

The Impact of Other Comprehensive Income Items on Financial Performance: Case of Jordanian Commercial Banks

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Abstract

This study aims to determine the effect of the independent variable other comprehensive income on the dependent variables represented by the financial performance of commercial banks. Researcher has studied the case of Jordanian Commercial Banks during the period 2012 to 2017. The study sample consists of 13 Jordanian commercial banks. The study independent variable was given by the quotient of other comprehensive income on net income. The ratios: financial performance by return on assets, and return on equity were the two dependent variables. Study hypotheses were tested by the simple regression equation and T- test. It was found that there was a statistically significant effect of other comprehensive income on the financial performance as measured by the return on assets and return on equity. This significance can be attributed to the increasing weight of other comprehensive income items which makes the value of other comprehensive income an indicator of profitability and efficiency of banks and means of maximizing their wealth. It is recommended that Amman Stock Exchange, Securities Commission and the Companies Control Department, to urge the companies listed on ASE to increase the awareness of companies' management about the importance of other comprehensive income concept.

Keywords: Other comprehensive income financial performance; Return on assets; Return on equity.



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1. Introduction

The measurement of income information and the financial position of the enterprise provided in the financial statements is essential for the corporate managers especially in the decision-making process. The statement of profit and loss statement is the basic tool for indicating financial performance and forecasting future cash flows. The introduction of the concept of other comprehensive income and its application in the financial statements caused a lot of controversy between the authors of accounting standards and users, and increased the controversy about its importance in terms of interpretation or how to use it, which required further elaboration as a result of corporates' successive developments facilities beyond their normal operational activities as defined by the United States Accounting Standards Board ([Financial Accounting Standards Board, 1985](#)).

The importance of other comprehensive income is increased as the US Financial Accounting Standards Board (FASB and IASB) have issue and amended relevant accounting standards accordingly. It is necessary to increase the focus on these issues rather than just to the traditional list of profits and losses. [Financial Accounting Standards Board \(1997\)](#) Financial Accounting Standard was issued by the Standards Board US financial accounting for issuing a comprehensive income report and the need to include its items in the profit and losses list for the entities operating in accordance with generally accepted accounting principles (GAAP) followed by The International Accounting Standards Board (IASB) which issued ([IAS, 1997](#)) entitled "Presentation of Financial Statements with the Purpose of Increasing Compliance and Reducing Differences with US Financial Accounting Standards", and was adjusted In 2007 and 2011 to enforce the concerned entities to present all other comprehensive income items in their financial statements and presented in their profit or loss statement, or they could present them in two separate lists, in other words the other comprehensive income items may presented by the comprehensive profit and loss statement or by the net income or by a separate list.

1.1. The Other Comprehensive Income Items Presented in Accordance With IAS1 Include

- Profit and loss upon revaluation of assets,
- Actuarial profits and losses (employee benefits),
- Profits and losses on exchanging of financial statements in foreign currencies,
- Profits and Losses on revaluation of financial assets available for sale
- Profits and losses of cash flow hedges,

- Some substantial profits and losses arising from extraordinary items such as a legal prohibition not to sell a particular commodity,
- Natural disasters
- Special circumstances, such as the shift from one accounting principle to another.

Recently, interest in other comprehensive income has been increased as it gives a more detailed and comprehensive picture of sources of revenue and expenditure, better performance as compared with the traditional profit and loss statement, which was limited to revenues and expenses. The existence of other income leads to universalization and consequently leads to the increase in predictive capacity of future profits, and it provides greater discipline for managers as well as financial analysts due to the documentation of information of the non-operational operation that some may be able to conceal, this will lead to greater accuracy and transparency appropriateness and inclusiveness. Beresford *et al.* (1996). Financial institutions usually manage large investments through which profits and losses are realized via the net income reported in their profit and loss statements and sometimes without giving sufficient attention to items of the other comprehensive income values due to overlapping or not being recognized. The focus in this research on Commercial banks is because these institutions are considered the most important components of the operational financial system and are considered the most important source of funding for various sectors of the economy, and they are especially privileged to own large sums of financial assets and liabilities for which unrealized gains or losses are not recognized in the comprehensive income statements. As an example, some financial securities are available-for-sale as part of the liquidity reserves used for hedging; In addition, derivatives that are classified as hedging tools are normally used in cash flow to hedge against fluctuations in interest rates and exposures to foreign exchange risk, Papa *et al.* (2015). The importance of this research is that it shed more light on the reporting of other comprehensive income items as separate from the elements of net income and has a high degree of disclosure. This can help the other comprehensive income to obtain more accurate and objective financial information as a result of its separation from the operating profits and net income so that users of the financial statements can give more attention to each aspect of the income list in a different way. Moreover, giving information to the commercial banks management and other stakeholders the importance of comprehensive income items as being independent from the operational and other financial activities. The research contributes to determine who gets the most benefit of the other comprehensive income items from owners or creditors. This study is aimed to determine impact of other comprehensive income value items on financial performance as evaluated by both the return on assets and return on equity in Jordanian Commercial Banks.

In a bid that the profit and loss statement becomes a better assessment tool of financial performance and future forecasting of cash flows and the risk determinant of non-realization of these flows, it is not limited to the operating performance ,it adds the facilities outside the scope the normal operating activities and the consequent profit events and non-recurring losses that may be hidden by the management in the event of a change in the values of liabilities and equity which has an impact on their financial position. The enterprises may not be aware of the loss of some operations on the grounds that they are non-recurrent compared to operational performance and the resulting lack of appropriate documentation, despite the efforts made by the IASB to establish firm bases for binding establishments to follow in terms of other comprehensive income items. Many researchers tried to show the impact of increased financial performance taking into account the overall dimensions of operational activities of other comprehensive income items; such an alternative makes financial performance more comprehensive, accurate, and reliable.

The problem of the study is how to determine the effect of other comprehensive incomes on the financial performance of Jordanian banks. It is worth to add that the existence of such a relationship will stimulate the issuance of more appropriate accounting standards and to enforce banks managers to increase the disclosure and attention of these items in their financial statements.

In the light of the research problem, the researchers have developed the following null hypotheses:

H01: There is no statistically significant impact of other comprehensive income values as a percentage of net income in Jordanian commercial banks at ($\alpha \leq 0.05$).

H02: There is no statistically significant impact of other comprehensive income values as a percentage of net return on assets of Jordanian commercial banks at ($\alpha \leq 0.05$).

H02: There is no statistically significant impact of other comprehensive income values as a percentage of net return on equity of Jordanian commercial banks at ($\alpha \leq 0.05$).

2. Literature Review

The theoretical background of this course is the nature of the information that must be provided to the users of the financial statements; The prime objective is to provide sufficient information on the performance and comprehensiveness of the commercial enterprise taking into consideration all other comprehensive income items and determining the resulting changes in the financial statements. Previous studies have collectively emphasized the need to focus with full attention on targeting other comprehensive income within the necessary amendments and their suitability, as a result of the controversy over the feasibility of the financial statements when other comprehensive income items were neglected and its items were not considered.

The financial position and profit and loss statement are used as the basis for indicating financial performance and forecasting cash flows; there has been wide controversy among the authors of accounting standards since the advent of the concept of the other comprehensive income before its application in the financial statements to report only the realized profits and losses. The development has increased in the appearance of its items and the need for it and how to deal with it and its interpretation work, the efforts of many researchers in the other comprehensive income study including (Dhaliwal *et al.*, 1999) have concentrated on this issue. Most of the discussions have

considered that the value of net income or gross comprehensive income reflected via the basic revenue line are accurately presenting financial performance.

The International Accounting Standards Board (IASB, 2013) has made continuous adjustments to access to clarify the concept of other comprehensive income. In 2007 the first paper was launched to discuss the purpose of Stakeholders' needs to identify priorities to facilitate the work of enterprises the need to focus on other comprehensive income was considered by the majority to be controversial as a result of disregarded Items from the users of the financial statements. Enquist and Magnerius (2014) have confirmed that IAS-1 standard which was amended in 2007 and was applied in 2009, that all changes in equity and unlisted items are required to be presented in the profit and loss statement that should be reported in the comprehensive income statement and allowed that these changes be presented the in the equity changes statement, and the amendment to the standard in 2011 that commenced its application in 2012, did not include any substantial changes.

2.1. Total Gross Income and Other Comprehensive Income

The comprehensive income statement includes net income for the year plus any other comprehensive income items. All transactions and events that result in a change in the net assets or any corresponding changes that may arise to the equity during the accounting period after excluding any changes in the increase or decrease in the capital and distribution of profits to owners (Hanan, 2013). Others consider it to includes all changes that apply to equity over a certain period of time excluding those resulting from the owners' investments and distributions, not only to previous operations but also to items which are unusual and non-recurring from the normal activity of the enterprise and may occur as a result of a change in principles of accounting, and non-stop operations such as the interruption of a production line, natural disasters and accidents, (AlSarraj and Alian, 2011).

Net income reflects the remaining profit after taking into account the difference between all revenues, gains and expenses and losses from operations during the period of operating, administrative and marketing profits and losses and other liabilities, which may be referred to as the net increase in shareholders' equity resulting from corporate activities.

However, other comprehensive income reflects revenues, expenses, profits and losses which are excluded from the profit and loss statement and are recognized in the statement of comprehensive income under the requirements of the rules (GAAP), and the International Financial Reporting Standards (IFRS), 2017 (IFRS). Al Jaarat concludes that it is consisted of revenues and expenses, including the reclassification items that are not recognized in the statement of profit and loss (Jajarat, 2015).

The study researchers believe that other comprehensive income consists of the profit and loss group that is described as expected, and thus, it is not recognized in the profit and loss statement without any other reasons preventing such recognition.

To demonstrate the importance of other comprehensive income, the researchers AlSarraj and Aian have confirmed that it was designed to grant the users of financial statements a more detailed and comprehensive view of the financial situation as a result of what is disclosed of expected but not recognized accounts, regardless of the complexities that may be encountered (AlSarraj and Alian, 2011). Therefore, the primary objective of other comprehensive income in accordance with IAS-1 reflects all the changes in equity arising from transactions with non-owners. This will assist to predict and assess future cash flows and financial performance (Schroeder *et al.*, 2005).

2.2. Other Comprehensive Income Items in Accordance With IAS-1

- 1- Gains or losses on revaluation of assets: Revaluation reflects the difference between fair value (Market) of the fixed asset and its cost over the period, if the fair value is greater than the cost recorded, this will be an excess of revaluation in the statement of comprehensive income, and this surplus is realized upon the cancelation or the use of the asset and its value will be transferred to retained earnings. The fair value or current value of a fixed asset can be determined on market prices and revaluation transactions which are published by the legally authorized authorities such as the Ministry of Finance or the Directorate General (Attia, 2011). It should be noted that any changes in revaluation of property arise in accordance with (IAS 16), for Property, Building and Equipment, and the International Standard (IAS 38) on the revaluation of intangible assets.
- 2- Actuarial gains and losses (employee benefits) are determined in accordance with the International Standard (IAS 19) on accounting benefit plans taking into account the increase and decrease in the enterprise's estimate of its expected budget as a result of its periodic reassessment. This standard was introduced in 2013 (Enquist and Magnerius, 2014).
- 3- Gains or losses in transforming financial statements of foreign currencies in accordance with IAS 21 means that a financial transaction in a foreign currency resulting in an asset with gain or loss that has occurred but not settled at the time of initiation.
- 4- Gains or losses on valuation of financial assets available for sale, in accordance with IAS 39, at which Hilton & Herauf have defined as an investment in financial instruments classified as current assets in accordance with the length of time that the management of the entity intends to maintain. It is measured and restated at fair value at the financial statements date and any gains or losses will be stated in the other comprehensive income statements. Hilton and Herauf (2013).
- 5- Profits and loss of cash flow hedges in accordance with IAS 39 are defined as hedges of changes in the current assets cash flows, liabilities, and expected transactions; It will be converted to the financial

statements profit and loss for the period at which the transaction affects the bank's income. [Inquest and Magneruis \(2014\)](#). It is important to note that the disclosure of other comprehensive income items can be done before or after taxation. When the discloser is done before taxation, the tax effects of the items shall be disclosed individually in the financial list.

2.3. Presentation of Comprehensive Income in the Financial Statements

In accordance with International Standard (IAS 1), The corporation has two options: **-The present in one statement:**(profit and loss and other comprehensive income statement) This list includes all items of recognized income and expenses, and income items are recognized other comprehensive income as part of total comprehensive income by their nature after net income of the enterprise, then total comprehensive income for the period is attributable to the owners.

2.3.1. The Present in Two Separate Statements

- a-The profit and loss statement and the comprehensive income statement: the profit and loss statement is presented as the income and expenses for the period (Net income).
- b- The statement of comprehensive income starting with net income plus items of other comprehensive income to produce the total comprehensive income for the period ([AlSarraj and Alian, 2011](#)). Jordanian commercial banks of the research sample follow the two separate statements.

2.4. The Importance of Other Comprehensive Income

The significance of other unrealized comprehensive income items is explained by how the bank manages its acquisition resulting from non-operating profits and losses that have not yet been recorded because that underlying transactions are still outstanding. More focus and highlights are on the branches operating overseas that in turn manage the hedge and have high returns, which help limiting the impact of currency fluctuations on operations. However, other comprehensive losses may indicate significant weaknesses of the investment strategies along with the difficulty of managing the hedge, and the consequent distortion of the other excellent operating results; this will give a warning signal that will urge the enterprises to exert more effort to control the other comprehensive income and its items.

As a result, the researchers believe that the importance of other comprehensive income is highlighted in giving a detailed and comprehensive picture of the sources of income and performance better than the traditional list limited to the revenues and operating expenses; it is a predictive tool of cash flow and it creates more discipline for the administrative bodies, so that the information becomes more accurate and appropriate for the users of the financial statements.

2.5. Financial Performance

Financial performance contributes to the achievement of the key objectives of banks and ensures their survival and sustainability, it varies and is commensurate with objectives of the owners or creditors through providing information on profits and liquidity ([Sana and Almasaudi, 2015](#)), This reflects the capacity and efficiency of the banks to exploit all their available resources in order to make gains from their investments, the extent to which they meet their commitments and achieve their intended objectives via maximizing revenue at the lowest possible cost.

The strategy adopted by each bank is to achieve its objectives via managing its assets and liabilities and net rights ownership, and both revenues and expenses ([Khatib, 2009](#)).

The researchers consider the financial performance as the mirror which reflects the results of the business and its management focus on the financial indicators to achieve the objectives as their main and fundamental support for all actions to the provision of financial resources and investment opportunities that are used to meet the needs of the stakeholders to achieve their goals.

The main objective of financial performance is to compare the plans formulated by the bank management with the results achieved and via measuring their efficiency rates through achieving the greatest return from the optimal utilization of available resources, and seeks to analyze their activities to locate the imbalances and their causes; It will also provide important information for the adoption of different decisions and assistance in missions and future researches that will improve the company future performance. The comprehensive income statement provides more informed, relevant and reliable results for users in making appropriate inquiries, which clearly reflects the financial performance of the enterprise more clearly and transparently and assess it better ([Saadeh, 2013](#)).

2.6. Evaluation of Financial Performance and Its Indicators

The assessment of financial performance is a critical process; it is a measure of the results achieved by the enterprise (bank) in the light of the objectives identified in advance.

The process of financial performance assessment helps in measuring the profitability of the entity and determining the degree of availability of liquidity required for the purpose of taking financing and investment decisions and the risks associated with them are designed to verify the compatibility between its various activities to obtain the greatest returns at the lowest cost possible ([Al-Mutairi and Mansoor, 2011](#)).

Many financial and investment analysis institutions have been concerned with the process of developing and evaluating financial performance for its important role in maximizing wealth. A number of measures have been introduced to evaluate the performance of the enterprise to achieve the returns in its various investment activities as

reflected by the financial ratios calculated by using data available in the financial statements, which are computed as ratios such as Liquidity, activity ratios, profitability ratios, leverage ratios and market ratios to reflect their success over a period of time. In order for the financial ratios to be effectively utilized, they must be compared to the ratios of the same bank over a period of successive periods, or compared with other banks with similar activities as well as the market index (Al-Husseini and Al-Douri, 2000), p. 236).

The most important indicators of profitability and financial performance of the establishments will be the focus on the return on Assets (ROA) and the return on Equity (ROE) As the two variables of the study. The return on Assets (ROA) reflect how enterprises exploit their properties to generate more profits, and measure an entity's ability to Invest their assets and reflect the final outcome and the results of policies and decisions taken by the administration in respect of liquidity and financial leverage. The ROA illustrates a relationship the profit of the entity by its total assets and it is calculated by dividing the net profit for the year to a total asset (Net Profit/Total Assets), which means the profits that are earned from each dinar invested in the assets of the enterprise (bank), regardless of whether the source of funding was inside or outside, and gives final answers to the overall efficiency of assets investment (Haddad, 2007).

Return on equity (ROE) is one of the most important profitability ratios used and an important measure of an organization's success in achieving income to ordinary shareholders through their ability to finance their holdings to generate revenue for them and indicates good exploitation of shareholders' funds. Each J.Dinar is invested by ordinary shareholders in the activities of the establishment. ROE is a tool for measuring profitability through disclosing the amount of profit generated by the shareholders' equity invested. The return on equity is calculated by dividing the net profit for the year by the total equity (Net Profit/T. Equity), Amer (2008) and Matar (2016).

The researchers' goals were different in the other comprehensive income study, some of them aimed to find the impact of reporting it on the financial performance measured by its return on the market stock price, along with its impact on taking decisions by analysts and investors, and its impact on profits management, others tested the other comprehensive income characteristics in terms of their added value and predictive income. Lin *et al.* (2007) has examined the extent to which three figures of the main accounting income (operating income, net income, comprehensive income) as valuable information for the investors in Germany, France, Spain, Italy and the United Kingdom. The study used a sample that represents all the companies listed in the financial markets of these countries for the period (1992-2004). The study results pointed that all three measures were statistically associated with the returns of stocks in the sample countries. The study results showed that comprehensive income provides lower important information to investors than the net income and operating income according to the studied sample; also, the study revealed that total other comprehensive income is of value as it provides additional valuable information that exceeds net income in most sample countries. Moreover, Louis (2003) aimed to examine whether the settlement of the currency translation was actually related to the change in the value of the enterprises for the US industrial sector and how so, the study has provided an economic analysis to settle currency exchanges as a component of other comprehensive income for the period 1985-1999. The study concluded that, for companies in the industrial sector, currency exchanges was associated with the enterprise loss rather than an increase; Which means that this value is not relevant in the assumed direction, which is raising the income account.

Lin *et al.* (2007), examined the provision of three main figures for the main accounting incomes (operating, net, comprehensive) as a valuable information to investors in Germany, France, Spain, Italy and the United Kingdom. By using a sample representing all companies listed in the financial markets of the mentioned countries for the period 1992-2004. Analyses revealed that all three measures were statistically associated with the returns of stocks in the sample countries. The results showed that comprehensive income provides less important information to investors than net the income and operating income of the studied sample, and another result also revealed that other comprehensive income is of value as it provides additional price-related information that exceeds the net income in most of the sample countries; This result is different from previous US and UK studies suggesting that other comprehensive income is not generally associated with values of the other comprehensive income items especially when it is not separately disclosed in the financial statements. The latest result showed that increased transparency in reporting other comprehensive income in the financial statements in accordance with FRS3 and US SFAS 130 may explain a stronger statistical correlation between stocks fixed income and total income. In addition, (Dastgir and Velashani, 2008) conducted a study to test the relative capacity of other comprehensive income and net income to summarize the performance of the company and its reflection on the returns of shares, and studied at which specified item of other comprehensive income that better summarizes the financial performance of the enterprise. The study was conducted on a sample of industrial companies listed on Tehran Stock Exchange (Iran) during the period 2001-2003; the necessary information was collected from the financial statements of these entities. Study results did not support the hypothesis that other comprehensive income assesses financial performance better than net income based on equity returns and prices. When study was applied on a range of government institutions, the results obtained have better assessed the performance of the entity on the basis of cash flow forecasts by using other comprehensive income was better than using net income. Study conclusions reveal that the items of other comprehensive income improve the ability of the total income to show a steady performance of the facility.

Kanagaretnam *et al.* (2009), tested if the Canadian enterprises disclose total income and its components will provide the Canadian securities market with valuable additional information compared by the traditional approach of returns and costs. Actual data for other comprehensive income were used for a sample set of enterprises not listed on the Canadian Stock market for the period 1998-2003. The results showed that available salable securities and cash flows hedges as other comprehensive income items are closely correlated with prices and market returns.

Gross comprehensive income is more strongly associated with both shares prices and return compared by net income. However, net income is a better indicator of future net comprehensive income. The results propose that all Canadian companies are authorized to adopt the new accounting standards which are expected to enhance the usefulness of the financial statements. [Bamber et al. \(2010\)](#), clarified the determinants set by the Executive Directors when they choose the reporting location on total income and not follow the requirements of policy makers. The study relied on analysis research based on behavioral surveys; two factors were identified for the reporting determinants: incentives based on equity and compensation, and concerns about job security. The study tested its expectations for reporting site of financial statements on comprehensive income by Standard & Poor's (S & P) on a sample of 500 corporations for the period (1998-2001). Based on study assumptions, enterprises that do not follow the policy makers' details in the preparation of performance reports are anchored in operational decisions with incentives for equity and compensation and less functional security. It also concluded that enterprises that have higher losses (AFS) are less likely to use performance reports.

[Fernández and Arana \(2010\)](#), in the Spanish context conducted an analytical study aimed at assessing the impact of comprehensive income on equity return as compared with net income for the period (2004-2008), on a sample of 35 Spanish companies listed on the financial market. and the verification of the impact of comprehensive income on return on equity in the period of the global financial crisis (2008). Study results showed a statistically significant impact on the return on equity in accordance with comprehensive income instead of the net income, which was observed in three years of the period of the loan especially in 2008 when a significant decline in return on equity, was calculated according to total income where it was less than the return on equity. This result could contribute to further international discussions on the need to introduce other measures of corporate performance than net income by using selected ratios of financial analysis. On the other hand, [\(Gazzola and Amelio, 2014a\)](#) compared the net interest income and the total comprehensive income as an assessment with respect to taking into account corporate performance and evaluating financial performance through other comprehensive income, and to determine whether they include the company's total income in the income statement or in a separate statement and used consolidated financial statements for the period from 2010 to 2012 that were published online for companies listed on the Czech Republic Stock Exchange which follows the international standards for the preparation of financial statements, and calculated some of the financial ratios through using comprehensive income such as return on equity and the ratio of the other comprehensive income to the total gross income and compare them with the calculated values for net income. The results showed that the financial statements of Czech companies do not have a tendency to separate the income statement into two lists but rather merging them into a single list it was also realized that the total gross income provides additional value information to assess financial performance.

[Mechelli and Cimini \(2014\)](#), verified the relative relevance and added value of both total income and other comprehensive income in the European countries after being required to comply with the International Accounting Standard IAS 1. Enterprises were required to prepare a statement of comprehensive income that discloses the other comprehensive income items. The importance of this study lies in its assessment of the information included in the comprehensive income statement as it reflects its importance for investors to take their decisions. Data were collected from the financial statements of a sample of European enterprises of countries listed the European Union for the period (2006 - 2011).The sample size was 3,377 companies that follow the international accounting standards. The results showed that net income is greater in value than the total income as the coefficient of the other comprehensive income was less than a coefficient of the net income for the period. The statement of comprehensive income items in the financial statements does not affect their importance. Significant differences in the additional value of comprehensive income between countries were observed as a result of different systems and policies.

The prime objective of [Bratten et al. \(2016\)](#) was to determine whether the fair value adjustments of other comprehensive income items are predictable to the future performance of banks, and examines whether the reliability of these estimates affects predictive value for fair value adjustments. The study was conducted on a sample of governmental and private holding US banks and companies for the period (2001-2013). The results of this study indicated that changes in the fair value of other comprehensive income items can predict bank profits a year or two back, but not the unrealized gains and losses in other comprehensive income items which have the same effect on future profits, where the available-for-sale investment gains and losses are positively related to future profits. Conversely, hedge gains and losses are negatively correlated with future earnings. As well, the study has found that the fair value adjustments in accordance with other comprehensive income items has successfully predicted the profitability of future banks during the global financial crisis (2007-2009), which contradicts the accusations against fair value accounting during that period. Besides, [\(Al-Najjar and Jamil, 2017\)](#) examined the impact of intangible assets, financial performance and fiscal policy on value of the company. Study sample is formed by choosing 34 shareholding companies listed on Palestine Stock Exchange and for the period 2014 -2016. The study used the multiple regression models and path analysis to illustrate the relationship between the variables, the results showed that the Palestinian industrial public shareholding companies had recorded the highest value in the average investment in intangible assets while companies in the investment sector on the average do not invest in intangible assets. The investment in intangible assets, return on assets, asset turnover rate, and the profit-sharing ratio positively and substantially affect market value for companies listed on the Palestine Stock Exchange.

[Kishan \(2017\)](#), was to investigate the usefulness of comprehensive income and other comprehensive income compared to net income, for investors of European firms. The usefulness is measured by assessing the value relevance and incremental value relevance. The evidence indicates that overall net income and comprehensive income are useful to investors of European firms. Additional analyses showed that net income is more persistent and a better predictor of future cash flows, than comprehensive income. The sample consists of European listed firms,

available in Datastream and Worldscope in the period 2005-2016. The results provide strong evidence that comprehensive income and other comprehensive income are useful to investors. Finally, the results also indicate that comprehensive income is more useful to investors of financial firms. In another attempt, Sajnóg (2017) evaluated the usefulness of comprehensive income for predicting banks' future earnings. The fundamental objective of this paper was centered around the main research hypothesis, stating : in economic practice of banks listed on the Warsaw Stock Exchange it can be assumed that there is a positive predictive power of financial result in forecasting financial standing of these entities. The research comprised bank joint-stock companies listed on the Warsaw Stock Exchange (qualified on 15.09.2016). The problem was realized in two analytical dimensions: absolute dimension financial results, and a relative dimension (return ratios). The research method was the regression analysis conducted by means of Spearman's rank correlation coefficient and by two regression models in two versions. The research showed that the analyzed bank companies were characterized by a diversity usefulness of comprehensive income for predicting banks' future earnings. Calculated Spearman's rank correlation coefficients confirm in most instances a positive character of dependence between the comprehensive income and future return ratios. The results of the estimation of econometric models show the positive association of comprehensive income with future profitability of banks.

With reference to Jordanian market, Al Kababj *et al.* (2014) demonstrated the impact of the TQM system in improving the financial performance of the company via using the comprehensive survey method by using a sample from the Jordanian public industrial shareholding companies through the distribution of a questionnaire to 25 companies applying the TQM system during the period 2005 – 2009. Using descriptive analytical methodology. The results of the study showed that there was no effect on the use of TQM dimensions on improving the financial performance of industrial public shareholding companies. The study recommended the adoption of TQM system and its dimensions, as the quality improvement ensures the optimum exploitation of the forces, materials, and machinery which will lead to reduce costs and improves the financial performance of the company the future. Through a review of the various previous studies, Which dealt with the subject of other comprehensive income financial performance and other variables in different sectors. This research is characterized and distinguished by the period covering the span from 2012 to 2017 and according to information available, previous studies did not address the impact of the other comprehensive income on financial performance represented by the return on assets and the return on equity. The present study is distinguished in its attempt to determine the values of other comprehensive income and its increased weight in financial performance in Jordanian banks.

3. Study Methodology

The researchers used the descriptive analytical method based on the empirical study from the real data that was published by the sample banks, to fulfill the practical aspect of this study by testing its hypotheses and answering the study questions to reach results. The community consists of 13 Jordanian commercial banks listed on the Amman Stock Exchange for the period (2012-2017). The sample used in the study is an intentional sample based on a comprehensive survey of all Jordan's commercial banks which meet a certain conditions where their operations continue during the study period (2012-2017) and the information required to measure the independent and independent accounting variables is available in their financial statements throughout the study period. The basic data relating to the regulatory performance of Jordanian commercial banks were collected from the financial statements - existing in the Amman Stock Exchange. The researchers also relied on additional sources such as books, previous studies, and scientific journals in collecting information.

3.1. Study Variables and Conceptual Framework

The independent variable (= X) is other comprehensive income as a percentage of net income, whereas dependent variables: Return on assets (ROA) = Y1 and Return on equity (ROE) = Y2, Study formulas:

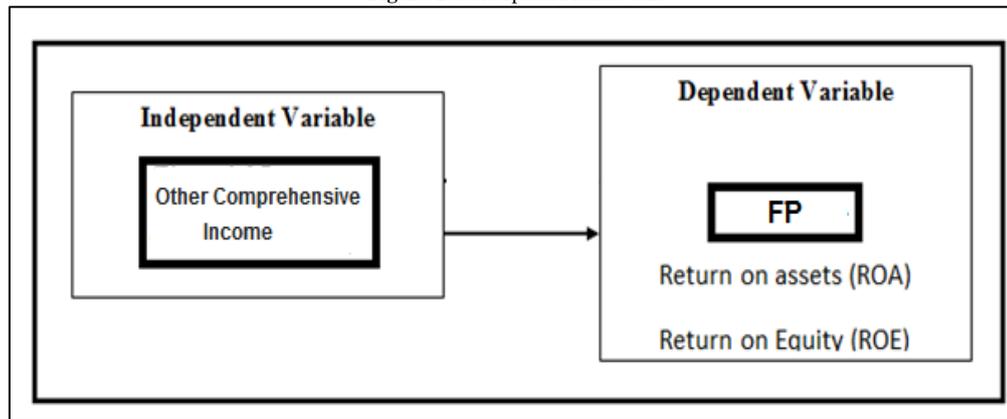
$$Y1 = a + b1 x, Y2 = a + b2 x, a : \text{Correlation Coefficient}, b : \text{Constant}.$$

Table-1. Dependent and Independent variable and their descriptions as used in the study

Symbol	Variables	Description and Measurement of variables
OCI	Independent variable:	(Other comprehensive income / net income) x100%
FP	Dependent Variables	Net income / Total Assets.
	ROA	
	ROE	Return on equity

Source: Author's processing.

Figure-1. Conceptual Framework



Source: Author's Design.

T-test is used to test the first hypothesis and the (SPSS) model is utilized to test Second and third hypotheses to determine the effect between their variables.

4. Study Results

Table-2. Net Income and Total Gross Income of Jordanian Commercial Banks

#	Table – 1	Total Gross Income	TCI	Net Income	NI
	Bank Name	Mean	Variance	Mean	Variance
1	Arab Bank	142,721,000	81,268,588.2	238,368,800	71,362,990
2	Arab Banking Corporation	13,272,986.8	1,839,974.9	13,175,717	1,853,777.7
3	Bank of Jordan	52,466,530.2	15,886,591.1	39,334,430	4,618,056.2
4	Cairo Amman Bank	37,275,941.1	5,063,019.6	39,303,514	4,185,582.6
5	Jordan Finance	20,989,736.4	20,521,555.4	22,518,419.6	15,017,982.9
6	Bank	8,019,301.8	5,137,127.4	8,687,466.6	5,397,935.1
7	Jordan Commercial Bank	42,822,521.6	8,146,083.1	42,040,985.0	7,480,159.0
8	Jordan Kuwait Bank	20,530,513.0	10,224,716.6	20,623,610.8	10,316,785.0
9	National Bank of Jordan	84,480,029.4	16,060,627.7	118,214,623.4	11,774,495.5
10	The Housing Bank for Trade	19,415,753.8	3,685,685.4	20,369,150.0	4,231,869.0
11	and Finance	13,697,576.2	2,417,067.6	13,093,104.6	1,807,656.7
12	Arab Jordan Investment	8,373,552.8	2,490,717.9	8,370,886.6	2,495,401.5
13	Bank	24,995,535.6	5,772,866.1	24,362,250.4	6,000,718.6
	Invest Bank				
	Société General Bank –				
	Jordan				
	Union Bank				
	General average	37,620,121.5	13,731,893.9	46,804,842.9	11,272,570.0

Source: The financial statements of the annual reports of Jordanian commercial banks are taken from the Amman Stock Exchange website, Appendix pages 78-83.

Table (2) shows the data used to calculate the value of other comprehensive income as an independent variable during the period (2012 – 2017). The table shows a significant increase in the values of average comprehensive income (net income plus other comprehensive income) among the sample banks, the highest of which is the Arab Bank with a value of (JD142,721,600), the lowest of which is the Commercial Bank of Jordan (JD 8,019,301.8). The general average of the sample amounted to (JD 37,620,121.5). The variance in overall income is JD 13,731,893.9, and this is due to the different values of net income and the other comprehensive income;

Study found that 54% of the banks have average gross income that exceeds the net average Income, Example: Bank of Jordan with a total income of JD 52,446,530.2, compared to JD 39,334,430 net income. The positive difference between comprehensive income and net income reflects an unrealized profit or gains for the period which might have a positive effect if they are subsequently achieved. As for the other 46% of banks, the spread between the values of total income and net income was negative. Arab Bank had a comprehensive income average of 142,721,600 dinars as compared with the average net income of 238,368,800 dinars; same was the case of the Housing Bank and Cairo Amman Bank and others, but with lower spreads.

It is worth to indicate that the net difference between gross income, and net income, may pose difficulties for banks and operational risk in the event of such losses occurring in subsequent periods. This is a weakness in the investments management as well as the assets and liabilities associated with the operating operations. More attention is to be given to the elements that represent the difference between total income and net income, (known as the other comprehensive income). This will give banks sufficient time to improve their performance and minimize losses and potential risks in the future.

Table-3. Other Comprehensive Income and Total Income

Bank	Dependent Variable				Independent Variable			
	ROE		ROA		[OCI\TI] %		OCI	
	St. Dev.	Mean	St. Dev.	Mean	St.Dev.	Mean	St.Dev.	Mean
Arab Bank	1.58%	6.42%	0.30%	0.96%	22.68%	-44.15%	26,731,733.6	-95,647,200.0
Arab Banking Corporation	2.25%	7.36%	0.37%	1.07%	0.54%	0.76%	65,770.6	97,269.8
Bank of Jordan	1.53%	12.84%	0.17%	1.93%	37.10%	26.79%	14,549,706.9	13,132,100.2
Cairo Amman Bk.	2.11%	14.43%	0.22%	1.75%	9.40%	-4.99%	3,883,691.1	-2,027,572.4
Jordan Finance Bk.	5.10%	7.73%	0.83%	1.26%	343.57 %	-158.73%	5,745,572.9	-1,528,683.2
Jordan Commercial.Bk	4.40%	6.82%	0.43%	0.72%	23.53%	-11.97%	997,375.1	477,655.6
Jordan Kuwait Bk.	2.54%	10.24%	0.38%	1.65%	4.47%	1.80%	1,863,898.5	781,536.6
National Bk. of Jordan	3.41%	6.98%	0.45%	0.83%	3.40%	0.37%	437,080.2	-93,097.8
The Housing Bank for Trade and Finance	1.13%	11.30%	0.10%	1.60%	7.21%	-29.02%	5,835,391.5	-33,734,594.0
Arab Jordan Investment Bank	1.11%	10.94%	0.17%	1.46%	8.43%	-4.01%	1,826,108.0	-953,396.2
Investment Bank	0.57%	8.99%	0.05%	1.64%	6.84%	4.23%	851,556.0	604,471.6
Société General Bank – Jordan	1.23%	7.56%	0.18 %	1.05%	0.39%	0.04%	40,421.7	2,666.2
Union bank	1.57%	9.12%	0.15 %	1.16%	3.14%	3.08%	563,024.0	633,285.2
Average Mean	2.19%	9.29%	0.29 %	1.31%	36.21%	-16.60%	4,876,256.2	-9,096,581.4

Source: The financial statements of the annual reports of Jordanian commercial banks are taken from the Amman Stock Exchange website within Appendix Pages. 78-83

Table (3) shows the independent variable of the other comprehensive income, and the dependent variables represented by return on assets, return on equity, the mean, and standard deviation of each. The values of the standard deviation in column 1 reflect the instability of other comprehensive income over the years, the highest of which was the Bank of Jordan with 13,132,100.2 JD mean and of 14,549,706.9 JD standard deviation, and the lowest is the Arab Bank with - 95,647,200 JD mean and of 26,731,733.6 JD standard deviation. The mean of all Banks amounted to - 9,096,581.4 JD and the standard deviation of 4,876,256.2 JD.

This reflects a state of instability. The total number of other comprehensive income banks was above the average standard deviation by 315 and others below by 69%. The other comprehensive income which is below the average raises doubts about the existence of future losses risks related to the lack of implementing adequate management techniques to hedge against the rise and drop in interest rates or the price exchange of different currencies, and weak investment management. The table shows that seven banks have positive values for other comprehensive income, reflecting non-profits for the study period commensurate with possible positive future effects. The rest of the banks have negative values, indicating the existence of other comprehensive losses, requiring them to take necessary actions to avoid any possible losses before they take place and will be stated in the statement of profit and loss.

The table shows the variance in the values of financial performance, the average for the overall return on assets was 1.31, and the variance was 0.29; while the general average return on equity was 9.29 and its variance was 2.19. The indicators high level is referred to the existence of higher efficiency in the management and better exploitation of assets which made their shares more attractive to investors. The table also shows that there were 54% differentiated banks in both the financial performance and the other comprehensive income so that one rises and the other decreases, indicating that there is a need to increase more attention to the performance of other comprehensive income to create a positive correlation between them.

4.1. Natural Distribution Test

To determine whether "the conditions for the adequacy of the data of the study were available for the purposes of statistical analysis via testing the naturally distributed data and ensuring that there is no need to resort to test the abnormal distributed data by relying on Non-scientific statistical tests Bagozzi and Yi (1988) in order to conduct a T test for a single sample, and simple regression analysis, so all variables were tested in terms of Natural distribution through the Kolmogorov-Smirnov test, and the results were as follows:

Table-4. The natural distribution test of the study variables

Variable Type	Variables	Significance
Dependent Variable	ROA	0.2
Dependent Variable	ROE	0.2
Independent Variable	Income as a percentage of net income- X	0.142

Table (4) shows the results of the "normal distribution test" using the Kolmogorov-Smirnov test for the study variables. In order to ensure that the variable changes follow the normal distribution, the probability value (Sig) should be greater than 0.05. Table (4) indicates that the (Sig) for the entire variable is greater than (0.05). The natural distribution condition is available in all variables, allowing the researchers to use a single sample T test and simple regression analysis.

Pearson correlation matrix for school change the following table presents the Pearson correlation matrix to determine the correlation between variables as follows:

Table-5. Results of Pearson correlation matrix for school variables

Variable	X	ROA	ROE
X	1		
ROA	0.384**	1	
ROE	0.381**	0.697**	1

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table (5) presents the statistical results of the Pearson correlation matrix for the study variables represented by X, which refers to the value of the other comprehensive income as a percentage of net income as an independent variable, ROA, which indicates the return on assets (ROE) Property rights, the following are illustrated:

1-There are statistically significant relationships between the value of the other comprehensive income and performance where the highest correlation between total income as a percentage of net income was obtained with a return on assets of (0.384) which indicates a strong and positive correlation which means the higher the change in the value of comprehensive income than the net income, the higher the return on assets, while the least correlation (0.381) between total income as a percentage of net income and the return on equity, and this relationship is statistically significant.

2- There is also a very strong positive correlation between financial performance and the return on assets and return on equity amounts to (0.697).

Tests of hypotheses

H01-: There is no statistically significant difference of other comprehensive income as a percentage of net income between Jordanian commercial banks at ($\alpha \leq 0.05$). In order to prove or "negate this hypothesis," the first major was based on a single sample T-Test, and the researchers' reliance on the arithmetic mean to determine whether there was a statistically significant difference by looking at the μ value that refers to the accounting mean coefficient of the independent variable, which is the value of the other comprehensive income as a percentage of the net income of Jordan's banks, as there will be a difference in case there is a difference from the value of the average which is ($\mu = -7.72$), and this represents the lowest proportion of the study sample for the study period; in order to determine whether these results were statistically significant, the results were based on the value of calculated T as compared and is greater than the T tabular which indicates "the existence of statistical significance, as is presented by the following table:

Table-6. Results of One Sample T-Test on other comprehensive income in Jordanian banks

Sig.	Df	T-Statistics	T-Distribution Table	S-Deviation	Mean
000	64	62.39	1.669	0.976	-0.166

Table (6) presents the results of the other comprehensive income analysis among Jordanian commercial banks. The results showed that the arithmetic mean is (-0.166), which is greater than the average predetermined scale which is ($\mu \geq -7.72$).

The results of T-test of the sample unit showed that there was a significant statistical difference at (2.25) significance level between the arithmetic mean (-0.166) and the predetermined mean ($\mu = -7.72$), significance was (0.000), which is less than (5) %; also the calculated T value (62.390) was higher than their tabular value (1.669). Consequently, the first major null hypothesis was rejected and the "alternative" hypothesis was accepted, that is, there is a statistically significant difference with regard to other comprehensive income among Jordanian commercial banks.

"With respect to the remaining null hypotheses, the researchers have used the simple regression method, depending on the level of Morality Sig to accept or reject the hypotheses, i.e. the Sig level should be less than 5% to reject the null hypothesis accept.

H02-: There is no statistically significant effect at ($\alpha \leq 0.05$) that other comprehensive income has a percentage of net income on the return on assets of Jordanian commercial banks.

Table-7. Results of the simple regression test of the second null hypothesis

Sig	T-Statistics	β Standardized Coefficients	Constant β	X (β)
0.002	3.3	0.384	0.013	0.002
Adjusted R Square = 0.134			R Square = 0.147	
Model F test = 10.887				

Table (7) presents the results of the simple regression analysis of the other comprehensive income as a percentage of net Income on the return on assets of Jordanian commercial banks. The results showed that the value of β Standardized Coefficients was (0.384), indicating that there is a strong effect of the value of other comprehensive income on the financial performance is the size of return on assets; study results showed that the significance value was less than (5%), as it was (0.002 = Sig), and according to the basic rule, the hypothesis was rejected and the acceptance of the alternative hypothesis, that is, there is a statistically significant effect on the value of other comprehensive income as a percentage of net income on return on assets of Jordanian commercial banks.

The results of the above regression analysis were also taken into account, taking into account the adjusted R Square value of (0.134) which refers to the ability to interpret the changes in financial performance if the ROA is adopted through the value of other comprehensive income as a percentage of the net income of Jordanian commercial banks.

Based on the simple regression analysis above, the linear regression equation representing the forecast model is as follows: $ROA = 0.013 + (0.002 * X) + e$ whereas: ROA: refers to financial performance measured by return on assets. X: Indicates the value of other comprehensive income from net income.e: margin of error.

H03- There is no statistically significant effect at (α 0.05 0.05) of the value of other comprehensive income as a percentage of net income on ROE of commercial Jordanian banks.

Table-8. Results of the simple regression test of the third main hypothesis

Sig	T- statistics	β Standardized Coefficients	Constant β	X (β)
0.002	3.274	0.381	0.095	0.013
Adjusted R Square = 0.132			R Square = 0.145	
Model F test = 10.716				

Table (8) presents the results of the simple regression analysis of the percentage change in the value of other comprehensive income from the net income of the return on equity of Jordanian commercial banks. The results showed that the value of β Standardized Coefficients (0.381) indicates that the effect of other comprehensive income as measured by return on equity, and the results of the study showed that the nominal value is less than (5%), which is (0.002 = Sig), and according to the decision rule, the third null hypothesis was rejected and the alternative hypothesis is accepted. This means that there is a significant effect of the other comprehensive income as a percentage of the net income on the return on equity of Jordanian commercial banks. Based on the simple regression analysis above, the linear regression equation representing the forecast model is formulated to predict the return for the ownership rights of Jordanian commercial banks listed on the Amman Stock Exchange if it approve the value of the other comprehensive income as a proportion of the net income only as a function of this prediction is as follows: $ROE = 0.095 + (0.013 * X) + e$, whereas:ROA: refers to financial performance measured by return on assets. X: Indicates the value of other comprehensive income from net income.e: margin of error.

5. Conclusions, Recommendation and Suggestion for Further Research

Based on "statistical tests and hypothesis testing, there was a wide and statistically significant difference in the values of other comprehensive income between Jordanian commercial banks, the highest value was achieved by the Bank of Jordan and is amounted to JD.13,132,100.2, and the lowest value was for Arab Bank and was amounted to JD (- 95,647,200.0) according to Table 2, and this result according to the researchers can be referred to the commercial banks' work nature as they deal with the other comprehensive income items in varying degrees. It should be noted that none of the earlier studies has reached this conclusion. Moreover, there was a statistically significant effect of other comprehensive income on the return on assets of Jordanian commercial banks. This result can be attributed to the increased weight of other comprehensive income items. Its existence is of importance to all stakeholders, whether they are depositors, owners or legislators. This gives an impression of the increased weight that other comprehensive income has had on the performance of Jordanian commercial banks, which can no longer be ignored. It should be noted that none of the previous studies had achieved this result. The study also showed that there was a statistically significant effect of the value of other comprehensive income on return on equity for Jordanian commercial banks. This result can be attributed to the increased weight of the items of other comprehensive income, whose existence is of particular importance to owners and legislators, as it is an important source of profits and means of maximizing the wealth of the owners and became impossible to ignore.

These findings were attributed to the increasing weight of other comprehensive income items whose existence was important to all stakeholders, which makes the value of other comprehensive income an indicator of profitability and efficiency of banks in managing their assets and means of maximizing wealth, reflecting its impact on overall financial performance. It is worth noting that none of the previous studies have reached this conclusion where some

studies have measured the effect of other comprehensive income on the market returns of banks and all public shareholding companies in general, namely earning per share. It is recommended to urge the companies to increase the awareness of their corporate managements about the importance of the concept of other comprehensive income, and raise their interest in showing the revaluation of their assets and disclose the resulting differences in other comprehensive income items because they are an important part of their capital and affect the quality of profits. In addition this study recommends Urging official entities responsible for companies listed on the Amman Stock Exchange, such as the Securities Authority and the Corporate Banking Department, to increase awareness of companies' perceptions of the importance of the concept of other comprehensive income. Besides it is recommended to Urge public shareholding companies to pay attention to revaluation of their assets and disclosure for differences arising in other comprehensive income because they are an important part of their capital and capital It is therefore an important impact for different stakeholders and the quality of disclosure of profits and finally it recommends to establish laws requiring commercial banks to disclose all other comprehensive income items. This work was limited to Jordanian commercial banks and excluded Islamic banks and foreign banks - Operating in Jordan and it is limited to determining the effect of other comprehensive income on the financial performance of Jordanian commercial banks, other irrelevant factors were excluded. So and for future research proposals, further studies might be conducted to cover these gaps and to assess the relative impact of other comprehensive income on financial performance for other financial sectors based on measuring the differences between net income and other comprehensive income.

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References

- Al-Husseini, F. and Al- Douri, M. (2000). *Banking management: A quantitative approach and a contemporary strategic approach*. Wael Publishing House: Amman.
- Al-Mutairi and Mansoor (2011). Titled: "Analyzing and evaluating the financial performance of Kuwait petroleum company". Unpublished ma thesis. Middle East University: Amman: Jordan.
- Al-Najjar and Jamil, H. (2017). Titled : The impact of both investment in intangible assets , financial performance , and fiscal policy on the value of the stock market companies listed on the stock exchange. *The Jordanian Journal of Business Administration, Faculty of Economics, Palestine*, 13(3): 375-414.
- Al Kababj, Magdy, W. and Abu, A. (2014). Titled: "Measuring the impact of using the quality management system in improving the financial dysfunction in jordanian public shareholding companies. University of Jerusalem Journal.
- AlSarraj, K. H. and Alian, S. N. M. (2011). *FASB & IASB Unpublished paper*. Al-Azhar University: Gaza.
- Amer, M. (2008). Studying the credibility of the return on investment as a financial indicator for shares listed on the stock exchange." University of Baghdad, Faculty of Management and Economics. *Journal of Economic and Administrative Sciences*, 14(49): 195-211.
- Attia, A. R. (2011). title : *Extended Accounting in accordance with the Financial Accounting System*. Algiers, I. 218.
- Bagozzi, R. P. and Yi, Y. (1988). On the evaluation of structural equation models. *Journal of The Academy of Marketing Science*, 16(1): 74-94.
- Bamber, L. S., Jiang, J., Petroni, K. and Wang, I. Y. (2010). Comprehensive income: Who's afraid of performance statement reporting? *The Accounting Review*, 85(1): 97-126.
- Beresford, D. R., Johnson, L. T. and Reither, C. L. (1996). Is a second income statement needed? *Journal of Accountancy*, 181(4): 69.
- Bratten, B., Causholli, M. and Khan, U. (2016). Usefulness of fair values for predicting banks' future earnings: evidence from other comprehensive income and its components. *Review of Accounting Studies*, 21(1): 280-315.
- Dastgir, M. and Velashani, A. S. (2008). Comprehensive income and net income as measures of firm performance: some evidence for scale effect. *European Journal of Economics, Finance and Administrative Sciences*, 12(1): 123-33.
- Dhaliwal, D., Subramanyam, K. R. and Trezevant, R. (1999). Is comprehensive income superior to net income as a measure of firm performance? *Journal of Accounting and Economics*, 26(1): 43-67.
- Enquist, K. and Magnerius, M. (2014). *A practical approach to other comprehensive income, Does anyone really care?* BSc Thesis within Accounting & Financial Management, Stokholm School of Economics, Department of Accounting.
- Fernández, F. S. and Arana, M. M. C. (2010). Effects of comprehensive income on roe in a context of crisis, Empirical evidence for ibex-35 listed companies 2004-2008. *The International Business & Economics Research Journal*, 9(1): 117.
- Financial Accounting Standards Board (1985). *Statement of financial accounting concepts no. 6, Elements of financial statements*. Financial Accounting Foundation: Norwalk, CT.
- Financial Accounting Standards Board (1997). *Statement of financial accounting standard no. 130, Reporting comprehensive income*. Financial Accounting Standards Board: Norwalk, CT.24.

- Gazzola, P. and Amelio, S. (2014a). Is total comprehensive income or net income better for the evaluation of companies' financial performance? *Central European Review of Economic Issues*, 17(1): 39-51.
- Haddad, F. (2007). *Financial management*. Al-Dustour Commercial Printing Press: Amman.
- Hanan, R. H. (2013). *Titled: "Introduction to the accounting theory, the intellectual framework - practical applications*. Dar Wael Publishing: Amman-Jordan.
- Hilton, M. U. and Herauf, D. A. (2013). *Modern advanced accounting in Canada*. 7th edn: Grow. Hill Ryerson limited: Canada.
- IAS (1997). *Financial accounting standards board, 1997 statement of financial accounting standard no. 130: Reporting comprehensive income*. Financial Accounting Standards Board: Norwalk, CT.
- IASB (2013). A review of the conceptual framework for financial reporting. Iasb. Available: <http://www.ifrs.org/Current-Projects/IASB-Projects/Conceptual-Framework/DiscussionPaper-July-2013/Documents/Discussion-Paper-Conceptual-Framework-July-2013.pdf>
- Inquest and Magneruis (2014). *Titled: "The Role of Financial Indicators in Assessing the Financial Performance of the Corporation, A Field Study of the Foundation for Building for the South and the Great South"* Unpublished Master Study. Kassid University of Marabah: Ouargla, Algiers.
- Jajarat, K. (2015). *Titled: "Abbreviations of international accounting standards*. Qasidi Marbah Press.
- Kanagaretnam, K., Mathieu, R. and Shehata, M. (2009). Usefulness of comprehensive income reporting in Canada. *Journal of Accounting and Public Policy*, 28(4): 349-65.
- Khatib, M. (2009). *Titled: "Factors affecting financial performance*. First Edition edn: Dar Al-Hamed: Amman-Jordan.
- Kishan, T. R. (2017). *The usefulness of comprehensive income and other comprehensive income a european study*. Unpublished master thesis. Erasmus University Rotterdam.
- Lin, S. W., Ramond, O. J. and Casta, J. (2007). *Value relevance of comprehensive income and its components: Evidence from major European capital markets*. Unpublished paper. Universite of Paris Dauphine: Paris.
- Louis, H. (2003). The value relevance of the foreign translation adjustment. *The Accounting Review*, 78(4): 1027-47.
- Matar, M. (2016). *Title : "Recent trends in financial and credit analysis*. Wael Publishing and Distribution: Amman-Jordan. 42.
- Mechelli, A. and Cimini, R. (2014). Is comprehensive income value relevant and does location matter? A European study. *Accounting in Europe*, 11(1): 59-87.
- Papa, V. T., Peters, S. J., Schacht, K. N. and Lu, S. (2015). Analyzing bank performance, Role of comprehensive income, The need to increase investor attention on other comprehensive income statement items. *Codes, Standards, and Position Papers*, 2015(3): 1-91.
- Saadeh, S. (2013). *Assessing the financial performance of small and medium enterprises using the treasury flow schedule unpublished master thesis*. Qasidi University: Algeria.
- Sajnog, A. (2017). The role of comprehensive income in predicting banks' future earnings based on the practice of banks listed on the Warsaw Stock Exchange. *Equilibrium Quarterly Journal of Economics and Economic Policy*, 12(3): 485-500.
- Sana and Almasaudi (2015). *Titled: Financial performance assessment of commercial banks"*. Npublished master thesis. University of Al-Shaheed Hama Lakhdar Balwadi: Algiers.
- Schroeder, R. G., W., C. M. and Cathey, J. M. (2005). *Financial accounting theory and analysis: Text readings and cases*. 8th edn: Hoboken: N.J.