

The Impact of Comprehensive Income on Owners Equity at the Jordanian Commercial Banks, Analytical Study

Mohammad Ali Al Hayek

Accounting Department, Al al-Bayt University, Mafraq, Jordan

Abdel-Rahman kh. El-Dalabeeh *

Accounting Department, Al al-Bayt University, Mafraq, Jordan

Abstract

The study aimed to examine the impact of comprehensive income statement's items on the owners equity of Jordanian commercial banks, and to achieve this objective researcher conducted an analytical study by adopting the descriptive and analytical approach, and used the statistical method to analyze the study data represented in the actual data, which were taken from the financial statements of the (13) Jordanian commercial banks for the period (2008-2017). The study found a statistically significant impact of comprehensive income statement's items on the owners equity of Jordanian commercial banks, and in regard to the secondary hypotheses the study results showed nonexistence of statistically significant impact of net income on the owners equity of Jordanian commercial banks, but found a statistically significant impact for each of the other comprehensive income and comprehensive net income on the owners equity of Jordanian commercial banks. One of the main recommendations of the study will be to increase the attention to comprehensive income, due to its impact on the owners equity, and to conduct additional studies about the impact and the relationship of study variables at the public shareholding companies, in other sectors.

Keywords: Comprehensive income statement; Comprehensive net income; Jordanian commercial banks; Net income; Other comprehensive income; Owners equity.



CC BY: [Creative Commons Attribution License 4.0](https://creativecommons.org/licenses/by/4.0/)

1. Introduction

The income and owners equity consider terms that receive a lot of attention, and a goal to gain knowledge and for analysis from all sides of the economical process, and the parties that benefit from the financial data to ensure the continuation of economical unit and gain profits. Income will be calculated from the income statement, as one of the major financial statements that are prepared periodically, and through it will determine the company's business result in term of profit or loss, from the main activity of company during the ended financial period, but there are some significant sources of income that not mentioned in the income statement, as it don't result from the main activity of company, from unfulfilled items, and largely influence the decisions of financial statements users, where those items that result from unusual activities called other comprehensive income items, and must be displayed on the comprehensive income statement in order for the income to be more inclusive to all the economical activities within the company.

In regard to the owners equity, it represented in investors' contribution to finance company's operations and consists of shareholders' paid-in capital and the additional capital, which represent the difference between the nominal value and the market value of shares sold by the company. It include the obligatory reserve owners equity and voluntary reserves, which represent part of the profits that company made and maintained for the purpose of strengthening company's financial position, and it also show through the owners equity the retained earnings or retained losses, which represent the remaining profits at the end of the year except the distribution, in addition to the treasury stocks and re-evaluated reserve, according to the international accounting standards (IASs) number (39).

Given the importance of income impact on the owners equity , where there is an expected linear natural relationship between the income and owners equity , which means that any anticipated increase in income will also lead to an increase in owners' equity , therefore the purpose of this study was to show the impact of comprehensive income on the owners equity at the Jordanian commercial banks, where this topic consider one of the most importance variables to all internal and external users of financial statements.

2. Study Problem

Income increase that happen through practicing the company to its business consider one of the major goals to the existence of organizations and enterprises, in order to satisfy the desires of owners by increasing their wealth, where the complexity of income statement increased due to the calculation of net income from the normal operations and the ongoing activities (traditional pattern of income statement), the emergence of new practices that affected the profit and loss accounts, in term of unusual and non-continuous gains and losses that result mostly from the exceptional and non-recurrent operations, and also the emergence of so called other comprehensive income items, which if it was merge with the net regular operations it will get comprehensive income where its relationship with

*Corresponding Author

the values of owners equity will essentially be affected by informational content of income (Lin *et al.*, 2007), which in turn will affect the size of owners' investment and their investment decisions in the organizations, whether if it increase or decrease (Frendzel and Szychta, 2013; Turktas *et al.*, 2013). Due to the active role that banking sector play in the Jordanian economy, it called on researchers to implement the study on this sector, where the study main question came as follow: "What is the impact of comprehensive income on the owners equity of Jordanian commercial banks, listed at Amman stock exchange?"

3. Study Importance

Study significant comes from its goal to examine the impact of comprehensive income statement's items on the owners equity at the Jordanian commercial banks, due to the importunacy of this topic to all internal and external users of financial statements, where it takes large importance and deserves a lot of independent studies to examine all its aspects, and bridge the gap by determining whether if there is an impact of comprehensive income statement's items on the owners equity of Jordanian commercial banks.

4. Study Hypotheses

Researcher depended on the following main hypothesis (H_0) to achieve the study objectives "There is no statistically significance impact of comprehensive income statement's items on the owners equity at Jordanian commercial banks listed on Amman stock exchange" and branched from it the following secondary hypotheses:

H_{01} : There is no statistically significant impact of net income on the owners equity of Jordanian commercial banks.

H_{02} : There is no statistically significant impact of other comprehensive income on the owners equity of Jordanian commercial banks.

H_{03} : There is no statistically significant impact of comprehensive net income on the owners equity of Jordanian commercial banks.

5. Literature Review

The concept of comprehensive income appeared in 1980, through the financial accounting standards board (FASB) but didn't request to disclose it until early 1990s, and until that time there weren't any sufficient elements to generate a significant difference between the net income and comprehensive income. During the period (1980-1993), new concepts appeared that had impact on the owners equity and retained earnings, such as financial hedging and financial derivatives, which called for issuing standards for it in 1998 (Yen *et al.*, 2007). The international accounting standards (IAS-1) and the international financial reporting standards (IFRS-1) and its amendments came to ensure the agreement between the parties who implement those standards at the companies on using standardized accounting procedures, policies, and criteria (IASB, 2013), where some of it had an acceptable flexibility but within limits.

The implementation of these criteria result in issuing, to some extent homogeneous disclosure financial statements which ensure to supply the accounting information users with the possible maximum information content, where the IAS (1) dealt with the methods used to present the financial statements, and then determine the method and level of financial statements items disclosure (Szychta and de la Rosa, 2012), which include the income statement that contains information content about the business results of the operational level, going through the net income of normal operations, and summarizing the unusual operations. Some data that were part of the first criterion and adjustments made on it, the concept of comprehensive income (Chambers, 2011), which includes all the processes and events that change the net assets (or change the owners equity) during the accounting period after excluding the owners equity changes resulting from capital operations, such as capital increase or decrease and dividends distribution (the operations of owners), which reduced the use of retained earnings statement to close some of the non-recurring and unusual accounts, which increased the reliability of information and the informational value by including the normal operations' net incomes, other comprehensive income items, and comprehensive income in the financial statements.

It's possible to view the comprehensive income in two ways (Agostini and Marcon, 2013), the first one includes all items of normal income and other comprehensive income items which recognized as part of the total comprehensive income (one statement method), and the second includes profit and loss statement, and comprehensive income statement, where the first list contains ordinary net income elements and the second list that includes other comprehensive income items, in addition to the ordinary net income which produce the total comprehensive income for the accounting period. In spite of the method used to express the comprehensive income, and through the several studies that addressed its impact on the financial ratios and the importance of ratios on performance (El-Dalabeeh, 2013) , such as return on equity (Būmane, 2018), the question remains about the impact of comprehensive income disclosure on increasing or decreasing the owner's investment, and therefore the owners' equity in the budget, which calls the attention of information users about this expected impact, such as the investors who primarily rely on the income statement to measure the profitability of company invested in Turktas *et al.* (2013), despite the findings that no matter what form of comprehensive income disclosure, the results are similar (Dhaliwal *et al.*, 1999; Kreuze and Newell, 1999).

The amendment of international accounting standards board resulted in an addition to the net income represented in the other comprehensive income items, which include the results of unusual and interrupted activities (Bellandi, 2012), such as the effects of change that result from repeating the evaluation of assets, where the company has to disclose information about the value of reduction losses, which result from repeating the evaluation of

comprehensive income statement during the period and the items that affected these losses, (employees' benefits) of short term benefits and the long term benefits (pensions and severance pay), in addition to the gains and losses from the investments in owners' equity tools, which measured by the economical value, through other comprehensive income items, and the gains and losses that would be created from the hedging instruments. As in all financial statements, the improvement of information content and the promotion of quality characteristics, such as suitability where the efforts made by accounting standards board, and its modifications consider the foundation for companies' implementation of financial performance evaluation standards, with more accurate results (Pascan, 2010), and therefore positively impact the decisions of information users (Frendzel and Szychta, 2013).

Several studies have addressed the aspects of comprehensive income concept, and there was a form of debate over the accounts that it include, in addition to its level of effectiveness and information content which should add in comparison with the traditional form of processing unusual and interrupted gains and losses, where the investment management researches committee sees that to get a better financial reporting, more useful, and in various fields, there is a need for the comprehensive income concept which now include the unusual gains and losses elements that result from changes to fair value and the reasons for changing the owners equity balance of non-shareholders (Johnson *et al.*, 1995), where there is a logical relationship between the net income and capital (owners equity) (Macintosh *et al.*, 2000).

Studies have shown some benefits and advantages that can be derived from assigning a portion of financial statements to include other comprehensive income elements, where Yin and Zheng (2017) see that other comprehensive income items reduce profit management, in addition to the maintenance of income and the improvement of financial indicators (Zhao *et al.*, 2018). The study of Munteanu *et al.* (2015) came to describe the transition method from international accounting standards to the financial reporting standards, and show the changes' effects of fair value and its relationship with the financial performance, which justify the growing interest in the topic of comprehensive income and its elements, and in return the impact of the latter through possession unrealized profits and losses of investment on the financial ratios of evaluating organizational performance, especially in the crises that face companies (Fireescu, 2015; Gazzola and Amelio, 2014b; Marchini and D'Este, 2015).

The financial reporting standards create a way to re-evaluate the performance, where it became necessary to disclose information about the comprehensive income and its role to supply the markets and companies with the appropriate information about the financial performance of these companies, which showed that net income has a weaker effect on the financial performance compared with comprehensive income (Bellandi, 2012; Gazzola and Amelio, 2014a; Tsujiyama, 2007). The debate increases through the study of Tsuji (2013), which concluded no particular impact of comprehensive income, as an increase from the effect of net income or cash flows in predicting returns of future property, and that they both have the same effect. This result reflects the findings of the above studies.

When dealing with the relationship between comprehensive income and financial indicators, especially the return on equity and return on assets, Būmane (2018) proved the existence of this relationship which indicate the important role of determining the comprehensive income separate from the net income of normal operations on increasing the information content of financial indicators, which considered a common measurement of performance (Fernández and Arana, 2010). Another study showed a positive effect of return on equity based on comprehensive income in contrary to the effect of return on equity based on net income, and this strengthen the existence and continuity of controversy among researchers about the two indicators.

In regard to the positive effects of comprehensive income disclosure on investors, the study of Deol (2013) and Hirst and Hopkins (1998) indicated an effect of comprehensive income on the estimation of market shares' prices, and this would help the investors to select and take their investment decisions more accurately, which agree with the study of Kanagaretnam *et al.* (2009), and this of course will reflect positively on the company, and increase its value in front of shareholders and customers (Dee, 1999). However, a study by Choi *et al.* (2007) showed that predictive aspect of investment will be on short term but not on the long term, where it's useful for a short profitability strategy. A study by Choi and Das (2003) and Choi and Zang (2006) proved that comprehensive income has a stronger prediction capability in the future recognition of unrealized losses than the future recognition of unrealized gains or profits, which means that both don't have the same prediction capability. Marchini and D'Este (2015) study found that reporting comprehensive income doesn't affect the decision making process, by users of financial statements, but on the contrary study by Dermawan and Indrajati (2017) showed that investors, as respondents of the study care for the comprehensive income, as an indicator to evaluate performance more than relying on the other comprehensive income items.

Comprehensive income and other comprehensive income items have a role on assessing the organization value, and therefore the selection of measurement for the utility and benefit level from other comprehensive income items, whether if it's important in analysis, and whether if the continuity of supplying information about the income will have an effect on organization's value or not (Park, 2018). The key determinant is the extent of decision maker to use other comprehensive income or relies only on ordinary net income, and this in any case a choice of decision maker, where the important of information content would grow through the additional recruitment of information, in any items of the comprehensive income statement, and await from using it to reduce the uncertainty in the market and get more informational value for the market shares' prices of investors (Edinger *et al.*, 2018).

The value that comes from using information or value relevance (Cahan *et al.*, 2000) but not the benefit that comes from using accounting information, where the first will be the foundation to assess the company's ownership value and the value of its market shares based on comprehensive income and other comprehensive income (Bratten *et al.*, 2016; Devalle, 2012). The comprehensive income elements, such as financial derivatives and hedge have an

informational relevance value, unlike what found in comprehensive income and other comprehensive income (Jahmani *et al.*, 2017), while the study of Lin *et al.* (2018) proved that disclosure of comprehensive income can affect the way that enrich the informational relevance value or reduce it.

Therefore, researchers conclude instability in the disclosure impact of comprehensive income, other comprehensive income, and other comprehensive income items, and its contribution level in the investment decisions taken by investors, and on informational relevance value related to it.

6. Study Methodology

Study population & Sample: It consist of all the (13) Jordanian commercial banks listed on Amman stock exchange, where the researchers depended on the actual data extracted from the annual financial reports of the banks, as the study sample during the period (2008-2017) to achieve the objectives of this study and test its hypotheses. The study variables were classified and their natures were determined as follows:

Independent Variables: Comprehensive net income, other comprehensive income, and net income.

Dependent Variable: Overall owners equity.

Study Approach: Study adopted the descriptive and analytical method by exposing the concept of comprehensive income statement and its impact on the owners equity of Jordanian commercial banks, where researchers collect the essential scientific knowledge about various aspects of the study by returning to the previous studies and scientific references, which enable researchers to get familiar with all aspects of the problem at hand, and create the required background knowledge to complete the search. In addition, it used the statistical method to analyze the study data based on banks data related to the study, for the period (2008-2017) by using the descriptive statistical analysis methods to analyze the data and test the study hypotheses.

7. Data Analysis and Hypotheses Testing

The process of data analysis and testing of study hypotheses went through three main phases, where it begin with the phase of verifying the suitability of data for statistical analysis, then the phase of descriptive statistics, and finally hypotheses testing phase.

7.2. Test Data Suitability for Statistical Analysis

Before starting the data analysis and the hypotheses testing, it's necessary to ensure the suitability level of study data for the multiple linear regression analysis and the parametric tests by conducting some pre-tests, and to achieve that the following tests were performed:

Table-1. Data validity tests and study model

Variables	Normal-Distribution		Time Series		Multicollinearity	
	Jarque-Bera Test		Stationarity		Collinearity Statistics	
	J-B	Prob.	PP	ADF	VIF	Tolerance
Net income for the year	1182.64	0.000	-6.825	-14.221	2.808	0.554
Total other comprehensive income	2668.99	0.000	-4.101	-6.321	1.208	0.824
Total comprehensive income	2300.62	0.000	-4.312	-5.514	1.482	0.673
Autocorrelation Test	Durbin Watson Test		2.250			
Heteroskedasticity Test	White Test(Sig.)		0.034			

7.3. Normal-Distribution Test

Jarque-Bera (J-B) parametric test has been used to verify the closeness level of data to its normal distribution, where the decision base will be to accept the nihilism hypothesis, which indicate that data follow the normal distribution if the probability of J-B test is greater than (5%) (Gujarati, 2013), and this test was implemented for each variable of the model. Table (1) shows that probability of J-B test for all model's variables are less than the significant level of ($\alpha \geq 0.05$), which means that data are not close to the normal distribution, and in order to overcome this problem the natural log was taken for the data of study variables, and since the sample size is greater than (30) observations, it won't be the problem of data distribution effective on analysis results.

7.4. Time Series Stability (Stationary) Test

Researches that used time series assume the stability of this series, and the autocorrelation may be created in the model whenever the time series that study build on is non-stationary, and to check the stability of time series the Parametric Unit Root Test has been used, which includes the Parametric Augmented Dicky-Fuller Test (ADF), and the Non-Parametric Phillips-Person (PP) Test, and table (1) shows that absolute value of (ADF) Parametric Test and Non-Parametric (PP) test are statistically significant at level ($\alpha \geq 0.05$), which indicate that data of the time series (2007-2017) are stable or stationary.

7.5. Multicollinearity Test

The strength of General Linear Model mainly depends on the Independency hypothesis of each independent variables, and if this condition wasn't met, the General Linear Model wouldn't be acceptable for the implementation,

and to make sure there is no linear overlap or Multicollinearity between the independent variables, which serve to magnify the interpretation coefficient value (R²) and makes it greater than the actual value, Collinearity Diagnostics scale will be used by calculating the Tolerance Coefficient for each of the independent model variables, and then calculate the Variance Inflation Factor (VIF), where Gujarati (2013) indicated the need for VIF coefficient to not exceed the value (5) and that value of Tolerance Coefficient must be greater than (0.05). Table (1) show that VIF Coefficient values, for all variables were greater than (1) and less than (5) and ranged between (1.208-2.808), while Tolerance values ranged between (0.554-0.824), which are larger than (0.05). These values indicate the non-existence of high correlation between the dimensions of independent variable, and therefore the possibility of using it all in the regression model.

7.6. Autocorrelation Test

This test aimed to ensure that data don't have Autocorrelation problem in the model, which weaken the ability of the model to predict, and to verify that Durbin-Watson (DW) Test was used, where near-zero result indicates a strong positive correlation between the successive residuals, while the result near (4) indicate a strong negative correlation, but the optimal result for this test will be between (1.5–2.5), which indicates lack of Autocorrelation between the adjacent values of variables. The economists feel reassured by the results when the value of D-W close to (2), where the Autocorrelation problem is weak (Montgomery *et al.*, 2001). From table (1), it notice that calculated D-W value for the study model is (2.250), which consider an optimal result, and indicate that model don't have Autocorrelation problem

7.7. Heteroskedasticity Test

Random error constancy or Heteroskedasticity consider one of the professional assumptions of regression models, and the implementation of ordinary least squares (OLS) method, in addition to its medium which must be equal to zero, and in the case of Heteroskedasticity some statistical techniques will be used to overcome this problem like the White Test, which used routinely through the E-Views software after its discovery by the software itself. Table (1) showed that statistical probability White test is equal to (0.034), which is less than (5%), and indicate that study model doesn't suffer from the problem of random error constancy or Heteroskedasticity.

7.8. Descriptive Analysis of Study Variables

After confirming the validity of data for the statistical analysis, and before testing the study hypotheses it's a must to conduct the descriptive analysis of study variables during the period (2008-2017), where tables (2, 3) showed the descriptive analysis results by using the descriptive statistical analysis methods, such as Mean, Median, Max, Min, STDEV., Skewness, and Kurtosis, which are available on the (E-Views) program and the statistical analysis package for Social Sciences (SPSS), where the results indicate that Skewness values of the study variables fall within the acceptable normal range of Skewness coefficients values of (± 1), and ranged between (-0.338) for the other comprehensive income, and (0.576) for the annual net income. In addition, the behavior of Kurtosis for study variables were bigger than the normal distribution (kurtosis = 3).

Table-2. Descriptive statistics of the variables (2008-2017)

Variables	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Net income for the year	87.35	62.04	43.83	45.27	52.03	66.11	77.33	62.63	68.83	68.74
Total other comprehensive income	-30.50	20.47	2.84	-13.57	-10.29	-14.44	-16.52	-18.98	-10.67	2.66
Total comprehensive income	55.41	82.88	46.63	30.30	41.66	51.67	60.94	43.65	58.15	71.40
Owners' Equity	774.45	835.33	249.24	256.67	848.83	873.68	897.22	916.11	939.05	979.71

Table-3. Descriptive statistics of the variables (millions)

Variables	Net income for the year	Total other comprehensive income	Total comprehensive income	Owners' Equity
Mean	63.452	-8.900	54.268	757.829
Median	22.279	0.035	22.37	228.969
Maximum	839.814	205.160	780.702	8409.272
Minimum	-1.330	-356.625	-7.185	48.423
Std. Dev.	134.592	51.121	109.599	1863.649
Skewness	0.576	-0.338	0.111	0.561
Kurtosis	13.489	22.054	19.693	11.418

Source: Researcher calculations depend on E-Views out put

It noticed also from the table above, the following:

- The arithmetic mean of total annual net income amounted to (63.452) million JDs, and the standard deviation (134.592), which indicate a variation in the annual net income at Jordanian commercial banks during the study years, and ranged between a net loss of (-1.330) million JDs, as the lowest value and a net income of (839.814) million JDs, as the highest value.
- The arithmetic mean of other comprehensive income items at Jordanian commercial banks, during the study period a loss of (8.900) million JDs, and the a standard deviation of (51.121), which refer to the presence of dispersion in the size of other comprehensive income among the banks, as the study sample during the period (2008-2017), where the lowest value of other comprehensive income amounted to (356.625.) million JDs, and the highest income amounted to (205.160) million JDs.
- In regards to the total comprehensive income at Jordanian commercial banks, as the study sample, the results indicated that overall arithmetic mean amounted to (45.268) million JDs, which is a good value for the comprehensive income at the banks, at a standard deviation of (109.599), and shows a dispersion and a variation in the comprehensive income values among the banks, and ranged between a net loss of (-7.185) million JDs, as the lowest value and a net income of (780.702) million JDs, as the highest income value.
- In regards to the descriptive analysis of dependent variable, the overall arithmetic mean of Owners equity at the banks amounted to (757.829) million JDs, at a standard deviation of (1863.649), and shows a high variation in the values of owners equity among banks, which ranged between (48.423) million JDs as the lowest value of owners equity and (8409.272) million JDs, as the highest value during (2008-2017).

7.9. Hypotheses Test

After confirming the validity of data for the statistical analysis, and performing initial study sample description, the last phase of data analysis will come which is hypotheses testing, where the study model measures the impact of comprehensive income through (Net income for the year, Total other comprehensive income, Total comprehensive income) on the owners equity of Jordanian commercial banks, and since the impact is between a set of independent variables and the dependent variable, the Pooled Data Regression model is the appropriate regression for the measurement of this relationship, with the fact that study data is Cross sectional Data, and also the study sample represented in the data of (13) Jordanian commercial banks through Time Series Data, for the period (2008-2017). In order to identify the effects between the variables, E-Views program was used, and the following table shows the results of study sample test model.

7.9.1. Main Hypothesis

"There is no statistically significance impact of comprehensive income on the owners equity of Jordanian commercial banks listed at Amman stock exchange", and stems from this hypothesis three secondary hypotheses that measure the impact of comprehensive income statement items on the owners equity at Jordanian commercial banks listed on Amman stock exchange, and used the Pooled Data Regression to test the main hypothesis and the hypotheses branched from it, where [table \(4\)](#) show the results of this test.

Table-4. Pooled Data Regression for the effect of the independent on dependent variable

Independent Variable	Coefficient	Std. Error	Expected sign	Z-Statistic	Prob.
(Constant)	-7.490	3.429		-2.184	0.030
Net income for the year	-3.701	3.962	+/-	-0.934	0.352
Total other comprehensive income	-14.321	4.162	+/-	-3.440	0.000
Total comprehensive income	17.323	4.637	+/-	3.735	0.000
R	0.934				
R-squared	0.872				
Adjusted R Square	0.868				
F-statistic	286.181				
Prob (F-statistic)	0.000				

Source: Researcher calculations. Dependent variable: Owners' Equity

It shows from [table \(4\)](#) that model as a whole is significance, where the value of calculated (F) amounted to (286.181) which is significance at level ($\alpha \leq 0.05$), and show a statistically significant impact of comprehensive income on the owners equity at Jordanian commercial banks, with correlation coefficient value of (0.934) which is statistically significant at level ($\alpha \leq 0.05$), and represent a positive and strong relationship between the independent variables as a whole and the dependent variable (owners' equity), but the Adjusted R Square explains (86.8%) from the variation in dependent variable, which means that (86.8%) from changes that occur in the owners' equity result from the changes in the comprehensive income. Other changes are the result of other factors that weren't examined in the used model, and this shows the importance of comprehensive income to the improvement of owners equity, and accordingly will reject the nihilism hypothesis and accept the alternative hypothesis.

By reviewing the results of regression coefficients, we found that coefficient value of the variable net income for the year wasn't a statistically significant, while all other variables in the model coefficient values of it were

statistically significant at the different Z-Statistic levels, with a significant level of ($\alpha \geq 0.05$), and all came under (5%), which confirm the significance of regression coefficients, and indicates that the impact of variables is statistically significant, and therefore it's possible to create the multiple regression formula for variables, as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + E_{it}$$

Owners' Equity = -7.490-14.321 (Total other comprehensive income) +17.323
(Total comprehensive income)+3.429

It stems from the main hypothesis three secondary hypotheses that measure the impact of comprehensive income on the owners equity at Jordanian commercial banks listed on Amman stock exchange, during the period (2008-2017). The results of secondary hypothesis test, as follows:

7.9.2. First Secondary Hypothesis

"There is no statistically significant impact of annual net income on the owners equity of Jordanian commercial banks".

It shows from table (4) that coefficient value of the annual net income variable is equals to (-7.490), which is a negative value and indicate the existence of negative relationship, and means any increase in the annual net income leads to a reduction in the overall owners equity at the Jordanian commercial banks. In another word, an increase by one degree in the annual net income will lead to a reduction in the owners equity value by (3.701). It also shows from testing the first hypothesis that its calculated Z-Statistic value is equal to (-0.934.), which is statistically insignificant value at (95%) level of confidence, and its probability is larger than (5%), where it reached (0.352), which means the acceptance of alternative hypothesis states "There is statistically significant impact of annual net income on the owners equity of Jordanian commercial banks".

7.9.3. Second Secondary Hypothesis

"There is no statistically significant impact of other comprehensive income on the owners equity of Jordanian commercial banks".

It shows from table (4) that coefficient value of the other comprehensive income variable is equals to (-14.321), which is a negative value and indicate the existence of negative impact on the dependent variable, and means any increase in the other comprehensive income leads to a reduction in the owners equity at the Jordanian commercial banks. In another word, an increase by one degree in the other comprehensive income will lead to a reduction in the owners equity value by (14.321). It also shows from testing the second secondary hypothesis that its calculated Z-Statistic value is equal to (-3.440.), which is statistically insignificant value at (95%) level of confidence, and also the probability is less than (5%), where it reached (0.000), which means the acceptance of alternative hypothesis states "There is statistically significant impact of other comprehensive income on the owners equity of Jordanian commercial banks".

7.9.4. Third Secondary Hypothesis

"There is no statistically significant impact of comprehensive net income on the owners equity of Jordanian commercial banks".

It shows from table (4) that coefficient value of the comprehensive net income variable is equals to (17.323), which is a positive value and indicate the existence of positive impact on the dependent variable, and means any increase in comprehensive net income leads to an increase in the owners' equity at the Jordanian commercial banks. In another word, an increase by one degree in the comprehensive net income will lead to an increase in the owners' equity value by (17.323). It also shows from testing the second secondary hypothesis that its calculated Z-Statistic value is equal to (3.735), which is statistically insignificant value at (95%) level of confidence, and also the probability is less than (5%), where it reached (0.000), which means the acceptance of alternative hypothesis states "There is statistically significant impact of comprehensive net income on the owners equity of Jordanian commercial banks".

8. Conclusions and Recommendations

Study results showed that (86.8%) from the changes occur in the owners equity result from the change in comprehensive income, and there is a positive strong relationship between the independent variables, as a whole and the dependent variable (owners' equity), which shows the importance of comprehensive income in the improvement of owners equity. In regard to the first secondary hypothesis, it showed a negative relationship between the annual net income and owners equity, which means the greater the annual net income the smaller the overall owners equity in the Jordanian commercial banks. It also showed from testing the first secondary hypothesis that its calculated (Z-Statistic) value is statistically insignificant at (95%) level of confidence, and also the probability is larger than (5%), which means there is no impact of annual net income on the owners equity in the Jordanian commercial banks. But in respect to the other comprehensive income, every time it increase the owners equity in the Jordanian commercial banks decrease, and it also showed from testing the second secondary hypothesis that its calculated (Z-Statistic) value is statistically significant at (95%) level of confidence. Results refer to a positive impact of comprehensive net income on the owners equity, where the increase in comprehensive net income leads to increase in the owners' equity at the Jordanian commercial banks. It also indicate that calculated (Z-Statistic) value is statistically significant at (95%) level of confidence, and therefore there is a statistically significant impact of comprehensive net income on the owners equity at the Jordanian commercial banks listed on the Amman stock exchange.

The Study Made the Following Recommendations

- Increase the interest in comprehensive income, due to its impact on owners equity.
- The need of scientific committees to work on adopting the standards that consider the various environmental aspects of countries' economies, which as researchers believe should lead to similar results, in terms of the expected impact of comprehensive income statement elements on the owners equity and any other dependent variables.
- Conduct other studies related to the causes that lead to the nonexistence of statistically significant impact of net income on the owners equity at the Jordanian commercial banks.
- Conduct other studies about the impact and relationship of study variables at public shareholding companies in other sectors

References

- Agostini, M. and Marcon, C. (2013). Comprehensive income (ci) statement's compliance with international accounting standard (ias) 1 (revised 2007 and 2011): Evidence from italian listed corporate groups. *Journal of Modern Accounting and Auditing*, 9(1): 1.
- Bellandi, F. (2012). *Dual reporting for equity and other comprehensive income under IFRSs and US GAAP*. John Wiley and Sons. 10:
- 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.
- Būmane, I. (2018). The methodology of the statement of comprehensive income and its impact on profitability: the case of Latvia. *Entrepreneurship and Sustainability Issues*, 6(1): 77-86.
- Cahan, S. F., Courtenay, S. M., Gronnewoller, P. L. and Upton, D. R. (2000). Value relevance of mandated comprehensive income disclosures. *Journal of Business Finance and Accounting*, 27(9-10): 1233-65.
- Chambers, D. (2011). Comprehensive income reporting: FASB decides location matters. Available: <https://digitalcommons.kennesaw.edu/cgi/viewcontent.cgi?article>
- Choi and Das, S. (2003). The predictive ability of comprehensive income disclosures under sfas no. 130. Available: <http://lwww.mgmt.purdue.edu/events/bkdspeakers/papers/IS/sori/nathdaspdfBiographicalnotes>
- Choi and Zang, Y. (2006). Implications of comprehensive income disclosure for future earning and analysts' forecasts. *Seoul Journal of Business*, 12(2): 77-109.
- Choi, Das, S. and Zang, Y. (2007). Comprehensive income, future earnings, and market mispricing. *Research Collection School of Accountancy*, (3): 1-35. Available: https://ink.library.smu.edu.sg/soa_research/162
- Dee, C. C. (1999). *Comprehensive income and its relation to firm value and transitory earnings*. LSU Historical Dissertations and Theses. https://digitalcommons.lsu.edu/gradschool_disstheses/7039
- Deol, H. (2013). *The decision usefulness of comprehensive income reporting in Canada*. Doctoral Dissertation, University of Calgary.
- Dermawan, E. S. and Indrajati, M. D. (2017). The quality of operating profit and other comprehensive income: Evidence from indonesia stock exchange. *Journal of Economic and Management Perspectives*, 11(1): 1545-57.
- Devalle, A. (2012). Assessing the value relevance of total comprehensive income under IFRS: An empirical evidence from European stock exchanges. *International Journal of Accounting, Auditing and Performance Evaluation*, 8(1): 43-68.
- 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(1-3): 43-67.
- Edinger, T., Moore, J., Wang, D. and Berger, D. (2018). Other comprehensive income and the market's processing of earnings information. 1-34. Available: https://scholarspace.manoa.hawaii.edu/bitstream/10125/59285/HARC_2019_paper_83.pdf
- El-Dalabeeh, A. K. (2013). The role of financial analysis ratio in evaluating performance:(case study: National chlorine industry). *Interdisciplinary Journal of Contemporary Research In Business*, 5(2): 13.
- 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). *International Business and Economics Research Journal*, 9(1): 117-28.
- Firescu, V. (2015). Comprehensive income, a new dimension in performance measurement and reporting. *Procedia Economics and Finance*, 20: 218-23. Available: <https://www.sciencedirect.com/science/article/pii/S2212567115000684>
- Frendzel, M. and Szychta, A. (2013). Comprehensive income reporting: empirical vidence from the Warsaw Stock Exchange. *Social Sciences*, 82(4): 7-16.
- Gazzola, P. and Amelio, S. (2014a). The impact of comprehensive income on the financial ratios in a period of crises. *Procedia Economics and Finance*, 12(~): 174-83. Available: <https://www.sciencedirect.com/science/article/pii/S2212567114003335?via%3Dihub>
- Gazzola, P. and Amelio, S. (2014b). Is total comprehensive income or net income better for the evaluation of companies' financial performance? *Central European Review of Economic Issues*, 17: Available: <https://www.ekf.vsb.cz/export/sites/ekf/cerei/cs/cisla/vol17/vol17num1/dokumenty/VOL17NUM01PAP04.pdf>

- Gujarati, D. N. (2013). *Basic econometrics*. 7th edn McGraw-Hill.
- Hirst, D. E. and Hopkins, P. E. (1998). Comprehensive income reporting and analysts' valuation judgments. *Journal of Accounting Research*, 36: 47-75. Available: https://econpapers.repec.org/article/blajoa/v_3a36_3ay_3a1998_3ai_3a_3ap_3a47-75.htm
- IASB (2013). A review of the conceptual framework for financial reporting. IASB. Available: <https://www.iasplus.com/en/news/2013/07/framework-dp>
- Jahmani, Y., Choi, H. Y., Park, Y. and Jiayun, W. G. (2017). The value relevance of other comprehensive income and its components. *Revista Internacional Administracion and Finanzas*, 9(1): 1-11.
- Johnson, L. T., Reither, C. L. and Swieringa, R. J. (1995). Toward reporting comprehensive income. *Accounting Horizons*, 9: 128-37.
- 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.
- Kreuzer, J. G. and Newell, G. E. (1999). The relationship of net income to comprehensive income: An analysis of Fortune 500 companies. *American Journal of Business*, 14(1): 53-58.
- Lin, 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.
- Lin, Martinez, D., Wang, C. and Yang, Y. W. (2018). Is other comprehensive income reported in the income statement more value relevant? The role of financial statement presentation. *Journal of Accounting, Auditing and Finance*, 33(4): 624-46.
- Macintosh, N. B., Shearer, T., Thornton, D. B. and Welker, M. (2000). Accounting as simulacrum and hyperreality: Perspectives on income and capital. *Accounting, Organizations and Society*, 25(1): 13-50.
- Marchini, P. L. and D'Este, C. (2015). Comprehensive income and financial performance ratios: Which potential effects on roe and on firm's performance evaluation? *Procedia Economics and Finance*, 32: 1724-39. Available: <https://www.sciencedirect.com/science/article/pii/S2212567115014781>
- Montgomery, D. C., Peck, E. A. and Vining, G. G. (2001). *Introduction to liner regression analysis*. 3rd edn: John Wiley and Sons: New York, N Y.
- Munteanu, V., Tinta, A., Vera, S., Copcinschi, L., Lăceanu, A. and Luschi, C. (2015). The comprehensive income-a new dimension in measuring the financial results by applying ifrs. Knowledge horizons. *Economics*, 7(1): 33.
- Park, H. (2018). Market reaction to other comprehensive income. *Sustainability*, 10(6): 1837.
- Pascan, I. (2010). *A new measure of financial performance: the comprehensive income—opinions and debates*. Applied Economics, Business and Development. 186-91. <http://www.wseas.us/e-library/conferences/2010/Tunisia/AEBD/AEBD-31.pdf>
- Szychta, A. and de la Rosa, D. (2012). Comprehensive income presentation under ias 1: The reporting practices of the largest companies listed on the warsaw stock exchange. *Zeszyty Teoretyczne Rachunkowości*, 68(124): 121-45.
- Tsuji, C. (2013). Comprehensive income and stock return: Evidence from the tokyo stock exchange. *J. Mgmt. and Sustainability*, 3(3): 142-47.
- Tsujiyama, E. (2007). Two concepts of comprehensive income. *Accounting and Audit Journal*, 19(11): 30-39.
- Turktas, B., Georgakopoulos, G., Sotiropoulos, I. and Vasileiou, K. Z. (2013). Reporting comprehensive income: Reasons for reporting choices and investor reactions. *International Journal of Economics and Finance*, 5(4): 1-20.
- Yen, A. C., Hirst, D. E. and Hopkins, P. E. (2007). A content analysis of the comprehensive income exposure draft comment letters. *Research in Accounting Regulation*, 19(2007): 53-79.
- Yin, F. and Zheng, Q., 2017. "Other comprehensive income and earnings management-an empirical analysis based on modified jones model." In *International Conference on Transformations and Innovations in Management (ICTIM 2017)*. Atlantis Press.
- Zhao, X., Kuan, Z. and Wei, W., 2018. "Earnings management using other comprehensive income items: A multi-case study on chinese listed companies." In *2nd International Conference on Social Sciences, Arts and Humanities*.