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Determinants of value creation in the industrial sector
A study on a sample of industrial companies listed on the Amman Stock

محددات خلق القيمة في القطاع الصناعي
دراسة على عينة من الشركات الصناعية المدرجة في بورصة عمان

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Abstract

This study aims to highlight the determinants of the value creation process based on specific indicators to select the indicators that affect the market value, through an applied study on a sample of 11 companies listed on the Amman Stock Exchange for the period from 2013 to 2020, where the descriptive analytical approach was adopted. And the use of Panel Data models.

The study concluded that the best model is the random effects model, which showed that financial leverage and return on shareholders' equity have a positive and statistically significant effect on value creation, while growth rate, economic return and share of profits do not affect value creation.

Keywords

Value creation, economic return, financial return, investments, share of profits, financial leverage.

JEL Classification Codes : D21 ; D12 ; D46 ; D25

الملخص

تهدف هذه الدراسة إلى إبراز محددات عملية خلق القيمة انطلاقا من مؤشرات محددة لانتقاء المؤشرات التي تؤثر على القيمة السوقية، وذلك من خلال دراسة تطبيقية على عينة مكونة من 11 شركة مدرجة ببورصة عمان للفترة الممتدة من 2013 إلى 2020، حيث تم الاعتماد على المنهج الوصفي التحليلي، واستخدام نماذج بيانات بانل Panel Data.

وتوصلت الدراسة إلى ان أفضل نموذج هو نموذج الآثار العشوائية الذي أظهر أن الرفع المالي والعائد على حقوق المساهمين لهما أثر إيجابي ذو دلالة احصائية على خلق القيمة، بينما لا يؤثر معدل النمو والمردودية الاقتصادية وحصة السهم من الأرباح على خلق القيمة.

الكلمات المفتاحية

خلق القيمة، مردودية اقتصادية، مردودية مالية، استثمارات، حصة السهم من الأرباح، رفع مالي.

تصنيف JEL: D21 ؛ D12؛ D46 ؛ D25

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I. INTRODUCTION

The company will respond to the upcoming collapses, including its preparation for them, and determining its financial future for the coming years depends on its choices. Hence, will it prepare itself to discover the tool or tools necessary for the value creation process for a company.

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The economic company of any kind, whether listed or unlisted in the stock exchange, aims to maximize its value for the benefit of its owners (shareholders) or parties interested in it. It has to stand on its value, and from this we find it goes beyond the strategic and financial aspect, as it extends to all levels of the company, and accordingly, we find the daily operational aspects that are also directed to serve the goal of value.

Based on the above, we will try to address a set of determinants that help create value for the company and determine the strength of its impact on it, which would help financial managers

in the first place in revealing the company's position on several levels, which results in rationality in making sound decisions.

Problem: The following problem can be put forward:

- What are the most important determinants of value creation in the industrial sector companies in the Amman Stock?

II. Sub-questions:

1: Strategic determinants

What is the impact of fixed investment growth rate on value creation?

What is the impact of economic profitability on value creation in the ASE?

2: Financial determinants

What is the extent of the impact of financial leverage on value creation in the ASE?

What is the impact of the share of profits per share on value creation in the ASE?

3: Determinants related to governance

What is the impact of return on shareholders' equity on value creation in the ASE?

III. Hypotheses of the study:

1: Strategic determinants

There is a direct relationship between economic profitability and value creation through generating surpluses based on its various activities and defining the company's exploitative activity, which is known as value creation.

There is a positive relationship between fixed investment rate and value creation.

2: Financial determinants

There is a direct relationship between financial leverage and value creation through short-term shareholder aspirations.

There is a direct relationship between the share of profits per share and the creation of value by knowing what the company can offer to its shareholders.

3: Determinants related to governance

There is a direct relationship between return on shareholders' equity and value creation by maximizing the value of shareholders' funds (equity).

IV. Objective of the study:

The study aims to highlight the most important determinants and indicators in the value creation process, based on specific mechanisms to select the best mechanism for value creation and to test the relationship between the variables of the study.

V. The importance of the study:

The value creation process receives a degree of attention shown through a group of studies and research, and it has become the most important challenge facing companies through all dimensions, whether economic, strategic or financial, due to the importance of the value index of companies that create value in making strategic decisions for the company, from here we highlight Spotlight on value creation in the ASE.

VI. Previous Studies:

To determine the features and dimensions of the study, the latter relied on a number of applied studies, the most important of which are:

First: Amal Lagoun and Aman Yousefi 2021: Journal of Economic Studies, Human Resources Development Laboratory, Farhat Abbas University - Setif - (Algeria), under the title "Creating Value in the Enterprise Using the Economic Value Added Index (EVA) Case Study of the Eurasian Foundation 2002/2019", where the study aimed to Knowing the impact of the added economic value index on the value of the Eurasian enterprise.

The study concluded that there is a co-integration relationship between the added economic value and the value of the institution, and that the Eurasian Foundation is able to create value for its shareholders and all stakeholders, and the result was that the economic value added indicator is nothing but the remaining profit indicator that was developed by introducing the idea of capital cost.

Second: Study of Asmaa Ayman and Abdelghani Daden (2020/2021): Journal of Financial, Accounting and Administrative Studies, University of Kasdi Merbah Ouargla (Algeria), under the title "The Role of Financial Decisions in Creating Value for Shareholders, a case study of Saidal Complex and the Hotel Management Corporation of Eurasian during the period (2017/ 2002), where the study aimed to test the extent to which financial decisions contribute to creating value for the shareholder, and the value of the enterprise was measured using the modified economic added value, and the study sample was represented in the Saidal complex and the Eurasian Foundation (2002/2017), where simple linear regression and correlation coefficient were used.

The study concluded that there is a negative correlation between the modified economic value-added index and the financial structure, and there is no effect of the investment decision and the profit distribution decision on value creation in the Eurasian Corporation, and the presence of a negative impact of the investment decision on the adjusted value-added and the absence of an effect on the variables representing the financial structure and the decision to distribute Profits on value creation in Saidal complex.

Third: The study of Bin Aisha Karima and Najjar Hayat (2020/2021): Al-Bashaer Economic Journal under the title The Impact of Financial Risks on Value Creation in the Economic Enterprise "A Study of a Sample of Institutions Listed in the Saudi Financial Market Using Panel Models", where this study aimed to test the impact of risks Finance on value creation for a sample of 30 institutions listed in the Saudi financial market during the period 2014-2018, based on Panel Data models and the use of R Studio analysis software.

The study concluded that the best model for explaining the phenomenon is the fixed effects model, while no effect of financial returns on value creation was recorded.

Fourth: The study of Nait Attia Mariam (2011/2014): Journal of Economic and Financial Research, University of Badji Mokhtar-Annaba, under the title "Determinants of the value creation process at the level of Algerian industrial enterprises according to the branch of their industrial activity." The study aimed to reveal the determinants of the value creation process. At the level of Algerian industrial establishments, and to achieve this, the study was conducted on a sample of 41 large and joint Algerian industrial establishments, depending on the method of factor and discriminant analysis.

The study reached a set of results, the most important of which are: that the correlation coefficient is R = 0.487, and there is a weak positive correlation between the discrimination functions. cost of capital).

Fifth: A study by Alberto Pezzi (2018): International Journal of Business and Management, Canadian Center for Science and Education, Business Studies, -University of Romatri-Italy under the title Determinants of value creation in cross-border mergers and acquisitions a case study of the software industry, where it aimed to study the software market and identify sources that enhance property rights, by measuring and analyzing the development of investments through mergers and

acquisitions (M&A), increasing the size of the company and achieving new growth, by knowing the strategies for creating value.

It was concluded that the younger the target company, the greater the possibility of creating value, as there is a correlation between the market return, the size of the invested company, and the target company in mergers.

VII. Theoretical framework of the study:

Definition of value creation: It is the value of shareholders' equity and they are the legal owners of the company who supply permanent capital funds and in the event of liquidation they only have the remaining value of the assets and profits of the company after paying all the rights of the other parties where the shareholders bear an unspecified risk and the creditors are the other parties to the supply of cash to the company where they bear a specific risk In exchange for a specific return, which is the company's ability to finance its financial needs and its ability to create surpluses in value, because the efficiency in financing financial needs is linked to the extent to which these financial capabilities turn into financial revenues, which in the end are wealth for the company, after deducting various costs, whether those related to exploitation, or related to the financing cost[1].

The most important theories explaining value creation:

1/Value Creation from the Perspective of Agency Theory: It states that the idea of value creation is based on the contractual approach, whereby managers are assigned by the shareholders to manage the invested capital with the aim of creating value, i.e. maximizing wealth in the short and long term for the benefit of the shareholders, and this goal is achieved when the profitability of the company is higher than the required rate of return on capital, and thus there is value creation if the return on economic assets (return on invested capital) is higher than the cost of financing, i.e. the cost of debt and private funds[3].

2/Creation of value from the perspective of the signal theory Through the name of the signal derived from the verb to indicate and from it, we find that there are two main ideas on which the theory relies, which is that "the same information is not possessed by all parties, as the managers may have information that the investors do not possess" and "that the information is available For all parties, they are not received in the same way." Hence, the financial decisions taken by the managers do not stop to the extent that they are correct decisions only. Finance and dividends are considered one of the most important determinants of the value of the establishment, which are studied with great care in financial theories.

3/Value creation from the perspective of real options: Determining the fair market value of a specific asset (physical, financial, or "intangible" or "intangible") is very difficult due to the economic conditions of strike and uncertainty. Perhaps one of the best approaches used to estimate the fair value (real options)), and that the emergence of what is known as the financial derivatives markets in the seventh decade of the twentieth century, which consists of financial options and futures, and the emergence of the Black Scholes model for pricing options contracts, which enabled

us to use the same model to use the pricing of assets of a non-financial nature, such as real assets and intangible assets. And so, due to its unique characteristics, the options pricing model (Black and Scholes) exceeded many of the methods used in the financial evaluation of investment projects, and from it the idea of real options emerged and from it it is an extension of the pricing theory of financial options, so the real option is an option linked or based on non-financial assets[5].

The importance of value creation:

First: The value offered to the shareholder: Creating shareholder value when shareholder returns exceed the cost of shares (return on equity). It is also a set of relationships between executive directors of listed companies, boards of directors, and stock exchanges that employ shareholders. In addition, technology contributes to value creation at the macro and sectoral levels[6].

Second: The value provided to the customer, the value complex and the competitive advantage:

The value provided to the customer:

Philipe Kotler defined it as the difference between the total customer value and the total cost, where the customer's total cost is "what the customer gets as a result of the exchange process in exchange for the price he pays, as it represents the total benefit minus the cost that the customer bears when making the purchase decision[7]." The products and services offered by the company and how they relate to the lowest price and the shortest delivery times.

Value complex and competitive advantage:

Competitive and strategic value: It is the result of the company's relations with its environment and value creation here is done through the selection and installation of activities with the aim of creating a competitive advantage[8]. Porter suggested using the concept of value or the chain of activities to obtain a competitive advantage. And the mix of activities of the company for the purpose of creating value, here the company creates value through its experience and know-how, so it has an interest to evaluate each element in the value chain in order to enhance its advantages.

Strategies determinants of value creation:

The origin of the terms internal growth and external growth goes back to American researchers who used in their research both internal growth and external growth to express several different aspects of economics and business management. The concept differed from one researcher to another according to the following[9]:

It was used to express the sources of financing growth in the activity, then the internal growth is associated with the sources of internal financing and the external growth with the source of external financing.

It is used to express the sources of the turnover, so the term external growth is considered for the increase in the turnover achieved abroad (export growth), and the internal growth is considered for the increase in the turnover achieved by the company in its original origin.

1/Internal growth strategy: internal growth depends on internal investments and the development of the company's production capabilities without resorting to alliances with other organizations. Additional production workshops are opened to support the current activity, or other units are established that are concerned with organizing New activities[10], internal growth is called organic growth and is defined as follows:

"It is a strategic choice for the company's growth, relying on its own resources." Creativity in new products, expansion of the product's location, opening a commercial branch[11].

Internal growth occurs in the company as a result of the interactions that occur between a group of economic and financial variables, which are technical indicators that represent sensitive centers for growth. The analysis of these variables reveals the various economic and financial behaviors produced by companies to record different growth rates[12].

The possibility of analyzing the relationships between the economic and financial variables that are under the control and monitoring of the company, by highlighting the mechanisms that control its internal growth[13].

2/External growth strategy: It is the company's acquisition of all or part of the internal resources linked to each other in the form of an economic unit that has the ability to produce goods and services by resorting to the process of merger, absorption, participation with control, and we also point out that the company is able to benefit from external resources that It was acquired by a group of operations, because the new positioning allows it to use the natural, public resources available in the vicinity of the target company[14].

According to R PATUREL, external growth was defined as direct, partial or total acquisitions of a company or a branch by swallowing, or indirect possession by controlling another company with the company owning a significant share of its capital sufficient to assume control and management or control without Direct contribution through a financial intermediary (holding companies, investment funds, financial agencies....), or through another company under the control and management of the company, through a group of production factors linked to each other by internal organizational relations and with the ability to produce and Or provide services and acquire market share[15].

Value Creation Evaluation Scales:

1/Leverage:

Apart from the conflicting opinions of economists and financiers, the profitability measures the extent to which the procurement project has achieved activities related to the performance and cost structure. It also expresses the outcome of the political results and the decisions taken by the project with regard to liquidity and financial position[16].

Economic Yield (Re):

It is considered one of the most important indicators of value creation as it is used in evaluating the company as a whole or in selecting and evaluating the project to be financed, and this indicator is compared with the cost of capital. as follows[17]:

$$R_{\acute{e}}\% = \frac{R_{EXP}(1-IS)}{AE} = \frac{R_{EXP}(1-IS)}{CA} \times \frac{CA}{AE}$$

Financial Yield (Rcp): It is defined as the profitability of private funds, so that the financial profitability is concerned with the total activities of the company and includes in its components all the elements and financial movements, as it expresses the ability of the company to generate profits through the funds provided by the shareholders, as the net result is taken from the table of accounts and special funds from the budget, and it can be calculated The return on private funds is as follows[18]:

$Rcp = R_{NET} / CP$

2/Total earnings per share:

The shareholder's total rate (TSR) calculates the profitability of the shareholder, as he buys the share at the beginning of the period, then touches the distributions, which are often assumed to be reinvested in the purchase of new shares, in addition to that the shareholder estimates his portfolio of securities at the end of the period, based on the last share price, which is This indicator is in the rate of growth of the market share price in addition to distributions related to the price. In fact, it is no different from the assumed rate of return. To give it more significance, it is advisable to calculate it over long periods, and it is calculated as follows[19]:

$$TSR = \frac{(P_0 + D - P_1)}{P_0}$$

3/Added economic value:

Economic profit or added economic value goes beyond the accounting concept of cost, as the capital reward, i.e. the reward for private funds, is viewed as a restriction or cost, and thus is calculated on the basis of "private funds and debts." The company is able to create value in a specific period when it can achieve economic profitability AE After the tax on the economic asset exceeds the cost of capital (private funds and net debt), the economic value added as an economic indicator of value creation is superior to profitability (return on capital / return on equity) as a purely accounting indicator[20], The EVA value is calculated in the following way:

Anglo-Saxon method:

EVA= (ROCE□ ـ WACC) CE ……..(1)

EVA= EBIT ـ WACC × CE ……(2)

Francophone method:

EVA= (Ré□ ـ CMPC) CI ……..(1)

EVA= Rexp(1ـ IS) ـ CMPC × CI ….(2)

After making several economic value-added adjustments, we find:

EVA= NOPAT ـ (TCE × WACC)

EVA›1 enables the company to create shareholder value, after rewarding them for risk in the form of dividends.

EVA›1 enables the company to create shareholder value, on the contrary there is a waste of value to the detriment of shareholders.

4/ Contributory Value Added (SVA):

Alfred Rappaport defines it from the point of view of the shareholder as the value of the enterprise minus the value of the debts, and equals the value of the enterprise to the DCF discounted cash flows of the enterprise plus the value of operating assets and negotiable securities, and it is an easy-to-measure indicator as the market value of debts and property rights is available for each period[21].

$$SVA = \left[\frac{[(ROE \times CP_{N-1}) - (Kcp \times CP_{N-1})]}{(K_{CP-G})}\right] + CP_{N-1} + VD$$

5/ The value index IV: Indicateur de valeur, or as it is also called the "value lever", is considered one of the ex-post value creation indicators, that is, it measures the achieved performance, as it measures the ratio of the achieved financial return to the financial return required by financial investors and obtained through the asset evaluation model. MEDAF/CAPM, calculated by the following relationship[22]:

$$Iv = \frac{R_F\%}{R_{MEDAF}}$$

VIII. The applied framework of the study:

1/The method used in the study

In order to answer the problem posed and test the hypotheses, the following method was used :

The first section: the study population and sample

First: Study Population: The study population consists of the industrial sector companies listed on the Amman Stock Exchange.

Second: Study sample: The sample of the study is eleven industrial companies listed on the Amman Stock Exchange, which are: (Asas Company for Concrete Industries, Jordanian Company for Pipe

Industries, Intermediate Biochemical Industries Company, Arab Company for Aral Aluminum Industry, Jerusalem Company for Concrete Industries, National Company for Aluminum Industry , the National Steel Industry Company, Dar Al-Dawa Development and Investment Company, Philadelphia Pharmaceutical Industry Company, United Cable Factories Company, and the Jordanian Woolen Factories Company) using the data related to the time period from 2013 to 2020.

The second section: identifying the variables of the study and how to measure them

First: formulating and defining the variables of the study

This model studies the impact of the determinants of value creation in the industrial sector. The value creation index function takes the following form:

MARRIS Ratio=f(ROI,GROW,LEV,EPS,ROE)

whereas:

The dependent variable: it is represented by an indicator for measuring value creation, which is the MARRIS ratio;

Independent variables: represented in economic profitability, growth rate of fixed investments, financial leverage, share of profits per share, return on equity.

Second: Determining how to calculate the study variables

The table below shows variables related to the study and how they are calculated :

Table (1): Method of calculating the variables adopted in the study

Expressed symbol	**How to calculate it**	**variants**
MARRIS_Ratio	Market value / book value of equity	**RATE MARRIS**
ROI	Exploitation result after tax/economic asset	**economic profitability**
GROW	(Fixed investments for the current year - Fixed investments for the last year) / Fixed investments for the past year	**Fixed investment growth rate**
LEV	Net Financial Debt / Private Funds (Equity)	**Leverage**
EPS	Net profit/number of shares	**Earnings per share**
ROE	net profits/own funds (equity)	**return on shareholders' equity**

Source: Prepared by the researcher based on theoretical literature

2/Tools used in the study

The third section: the tools used in the study

This requirement includes defining sectional time series data, which is denoted by the word "Banal", and the advantages of this model, as its data takes three main forms used in estimation.

1/definition and characteristics of Banal data

First: Defining Banal Data: Banal data series is the data that combines time series data and sectional series data.

We use Banal's data as a tool to determine the optimal model that explains the phenomenon to be studied, because the study contains cross-sectional series (6 variables, a group of institutions, and a study period).

Second: Characteristics of Banal Data: For the application of Banal data, the study must contain time series data and cross-sectional data, where:

time series:

It is a set of values of observations of a random phenomenon arranged over time, and it is also data that can be obtained in an organized iterative manner that changes with the change of time, and the most important of its chains are those of economic indicators, but from the mathematical point of view, we say that the independent time variable t and its corresponding values are the dependent variable y and that each value in time t corresponds to values of the dependent variable y, then it is a function at time t, ie y=f_((t)))

Sectional data:

It is that data that takes a variable or phenomenon at a point in time and studies a group of sections such as countries, people or animals, where the aim is to compare them.

2/ the basic forms of analyzing Banal data: To analyze Banal data, we have three types of models for estimation, namely:

First: Pooled OLS Regression Model:

This model is considered one of the simplest Benal models in which all coefficients β_1 and β_2 are constant for all time periods (the effect of time is ignored). For the purpose of estimation, the ordinary least squares method is used after arranging the values of the explanatory variable and the values of the response variable starting from the first cross sectional data set, and so on. And the number of observations is (N*T=88, N=11, T=8).

Second: Fixed Effect OLS Model:

The fixed effects model means that the parameter β_1 for each cross-sectional data group does not change over time, but the change is only in these data groups. This model aims to know the behavior

of each group of cross-sectional data by itself, by making the parameter β_1 vary from one group to another, with the slope coefficients remaining constant for each group of cross-sectional data (the case of inhomogeneity between the variance between the groups).

Third: Random Effect OLS Model:

The fixed effects model means that the parameter β_1 for each cross-sectional data group does not change over time, but the change is only in the groups of these data. The slope is constant for each group of cross-sectional data (case of heterogeneity between the variance between the aggregates).

3/View and analyze the results of the study:

Show top results: In order to describe and organize the statistical data of the phenomenon under study, some statistical measures have been relied upon in order to understand and highlight some of the characteristics of the study variables, as follows:

Table (2): Results of the descriptive study of the study variables

Study variables	MARRIS	ROI	GROW	LEV	EPS	ROE
Mean	0.924898	0,388408	9,271583	,2793060	1,267168	,3946020
Median	0.951000	0.061163	-0.026538	0.194636	0.035178	2.003500
Maximum	4.092000	26,8846	814,5661	1.4280	15,8852	51,0060
Minimum	0.142000	-1,3307	-0,4946	0,0000	-35,7290	-39,0240
Std.Dev	0.536372	2,8880258	86,8317019	,32419270	5,5627676	14,0541220
CV	57.9926	743.554	936.536	116.071	438.992	3561.59

Source: Prepared by the researcher based on Excel and SPSS.26

First: Through table (2), we can see the following through observation:

Economic profitability:

The percentage of economic return ROI ranges between the lowest value, which is -1.3307% for the National Steel Industry Company achieved during the year 2019, and the highest value, which is 26.8846% for the United Cable Factories Company achieved during the year 2017. That is, with an arithmetic average of 0.388408% and a standard deviation of 0.388408%. 2.8880258%, and a coefficient of difference of 743.5%.

Investment growth rate:

The growth rate of fixed investments GROW ranged between the lowest value, which is -0.4946% for the National Steel Industry Company, achieved during the year 2016, and the highest value, which is 814.5661% for the Arab Company for the Aral Aluminum Industry, achieved during the year 2013. That is, with an arithmetic average of 9.271583% and a deviation The standard was 86,8317019%, and the coefficient of variation was 936.5%.

Leverage Ratio:

The financial leverage ratio LEV ranged between the lowest value, which is 0.0000% for the Jerusalem Concrete Industries Company, the National Aluminum Industry Company achieved during the years 2015 and 2016 respectively, Asas Concrete Industries Company, the Jordanian Pipe Industries Company, the Intermediate Petrochemical Industries Company and the Arab Company for Aral Aluminum Industry Achieved during the years 2014, 2015, 2016, 2017, respectively. The Intermediate Petrochemical Industries Company and the Arab Company for the Aluminum Industry, Aral, achieved during the years 2019 and 2020, respectively. The United Cable Factories Company achieved during the year 2019. The highest value is 1.4280% for Dar Al Dawa Development and Investment Company achieved during In 2019, that is, with an arithmetic mean of 0.279306%, a standard deviation of 0.32419270%, and a coefficient of variation of 116%.

Earnings Per Share:

The share of earnings per share, EPS, ranges from the lowest value, which is -35.7290% for Asas Concrete Industries Company, achieved during the year 2020, to the highest value, which is 15.8852% for the Philadelphia Pharmaceutical Company, achieved during the year 2018. That is, with an arithmetic average of 1.267168% and a standard deviation. It reached 5,5627676, with a coefficient of difference of 439%

Return on Equity:

The return on shareholders' equity (ROE) ranged between the lowest value, which is -39,0240% for Asas Concrete Industries, achieved during the year 2019, and the highest value, which is 51,0060% for the Jordanian Woolen Factories Company, achieved during the year 2014. That is, with an arithmetic average of 0,394602%, with a standard deviation of 14,0541220%, and a coefficient of difference of 3561.5%.

Ratio Index: MARRIS

The MARRIS ratio index ranged between the lowest value, which is 0.142000% for Dar Al-Dawa Development and Investment Company, achieved during the year 2020, and the highest value, which is 4.092000% for the Jordanian Woolen Factories Company, achieved during the year 2014. That is, with an arithmetic mean of 0.924898%, a standard deviation of 0.536372%, and a coefficient of variation of 58%.

Correlation between study variables:

By the linear correlation matrix, we mean the existence of a relationship between two or more factors, and that each of them affects the other, meaning that the effect is mutual, either positively or negatively. For this purpose, we use the simple linear correlation coefficient (Pearson).

Table (3): Correlation matrix between indicators

	MARRIS	ROI	GROW	LEV	EPS	ROE
MARRIS	1	0,061	0,014	0,061	0,163	,4000
Sig.		,5720	,8970	,5710	,1290	,0000
ROI		1	-0,012	0,233	-0,017	-0,246
			,9120	,0290	,8730	,0210
Sig.						
GROW			1	-0,086	0,231	0,041
Sig.				,4280	,0310	,7030
LEV				1	-0,189	-0,575
Sig.					,0780	,0000
EPS					1	0,312
Sig.						,0030
ROE						1
Sig.						

Source: prepared by the researcher based on the outputs of SPSS.26

We notice from Table (3) that there is a positive linear correlation between the MARIS index and economic profitability. The value of statistical significance was .0,572 which is a value greater than 0.05; And there is a positive linear correlation between the MARIS index and the fixed investment rate, as the statistical significance value reached . 0,897 which is a value greater than 0.05, in

addition to a positive linear correlation between the MARIS index and financial leverage, as the statistical significance value reached . 0,897 which is a value greater than 0.05.

There is also a positive linear correlation between the MARIS index and the share of earnings per share. The value of statistical significance was 0,129 which is a value greater than 0.05; There is no linear correlation between the MARIS index and the return on equity, as the probability value is 0,000, which is a value less than 0.05.

model estimation resultspanel studied relationship:

Table (4): Results of estimating the Panel models

random model	Fixed form	aggregate model	variants	
0.718658 0.0000)(	0.715595 (0.0000)	0.706861 0.0000)(	β_0	**estimated parameter**
0.020786 (0.1698)	0.020164 (0.1886)	0.023594 (0.1891)	β_1	
0.000232 (0.6360)	0.000263 (0.5953)	0.000101 (0.8639)	β_2	
0.663093 (0.0018)	0.677943 (0.0061)	0.693840 (0.0004)	β_3	
0.002677 (0.7704)	0.002715 (0.7829)	0.003306 (0.7322)	β_4	
0.018799 (0.0001)	0.015808 (0.0018)	0.025226 (0.0000)	β_5	
0.001176	0.000000	0.000013	**Prob (Fstatist**	**Total morale**
0.278569	0.595549	0.303627	**R-squared**	
0.001176	1.531870	0.984723	**Durbin-Watson stat**	

Source: prepared by the researcher based on the outputs of SPSS 26

We notice from the above table (2-4) that the partial and total significance of the Benal models estimated for the three models (summative model, fixed effects model and random effects model) had a statistical significance.

Analyze the results of estimating the fitting model parameters:

For the purpose of comparison between the aggregate model and the fixed effects model, we re-estimate the fixed effects model with the introduction of dummy variables. The results are shown in Table (5):

Table (5): Results of estimating the LSDV fixed-effects model

Dependent Variable: MARRIS

Method: Panel Least Squares

Date: 04/22/22 Time: 00:19

Sample: 2013 2020

Periods included: 8

Cross-sections included: 11

Total panel (balanced) observations: 88

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.637433	0.171135	3.724745	0.0004
ROI	0.020164	0.015191	1.327409	0.1886
GROW	0.000263	0.000493	0.533564	0.5953
LEV	0.677943	0.239984	2.824955	0.0061
EPS	0.002715	0.009816	0.276581	0.7829
ROE	0.015808	0.004867	3.248291	0.0018
D1	-0.353380	0.219154	-1.612476	0.1112
D2	0.030347	0.246331	0.123195	0.9023
D3	-0.186659	0.268434	-0.695364	0.4891
D4	0.360194	0.210388	1.712046	0.0912

D5	-0.296082	0.218627	-1.354283	0.1799
D6	0.409631	0.224019	1.828558	0.0716
D7	-0.026609	0.252570	-0.105354	0.9164
D8	-0.059240	0.273496	-0.216602	0.8291
D9	0.744480	0.232799	3.197949	0.0021
D10	0.237101	0.222272	1.066712	0.2897
Root MSE	0.339170	R-squared		0.595549
Mean dependent var	0.924898	Adjusted R-squared		0.511288
S.D. dependent var	0.536372	S.E. of regression		0.374967
Akaike info criterion	1.039007	Sum squared resid		10.12321
Schwarz criterion	1.489432	Log likelihood		-29.71631
Hannan-Quinn criter.	1.220472	F-statistic		7.067926
Durbin-Watson stat	1.531870	Prob(F-statistic)		0.000000

Source: prepared by the researcher based on the outputs of the 12 Eviews program.

In order to find out whether we can consider all coefficients of sham variables to be non-existent, we put the following two hypotheses

The null hypothesis: the coefficients of the dummy variables are all equal to zero.

Alternative hypothesis: Not all of these coefficients are equal to zero.

To verify, we conduct the Wald test on the estimated model, i.e. Table No. (5) above. Test results shown in Table (6) below.

Table 6: Wald test results

Wald Test:

Equation: Untitled			
Test Statistic	Value	df	Probability
F-statistic	9.029314	(11, 72)	0.0000
Chi-square	99.32246	11	0.0000

Source: prepared by the researcher based on the outputs of the 12 Eviews program.

We notice through the results of Wald's test that the probability value associated with the calculated value of Fisher's statistic is very high. This means not accepting the null hypothesis and thus accepting the alternative hypothesis, that is, not all coefficients of simulated variables are equal to zero. As shown in the results of Table (5) above.

The comparison between the fixed effects model and the random effects model

The difference between the fixed effects model and the random effects model lies in the fact that the first assumes that the segments differ in their fixed limit, while the second assumes that the segments differ in the error limit. For the purpose of knowing which model to accept we perform the Hausman test where:

The null hypothesis: the random effects model is accepted

Alternative hypothesis: Acceptance of the fixed-effects model

Table No. (7): Hausman test results

Correlated Random Effects - Hausman Test

Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.

Cross-section random	8.297484	5	0.1406

Source: prepared by the researcher based on the outputs of the 12 Eviews program.

We notice through the obtained results of the Haussmann test that the null hypothesis is accepted because the probability value is 0.1406 which is greater than the significance level $\alpha = 0.05$, meaning that the appropriate model is the random effects model shown in Table (8).

Table 8: Hausman test results

Dependent Variable: MARRIS

Method: Panel EGLS (Cross-section random effects)

Date: 04/22/22 Time: 00:36

Sample: 2013 2020

Periods included: 8

Cross-sections included: 11

Total panel (balanced) observations: 88

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.718658	0.102198	7.032010	0.0000
ROI	0.020786	0.015008	1.384978	0.1698
GROW	0.000232	0.000488	0.475015	0.6360
LEV	0.663093	0.205606	3.225071	0.0018
EPS	0.002677	0.009141	0.292861	0.7704
ROE	0.018799	0.004477	4.199306	0.0001

Effects Specification

			S.D.	Rho
Cross-section random			0.244985	0.2992
Idiosyncratic random			0.374967	0.7008
Weighted Statistics				
Root MSE	0.369164	R-squared		0.214413
Mean dependent var	0.440181	Adjusted R-squared		0.166512
S.D. dependent var	0.418894	S.E. of regression		0.382432
Sum squared resid	11.99283	F-statistic		4.476116
Durbin-Watson stat	1.316974	Prob(F-statistic)		0.001176
Unweighted Statistics				
R-squared	0.278569	Mean dependent var		0.924898
Sum squared resid	18.05703	Durbin-Watson stat		0.874687

Source: prepared by the researcher based on the outputs of the 12 Eviews program.

4/ Analyze and discuss the results reached

Analyze the results obtained

After obtaining the statistical results through the Eview 12 program, the results of the statistical study can be analyzed as follows:

First: Analyzing the results of the estimation of the aggregate model: It is clear from the results of the estimation shown in Appendix (02) the following:

The constant c has a statistical significance, and this is explained by the presence of other variables that explain the dependent variable; This is consistent with economic theory.

The coefficient of the independent variable "economic return ROI" is not statistically significant;

The coefficient of the independent variable "growth rate of fixed investments" is not statistically significant;

The coefficient of the independent variable “leverage LEV” has a very high statistical significance as well and with a positive sign, meaning that every increase in financial leverage by one unit increases the value creation rate by 0.69%, which means that financial leverage positively affects the MARRIS ratio; This is consistent with financial theory.

The coefficient of the independent variable “Earnings Per Share” (EPS) is not statistically significant;

The coefficient of the independent variable “return on equity ROE” has a very high statistical significance as well and with a positive sign, that is, every time the return on equity increases by one unit, the value creation rate increases by 0.02%, which means that the ROE positively affects the MARRIS ratio; This is consistent with financial theory.

The overall significance of the estimated model is achieved by looking at the calculated significance of Fisher's statistic. Although there is a linear correlation and this is indicated by the Durbin-Watson

The explanatory power of the model amounted to 0.30, meaning that the estimated equation explains 30% of the estimated model, which is a percentage that explains the acceptable explanatory power.

Second: Analyzing the results of the estimation of the fixed effects model: It is clear from the results of the estimation that the table shown in Appendix 3 shows the following:

The constant c has a statistical significance, and this is explained by the presence of other variables that explain the dependent variable; This is consistent with economic theory.

The coefficient of the independent variable "economic return ROI" is not statistically significant;

The coefficient of the independent variable "growth rate of fixed investments" is not statistically significant;

The coefficient of the independent variable “leverage LEV” has a very high statistical significance as well and with a positive sign, meaning that every increase in financial leverage by one unit increases the value creation rate by 0.67%, which means that financial leverage positively affects the MARRIS ratio; This is consistent with financial theory.

The coefficient of the independent variable “Earnings Per Share” (EPS) is not statistically significant;

The coefficient of the independent variable “return on equity ROE” has a very high statistical significance as well and with a positive sign, that is, every time the return on equity increases by one unit, the value creation rate increases by 0.01%, which means that the ROE positively affects the MARRIS ratio; This is consistent with financial theory.

The overall significance of the estimated model is achieved by looking at the calculated significance of Fisher's statistic. Although there is a linear correlation and this is indicated by the Durbin-Watson value.

The explanatory power of the model amounted to 0.59, meaning that the estimated equation explains 59% of the estimated model, which is a percentage that explains the acceptable explanatory power.

Third: Analyzing the results of the comparison between the aggregate model and the fixed effect model: It is clear from the results of the estimation shown in Table (2-5) and (2-6) the following:

The constant C (1) has a very high statistical significance. This is explained by the presence of other variables that explain the dependent variable; This is consistent with economic theory.

The coefficient of the independent variable "leverage LEV", which is coefficient C (2), has a very high statistical significance as well and with a positive sign, meaning that whenever the financial leverage increases by one unit, the MARRIS index increases by 0.67%, which means that financial leverage positively affects the latter; This is consistent with financial theory.

The coefficient of the independent variable "return on equity ROE", which is coefficient C (5), has a very high statistical significance as well and with a positive sign, meaning that whenever the return on equity increases by one unit, the MARRIS index increases by 0.01%, which means that the share of one share of profits positively affects the latter; This is consistent with financial theory.

One coefficient out of 10 has statistical significance;

The overall significance of the estimated model was achieved by looking at the significance of the calculated Fisher statistic, despite the existence of a linear correlation, which is indicated by the Durbin-Watson value.

Fourth: Analyzing the results of the estimation of the random effects model: It is clear from the results of the estimation shown in Appendix (04) the following:

The constant c has statistical significance, and this is explained by the presence of other variables that explain the dependent variable; This is consistent with economic theory.

The coefficient of the independent variable "economic return ROI" is not statistically significant;

The coefficient of the independent variable "growth rate of fixed investments" is not statistically significant;

The coefficient of the independent variable “leverage LEV” has a very high statistical significance as well and with a positive sign, meaning that every increase in financial leverage by one unit increases the value creation rate by 0.66%, which means that financial leverage positively affects the MARRIS ratio; This is consistent with financial theory.

The coefficient of the independent variable “Earnings Per Share” (EPS) is not statistically significant;

The coefficient of the independent variable “return on equity ROE” has a very high statistical significance as well and with a positive sign, that is, every time the return on equity increases by one unit, the value creation rate increases by 0.01%, which means that the ROE positively affects the MARRIS ratio; This is consistent with financial theory.

The explanatory power of the model amounted to 0.21, meaning that the estimated equation explains 21% of the estimated model, which is a percentage that explains the acceptable explanatory power.

Fifth: Analyzing the results of the comparison between the fixed effect model and the random effect model: It is clear from the results of the estimation shown in Table (2-8) the following:

The constant c has a very high statistical significance, and this is explained by the presence of other variables that explain the dependent variable; This is consistent with economic theory.

The coefficient of the independent variable "economic return ROI" is not statistically significant;

The coefficient of the independent variable "growth rate of fixed investments" is not statistically significant;

The coefficient of the independent variable “leverage LEV” has a very high statistical significance as well and with a positive sign, meaning that every increase in financial leverage by one unit increases the value creation rate by 0.66%, which means that financial leverage positively affects the MARRIS ratio; This is consistent with financial theory.

The coefficient of the independent variable “Earnings Per Share” (EPS) is not statistically significant;

The coefficient of the independent variable “return on equity ROE” has a very high statistical significance as well and with a positive sign, that is, every time the return on equity increases by one unit, the value creation rate increases by 0.01%, which means that the ROE positively affects the MARRIS ratio; This is consistent with financial theory.

Accept the null hypothesis that the random model is the optimal model.

discussing hypotheses

First: Based on the previous studies that were collected and analyzed and their results summarized, the study hypotheses were formulated as follows:

1/Strategic determinants

The first hypothesis: There is a positive relationship between economic profitability and value creation.

The second hypothesis: There is a direct relationship between the growth rate of fixed investments and value creation;

2/Financial determinants

The third hypothesis: There is a direct relationship between financial leverage and value creation;

The fourth hypothesis: There is a direct relationship between the share of profits per share and value creation.

3/ Determinants related to governance

Hypothesis Five: There is a positive relationship between return on shareholders' equity as an indicator of governance and effective management of shareholder funds and value creation.

Second: Based on the results of the applied study, we have reached the following:

The factors affecting value creation at the level of Jordanian industrial companies are: financial leverage and return on equity;

Denying the hypothesis of a direct relationship between economic profitability and value creation, due to the absence of a statistically significant relationship with regard to this determinant, and this is due to the lack of interest of investors in the evaluation aspect of projects and not considering it an interpretive measure of the market value because it is a measure that expresses the overall performance of the company, which is the financial performance of an economic nature Resulting from optimizing operations.

Denying the hypothesis of a direct relationship between the rate of fixed investments and value creation. This explains that the investors' view is short-term only, as their interest is on creating value through pricing and thus maximizing the market value of shares.

Confirming the hypothesis that there is a direct relationship between financial leverage and value creation, and this is consistent with what is stipulated in the financial theory, whereby debt is resorted to to increase the return of the share.

Denying the existence of a statistically significant relationship between earnings per share and value creation. This is explained by investors' preference for the cash dividends they receive instead of retaining profits to finance the growth and potential profitability of the share.

Standard results confirmed the existence of a positive relationship between return on equity and value creation. This is explained by the interest of investors in the latter as it is an indicator of the financial evaluation of the company, as it expresses the extent of the efficiency of the companies' management in employing shareholders' money and controlling costs in order to achieve profits optimally and thus maximize share prices and create high value.

For the purpose of this, the study was carried out in some companies of the Amman Stock Exchange, which is considered one of the most important stock exchanges, where the statistical and standard results were reached as follows:

The values of the study variables differed from one industrial company to another, but they all aspire to the fact that the financial leverage index and the return on equity index have a positive impact on value creation.

The correlation between the variables of the study proved that there is a statistically significant relationship for some specific indicators of value creation, and this is consistent with what we have reached in the theoretical chapter;

Estimating the summation model found that financial leverage and return on shareholders' equity affect value creation;

Estimating the fixed effect model to reach financial leverage and return on shareholders' equity affects value creation;

The comparison between the aggregate model and the fixed effects model. The results of the Walden test confirmed that the fixed effects model is optimal. This is due to the fact that the aggregate model neglects the time factor and ignores the impact of the company, and this is a breach of one of the least squares hypotheses;

The comparison between the fixed effects model and the random effects model. The results of the Haussmann test confirmed that the random effects model is the best model, and this is considered a logical explanation, given that the model is based on the fact that there is a difference between the homogeneity of companies and that not all are similar.

IX. Conclusion

The company's goal is justified in maximizing its value, especially the value related to the Marris ratio within the financial markets, based on raising profitability (financial profitability and share profitability), which is built on the basis of improving results and reducing costs, and thus maximizing the market value and the value that is created for shareholders, as the pricing of shares is affected With information related to reducing costs and the existence of any possibilities for creating value, whether financial, economic or market resulting from them.

From this standpoint, the study attempted to determine the extent to which the determinants of value creation of a strategic and financial nature affect the interpretation of value creation for companies listed on the Amman Stock Exchange for the period (2013-2020).

The work is presented in two chapters, where the first chapter deals with the theoretical literature of the most important concepts related to value creation and its various indicators, then the most important previous studies that dealt with this topic, while the second chapter is represented in the formulation of the model that explains the influence of the Marris ratio of the sample taken from the study population by value indicators of a nature strategy and finance in a specific period of time, and modern statistical methods were used, represented in panel sectional time series data and models, in order to answer the problem and test hypotheses.

Results of hypothesis testing

The results of hypothesis testing led to the following:

As for the first hypothesis, which is “there is a direct relationship between economic profitability and value creation,” it has been denied, through the following results:

There is no statistically significant relationship between economic profitability and value creation on the Amman Stock Exchange at a significant level of 0.05 in relation to this determinant. Resulting from optimizing operations.

As for the second hypothesis, which is “there is a direct relationship between the growth rate of fixed investments and value creation,” it has been denied through:

There is no statistically significant relationship between the rate of growth of fixed investments and value creation in the Amman Stock Exchange at a significant level of 5%, and this explains that the investors' view is short-term only, as their interest is on creating value through pricing and thus maximizing the market value of shares.

As for the third hypothesis, "the existence of a direct relationship between financial leverage and value creation", it was proven through the existence of a statistically significant relationship between financial leverage and value creation on the Amman Stock Exchange at a significant level of 5%. to increase the share yield.

With regard to the fourth hypothesis, “the existence of a statistically significant relationship between the share of profits per share and value creation,” the hypothesis was denied, as follows:

There is no statistically significant relationship between the share of profits per share and value creation on the Amman Stock Exchange at a significant level of 5%.

As for the fifth hypothesis, "There is a direct relationship between return on equity and value creation," it has been proven because there is a statistically significant relationship between return on equity and value creation on the Amman Stock Exchange at a significant level of 5%. This is explained by investors' interest in the latter as it is an indicator of the company's financial evaluation It expresses the extent to which corporate management is efficient in employing shareholder funds

and controlling costs in order to achieve optimal profits and thus maximize share prices and create high value.

Based on the previous results, it is possible to move on to the recommendations.

Study recommendations:

Attempting to explain value creation in institutions outside the generally accepted theoretical framework in this field by opening up to other determinants of a strategic nature and related to governance in order to improve the strategic decision-making process.

Increasing companies' interest in issuing detailed and transparent reports related to indicators related to value creation, with the aim of improving the performance of stocks in the financial market based on improving investors' awareness about value, its determinants and sources.

Journal Papers:

[1] إلياس بن ساسي، **محاولة ضبط مفهومي النمو الداخلي والنمو الخارجي للمؤسسة كمنطق للمفاضلة بينهما**، مجلة الباحث، 2008، ص2.

[2] خالد سيف الاسلام بوخلخال، علال بن ثابت، **قياس وتقييم الأداء المالي باستخدام المؤشرات الحديثة والتقليدية ودراسة فعاليتها في خلق القيمة**، دراسة حالة مجمع صيدال خلال الفترة2009–2019، مجلة دراسات العدد الاقتصادي، المجلد12، العدد01، مخبر العلوم الاقتصادية والتسيير، جامعة الأغواط، الجزائر، 2020، ص149.

[3] سويسي الهواري، رمضاني حميدة، **قياس أداء المؤسسة الاقتصادية الجزائرية من منظور خلق القيمة باستخدام مؤشرات الأداء الحديثة**، مجلة الواحات للبحوث والدراسات، المجلد10، العدد2، 2017، ص801.

[4] شوقي بورقبة، **دور نظرية الإشارة في الرفع من كفاءة الأسواق المالية**، مجلة العلوم الأقتصادية وعلوم التسيير، العدد10، 2010، ص144–145.

[5] عبد الكريم قندور، **الخيارات الحقيقية ودورها في التقييم المالي للمشروعات الاستثمارية**، المجلة الجزائرية للتنمية الاقتصادية، العدد3، 2015، ص58.

[6] عبدي نعيمة، **حوكمة المؤسسات كمدخل لخلق القيمة "درسة تحليلية من منظور المدخل الأنضباطي"**، مجلة الحقوق والعلوم الإنسانية، جامعة زيان عاشور، بالجلفة، الجزائر.

[7] علي بن ضب، سيدي أمحمد عيادة، **تكلفة رأس المال وإنشاء القيمة**، مجلة أداء المؤسسات الجزائرية، جامعة ورقلة، العدد2، 2012، ص114.

[8] عبد الوهاب دادن، **سلوك المؤسسات البترولية في تمويل نموها الداخلي، دراسة مقارنة بين المؤسسة الوطنية للأشغال في الآبار (ENTP) والمؤسسة الوطنية للتنقيب (ENAFOR)**، مجلة الإصلاحات الإقتصادية والإندماج في الإقتصاد العالمي، جامعة ورقلة، الجزائر، ص100.

[9] لمياء عماني، سمية بن علي، **الخيارات الحقيقية "خلق القيمة والمرونة"**، مجلة إضافات اقتصادية، جامعة غرداية، الجزائر، العدد2، 2018، ص194.

[10]لمياء عماني، سلمى كيحلي، **خلق القيمة وأقتصاد الأصول غير المادية، مجلة أداء المؤسسات الجزائرية**، كلية العلوم الإقتصادية والعلوم التجارية وعلوم التسيير، جامعة قاصدي مرباح، ورقلة، سنة 2017.

[11]مداني شهيناز، **أثر تكلفة راس المال على ربحية الشركات**، المجلة الجزائرية للدراسات المحاسبية والمالية، المجلد7، العدد2، 2022، ص3.

[12]معاليم سعاد، بوحفص سميحة، **إنشاء القيمة في المؤسسة وفق مؤشر القيمة الاقتصادية المضافة EVA" دراسة حالة: مؤسسة صناعة الكوابل فرع جنرال كابل-بسكرة-**"، مجلة العلوم الإنسانية والإجتماعية، الجزائر، 2017، ص401-402.

[13]هواري سويسي، **دراسة تحليلية لمؤشرات قاس أداء المؤسسات من منظور خلق القيمة**، مجلة الباحث، جامعة ورقلة، العدد السابع، 2009-2010، ص61.

[14]Cappelliti, l-khouatra, **la mesure de la création de valeur organisationnelle**, overts hall, 2011.

[15]Jokung-Ngéna O, Arrgle J-L, Yves de kougé, UlagaW, **introduction au management de la valeur**, 2011.

Books:

[16]الياس بن ساسي، **الخيارات الإستراتيجية لنمو المؤسسة**، الطبعة1، دار وائل للنشر، عمان، الإردن، 2011.

[17]الياس بن ساسي، يوسف قريشي، **التسير المالي**، الجزء الأول، الطبعة الثانية، دار وائل، عمان-الأردن، 2011.

[18]رجم نصيب، لمياء عماني، سمية بن على، **تقييم المؤسسات، دروس وتطبيقات محلولة**، دار الجزائرية، الطبعة الاولى، سنة 2018، ص27.

[19]كحيحة أكرام، **دور إستراتيجية النمو الداخلي كخيار في تحسين أداء المؤسسة من منظور بطاقة الأداء المتوازن**، قسم علوم التسيير، جامعة محمد خيضر، علوم التسيير، بسكرة، ص 53.

[20]ميلان كوبر، **الإستشارات الإدارية**، مكتب العمل الدولي جنيف، دار النشر شركة أبوغزاله، الطبعة الرابعة، سنة 2015، ص295.

[21]Pierre vernimen, Pascl quiry, yann le fur, **Finance d'entreprise9°édition**, Dalloz, paris,2011.

Proceedings Papers:

[22]عبد المجيد قدي، عبد الوهاب دادن، **تحليل المنطق المالي لنمو المؤسسات الإقتصادية كأسلوب لتقييم الأداء المالي**، المؤتمر العلمي الدولي حول الأداء المتميز للمنظمات والحكومات، جامعة ورقلة، 2005، ص520.