. Moreover, rights offerings are less costly and lengthy for companies than a costly public cash offering (Balachandran et al., 2017). In addition, it enables existing shareholders to increase their company ownership by purchasing new shares at discounted market prices (Dewi & Candraningrat, 2019). An increase in the number of shares via a rights issue causes an increase in circulation, which thus increases the trading liquidity of the company's shares (Susanto et al., 2020). However, a rights issue may decrease the percentage of share ownership for shareholders who do not exercise their rights (Susanto et al., 2020). In this regard, rights issues may be considered a force for existing shareholders to purchase new shares, as their percentage of ownership in the company will decrease and the share price will be diluted if they do not exercise their rights (Susanto et al., 2020).

A rights offering is a corporate action that can cause a positive or negative market reaction. Changes in stock prices and abnormal returns are commonly used to measure market reactions after corporate actions (Balachandran et al., 2017; Dewi & Candraningrat, 2019; Kendirli & Elmali, 2016). Several factors enable a company to raise additional equity, including various issue methods, industry effects, information effects, institutional differences, and economic conditions that influence the market's response to different corporate actions (Pathak & Gupta, 2018). Moreover, country-specific factors, such as the legal environment, may influence how the market reacts to equity rights offerings (Bobenhausen & Salzmann, 2021).

This study contributes to the existing literature by adding new insights on how the announcement of a capital increase via rights issue affects stock performance in Saudi Arabia. It investigates a sample of 65 Saudi Arabian rights issue announcements between January 1, 2013, and December 31, 2023. It examines the market reaction to the rationale behind the issuance (investment opportunity or debt payment).

The main findings of the research are that rights-offering activities took place during the COVID-19 pandemic to increase capital to help pay firms' obligations, and the price notably decreased during the first trading date compared with that during the eligible date. The results show that a firm's rights issues negatively impact the market reaction when their rationale is debt payment.

In the following sections of the paper, we determine the testable hypotheses, discuss

the research methodology, provide the data construction procedure, present the empirical results, and conclude the study.

2. Theoretical Framework and Assumption Development

The analysis of rights-offering announcements can be conducted effectively through the lens of agency cost and signalling theory. In the case of a conflict of interest between shareholders and managers, agency costs may arise, which may potentially lead management to undertake rights offering for reasons such as alleviating personal risk or entrenchment, which do not align with the main goal, i.e., shareholder wealth maximization (Jensen & Meckling, 1976). In such a case, rights offering could be perceived as a signal of financial distress or managerial opportunism, particularly in environments where ownership structures are concentrated. On the other hand, signalling theory suggests that rights offering can help reduce information asymmetry by giving signals of confidence of the management in prospects of the firm, especially when insiders participate in the offering (Heinkel & Schwartz, 1986). Moreover, the heterogeneous investor expectations also play an important part in shaping market reaction in response to rights offering announcements, since investors may differ with respect to their access to information, ability to translate corporate signals, and risk tolerance. The institutional investors in Saudi Arabia may interpret rights offerings or other events, such as merger announcements, as capital restructuring or strategic growth opportunities, while retail investors may perceive agency conflicts or risk of dilution, suggesting varied behavior of the investors and price volatility (Sayed, 2024).

Most theoretical literature argues that announcing rights issues negatively affects share performance (Dewi & Candraningrat, 2019; Pramana et al., 2019; Otieno & Ochieng, 2015). However, several empirical studies have reported positive effects following rights issue announcements (Yakup & Cahyadi, 2016; Tan et al., 2002). Moreover, Bobenhausen and Salzmann (2021) found positive effects following rights issue announcements in different countries. Consequently, this study focuses on investigating the impacts of rights issues on stock prices within the context of Saudi Arabia. Since the literature's findings regarding the impacts of rights offerings on market reaction and performance are mixed, empirical studies are needed to investigate the impact of rights issues on stock performance in Saudi Arabia.

Assumption $_1$: The firm's ex-ante and ex-post rights issue performance change is statistically significant.

The rationale behind rights offerings is that investment decisions are made following a rights-offering announcement (Dewi & Candraningrat, 2019). Changes in share prices are influenced by investors' preferences following the announcement of a rights issue (Susanto et al., 2020). For example, investors positively perceive the rights issue if the proceeds from such issuance are used for investments or business expansions because of anticipated positive gains (Susanto et al., 2020).

Investors may expect the company to raise funds by offering a rights issue to enhance the financing structure, which may indicate favorable investment opportunities for the company and, consequently, cause a positive market response (Dewi & Candraningrat, 2019).

Assumption $_2$: The firm's ex-post rights issue performance is higher than its ex-ante one when the rationale behind an announcement is investment opportunities.

Conversely, investors may perceive the rights issue negatively if the proceeds from such an issuance will be used for non-investment ventures, such as covering running costs or paying off company debts (Susanto et al., 2020). Additionally, rights offerings may cause negative market reactions if investors presume that the firm issued the rights because of stock overvaluation (Dewi & Candraningrat, 2019).

Assumption $_3$: The firm's ex-post rights issue performance is lower than its ex-ante one when the rationale behind the issuance is debt payment.

Generally, a rights issue may cause positive market reactions if the investors presume that the issuance is motivated by viable investment opportunities for the company. However, the rights issue may cause an adverse market reaction if the investors presume that the company issued the rights for non-investment obligations, such as offsetting debts.

3. Methodology

An event study methodology is commonly used to estimate the effects of an intervention, an event, or a treatment that is not randomized (Borusyak et al., 2024). Since an event fairly affects share prices, assuming that the market follows semi-strong-form efficiency, examining these impacts through comparing stock prices before and after the event is possible (Mackinlay, 1997; Basdas & Oran, 2014). This study applied an event study methodology to examine the impact of rights issues on the market reaction for Saudi-listed companies from 2013 to 2023 and whether the ex-post announcement abnormal returns are different than those ex-ante announcements, indicating an adverse market reaction to rights issues. Furthermore, it examines the impact of the rationale behind the issuance (debt payment or investment opportunities) on market reaction. Previous empirical research has shown that various standards and widely used benchmarks are employed to estimate abnormal returns and assess the event's impact (Malmendier et al., 2011). Positive abnormal returns indicate a positive market reaction. On the contrary, negative abnormal returns indicate an adverse market reaction (Dewi & Candraningrat, 2019). This analysis will provide insight into investor sentiment and market reaction to rights issues.

The first benchmark is the market model (*MM*), within a one-month window before the announcement (t-30) and one-month after the announcement (t+30). The

abnormal return was calculated as the difference between the firm's returns and the market index returns (Tadawul All Share Index, or TASI). The abnormal return for each firm *i* on each calendar day *t* was calculated as follows:

Definition 3.1 *Abnormal return using the Market Model.*

$$AR_{it} = R_{it} - R_{mt},$$

where R_{it} is the return for firm *i* on date *t* and R_{mt} is the return on the benchmark index *m* on time *t* relative to the announcement date *t=0.*

The second benchmark uses the capital asset pricing model (CAPM) within a one-month window before the announcement (t-30) and one-month after the announcement (t+30). The abnormal return for each firm *i* on each calendar day *t* was calculated as follows:

Definition 3.2 *Abnormal return using the CAPM.*

$$AR_{it} = R_{it} - R_{ft} - \beta_i\left(R_{mt} - R_{ft}\right),$$

where R_{ft} is the return on a risk-free security in month *t* and β_i is estimated by running a single-factor regression of the firm's monthly return on the market returns separately for ex-ante and ex-post events.

Additionally, to test the differences between the ex-ante and ex-post periods, the average abnormal returns for all shares before the announcement were calculated and compared with the average abnormal returns for all shares each day after the announcement. The average abnormal return was calculated as follows:

Definition 3.3 *Average abnormal return*

$$\text{Average abnormal return} = {}^{1}/_{N} \sum_{i=1}^{N} AR_{it}$$

To further investigate the differences over two months around the announcement date, the cumulative abnormal return, which is equal to the sum of the differences between the firm's returns and the benchmark index returns, was calculated as follows:

Definition 3.4 *Cumulative abnormal return*

$$\text{Cumulative abnormal return} = \sum_{i=1}^{N} AR_{it}$$

where R_{it} is the return for firm *i* on date *t* and R_{mt} is the return on the benchmark index *m* on time *t* relative to the announcement date *t=0.*

Finally, paired sample *t*-tests were used to evaluate whether the change in the means of two related variables was statistically significant (Orcan, 2020; Yu et al., 2022). The test was also used to evaluate whether the change in abnormal returns before and after the rights issue announcement for the full and sub-samples was statistically significant based on the rationale behind the issuance (investment opportunity and debt payment).

4. Data analysis

4.1 Sample overview

The sample contained 65 rights offer announcements issued in Saudi Arabia between January 1, 2013, and December 31, 2023. The Capital Market Authority (CMA) and the Saudi Exchange (Tadawul) have developed a mechanism for trading the rights of companies and provided the related data. The Saudi Exchange (Tadawul) provided the announcement date (A. Date), the eligible date (E. Date) or the date of the Extraordinary General Meeting (EGM), the new capital (N. Capital), and the old capital (O. Capital). Moreover, the Capital Market Authority (CMA) provided the new number of shares (N. Shares), the offer price (O. Price), the closing price on the date of the Extraordinary General Meeting (EGM) (Price at E. Date), and the adjusted price after the capital increase (A. Price after E. Date), where the data were collected manually from the prospectus published for each rights issue.

Table 1: Descriptive statistics of the rights offering sample in Saudi Arabia

	N	Minimum	Maximum	Mean	Std. Deviation
N. Capital (in Billions)	65	0.06	16.71	1.16	2.83
O. Capital (in Billions)	65	0.01	9.25	0.65	1.73
N. Shares (in Billions)	65	0.0045	0.80	0.05	0.12
O. Price	65	10.00	23.00	10.26	1.64
Price at E. Date	65	12.34	439.00	64.26	89.32
A. Price After E. Date	65	11.12	92.60	26.09	15.92

The descriptive statistics show that, on average, Saudi companies in the sample raised SAR 1.16 billion in new capital. However, the high variability (SD = SAR 2.83 billion) indicates that some companies raised significantly more or less than the average. The pre-existing (old) capital averaged approximately SAR 0.65 billion. On average, 50 million new shares were issued (M = 0.05 billion, SD = 0.12 billion). Moreover, the mean offer price was SAR 10.26 per share. Offer prices during rights offerings from 2013 to 2023 were largely fixed at SAR 10. Only three companies—Medgulf, Walaa, and Maaden—set different offer prices based on their prospectuses: SAR 12, SAR 12, and SAR 23, respectively.

On the event date, the average closing price recorded was SAR 64.26, with a high variability (SD = SAR 89.32). After the capital increase, the average adjusted price was SAR 26.09. The approval of the capital increase temporarily affected the price negatively due to the increase in the number of shares, which reduced the earnings

per share (dilution). The change in share price was calculated by comparing the market value of the company's shares on the day of the EGM with the next day's opening price. We found that the average decrease in share price for 65 rights issues in the study sample was 40%. Table 1A in the appendix shows the rights issue sample in the Saudi market from 2013 to 2023. The firm's share price and the rights' indicative value show a direct correlation.[2] Consequently, the daily price limits of rights trading are influenced by the daily price limits. The minimum fluctuation rate for tradable rights is ±1%.

Tradable rights as securities are deposited with a new code in the registered shareholders' portfolios. Before the trading and subscription period begins, only the number of rights is shown in the shareholder portfolio, not the value, as it is changeable according to share price changes. The Saudi Exchange (Tadawul) then calculates the value and publishes it on its website before the trading period begins. In the Saudi market, the trading and subscription period for priority rights shares commences three business days following the EGM's approval of the capital increase. The trading and subscription periods start on the same day.[3] The trading period then lasts until the end of the sixth day. In contrast, the subscription period continues until the end of the ninth day, allowing all registered and non-registered shareholders to exercise their rights. Subscriptions are available electronically through investment portfolios on trading platforms, applications, and other channels and means provided by brokers.

Under the new mechanism, each right entitles its holder to purchase a new share at the offering price. Existing and registered shareholders can subscribe to all deposited rights to maintain ownership percentages, sell all or part of their rights through the market via brokers, obtain financial compensation, and finally, purchase additional rights through the market and subscribe after settlement. On the other hand, non-registered shareholders (new shareholders) can purchase rights during the trading period and subscribe post-settlement. If the new investors withhold from exercising their rights before the subscription period ends, the period of the rump offering starts. The rump offering period starts when the shareholders do not exercise or sell their rights post-trading and subscription. These shares are then offered to institutional investors at the lowest offering price. Institutional investors must submit buy offers for rump shares. The minimum subscription price during this period is the offering price. Any excess from higher sales prices is assigned to shareholders who did not subscribe, based on their ownership percentages. The prospectus details the share allocation period and the date for transferring any compensation, where the period from the approval until the allocation of shares is a maximum of 28 days, according to the new mechanism. We classified the rationale behind the issuance of the capital increase via the rights offered from the prospectus.

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[2] The indicative value of the rights equals the difference between the closing share price and the offer price.

[3] Recently, all investors have been able to subscribe in one phase instead of two separate periods (CMA, 2024).

Based on motivation, the sample was divided into two sub-samples: a debt payment sub-sample and an investment opportunity sub-sample. We found that 89% of the firms increased their capital via rights offered to meet their obligation (debt payment), 67% raised funds for investment and growth plans, and 56% had a hybrid motivation to pay off their debt and invest in growth opportunities.
Sometimes, when firms have insufficient funds to pay dividends to their shareholders, they can reduce their capital (capital structure) to cover the dividend payment and meet their obligations (Lemishovska, 2017). During the ten-year sample, we checked whether the firms reduced their capital to amortize accumulated losses before or after the eligible date for the capital increase. We found that 29 and 13 firms reduced their capital to meet their obligations before and after the capital increase via rights issues, respectively.

4.2 The leading investment bankers in rights offerings in Saudi Arabia

Investment banks play crucial roles in firms' capital-raising process. Underwriters provide various services and compete in various areas, such as fee structures, pricing accuracy, analyst recommendations, distribution capabilities, market-making expertise, debt issuance capabilities, and overall reputation (Ellis et al., 2006). Excelling in a highly competitive market is particularly challenging. Figure 1 shows the leading investment bankers in Saudi Arabia.

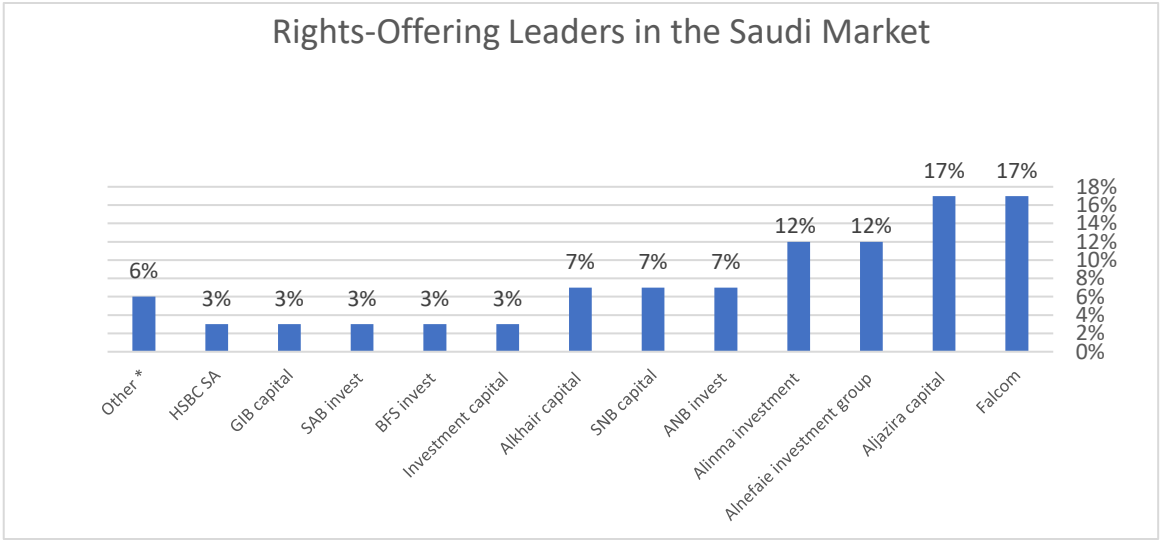

Figure 1: The leading investment bankers in rights offerings in Saudi Arabia

As shown in Figure 1, the leading investment banks in the rights-offering sector are Falcom, Aljazira Capital, Alnefaie Investment Group, and Alinma Investment, with 11, 11, 8, and 7 out of 65 firms, respectively, approving a capital increase via rights offering. The "Other" option in Figure 1 refers to six managing investment bankers with no more than one rights issue in the Saudi market: Samba Capital, J.P. Morgan, Alawwal Capital, Albilad Capital, Riyad Capital, Yaaqen, and Riyad Capital.

4.3 Distribution of Rights-Offering Events Over Time

In the figure below, 65 rights issue events over ten years are grouped by year to show the number of right offer activities in each year from 2013 to 2023.

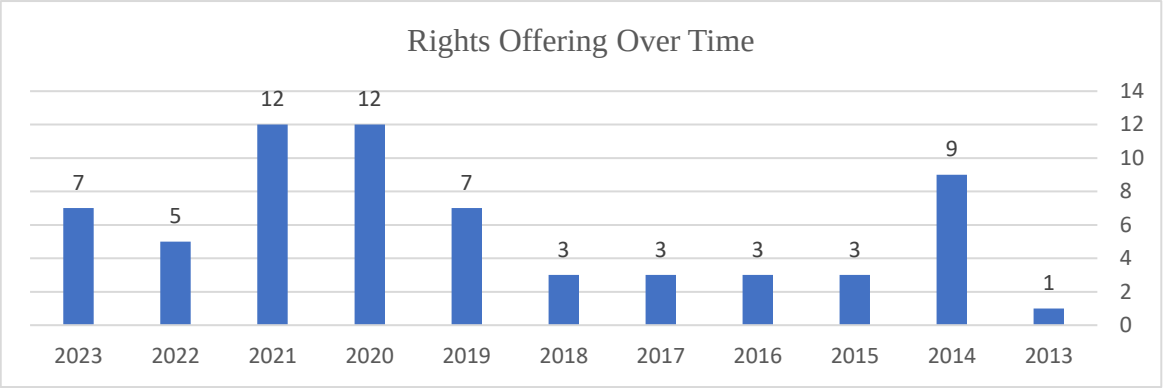

Figure 2: **Distribution of rights-offering events over time**

A notable increase was seen in 2014 due to the announcement of the Saudi Council of Ministers, the highest authority in Saudi Arabia, which allowed foreign investors to trade directly the stocks listed on the Saudi Stock Exchange (Tadawul). The Saudi Arabian index is the most diverse capital market in the region due to its size and maturity, and it has been preparing to welcome foreign investors. This opened up opportunities for the listed firms to expand and diversify their investments. Then, a decrease was seen from 2015 to 2018. From 2019 to 2022, the number of rights-offering events significantly increased despite the market situation due to the COVID-19 pandemic. The listed firms sought to increase capital via a rights offering to pay their debts and avoid bankruptcy.

5. Empirical results

Table 2: Descriptive statistics of abnormal returns based on MM and CAPM (full and sub-samples)

	N	Minimum	Maximum	Mean	Std. Deviation
MMFULL_CAR	60	-0.994	2.892	0.034	0.551
MMFULL_AAR	60	-0.015	0.044	0.001	0.008
MMDEBT_CAR	60	-0.799	0.266	-0.060	0.158
MMDEBT_AAR	60	-0.038	0.013	-0.003	0.008
MMINVEST_CAR	60	-0.176	0.225	0.002	0.075
MMINVEST_AAR	60	-0.025	0.032	0.000	0.011
CAPMFULL_CAR	60	-1.009	2.576	-0.474	0.551
CAPMFULL_AAR	60	-0.016	0.040	-0.007	0.008
CAPMDEBT_CAR	60	-0.392	0.267	-0.108	0.121
CAPMDEBT_AAR	60	-0.019	0.013	-0.005	0.006
CAPMINVEST_CAR	60	-0.120	0.216	-0.028	0.067
CAPMINVEST_AAR	60	-0.017	0.031	-0.004	0.010

Before explaining the main results, we explore abnormal returns based on the two benchmarks, the market model (MM) and the capital asset pricing model (CAPM), for the full sample and sub-samples. In the case of the full sample, the MM suggests a slightly positive CAR (M = 0.034). On the other hand, CAPM shows a strongly negative CAR (M = -0.474). It suggests that benchmark models influence perceived market reaction. However, in both models, the AARs were close to 0. When the debt sub-sample (rights issues for debt repayment) is considered, both models show negative average CARs and AARs, indicating an unfavorable view of investors on debt-motivated rights offerings. In the case of the investment sub-sample, slightly negative returns show a mild/neutral market reaction to the rights issues, which are investment-based.

The results in Table 3 indicate a significant difference between the ex-ante and ex-post average abnormal returns using the market model and capital asset pricing model only when the rationale behind the rights offering is debt payment. The table shows that the mean of the average abnormal returns using the market model for the ex-ante period is -0.0002, indicating a minimal negative effect before the rights-offering announcement, while the mean of the average abnormal returns using the market model for the ex-post period is -0.004, which is still negative but larger in magnitude, which would suggest that the average abnormal return experienced a greater decline after the announcement date.

Moreover, the mean of the average abnormal returns using the capital asset pricing model for the ex-ante period is -0.006, indicating a small adverse effect before the rights issue announcement. The mean of the average abnormal returns using the capital asset pricing model for the ex-post period is -0.004, which is still negative but slightly less negative than that for the ex-ante period, which indicates that the average abnormal returns experienced a smaller decline in the ex-post period compared with that in the ex-ante period. Given the small magnitude of both means, the impact of the rights issue was weaker than expected. The results show that the significance level is lower when applying the CAPM to examine the impact of the rights issue on the market reaction in the Saudi Arabian market. The model ignores firm-specific factors and assumes a constant risk premium, which may mis-specify expected return estimates, reducing the power of the event study tests (Fama & French, 1969).

Finally, no statistically significant difference is found between the ex-ante and ex-post periods using the full sample or the sub-sample when the rationale behind the rights issue is investment opportunities, which indicates that the observed change could be due to random variation rather than a rights issue.

Table 3 reports the mean, standard deviation, and t-value for the average abnormal returns one month before and after the announcement date for the full sample and the sub-sample based on the rationale behind the issuance.

Table 3: Comparing ex-ante and ex-post average abnormal returns

	Mean	***SD***	***T***
Panel 1: Full-Sample MM			
Ex-Ante Average Abnormal Return	0.001	0.005	
Ex-Post Average Abnormal Return	0.0005	0.011	(0.275)
Panel 2: Debt Payment Sub-Sample MM			
Ex-Ante Average Abnormal Return	-0.0002	0.005	
Ex-Post Average Abnormal Return	-0.004	0.007	(3.104) ***
Panel 3: Investment Sub-Sample MM			
Ex-Ante Average Abnormal Return	-0.001	0.012	
Ex-Post Average Abnormal Return	0.001	0.010	(-0.743)
Panel 4: Full-Sample CAPM			
Ex-Ante Average Abnormal Return	-0.009	0.005	
Ex-Post Average Abnormal Return	-0.006	0.011	(-1.130)
Panel 5: Debt Payment Sub-Sample CAPM			
Ex-Ante Average Abnormal Return	-0.006	0.004	
Ex-Post Average Abnormal Return	-0.004	0.007	(-1.440) *
Panel 6: Investment Sub-Sample CAPM			
Ex-Ante Average Abnormal Return	-0.005	0.009	
Ex-Post Average Abnormal Return	-0.003	0.009	(-0.588)

The results in Table 4 indicate a significant difference between the ex-ante and ex-post cumulative abnormal returns using the market and capital asset pricing models only when the rationale behind the rights offering is debt payment. The result shows that the mean of the cumulative abnormal returns using the market model for the ex-ante period is -0.004, which is close to zero, indicating little to no effect before the event. On the other hand, the mean of the cumulative abnormal returns using the market model for the ex-post period is -0.092, which is still negative but larger in magnitude, suggesting a more substantial decline in the market reaction to the rights issue announcement.

Moreover, the mean of the cumulative abnormal returns using the capital asset pricing model for the ex-ante period is -0.129, indicating a negative effect before the rights issue announcement, while the mean of the cumulative abnormal returns for the ex-post period is -0.088, which is still negative but less negative than that in the ex-ante period, which indicates that while the cumulative abnormal returns showed a decline, its magnitude reduced after the announcement. This suggests a moderate negative impact for the ex-post period.

The results show that the significance level is lower when applying the CAPM to examine the impact of the rights issue on the market reaction in the Saudi Arabian market. The model ignores firm-specific factors and assumes a constant risk premium, which may mis-specify expected return estimates, reducing the power of the event study tests (Fama & French, 1969).

Finally, no statistically significant difference is found between the ex-ante and ex-post periods using the full sample or the sub-sample when the rationale behind the rights issue is investment opportunities, which indicates that the observed change could be due to random variation rather than a rights issue.
Table 4 reports the mean, standard deviation, and t-value for the cumulative abnormal returns one month before and after the announcement date for the full sample and sub-sample based on the rationale behind the issuance.

Table 4: Comparing ex-ante and ex-post cumulative abnormal returns

	Mean	***SD***	***T***
Panel 1: Full-Sample MM			
Ex-Ante Cumulative Abnormal Return	0.071	0.311	
Ex-Post Cumulative Abnormal Return	0.030	0.703	(0.275)
Panel 2: Debt Payment Sub-Sample MM			
Ex-Ante Cumulative Abnormal Return	-0.004	0.094	
Ex-Post Cumulative Abnormal Return	-0.092	0.139	(3.104) ***
Panel 3: Investment Sub-Sample MM			
Ex-Ante Cumulative Abnormal Return	-0.006	0.079	
Ex-Post Cumulative Abnormal Return	0.007	0.070	(-0.743)
Panel 4: Full-Sample CAPM			
Ex-Ante Cumulative Abnormal Return	-0.561	0.298	
Ex-Post Cumulative Abnormal Return	-0.388	0.717	(-1.130)
Panel 5: Debt Payment Sub-Sample CAPM			
Ex-Ante Cumulative Abnormal Return	-0.129	0.091	
Ex-Post Cumulative Abnormal Return	-.088	0.143	(-1.440) *
Panel 6: Investment Sub-Sample CAPM			
Ex-Ante Cumulative Abnormal Return	-0.032	0.065	
Ex-Post Cumulative Abnormal Return	-0.023	0.069	(-0.588)

6. Discussion and Conclusions

Previous studies shed light on rights issues and underscore the complexity and variability of market reactions to such corporate actions. This research examines how the announcement of a capital increase via a rights issue affects stock performance in Saudi Arabia. Moreover, it examines the market reaction to the rationale behind the issuance (investment opportunity or debt payment). The results show that a firm’s rights issue negatively impacts the market reaction when the rationale is debt payment. The price during the first trading date was notably lower than the price during the eligible date. We also find that rights-offering activities occurred during the COVID-19 pandemic to help pay firms' obligations.
The results of the current study can be explained by considering theoretical frameworks and empirical evidence. The sharper decline in AAR in the debt payment sub-sample aligns with agency cost concerns and signaling theory.

Previous research suggests that debt-related issuances of equity may signal liquidity constraints or financial distress, which can trigger adverse market reactions (Zhang, 2014; Xia, 2025). It is observed that businesses with high debt burdens are penalized by the markets due to underinvestment risks (Becker-Blease & Paul, 2006; Shahid & Gul, 2017). This reaction may exhibit investor skepticism in Saudi Arabia about whether operational inefficiencies are addressed by debt repayment rather than growth in financing (Kim & Purnanandam, 2011). On the other hand, a weaker post-announcement decline in AAR under CAPM may indicate the rights issues' partial market anticipation. Previous studies have shown similar trends, where price adjustments (ex-ante) reflect pre-announcement speculation or leaked information (Surya & Sugiana, 2013). In the current study, the effect of rights issues was weaker than expected. It is observed that in emerging markets, the rights offering has less pronounced reactions as a result of heterogeneous investor expectations and lower liquidity (Xia, 2025).

When using the CAPM approach, the reduced statistical significance compared to the market model suggests model-specific limitations. This could be due to CAPM's focus on systematic risk, while firm-specific factors, such as project credibility or governance quality, are more relevant in the case of rights issuance (Cassidy et al., 1990; Kim & Purnanandam, 2011). Moreover, capital structure adjustments and other risk management activities impact firm value via idiosyncratic channels, which CAPM does not capture fully (Cassidy et al., 1990). It suggests that firm-level risks may be prioritized by Saudi investors in pricing equity issuances over broader market beta (Zhang, 2014).

For investment-driven rights issues, the lack of significant results contrasts with theories that link equity finance and growth. Previous research shows that for NPV-positive projects, markets reward businesses raising capital (Shahid & Gul, 2017). However, in Saudi Arabia, we observe neutral investor sentiment, which could be due to skepticism about execution or offsetting effects. The weak overall market reaction could also be due to less-developed equity markets, which may lack the ability to accurately tackle price informational signals (Xia, 2025; Surya & Sugiana, 2013).

There are several contributions of the current study in the context of rights issue announcements in Saudi Arabia and subsequent market reactions. By comparing CAPM and Market Model, we highlight the traditional asset-pricing models' limitations during equity issuances in capturing firm-specific risks. Moreover, the sub-sample differentiation (investment-driven vs. debt repayment rights issues' analysis) offers a framework for future research. The AAR's sharper decline in the case of the debt repayment sub-sample highlights the sensitivity of Saudi investors to liquidity constraints. Future research on the subject may address methodological considerations and gaps highlighted in the findings. It is important to examine further the reasons for the lower significance of CAPM yields than MM in capturing the effects of rights issues. It may include integrating firm-specific factors with systematic risk metrics. Moreover, contextual factors should be considered, such as liquidity, that could moderate reactions to rights issues. Future studies may also

conduct cross-jurisdictional comparisons to determine how results vary between Saudi Arabia and other countries.

References

[1] Balachandran, B., Kanapathippillai, S., Krishnamurti, C., Theobald, M., & Velayutham, E. (2017). The issuance of warrants in rights offerings: Agency costs and signaling effects. Australian Journal of Management. https://doi.org/10.1177/0312896216682062

[2] Basdas, U., & Oran, A. (2014). Event studies in Turkey. Borsa Istanbul Review, 14(3), 167-188. https://doi.org/10.1016/j.bir.2014.03.003

[3] Becker-Blease, J. R., & Paul, D. L. (2006). Stock liquidity and investment opportunities: Evidence from index additions. Financial management, 35(3), 35–51. https://doi.org/10.1111/j.1755-053X.2006.tb00146.x

[4] Bobenhausen, N. C., & Salzmann, A. J. (2021). Discount, transparency, and announcements effects of equity rights offerings: International evidence. Journal of Business Economics, 91(5), 733-758. https://link.springer.com/article/10.1007/s11573-020-01023-8

[5] Borusyak, K., Jaravel, X., & Spiess, J. (2024). Revisiting event-study designs: robust and efficient estimation. Review of Economic Studies, rdae007. https://doi.org/10.1093/restud/rdae007

[6] Cassidy, S. M., Constand, R. L., & Corbett, R. B. (1990). The market value of the corporate risk management function. Journal of risk and insurance, 664–670. https://doi.org/10.2307/252951

[7] Dewi, N. P. L., & Candraningrat, I. R. (2019). Market reaction to the rights issue announcement on the Indonesian stock exchange. International Research Journal of Management, IT and Social Sciences, 6(6), 264–269. https://sloap.org/journals/index.php/irjmis/article/view/805/1313

[8] Ellis, K., Michaely, R., & O'Hara, M. (2006). Competition in investment banking. Available at SSRN 491722. https://10.2139/ssrn.491722.

[9] Fama, E. F., Fisher, L., Jensen, M. C., & Roll, R. (1969). The adjustment of stock prices to new information. International economic review, 10(1), 1–21. https://www.jstor.org/stable/2525569

[10] Heinkel, R., & Schwartz, E. S. (1986). Rights versus underwritten offerings: An asymmetric information approach. The Journal of finance, 41(1), 1-18. https://doi.org/10.1111/j.1540-6261.1986.tb04488.x

[11] Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm. Managerial behavior, agency costs and ownership structure, 3(4), 305-360. https://doi.org/10.1007/978-94-009-9257-3_8

[12] Kendirli, S., & Elmali, M. E. (2016). The effects of right offering announcements on returns of shares of deposit banks traded in the Istanbul Stock Exchange. Journal of Economic Development, Environment and People, 5(1), 74-82.

https://www.semanticscholar.org/reader/61df574378943c881608c9160da1678b570dd441

[13] Kim, E. H., & Purnanandam, A. (2011, February). Corporate governance and investor confidence in seasoned equity offerings. In AFA 2010 Atlanta Meetings Paper. https://doi.org/10.2139/SSRN.1339642

[14] Lemishovska, O. (2017). Economic categories of "amortization" and "depreciation": the history of accounting concept formation and development. Baltic Journal of Economic Studies, 3(5), 260-267. http://dx.doi.org/10.30525/2256-0742/2017-3-5-260-267

[15] MacKinlay, A. C. (1997). Event studies in economics and finance. Journal of Economic Literature, 35(1), 13–39. https://www.jstor.org/stable/2729691

[16] Malmendier, U., Tate, G., & Yan, J. (2011). Overconfidence and early-life experiences: the effect of managerial traits on corporate financial policies. The Journal of Finance, 66(5), 1687-1733. https://doi.org/10.1111/j.1540-6261.2011.01685.x

[17] Orcan, F. (2020). Parametric or non-parametric: Skewness to test normality for mean comparison. International Journal of Assessment Tools in Education, 7(2), 255–265. https://doi.org/10.21449/ijate.656077

[18] Otieno, O. D., & Ochieng, D. E. (2015). The effects of rights issue announcements on stock returns for firms listed at the Nairobi Securities Exchange. international Journal of Education and Research, 3(9), 411-426. https://www.ijern.com/journal/2015/September-2015/33.pdf

[19] Pathak, H. P., & Gupta, S. (2018). Rights offering and its effect on share price movement: a study of commercial banks. Journal of Nepalese Business Studies, 11(1), 1–13. https://doi.org/10.3126/jnbs.v11i1.24195

[20] Pramana, Y., Suprasto, H. B., Putri, I. G. A. M. D., & Budiasih, I. G. A. N. (2019). Fraud factors of financial statements on construction industry in Indonesia stock exchange. International Journal of Social Sciences and Humanities, 3(2), 187-196. https://doi.org/10.29332/ijssh.v3n2.313

[21] Sayed, O.A. (2024). Analyzing the impact of mergers on stock prices in the banking sector: An implication for strategic merger planning and stakeholder communication. Corporate & Business Strategy Review. https://doi.org/10.22495/cbsrv5i4art10

[22] Shahid, M. S., & Gul, F. (2017). Investment Opportunities and Liquidity Constraints: Evidence from Two Emerging Markets, India and Pakistan. JISR management and social sciences & economics (JISR-MSSE), 15(1), 69–84. https://doi.org/10.31384/JISRMSSE%2F2017.15.1.5

[23] Surya, B.A., & Sugiana, B. (2013). Implication of Right Issue Cum and Ex-Date Announcement to the Stock Return (Empirical Study on Indonesia Stock Exchange Period: 2009-2012). Indonesian Journal of Business Administration, 2. https://core.ac.uk/download/pdf/304207608.pdf

[24] Susanto, A. N., Banani, A., & Laksana, R. D. (2020). The Effect of Right Issue Announcement on Share Return and Share Liquidity Levels In Companies Registered In Indonesia Stock Exchange, 2014-2018. In Proceedings of the

International Conference on Sustainable Competitive Advantage, 1(1), 92-101. https://www.jp.feb.unsoed.ac.id/index.php/sca-1/article/viewFile/1883/1758

[25] Tan, R. S. K., Chng, P. L., & Tong, Y. H. (2002). Private placements and rights issues in Singapore. Pacific-Basin Finance Journal, 10(1), 1-118. https://doi.org/10.1016/S0927-538X(01)00028-2

[26] Xia, Q. (2025). Rights offerings: a systematic literature review and research agenda. Journal of Accounting Literature. https://doi.org/10.1108/JAL-10-2024-0288

[27] Yakup, W. Y., & Cahyadi, Y. (2016). Analysis of Right Issue Announcement Effect toward Stock Price Movement and Stock Trading Volume within Issuer in Indonesia Stock Exchange. Binus Business Review, 7(1), 33-38. https://journal.binus.ac.id/index.php/BBR/article/view/1447

[28] Yu, Z., Guindani, M., Grieco, S. F., Chen, L., Holmes, T. C., & Xu, X. (2022). Beyond t test and ANOVA: applications of mixed-effects models for more rigorous statistical analysis in neuroscience research. Neuron, 110(1), 21-35. https://www.cell.com/neuron/fulltext/S0896-6273(21)00845-X?dgcid=raven_jbs_etoc_email

[29] Zhang, W. (2014). The impact of cost of equity on seasoned equity offerings. Available at SSRN 2320552. https://doi.org/10.2139/ssrn.2320552

Appendix

Table 1A: The rights offer sample in Saudi Arabia

No	Code	Name	A. Date	E. Date	N. Capital	O. Capital	A. Shares	O. Price	Price at E.Date	A.Price After E.Date
1	1211	MAADEN	15/05/2014	13/11/2014	11,684,782,610	9,250,000,000	243,478,261	23	36	33
2	6040	TADCO	16/07/2013	06/01/2015	450,000,000	200,000,000	25,000,000	10	25	17
3	8280	LIVA	27/04/2014	06/01/2015	400,000,000	200,000,000	20,000,000	10	102	56
4	8190	UCA	21/07/2014	18/02/2015	490,000,000	280,000,000	21,000,000	10	22	17
5	8230	ALRAJHI TAKAFUL	27/04/2014	10/03/2015	400,000,000	200,000,000	20,000,000	10	44	27
6	8160	AICC	28/08/2014	07/04/2015	400,000,000	200,000,000	20,000,000	10	18	14
7	8110	WAFA INSURANCE	27/04/2014	08/04/2015	205,000,000	100,000,000	10,500,000	10	32	21
8	8060	WALAA	24/04/2014	27/04/2015	400,000,000	200,000,000	20,000,000	12	22	17
9	8050	SALAMA	15/06/2014	30/06/2015	250,000,000	100,000,000	15,000,000	10	29	18
10	8312	ALINMA TOKIO M	26/10/2014	04/08/2015	450,000,000	200,000,000	25,000,000	10	39	23
11	8011	METLIFE AIG ANB	23/02/2016	23/02/2016	350,000,000	175,000,000	17,500,000	10	57	34
12	8300	WATANIYA	15/04/2015	31/07/2016	200,000,000	100,000,000	10,000,000	10	44	27
13	1201	TAKWEEN	17/12/2015	21/09/2016	950,000,000	350,000,000	60,000,000	10	18	13
14	8020	MALATH INSURANCE	14/12/2016	28/09/2017	500,000,000	120,000,000	38,000,000	10	20	12
15	1020	BJAZ	14/01/2015	19/03/2018	8,200,000,000	5,200,000,000	300,000,000	10	13	12
16	8030	MEDGULF	08/02/2018	10/09/2018	800,000,000	400,000,000	40,000,000	10	14	15
17	4140	SIECO	19/11/2017	09/10/2018	64,800,000	10,800,000	5,400,000	10	237	47
18	8311	ENAYA	14/12/2017	12/12/2018	300,000,000	100,000,000	20,000,000	10	34	18
19	8310	AMANA INSURANCE	07/09/2016	28/01/2019	240,000,000	140,000,000	10,000,000	10	22	17
20	2110	SAUDI CABLE	16/04/2019	31/12/2019	360,614,060	110,614,060	25,000,000	10	38	18
21	1213	NASEEJ	25/09/2019	22/01/2020	178,160,000	65,500,000	11,266,000	10	34	19
22	6050	SFICO	15/10/2019	14/05/2020	400,000,000	101,100,000	29,890,000	10	35	16
23	8040	ALLIANZ SF	05/06/2018	16/06/2020	600,000,000	200,000,000	40,000,000	10	28	16
24	4070	TAPRCO	25/03/2019	15/07/2020	175,000,000	75,000,000	10,000,000	10	32	19
25	3008	ALKATHIRI	17/11/2019	05/10/2020	90,417,600	45,208,800	4,520,880	10	175	93
26	7030	ZAIN KSA	25/10/2017	14/10/2020	8,987,291,750	4,487,291,750	450,000,000	10	18	14
27	4061	ANAAM HOLDING	04/12/2019	27/10/2020	105,000,000	15,000,000	9,000,000	10	395	65
28	2160	AMIANTIT	14/06/2020	01/12/2020	320,000,000	200,000,000	12,000,000	10	32	24
29	2300	SPM	30/04/2020	06/12/2020	192,000,000	92,000,000	10,000,000	10	107	57
30	6040	TADCO	07/12/2020	06/04/2021	391,767,000	241,767,000	15,000,000	10	38	28
31	4011	LAZURDE	11/10/2020	02/06/2021	575,000,000	430,000,000	14,500,000	10	24	21
32	8260	GULF GENERAL	29/04/2019	28/06/2021	500,000,000	200,000,000	30,000,000	10	33	19
33	1820	ALHOKAIR GROUP	28/10/2020	08/07/2021	650,000,000	343,000,000	30,700,000	10	37	24
34	6012	RAYDAN	08/09/2020	13/07/2021	337,500,000	225,000,000	11,250,000	10	37	28
35	8030	MEDGULF	06/10/2020	03/11/2021	1,050,000,000	700,000,000	35,000,000	12	23	20
36	4290	ALKHALEEJ TRNG	30/03/2021	03/11/2021	650,000,000	450,000,000	20,000,000	10	26	21
37	1213	NASEEJ	28/09/2020	04/11/2021	211,632,010	61,632,010	15,000,000	10	109	39
38	2220	MAADANIYAH	01/03/2021	23/11/2021	354,000,000	234,000,000	12,000,000	10	28	26
39	1832	SADR	04/01/2021	01/12/2021	175,000,000	25,000,000	15,000,000	10	439	71
40	4110	BATIC	15/04/2021	06/12/2021	600,000,000	300,000,000	30,000,000	10	39	24
41	8150	ACIG	16/01/2020	29/12/2021	291,000,000	141,000,000	15,000,000	10	36	23
42	4130	ALBAHA	10/11/2020	21/02/2022	297,000,000	177,000,000	12,000,000	10	34	24
43	8300	WATANIYA	16/09/2021	13/04/2022	400,000,000	200,000,000	20,000,000	10	31	20
44	8120	GULF UNION ALAHLIA	20/10/2021	20/04/2022	458,949,280	229,474,640	22,947,464	10	14	12
45	4140	SIECO	10/11/2020	11/05/2022	194,400,000	21,600,000	17,280,000	10	416	55
46	4061	ANAAM HOLDING	09/02/2021	17/05/2022	315,000,000	105,000,000	21,000,000	10	78	27
47	4020	ALAKARIA	12/12/2021	18/05/2022	3,750,000,000	2,400,000,000	135,000,000	10	19	16
48	8310	AMANA INSURANCE	18/01/2022	29/05/2022	430,000,000	130,000,000	30,000,000	10	23	14
49	2380	PETRO RABIGH	31/03/2022	08/06/2022	16,710,000,000	8,760,000,000	795,000,000	10	27	19
50	2100	WAFRAH	23/05/2021	14/06/2022	231,511,050	77,170,350	15,434,070	10	114	45
51	2300	SPM	18/10/2021	17/10/2022	337,000,000	192,000,000	14,500,000	10	48	32
52	8311	ENAYA	18/08/2022	06/11/2022	230,000,000	100,000,000	13,000,000	10	24	16
53	4170	TECO	24/08/2021	20/11/2022	578,236,230	52,566,930	26,500,000	10	12	11
54	8160	AICC	23/12/2018	20/11/2022	530,000,000	265,000,000	52,566,930	10	141	22
55	4070	TAPRCO	14/07/2021	02/04/2023	400,000,000	50,000,000	35,000,000	10	63	17
56	6060	SHARQIYAH DEV	30/12/2020	07/05/2023	300,000,000	75,000,000	22,500,000	10	57	22
57	4160	THIMAR	20/06/2023	08/10/2023	250,000,000	100,000,000	15,000,000	10	22	15
58	8050	SALAMA	06/11/2022	05/11/2023	200,000,000	100,000,000	10,000,000	10	32	21
59	6010	NADEC	04/04/2023	05/11/2023	3,016,400,000	1,016,400,000	200,000,000	10	47	23
60	4141	ALOMRAN	21/08/2022	08/11/2023	120,000,000	60,000,000	6,000,000	10	57	33
61	7040	ATHEEB TELECOM	30/03/2023	06/02/2024	339,999,000	89,999,000	25,000,000	10	188	57
62	1201	TAKWEEN	18/05/2023	13/02/2024	764,646,060	464,646,060	30,000,000	10	20	16
63	2160	AMIANTIT	14/09/2023	20/02/2024	445,500,000	99,000,000	34,650,000	10	74	24
64	8180	ALSAGR INSURANCE	14/09/2023	26/06/2024	300,000,000	140,000,000	16,000,000	10	28	18
65	2140	AYYAN	28/08/2023	08/07/2024	1,006,363,280	806,363,280	20,000,000	10	18	16