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Vol. 13, No. 2, 2023, Pg. 267 - 285

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The Interactive Relationship between Investment Policies and the Quality of Corporate Profits

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Abstract

Financial markets are a major and effective criterion in the field of economic integration of developed countries, as they are the most important tool for linking the economies of countries with each other and thus a mirror of the extent of success of those countries in the various fields of investment and development. As long as the main objective of modern financial management is to maximize the market value of the company by adopting different investment strategies and policies, attention to the type of investment policy is extremely important in determining the quality and quality of the profits of securities traded in the financial market. The (Johanson) models of cointegration were used to show the nature of integration and direction between the study variables, as well as the (Granger) model to clarify causality. The study concluded that investment policy is a major and decisive player in determining the quality of dividends in companies. Investment policy (X) and after the profitability of the banking sector (Y1), which means that there is a long-term equilibrium relationship between those variables.

Keywords: Investment Policy, Profits, Financial Market, Stocks, Bonds.

Introduction

The financial sector plays a crucial role in the development of the Iraqi economy, given that Iraq is one of the developing countries that began to rely on the financial markets to meet its financial needs and now uses them as a basic pillar of the national economy as a whole. The integration of global financial markets in recent years has had the effect of raising the level of competition between various sectors, with the development of means of communication and information technology that helped in developing the areas of corporate finance and opening new horizons in building their financial centers, and with the entry of financial markets into a new era of innovation in the financial field , which led to the emergence of a new financial philosophy based on financial concepts that advance the financial affairs of the country. Companies listed on the stock market are the primary material for financial market activity. Consequently, any deterioration in the financial positions of companies will reflect negatively on the reality of the financial market as a whole. Hence, it is necessary to study the investment policies adopted by the listed companies for the purpose of evaluating them and improving their performance in support of the national economy. Investment policies are one of the

Vol. 13, No. 2, 2023, E-ISSN: 2225-8329 © 2023 HRMARS

most important modern innovations in financial thinking based on strategic planning and are adopted by institutions at all levels, due to their importance in shaping the future of companies and institutions and in hedging them from the risks that surround them. Large financial operations suffered large losses due to fluctuations in the prices of their financial assets, which made them exposed to great risks as a result of these fluctuations. The profitability of its shares had a negative impact on building investment decisions.

The First Topic / study Methodology The Study Problem

The investment policy of any company or organization is its beating heart, because it is through the investment policy that a future roadmap can be built, through which companies can proceed to achieve their future goals. In view of the active role played by the investment policy, the study problem can be crystallized by the following question: "Can the investment policies in place affect the profitability of local shares of companies listed on the Iraq Stock Exchange?"

Second: The Importance of the Study

The importance of the study is summarized by highlighting the risks associated with and associated with fluctuations in the prices of companies listed on the stock market as a result of pursuing investment policies and their repercussions in the stock market, which are represented by the profits of companies listed on the stock market. And the effect of this on the financial centers of depositors and investors dealing in those markets, which in turn affects the national economy as a whole. From this standpoint, highlighting the associated effects and presenting the alternatives available for the purpose of treating them helps to draw attention to the surrounding dangers before they occur, and it will benefit all users of companies' financial statements, whether investors in the financial assets of these companies or dealers in the stock market, which enhances confidence in it and the resulting decisions that serve the financial sector and the national economy.

Purpose of the Study

The objectives of the study can be summarized as follows

- .1Testing the capabilities of the companies listed on the Iraq Stock Exchange in building their policies. investment by analyzing the extent to which these policies are affected by the level of profits achieved for its shareholders.
- ·2Helping investors in companies listed on the Iraq Stock Exchange to follow scientific and practical methods in determining the investment policy that can help them hedge against damages resulting from price fluctuations of listed companies.
- 3. Finding alternatives to the investment policies used to reduce the effects of stock price fluctuations and what affects the level of profits achieved.

Study Limits

1. Temporal limits

The research was conducted for a period of time extending from (2005–2016), i.e., an analysis of the profitability of shares with the financial statements for twelve consecutive years for some companies listed on the Iraq Stock Exchange.

2. Spatial boundaries:

Vol. 13, No. 2, 2023, E-ISSN: 2225-8329 © 2023 HRMARS

The study was conducted on 20 companies representing four sectors listed in the Iraq Stock Exchange, namely banks, investment, insurance, and hotels, as a sample of the total eight sectors listed in the market, representing 50% of the sectors listed in the Iraq Stock Exchange.

Methods of Data Collection

1. The theoretical aspect is

The research in enriching the theoretical side used the contributions of writers and researchers, which were collected from various sources represented by scientific references from books, magazines, scientific periodicals, research, and studies related to both Arabic and English, as well as using the international information network (the Internet) and what it contains of books and electronic research rich in information and from the most prestigious international libraries and universities.

2. The application side

Reliance was made on the special bulletins of the Iraq Stock Exchange, in addition to the financial statements of the sectors, the sample of the study, for the purpose of carrying out the necessary applications to reach the goal of the study, as well as the quarterly and annual bulletins of the market for the period from 2005–2016, reliance was made on the special bulletins of the Iraq Stock Exchange, in addition to the financial statements of the sectors and the sample of the study.

The Second Topic / Intellectual Pillars of the Study Variables I: Intellectual proposals related to investment policies

- 1. The concept of the investment policy: It is the investment policy as that flexible tool through which it is possible to communicate the challenges that countries face in seeking to achieve development, and to encourage policy-makers to ask appropriate questions about their institutions and to set priorities for developing and developing policies and assessing the progress achieved, by strengthening the policy formulation process. And implementing it at all government levels as part of the national development strategy, creating an attractive environment for all investors, and enhancing the benefits of investment in society (Mishkin, 2007).
- 2. Functions of investment policies: Investment policies in profit-oriented companies play a prominent role in obtaining the acceptable and expected return that guarantees the continuity and permanence of the company in the face of competition and providing the best financial services to shareholders and its dealers, as well as providing the necessary liquidity that helps companies secure their current business requirements and planning. For the future, as well as fulfilling its obligations towards companies and others or shareholders, as well as providing and maintaining capital (Brigham, 2017)
- 3. Types of investment policies: It is possible to differentiate between three main types of investment policies in working capital, which are the comfortable investment policy, the restricted investment policy, and the balanced investment policy.
- 4. The role of investment policies in achieving the company's goals
- 5. Investment Policy Responsibility (Jaffe, 2013)

Stock Market Indices

Weighted index (weighted) by price: The process of calculating this index can be done by collecting the prices of the shares that make up the index and then dividing it by the number

Vol. 13, No. 2, 2023, E-ISSN: 2225-8329 © 2023 HRMARS

of shares. This necessitates when evaluating the performance of the index, more weight must be given to the higher-priced stocks. Therefore, stocks with a higher price will be the main driver of the index more than a stock that has a low price.

Weighted index (weighted) by value: This index is calculated through the process of multiplying the market price of all the shares of the companies that make up this index by the number of shares traded for these companies, and then the process of summation of the market values of all companies that make up this index takes place. Thus, this method gives more importance to companies with higher market value. And that the changes in the level of the index may be a result of a change in price or a result of a change in the quantity of shares traded.

Indicator of equal weight: This method is based on placing an equal weight for each return, in contrast to the two previous methods, which have a higher weight either for the higher price or the higher market value. Among the most famous indicators used for this method is the value line indicator, and its mathematical formula is:

$$1 + rG = [(1 + r1)(1 + r2].....(1 + rn) 1/n$$

rG = geometric mean

r = Earnings per share in the index

n = number of shares in the index

Global Stock Market Indexes

Dow Jones Industrial Average - United States of America

This consists of thirty shares of the largest and most reputable companies in the USA by capitalization that are traded on the New York Stock Exchange. It is a price-weighted indicator, and accordingly, any relative change in this index reflects the relative change in the average price of (30) shares that make up the index. Therefore, it measures the relative change in the Dow Jones Industrial Average return on the portfolio invested in each share of this index (Fang, 2014).

Big Market Index - United States of America

This index consists of 20 stocks that have been selected in a way that the movement of this index is somewhat similar to that of the Dow Jones Industrial Average, which consists of 30 stocks, as we explained previously. In fact, most of the major market index stocks are in the Dow Jones Industrial Average. The large market index is calculated by adding the prices of the twenty stocks that make up this index and dividing them by the rate of the large market index. In the same way, the Dow Jones Industrial Average index is calculated, whereby the prices of the thirty shares that make up the index are summed up, and then divided by the index rate. The average is used in both indices in order to adjust it due to the splitting cases that happen to the shares as well as the merger and dividend cases that can be obtained in the index. The equation that is used to calculate these two indicators is:

Index =
$$\frac{\sum_{i=1}^{n} pi}{Divisor}$$

Pi = share price
Divisor = rate

And because the two indices are based on a number of monetary amounts resulting from the collection of all prices in the index, they do not reflect the relative change in the price of any share, so changes in share prices have the same effect on the index.

Vol. 13, No. 2, 2023, E-ISSN: 2225-8329 © 2023 HRMARS

In order for the index to accurately reflect the price level, the exchange of one company's share for another company's share should not change the market index, and this principle should be applied in cases of dividend per share, as well as the share split. Accordingly, the rate must be changed to match the change in shares or in the dividend or halving profits. Here, a new rate must be extracted according to the following equation:

 $ND = \frac{NSOP}{IVBS}$

ND = New Rate

NSOP = New Total Price

IVBS = The value of the index before the exchange of a stock

In order to be able to extract the new rate, we calculate the new total of prices that result from replacing one company's share with another, and then divide it by the original value of the index (Al-Amiri, 2013: 562).

C- Nikkei 225 Index, Japan

This index is considered one of the most important and most famous Asian indicators for the financial markets at all, as it consists of 200 companies listed on the Tokyo Stock Exchange and has been calculated in the (Naihn Casa Yachimon) newspaper since 1971 and it is a weighted average of the stock price in Japanese yen and its components are adjusted once annually (Svensson, 2008).

D- The Financial Times Index

This index was established in 1983 and consists of 100 shares of the shares listed on the stock exchange, and this index is a weighted index of the market value of the companies it represents, as it gives companies a number that determines their relation to the market (Willoughby, 2016)

C- Standard & Poor's Index

This index is considered as an amendment to the (Dow Jones Industrial Average) index because this index is wider because it includes 500 companies and this is weighted by the market value and this index is calculated by calculating the total market value of 500 companies in the previous and next day and the difference between them is a change in the index If there is a certain increase in the ratio, then it is the rate of return for investors who own portfolios consisting of the shares of the 500 companies and weighted by market value (Bodie, 2018)

H- New York Stock Exchange Index - United States of America

The New York Stock Exchange represents the most important international financial market and the largest in America and the world, as it dates back to 1817 and the companies listed on the New York Stock Exchange are considered one of the largest companies operating in the global financial and business market. The market value of the companies listed in this market is (16) trillion US dollars, and the number of companies listed in this market until 2014 is (1900) companies, including 1500 American. Among the most important companies listed in this market are

Bank of Amerecia

Ford Motor co.

Genral Electric co.

Twitter Inc

Vol. 13, No. 2, 2023, E-ISSN: 2225-8329 © 2023 HRMARS

G- Nasdaq index - NASDAQ United States of America

Name NASDAQ (National Association of Security Dealers Automated Quotation)

It is a large index and contains (400) shares being traded on the Nasdaq National Market. In 1971, this index was used with a nominal value of 100 points, and this index is used in the parallel financial market (Svensson, 2008).

Fifth: dividends

Share: It is a security of equal value that is traded either directly or through the secondary market (the stock exchange), and the share represents basic ownership in the company, and the company becomes owned by its shareholders, and the number of shareholders in one company may reach hundreds or thousands of people, as each of them owns a share In the company in proportion to the shares he owns. A distinction can be made between two types of ordinary and preferred shares. The following is an explanation for each of these two types of shares.

1- Ordinary shares: It is a title deed owned by shareholders and does not give its holder any preferential advantage over other shareholders, because all holders of ordinary shares enjoy the same rights and among these rights, obtain profits during the life of the facility, the right to choose the board of directors, and the right to vote. Ordinary shares are issued in more than one class and with different privileges. The first category gets higher profits, but it must waive its right to vote. The second category gets less profits but enjoys the right to vote. It is worth noting that both classes are entitled to obtain profits in the following forms:

A- Dividends distributed in cash: In this type of distributed profits, the shareholder receives his profits in cash. If we assume that an ordinary shareholder owns (1000) shares and that the dividend per share is (\$ 2), then the dividends that this shareholder will receive are (\$ 2000). B- Dividends distributed in the form of shares: In this type of profit distribution, they are distributed in the form of shares as profits for ordinary shareholders. For example, if the percentage of profits is distributed as shares 2% and the shareholder has (1000) shares, this means that the shareholder will get (20) shares as dividends.

- C- Distributed profits in the form of properties: This type of dividend is in the form of bonds or preferred or ordinary shares in other companies, and in some cases the profits are in the form of machines and equipment (Brigham, 2017).
- 2- Preferred shares: They are shares that are among the equity, but that they have common characteristics between bonds and ordinary shares. They carry a fixed and fixed return, such as bonds, and their owner does not have the right to vote, and they can be called or converted into ordinary shares. On the other hand, it shares with ordinary shares that it does not carry a maturity date unless there is a condition to do
- 1- Revenue return: It is the return that is distributed to shareholders through the company's board announcing the distribution of profits at a specific time and that the amount of money distributed can be evaluated as a rate of return on the value of the investment and this rate is called revenue (Duchac, 2007). The high revenue return is one of the important factors in helping shareholders to make decisions to buy and sell ordinary shares in the stock market, as the good impression that shareholders perceive about the company has one of the reasons for the high value

 $R_e = \frac{D1}{P0}$

Re = Earnings per share

D₁ = Share of dividends

 P_0 = Share price at the beginning of the period

Vol. 13, No. 2, 2023, E-ISSN: 2225-8329 © 2023 HRMARS

2- Capital return: The capital return of ordinary shares is defined as the increase in the capital value of these shares and the capital return is related to the market value of the common share, and the market value of ordinary shares is subject to changes in supply and demand in the stock market (Moyer, 2012).

Also, the market value of shares is affected by a set of factors, the most important of which is the distribution of profits and timing of profits, and when profits are achieved in companies, they can distribute part of their profits to shareholders either in the form of dividends or retaining profits and reinvesting them with profitable investments and this is reflected in the increase in the share price (Fabozzi, 2003). He adds Ehrhardt (2007) that the values of common stocks are affected by several factors, including inflation, economic expectations, interest rates and changing investor priorities. There are also many investors who rely on the opinions of specialized analysts to estimate how much the stock is worth in terms of value, depending on a group Among the factors that affect the share price, the capital return per share is calculated through the following equation:

$$R = \frac{P1 - P0}{P0}$$

R = Capital return per share

 P_1 = Share price at the end of the period

 P_0 = share price at the beginning of the period

The Third Topic

The Application Side of the Study Variables

Introduction

The variables of the study are not stable in their levels, but stable in their first differences, they are integrated of the first degree, and this means that the time series of the study variables represented by (investment policy for companies (X) and the profitability of local stocks for companies listed in the Iraq Stock Exchange for the sectors (banks Y1, investment) Y2, insurance, Y3, hotels Y4) which have a balanced relationship in the long term even if there is a difference in the short term on the variables of the study, they will be towards equilibrium in the long term. Impact between study variables.

Vol. 13, No. 2, 2023, E-ISSN: 2225-8329 © 2023 HRMARS

Table (3)

Data approved in the application side of the study

Sector	Year	earnings per share		fixed assets	Current assets
	2005	3.04	cautious	4332732572	77517662873
	2006	3.54	cautious	4882666891	97588433987
	2007	1.12	cautious	4982666676	1.12E+11
	2008	0.00	cautious	6152122110	2.08833E+11
	2009	2.67	cautious	5888331324	2.00482E+11
Danks	2010	5.15	cautious	6667556334	1.86332E+11
Banks	2011	0.00	cautious	4592696526	1.03098E+11
	2012	4.11	cautious	5175626904	1.29793E+11
	2013	4.32	cautious	5281626677	1.4896E+11
	2014	3.87	cautious	6521249437	2.77748E+11
	2015	4.90	cautious	6241631203	2.66641E+11
	2016	7.02	cautious	7067609714	2.47822E+11
	2005	3.40	cautious	3354770000	33843987200
	2006	3.96	cautious	6876122453	2.65775E+11
	2007	1.25	cautious	6834765498	3.00232E+11
	2008	2.20	cautious	5227657590	4.65877E+11
	2009	2.99	cautious	5419000436	4.00436E+11
1	2010	5.77	cautious	4992100987	4.66007E+11
Investment	2011	1.11	cautious	3596313440	40274344768
	2012	4.60	cautious	7371203270	3.16273E+11
	2013	4.84	cautious	7326868614	3.57276E+11
	2014	4.33	cautious	5604048936	5.54393E+11
	2015	5.49	cautious	5809168467	4.76519E+11
	2016	7.86	cautious	5351532258	5.54548E+11
	2005	3.00	cautious	18945667	1154743908
	2006	3.49	cautious	14908122	1178290877
	2007	1.10	cautious	9500121	1023444087
	2008	1.94	cautious	5786122	1233543739
	2009	2.63	cautious	723511	1321630477
Incurance	2010	5.08	cautious	917100	1288022975
Insurance	2011	0.98	cautious	20844022.83	1262366040
	2012	4.05	cautious	16401915.82	1288107587
	2013	4.26	cautious	10452033.12	1118829076
	2014	3.81	cautious	6365891.424	1348510015
	2015	4.83	cautious	796006.8022	1444806437
	2016	6.92	cautious	1008993.42	1408066716
Hotels	2005	1.35	cautious	82765123	3162667890

Vol. 13, No. 2, 2023, E-ISSN: 2225-8329 © 2023 HRMARS

2006	1.57	cautious	198000231	2566922412
2007	0.50	cautious	99100354	1411333741
2008	0.87	cautious	908111664	412754233
2009	1.18	cautious	77332912	1578099777
2010	2.28	cautious	65112889	1622566233
2011	0.44	cautious	89220802.59	3225921248
2012	1.82	cautious	213444249	2618260860
2013	1.92	cautious	106830181.6	1439560416
2014	1.72	cautious	978944373.8	421009317.7
2015	2.17	cautious	83364879.14	1609661773
2016	3.11	cautious	70191694.34	1655017558

First: - The Johansen test of mutual complementarity. Table (4)

The Johansen test of the mutual complementarity of investment policy and profitability of the banking sector stocks

Eigenvalue	Critical value 95%	πtrace	alternative hypothesis	Null hypothesis	X&Y1	Impact
0.24	10.44	26.01	r =1	r = 0	Annual	test
0.11	4.12	2,97	r =2	r ≤ 1	data	trace
Eigenvalue	Critical value 95%	πтах	alternative hypothesis	Null hypothesis	X&Y1	Great value
0.04	10.44	19.65	r =1	r = 0	Annual	test max
0.09	4.12	2.97	r =2	r ≤ 1	data	

X = Investment Policy

Y1 = Profitability of domestic stocks for the banking sector

Through Table (2) the following became clear

- 1. Results of the impact test (trace) and the maximum value test (max) to analyze the (annual) relationship between investment policy (X) and the profitability of shares for the banking sector in the Iraq Stock Exchange (Y1). The results indicate that the calculated value of the trace of the annual data was (26.01), and it exceeds the critical values (10.44) at a significant level (5%), which indicates the rejection of the null hypothesis, which states that there is no vector of co-integration, and the acceptance of Alternative hypothesis which states that there are a number of covariant vectors greater than zero. Also, the null hypothesis cannot be rejected at a significant level (5%) for the approved annual data. Thus, there is no second vector for cointegration, as the results show that the calculated value of the impact test (2.97) is smaller than the critical value (4.12) at a significant level (5%).
- 2. The results of the maximum value test (max) were identical to the results of the impact test, in the presence of a single vector for the common complementarity between investment policy (X) and the profitability of local stocks for the banking sector in the Iraq Stock Exchange (Y1). As the results in Table (1) show that the calculated values of the likelihood rate, for the

Vol. 13, No. 2, 2023, E-ISSN: 2225-8329 © 2023 HRMARS

annual data, were (19.65), greater than the critical values (10.44) at the level of significance (5%), which indicates the rejection of the null hypothesis, which states that there is no That is, a vector of cointegration and acceptance of the alternative hypothesis which states that there is a single vector of cointegration.

3. The results showed that the computed values of the maximum value test were (2.97) less than the critical value (4.12) at the level of significance (5%), which means accepting the null hypothesis that states that there is no second vector for cointegration. This means that there is a long-term equilibrium relationship (one-way) between the investment policy (X) and the profitability of local stocks for the banking sector in the Iraq Stock Exchange (Y1). This means that despite the presence of an imbalance in the short term, the two variables are moving towards equilibrium in the long term.

Table (5)

Johanssen test of mutual complementarity between investment policy and profitability of investment stocks

Eigenvalue	Critical value 95%	πtrace	alternative hypothesis	Null hypothesis	X&Y1	Impact
0.09	7.22	21.09	r =1	r = 0	Annual	test
0.13	5.19	1.42	r =2	r ≤ 1	data	trace
Eigenvalue	Critical value 95%	πтах	alternative hypothesis	Null hypothesis	X&Y1	Great value
0.07	6.48	15.13	r =1	r = 0	Annual	test max
0.19	3.77	1.99	r =2	r ≤ 1	data	

X = Investment Policy

Y2 = Profitability of investment stocks

Through Table (3) the following became clear

- 1. Results of the impact test (trace) and the maximum value test (max) to analyze the (annual) relationship between investment policy (X) and the profitability of local stocks for the investment sector in the Iraq Stock Exchange (Y2). The results indicate that the calculated value of the trace of the annual data was (21.09), which exceeds the critical values (7.22) at a significant level (5%), which indicates the rejection of the null hypothesis, which states that there is no vector of co-integration, and the acceptance of Alternative hypothesis which states that there are a number of covariant vectors greater than zero. Also, the null hypothesis cannot be rejected at a significant level (5%) for the data. Thus, there is no second vector for cointegration, as the results show that the calculated value of the impact test (1.42) is smaller than the critical value (5.19) at the level of significance (5%).
- 2. The results of the maximum value test (max) were identical to the results of the impact test, in the presence of a single vector for the common complementarity between investment policy (X) and the profitability of local stocks for the investment sector in the Iraq Stock Exchange (Y2). As the results in Table (2) below show that the calculated values of the likelihood rate, for the annual data, were (15.13) which is greater than the critical values (6.48) at the level of significance (5%), which indicates the rejection of the null hypothesis,

Vol. 13, No. 2, 2023, E-ISSN: 2225-8329 © 2023 HRMARS

which states that there is no That is, a vector of cointegration and acceptance of the alternative hypothesis which states that there is a single vector of cointegration

3. The results showed that the calculated values of the maximum value test were (1.99) smaller than the critical value (3.77) at a significant level (5%), which means accepting the null hypothesis that states that there is no second vector for the covariant integration, and rejecting the alternative hypothesis. This means that there is a long-term equilibrium relationship (one-way) between investment policy (X) and the profitability of local stocks for the investment sector in the Iraq Stock Exchange (Y2). Therefore, despite the presence of an imbalance in the short term, the two variables are moving towards equilibrium in the long term.

Table (6)
The Johansen test of the mutual complementarity between investment policy and the profitability of insurance sector stocks

Eigenvalue	Critical value 95%	πtrace	alternative hypothesis	Null hypothesis	X&Y1	Impact
0.17	4.55	9.98	r =1	r = 0	Annual	test
0.25	3.93	2.83	r =2	r≤1	data	trace
Eigenvalue	Critical value 95%	πтах	alternative hypothesis	Null hypothesis	X&Y1	Great value
0.04	5.62	11.08	r =1	r = 0	Annual	test max
0.18	3.91	2.79	r =2	r ≤ 1	data	

X = Investment Policy

Y3 = Profitability of the insurance sector

Through Table (4), the following is clear:

- 1. Results of the impact test (trace) and the maximum value test (max) to analyze the (annual) relationship between investment policy (X) and the profitability of local shares of the insurance sector in the Iraqi Stock Exchange (Y3). The results indicate that the calculated value of the trace of the annual data was (9.89), which exceeds the critical values (4.55) at a significant level (5%), which indicates the rejection of the null hypothesis, which states that there is no vector of co-integration, and the acceptance of The alternative hypothesis states that there are a number of cointegration vectors greater than zero. Also, the null hypothesis cannot be rejected at a significant level (5%) for the data. Thus, there is no second vector for cointegration, as the results show that the calculated value of the impact test (2.83) is smaller than the critical value (3.93) at a significant level (5%).
- 2. The results of the maximum value test (max) were identical to the results of the impact test, in the presence of a single vector for the common complementarity between investment policy (X) and the profitability of local stocks for the insurance sector in the Iraq Stock Exchange (Y3). As the results in Table (3) show that the calculated values of the likelihood rate, for the annual data, were (11.08), which is greater than the critical values (5.62) at a significant level (5%), which indicates the rejection of the null hypothesis, which states that there is no Vector of cointegration and acceptance of the alternative hypothesis which states that there is a single vector of cointegration

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3. The results showed that the computed values of the maximum value test were (2.79) smaller than the critical value (3.91) at a significant level (5%), which means accepting the null hypothesis that states that there is no second vector for the covariant integration, and rejecting the alternative hypothesis. This means that there is a long-term equilibrium relationship (one-way) between the investment policy (X) and the profitability of local shares of the insurance sector in the Iraq Stock Exchange (Y3). Therefore, despite the presence of an imbalance in the short term, the two variables are moving towards equilibrium in the long term.

Table (7)
The Johansen test of the mutual complementarity of investment policy and profitability of hotel stocks

Eigenvalue	Critical value 95%	πtrace	alternative hypothesis	Null hypothesis	X&Y1	Impact
0.12	7.36	19.02	r =1	r = 0	Annual	test
0.04	4.87	0.002	r =2	r ≤ 1	data	trace
Eigenvalue	Critical value 95%	πтах	alternative hypothesis	Null hypothesis	X&Y1	Great value
0.03	4.78	12.89	r =1	r = 0	Annual	test max
0.01	4.66	1.98	r =2	r ≤ 1	data	

X = Investment Policy

Y4 = Earnings in the hotel sector

Through Table (5), the following is clear

- 1. Results of the impact test (trace) and the maximum value test (max) to analyze the (annual) relationship between investment policy (X) and the profitability of local shares of the hotel sector in the Iraq Stock Exchange (Y4). The results indicate that the calculated value of the impact test (trace) The annual data was (19.02), which exceeds the critical values (7.36) at the level of significance (5%), which indicates the rejection of the null hypothesis, which states that there is no cointegration vector, and the acceptance of the alternative hypothesis that states the existence of a greater number of cointegration vectors. from zero. Nor can the null hypothesis be rejected that it is at a significant level (5%) with respect to the data. Thus, there is no second vector for cointegration, as the results show that the calculated value of the impact test (0.002) is smaller than the critical value (4.87) at a significant level (5%).
- 2. The results of the maximum value test (max) were identical to the results of the impact test, in the presence of one vector for the common complementarity between investment policy (X) and the profitability of local shares of the hotel sector in the Iraq Stock Exchange (Y4). As the results in Table (4) below show that the calculated values of the likelihood rate, for the annual data, were (12.89) which is greater than the critical values (4.78) at the level of significance (5%), which indicates the rejection of the null hypothesis, which states that there is no That is, a vector of cointegration and acceptance of the alternative hypothesis which states that there is a single vector of cointegration.
- 3. The results showed that the calculated values of the maximum value test were (1.98) smaller than the critical value (4.66) at a significant level (5%), which means accepting the null

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hypothesis that states that there is no second vector for the covariance, and rejecting the alternative hypothesis. This means that there is a long-term (one-way) equilibrium relationship between investment policy (X) and the profitability of local shares of the hotel sector in the Iraq Stock Exchange (Y4). Therefore, despite the presence of an imbalance in the short term, the two variables are moving towards equilibrium in the long term.

Second: the Granger causality test

As in this part it deals with analyzing the direction of the effect between the study variables, i.e. knowing the source of the effect, is it from the independent variable towards the dependent variable or from the dependent variable towards the independent variable.

Table (8)

The results of the Granger causality test of investment policy and profitability of banking stocks

X ← Y1					
Indication level	The computed F value	Indication level	The computed F value	periods	
0.066	1.791	0.012	8.467	1	
0.100	1.438	0.005	8.553	2	
0.125	1.858	0.002	10.784	3	
0.056	1.719	0.002	7.284	4	
0.083	0.573	0.001	6.858	5	
0.136	1.195	0.005	7.357	6	
0.116	1.753	0.002	7.607	7	
0.090	0.780	0.002	7.475	8	
0.104	0.777	0.018	10.521	9	
0.154	1.220	0.011	6.177	10	
0.090	0.881	0.003	8.028	11	
0.238	1.666	0.027	5.511	12	

The results of the causality test contained in Table (6) show that changes in investment policy (X) help explain changes in the profitability of local stocks for the banking sector in the Iraq Stock Exchange (Y1), and for all slowdown periods, at a significant level (5%).

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As Table (6) shows the insignificance of all periods of (annual) slowdown in the direction of the relationship from the profitability of local shares of the banking sector in the Iraqi Stock Exchange (Y1) to the investment policy (X) (X ② Y1). It has less than the tabular value of F. In contrast, all periods of slowdown (annual) for the direction of the investment policy relationship (X) to the profitability of local shares of the banking sector in the Iraq Stock Exchange (Y1) were significant (② X Y1). This is because for all periods the calculated value of (F) was greater than the tabular value of (F). Also, the level of significance appeared for all tests that is less than the level of meaning used, which is 5%, and this is evidence of the decrease in the error rate in the results to less than 5%, which leads to dependence on the results obtained.

Decision: - The source of the impact from the investment policy (X) towards the profitability of the banking sector shares (Y1)

Table (9)
Results of the Granger causality test of investment policy and profitability of investment stocks

X ← Y1	ger edusanty test of r			Slow
Indication level	The computed F value	Indication level	The computed F value	down periods
0.262	1.429	0.001	9.348	1
0.118	2.217	0.015	11.246	2
0.098	1.925	0.013	10.583	3
0.119	2.050	0.006	6.851	4
0.106	1.240	0.009	9.740	5
0.139	1.863	0.003	6.682	6
0.136	1.520	0.001	7.594	7
0.188	2.611	0.030	7.418	8
0.131	1.433	0.001	5.914	9
0.119	1.875	0.025	5.443	10
0.128	3.015	0.002	7.736	11
0.226	2.635	0.016	8.440	12

The results of the causation test presented in Table (7) below show that changes in investment policy (X) help explain changes in the profitability of local stocks for the investment sector in the Iraq Stock Exchange (Y2), and for all slowdown periods, at a significant level (5%).

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As Table (7) shows the insignificance of all periods of (annual) slowdown in the direction of the relationship from the profitability of local shares of the investment sector in the Iraq Stock Exchange (Y2)) to the investment policy (X) (XIY2) because all the periods were the value of F calculated for them Less than the tabular F value. In contrast, all periods of slowdown (annual) for the direction of the investment policy relationship (X) to the profitability of local shares for the investment sector in the Iraq Stock Exchange (Y2) were significant (IX Y2). This is because for all the periods the calculated value of (F) was greater than the tabular value of (F). Also, the level of significance appeared for all tests that is less than the level of meaning used, which is 5%, and this is evidence of the decrease in the error rate in the results to less than 5%, which leads to dependence on the results obtained.

Decision: - The source of the impact from the investment policy (X) on the direction of the profitability of the investment sector shares (Y2)

Table (10)
The results of the Granger causality test for investment policy and the profitability of insurance stocks

X ← Y1		⇔ X Y1		Slow
Indication level	The computed F value	Indication level	The computed F value	down periods
0.121	1.890	0.020	9.618	1
0.117	2.757	0.014	8.888	2
0.098	1.961	0.016	8.838	3
0.167	1.807	0.007	10.273	4
0.328	1.664	0.009	5.601	5
0.251	1.172	0.015	6.564	6
0.135	1.783	0.009	7.917	7
0.141	1.255	0.011	6.442	8
0.149	0.902	0.001	6.405	9
0.148	0.822	0.006	9.148	10
0.269	1.844	0.003	8.910	11
0.179	1.503	0.009	8.148	12

The results of the causation test presented in Table (8) below show that changes in investment policy (X) help explain changes in the profitability of local shares of the insurance sector in the Iraq Stock Exchange (Y3), and for all slowdown periods, at a significant level (5%).

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As Table (8) shows the insignificance of all the (annual) slowdown periods of the direction of the relationship from the profitability of the local shares of the insurance sector in the Iraqi Stock Exchange Y3) to the investment policy ((X (XIY3)) because all the periods were the value of (F) The calculated has less than the tabular F value. In contrast, all the (annual) slowdowns of the direction of the investment policy relationship (X) to the profitability of local shares of the insurance sector in the Iraq Stock Exchange (Y3) were significant (IX Y3). This is because all the periods had a ((calculated F) value greater than the tabular value of F). Also, the level of significance appeared for all tests that is less than the level of meaning used, which is 5%, and this is evidence of the decrease in the error rate in the results to less than 5%, which leads to dependence on the results obtained.

Decision: - The source of the impact from the investment policy (X) towards the profitability of the insurance sector's shares (Y3)

Table (11)
Results of the Granger causality test of investment policy and profitability of hotel stocks

X ← Y1	ger edusanty test of	⇔ X Y1	Slow	
Indication level	The computed F value	Indication level	The computed F value	down periods
0.175	2.075	0.005	7.845	1
0.116	3.008	0.019	12.486	2
0.240	2.170	0.003	7.375	3
0.231	1.987	0.002	8.450	4
0.115	1.818	0.013	9.268	5
0.161	1.286	0.003	6.456	6
0.256	2.143	0.002	10.898	7
0.304	2.026	0.003	10.229	8
0.266	1.776	0.027	10.313	9
0.357	1.120	0.003	7.836	10
0.258	0.678	0.000	8.057	11
0.252	0.924	0.007	9.015	12

The results of the causality test presented in Table (9) below show that changes in investment policy (X) help explain changes in the profitability of local shares of the hotel sector in the Iraq Stock Exchange (Y4), and for all slowdown periods, at a significant level (5%).

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As Table (9) shows the insignificance of all the (annual) slowdown periods of the relationship direction from the profitability of the local shares of the hotel sector in the Iraq Stock Exchange (Y4) to the investment policy ((X (X ② Y4))). This is because all the periods were the value of (F). In contrast, all periods of slowdown (annual) for the direction of the investment policy relationship (X) to the profitability of local shares of the hotel sector in the Iraq Stock Exchange (Y4)) were significant (② X Y4). This is because for all the periods the calculated value of (F) was greater than the tabular value of (F). Also, the level of significance appeared for all tests that is less than the level of meaning used, which is 5%, and this is evidence of the decrease in the error rate in the results to less than 5%, which leads to dependence on the results obtained.

Decision: - The source of the impact from the investment policy (X) towards the profitability of the hotel sector shares (Y4)

Summary

The current study sought to link the various directions of investment policies used in companies with the profitability of those companies, as an analytical study of a number of companies listed in the Iraq Stock Exchange.

Co-integration through the Johanson and Kranger methodologies proved that the equilibrium relations produced a single trend between the investment policy variable and the earnings per share of the banking sector, confirming that companies adopt an investment policy that is consistent with the nature of their work and their challenges to achieve a long-term balance that maximizes the market value of the share and the company as a whole. One of the most important things recommended by the analytical study is the need to pay great attention to the quality of investment policy through the use of professional financial analysts in investment decision-making.

The Fourth Topic

Conclusions and recommendations

First: Conclusions

After entering into the intellectual foundations of the study variables and their repercussions through the statistical analysis, which was dealt with in two phases complementary to each other, a set of conclusions was reached, the most important of which were the following:

- .1The investment policies set by companies are strategic policies because they affect the life and sustainability of the company.
- ·2Companies aim to maximize their value by maximizing the level and quality of their profits, to make investors aware of the strength of the company and work to attract them to invest in it.
- .3The investment policy varies according to the companies and sectors operating in them.
- .4The results of the cointegration test showed that there is one vector of cointegration between the investment policy dimension (X) and the profitability dimension of the banking sector (Y1), which confirms the existence of a long-term equilibrium relationship between the variables of the study.
- .5The results of the co-integration test showed that there is one vector of co-integration between the investment policy dimension (X) and the profitability dimension of the investment sector (Y2), which confirms the existence of a long-term equilibrium relationship between the variables of the study.

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.6The results of the co-integration test confirmed that there is one vector of co-integration between the investment policy dimension (X) and the insurance sector profitability dimension (Y3), which means that there is a long-term equilibrium period between these variables.

Second: Recommendations

After completing the theoretical and practical variables of the study, they were tested by analyzing them statistically, presenting the results, and presenting the conclusions. Among the most important of these recommendations are:

- 1. Specialized centers should be established to assist in building investment policies for companies in order to achieve their specific goals and strategies.
- 2. The authorities responsible for building the state's economy must follow the policies followed by the companies that make up the state's economy, because any policy that is followed in an ill-considered manner may affect the company and then its sector. to the national economy.
- 3. The need to seek the assistance of professional financial analysts to build the correct financial foundations for companies and avoid any future financial failure in order to benefit from their expertise and experience in dealing with obstacles and uncertainties that may affect the company.
- 4. The need to use the co-integration model in analyzing economic relations in future applied studies, as it clarifies the nature and direction of the relationship between economic variables in the short and long term, which increases the accuracy of the results and the possibility of benefiting. them by economists and economic policy makers.

References

Bodie, Z. (2018). investement. new york: mcgraw-hille ducation.

Brigham. (2017). financial management. saudi arabia: Alsarawat press.

Brigham, E. F. (2017). Fundamentals of Financial Management, Eleventh Edition . University of Florida: USA.

Duchac, J. E. (2007). financial accounting. usa: thomson south -western mason.

Ehrhardt, M. C. (2007). financial management: theory and practice. usa: south western.

Fabozzi, F. J. (2003). financial management and aalysis . new jersey: john wiley & sons inc, hoboken.

Fang, E. S. (2014). Islamic finance in global markets: Materialism, ideas and the construction of financial knowledge. Taylor & Francis, Ltd: Published By: Taylor & Francis, Ltd.

Jaffe, J. (2013). Modern Financial Management, 1st Edition, . Jordan: Wael House.

Mishkin, F. (2007). The economics of money, banking and Financial Markets, seventh edition. usa: Columbia University.

Moyer, R. C. (2012). contemporary financial management. usa: western mason.

Svensson, L. E. (2008). The Relation between Monetary Policy and Financial Policy . Stockholm: Sveriges Riksbank, Stockholm University, CEPR, and NBER.

Willoughby, M. G. (2016). The Investment Environment: Markets & Securities. In M. G. Willoughby., The Investment (p. 35).

http://willoughby.ucsd.edu/files/2016/04/Reader-1-3.pdf: