

The Role of Al Rajhi Bank's Financial Options in Improving the Performance of the Saudi Stock Exchange

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Abstract: This study aims to analyze the relationship between Al Rajhi's Islamic Bank's financial options and the Saudi Stock Market General Index (TASI), using the ARDL autoregressive analysis model for daily data from October 2024 to March 2025. The most important results of the study are the existence of a short-term, significant, inverse relationship between these options (H60, H65, M60, M70) and the Saudi Stock Market General Index (TASI). It also indicates that the deviation value will be rebalanced by 2.82% if the dependent variable deviates from the equilibrium value in period (t). In addition, in the long-term there is no moral influence from these options on the Saudi financial market..

Keywords: Financial Market; Financial Options; Financial Engineering.

1. Introduction

The Saudi financial market is the foundation of the Kingdom's economy. It does more than facilitate buying and selling stocks and bonds; it is a primary source of economic development. It serves as a source of financing and investment and is a reflection of the aspirations of investors. The substantial revolution in financial engineering products and the volatility that accompanies the revolution, which no financial market can escape from, means that financial options have arisen as a hedge against financial market liquidity. In this case, financial options are to place a protective barrier around the investor, allowing them to hedge their portfolios from losses due to price fluctuation.

As a form of financial innovation and flexibility, financial options offer an unlimited number of hedging strategies for different expectations and market situations. Options can also be an effective way to hedge, largely due to the low cost, allowing an investor to control a large position with less investment. Options can serve a number of purposes in hedging, from protecting stock portfolios from general market volatility to hedging currency price risk and commodity price risk for companies operating internationally.

Accordingly, from our study, the Saudi financial market is now experiencing a gradual increase in absorbing the use of traditional and modern financial products that serve their investors' needs and aspirations, financial options are basic mechanisms for risk

management, also improving risk appetite providing more certainty in financial planning in volatile market conditions.

The present study seeks to examine the relationship of financial options and the general index of the Saudi stock market autoregressive analysis model for daily data from October 2024 to March 2025.

1.1 Study Problematic

Based on the identified research gap, this investigation revolves around the following main question:

How does the financial options of ALRAJHI bank affect the performance of the Saudi Stock Exchange ?

1.2 Study Aims

To answer the main question, assuming there is a relationship between the Saudi Stock Exchange and financial instruments, we must answer the following sub-questions:

How does the Saudi Stock Exchange respond to rapid changes resulting from shocks and the re-establishment of long-term equilibrium?

- Do changes in the value of short-term financial options affect the Saudi Stock Exchange?

We typically use econometric methods to answer questions of this type. Among the most important models used, in addition to the error correction mechanism, are the Autonomous Deterioration and Co-Integration Analysis (ARDL) model. This mechanism enables us to achieve long-term equilibrium for the financial options of Al Rajhi Bank and the Saudi Stock Exchange, in addition to achieving short-term dynamics, taking into account:

- The instability of variables;
- Potential internal heterogeneity.

Through this research, we will attempt to make several contributions, the most important of which are:

- It contributes to bridging the gap in current studies by providing a detailed analysis of the relationship between financial instruments and financial options at Al Rajhi Bank, which contributes to;
- It relies on robust econometric approaches to address the complexities among the study variables;
- With the current acceleration of volatility, it provides a clear analysis for financial policymakers in managing the stock market.

To answer the question, this study is organized as follows: The second section of this paper reviews the noteworthy literature and summarizes relevant studies that highlight the relationship between the study variables, and then identifies the research gap. The third section of this study will discuss the data and methodology used in the analysis. The fourth section of this paper will present the results of the ARDL model estimation and cointegration test, in addition to the results of error correction. The fifth section of this paper will present a reading of the results obtained and determine the nature of the relationship between the study variables. The final section of this study presents alternative trends for the dynamism of financial instruments within the financial market and recommendations for financial decision makers.

2. Literature Review

To understand the dynamics between the study variables, especially with the growing interest in technological developments and artificial intelligence programs, and to propose a mechanism to help achieve the goals expected by financial market activists, we review in this section research related to the study variables.

Many studies have confirmed that the financial market is affected by the internal environment through what is called systemic risk, and also by the external environment, which consequently affects the participating financial instruments that are considered part of the financial market, (Geoffrey , 2025) In his study, he discusses the conceptual framework and development of the history of options contracts from ancient times until the publication of Vincent Bronzin's book "Theory of Options" in 1908. The study (Abou Maliha Mohamed Soliman, Gomaa Gomaa Zaghloul, & Ramadan Mohamed Ahmed Harec, 2024) We discussed the legislative conceptual framework for option contracts, in addition to the difference between financial options in Islamic jurisprudence and the legislative framework, and attempted to find the appropriate formula for ruling on them and establishing their legal form. As for the study (Huddart, 1994) which addressed the of employee stock options (ESOs), the results of this study showed that employees prefer to exercise options before their expiration date under certain conditions related to risk avoidance, investment opportunities, and wealth.

In the Kingdom of Saudi Arabia, researchers have conducted numerous studies regarding the nature of the relationship between the stock exchange and financial instruments.(Mohammed Hussainadnan & Qasim, 2023) presented a study evaluating the performance of an optimal portfolio, unhedged and hedged, using balanced options strategies. The study used strategies such as the Long Call Butterfly and the Long Call Condor. The results showed higher returns with lower risks. The study also demonstrated that better performance using the Black-Scholes model improved portfolio performance and reduced unsystematic risks, In another study presented by the researcher (ABDELBASSET ABDESSAMAD, 2024) Regarding the relationship between financial engineering tools and the Saudi financial market, The results of the study showed that the relationship between the study variable and the general index of the Saudi Stock Exchange is heterogeneous. (Al-Nassar , Alhajjaj, & Bleadly, 2022),

Many research literatures have demonstrated the nature of the relationship between the stock exchange and the various financial instruments present in the same market, in search of a possible mechanism to reduce risks. In this context, our research came to support this hypothesis by choosing new tools that are compatible with the investor's desire to hedge against risks.

3. Standard Study of the Impact of ALRAJHI Financial Options on Saudi Stock Market Performance

To determine the relationship between financial options as a financial instrument for Al Rajhi Bank and the Saudi Stock Exchange as the dependent variable, the autoregressive distributed lag (ARDL) model was used(Issolah , Djemaci , & Kertous , 2021),The general law of the ARDL model can be formulated as follows:

$$\Delta Y_t = \beta_{0t} + \sum_{i=1}^p \beta_{1i} \Delta y_{t-i} + \sum_{i=1}^{q_1} \beta_{2i} \Delta X_{t-i} + \delta_1 Y_{t-1} + \delta_2 X_{t-1} + \varepsilon_{1t}$$

Where β_{0i} represents the constant term of the model, β_{1i} represents the short-term correlation coefficient of the (Y) variable, while β_{2i} represents the long-term correlation coefficient ($X_1, X_2, \dots, X_K$), P is the lag period of the variable (Y), q_i is the lag period of the variable ($X_1, X_2, \dots, X_K$), Δ is the difference of one degree, and finally ε represents the random error threshold.

To apply the Autoregressive Distributed Lag (ARDL) model, the scientific steps stipulated in the following research alphabets must be followed. First, there is a need to check the properties of the time series you are using by conducting stationarity tests. Next, the optimal ranks of the ARDL model need to be identified and the estimation performed based on the Akaike Information Criterion (AIC). The third step is to conduct a bounds test to confirm whether or not the variables are cointegrated

The final step, before formulating the final equation of the model, is to:

- Extract the term and long-run relationship;
- Extract short-run relationship estimates;
- Extract the error correction coefficient..

3.1 Data

This research utilized weekly data to assess the actual returns of financial options issued by Al Rajhi Bank for daily data from October 2024 to March 2025. The most prominent of these instruments were selected based on the level of trading volume and rate of return. Additionally, the Saudi Stock Exchange (Tadawul) General Index (TASI) was selected, because it contains many diverse financial instruments, in addition to its distinction in responding quickly to economic changes, as well as being the largest financial market in the Arab region.

FBER

81

Table .1. Definition of the variables

TYPE	DEFINITION	LABEL	UNIT
Dependent variable		TASI	%
Independent variable	ELRAJIHI Bank financial options	M60	
		H60	
		M65	
		H65	
		M70	
		H70	

Source: Prepared by the researchers

The study variables were coded using Table (01). The data used in the research paper were obtained from the Tadawul website of the Saudi Stock Exchange at the link: (<https://www.saudiexchange.sa>, 2024)

This study relied on the required return (Eka Violita, 2021) for the study variables, which can be formulated as follows:

$$R_t = \ln(P_t / P_{t-1})$$

Where R_t represents the real return, and P represents the price of the financial option. In this context, the ARDL model can be formulated according to the variables shown in Table 1 as follows:

$$\begin{aligned} \Delta TASI_t = & \beta_{0i} + \sum \beta_{1i} \Delta TASI_{t-1} + \sum \beta_{2i} \Delta(H60)_{t-1} + \sum \beta_{3i} \Delta(H65)_{t-1} + \sum \beta_{4i} \Delta(H70)_{t-1} \\ & + \sum \beta_{5i} \Delta(M60)_{t-1} + \sum \beta_{6i} \Delta(M65)_{t-1} + \sum \beta_{7i} \Delta(M70)_{t-1} + \delta_1 TASI_{t-1} + \\ & \delta_2 (H60)_{t-1} + \delta_3 (H65)_{t-1} + \delta_4 (H70)_{t-1} + \delta_5 (M60)_{t-1} + \delta_6 (M65)_{t-1} + \delta_7 (M70)_{t-1} + \\ & \varepsilon_{1t} \end{aligned}$$

where β_{0i} represents the constant term of the model, β_{1i} is the correlation coefficient of the general index of the short-term relationship, β_{2i} is the correlation coefficient of the short-term relationship of the explanatory variables H60, H65, H70, M60, M65, M70, δ represents the long-term correlation coefficient, P is the lag period of the dependent variable TASI index, q_i is the lag period of the explanatory variables H60, H65, H70, M60, M65, M70; Δ and ε are the difference of degree and the random error term respectively.

3.2 Descriptive and Statistical Analysis

The following table shows the outputs and results of the descriptive and statistical analysis of the data variables in the research paper.

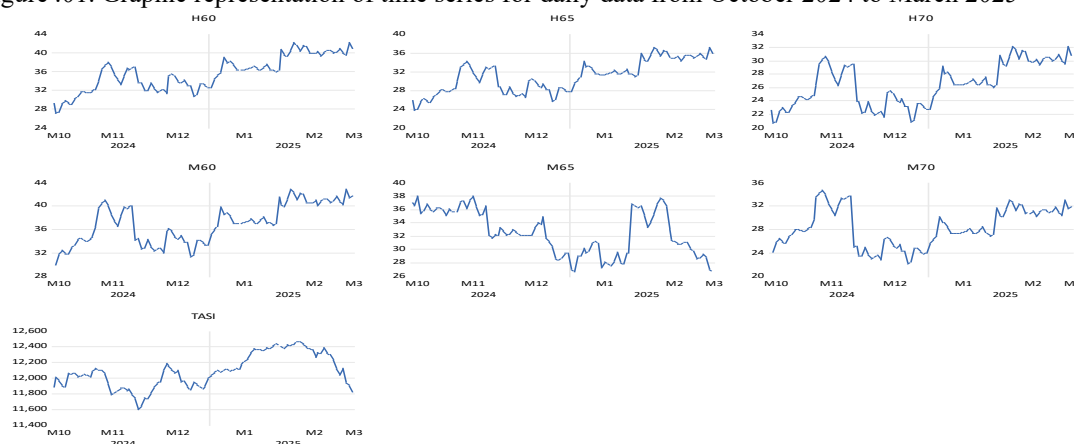
Table . 02. Results of the descriptive and statistical analysis of the variables

H60	H65	H70	M60	M65	M70	TASI	
35.54364	30.95293	26.46182	36.97707	32.56545	28.27384	12090.81	Mean
36.30000	31.36000	26.43000	37.03000	32.16000	27.81000	12077.31	Median
42.16000	37.19000	32.22000	42.89000	37.98000	34.67000	12471.72	Maximum
27.08000	23.69000	20.64000	29.83000	26.61000	22.05000	11590.79	Minimum
3.709860	3.440461	3.210816	3.422563	3.294474	3.297727	217.7602	Std. Dev.
-0.122217	-0.040864	0.002228	-0.085782	-0.036769	0.054791	0.083847	Skewness
2.160068	1.948116	1.765292	1.839848	1.721620	1.908534	2.078992	Kurtosis
3.156587	4.591703	6.288665	5.673469	6.763608	4.963643	3.615053	Jarque-Bera
0.206327	0.100676	0.043096	0.058617	0.033986	0.083591	0.164059	Probability
3518.820	3064.340	2619.720	3660.730	3223.980	2799.110	1196990.	Sum
1348.780	1160.004	1010.315	1147.966	1063.649	1065.751	4647112.	Sum Sq. Dev.
99	99	99	99	99	99	99	Observations

Source: from database using Eviews 13.0

The average returns for all variables in table (02) indicate that all variables have a positive return, suggesting that the variables are trending similarly. In terms of standard deviation, the (H60) had the highest deviation, meaning it is more susceptible to fluctuation than any other variable. The (H70) had the lowest standard deviation, signifying it is the least responsive variable.

Figure .01. Graphic representation of time series for daily data from October 2024 to March 2025



Source: from database using Eviews 13.0

Figure (01) explains that we note that almost all variables have positive means because they are located on the upper side of the curve., where the figure shows that all rates are positive and at the same time there is some stability associated with the measurements.

3.3 Time Series Stability Test

To apply the ARDL model, it was necessary to check the stability of the study variables, which will fall into one of the following situations: either they will all be stable at level $I(0)$, or they will all be stable at first differences $I(1)$ (Phillips & Perron, 1998), or some of them will be stable at level and some will be stable at first differences, while ensuring no variable is stable at second differences $I(2)$.

Table .03. Test results (Phillips-Perron test)

	<u>At Level</u>							
		H60	H65	H70	M60	M65	M70	TASI
With Constant	t-Statistic	-1.7796	-1.9281	-2.0482	-2.2786	-1.9973	-2.3309	-1.5546
	Prob.	0.3886	0.3183	0.2661	0.1809	0.2877	0.1645	0.5019
		n0	n0	n0	n0	n0	n0	n0
With Constant & Trend	t-Statistic	-3.2110	-2.9555	-2.7040	-2.8911	-2.4817	-2.4781	-0.9875
	Prob.	0.0883	0.1502	0.2375	0.1700	0.3365	0.3382	0.9403
		*	n0	n0	n0	n0	n0	n0
Without Constant & Trend	t-Statistic	0.8853	0.6529	0.4281	0.7129	-0.9232	0.2841	-0.1279
	Prob.	0.8981	0.8555	0.8042	0.8675	0.3142	0.7662	0.6371
		n0	n0	n0	n0	n0	n0	n0

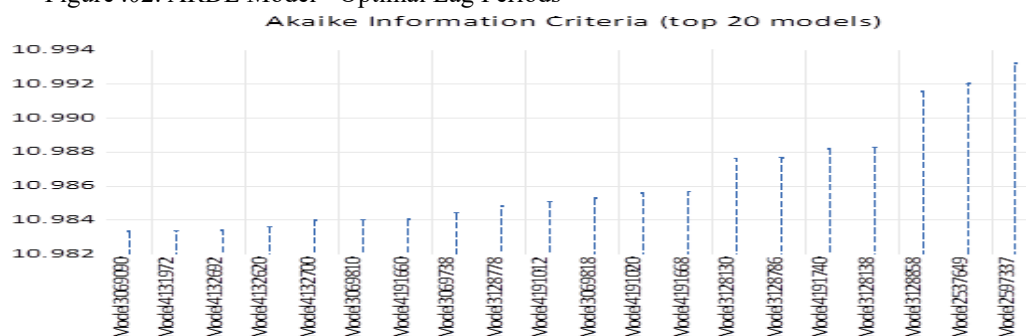
Source: from database using Eviews 13.0

The results obtained in Table No. (03) show that all securities represented in the financial option of Al Rajhi Bank: M60, M70, H65, H60, M65, H70, and the general index of the Saudi Stock Exchange (TASI) are integrated or stable in the first degree, and therefore we can apply the ARDL methodology once the second requirement for stability in the first degree is determined at the level of 5%.

3.4 Bounds Testing - Cointegration -

3.4.1. Equal Time Period: According to the ARDL model, the most widely used criterion (Akaike's criterion) was used to determine the optimal time period for the study's determinants (q1, q2, q3, q4, q5, q6). To determine the appropriate and best model chosen by this model, the lowest statistical value was chosen.

Figure .02. ARDL Model - Optimal Lag Periods -



Source: from database using Eviews 13.0

Figure No. 1 shows that the most appropriate model is the ARDL model (3, 2, 0, 2, 0, 0, 0) out of more than 4,251,528 models tested through the results obtained from the Eviews 13.0 program, by choosing the lowest statistical value for the Akaike criterion (10.9835).

3.4.2 Results of The Bound Test to Co-integration: The long-run equilibrium relationship of the study determinants is a key part of the ARDL methodology, which is obtained through the cointegration bounds test (Abayie Eric Fosu & Joseph Magnus, 2006). This test is a statistical test used to assess the strength of the relationship between variables by comparing the upper and lower bounds with the calculated F value.

- This test is based on testing two statistical hypotheses regarding the existence of a cointegration relationship:

- H_0 : There is no cointegration relationship between the research elements.
- H_1 : There is a cointegration relationship between the research elements.

Table .04. Results of the Bound Test to Co-integration:

		Test Statistic		Value			
		F-statistic		2.170000			
		10%		5%		1%	
Sample Size	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	
80	2.088	3.103	2.431	3.518	3.173	4.485	
Asymptotic	1.990	2.940	2.270	3.280	2.880	3.990	

* I(0) and I(1) are respectively the stationary and non-stationary bounds.

Source: from database using Eviews 13.0

From the results obtained and indicated in the table, the calculated value of the F-test (F-statistic = 2.170000) is between the minimum critical value and the maximum freedom value of the scale at the significance level of 10%. As a result, the null hypothesis H0 is accepted, which states that there is no joint integration between the study variables (H60, H65, H70, M60, M65, M70) as independent variables, and the TASI index as a dependent variable..

3.5. An Estimate of the Stock Option Return Function Using the ARDL Model

To assess the model and ascertain its integrity and ability to interpret the results by conducting the following standard tests:

3.5.1 Decline in Joint Integration: The statistics shown in the table indicate that the coefficient of determination (R^2) was high, estimated at 0.941949., indicating that the independent variables (M60, M65, M70, H60, H65, H70) explain a significant percentage of 94.19% of the changes occurring in the Saudi Stock Exchange (Tadawul) index. The remaining percentage is attributed to other factors outside the scope of this model. To enhance the credibility of the model in general, the calculated Fisher's t-statistic ($F = 102.349$) and the associated significance level ($P = 0.000$) indicated that the estimated model has strong statistical significance, which enhances confidence in the existing relationship between listed investment funds and Saudi Stock Exchange.

Table .05. Results of the estimation of the decline in cointegration for the ARDL model

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
TASI(-1)	1.024463	0.124607	8.221547	0.0000
TASI(-2)	0.079502	0.176445	0.450576	0.6535
TASI(-3)	-0.177591	0.131469	-1.350814	0.1805
M70	19.22724	23.48024	0.818869	0.4152
M70(-1)	-349.3118	193.8259	-1.802194	0.0752
M70(-2)	-65.18450	23.32233	-2.794939	0.0065
M65	3.380560	2.726995	1.239665	0.2186
M60	-29.04308	26.91936	-1.078892	0.2838
M60(-1)	540.4089	308.3092	1.752815	0.0834
M60(-2)	66.90048	27.66516	2.418221	0.0178
H70	915.0163	616.3188	1.484648	0.1415
H65	-1352.244	1139.431	-1.186771	0.2387
H60	239.0487	493.2481	0.484642	0.6292
C	-241.5737	1224.992	-0.197204	0.8442
R-squared	0.941949	Mean dependent var		12095.23
Adjusted R-squared	0.932745	S.D. dependent var		219.5044
S.E. of regression	56.92516	Akaike info criterion		11.05539
Sum squared resid	265718.9	Schwarz criterion		11.42936
Log likelihood	-516.6587	Hannan-Quinn criter.		11.20655
F-statistic	102.3494	Durbin-Watson stat		2.019662
Prob(F-statistic)	0.000000			

*Note: p-values and any subsequent test results do not account for model selection.

Source: from database using Eviews 13.0

3.5.2. Model Diagnosis: There are several tests performed to ensure that the model is free of economic problems:

A. Breusch-Godfrey Serial Correction LM Test: The results obtained from Table 6 are shown displays an F-statistic value of 0.7690, which is over the legitimate 5% significance level. Obviously, there is no autocorrelation among errors with our model.

Table .06. Results of self-connection tests

Breusch-Godfrey Serial Correlation LM Test:		
Null hypothesis: No serial correlation at up to 2 lags		
0.7690	Prob. F(2,80)0.263593	F-statistic
0.7303	Prob. Chi-Square(2)0.628480	Obs*R-squared

Source: from database using Eviews 13.0

B. Non-Fixion Test for Residuals:

Table.07. Results of homogeneity tests

Heteroskedasticity Test: Breusch-Pagan-Godfrey
Null hypothesis: Homoskedasticity

0.6724	Prob. F(13,82)	0.786186F-statistic
0.6410	Prob. Chi-Square(13)	10.63929Obs*R-squared
0.6862	Prob. Chi-Square(13)	10.09394Scaled explained SS

Source: from database using Eviews 13.0

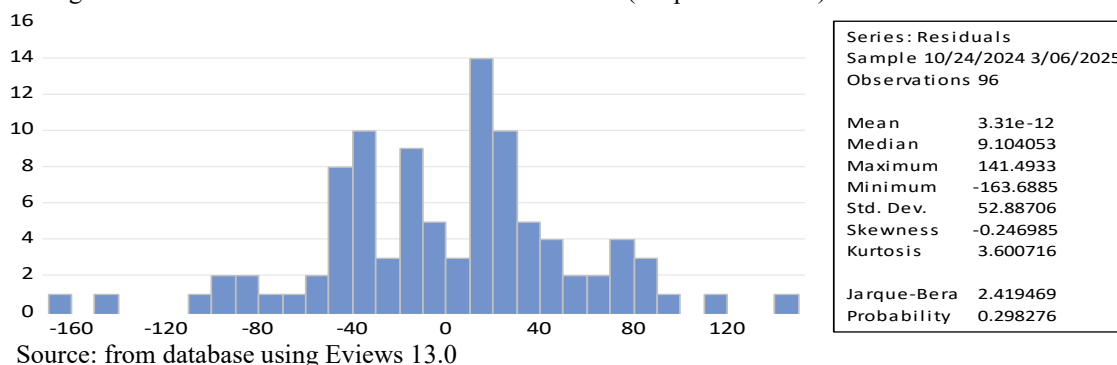
The results of the heteroscedasticity mechanism test as shown in Table (07) indicate that no problem of homogeneity of errors. The value of the F statistic (0.786186) and the significance of R square (10.63929) were larger than the 5% significance level, indicates that the variance of error is homogeneous, and that there are not significant differences in the model.

FBER

86

C. Natural Distribution for Residuals:

Figure .03.Results of natural distribution for residuals (Jarque-Bera Test)



From the normal distribution table for of residuals indicate that the Jack-Bera test, the analysis results indicate that the Jacques-Bera test has a value of (2.419469), which is a normal distribution because this value is greater than the 5% confidence level.

3.6. Long-term and Short-term Relationship and Evaluation of Error Correction Model According to ARDL Model:

To ensure a short-term relationship, the ARDLECM error correction factor must be moral at 5% and negative at the same time.

Table .08. Long-term and short-term relationship and error correction model evaluation

	Prob.	t-Statistic	Std. Error	Coefficient	Variable
	0.0000	-4.912247	0.005741	-0.028200	COINTEQ*
	0.0000	-5.341367	329.7668	-1761.406	D(H65)
	0.0000	5.527232	207.4577	1146.667	D(H70)
	0.2220	-1.229560	21.87154	-26.89237	D(M60)
	0.3783	0.885183	19.84245	17.56421	D(M70)
	-0.732857	Mean dependent var		0.288290	R-squared
	63.99952	S.D. dependent var		0.257679	Adjusted R-squared
	10.90733	Akaike info criterion		55.14076	S.E. of regression
	11.03921	Schwarz criterion		282766.8	Sum squared resid
	10.96067	Hannan-Quinn criter.		-529.4591	Log likelihood
	1.889794	Durbin-Watson stat		9.417790	F-statistic
				0.000002	Prob(F-statistic)

* p-values are incompatible with t-Bounds distribution.

Source: from database using Eviews 13.0

Table (08) shows the results of the cointegration test with respect to the Saudi Stock Exchange General Index (TASI) and each of the independent variables (M60, M65, M70, H60, H65, and H70). Through this analysis, we aim to test the long-term equilibrium relationship between the study determinants. The findings reveal the probability value (Prop=0.0000) indicates a relationship among the variables is statistically significant. Additionally, The t-statistic value (-4.912247) is large enough to reject the null hypothesis (H0), indicating no relationship at a significance level of less than 5%. The table also shows that the value of the coefficient (Cointeq* = -0.028200) is neither positive nor equal to zero, which means it is statistically significant at a 5% significance level. Therefore, this result indicates that the standard deviation will be corrected by 2.82% if the dependent variable deviates from its equilibrium value during period t.

In this context, a linear equation can be formulated to analyze the long-run relationship between the variables using the following scale:

Table.09. Long-term relationship:

Deterministics: Rest. constant (Case 2)

$$\begin{aligned} \text{CE} = & \text{TASI}(-1) - (14318.511388 * \text{H60} - 57479.888695 * \text{H65}(-1) + \\ & 35566.496928 * \text{H70}(-1) + 20333.561811 * \text{M60}(-1) + 87.941120 * \text{M65} - \\ & 13360.353260 * \text{M70}(-1) - 34459.955501) \end{aligned}$$

	Prob.	t-Statistic	Std. Error	Coefficient	Variable *
	0.6754	0.420116	34082.30	14318.51	H60
	0.6209	-0.496232	115832.7	-57479.89	H65(-1)
	0.6065	0.516925	68803.98	35566.50	H70(-1)
	0.5841	0.549347	37014.09	20333.56	M60(-1)
	0.5553	0.592020	148.5441	87.94112	M65
	0.5767	-0.560169	23850.57	-13360.35	M70(-1)
	0.7054	-0.379275	90857.54	-34459.96	C

Note: * Coefficients

Source: from database using Eviews 13.0

According to the outputs obtained from the table, the mathematical formula for the long-term equilibrium relationship can be formulated as follows:

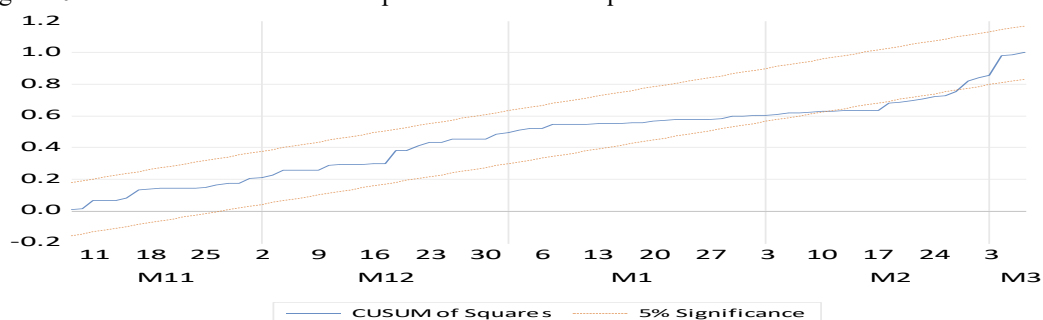
$$\begin{aligned} CE = & \text{TASI}(-1) - (14318.511388 * H60 - 57479.888695 * H65(-1) + \\ & 35566.496928 * H70(-1) + 20333.561811 * M60(-1) + 87.941120 * M65 - \\ & 13360.353260 * M70(-1) - 34459.955501) \end{aligned}$$

Considering the estimated long-term equilibrium relationship of the study's determinants, we note the insignificance of Al Rajhi Company's (non-statistical) financial options (H60: $p = 0.6754$), (H65: $p = 0.6209$), (H70: $p = 0.6065$), (M60: $p = 0.5841$), (M65: $p = 0.5553$), (M70: $p = 0.5767$) thus there is no moral impact on the Saudi Stock Exchange with these options.

3.7. Structural Stabilization:

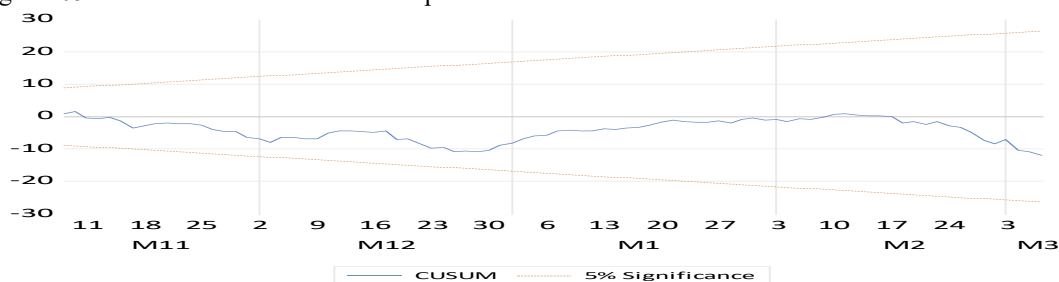
Both the CUSUM of squares and the CUSUM are commonly used to test the structural stability of the estimated short- and long-term variables according to the ARDL model. According to this test, the alternative hypothesis H_1 is rejected and the null hypothesis H_0 is accepted, that if the graph falls within the confidence interval at the 5% significance level, then all the estimated determinants are stable.

Figure .04. Cumulative total for the repetition of residual squares



Source: from database using Eviews 13.0

Figure .05. Cumulative total of residual repeaters



Source: from database using Eviews 13.0

Considering the two figures illustrated above the trajectory for the cumulative CUSUM and the cumulative sum of squares is seen to remain within the designated limit of the confidence region at 5% significance level. Thus, we cannot reject the null hypothesis of constant estimated coefficients and we conclude that the model maintains structural stability over the study's time period.

2. Conclusion

This study was achieved in the relationship of the financial options of Al-Rajhi Bank, which is considered one of the most important financial institutions within the Saudi financial market, with the Saudi Stock Exchange index (TASI), and the study was covered to :

- The existence of a common integration relationship between the general index of the Saudi stock market (TASI) and each of the independent variables (M60, M65, M70, H60, H65, and H70), allowing the choice of the relationship to the term Al-Taweel ;
- The presence of a long-term adverse relationship between the options contract index for Al-Rajhi Bank and the TASI index ;
- The cumulative path and the total cumulative squares of CUSM showing the existence of structural stability between the changes of the model

3. Recommendations

Among the results obtained in this research paper, we suggest the following recommendations:

- Work to determine the prices and duration of financial options by relying on the nature of the relationship between the option contracts and the general indicator of the Saudi financial market;
- Establish a specialized index for a group of financial tools that serve as a guide for a buyer or seller of options contracts.

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89

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