

ISSN: 2525-3654

ACCESS

EXECUTING FINANCIAL MARKETS ANALYSIS ON PROMINENT MARKETS: A CASE STUDY OF (ASE) AMMAN STOCK EXCHANGE FOR ISLAMIC BANKS SHARES IN JORDAN

Rula Mustafa Airout^A, Sari Sulaiman Malahim^B, Abdullah Yusri Al Khatib^C

ARTICLE INFO	ABSTRACT
Article history:	Purpose : This research purpose is to test the efficiency of Islamic banks' shares in the Amman stock exchange (ASE) at the levels of the financial markets efficiency
Received 29 May 2023	hypothesis, especially of the weak level, by implementing and executing the random walk theory on stock and shares prices and returns of Islamic banks in Amman stock
Accepted 24 August 2023	exchange (2018-2022).
Keywords:	Theoretical Framework: Through financial analysis of a well-known market, we investigate the effectiveness of the Amman Stock Exchange for Islamic banks' share prices when they are in a weak state. The results of this study will inform financial
Islamic Banks; Financial Markets Analysis; Prominent Markets;	analysts and numerous banking investors about the best investment strategies and techniques they can use to make investments in Jordan's financial market and generate abnormal returns over time.
Normal And Abnormal Returns; Financial Markets Forms' Levels; Amman Stock Exchange (ASE); Jordan.	Design/Methodology/Approach: ASE index is used in studying the behavior of shares prices and the monthly changes as percentages in the market index as a representative of returns of shares. Numbers and values test such as time series, cumulative average abnormal return, and other observations were conducted to figure out whether prices in the near future and returns, generally, can be predicted and expected by using and analyzing historical prices and returns.
PREREGISTERED	Findings: The findings and results of this research are clarified by prices of shares and returns for Islamic banks not supporting the random walk theory and weak form level of efficiency.
OPEN DATA	Research, Practical & Social implications: The study's primary goals are to: Analyze and determine whether financial theories and market analysis are appropriate for the Jordanian Amman Stock Exchange, to gauge the levels of financial markets' effectiveness, and to give information on when financial investors can expect a typical or abnormal return from investing in the financial markets.
	Originality/Value: This research can be a source of help to financial analysts to earn knowledge about Islamic banks' shares and return on shares as well.
	Doi: https://doi.org/10.26668/businessreview/2023.v8i9.2456

^c PhD in Islamic Banks. Islamic Banks Department, Finance and Business Faculty, The World Islamic Sciences and Education University (WISE). Amman, Jordan. E-mail: <u>abdullah.alkhatib@wise.edu.jo</u> Orcid: <u>https://orcid.org/0000-0002-5861-3470</u>



^A PhD in Islamic Banks. Department of Financial and Banking Sciences, Amman University College for Financial and Administrative Sciences, Al-Balqa Applied University. Amman, Jordan. E-mail: <u>rula.airout@bau.edu.jo</u> Orcid: <u>https://orcid.org/0000-0002-9536-5779</u>

^B PhD in Islamic Banks. Department of Financial and Banking Sciences, Amman University College for Financial and Administrative Sciences, Al-Balqa Applied University. Amman, Jordan. E-mail: <u>sarymalahim@bau.edu.jo</u> Orcid: <u>https://orcid.org/0000-0001-5142-141X</u>

EXECUTANDO ANÁLISE DE MERCADOS FINANCEIROS EM MERCADOS PROEMINENTES: UM ESTUDO DE CASO DA (ASE) BOLSA DE AMÃ PARA AÇÕES DE BANCOS ISLÂMICOS NA JORDÂNIA

RESUMO

Objetivo: Este objetivo de pesquisa é testar a eficiência das ações de bancos islâmicos na Bolsa de Valores de Amã (ASE) nos níveis da hipótese de eficiência dos mercados financeiros, especialmente do nível fraco, implementando e executando a teoria de passeio aleatório sobre ações e preços de ações e retorno de bancos islâmicos na Bolsa de Valores de Amã (2018-2022).

Quadro teórico: Através da análise financeira de um mercado bem conhecido, investigamos a eficácia da Bolsa de Amã para os preços das ações dos bancos islâmicos quando eles estão em um estado fraco. Os resultados deste estudo informarão os analistas financeiros e numerosos investidores bancários sobre as melhores estratégias e técnicas de investimento que podem usar para fazer investimentos no mercado financeiro da Jordânia e gerar retornos anormais ao longo do tempo.

Concepção/Metodologia/Abordagem: O índice ASE é utilizado no estudo do comportamento dos preços das ações e das variações mensais em percentagem no índice de mercado, como um representante da rendibilidade das ações. Foram realizados testes de valores e números, tais como séries temporais, média cumulativa de retorno anormal e outras observações para determinar se os preços no futuro próximo e os retornos, em geral, podem ser previstos e esperados usando e analisando os preços e retornos históricos.

Conclusões: As conclusões e os resultados desta pesquisa são esclarecidos pelos preços das ações e retornos para os bancos islâmicos que não apoiam a teoria do passeio aleatório e o nível fraco da forma de eficiência.

Pesquisa, Implicações práticas e Sociais: Os objetivos principais do estudo são: Analisar e determinar se as teorias financeiras e a análise de mercado são apropriadas para a Bolsa de Valores de Amã da Jordânia, avaliar os níveis de eficácia dos mercados financeiros e fornecer informações sobre quando os investidores financeiros podem esperar um retorno típico ou anormal do investimento nos mercados financeiros.

Originalidade/Valor: Esta pesquisa pode ser uma fonte de ajuda para os analistas financeiros obterem conhecimento sobre as ações dos bancos islâmicos e também sobre o retorno das ações.

Palavras-chave: Bancos Islâmicos, Análise dos Mercados Financeiros, Mercados Provisórios, Regressos Normais e Anormais, os Níveis dos Formulários dos Mercados Financeiros, Bolsa de Amã (ASE), Jordânia.

EJECUCIÓN DE ANÁLISIS DE MERCADOS FINANCIEROS EN MERCADOS DESTACADOS: ESTUDIO DE CASO DE LA BOLSA DE AMMÁN PARA ACCIONES DE BANCOS ISLÁMICOS EN JORDANIA

RESUMEN

Propósito: Este propósito de investigación es probar la eficiencia de las acciones de los bancos islámicos en la bolsa de valores de Ammán (ASE) en los niveles de la hipótesis de eficiencia de los mercados financieros, especialmente del nivel débil, mediante la implementación y ejecución de la teoría del paseo aleatorio sobre los precios de las acciones y los rendimientos de los bancos islámicos en la bolsa de valores de Ammán (2018-2022). **Marco teórico:** A través del análisis financiero de un mercado bien conocido, investigamos la eficacia de la Bolsa de Valores de Ammán para los precios de las acciones de los bancos islámicos cuando están en un estado débil. Los resultados de este estudio informarán a los analistas financieros y a numerosos inversores bancarios sobre las mejores estrategias y técnicas de inversión que pueden utilizar para hacer inversiones en el mercado financiero de Jordania y generar rendimientos anormales a lo largo del tiempo.

Diseño/Metodología/Enfoque: El índice ASE se utiliza para estudiar el comportamiento de los precios de las acciones y los cambios mensuales como porcentajes en el índice de mercado como representante de los rendimientos de las acciones. Se realizaron pruebas numéricas y de valores, como series temporales, rendimiento medio anormal acumulado y otras observaciones para determinar si los precios en un futuro próximo y los rendimientos, en general, pueden predecirse y esperarse utilizando y analizando los precios y los rendimientos históricos.

Hallazgos: Los hallazgos y resultados de esta investigación se aclaran por los precios de las acciones y los retornos para los bancos islámicos que no apoyan la teoría del paseo aleatorio y el bajo nivel de eficiencia de la forma.

Investigación, Implicaciones prácticas y Sociales: Los objetivos principales del estudio son: Analizar y determinar si las teorías financieras y el análisis de mercado son apropiados para la Bolsa de Valores de Ammán, para medir los niveles de eficacia de los mercados financieros, y dar información sobre cuándo los inversores financieros pueden esperar un retorno típico o anormal de invertir en los mercados financieros.

Originalidad/Valor: Esta investigación puede ser una fuente de ayuda para los analistas financieros para obtener conocimiento sobre las acciones de los bancos islámicos y el rendimiento de las acciones también.

Palabras clave: Bancos Islámicos, Análisis de los Mercados Financieros, Mercados Prominentes, Retornos Normales y Anormales, Niveles de las Formas de Mercados Financieros, Bolsa de Ammán (ASE), Jordania.

INTRODUCTION

Markets are considered efficient if securities are priced excellently to provide and give a normal return for their levels of risk. The expected real value of an abnormal return is zero or almost zero if securities are appropriately priced. The efficient market hypothesis is divided into three levels in financial literature and previous articles (Malahim, 2023). Each level explains different kinds of information, and weak shape testing is used to determine whether all information in historical prices is reflected in current present prices. The semi-strength test determines whether current shares' prices are reflected in public information. (Dahmash, 2013). Lastly, strong form tests determine whether all information is reflected in security prices, whether public or private institutions, companies, and banks, and whether an abnormal return will be earned (Mattar, 2019).

This paper will focus on form levels, especially the weak form level of efficiency, which supports the random walk theory of stock and shares' prices. For that, a collection of data random walk over time series conducted for each observation is calculated to be independent of the previous value. As known that capital and shares markets if they are inefficient, there is an opportunity to earn a higher return and abnormal returns by creating expected charts and moving above averages based on historical stock prices. Therefore, financial investors argue that utilizing the buy-and-sell strategy can work well in inefficient markets and earn a superior return (Mattar, 2019).

On the other side, some financial analysts think that capital and financial markets are efficient. It may be impossible to outperform the market results or earn a superior return. They consider that any strategy depends on timing, and time series analyses for the markets only consume time and waste efforts (Al-Hamdooni,2023). They think that adapting to the environment of efficient markets is by buying and holding the shares strategy, where all securities are priced at their fair value. Also, the fundamentals of financial, money, and capital markets are competitive. All information is available for all investors simultaneously, and the monopolistic information phenomenon does not exist (Matar, 2019).

Although the Importance of the study is to Investigate the efficiency of the Amman Stock Exchange for Islamic bank's share prices at the weak form by executing the financial analysis on a prominent market to analyze the prices and returns, and that will provide financial

analyzers and many banking investors with information and knowledge about the suitable investments' strategies and techniques to invest in Jordan in the financial market and to earn abnormal return during the time. Moreover, this research is expected to have contributions in (3) fields: firstly, to decide the level of efficiency that the Amman stock exchange deals with and provide investors with the sectors that have opportunities to earn excess returns; secondly, to establish suitable strategies to fulfill unfulfilled goals, thirdly, to provide academic individuals with new results and findings in markets' efficiency and financial markets analyses. The main objectives of the research are:

To analyze and examine whether financial markets analysis and financial theories are suitable for the Amman stock exchange in Jordan, to test the efficiency of financial markets forms' levels, and to provide data for financial investors to earn normal or abnormal returns by investing in the financial markets.

This research is intended to examine the efficiency and financial analysis of the Amman stock exchange and Islamic bank's shares and stocks at the financial markets form levels of efficiency by implementing the random walk theory and financial analysis on stock prices and returns. Are shares' prices in the Amman stock exchange for Islamic banks independent, or can investors use historical and previous financial data to expect the following prices in the future? Do Amman stock exchanges for Islamic banks' shares' prices and returns follow financial markets analysis, and the financial market in Jordan is efficient at the strong, semi-strong, or weak form level? Can investors earn normal or abnormal returns by using historical financial data and prices to expect the following prices in the future?

LITERATURE REVIEW

A study by AL-Qudah (2012) tested the efficiency of ASE at the weak form and concluded that ASE was not efficient; they used the correlations to test the study hypotheses and found that the Amman stock exchange was not efficient at strong, semi-strong levels, but it was efficient at the weak form level. In addition, a study by Ananzeh and Eddien (2015) found that the financial market in Jordan was at a weak form level because the shares' prices were not independent of each other. There was no opportunity to use historical prices to expect the following future prices.

According to Malahim and Mattar (2019), ASE is inefficient, and a size anomaly exists. Furthermore, they recommended studying other anomalies in the Amman stock exchange. Matar (2019) found an under-reaction response in the Amman stock exchange, and there was a

possibility to earn superior returns as the prices slowly adjusted to new financial data and information. Based on Mattar (2019), moving from normal to electronic dealing increased the operational efficiency, liquidity in the Amman stock exchange, e and profitability.

In a study about macroeconomic variables (Mawardi, Widiastuti, Sukmaningrum, 2019), the study's primary objective was to illustrate the effects of macroeconomic factors, specifically inflation, the Industrial Production Index, and Indonesian Islamic Stock Rates. The Indonesia Islamic Stock Index is used to calculate it. About 350 Islamic stock price indicators make up the index. Securities are traded on the Indonesia Stock Exchange. The majority of investors think that macroeconomic activities significantly influence stock price volatility. Using monthly usage data from May (2011) to November (2017), the study employed a quantitative multiple linear regression approach. According to research, inflation, prices, financial and banking sector indicators, and interest rates significantly affect Indonesia's legitimate stock index. This is required to evaluate the correlation between macroeconomic factors in the Indonesia financial market.

Utilizing a data set of 2210 observations from 170 banking systems in 12 different countries, there was a dual banking system in the years 2005 through 2017. The study discovered that Islamic banks perform worse than conventional banks in terms of return on equity and liquidity ratios, as well as dividend predictability of current returns. These findings cover the GCC member states and non-crisis situations. As a result, Islamic banking in these nations offers less stock market information than traditional banking, possibly due to the Commission's low level of transparency in those banks' financial models. This implies that market discipline might not be as effective for Islamic banks as for traditional banks. So, it calls for greater promptness. This finding has significant policy implications for the banking system in dual-disability countries (Abedifar, Bouslah, Hashem, and Song, 2020).

According to a study by (Mirzaei, Saad, and Emrouznejad, 2022), Islamic banking stocks have underperformed their conventional counterparts in the early stages of their development. The study also provides insights into the significance of essential bank characteristics in decision-making. In times of crisis, yields on traditional bank stocks in the study included 426 banks from 48 different countries. According to the study, equity returns for Islamic banks have outperformed conventional banks by 10% to 13%. Once some variables at the bank and national economics levels have been considered, this is done, and efficiency

has a unique place. The equity returns of Islamic banks relative to conventional banks during the crisis can be explained by the level of risk-adjusted efficiency of banks before the crisis.

Also, a study by (Huda, Rini, Setianingrum, and Zulihar, 2022) demonstrates that social exclusion during the COVID-19 pandemic is imposed using stock market and economic indicators. The rise in confirmed cases has not significantly impacted the business, evaluating the outcomes and achievement of Islamic stock indices before and after the pandemic. Information from the Indonesia Islamic Equity Index, the Jakarta Islamic Index 70, the Jakarta Islamic Index (JII), and other sources from April 2019 to March 2020 (before COVID-19) and April 2020 to June 2021 (after COVID-19). According to the findings, these indicators outperformed previous years' COVIDs in COVID-19. In ISSI's estimation, there is a statistically significant difference between Covid19 and prior returns. According to the study's findings, Covid-19 affected average returns and reduced risk for all reliable indicators examined during monitoring. Analysts predict that higher prices will increase returns on Shariah-compliant stocks in the Belt and Road Initiative first and then in other markets (Insawan et al., 2022).

MATERIAL AND METHODOLOGY

Sample

Executing financial markets analysis on prominent markets, especially in Jordan, implies testing the efficiency of markets at the strong, semi-strong, or weak forms levels by following the shares' closing prices for Islamic banks and returns in the near future by investigating the correlation between the values of historical and future Islamic banks shares' prices, and time series patterns which can be managed to achieve a superior return which implies controlling the market. The data used in this research were collected from the monthly closing prices for Islamic banks in Jordan of market indexes published in the Amman stock exchange from (2018) to (2022) for the identified Jordan Islamic banks to achieve the most important objectives of this research.

Description of variables

The study contains the following variables:

A) The independent variables will be the end of each month Islamic banks return which was symbolized as r _{it-1}

B) The dependent variable will be the same for each month Islamic banks return, symbolized as r _{it}.

C) The random variables will be the shares that return an error that could not be explained by the previous day's return and symbolized as ε .

D) Abnormal and superior returns will be the expected returns of Islamic banks' financial markets index and deducted from the actual return of the market index, symbolized as U.

E) Real return of the financial market of Islamic banks will be the percentage change of monthly closing prices portfolio= $[(I_2 - I_1) / I_1]*100\%$. To test the hypotheses, the following statistical methods are utilized: i- Correlation tests for a linear relationship between current and historical data prices. The following regression is then estimated as

 $r_{it} = \alpha_{it} + \beta r_{it-1} + \varepsilon$

Where:

 $\alpha_{it:}$ measures the expected return independent of the previous return, and always must be a positive value which measures the relationship between the previous and current prices and return for Islamic banks shares. ϵ : is a random error representing the variability of returns and not related to previous returns. If the correlation coefficient is 0.6, for instance, it means that $0.6^2=0.36$ of the variation in recent stock price for Islamic banks will be explained at 36% of the last month's sock price, while other variables will explain 64%. iii- normality tests: means if the values of stock prices and returns follow a normal distribution, then shares' prices and returns for Islamic banks will be consistent with efficient markets hypotheses and random walk theory, which means that monthly returns for Islamic banks are not predicted and expected by last month prices and returns, and there are no abnormal or superior returns will be gained or accomplished which implies that the efforts of analysts' will yield to almost zero abnormal returns or no chances or opportunities to outperform the market prices. On the other side, if returns are independent and cannot follow a normal distribution, the Amman stock exchange will not support the efficient markets hypotheses.

Empirical Analyses

The study sample consists of the dominant banks in Jordan. Although the dependent variable in this study is monthly stock returns, and it is calculated by using percentage changes in real monthly stock prices, the independent variable is market portfolio returns, measured as percentage changes in the monthly financial indicators of the Amman Stock Exchange. This study uses the capital assets pricing module to estimate normal returns and the deviation between real and expected returns to estimate excess returns. To test hypotheses and compare abnormal returns before and after events, paired sample tests and analysis of variance were

conducted. In addition, the Pearson correlation coefficient using the SPSS software package was used to test the correlation between the two variables at the (0.05) significance level.

	Table. 1 Market Val	lues of Monthly Cl	osings Prices for Is	lamic Banks in Joi	dan
#	Column 1	Column 2	Column 3	Column 4	Column 5 Total
1	0.0223	0.027588	0.12839	0.155228	0.333506
2	0.0414	0.051081	0.151883	0.175667	0.420031
3	0.06112	0.075337	0.176139	0.196769	0.509365
4	0.08154	0.100453	0.201255	0.218621	0.601869
5	0.10108	0.124487	0.225289	0.239531	0.690387
6	0.11708	0.144167	0.244969	0.256652	0.762868
7	0.12794	0.157525	0.258327	0.268273	0.812065
8	0.14324	0.176344	0.277146	0.284646	0.881376
9	0.15878	0.195458	0.29626	0.301275	0.951773
10	0.16962	0.208792	0.309594	0.312875	1.000881
10	0.18292	0.225151	0.325953	0.327108	1.061132
12	0.19338	0.238016	0.338818	0.338301	1.108515
12	0.20756	0.255458	0.35626	0.353475	1.172753
13					
	0.23256	0.286208	0.38701	0.380227	1.286005
15	0.23898	0.294104	0.394906	0.387097	1.315087
16	0.25116	0.309086	0.409888	0.400131	1.370265
17	0.26648	0.327929	0.428731	0.416525	1.439665
18	0.27936	0.343772	0.444574	0.430308	1.498014
19	0.2989	0.367806	0.468608	0.451218	1.586532
20	0.31514	0.387781	0.488583	0.468596	1.6601
21	0.3331	0.409872	0.510674	0.487815	1.741461
22	0.3331	0.409872	0.510674	0.487815	1.741461
23	0.11708	0.144167	0.244969	0.256652	0.762868
24	0.12794	0.157525	0.258327	0.268273	0.812065
25	0.14324	0.176344	0.277146	0.284646	0.881376
26	0.15878	0.195458	0.29626	0.301275	0.951773
27	0.16962	0.208792	0.309594	0.312875	1.000881
28	0.18292	0.225151	0.325953	0.327108	1.061132
29	0.19338	0.238016	0.338818	0.338301	1.108515
30	0.20756	0.255458	0.35626	0.353475	1.172753
31	0.23256	0.286208	0.38701	0.380227	1.286005
32	0.23898	0.294104	0.394906	0.387097	1.315087
33	0.25116	0.309086	0.409888	0.400131	1.370265
34	0.26648	0.327929	0.428731	0.416525	1.439665
35	0.27936	0.343772	0.444574	0.430308	1.498014
36	0.29891	0.367806	0.468608	0.451218	1.586542
37	0.11708	0.144167	0.244969	0.256652	0.762868
38	0.12794	0.157525	0.258327	0.268273	0.812065
39	0.14324	0.176344	0.277146	0.284646	0.881376
40	0.15878	0.195458	0.29626	0.301275	0.951773
41	0.16962	0.208793	0.309594	0.312875	1.000882
42	0.18292	0.225151	0.325953	0.327108	1.061132
43	0.19338	0.238016	0.338818	0.338301	1.108515
44	0.20756	0.255458	0.35626	0.353475	1.172753
45	0.23256	0.286208	0.38701	0.380227	1.286005
46	0.23290	0.294104	0.394906	0.387097	1.315087
40	0.24785	0.271883	0.381259	0.384004	1.284996
47	0.22621	0.266034	0.343967	0.397965	1.234176
48 49	0.2042	0.256133	0.3236605	0.377705	1.1616985
49 50	0.2042	0.236135	0.33377	0.348005	1.146399
50 51	0.2175	0.247124	0.3807293		
				0.348065	1.2303173
52	0.21656	0.225964	0.3181787	0.348005	1.1087077

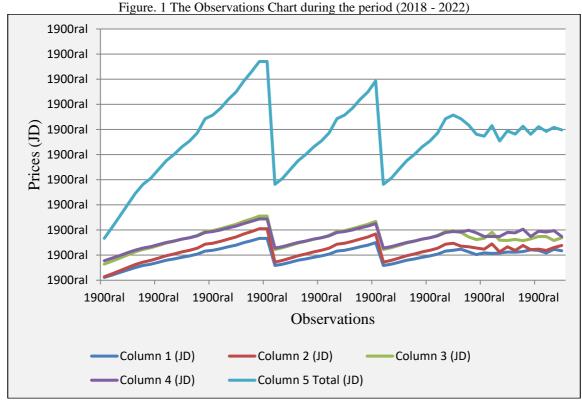
Intern. Journal of Profess. Bus. Review. | Miami, v. 8 | n. 9 | p. 01-15 | e02456 | 2023.

Airout, R. M., Malahim, S. S., Khatib, A. Y. A. (2023)

Executing Financial Markets Analysis on Prominent Markets: A Case Study of (ASE) Amman Stock Exchange for Islamic Banks Shares in Jordan

53	0.22446	0.266943	0.3159714	0.381514	1.1888884
54	0.22351	0.237126	0.3254282	0.377704	1.1637682
55	0.22776	0.276161	0.3148771	0.407102	1.2259001
56	0.24262	0.242868	0.328459	0.348005	1.161952
57	0.23671	0.247493	0.347927	0.389526	1.221656
58	0.21656	0.236928	0.348095	0.383787	1.18537
59	0.246322	0.260455	0.315782	0.394687	1.217246
60	0.23437	0.276163	0.337478	0.348021	1.196032

Source: prepared by the researchers



Source: prepared by the researchers

Figure 1 and Table 1 show the market index of monthly closing prices for Islamic banks in Jordan for the time series of the stock price index and a lag in the series from column 1 to column 5. Moreover, table 1 also shows the values between the monthly price index and the previous day's price index. In addition, this table clarifies that. It indicates that historical and previous prices can explain forward prices. It returns that the stock exchange indicates or supports neither random theory nor any form of levels of financial markets efficiency.

Hypotheses of the Research

The following three major hypotheses will be tested in this research.

1- It is expected that stock prices for Islamic banks in the Amman Stock Exchange are serially independent, and investors cannot use historical financial data and information to predict future prices.

2- It is expected that Investors could not use post and current prices to predict future prices.

3- It is expected that the summation of accumulative abnormal returns is equal to zero or almost zero.

TESTING THE HYPOTHESES

Testing the First Hypothesis

 $H_{0.1}$: It is expected that stock prices for Islamic banks in the Amman stock exchange are serially independent, and investors cannot use historical financial data and information to predict future prices. This hypothesis was tested using a one-sample t-test, and the results are as follows:

Table. 2 Testing of the First Hypothesis								
Mean t _{calculated} t _{tabulated} R R square Sig. p. Value Result of H ₀								
1.1211	1.1211 4.657 1.9817 0.634 0.4019 0.0412 0.05 Rejection							
Source: prepared by the researchers								

Table 2 clarifies that historical data and prices and returns can explain current prices and returns, the correlation coefficient between current prices and historical prices amounted to 0.634, and the determinant coefficient is equal to $R^2 = 0.4019$ which means that historical price and returns explained 40.19% of the variation of current prices and returns. Also, the significance level is equal to 0.0412, which is less than 0.05 so, It was known that (t calculated = 4.657) is less than (t tabulated = 1.9817). The result of testing this hypothesis is rejected, and the researchers can conclude that there is no significant correlation between shares' current returns and historical returns. The researchers cannot accept the null hypothesis, which implied that the results supported neither the random walk theory nor a weak efficiency level.

Testing the Second Hypothesis

 $H_{0.2}$: It is expected that Investors could not use post-current prices to predict the next future prices for Islamic banks in the Amman stock exchange.

This hypothesis (hypothesis number 2) is tested by using paired sample (t) test, which compares the return of investors represented by investing in Islamic bank's shares in the Amman

stock exchange market in Jordan as an indicator of normal shares' returns. The results of the testing of the hypothesis were as follows:

Table. 3 Testing of the Second hypothesis							
Mean $t_{calculate}$ $t_{tabulated}$ R R square Sig. p. Value Result of H ₀							
0.071573	5.4589	1.9817	0.6128	0.3755	0.0367	0.05	Rejection
Source: prepared by the researchers							

Table 3 is also clarifying that the investors in Islamic bank's shares performance had outperformed the market performance with a percentage of 7.1573%. If the transaction costs in Jordanian financial markets are between 3% - 5%, then there is a positive abnormal return in favor of investors.

As clarified in Table 3, the correlation coefficient equals 61.28%, and the coefficient of variation equals 37.55%, which means that 37.55% of the abnormal return earned by investors had explained the utilizing and using of the historical data and prices to predict the following future prices and returns. Moreover, (t) calculated is 5.4589, more than (t) tabulated, and the significance level is less than 0.05. All the numbers mean to reject the null hypothesis and accept the alternative hypothesis, which considers that investors can earn abnormal returns by using historical prices to predict future prices.

Testing the Third Hypothesis

 $H_{0.3}$: It is expected that the summation of accumulative abnormal returns is equal to zero or almost zero.

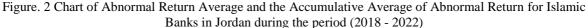
#	Average Abnormal Return (AAR)	Accumulative Average Abnormal Return (AAAR)
1	0.152761	
2	0.15262	0.305381
3	0.154803	0.460184
4	0.154623	0.614807
5	0.155571	0.770378
6	0.15431	0.924688
7	0.153843	1.078531
8	0.152198	1.230729
9	0.153286	1.384015
10	0.153113	1.537128
11	0.152159	1.689287
12	0.15246	1.841747
13	0.152364	1.994111
14	0.153273	2.147384
15	0.156409	2.303793
16	0.150879	2.454672
17	0.152723	2.607395
1/	0.132725	2.007393

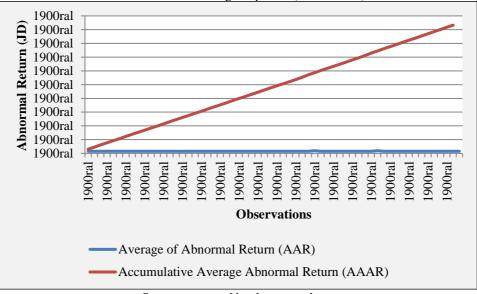
Table. 4 Average of Abnormal Return and the Accumulative Average of Abnormal Return for Islamic Banks in Iordan

Airout, R. M., Malahim, S. S., Khatib, A. Y. A. (2023) Executing Financial Markets Analysis on Prominent Markets: A Case Study of (ASE) Amman Stock Exchange for Islamic **Banks Shares in Jordan**

18	0.15351	2.760905
19	0.152614	2.913519
20	0.154303	3.067822
21	0.154028	3.22185
22	0.153875	3.375725
23	0.152825	3.52855
24	0.156543	3.685093
25	0.154092	3.839185
26	0.152633	3.991818
27	0.1537722	4.1455902
28	0.152543	4.2981332
29	0.154105	4.4522382
30	0.154815	4.6070532
31	0.153555	4.7606082
32	0.152319	4.9129272
33	0.153119	5.0660462
34	0.153407	5.2194532
35	0.152972	5.3724252
36	0.155782	5.5282072
37	0.193721	5.7219282
38	0.152799	5.8747272
39	0.152646	6.0273732
40	0.153075	6.1804482
41	0.153446	6.3338942
42	0.153574	6.4874682
43	0.154591	6.6420592
44	0.158822	6.8008812
45	0.152972	6.9538532
46	0.155782	7.1096352
47	0.193721	7.3033562
48	0.15358	7.4569362
49	0.154201	7.6111372
50	0.155312	7.7664492
51	0.155432	7.9218812
52	0.155453	8.0773342
53	0.155465	8.2327992
54	0.155766	8.3885652
55	0.155994	8.5445592
56	0.156026	8.7005852
57	0.156105	8.8566902
58	0.156291	9.0129812
59	0.157101	9.1700822
60	0.158184	9.3282662

Source: prepared by the researchers





Source: prepared by the researchers

Figure 2 and Table 4 represent the average of abnormal return (AAR) and the accumulative average of abnormal return (AAAR) which the investors earned in the Jordanian financial market (Amman Stock Exchange) during the research period and the possibility of making profits in investing in the financial market by investors in Islamic banks.

Table. 5 Testing of the Third Hypothesis									
Mean	Iean t calculated t tabulated R R square Sig. p. Value Result of H_o								
4.7897	3.176	1.9817	0.791	0.6256	0.0253	0.05	Rejection		
0.1554									

Source: prepared by the researchers

Table 5 shows the results of testing the third hypothesis as the following the (t) calculated is equal to 3.176, which is more than the (t) tabulated, which is equal to 1.917 with a significance level of 0.0253. The value of (R) equals 0.791, and (R square) equals 0.6256, meaning that historical data prices and returns explained 62.56% of abnormal returns earned by investors. Finally, the correlation coefficient between these returns was equal to (R=0.791), and all the values above indicate that the null hypothesis is rejected and the alternative hypothesis is accepted, which means that the summation of accumulative abnormal returns is not equal to zero or almost zero.

FINDING AND RESULTS

According to the previous analyses of the financial data, values, and testing of the hypotheses. The following findings and results were reached:

1- The prices and returns of Islamic bank's shares in the Amman stock exchange were not supporting the financial analysis for random walk theory for the financial market in Jordan for Islamic bank's shares. They could have been more efficient at the weak-form level but efficient at strong and semi-strong forms.

2- Investors can utilize current prices to predict and expect future prices for shares.

3- There was a significant abnormal return accomplished by investors during the research period in the financial market in Jordan.

CONCLUSIONS AND RECOMMENDATIONS

Finally, after analyzing the findings of this research, the researchers recommend the following points.

1. Analyzing Islamic banks' share prices and comparing them with the commercial bank's shares prices at strong, semi-strong, and weak forms levels.

2. Execute the financial market analyses on other prominent markets to compare the financial markets.

3. Analyzing the Jordanian financial market (Amman Stock Exchange ASE) at strong, semi-strong, g, and weak forms levels using Islamic bank's shares' prices to determine the efficiency of the banking sector.

These results are similar to studies and research about the weak level form for stock exchanges such as the Karachi stock exchange (KSE), and other levels that were not applicable, such as semi-strong levels and strong levels in stock exchange markets forms (Gough, Malik, 2005)

REFERENCES

Abedifar, P., Bouslah, K., Hashem, S. Q. and Song, L. (2020), "How informative are stock prices of Islamic banks?", Journal of International Financial Markets, Institutions and Money p. 101203. Available at SSRN: https://ssrn.com/abstract=3301964 or http://dx.doi.org/10.2139/ssrn.3301964

Al-Hamdooni, E. K. F. (2023). The Relationship Between the Random Walk of the Returns of Financial Market Indices and Market Efficiency: An Analytical Study of the Indicators of a Sample of Arab Financial Markets. *International Journal of Professional Business Review*, 8(3), e0663. <u>https://doi.org/10.26668/businessreview/2023.v8i3.663</u>

AL-Qudah, K., Alrabadi. D. W., (2012), "Calendar Anomalies: The Case of Amman Stock Exchange", International Journal of Business and Management, Volume: 7, No. 24, pages: 120-121

Ananzeh, I.; Eddien N., (2015), "Weak form efficiency of the Amman stock exchange: An empirical analysis (2000-2013)", International Journal of Business and Management, Volume 11, No. 1, pages: 173–180.

Dahmash, F. N., (2013), "Abnormal Earnings Persistence in the Jordanian Context", International Journal of Business and Management, Volume 8, and Number: 15, pages: 33–43.

Gough, Orla; Malik, Ali, (2005), "Random Walk in Emerging Markets: a Case Study of the Karachi Stock Exchange (KSE)", Risk Management in Emerging Markets, Centre for the Study of Emerging Markets Series. Palgrave Macmillan, London. https://doi.org/10.1057/9780230596368_5

Huda, N., Rini, N., Setianingrum, A., & Zulihar, Z., (2022), "Is There Any Effect of Covid-19 on the Performance of the Sharia Stock Index?", Share: Jurnal Ekonomi dan Keuangan Islam, Volume: 11, Number: 1, pages: 171-185, doi: <u>http://dx.doi.org/10.22373/share.v11i1.10726</u>

Insawan, H., Abdulahanaa, Karyono, O., & Farida , I. (2022). The Covid-19 Pandemic and its Impact on the Sharia Stock Business Portfolio Yields in Indonesia. *International Journal of Professional Business Review*, 7(6), e0941. <u>https://doi.org/10.26668/businessreview/2022.v7i6.e941</u>

Malahim, S. S. (2023). The Relationship Between the Risk Disclosure and Risk ManagementCommittee on Banks Value: Empirical Evidence From Jordan. International Journal ofProfessionalBusinessReview,8(3),e0572.https://doi.org/10.26668/businessreview/2023.v8i3.572

Malahim, S. S.; Mattar, M. S., (2019), "The Size Effect Anomaly: The Case of Amman Stock Exchange", Academy of Accounting and Financial Studies Journal, Volume 23, No. 6, pages: 1-8.

Mattar, M. S., (2019), "Dividend Announcement and Abnormal Return: An Applied Study on Banking Shareholding Firms in Amman Bourse". Research Journal of Finance and Accounting, Volume: 10, No. 18, pages: 18-22.

Mawardi, Imron; Widiastuti, Tika; Sukmaningrum, Puji Sucia, (2019), "The Impact of Macroeconomic on Islamic Stock Prices Evidence from Indonesia", in the 2nd International Conference on Islamic Economics, Business, and Philanthropy (ICIEBP) Theme: "Sustainability and Socio-Economic Growth", KnE Social Sciences, pages 499–509, DOI 10.18502/kss.v3i13.4226

Mirzaei A, Saad M, Emrouznejad A. (2022), "Bank stock performance during the COVID-19 crisis: Does efficiency explain why Islamic banks fared relatively better?", Ann Oper Res.2022 Mar 17:1-39. Doi: 10.1007/s10479-022-04600-y. Epub ahead of print, PMID: 35313612; PMCID: PMC8927751.

Omet, Ghassan, (2002), "The Jordanian Stock Exchange Prospects and challenges", Derasat Journal, University of Jordan, and Volume: 26 No. 1, pages: 132-139.