



# METHODS FOR DETECTING CREATIVE ACCOUNTING PRACTICES AND THEIR IMPACT ON INVESTMENT DECISIONS UNDER INTERNATIONAL FINANCIAL REPORTING STANDARDS (AN APPLIED STUDY IN A SAMPLE OF BANKS LISTED ON THE IRAQI STOCK EXCHANGE)

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Article history:	Abstract:
<b>Received:</b> 11 <sup>th</sup> October 2023 <b>Accepted:</b> 10 <sup>th</sup> November 2023 <b>Published:</b> 14 <sup>th</sup> December 2023	The research aims to address the Jones model as one of the appropriate models for detecting creative accounting methods and explaining their causes, as well as finding methods that help in searching for any warning signs indicating the presence of manipulation in financial information, as well as explaining the importance of this in helping to rationalize investment decisions. The research was applied in the research sample to a group of Iraqi banks listed on the Iraqi Stock Exchange for the period from 2013 to 2018. The research reached a set of conclusions, the most important of which was that creative accounting is one of the aspects of manipulating financial statement data for the purpose of misleading by exploiting flexibility in applying accounting and professional standards, principles, policies and procedures, as well as the presence of many models and indicators that regulatory authorities can adopt in revealing accounting practices. Creativity. Or which gives a warning that there is a possibility that these practices will be used to manipulate the financial statements for the purpose of helping to rationalize investment decisions in accordance with different environmental requirements.

## Keywords:

### INTRODUCTION:

As a result of the complexity of business and the nature of financial transactions in the recent period and the consequent complexity in the nature of the accounting information that is relied upon by its beneficiaries, which called on professional parties to issue accounting standards and rules for the purpose of addressing these complexities in financial transactions, which allowed for the creation of various alternatives and methods for application, paving the way for this. For departments to manipulate the financial statements in order to make the organization's performance better in front of the users of its data, through the management's exploitation of changes in these accounting standards and principles, Creative accounting is one of the forms of manipulating financial statement data for the purpose of misleading by exploiting flexibility in applying accounting and professional standards, principles, policies, and procedures. Therefore, research began on the nature of these practices carried out by management and a statement of their impact on the financial statements, which subsequently affect decision-making, especially investment decisions. And creating tools that enable regulatory authorities to detect such practices.

### THE FIRST SECTION: RESEARCH METHODOLOGY

#### 1-1 Research problem:

As a result of the multiplicity of accounting standards and principles and the multiple methods of accounting treatments, departments have wide flexibility to choose between these procedures and alternative methods, which can be exploited by senior management to achieve some personal purposes, as well as their impact on the level of income, which harms the interests of other parties and shows the organizations' performance in a way that is different from the unit's performance. In fact, this is why the search began to find ways and means to detect



practices to serve as an alarm bell in further investigating the practices of manipulating financial information, in addition to explaining the impact of this on investment decisions.

### **1-2 Research importance:**

The importance of the research is that it addresses an important topic related to addressing methods for detecting creative accounting practices, which allows users of financial information to take appropriate analytical measures in monitoring accounts by using multiple tools, including the Jones model, in order to help rationalize investment decisions.

### **1-3 Research objectives:**

The research aims to address the Jones model as one of the appropriate models for detecting creative accounting methods and explaining their causes, as well as finding methods that help in searching for any warning signs indicating the presence of manipulation in financial information, as well as explaining the importance of this in helping to rationalize investment decisions.

### **1-4 Research hypothesis:**

The research is based on the following hypothesis: There is a possibility of using the Jones model to reveal creative accounting methods, which allows users of financial statements to limit the effects of these practices for the purpose of taking appropriate corrective measures and rationalizing investment decisions.

### **1-5 Research population and sample:**

The research sample represents a group of Iraqi banks listed on the Iraqi Stock Exchange for the period from 2013 to 2018.

## **The second section: The theoretical aspect of the research**

### **2.1 The concept of creative accounting:**

The concept of creative accounting appeared at the beginning of the eighties of the last century when some economic units faced difficulties represented by pressure to achieve better profits at a time when it was difficult to achieve those profits. Therefore, these units saw that if they could not earn and achieve profits, they could at least To innovate it, and define creative accounting as a process through which accountants use their knowledge of accounting rules to process the numbers recorded in the accounts of economic units (Naser & Pendlebury, 1992:4).

Creative accounting is a set of procedures or steps that are used for the purpose of manipulating financial numbers through the use of options and practices of accounting principles or any procedure or step towards managing profits or smoothing income (Amat & Blake, 2005:22).

Thus, creative accounting is the process of transforming accounting numbers from their true form into a desirable form by exploiting existing laws in accounting, so that the new numbers give a positive advantage to the economic unit without compromising any of the accounting principles and rules (Oliver & Amat, 2003:7).

Therefore, creative accounting is a set of accounting procedures taken to facilitate the process of manipulating accounting by taking advantage of existing alternatives in accounting laws and existing measurement options, or it is the process that structures transactions in order to produce required accounting results and not record transactions in a neutral and compatible manner (Amat, et.al ,2000:4).

Thus, creative accounting refers to the use of flexibility within accounting procedures to manage standards and represent accounts so that they serve the interests of certain groups, especially those who prepare them (Jones, 2007: 81).

The results of these practices are complex and exciting in financial reports, and for this reason it has been called creative accounting and is used with the intention of distorting the real income, assets and liabilities of the economic unit, and thus it gives illegal or questionable benefits to maintain the entity of the economic unit's accounts (Breton & Taffler, 2001:98).

Therefore, creative accounting is a process of manipulating accounting numbers by seizing the opportunity to get rid of compliance with accounting rules, measurement alternatives, and disclosure applications to move the financial statements from what they should be to what the preparer of these statements prefers to report. It is also a process through which transactions are structured in order to produce results. Accounting is required instead of reporting these transactions in a coordinated and impartial manner (Al-Khashawi and Al-Dosari, 2008: 8).

### **2-2 Areas of creative accounting:**

Economic units seek to show the best picture of the financial position to express the extent of their economic stability, because this has a direct impact on their value, which is clearly shown in the prices of their shares in the market, and the amount of risk that investors and lenders assess based on the information disclosed by the financial statements of the economic unit, and accordingly. Under certain operational conditions, the management of the economic unit may resort to choosing among the accounting rules, which leads to the disclosure that it deems appropriate about its



profits, losses, and financial position, which opens the way for manipulation by using the appropriate accounting choice and providing misleading information to users of accounting information, resulting in irrational decisions ( Al-Mukhaizem, 2008: 13).

Beneis believes that the real methods used in creative accounting have two important elements. The first element represents the impact on the financial statement numbers, whether increased or decreased, and the second element is the presence of an element of intentionality, as management resorts to these real methods deliberately to achieve specific goals, in addition to the methods. In fact, creative accounting may use fictitious or fictitious methods, and it relies on a group of accounting methods and variables for the purpose of influencing the financial statement numbers. Creative accounting methods are represented by a group of means, the most important of which are: voluntary accounting changes, choosing between alternative methods, accounting estimates, and disclosure management ( Beneis,2012:4).

Accounting creativity generally takes several fields. It may be administrative creativity, radical, planned, or fundamental, organizational, individual, or collective, internal or external, and these fields are as follows: (Jamal and Ahmed, 2011: 10)

1. Accounting information system.
2. Concepts, definitions, assumptions, principles, foundations, rules and various standards of accounting.
3. Accounting measurement (evaluation).
4. Methods of recording, recording, and presenting accounting data and financial statements.
5. Methods of distributing or charging various expenses.
6. Methods of preparing and presenting reports.
7. Financial analysis methods.
8. Developing automated accounting programs.

### **2-3 Using the Jones model to reveal creative accounting practices and their impact on investment decisions:**

In his model, Jones aimed to improve the process of calculating non-discretionary receivables by taking the operational and economic circumstances of each company into account when determining these receivables. The model is based on the assumption that the total receivables consist of optional receivables and non-discretionary receivables, and optional receivables represent the part that is attributable to management intervention. In the accounting measurement and disclosure process to influence the accounting numbers stated in the financial statements, non-optional accruals represent the portion resulting from the company's operational activity, and non-optional accruals are calculated according to the following equation: (Rishi, 2017: 25)

$$NDA_t = a1\left(\frac{1}{A_{t-1}}\right) + a2\left(\frac{\Delta REV}{A_{t-1}}\right) + a3\left(\frac{PPE_t}{A_{t-1}}\right)$$

whereas:

NDA<sub>t</sub>: Nonelective accruals in year t.

REV: The change in the current year's revenues over the previous year's revenues.

PPE<sub>t</sub>: Total fixed assets such as machinery, equipment, and any assets subject to extinction.

A<sub>t-1</sub>: Total assets of the year prior to the measurement year.

a1, a2, a3: model parameters.

Through this equation, the optional accruals are also calculated, which represent (e<sub>t</sub>) and are called the residuals. This is the part that is not explained by the variables of the model, and which uses (Proxy) for the optional accruals that result from management's intervention and its practice of earnings management, as shown in the following model: (Michael,et.al.,2017:8)

$$\frac{\tau \Delta}{A}_{t-1}^t = a1\left(\frac{1}{A}_{t-1}\right) + a2\left(\frac{\Delta REV}{A}_{t-1}\right) + a3\left(\frac{PPE}_t}{A}_{t-1}\right) + e_t$$

Jones added to his previous model the change in receivables in order to improve the previous model and reduce errors in measuring optional receivables, and the model variables are calculated under the following assumptions: (Rishi, 2017: 27)

1. Every change that occurs in futures sales is a result of earnings management practices by management.



2. A variable that expresses non-discretionary receivables in working capital related to sales.

The same procedures for calculating optional receivables used in the previous model are then followed. Most researchers have relied on the modified Jones model in calculating optional receivables because it reduces errors in the previous model, as adding the change in receivables reflects the extent of management's intervention in the exercise of managing its companies' profits through Manipulating forward sales, which are more susceptible to manipulation and management intervention than cash sales, and thus it helps in providing the necessary data and information through which investment decisions in the economic unit can be rationalized to the requirements of the contemporary business environment and the rapid and successive developments and changes that accompany it (Jain,2015:3).

**THE THIRD SECTION: THE APPLIED ASPECT OF THE RESEARCH**

**3-1 Research population, sample, and data collection sources:**

The research population is represented by banks operating in the Iraqi environment listed on the Iraqi Stock Exchange, which number (44) forty-four banks. As for the research sample, it was determined as a judgmental sample with (10) ten banks that apply International Financial Reporting Standards (IFRS), for the period 2013. -2018, and the research sample was divided into two groups, which are as follows: - The first group: represents the years in which the banks in the study sample do not apply the International Financial Reporting Standards (IFRS), which are 2013, 2014, 2015, The second group: represents the years in which the banks applied the International Financial Reporting Standards (IFRS), which are 2016, 2017, 2018.

The number of Iraqi banks in the research sample that apply the International Financial Reporting Standards (IFRS) reached (10) ten banks. These standards were applied as a result of the support and directions of the Central Bank of Iraq in adopting them and benefiting from its multi-framework efforts in supervising the banking system and non-banking financial institutions. And amend everything that prevents this from being obstructed, and continue to build the necessary skills and knowledge for certified public accountants through the continuing education system and professional courses adopted by the Iraqi Society of Certified Public Accountants to ensure progress with modernity in this field.

**3-2 Detecting creative accounting in banks, the research sample, using the modified Jones model:**

For the purpose of revealing creative accounting in the banks of the research sample, which is expressed in the value of optional receivables for the period (2013-2018), the model (Jones, 1995) will be relied upon, and a set of steps can be followed, which is calculating the total receivables, then estimating the parameters of the model, and then calculating the non-optional receivables. Finally, optional accruals are calculated through which profit management can be measured. These steps can be explained as follows:

First: Calculating the total receivables: The total receivables of the banks in the research sample can be calculated according to the following model:

$$TAC_{it} = NI_{it} - CFO_{it} \dots\dots\dots (1)$$

whereas:

TAC<sub>it</sub>: The total receivables of the bank (i) during the year (t).

NI<sub>it</sub>: Net income of bank (i) during year (t).

CFO<sub>it</sub>: The operating cash flow of the bank (i) during the year (t).

Second: Estimating the model parameters: The model parameters used in the model in order to calculate the non-elective receivables are estimated through the regression equation that is performed on the banks in the research sample and for each year separately, as shown in the following model:

$$TAC_{ijt} / A_{ijt-1} = a1 (1/A_{ijt-1}) + a2 [(\Delta REV_{ijt} - \Delta REC_{ijt}) / A_{ijt-1}] + a3 (PPE_{ijt} / A_{ijt-1}) + e_{it} \dots\dots\dots (2)$$

Whereas:

TAC<sub>ijt</sub> / A<sub>ijt-1</sub>: The total receivables of the bank (i) during the year (t) over the total assets of the bank (i) at the beginning of the year (t).

ΔREV<sub>ijt</sub>: The change in bank (i) revenues between period (t) and (t-1).

ΔREC<sub>ijt</sub>: The change in the customer account balance of bank (i) between period (t) and (t-1)

PPE<sub>ijt</sub>: The total real estate, property, and machinery of the bank (i) during the year (t)

Third: Calculating non-discretionary receivables: Non-discretionary receivables can be calculated for the banks in the research sample according to the following model:

$$NDAC_{ijt} / A_{ijt-1} = a1 (1/A_{ijt-1}) + a2[(\Delta REV_{ijt} - \Delta REC_{ijt}) / A_{ijt-1}] + a3 (PPE_{ijt} / A_{ijt-1}) \dots\dots\dots (3)$$

whereas:



NDAC<sub>ijt</sub> / A<sub>ijt-1</sub>: Non-optional receivables of the bank (i) during the year (t) on the total assets of the bank (i) at the beginning of the year (t).

Fourth: Calculating the optional dues: The optional dues are represented by the difference between the total dues and the non-optional dues. The optional dues for the banks in the research sample can be calculated according to the following model:

$$DAC_{it} / A_{it-1} = TAC_{ijt} / A_{ijt-1} - NDAC_{ijt} / A_{ijt-1} \dots \dots \dots (4)$$

Whereas:

DAC<sub>it</sub> / A<sub>it-1</sub>: Optional receivables of the bank (i) during the year (t) on the total assets of the bank (i) at the beginning of the year (t).

ε<sub>it</sub>: random error, α<sub>1</sub>, α<sub>2</sub>, α<sub>3</sub>: model parameters for bank (i).

The banks in the research sample can be classified as practicing or not practicing creative accounting methods during the specified years of research, as shown in the following table:

Table (1)

Classification of the banks in the research sample into those that practice and do not practice creative accounting methods according to the modified Jones model before implementing IFRS

No.	Banks	Years	Absolute value of discretionary accruals Average	Absolute value of optional accruals	Classification (exercise/non-exercise)
1	Gulf	2013	0.0073	0.0076	Not practicing
		2014	0.0031	0.0076	Not practicing
		2015	0.0123	0.0076	practitioner
2	Assyria	2013	0.0098	0.0118	Not practicing
		2014	0.0061	0.0118	Not practicing
		2015	0.0194	0.0118	practitioner
3	Al-Mansour	2013	0.0084	0.0202	Not practicing
		2014	0.0047	0.0202	Not practicing
		2015	0.0476	0.0202	practitioner
4	Baghdad	2013	0.0648	0.0234	practitioner
		2014	0.0048	0.0234	Not practicing
		2015	0.0005	0.0234	Not practicing
5	the East	2013	0.1056	0.0428	practitioner
		2014	0.0155	0.0428	Not practicing
		2015	0.0072	0.0428	Not practicing
6	Al-Ahly	2013	0.0139	0.0304	Not practicing
		2014	0.0153	0.0304	Not practicing
		2015	0.0468	0.0304	practitioner
7	the Union	2013	0.0657	0.0545	practitioner
		2014	0.0079	0.0545	Not practicing
		2015	0.0898	0.0545	practitioner
8	United	2013	0.0053	0.0360	Not practicing
		2014	0.0984	0.0360	practitioner
		2015	0.0044	0.0360	Not practicing
9	Credit	2013	0.0049	0.0145	Not practicing
		2014	0.0332	0.0145	practitioner
		2015	0.0054	0.0145	Not practicing
10	North	2013	0.0038	0.1045	Not practicing
		2014	0.0068	0.1045	Not practicing
		2015	0.3028	0.1045	practitioner

Source: Prepared by the researcher based on the data available in the banks in the research sample.

We can classification of the banks in the research sample into those that practice and do not practice creative accounting methods according to the modified Jones model after implementing IFRS, as follows



Table (2)

Classification of the banks in the research sample into those that practice and do not practice creative accounting methods according to the modified Jones model after implementing IFRS

No.	Banks	Years	Absolute value of discretionary accruals Average	Absolute value of optional accruals	Classification (exercise/non-exercise)
1	Gulf	2013	0.0089	0.0072	practitioner
		2014	0.0115	0.0072	practitioner
		2015	0.0011	0.0072	Not practicing
2	Assyria	2013	0.0076	0.0187	Not practicing
		2014	0.0042	0.0187	Not practicing
		2015	0.0442	0.0187	practitioner
3	Al-Mansour	2013	0.0019	0.0073	Not practicing
		2014	0.0108	0.0073	practitioner
		2015	0.0092	0.0073	practitioner
4	Baghdad	2013	0.0453	0.0168	practitioner
		2014	0.0036	0.0168	Not practicing
		2015	0.0014	0.0168	Not practicing
5	the East	2013	0.0046	0.0052	Not practicing
		2014	0.0026	0.0052	Not practicing
		2015	0.0083	0.0052	practitioner
6	Al-Ahly	2013	0.0228	0.0185	practitioner
		2014	0.0304	0.0185	practitioner
		2015	0.0022	0.0185	Not practicing
7	the Union	2013	0.0067	0.0054	practitioner
		2014	0.0046	0.0054	Not practicing
		2015	0.0049	0.0054	Not practicing
8	United	2013	0.0165	0.0183	Not practicing
		2014	0.0091	0.0183	Not practicing
		2015	0.0294	0.0183	practitioner
9	Credit	2013	0.0078	0.0213	Not practicing
		2014	0.0470	0.0213	practitioner
		2015	0.0092	0.0213	Not practicing
10	North	2013	0.2879	0.0979	Not practicing
		2014	0.0114	0.0979	Not practicing
		2015	0.0057	0.0979	Not practicing

Source: Prepared by the researcher based on the data available in the banks in the research sample.

The two tables above show both the absolute value of the optional receivables and the average absolute value of these receivables for the banks in the research sample in order to determine whether each of the banks in the research sample is a practitioner or not of creative accounting methods. The frequencies and percentages for banks that practice and do not practice earnings management can be clarified through: The following table:

Table (3)

Frequencies and percentages for banks that practice and do not practice creative accounting methods

Details	Before implementing IFRS		After implementing IFRS	
	Frequency	Percentage	Frequency	Percentage
Banks practice earnings management	11	37%	12	40%
Banks that do not practice earnings management	19	63%	18	60%
Total	30	100%	30	100%

Source: Prepared by the researcher.



It is noted from the table above that the number of views indicating that the banks in the research sample practiced creative accounting methods before implementing IFRS reached (11) views, at a rate of (37%), and the number of views indicating that creative accounting was not practiced reached (19) views, at a rate of 37%. (63%), but after applying these standards, the number of views indicating that these banks practiced creative accounting methods reached (12) views, at a rate of (40%), and the number of views indicating that earnings management was not practiced reached (18) views, at a rate of (63%). 60%), which indicates that some of the banks in the research sample practice creative accounting methods.

## **SECTION FOUR: CONCLUSIONS AND RECOMMENDATIONS**

### **4-1 Conclusions:**

1. Creative accounting is one of the forms of manipulating financial statement data for the purpose of misleading by exploiting flexibility in applying accounting and professional standards, principles, policies and procedures.
2. Creative accounting practices aim not to show the reality of what the financial statement data represents in order to obtain the privileges of artificially increasing profits or increasing the rewards of senior management.
3. There are many models and indicators that regulatory authorities can adopt to detect creative accounting practices. Or which gives a warning that there is a possibility that these practices will be used to manipulate financial data for the purpose of expanding research and using more effective analytical procedures with the aim of achieving more beneficial control.
4. The use of the Jones index gives a wider scope in achieving self-monitoring for management and relevant parties for the purpose of reducing the costs and time of oversight through the use of indicators of this model.
5. Jones model indicators: Financial statement outputs are an indicator that can be used to achieve more effective control and focus on aspects that indicate the possibility of manipulation.

### **4-2 Recommendations:**

1. The need to limit creative accounting practices and manipulation of financial statement data because of their impact on the credibility of this data with its users.
2. Search for tools and indicators that can give warning signals about the possibility of fraud in the financial statements.
3. The goal of supervisory authorities is to prevent, not discover, errors. This is why the Jones Index is one of the tools that warns of the possibility of manipulation in financial statement data, and it is necessary for supervisory authorities to pay attention and expand analytical procedures.
4. The necessity of using the Jones Index to help detect fraud and manipulation of financial statements in order to increase their credibility.
5. Working to improve investment decisions by relying on accurate and reliable accounting information, which should warn of the possibility of using these practices to manipulate financial data for the purpose of expanding research and using more effective analytical procedures with the aim of achieving more useful control.

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