

Measuring the level of income smoothing in the Iraqi banks listed in the Iraq Stock Exchange: An Empirical study in a sample of banks listed in the Iraq Stock Exchange

Yassir Nori Mohammed¹, Abderrazek Hassan Elkhaldi²

¹Ph.D. Candidate at Institut Supérieur de Gestion de Tunis, University of Tunis, Tunis.

²Faculty of economic sciences and management of Sousse, University of Sousse, Tunis.

Abstract

This study aims to measure the level of income smoothing for Iraqi banks listed on the Iraq Stock Exchange. The study was conducted on a sample of (30) banks listed in the Iraq Stock Exchange, for the period from (2016-2017). Furthermore, (Eckel, 1981) model was used to measure the level of income smoothing, and descriptive tests were used, in addition to testing the hypothesis of the study using several statistical methods, including arithmetic mean, standard deviation, coefficient of variation (C.V), and the study concluded that most of the banks listed in the Iraqi Stock Exchange practice the process of smoothing income, as the results showed when measuring the level of income smoothing, as it reached (0.688) according to the Eckel scale.

Keywords: income smoothing, Eckel model.ISE

INTRODUCTION:

Income smoothing is one of the most common forms of Earning Management, through which management attempts to maintain net income stability by influencing the timing of certain financial events or by choosing certain accounting methods, or both. However, companies generally prefer to disclose a stable trend in income growth and do not want to show fluctuation in earnings and the rise and declines in some periods, to achieve this, it smooths the income to maintain its stability, where the administration depends on the relative current and future performance of the company, as when the

current earnings are low and the expected future earnings are good, the manager resorts to borrowing earnings (accounting) from the future period to be used in the current period, and when the opposite happens which mean that the current earnings are good but the administration expects low future earnings, then management resorts to saving current earnings for possible use in the future. However, the phenomenon of smoothing income during the last period has received great interest in accounting thought, and this interest has increased after the global financial crisis that most countries of the

world were exposed to, which led to the collapse of a number of major international banks such as Brothers Lehman Bank in the United States of America and the Bank of Fortis in Belgium, which carries out banking activity in addition to providing insurance services, where the management manipulated the results of the banks' business and offered unreal earnings to the audience of beneficiaries because of their desire to meet the required expectations about their performance. Accordingly, there are several definitions of income smoothing in accounting thought, including that income smoothing "is a type of earnings management in companies, which aims to reduce fluctuations in income across different financial periods by increasing or decreasing natural earnings and using these differences in subsequent years (Mulford & Comiskey, 2002).

The problem of the research is to determine the extent of the presence of income smoothing in Iraqi banks by measuring it because of its importance for users of financial information from decision-makers, whether they are current or prospective lenders, as well as current and potential investors, government agencies such as tax, accordingly and in light of the objectives of the study, the problem of the study can be formulated with the following question, do the banks listed in the Iraqi Stock Exchange practice the phenomenon of income smoothing? Is it possible to measure the level of smoothing income?

LITERATURE REVIEW

Various literature reviews dealt with the topic of income smoothing because of its importance, and we mention from them the study of (Almeida, et al. 2012), aimed to

verify the existence of a correlation between income smoothing practices and conditional reservation. In theory, most companies adopting income smoothing use accruals to reduce earnings volatility, decreasing the possibility of timely recognition of future economic losses (ie bad economic news) from earnings. Furthermore, Eckel model was used in 1981, and listed companies were classified as smoothed or ungraded for income, and Basso model was used in 1997 to determine the degree of conditional conservatism in each company, and to make the results of the study more robust, samples were created for annual stock returns from each of March and December.

The results indicated that non-income smoothing companies have a higher degree of conditional conservatism, that is, more opportunities to recognize future economic losses because the market can use stock returns data to anticipate future losses contained in earnings information. However, the aim of this research is the possibility of observing the theoretical correlations between the characteristics of accounting information:

- I. There is a correlation between smoothing income and conditional conservatism (ie accounting options).
- II. Shedding light on the informational environment of the Brazilian capital market for its contribution to the differentiation in the market between non-income smoothing companies and income smoothing companies.
- III. Improving the capital market by equipping economic activities with more forecasting of implicit economic losses.

Furthermore, the study (Gharibeh,2013) aimed to identify the extent of the

prevalence of income smoothing behavior in Jordanian service companies listed on the Amman Stock Exchange from 2009 to 2013 and to examine the impact of company liquidity, debt financing, earnings distribution, and company size on income smoothing, as well as studying the impact of the income smoothing practice on financial performance. Accordingly, one of the most prominent results was that the Jordanian service companies listed on the Amman Stock Exchange practice income smoothing for different levels of earnings at different rates from one level to another and from year to year, and there are statistically significant differences for dividends, debt financing and company size at other levels of income at the level (0.05). The study concluded that there are no statistically significant differences for earnings per share between non-income smoothing companies and income smoothing companies for all income levels at the level (0.05), but there are statistically significant differences for the return on assets, the return on ownership, and the turnover rate of assets between the non-income smoothing companies and income smoothing companies for all levels at the level of (0.05), but there are no statistically significant differences for the return on assets and the return on ownership between non-income smoothing companies and income smoothing companies for the total earnings at the level (0.05), and this indicates a statistically significant effect of income smoothing on financial performance.

The study (Al-Otaibi,2016) aimed to determine the extent to which income smoothing is practiced in Saudi joint-stock companies listed in the Saudi stock market and to identify the relationship of some of

the company's characteristics to income smoothing. Nevertheless, the main objective of the study is to identify the relationship between income smoothing and the extraordinary returns of the shares of Saudi joint-stock companies during the period (2011-2014). Furthermore, the study concluded that the proportion of Saudi joint-stock companies that practice income smoothing during the period (2009-2014) decreased from 56% to 23% during the period (1995-2001) and that the company's characteristics (size, profitability, and indebtedness) have no relationship with the practice of Saudi joint-stock companies to smooth the income. The study also found that there is no correlation between income smoothing and cumulative extraordinary returns when announcing the annual financial statements. Finally, through testing the study model, it was found that there was also no correlation between income smoothing and company characteristics and the cumulative extraordinary returns of shares in Saudi joint-stock companies. As for the study (Al-Taie et al, 2017), it aimed to reveal the practices attributed to income smoothing and accounting conservatism with regard to the actions taken by companies listed on the Iraqi Stock Exchange. Also, the research aims to design a statistical model to measure the impact of these practices on smoothing accounting income in light of accounting conservatism. It was concluded that companies that practice income smoothing and accounting conservatism face the effects of income smoothing practice on accounting conservatism.

Conceptual Framework

3. 1 Income smoothing concept

The administration of banks sometimes resorts to the process of smoothing the income to temporarily hide the facts from those interested in accounting information, which leads to a misdirection of the available economic unit resources in addition to investing them in losing projects instead of successful ones (Al-Shammari, 2016). Several studies have dealt with the concept of income smoothing, and it has been defined by (Ashari et al, 1994) as an intended action by the management of the economic unit, and the aim of which is to reduce income disparity through the use of certain accounting tools and methods, as the study (1991, Mathews) mentioned that the process of smoothing income is a set of methods and mechanisms that reduce income in periods when it increases significantly and increases income in periods of decline. And as defined by (Beidleman, 1973), it is a deliberate attempt to reduce the level of fluctuations of current earnings so that they appear at their normal level for the company.

3. 2 Types of income smoothing

Class of income smoothing: according to (Flayyih et al, 2019). Income smoothing has been categorized into two parts:

I. Natural smoothing: This type of smoothing is created without administrator intervention, as this happens naturally by the nature of business in the economic unit when it is stable.

II. Intentionally Smoothing: This type of smoothing is intended to intentionally manage the economic unit by using one of the following two methods:

a) Real smoothing: This occurs when the administration takes actions that it

deems appropriate to structure the economic activities of the economic unit in such a way as to lead to the emergence of income smoothing, and therefore, managers change economic events to generate revenue.

b) Artificial smoothing: This is also known as dummy smoothing. This smoothing occurs when the administration manipulates changes in the timing of income recognition through accounting processes

3.3 Reasons for smoothing income:

The reasons for smoothing the income, as shown below (Al-Baroudi, 2001):

- I. Supporting investors' confidence as they are major stakeholders in the economic unit, and this is done by actively and positively maintaining the level of the share price in the stock exchange, and this is an example of the extent of the profitability of the economic unit through stock prices in the market.
- II. Assigning the economic unit's negotiating position in the process of borrowing and financing from others, as it requires when issuing debt bonds or borrowing from banks that the economic unit has two main points:
 - III. Good results of the company's activity
 - IV. Good financial position
 - V. Government intervention through tax and financial policies, i.e. supporting the position of the economic unit in what is known as those burdens.

3.4 Income smoothing methods:

There are several methods or forms to smooth the income, as mentioned by (Copeland, 1968; Ronen & Sadan, 1975; Al-Otaibi, 2016; Fraihat, 2016):

I. Methods related to the statement of financial position: In this type of management, the management depends on the contents of the statement of financial position, represented in the values of assets and liabilities of all kinds, with the aim of producing a different picture of the true financial position of the economic unit by maximizing the value of assets through an exaggerated evaluation of the values of current assets. On the other hand, it is possible to influence and interfere with the liabilities side by exaggerating the potential burdens and obligations by not making sufficient provisions on the pretext that they are firm and payable obligations, which necessitates presenting them in the statement of financial position at their value without any reservations, which gives a picture of the existence of many liabilities that make the financial analysis studies of the statement of financial position expressive of the suitability of the financial position for the purposes of the management that it seeks by smoothing the income.

II. Methods related to the income statement: This type focuses on interfering with the values of revenues and expenditures with the aim of maximizing the income of an economic unit to express the extent of its profitability. Here, the administration of the unit resorts to inflating or increasing revenues in any way, and there are several methods through which this can be achieved, most of which are related to answering two questions: The first, when is this revenue recognized? Second, how is this revenue distributed over the different activities and periods? For example, if the revenues are

recognized before they are due, the income of the economic unit will greatly exceed what exists in reality, and this trend represents an example of the arbitrary application of generally accepted accounting principles, and then the financial statements will be characterized by shading, as the recognition of revenues before their maturity is a kind of manipulation on accounting principles, and this is due to the difficulty of distinguishing between recognizing unearned revenues and fictitious revenues in terms of their difference in purpose and intent, which is ultimately reflected in the degree of influence related to each of them. Furthermore, the income of an economic unit can be maximized by dealing with expenses so that they are reduced as much as possible by capitalizing these expenses or increasing the number of years in which the costs of assets or capitalized burdens are distributed in the form of depreciation.

III. Techniques related to the statement of cash flows: According to this type, the management of economic units can give a misleading and unrealistic impression about the profitability of the economic unit by interfering with the contents of the list of cash flows, which are classified into three main groups, each of which represents one of the main activities of the economic unit, which are operating activities, investment activities, and financing activities.(Mohammed.et al,2020) And since operating activities are among the most prominent activities that reflect the profitability of an economic unit, the administration relies on this type of activities in achieving income

smoothing and giving a good picture away from the truth by classifying some items of cash flows that are related to investment or financing activities as related to operating activities and vice versa, especially since this will not ultimately affect the final balance of cash flows. For example, we find companies that capitalize on the interest of borrowing and research and development costs exclude these amounts from operating activities and add them to investment activities, which leads to achieving an increase in net cash flow from operating activities and thus giving unrealistic good picture about the profitability of the economic unit from its main activities.

Result

One of the most famous models that have been used to reveal the accounting income smoothing, which many researchers have referred to, is (Copeland & Licastro, 1968), (Imhoff, 1977) and (Eckel, 1981), (Flayyih et al., 2020) and the last model is the most famous and most widely used (Saeed and Hassan ,2019).

Nevertheless, this study dealt with the Eckel model to detect income smoothing through a model based on the comparison between the change in income and the change in sales. Eckel suggested the following model (Eckel, 1981:28-40):

$$S1 = \frac{CV \Delta I}{CV \Delta S} \leq 1$$

Where:

SI smoothing income

ΔI Change in net profit for one period

ΔS Change in net sales for one period.

CV Variation coefficient

In our research, we will adopt the Eckel model in measuring income smoothing practices (Altaie et al, 2017).

4.1 Measuring the level of smoothing accounting income in banks listed in the Iraq Stock Exchange:

This study aims to identify the extent to which Iraqi banks listed in the Iraqi Stock Exchange practice the phenomenon of income smoothing, and to measure the level of income smoothing for these banks, and thus maintain its stability, as banks may face some difficulties if they face fluctuations in their annual income, and these fluctuations are varied and marred by large differences from year to year, whether it increases or decreases, which indicates its instability. Hence, the importance of this study stems from the special importance of the financial statements as a basic and important source of information for the process of making economic decisions by many parties interested in the activity of banks. In order to achieve the objectives of the study, the following hypotheses were formulated:

H1: There is a practice of smoothing income in Iraqi banks listed on the Iraqi Stock Exchange.

H2: There is a high level of income smoothing practice by measuring its levels in Iraqi banks listed on the Iraq Stock Exchange. (1)

Income smoothing is measured through the model (Eckel, 1981), which was referred to in the second axis of the research. This measure is used to measure income smoothing in the event that the result is one or less of the absolute product of the above equation, it is an indication of the economic unit's practice of the accountant income smoothing process. However, the

researchers used information about the activity revenue (sales) and net profits and the change that occurs in them during the research period, and Table (1) shows the results of the statistical analysis of the data of the change in activity revenue (sales) and the change in net profit for companies listed in the Iraq Stock Exchange.

Table 1 Statistical indicators

Statistical indicators	ΔI	ΔS	S1
Mean	-5344017498	1856652749-	0.688
Std. Deviation	14141629460	7145809000	
C.V	2.646254333-	3.848759011-	

Source: The table was prepared by researchers based on the results of the SPSS program

The coefficient of variation (CV) was reached for each of the changes in activity revenue (sales) and the change in net profit, by dividing the standard deviation of the change in activity revenue (sales) and the change in net profit by the arithmetic mean of the change in activity revenue (sales) and the change in net profit, and the standard deviation was extracted by means of the SPSS statistical program, and through the results presented in Table (1), it is clear that $S1 \leq 1$, as the value of S1 was (0.688), and it was extracted based on the Eckel model, that the result indicates companies practice the process of smoothing accounting income, and through the above results, the research hypothesis is accepted, which was:

"There is an indication for the practice of the banks listed in the Iraqi Stock Exchange for operations of smoothing accounting income"

REFERNCES:

1. Al-Baroudi, S. M.,(2001), an experimental study of the quality of financial statements in the light of innovative accounting methods, Journal of Business Thought, Trade Mechanism, Number 3, Ain Al Shams University.
2. Almeida, J. E., Sarlo N, Alfredo, Bastianello, R. F., & Moneque, E. Z.. (2012). Effects of income smoothing practices on the conservatism of public companies listed on the BM & FBOVESPA. Revista Contabilidade & Finanças, 23(58), 65-75.
3. Alotaibi, E., (2016), Introduction of Income and Extraordinary Returns for Shares in Saudi Joint Stock Companies, Master Thesis, Arab East College for Graduate Studies. Master Thesis.
4. Al-Shammari, & Maysoon Hammad. (2016). The Impact of Income Smoothing on Financial Performance (An Applied Study

- in the Housing Bank for Trade and Finance) 2010- 2014 (Doctoral dissertation, Middle East University).
5. Al-taie, B. F. K., Flayyih, H. H., Talab, H. R., & Hussein, N. A. (2017). Measurement of Income Smoothing and Its Effect on Accounting Conservatism: An Empirical Study of Listed Companies in the Iraqi Stock Exchange. *International Journal of Economic Perspectives*, 11.
 6. Ashari, N. (1994). "Factors Affecting Income Smoothing among Listed Companies in Singapore", *Accounting Business Research*, Vol. 24, No. 96.
 7. Beidleman, C. (1973). Income Smoothing: The Role of Management. *The Accounting Review*, 48(4), 653-667.
 8. Copeland, R., & Licastro, R. (1968). A Note on Income Smoothing. *The Accounting Review*, 43(3), 540-545.
 9. Flayyih, H. H., Mohammed, Y. N., & Talab, H. R. (2019). The role of accounting information in reducing the funding constraints of small and medium enterprises in Iraq. *African Journal of Hospitality, Tourism and Leisure*, 8(4), 1-10.
 10. Flayyih, H. H., Salih, J. I., Rahma, N. G. A., & Mohammed, Y. N. (2020). Earnings Management between the fact of manipulation and credibility of management procedures: a literature review. *Social Science and Humanities Journal*.
 11. Fraihat, M. A., (2016), the effect of smoothing income on market returns for shares of money companies listed in the Kingdom of Saudi Arabia market, *Arab Journal of Management*, Volume 36, Issue 2.
 12. Gharaybeh, (2013), Factors Affecting the Income Smoothing Practice and Its Impact on Financial Performance in Jordanian Service Companies Listed on the Amman Stock Exchange: An Analytical Study,
 13. Mathews, M. R. and M. H. Perera. (1991). *Accounting Theory Developments*. Champan & Hall. Boundary Rows, London.
 14. Mohammed, Y. Ni, Salman, W .H, Mohammed, B. H. & Flayyih, H. H. (2020). The Role of Balanced Scorecard in the Integration of Management Control System and the Strategy of Economic Unity, *International Journal of Innovation, Creativity and Change*. www.ijicc.net Volume 13, Issue 7.
 15. Mulford, C.W & Comiskey, E.E. (2002). "The Financial Numbers Game Detecting Creative Accounting Practices", John Wiley and Sons. INC., USA.
 16. Ronen, J., & Sadan, S. (1975). Classificatory Smoothing: Alternative Income Models. *Journal of Accounting Research*, 13(1), 133-149. doi:10.2307/2490652,
 17. Saeed, L. M. & Hassan, M. M.,(2019), The Impact of the Income Smoothing Policy on the Quality of Accounting Profits, Volume 4, Issue 4.