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**The Usefulness of Comprehensive
Income to Investors Compared to
the Net Income: an Empirical
Study on listed Firms
in the Egyptian Stock of Exchange**

Abstract

This study empirically investigates the usefulness of the mandatory reporting of comprehensive income in Egypt under the last Egyptian Accounting Standards (Revised EAS 1). The purpose of this research is to compare the usefulness of the comprehensive income compared to the net income for investors in the Egyptian stock market after the mandatory adoption of the revised EAS (1) in 2016. The usefulness of the comprehensive income for investors is tested by assessing the value relevance, persistence, predictability, and performance measurement of comprehensive income compared to the traditional net income. The sample consists of 169 observations of firms listed in the Egyptian Stock Market for the year 2017 and 157 observations of listed firms in year 2016. The results show the following evidence. The results provide evidence that both the Net income and the Comprehensive income are positively related to the share market prices of firms. However, the value relevance of net income is not significantly different from that of the comprehensive income. The results show that the net income is more value relevance to investors in the Egyptian Stock Market but the difference is not significant. Besides, the Foreign currency translate is the only component of the other comprehensive income which is incrementally value relevant once added to the net income. The other components of Comprehensive income- Foreign currency translate, Available for sale securities, Asset revaluation, the Pension Funds and the other comprehensive income of Comprehensive income do not add any value to the investors in the Egyptian Market.

In addition, the results also provide evidence that both the Net income and the Comprehensive income are positively related to the future cash flows of the firms. The results indicate that the net income is a better predictor for future cash flows of the firms than the comprehensive income however the difference is insignificant. Besides, neither the comprehensive income nor the net income is persistent in case of Egyptian listed firms. As well as, the results also indicate that the Comprehensive income is better in measuring the firm's performance than the net income however the difference is slight and insignificant. Accordingly, there is no strong evidence which support the assertion that one is superior to another.

Key words: Comprehensive income, Net income, Value relevance, price informativeness, Persistence, Predictability, Performance Measurement.

"منفعة الدخل الشامل للمستثمرين بالمقارنة مع صافي الدخل: دراسة تطبيقية على الشركات المدرجة في البورصة المصرية"

ملخص البحث

تهدف هذه الدراسة إلى إختبار منفعة الإفصاح الإلزامي عن الدخل الشامل في ظل معيار المحاسبة المصري المعدل رقم (١) في مصر. ويعتبر الغرض من هذا البحث هو مقارنة فائدة الإفصاح الإلزامي عن الدخل الشامل مقارنة بصافي الدخل للمستثمرين في سوق الأوراق المالية المصرية وذلك بعد تطبيق معايير المحاسبة المصرية المعدلة في عام ٢٠١٦. ويتم إختبار منفعة الدخل الشامل للمستثمرين مقارنة بصافي الدخل التقليدي عن طريق ٤ محاور رئيسية وهي تقييم ملائمة القيمة، الإستمرارية، القدرة على التنبؤ، وقياس أداء الدخل الشامل مقارنة بصافي الدخل. وتتكون عينة هذه الدراسة من ١٦٩ مشاهدة للشركات المسجلة في سوق الأوراق المالية المصرية عن عام ٢٠١٧ و ١٥٧ مشاهدة عن عام ٢٠١٦.

وتوصلت الدراسة إلى النتائج التالية: إن كلا من صافي الدخل والدخل الشامل يرتبط ارتباطاً إيجابياً بالسعر السوقي لأسهم الشركات. وتوصلت النتائج أيضاً إلى أن صافي الدخل له أهمية أكبر للمستثمرين في سوق الأوراق المالية المصرية ولكن الفرق بالنسبة لملائمة القيمة بين صافي الدخل والدخل الشامل غير معنوي. وأظهرت النتائج أيضاً إلى أن ترجمة العملة الأجنبية هي المكون الوحيد من عناصر الدخل الشامل التي ترتبط إيجابياً بالسعر السوقي لأسهم الشركات، أما باقي عناصر الدخل الشامل الأخرى مثل فروق تقييم العملة، الأوراق المالية المتاحة للبيع، وإعادة تقييم الأصول، وأموال المعاشات التقاعدية لا تضيف أي قيمة للمستثمرين في السوق المصرية. بالإضافة إلى ذلك، أوضحت النتائج أن كلا من صافي الدخل والدخل الشامل يرتبط ارتباطاً إيجابياً بالتدفقات النقدية المستقبلية للشركات. وتبين النتائج أن صافي الدخل يعتبر مؤشراً أفضل للتدفقات النقدية المستقبلية للشركات عن

الدخل الشامل ولكن الفرق غير معنوي. أما بالنسبة للإستمرارية، فأوضحت النتائج أنه تم رفض فرض الإستمرارية لكل من الدخل الشامل وصافي الدخل حيث كانت نتائج الإختبار غير معنوية لكل منهم بالنسبة للشركات المدرجة في البورصة المصرية. كذلك، أوضحت النتائج أن الدخل الشامل أفضل في قياس أداء الشركة عن صافي الدخل ولكن الفرق غير معنوي. وبناء على ذلك، لا يوجد دليل قوي يدعم أفضلية الدخل الشامل عن صافي الدخل بالنسبة للشركات المدرجة في البورصة المصرية.

الكلمات الرئيسية: الدخل الشامل، صافي الدخل، ملائمة القيمة، الإستمرارية، القدرة على التنبؤ، قياس الأداء.

1.1- Introduction

The financial statements are the final product of the financial accounting information system; as it provides information about the financial position and performance of an economic entity to help a wide range of users in making economic decisions to achieve their objectives. In fact, the accounting income has long been an important subject for empirical researches. It has a great importance as yielding a financial profit is the primary objective for all profit seeking organizations. In addition, it also measures the firms' financial performance and efficiency for using its resources. As well as, it is also an important measure to assess the value of the business entity and its prospects (IFRS Conceptual Framework, 2018).

Actually, Income measurement and financial position of an economic entity has always been a challenge for accounting standard setting bodies. In fact, the main objective of standard setters is to maximize the usefulness of accounting information provided in financial statements. Traditionally, net income was the key performance measure of any business. However over the time, accounting standard setters came to believe that net income by itself was an insufficient measure of financial performance. In fact, the traditional way of reporting income was considered to be too narrow. In addition, the environment of the accounting community was constantly changing and the reporting of company activities was becoming more complex with users of financial statements; who are asking for more detailed presentations. Nowadays, the assumption prevailed that a different way of presenting results in the financial statements was needed. This fact supported the implementation of Comprehensive Income reporting (Jianu and Gusatu, 2012, Gazzolaa and Stefano, 2014b, Le Manh, 2010).

Comprehensive income is an important development in the accounting standards. The International Accounting Standards Board's (IASB) decision to require the publication of comprehensive income has been taken after a long-time of debate regarding the concept of income. The introduction of Comprehensive Income was mainly driven by the convergence project between the IASB and the FASB, which had the goal of aligning international accounting standards and

increasing their comparability. One of the goals of the IASB has been to present comprehensive income and its components in the best way possible and to provide the current and the potential capital providers with informative figures, which are useful in making economic decisions (Conceptual Framework 2009, Pacter 2013, Royer 2017).

The proposal of the IASB and the FASB stated in the 2008 Discussion Paper (IASB/FASB 2008) draw up a single statement of income which is the statement of comprehensive income; in which the net income is an intermediate result compared with the total comprehensive income. This leads to bring the focus of the standard setters towards the consideration of the total comprehensive income as a key measure of performance evaluation, at the expense of the commonly used net income (FASB 2008, Le Manh, 2010).

The IASB comprehensive income project extends the 'fair value' measurement concept from the balance sheet into the income statement. The revised IAS 1 that was in effect since January 1, 2009; requires that all changes in equity, except the changes in equity arising from transactions with owners, should be recognized in the comprehensive income statement. The Revised IAS 1 requires companies to report the total comprehensive income that is a sum of net income and other comprehensive income. Total comprehensive income includes all unrealized gains and losses recognized under IFRS. Before the amendment, some of the unrealized gains and losses were shown in a statement of changes in equity but not in the income statement (IASB 2009).

In Egypt, a significant change in Egyptian accounting standards was induced in 2015 by introducing the amended Egyptian accounting standards which were prepared according to international financial reporting standards (IFRS). According to the final amendments, Egyptian firms are required to prepare the comprehensive income statement in addition to the traditional income statement starting from 1 January 2016.

1.2-Research problem

In fact, the question of what should make up a performance statement is an important question which has existed since the 20th century and continues up till now. Actually, this question is of many answers and different point of views from the academics and the accounting

standard setters. Indeed, the traditional way of reporting income was considered to be too narrow. Actually, net income has lost its importance for standard setters. Nowadays, the assumption prevailed that a different way of presenting results in financial statements is needed. Moreover, the environment of the accounting community is constantly changing and the reporting of company activities is becoming more complex with users of financial statements asking for more detailed presentations. This fact supports the implementation of Comprehensive Income reporting as it provides a more complete measure of an entity's financial performance than net income, especially from the perspective of the entity's owners. Actually, comprehensive income is currently becoming an increasingly important indicator of corporate performance on the international level (Gazzola, 2014b, Praulins and Bratka, 2012).

Actually, the presentation requirements of net income and comprehensive income have been amended by both the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB). The goal of these amendments is to present comprehensive income in the best way possible and to provide investors with informative figures which are useful in making economic decisions (IAS Plus, 2018). However, there were a lot of arguments between the academic and practitioner communities about whether the disclosure of comprehensive income provides useful information or not. There is an argument that the items included in comprehensive income are transitory, and therefore, could not be expected to be value relevant (Ohlson, 1999). In addition, many preparer and user of financial statements, however, have a tendency not to see the need to redefine their concept of income and prefer the traditional reporting under Net Income. They are demanding empirical validation of the superiority of Comprehensive Income over Net Income or at least the proof of usefulness of this supplementary information.

In fact, the results of the empirical studies regarding the relevance of the comprehensive income have been mixed. Some empirical studies which were conducted during the late 1990s and early 2000s provided mixed evidence on the superiority of comprehensive income related to other performance measures (Cheng et al. 1993; Hirst and Hopkins 1998; Dhaliwal et al. 1999; Maines and McDaniel 2000; Cahhan et al. 2000; Brimble and Hodgson 2004). However, other later

studies do not find evidence supporting the value relevance of Comprehensive Income (Biddle and Choi 2006; Choi and Zang 2006; Chambers et al. 2007; Choi et al. 2007; Kanagaretnam et al. 2009).

In Egypt, a significant change in the Egyptian accounting standards was induced in 2015 by introducing the amended Egyptian accounting standards which were prepared according to the international financial reporting standards (IFRS). According to the final amendments, Egyptian firms are required to prepare the comprehensive income statement in addition to the traditional income statement according to the reversed EAS 1 starting from January 1, 2016. However, there is a scarcity in the studies examining the usefulness of comprehensive income particularly in case of an emerging market as Egypt.

Accordingly, this study examines the usefulness of the comprehensive income to investors in an emerging capital market as in Egypt. The study investigates the usefulness of the mandatory disclosure of Comprehensive Income in Egypt along four dimensions which are the value relevance, persistence, predictability, and performance measurement. In particular, the study examines whether the disclosure of the comprehensive income components provide additional information compared to the net income which is the simple and usual measure of business performance. The study examines whether the mandatory disclosure of comprehensive income under the revised 2015 (EAS1) has increased the information value for investors, therefore, better reflecting the economic situation of the company compared to the Net Income. Thus, **this research seeks to answer the following research questions:**

- Q₁:** Is the disclosure of the mandatory comprehensive income useful to investors of firms in the Egyptian Stock Market?
- Q₂:** Does the Comprehensive Income convey value-relevant information relative to the traditional Net Income?
- Q₃:** Are the components of the comprehensive income transitory or persistent?
- Q₄:** Does the inclusion of the comprehensive income and its components increase the predictive ability compared to the traditional net income?

Q5: Does the comprehensive income provide a better performance measure relative to the traditional net income?

1.3-Research objective

The main objective of this research is to examine the usefulness of the mandatory disclosure of comprehensive income to investors, compared to the traditional net income, in reaching their economic decisions in an emerging capital market such as the Egyptian stock market. The purpose of this study is to examine empirically, using actually reported accounting data by Egyptian firms, whether the mandatory disclosure of Comprehensive Income, as required by the amended Egyptian Accounting Standard (1) in 2015, provide useful information to investors in the case of Egypt. The usefulness of the comprehensive income for investors is assessed along four dimensions which are the value relevance, persistence, predictability, and performance measurement.

The aim of this study is to provide empirical evidence with respect to the question if the inclusion of Comprehensive Income provides investors with incremental information for companies in Egypt under the revised (EAS1). This study examines the grade of success of the EAS in increasing the relevance of the accounting information by implementing EAS 1 (revised 2015). Besides, this study also aims to examine whether the components of the comprehensive income are persistent or transitory. Also, this study aims to examine whether the comprehensive income is a better predictor of firms' future cash flows. In addition, the study also aims to examine whether the comprehensive income is a better measure of firms' performance than the traditional net income.

1.4-Research importance and motivations

In fact, this study has several contributions. First, this study provides empirical evidence regarding the usefulness of Comprehensive Income disclosure for investors as reported under EAS 1 (revised 2015). This study was motivated by the mixed results of the studies carried out till now. Although, comprehensive income has been implemented under all accounting standards, the practical relevance for users of this information could so far not be reliably assessed in empirical studies. The studies carried out up till now have been conducted over different time periods and are based on different regions and

accounting standards, consequently providing mixed results. This creates the need for an enhancement of existing literature and to conduct further research to validate the present results.

Actually, the existing literature presents mixed results regarding the usefulness of the comprehensive income to investors. Some empirical studies provided evidence on the superiority of comprehensive income related to other performance measures (Hirst and Hopkins 1998; Dhaliwal et al. 1999; Maines and McDaniel 2000; Cahan et al. 2000; Brimble and Hodgson 2005). However, other empirical studies provide evidence that investors might probably do not consider the components of other comprehensive income as value relevance because they are transitory in nature, in that they are unpredictable, irrelevant for predicting future earnings and thus value irrelevant (Biddle and Choi 2006; Choi and Zang 2006; Chambers et al. 2007; Choi et al. 2007; Kanagaretnam et al. 2009). Accordingly the mixed results of the studies carried out till now, make there is a need for further research on the usefulness of Comprehensive Income as well as its components to investors especially in case of an emerging capital market such as in Egypt, which makes the results of this research are more interesting, important and relevant.

In addition, my motivation to perform this research is the scarcity of researches examining the usefulness of comprehensive income to investors especially in case of Egypt. Actually, the importance of this research stems from the obvious gap in the current literature regarding the decision-usefulness of comprehensive income especially in the Egyptian stock market. Although on the international level, research carried out on Comprehensive Income is extensive and diverse, however in Egypt the studies are rare. There are only few studies which were conducted using the actually reported data of the Egyptian listed firms. This is because data on comprehensive income of the Egyptian listed firms has only been available after the implementation of the revised EAS 1 starting from January 2016.

As well, the primary contribution of this study is to provide empirical evidence regarding the usefulness of Comprehensive Income. It contributes additional insights into the current discussion on the usefulness of comprehensive income in terms of its relevance to investors. The current study, however, goes beyond other studies which examine the value relevance of comprehensive income, as it also exam-

ines the persistence and the predicting power of comprehensive income. In addition, this study also adds to the existing literature of which performance measure reporting is most useful, as this study examines the extent to which comprehensive income represents an efficient measure of performance.

Moreover, the results of this study are also relevant to the accounting standard setters as well as to the investors. The results of this study are of importance to the standard setters as their primary goal is to establish accounting standards that present income figures which are useful to investors in making their economic decisions. This study provide evidence on whether the current financial reporting standards of comprehensive income enhance investors' usefulness, compared to the traditional net income, which is main of the goal of the combined project of the IASB and the FASB, since the main goal of this project is to develop an international standard for presenting financial statement information, which increases the usefulness in assessing the financial performance of entities.

Also, the results of this study are relevant for external auditors. External auditors seek to provide assurance that the financial statements give a true and fair view. If comprehensive income is useful to investors, external auditors should express due professional care in detecting the materially misstated amounts.

1.5- Research plan

This research is organized as follow: Section two starts with the definition of the Comprehensive Income concept and its components. It also presents the proponents and the opponents of the Comprehensive Income concept and its presentation requirements in the financial statements. Section three presents the decision usefulness of comprehensive income to investors; it explains the main idea behind the usefulness of the accounting information. Section four presents a review of the literature related to this issue and to the research questions; it is divided into four subsections. The first subsection reviews the previous literature examining the value relevance of comprehensive income. The second subsection reviews the previous literature related to the predictability of comprehensive income. The third subsection reviews the previous literature related to examining the persistence of comprehensive income, it reviews the studies examining whether the comprehensive income is transitory or permanent. The fourth subsec-

tion reviews the previous literature related to examining the measurement of the current performance, and finally the research hypotheses are developed in this section. Section five presents the design of the empirical study, the research population and sample, and the methods of analysis are described. Section six presents the results of the empirical study. Finally, the last section summarizes the empirical findings, conclusion, limitations, and suggests future researches in this area.

2. The Concept of Comprehensive Income and its components

2.1- The Concept of Comprehensive Income

In June 1997, the FASB issued SFAS No. 130 “Reporting Comprehensive Income”. This standard requires a company to report comprehensive income and its components in a full set of financial statements. Comprehensive income is defined by the FASB in SFAS 130 as “the change in equity (net assets) of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners.” (FASB, 1997).

Comprehensive income can be simply understood if it is divided into its two major components, the net income and the other comprehensive income components. Net income is the traditional measure of performance reported as the bottom line of a company's income statement. SFAS No. 130 does not change the present reporting requirements for net income; however it considers the amount of net income as the major component of comprehensive income. SFAS No. 130 does not change the reporting requirements for net income or any of its major components (FASB, 1997).

In 2005, the Canadian Accounting Standards Board issued Handbook (HB) 1530, Comprehensive Income. Comprehensive income is defined as “the change in equity (net assets) of an enterprise during a period from transactions and other events and circumstances from non-owner sources” (CICA HB1530). Comprehensive income consists of Net Income (NI), and Other Comprehensive Income (OCI). OCI as defined under HB1530 included three components, which are (1) unrealized gains and losses on available-for-sale financial assets, (2) unrealized gains and losses on foreign currency translations, and

(3) gains and losses on derivatives designated as cash flow hedges. It is obvious that the provisions of the Canadian Standard (HB 1530) were broadly similar to those of Statement of Financial Accounting Standard (SFAS) 130. In fact, the Canadian Standard was based on the US Financial Accounting Standard Board's (the FASB) Statement of Financial Accounting Standard 130 (SFAS 130), which defines comprehensive income in exactly the same manner as the Canadian Standard, except that SFAS 130 includes an additional item under OCI which is minimum pension adjustments.

The IASB has amended the IAS (1) "Presentation of Financial Statements" in September 2007. According to the amended IAS (1), it requires the mandatory reporting of other comprehensive income items. IAS 1 was revised to include the reporting of total CI as a concept for financial reporting. Total CI has been defined in IAS 1 (paragraph 7) as the change in equity during a period resulting from transactions and other events, other than the changes resulting from transactions with owners in their capacity as owners. Total comprehensive income comprises all components of «profit or loss» and of «other comprehensive income». According to the amended IAS (1), it requires that the profit or loss and OCI should be presented together, i.e. either as a single "statement of profit or loss and comprehensive income", or a separate "statement of profit or loss" and a "statement of comprehensive income" – rather than requiring a single continuous statement as was proposed in the exposure draft (IASB, 2007).

As it is obvious from the previous definitions, comprehensive income is an inclusive concept of income. It includes all measures of income, meaning it is the sum of traditional net income (NI) and also the effects of changes recorded in "other comprehensive income" (OCI). It includes all changes in equity during a period from non-owner sources except those resulting from investments by owners and distribution to owners (Dumitrana et al., 2010). In fact, the main purpose of introducing Comprehensive Income is not to replace the reporting of Net Income, but is to provide additional information about items that otherwise do not directly appear in the profit or loss.

2.2- The Components of Comprehensive Income

Actually, Comprehensive Income consists of Net Income and Other Comprehensive Income components. Net Income includes all changes

in equity that result from transactions with shareholders and non-shareholders representing the company's total profit or loss for a period. On the other hand, Other Comprehensive Income includes changes in equity that are not recognized in the profit or loss and are not based on transactions with shareholders. **The components of comprehensive income consist of the following items (IASB, 2012):**

- Unrealized investment gains and losses on available for sale securities;
- Unrealized gains and losses on derivatives used in cash flow hedging;
- Foreign currency translation adjustments on foreign subsidiaries,
- Gains and losses relating to pensions retirement benefits,
- Revaluation of property, plant and equipment.

As a matter of fact, Comprehensive income is a useful measure of the overall firms' performance as it provides information about the components of other comprehensive income which is needed to understand the overall performance. Actually, a single focus on the amount of comprehensive income is likely to result in a limited understanding of firm's performance; however information about the components of comprehensive income may be more important than the total amount of comprehensive income. In fact, investors are generally interested in knowing the components of firm's income for a given period of time than knowing the aggregate figure shown on the "bottom line". This is because the knowledge about the composition of the aggregate figure helps investors in making judgment about the quality of earnings (Beisland, 2008).

The components of the other Comprehensive Income are the items excluded from the net income. These items appear in the other comprehensive income as they may distort the reporting of profit or loss because these items have not yet been realized and are non-recurring, non-operating, involving a measurement of uncertainty, or are outside management control and, therefore, are recognized in the statement of other Comprehensive Income. These items recognized under the other Comprehensive Income may be reclassified to profit or loss at a later stage. It is believed that the other comprehensive income is made to give the management and the investors a more comprehensive view of the company's financial statement (Günther, 2015).

To conclude, the decision of whether to recognize an item partly or completely in profit or loss or in the statement of Other Comprehensive Income is based on several characteristics rather than a single attribute. Items that may distort the reporting of profit or loss because they are not being realized, non-recurring, non-operating, involving a measurement of uncertainty, or are outside management control are recognized in the Comprehensive Income statement. On the other hand; Items have opposing attributes are recognized in the profit or loss account.

2.3- The Advocates of Comprehensive Income concept

In fact, many arguments have been introduced in supporting the measurement of the comprehensive income of a business firm. First, financial statements should report the overall facts as completely as possible and should provide predictive ability. Advocates of the all-inclusive income concept claim that comprehensive income statements provide better measures of firm's performance than other summary income measures. In fact, Comprehensive income provides more information than net income, thereby accepting that the business performance is not limited only to the performance under the control of the manager (Acar and Semra, 2017, Cahan et al., 2000; Biddle and Choi, 2006).

Advocates of the all-inclusive concept argue that all items affecting the shareholders' interests, other than dividends and other transactions between the enterprise and its shareholders, during the period should be reported in the income statement. This is because it provides more useful information for the users of financial statements and enables them to evaluate the importance of the items and their effects on the operating results. Actually, supporters of comprehensive income argue that it is the only measure that captures all sources of value creation, and accordingly enforce managers, investors, and analysts to consider all factors affecting firm's value. Also, proponents of comprehensive income argue that the omission of certain expenses and gains from the computation of net income may lead to possible manipulation or smoothing in the earnings figures (Biddle and Choi 2006, Gazzolaa and Ameliob 2014 b, Penman, 2002).

Supporters of the “all-inclusive” statement of performance argue that comprehensive income, instead of net income, reveals the firm’s true and full value creation. Besides, advocates of comprehensive income also argue that the distinction between the operating and the non-operating transactions influencing the income is not clear-cut (Gazzola and Amelio, 2012, Biddle and Choi 2006, Gazzolaa and Ameliob2014 b, Penman, 2002). Sometimes transactions are classified as operating by one firm and are classified as non-operating by another firm. Moreover, items classified as non-operating in one year may be classified as operating by the same firm in a following year. This leads to inconsistencies in making comparison among different firms or over several periods for the same firm. In addition, advocates of this view focuses on reporting the complete facts in the income statement, whereas net income allows certain transitory and nonrecurring items to evade the income statement, thereby creating a Net Income figure that is assumed to have superior predicting power (Günther, 2015).

2.4- The Opponents of Comprehensive Income concept

On the other hand, the concept of Comprehensive Income has attracted strong criticism with regards to the high risk of volatility, as opposed to the Net Income. Components of comprehensive income tend to be more volatile than the net income and would increase investors’ assessments of firm risk (Biddle and Choi, 2008, Glaserova, 2012, Gazzolaa and Ameliob2014 b, Hirst and Hopkins, 1998, Khan and Bradbury, 2014). Ohlson (1999) developed the concept of transitory earnings compared to the concept of core earnings. Based on his arguments, only “core earnings” from operations are considered to have information which is relevant, and thus, useful to investors. Conversely, “Transitory earnings,” which do not add relevant information must be included in a separate statement, such as the components of the other comprehensive income, and therefore should be reported separately from the core earnings which are the net income. Basically, the components of comprehensive income are transitory in nature compared to the net income. These components are not considered good for the setters of the accounting standard to be included in the traditional net income because of their volatility (Chambers et al, 2007). Based on this fact several investors seem to ignore Compre-

hensive Income and continue to use Net Income figures for their valuations and other financial analyses.

Also, opponents of Comprehensive Income have criticized the complexity and costs of reporting, higher volatility and accordingly higher perceived risk and the possible inherent confusion created by this transitory income measure affected by judgmental treatment. Besides, it is argued that Comprehensive Income has limited explanatory power for predicting company values and its future Operating Cash Flows (Günther, 2015, Marinho, 2016).

In contrast, those who advocate the traditional Net Income argue that net income without the inclusion of extraordinary and non-recurring items has a superior predicting power and a better ability to predict the firm's future cash flows. Moreover, they argue that comprehensive income do not have greater informational potential than the net income in addition to the use of the historical cost is a key element (Gazzola, 2014, Goncharov and Hodgson 2008; Devalle and Magarini (2012); Mechelli and Cimini, 2014, Dhaliwal et al., 1999; Kanagaretnam et al., 2009; Zülch and Pronobis, 2010).

With respect to the presentation requirements of comprehensive income, the IAS (1) describes the choices which entities have for presenting their incomes. The first option of presenting income is a "single statement of comprehensive income." The second option is presenting "two separate statements," with the first statement being the statement of income (profit or loss) and the second, a statement of comprehensive income rather than requiring a single continuous statement. However according to the revised EAS (1), a comprehensive income statement is required as a separate statement begins with the net income and ends with the comprehensive income, the implementation of the revised EAS (1) have started from January1, 2016.

3. The Decision Usefulness of Comprehensive Income to investors

The concept of useful accounting information has been defined by the International Accounting Standards Board as follows: "If financial information is to be useful, it must be relevant and faithfully represent what it supposed to represent. The usefulness of financial information is enhanced if it is comparable, verifiable, timely and understandable". From this definition of useful accounting information it is obvious that

there are two sets of qualitative characteristics, fundamental characteristics and enhancing characteristics (IASB, 2018).

The fundamental characteristics are relevance and faithful representation, while the enhancing characteristics are timeliness; comparability, understandability, and verifiability. The first two qualitative characteristics, which are relevance and faithful representation, are concerned with the decision usefulness of accounting information. Thus, to be decision useful, accounting information should be capable of affecting the decisions made by the users of this accounting information, which means relevance and it should be presented faithfully (IASB, 2018).

Besides, the Conceptual Framework (IASB, 2018) states that the accounting information is decision useful if it also has predictive value. Accordingly, financial information is useful if it has predictive value and confirmatory value. Predictive value helps users in predicting or anticipating future outcomes. Confirmatory value enables users to ensure and verify earlier predictions. In addition, the fundamental qualitative characteristics of decision usefulness of financial information are enhanced if the information is, comparable, verifiable, timely, and understandable (IASB, 2018).

In fact, this research aims to answer the question of whether the comprehensive income is considered useful to investors when making their economic decisions. In this research, the usefulness of accounting information for investors is examined by assessing four attributes which are: first, the accounting number is value relevant if it is price relevance. Second, the accounting number must have the ability to predict itself which is persistence. Third, the accounting number is relevant in forecasting cash flows from operations in the following period which is the forecasting ability. Fourth, the accounting income number has the ability to measure the performance. The literature related to these attributes will be discussed in the next section.

4. Literature review

The following section provides an overview of the literature related to the research questions and to the usefulness of the comprehensive income. The first subsection reviews the previous literature examining the value relevance of comprehensive income. The second subsection reviews the previous literature related to the predictability of compre-

hensive income. The third subsection reviews the previous literature related to examining the persistence of comprehensive income, it reviews the studies examining whether the comprehensive income is transitory or permanent. The fourth subsection reviews the previous literature related to examining the measuring the current performance.

4.1. Previous literature related to examining the Relevance of Comprehensive Income

Relevance is one of the fundamental qualitative characteristic of the accounting information. In fact, the accounting information is considered to be relevant if it is capable of making a difference in the decisions made by the users. Actually, relevance requires the financial information to be related and able to affect the economic decision. Otherwise, the information is considered useless (FASB, 2006).

According to FASB, Relevance refers to the ability of information to influence a decision, and such information must meet the criteria of predictive value, feedback value and timeliness. Materiality is also an aspect of relevance which is related to the firm. The Information is considered material if its omission or misstatement could influence the decisions that users make on the basis of an entity's financial information (FASB, 2006). Actually, what is material to one firm may not be material to another. It is relative and firm- specific. Information is material if it is significant enough to affect the decision of the users. Materiality is affected by the nature and the size of the item. However, since audited financial statements take time to be released, it is argued that the delayed release of the information reduces its relevance. Accounting information is considered to be decision-useful if it is value-relevant, which means it is associated with stock price.

According to the accounting literature, value relevance is a commonly used method to measure the usefulness and quality of financial statement information to investors and to examine whether these accounting numbers reflect the information used by investors to reach their economic conclusions (Barth et al., 2001; Beisland, 2008). It is defined as an accounting number that has a predictable association with share prices or equity market values (Balasundaram and Vijitha, 2014). Accordingly, value-relevance of accounting information means that the reported income figure is associated with share prices or returns. It is the association between the specific accounting data and

market data which indicates that the accounting information is associated with the information used by the investors.

As indicated in the accounting literature; value relevance of accounting information means the ability of the accounting numbers to summarize the information underlying the company's stock market price (Balasundaram and Vijitha, 2014). It is defined in the existing accounting literature as an accounting number that has a predicted association with equity market values or share prices (Barth et al., 2001). Profit is considered to have value relevance because it has a statistical relationship with stock prices that reflect the value of the company (Dechow et.al, 2014).

Yousefinejad and others, 2017 examine whether OCI and its components, Available-For-Sale Financial Instruments and Revaluation Surplus of Property, Plant and Equipment are value relevant in Malaysia as a developing country. They hypothesize that OCI and its components are associated with share price. These hypotheses are empirically tested using a sample of 1,419 firm years observations from 2011 to 2013, of firms listed on the Main Market of Bursa Malaysia. The results indicate that OCI and its components are value relevant. They indicate that the move towards a more comprehensive income reporting through the preparation of the Statement of Comprehensive Income results lead to more informative financial reporting (Yousefinejad et. al, 2017).

Marinho (2016) investigates the value relevance of Comprehensive Income and Other Comprehensive Income from valuation, informational and forecasting perspectives compared to Profit or Loss after the mandatory adoption of the International Financial Reporting Standards by Brazilian listed companies. This study examines the relative and incremental association of P&L, CI, and OCI components with (i) share prices and (ii) share returns. In addition, the study also examines the forecasting ability of P&L, CI, and OCI components to predict future Operating Cash Flows and future P&L. The results indicate that P&L is more value relevant than CI, even though CI provide value relevant information. However, the CI coefficient is lower than P&L coefficient (Marinho, 2016).

Günther, 2015 examines the value-relevance of the Comprehensive Income and examines if the explicit reporting under the revised IAS 1 has increased the information value for investors. The study examines

the statistical association of Comprehensive Income and components of Other Comprehensive Income with share prices, share returns, abnormal share returns, and analysts' target prices and it compares the results to the association with the Net Income. In addition, the study examined the forecasting ability of Comprehensive Income and Other Comprehensive Income components to predict future Operating Cash Flows and future Net Income. The results of this study indicates that certain components of Other Comprehensive Income, namely foreign currency translation adjustments, gains and losses on available-for-sale financial assets, and gains and losses in cash flow hedges are value-relevant and robust for the price and return models. Conversely, based on the forecasting ability it cannot be established that Comprehensive Income is a superior predictor of future Net Income or future Operating Cash Flows compared to the Net Income (Günther, 2015).

Fei, 2015 analyzed the level of informativeness of the accounting earnings reported in the income statement of listed firms in Malaysia compared to the all-inclusive comprehensive income from the same annual reports. The study revealed that stock prices are more responsive to accounting earnings measured by the net income as compared to the comprehensive income concept. These findings imply that comprehensive accounting information is not effective in conveying value-relevant information to stakeholders as the traditional net income (Fei, 2015).

Mechelli & Cimini (2014) investigate the incremental value relevance of Comprehensive Income and Other Comprehensive Income across European countries after the mandatory adoption of the International Accounting Standards Board standards. The results show that the Net Income is more value-relevant than the Comprehensive Income. This result is expected because of the transitory nature of the Comprehensive Income components (Mechelli & Cimini, 2014).

With respect to the price relevance, it is defined as the relation between a financial statement item and a firm's equity market price. Black (2016) defines price relevance as the relation between an accounting number (net income, comprehensive income and other comprehensive income) and a firms' equity market price. The distinction between using changes in share prices or stated actual prices is that studies examining share price changes are interested in changes of the firms' value over a specific period of time, while the association with

share prices determines what is actually reflected in a firms' value (Royer, 2017).

Devalle and Magarini, 2012, compare the value relevance of the net income and the comprehensive income reported under IFRS. They aim to examine whether the total comprehensive income is more value relevant than the net income. The results show that the comprehensive income has not resulted in an unquestionable increase in value relevance compared with net income (Devalle and Magarini, 2012).

Goncharov and Hodgson (2011) find that comprehensive income are price relevant, but not as price relevant as net income. None of the three components of OCI examined (revaluation reserve adjustments, foreign currency translation adjustments, and unrealized gains and losses on AFS securities) are price relevant after controlling for net income and book value. The study found that comprehensive income is value relevant for changes in analysts' price targets. They also find that revaluation reserve adjustments and foreign currency translation adjustments are value relevant for analysts' price target revisions, while unrealized gains and losses on AFS securities are not (Goncharov& Hodgson, 2011).

Landsman et al. (2011) provide evidence that Comprehensive Income is price irrelevant, while net income is price relevant. This evidence suggests that investors consider OCI to be transitory for valuation purposes, while investors do not consider net income to be transitory or have insufficient information (Landsman et al., 2011).

Kanagaretnam et al. (2009) find evidence that unrealized gains and losses on AFS securities and cash-flow hedges are significantly correlated with stock prices. Correlations are negative for unrealized losses on cash-flow hedges and positive for unrealized gains on cash-flow hedges. In addition, the study found that comprehensive income better explained stock prices than the net income (Kanagaretnam et al., 2009).

Cahan et al. (2000) find that fixed asset revaluation adjustments, but not foreign currency translation adjustments, are significantly correlated with stock prices for a sample of New Zealand firms from 1992 to1997 that were required to report OCI components in a statement of changes in equity beginning in 1995. They fail to find evidence that the coefficients on net income, fixed asset revaluations, and

foreign currency translation adjustments are significantly different from one another and interpret this result as evidence that components of comprehensive income need not be disclosed separately (Cahan et al., 2000). Dhaliwal et al. (1999) showed that comprehensive income has less explanatory power for stock prices than the net income (Dhaliwal et al., 1999).

In sum, research on the price relevance of both comprehensive income and OCI provides mixed results, with findings varying with research design choices and sample selection. However, the majority of studies which have analyzed the association of different income measures, in particular Net Income and Comprehensive Income, with market data from around the world, including share prices or share returns over the past decade, conclude that Net Income is associated more with share prices or share returns than Comprehensive Income. Moreover, it has been found that Net Income is a better predictor of future Operating Cash Flows than Comprehensive Income.

Finally to conclude, researches on the value relevance of accounting information cannot be separated from the stock price. The market reaction is reflected in the change of the stock prices. Value-relevance studies examine the relative and incremental associations of income measures with share prices and other market data. To assess the value relevance of the performance measures, this study examine its association with share prices. A performance measure will be value relevant when this number reflects information, which is relevant to investors in order to value the entity. **Accordingly the relevance hypotheses will be as follows:**

- H₁:** There is a positive relationship between the share market price and the net income of listed Firms in the Egyptian Stock Market.
- H₂:** There is a positive relationship between the share market price and the comprehensive income of listed Firms in the Egyptian Stock Market.
- H₃:** There is a positive relationship between the share market price and the other components of comprehensive income of listed Firms in the Egyptian Stock Market.
- H₄:** The Net income is more prices relevant to investors than the comprehensive income of listed Firms in the Egyptian Stock Market.

4.2. Previous literature related to the Predictability of Comprehensive Income

As indicated in the accounting literature; predictive values relate to the accuracy with which future values can be estimated on the basis of the current values. It is assumed that predictive values of financial information can be increased if the additional information given by reporting the Comprehensive Income has an impact on the accuracy of predictions. In fact, the information given by past period associations should enhance the predicted associations in the following periods.

The Conceptual Framework (IASB, 2010), states that performance measures which predict future cash flows are more useful to investors and investors view these performance measures as more desirable. Actually, performance measures also differ in its forecasting ability. Ohlson (1999) shows that current gains from a forward contract might not predict future gains from this forward contract. However, this same contract might still be able to predict future earnings. Accordingly, the relation with comprehensive income is that, gains and losses from these earnings components might be able to predict future cash flows, as these gains and losses accumulate on the balance sheet for several years before being realized.

In fact, comprehensive income items are regarded as transitory in nature and include components that are realized over time and therefore will be recognized in the profit and loss account at a later date (Günther, 2015). Consequently, these items temporarily recorded under Comprehensive Income are later reclassified into profit and loss account. IFRS requires that the selected items only may be recycled to profit or loss. These include (i) foreign currency translation adjustments, (ii) gains and losses in cash flow hedges, (iii) gains and losses on available-for-sale financial assets, (iv) the related taxes. Finally it will show up in Net Income and, therefore take into consideration changes in economic resources more accurately.

Bataineh and Rababah (2016) compare the ability of comprehensive income and net income to predict companies' future performance in Jordan. They aim to examine the usefulness of both the net income and comprehensive income to the financial information users and to confirm which one of them is more powerful in predicting of the future performance. The results show that the current net income has

more predictive power for future income and future comprehensive income than current comprehensive income. Besides the results show that although the total comprehensive income possesses more informative content, but still the net income is more powerful in predicting future performance.

ÖZCAN, 2015 aimed to assess the usefulness of the comprehensive income reporting and the net income in explaining the future firm performance. The results of this empirical study revealed that the net income was better than the comprehensive income in predicting future net income and operating income (ÖZCAN, 2015).

Goncharov and Hodgson (2011) find that comprehensive income has lower predictive ability for cash from operating activities than the net income (Goncharov and Hodgson, 2011). Jones and Smith (2011) find that special items have better predictive power than OCI for future net income and future cash flows (Jones and Smith, 2011). Kanagaretnam et al. (2009) find that net income is a better predictor of future net income than the comprehensive income. However, Kanagaretnam et al. (2009) find that net income is a worse predictor of future cash flow from operations than is comprehensive income for a sample of Canadian firms from 1998 to 2003 that are cross-listed in the USA using as-reported data from firms' financial statements. They also find that unrealized gains and losses on available for sale securities are significantly positive in predicting future cash flow from operations (Kanagaretnam et al., 2009).

Barton et al. (2010) provide descriptive evidence that comprehensive income is the least predictable performance measure using data from 46 countries. Barton et al. (2010) find that comprehensive income has the lowest ability to predict operating cash flows of performance measures and this result is consistent with the result of Dhaliwal et al., 1999 (Barton et al, 2010). Dhaliwal et al. (1999) provide empirical evidence on the predictive ability of both the net income and the comprehensive income for year-ahead cash flow from operations and net income. They find that net income predicts year-ahead cash flow from operations and net income significantly better than comprehensive income (Dhaliwal et al., 1999).

As a result, previous researches indicate that Comprehensive Income has the lowest ability to predict future operating cash flows than

the net income. **Accordingly the prediction hypotheses will be as follows:**

H₅: There is a significant positive relationship between current period net income and future period's Cash flow from operations of listed Firms in the Egyptian Stock Market.

H₆: There is a significant positive relationship between current period comprehensive income and future period's Cash flow from operations of listed Firms in the Egyptian Stock Market.

H₇: Compared to the current Net income, the current Comprehensive Income is a better predictor of future Operating Cash Flows of listed Firms in the Egyptian Stock Market.

4.3-Previous literature related to examining the Persistence of Comprehensive Income

As it is previously mentioned above; the Conceptual Framework (IASB, 2010) states that the accounting information is useful if it has a predictive value and a confirmatory value. The confirmatory value relates to the association of current figures with the past results and can provide persistency for users of financial statements. Performance measures with higher persistence are more likely to be desirable by investors, as these performance measures are recurring. In this research, persistence refers to the ability of an accounting number to predict itself. This sub-section reviews the literature related to persistence, it includes studies examine whether comprehensive income is transitory or persistent.

Barton et al., 2010 indicates that persistence captures the different performance measure's sustainability over time. Actually, different performance measures have different levels of persistence. Previous researches have found that disaggregating income into its components can provide information to investors, and that the decision usefulness of a component is based on its persistence. Previous researches have shown that the information content of earnings components increased, when the persistence increased (Royer, 2017). Earnings components which are more persistent (e.g. core earnings), rather than the earnings components which are transitory or have zero persistence (e.g. special items) are more value relevant to investors (Brown and Shivakumar, 2003).

In fact, persistence of performance measures has significant implications for an entity's firm value (Kormendi and Lipe, 1987). The valuation models of Ohlson (1999) suggest that a financial reporting statement that emphasizes the importance of persistence is useful to investors. Jones and Smith (2011) indicate that special items are not persistent (i.e. zero persistence), while other comprehensive income is negatively persistent. Barton et al. (2010) find that comprehensive income is the least persistent performance measure, and while net income is more persistent, above the line items (e.g. revenues) are most persistent.

Jones and Smith (2011) use data on U.S. firms to jointly estimate the value relevance, predictive value, and persistence of OCI gains and losses. They conclude that OCI is value relevant, display negative persistence by partially reversing over time and have predictive value in terms of its ability to predict future operating income and cash flows. Jones and Smith (2011) find that OCI is negatively persistent, while special items have zero persistence for a sample of Compustat firms. The evidence indicates that comprehensive income and OCI are less predictable than net income (Jones and Smith, 2011).

In fact, Comprehensive Income and its components are often regarded as being transitory in nature as discussed above. Comprehensive Income is expected to follow a random walk model and revert over time and, therefore, should have an expectation value of zero. This study examines whether items of Comprehensive Income are transitory earnings because if Comprehensive Income is persistent they should be value relevant to investors. **Accordingly the presentence hypotheses will be as follows:**

H₈: There is a significant positive relationship between current period net income and future period's net income of listed Firms in the Egyptian Stock Market.

H₉: There is a significant positive relationship between current period comprehensive income and future period's comprehensive income of listed Firms in the Egyptian Stock Market.

H₁₀: Compared to the current Net income, the current Comprehensive Income is a better predictor of future Net Income of listed Firms in the Egyptian Stock Market.

4.4- Previous literature related to examining the superiority of performance measurement

This subsection reviews the previous literature related to examining measurement of the current firm's performance. Gazzola and Amelio (2014b) examine the usefulness of the net income compared to the comprehensive income for the evaluation of goodness in connection with companies' investments. The study used a sample of income statements of Czech companies; which have adopted IAS/IFRS principles. The results of the study show that the Czech companies' financial statements have no tendency to separate the income statement section into two statements rather than integrating it into a single one. The results show that the total comprehensive income possesses informative content and gives further information for the evaluation of financial performance (Gazzola and Amelio, 2014b).

Gazzola and Amelio (2014a) indicate that the calculations of established financial ratios such as EPS, P/E, or EV/ EBITD do not consider the Comprehensive Income at all. These ratios are based solely on the Net Income. In fact, it is important to consider the additional information given by the statement of Comprehensive Income, because if the users of financial statements rely solely on the former ratio only, then the reporting quality may be reduced. In such cases the information content is reduced rather than increased.

ACAR and KARACAER (2017) compare the usefulness of comprehensive income with net income in terms of financial performance proxied by stock price, stock returns and operating cash flows by using a sample of listed companies in Turkey. Their findings are consistent with previous researches arguing that investors find the financial information in comprehensive income is more volatile, risky, transitory and incomplete than net income, resulting in decreased stock price. With respect to the results obtained for operating cash flows, both the net income measures and the comprehensive income have the ability to explain the operating cash flows. However, due to transitory nature of comprehensive income, net income explains operating cash flows better than comprehensive income.

Marchini and D'Este (2015) has examined the effect of the other comprehensive income items reporting on the performance measurement of a sample of Italian listed entities, by calculating the RoE us-

ing either net income or comprehensive income. This study aims to examine the potential impact of unrealized gains and losses reporting on entities performance ratio, and thus on investors' decision process. The empirical results suggest that unrealized gains and losses due to changes in fair value could significantly affect the RoE ratio and, thus, the financial statements user's investment decisions.

The study of Fernández and Arana (2010) assess the impact of comprehensive income on the Return on Equity (ROE), as opposed to the more traditional net income, for the period 2004-2008 for 35 listed Spanish companies. The results show a statistically significant impact of the ROE calculated according to the comprehensive income as opposed to the ROE determined according to the net income. This was evidenced for three of the five years that were studied, especially for 2008, when there was an obvious decline in the ROE calculated according to the comprehensive income as opposed to that calculated according to the net income. Accordingly, there is a need to include other measurements of corporate performance that are broader than the traditional net income in certain ratios of the fundamental analysis (Fernández and Arana, 2010).

Saeedi (2008) examines whether the comprehensive income adjustments improve the ability of income to summarize firm performance. He investigates the claim that the income measured on a comprehensive basis is a better measure of firm performance than the other summary income measures. The results do not show that comprehensive income is superior to net income for evaluating firm performance on the basis of stock return and price in Tehran Stock Exchange. The study found no evidence that comprehensive income for firm performance evaluation on the basis of cash flows prediction is superior to net income.

The study of Van Cauwenberge and De Beelde (2007) focuses on the limitations of solely using the Net Income. They find that the exclusive reliance on a single concept of income is unsound. The authors argue that the mandatory publication of two EPS numbers, one for net income, and one for comprehensive income, should be considered. The case for a dual income display should also be considered at the highest level of summarization of financial performance reporting. The publication of two EPS ratios, one based on Net Income and the other based on the Comprehensive Income, can give more detailed

picture about the firm's performance (Cauwenberge and De Beelde, 2007).

This study examines whether Comprehensive Income is considered a better measure of firm's performance than the net income. Accordingly, **the research hypotheses will be as follows:**

H₁₁: There is a significant positive relationship between the current operating cash flows and the net income of listed Firms in the Egyptian Stock Market.

H₁₂: There is a significant positive relationship between the current operating cash flows and the Comprehensive income of listed Firms in the Egyptian Stock Market.

H₁₃: Compared to the current Net income, the current Comprehensive Income is a better measure of performance of listed Firms in the Egyptian Stock Market.

5. The Design of the Empirical Study

5.1- Research population and sample

The population of this research consists of all firms listed in the Egyptian Capital Market in the year 2016 and 2017. The number of these firms is 223 firms listed in the Egyptian Stock of Exchange in the year 2016 and the number of these firms is 224 firms listed in the Egyptian Stock of Exchange in the year 2017. These firms are divided into 12 sectors. This information as of mentioned in the Stock Exchange's Main Indicators monthly 2016-2017 on the web site of the Egyptian Stock of Exchange.

The research sample consists of 169 observations (23 firms for 8 quarters of data available) of firms listed in the Egyptian Capital Market in year 2017 and 157 observations (23 firms for 7 quarters of data available) of firms listed in the Egyptian Capital Market in year 2016. The research sample excludes banks and firms which prepare its financial statements in a foreign currency. This is because banks constitute a distinct industry. The accounting procedures of banks are quite different as they operate under strict regulatory constraints about how they run their businesses and how much capital they need to set aside to be able to continue operating. So, banks are excluded because of the different nature of this sector. The names of listed firms included in the research sample are indicated in table (1) in the appendix.

5.2- Model Specification

5.2.1- Value relevance Models

(Goncharov and Hodgson, 2008, Jaweher and Mounira, 2013, Saeedi, 2008, Acar and Karacaer, 2017)

$$M_1: P_{jt} = \delta_{01} + \delta NI_{jt} + \delta BV_{jt-1} + w_{jt}$$

$$M_2: P_{jt} = \delta_{01} + \delta CI_{jt} + \delta BV_{jt-1} + w_{jt}$$

Where: P_{jt} : Share price for the firm i, 3 months after the year end on the day after publishing the audited financial statements.

NI_{it} : Net income for the firm i, for the year t.

TCI_{it} : Comprehensive income for the firm i, for the year t.

BV_{it-1} : Book value of firm i for the previous year t-1.

5.2.2- Predictive power Models

(Goncharov and Hodgson, 2008, Jaweher and Mounira, 2013, Saeedi, 2008, Acar and Karacaer, 2017)

$$M_3: CFO_{it} = \alpha + \alpha CI_{jt-1} + \varepsilon_{jt}$$

$$M_4: CFO_{it} = \alpha + \alpha NI_{jt-1} + \varepsilon_{jt}$$

Where: CFO_{it} : Operating Cash Flows for the firm i, for the year t.

NI_{it-1} : Net income for the firm i, for the previous year t-1.

TCI_{it-1} : Comprehensive income for the firm i, for the previous year t-1.

All these variables are deflated by total assets.

5.2.3- Persistence Models

(Jaweher and Mounira, 2013)

$$M_5: NI_{i,t} = \beta_0 + \beta_1 NI_{i,t-1} + \varepsilon_{i,t}$$

$$M_6: CI_{i,t} = \beta_0 + \beta_1 CI_{i,t-1} + \varepsilon_{i,t}$$

Where: NI_{it} : Net income for the firm i, for the year t.

TCI_{it} : Comprehensive income for the firm i, for the year t.

NI_{it-1} : Net income for the firm i, for the previous year t-1.

TCI_{it-1} : Comprehensive income for the firm i, for the previous year t-1.

All these variables are deflated by total assets.

5.2.4- Measuring performance Models

(Jaweher and Mounira, 2013)

$$M_7: OCF_{it} = \alpha_0 + \alpha_1 NI_{it} + \omega_{it,k}$$

$$M_8: OCF_{it} = \beta_0 + \beta_1 TCI_{it} + \lambda_{it}$$

Where: CFO_{it}: Operating Cash Flows for the firm i, for the year t.

NI_{it}: Net income for the firm i, for the year t.

TCI_{it}: Comprehensive income for the firm i, for the year t.

6- Research Results:

6.1- Descriptive Statistic

First, the descriptive statistics were conducted for the explanatory variables. Table (2) provides the descriptive analysis which includes the mean and the standard deviation for the explanatory variables. Table (2) is presented below:

		Minimum	Maximum	Mean	Std. Deviation
N _t	169	-1.08E9	6.49E9	3.9248E8	8.24279E8
C _t	169	-1.57E9	5.77E9	3.9359E8	7.94369E8
AFS _t	169	-39410972.00	3.36E8	5.0621E6	3.22262E7
FCT _t	169	-7.80E8	7.14E8	2.0623E6	9.69219E7
PENSION _t	169	.00	26111000.00	174428.5444	2.02364E6
Asset revaluation	169	-1.88E8	.00	-1.1105E6	1.44369E7
OCI _t	169	-67532799.00	3.72E8	6.7527E6	3.94674E7
CFO _t	167	-1.18E9	6.53E9	3.7419E8	9.67819E8
BV _{t-1}	157	4991348.00	8.81E10	5.3630E9	9.45461E9
NT _{t-1}	157	-1.08E9	4.10E9	3.7977E8	7.41229E8
C _{t-1}	157	-1.57E9	6.53E9	3.9156E8	8.46681E8
Valid N (listwise)	155				

6.2. Correlation Analysis

TABLE (3) presents the Pearson Correlation Matrix of the share price and the net income, the comprehensive income, and the other components of comprehensive income.

		PRICE	N Ni _t	C Ci _t	A AFS _t	F FCT _t	PEN-SION _t	Asset re-valuation _t	O OCI _t	BBV _{t-1}
PRICE	Pearson Correlation	1	.371**	.371**	-.077	.139	-.009	.014	-.060	.272**
	Sig. (2-tailed)		.000	.000	.321	.074	.910	.861	.440	.001
	N	167	167	167	167	167	167	167	167	155
Ni _t	Pearson Correlation	.371**	1	.977**	-.060	.430**	-.085	.138	-.084	-.003
	Sig. (2-tailed)	.000		.000	.442	.000	.272	.074	.278	.973
	N	167	169	169	169	169	169	169	169	157
Ci _t	Pearson Correlation	.371**	.977**	1	-.026	.439**	-.089	.191*	-.024	.008
	Sig. (2-tailed)	.000	.000		.742	.000	.252	.013	.758	.923
	N	167	169	169	169	169	169	169	169	157
AFS _t	Pearson Correlation	-.077	-.060	-.026	1	.014	-.014	.012	.251**	-.011
	Sig. (2-tailed)	.321	.442	.742		.860	.857	.875	.001	.889
	N	167	169	169	169	169	169	169	169	157
FCT _t	Pearson Correlation	.139	.430**	.439**	.014	1	-.002	.241**	.141	.102
	Sig. (2-tailed)	.074	.000	.000	.860		.981	.002	.067	.204
	N	167	169	169	169	169	169	169	169	157
PEN-SION _t	Pearson Correlation	-.009	-.085	-.089	-.014	-.002	1	.007	-.015	-.046
	Sig. (2-tailed)	.910	.272	.252	.857	.981		.931	.846	.569
	N	167	169	169	169	169	169	169	169	157
Asset revaluation _t	Pearson Correlation	.014	.138	.191*	.012	.241**	.007	1	.013	-.012
	Sig. (2-tailed)	.861	.074	.013	.875	.002	.931		.864	.878
	N	167	169	169	169	169	169	169	169	157
OCI _t	Pearson Correlation	-.060	-.084	-.024	.251**	.141	-.015	.013	1	.261**
	Sig. (2-tailed)	.440	.278	.758	.001	.067	.846	.864		.001
	N	167	169	169	169	169	169	169	169	157
BV _{t-1}	Pearson Correlation	.272**	-.003	.008	-.011	.102	-.046	-.012	.261**	1
	Sig. (2-tailed)	.001	.973	.923	.889	.204	.569	.878	.001	
	N	155	157	157	157	157	157	157	157	157

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

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

In this research, The Pearson Correlation Analysis is used to assess the correlation between the firm's share price and the net income and the comprehensive income and the other components of comprehensive income. The results of the correlation analysis are presented in Table (3).

The statistical results show that there is a significant positive relationships were found between the share price and the net income ($r = .371$), comprehensive income ($r = .371$), and the Book Value t_{-1} variables ($r = .272$) at the $P < 0.01$ level. In addition to a significant positive relationship was found between the share price and the foreign currency translations FCT_t ($r = .139$) at the $p < 0.1$ level. According, these results support the hypotheses H_1 , which states that there is a significant positive relationship between firm's share price and the Net Income. The statistical results also support H_2 , which states that there is a significant positive relationship between firm's share price and the Comprehensive Income. In addition, there is a positive relationship between the Comprehensive Income and the foreign currency translations.

However, there is no significant correlation was found between firm's share price and the Available for sale ($r = -.077$, $p = .321$), Pensions ($r = -.009$, $p = .910$), Asset revaluations ($r = .014$, $p = .861$), and other comprehensive income ($r = -.060$, $p = .440$). Accordingly, these results do not appear to support hypotheses H_3 which states that there is a positive relationship between the share market price and the other components of comprehensive income in the Egyptian Stock Market. In addition, the correlation matrix revealed that the problem of Multicollinearity existed between three independent variables which are the Net Income, the Comprehensive Income and the foreign currency translations. In statistics, Multicollinearity is a phenomenon in which two or more predictor variables in a multiple regression model are highly correlated.

6.3- Results of Regression Analyses

To test the value relevance hypothesis, two sets of regressions models are run, in which the first one includes net income (NI) and the second regression replaces net income with comprehensive income (CI) to determine the value relevance of net income and comprehensive income and the dependent variable is the share price (P).

6.3.1- Multiple Regression Analysis

The results of running the Multiple Regression Model of the Net Income and the Book Value on Firm's share price using the SPSS are presented in Table (4) below.

Testing the value relevance Hypotheses

To test the value relevance hypotheses, Modle (1) and Modle (2) are used. Modle (1) in Table (4) shows that the results of running the Multiple Regression Model of Net Income and the Book Value on Firm's share price using the SPSS. The Net income variable was significant ($r=.364$, $\text{sig}=.000$) and the Book value was significant ($r=.263$, $\text{sig}=.000$), and the model was significant at 1% significance level and the adjusted R Square was .202. Accordingly the price relevance hypothesis (H_1) is supported; there is a statistically significant positive relationship between the firm's share price and the Net income.

Table (4): Results of Multiple Regression Models

M	H	Dependent variable	Independent variables	predicted sign	Coeff .B	Sig.	R square	adjusted R Square	F.	Sig.
The Value Relevance Hypothesis:										
M ₁	H ₁	Share Price	Ni _t	+	.364	.000	.218	.202	13.922	.000
			BV _{t-1}	+	.263	.000				
M ₂	H ₂		Ci _t	+	.358	.000	.213	.198	13.568	.000
			BV _{t-1}	+	.260	.000				
The Prediction Hypothesis:										
M ₃	H ₅	Cash flow from operations	Ni _{t-1}	+	.553	.000	.305	.296	3.179	.000
M ₄	H ₆		Ci _{t-1}	+	.552	.000				
The Persistence Hypothesis										
M ₅	H ₈	Nit+1	Nit	+	.021	.791	.004	-.009	.329	.72
M ₆	H ₉	Cit+1	Cit	+	.012	.878	.006	-.007	.439	.646
The Performance Measurement hypothesis:										
M ₇	H ₁₁	current operating cash flows	Nit	+	.443	.000	.209	.199	21.616	.00
M ₈	H ₁₂		Cit	+	.458	.000	.222	.212	23.387	.00

Model (2) in Table (4) shows that the Comprehensive income was significant ($r=.358$, $sig=.000$) and the Book value was significant ($r=.260$, $sig=.000$), and the model was significant at 1% significance level and the adjusted R Square was .198. Accordingly the price relevance hypothesis of comprehensive income (H_2) is supported; there is a statistically significant positive relationship between the firm's share price and the Comprehensive income. As the adjusted R Square for Model (1) is (.202) which is higher than the adjusted R Square of Model 2 which is (.198), accordingly the price relevance hypothesis H_3 is supported; there is a statistically significant positive relationship between the firm's share price and the net income and the net income is more value relevant than the Comprehensive income.

6.3.2. Stepwise Regression Analysis

As it is obvious from the correlation matrix; there is a problem of Multicollinearity existed between the two independent variables which are the Net Income and the Comprehensive Income. Accordingly, the Stepwise Regression Analysis is used to cover the Multicollinearity phenomenon in which two predictor variables in a multiple regression model are highly correlated as it exist in this case. The results of the Stepwise Regression Analysis are shown in Table(5), a summary of these results are given below:

Independent variables	Predicted sign	Coeff. B	Sig.	R Square	Adjusted R Square	F.	sig.
Nit	+	.369	.000	.210	.200	20.230	.000
BVt-1	+	.274	.000				

Table (5) shows that the Net income was significant ($r=.369$, $sig=.000$) and the Book value was significant ($r=.274$, $sig=.000$), and the model was significant at 1% significance level and the adjusted R Square was .20 and the Comprehensive Income was excluded from the stepwise regression model which means that the net income is more value relevant than the Comprehensive income. Accordingly, there is a statistically significant positive relationship between the firm's share price and the net income and the comprehensive income and the net income is more value relevant than the comprehensive income. In addition, to examine whether the difference between the net

income and the comprehensive income is significant or not, the Cramer Z test is used.

According to the Cramer Z test, the R^2 values from Model (1) and Model (2) for the two regression models were compared using the Cramer's z statistics (Cramer, 1987) to examine whether there is significant differences between the two regression models (the Net income and the comprehensive income) of the regressions. Hence, the Cramer's z statistics is calculated using the formula below;

$$Z = \frac{(R^2_1) - (R^2_2)}{\sqrt{\text{Var}(R^2_1), \text{Var}(R^2_2)}}$$

$$\text{Var}(R^2) = \frac{4 R^2 (1-R^2)^2 - (1 - \frac{2(q+1)+3}{N})}{N}$$

Where: N represent the size of the total sample used and q is the number of predictors (variables). R^2_1 represents the type of R^2 used for regression one and R^2_2 represents the type of R^2 used for regression two. $\text{Var}(R^2)_1$ and $\text{Var}(R^2)_2$ represents the variation of first and second regressions respectively.

The Cramer's Z value .81967 with P value .934 which is not significant at .05 significance level. This means that the difference between the net income and comprehensive income is non-significant. Accordingly, the fourth hypothesis (H_4) which is the Net income is more prices relevant to investors than the comprehensive income in the Egyptian Stock Market is rejected. There is a difference between the net income and comprehensive income, and the net income is more relevant to investors however this difference is non-significant in the Egyptian Stock Market.

Besides it is also obvious from the correlation matrix; that there is a problem of Multicollinearity existed between the two independent variables which are the Foreign currency translate and the Net Income, Available for sale securities, Asset revaluation, and the other comprehensive income. The results of the Stepwise Regression Analysis are shown in Table (6). A summary of these results are presented below:

Independent variables	Predicted sign	Coeff. B	Sig.	R Square	Adjusted R Square	F	Sig.
Nit	+	.369	.000	.210	.200	20.230	.000
BVt-1	+	.274	.000				

Table (6) shows that the Net income was significant ($r=.369$, $sig=.000$) and the Book value was significant ($r=.274$, $sig=.000$), and the model was significant at 1% significance level and the adjusted R Square was .20. However, the other components of the Comprehensive income are excluded from the Stepwise Regression Model; which means that there are no significant relationships between the other components of Comprehensive income- Foreign currency translate, Available for sale securities, Asset revaluation, the Pension Funds and the other comprehensive income and the firm's share price and that the other components of Comprehensive income do not add any value relevance to the investors in the Egyptian Stock Market. Accordingly, the third hypothesis (H_3) is rejected. There is no relationship between the share market price and the other components of comprehensive income in the Egyptian Stock Market. The other comprehensive income components do not add any value to investors in the Egyptian stock market.

Testing the prediction hypotheses

To test the prediction hypotheses, two sets of regressions models, M_3 and M_4 are run. Model (4) is used to test the prediction of the net income and Model (4) is used to test the prediction of the comprehensive income. The results of running the Regression Model of the firm's future Cash flow from operations and the Net Income using the SPSS are presented in Model (3) in Table (4). The results show that the Net income was significant ($r=.553$, $sig=.000$) and the Book, and the model was significant at 1% significance level and the adjusted R Square was .296; which means that there is a positive significant relationship between the Net Income and the future Cash flow from operations. Accordingly, the fifth hypothesis (H_5) which is the Value prediction hypothesis of the net income is accepted.

The results of running the Regression Model (M_4) of the firm's future Cash flow from operations and the Comprehensive Income using the SPSS are presented in Table (4). Results show that Comprehensive income was significant ($r=.552$, $sig=.000$), and the model was signifi-

cant at 1% significance level and the adjusted R Square was .296; which means that the sixth hypothesis (H_6) is accepted, there is a positive significant relationship between the Comprehensive Income and the future Cash flow from operations. Accordingly, the prediction hypothesis is accepted. Note that the results of this Regression Model is almost the same as the results of the above regression model presented in table (4) and this is because the net income and the comprehensive income is almost the same for many firms. To test whether there is a significant difference between the prediction ability of the net income and the comprehensive income, the Cramer's Z test is used.

To test the seventh hypothesis (H_7), which states that Compared to the current Net income, the current Comprehensive Income is a better predictor of future Operating Cash Flows in the Egyptian Stock Market, the Cramer's Z test is used. The Z value is .00 with P value equals 1 which means the result is non- significance at 5% significance level. Accordingly, the seventh hypothesis (H_7) is rejected as there is no statistically significant difference between the predicting ability of the net income and the comprehensive income.

Testing the Persistence Hypothesis

To test the Persistence Hypothesis, two sets of regressions models M_5 and M_6 are run. The first one includes net income (NI) and the second regression replaces net income with comprehensive income (CI) to determine the persistence of the net income and the comprehensive income. The results of running the Regression Model of the firm's future Net Income and the current Net Income using the SPSS are presented in Table (4).

The Regression Model (M_5) was insignificant ($F=.329$, $sig=.720$) at 1% significance level and; which means that there is no significant relationship between the future net Income and the current net income. Accordingly, the persistence hypothesis H_8 is rejected; there is no relationship between current the period net income and future period's net income in the Egyptian Stock Market. In addition, the results of running the Regression Model (M_6) of the firm's future Comprehensive Income and the current Comprehensive Income using the SPSS are presented in Table (4).The Regression Model was insignificant ($F=.439$, $sig=.646$) at 1% significance level and; which means that there is no significant relationship between the future Comprehensive Income and the current Comprehensive income. Accordingly, the per-

sistence hypothesis H_9 is rejected; there is a significant positive relationship between current period comprehensive income and future period's comprehensive income in the Egyptian Stock Market.

To test the tenth hypothesis (H_{10}), which states that Compared to the current Net income, the current Comprehensive Income is a better predictor of future Net Income in the Egyptian Stock Market is rejected, as there is no statistically significant difference between the net income and the comprehensive income.

Testing the performance measurement hypotheses

Finally with respect to the performance measurement hypothesis; two sets of regressions models M_7 and M_8 are run. In the following two models, net income (NI) is once again replaced with comprehensive income (CI) to determine the association of both independent variables, with the dependent variable, which is the firm's current operating cash flow. The results of running the Regression Model of the firm's current operating cash flow and the current Net Income using the SPSS are presented in Table (4).

The results of running the regression model (M_7) shows that the Net income was significant ($r=.443$, $sig=.000$) at 1% significance level and the adjusted R Square was .199. In addition, the Regression Model was significant ($F= 21.616$, $sig=.000$) at 1% significance level and; which means that there is a positive significant relationship between the current operating cash flows and the current net income. Accordingly, the performance measurement hypothesis (H_{11}) is accepted.

The results of running the Regression Model (M_8) of the firm's current operating cash flow and the current Comprehensive Income using the SPSS are presented in Table (3). The results show that the Comprehensive income was significant ($r=.458$, $sig=.000$) at 1% significance level and the adjusted R Square was .212. In addition, the Regression Model was significant ($F= 23.387$, $sig=.000$) at 1% significance level and; which means that there is a positive significant relationship between the current operating cash flows and the current Comprehensive income. Accordingly, the performance measurement hypothesis (H_{12}) is accepted. The Comprehensive income is better in measuring the firm's performance than the net income.

To test the thirteenth hypothesis (H_{13}) which states that, Compared to the current Net income, the current Comprehensive Income is a bet-

ter measure of firm's performance, the Cramer's Z test is used. The Z value is .0046 with P value equals .99633 which means the result is non-significance at 5% significance level. Accordingly, this hypothesis is rejected as there is no statistically significant difference between the net income and the comprehensive income.

A summary of the results of the research hypotheses is given in the following table:

Table (7): A Summary of the Results of the Research Hypotheses

	Hypotheses	Result
The Value Relevance Hypotheses:		
H ₁	There is a positive relationship between the share market price and the net income of listed firms in the Egyptian Stock Market.	Accepted
H ₂	There is a positive relationship between the share market price and the comprehensive income of listed firms in the Egyptian Stock Market.	Accepted
H ₃	There is a positive relationship between the share market price and the other components of comprehensive income of listed firms in the Egyptian Stock Market.	Rejected Except for FCT
H ₄	Compared to the current Net income, the current Comprehensive Income is a more price relevant to investors than the net income of listed firms in the Egyptian Stock Market	Rejected
The Prediction Hypothesis:		
H ₅	There is a significant positive relationship between the current period net income and future period's Cash flow from operations of listed firms in the Egyptian Stock Market.	Accepted
H ₆	There is a significant positive relationship between the current period comprehensive income and future period's Cash flow from operations of listed firms in the Egyptian Stock Market.	Accepted
H ₇	Compared to the Current Net income, the current Comprehensive Income is a better predictor of future Operating Cash Flows of listed firms in the Egyptian Stock Market.	Rejected

The Persistence Hypothesis:		
H ₈	There is a significant positive relationship between current period net income and future period's net income of listed firms in the Egyptian Stock Market.	Rejected
H ₉	There is a significant positive relationship between current period comprehensive income and future period's comprehensive income of listed firms in the Egyptian Stock Market.	Rejected
H ₁₀	Compared to the current Net income, the current Comprehensive Income is a better predictor of future Net Income of listed firms in the Egyptian Stock Market.	Rejected
The Performance Measurement hypothesis		
H ₁₁	There is a significant positive relationship between the current operating cash flows and the net income of listed firms in the Egyptian Stock Market.	Accepted
H ₁₂	There is a significant positive relationship between the current operating cash flows and the Comprehensive income of listed firms in the Egyptian Stock Market.	Accepted
H ₁₃	Compared to the current Net income, the current Comprehensive Income is a better measure of performance of listed firms in the Egyptian Stock Market.	Rejected

Sensitivity Analysis

This research performs a sensitivity analysis to increase the confidence in the findings of the empirical study. The research runs again the same previous tests, however, with a sample of 73 observations of listed firms whose comprehensive incomes do not equal their net incomes; that is their comprehensive income components have values other than zero. The Results of the Multiple Regression Models are shown in Table (8) below:

Table (8): The Results of the Multiple Regression Models

		Dependent variable	Independent variables	predicted sign	Coeff. B	Sig.	R square	adjusted R Square	F.	Sig.
The Value Relevance Hypothesis:										
M ₁	H ₁	Share Price	Ni _t	+	.278	.016	.160	.122	4.186	.009
			BV _{t-1}	+	.240	.042				
M ₂	H ₂		Ci _t	+	.257	.027	.148	.110	3.830	.014
			BV _{t-1}	+	.242	.042				
The Prediction Hypothesis:										
M ₃	H ₅	Cash flow from operations	Ni _{t-1}	+	.245	.062	.097	.064	.965	.060
M ₄	H ₆		Ci _{t-1}	+	.304	.019	.130	.098	.099	.022
The Persistence Hypothesis										
M ₅	H ₈	Nit+1	Nit	+	-.012	.920	.001	-.028	.020	.980
M ₆	H ₉	Cit+1	Cit	+	-.009	.939	.001	-.028	.047	.954
The Performance Measurement hypothesis:										
M ₇	H ₁₁	current operating cash flows	Nit	+	.652	.000	.463	.447	29.284	.00
M ₈	H ₁₂		Cit	+	.646	.000	.454	.438	28.257	.00

Again, this research performs the same previous tests once more, however, with a large sample. This large sample consists of 195 observations of both financial firms and non- financial firms. The sample includes 32 observations of the non- financial firms; this is because the industry sector in which a company is operating can have a significant impact on the income measures. Especially certain components of Comprehensive Income will have a severe effect only in some industries. In fact, firms of the financial industry will have a larger exposure to financial assets and consequently the effect of revaluation of available-for-sale financial assets will be higher than other industries. To capture this effect the regressions have been re-run with the inclu-

sion of firms from the financial industry. The Results of the Multiple Regression Models are shown in Table (9) below:

Table (9): The Results of the Multiple Regression Models

		Dependent variable	Independent variables	predicted sign	Coeff . B	Sig.	R square	adjusted R Square	F.	Sig.
The Value Relevance Hypothesis:										
M ₁	H ₁	Share Price	N _{it}	+	.363	.000	.241	.223	13.542	.000
			BV _{t-1}	+	.271	.000				
M ₂	H ₂		C _{it}	+	.357	.000	.236	.218	13.205	.000
			BV _{t-1}	+	.267	.000				
The Prediction Hypothesis:										
M ₃	H ₃	Cash flow from operations	N _{it-1}	+	.553	.000	.306	.296	31.897	.000
M ₄	H ₃		C _{it-1}	+	.553	.000	.305	.295	31.820	.000
The Persistence Hypothesis										
M ₅	H ₃	Nit+1	Nit	+	.018	.813	.031	.014	1.826	.144
M ₆	H ₃	Cit+1	Cit	+	.009	.901	.033	.016	1.939	.125
The Performance Measurement hypothesis:										
M ₇	H ₁₁	current operating cash flows	Nit	+	.432	.000	.219	.206	17.569	.00
M ₈	H ₁₂		Cit	+	.448	.000	.232	.219	18.896	.00

Finally, all the above re-run multiple regression models give the same results and the results do not change qualitatively.

7.1- Summary and Conclusions:

The purpose of this research is to empirically investigate the usefulness of the mandatory introduction of comprehensive income reporting by the revised EAS1 in Egypt starting from January 1, 2016. The revised EAS1 requires firms to present the comprehensive income statement among its financial statements. In fact, this indicates that the

income of firms reflects all sources of value creation, includes all changes in the firm assets, and is strongly linked to the fair value accounting. The objective of this research is to compare the usefulness of the comprehensive income compared to the net income for investors in the Egyptian stock market. The usefulness of the comprehensive income for investors is tested by assessing the value relevance, persistence, predictability, and performance measurement of comprehensive income compared to the traditional net income. The results of this research show the following evidence:

With respect to the Value Relevance hypotheses; the results provide evidence that both the Net income and the Comprehensive income are positively related to the market value of the shares. However, the Net income is more price relevant to investors than the comprehensive income in the Egyptian Stock Market however the difference between the net income and the comprehensive income is non-significant. The results also provide evidence that the only component of the other comprehensive income which positively related to the market value of the firm's shares is the foreign currency translation (FCT). The other three components of comprehensive income; Available for sale securities, Pension funds, Asset revaluation are not value relevant in explaining the market value of the firm's shares in the Egyptian stock market.

With respect to the Prediction hypotheses; the results provide evidence that both the Net income and the Comprehensive income are positively related to the future cash flows of the firms. The results indicate that the net income is a better predictor for future cash flows of the firms than the comprehensive income; however this difference is non-significant.

However with respect to the Persistence hypotheses; the results provide evidence that neither the Net income nor the Comprehensive income is positively related to the firm's future income and the relationships were non-significant.

Finally with respect to the Performance measurement hypotheses; the results provide evidence that both the Net income and the Comprehensive income are positively related to the current cash flows of the firms. The results indicate that the comprehensive income is a

better predictor for the firms' current performance than the net income; however this difference is non- significant.

7.2- Research Limitations and Future Suggested Research

This study, however, has some limitations that are briefly illustrated. The limitations of this study are primarily related to the availability of specific data during the observation period. One limitation of the study is the relatively small observation period due to the mandatory application of revised EAS 1 starting only from the beginning of 2016. Repeating the analysis at a later stage when more reporting years will be available, the study may yield more robust results.

In terms of future research, it is also recommended that future research concentrate on providing greater understanding of the quality of the income stream through knowing the transitory and the permanent components. Also, future research could examine the effect of the mandatory reporting of comprehensive income on increasing the quality of earnings and reducing the earnings management. It is also recommended that future research also examine the materiality and volatility of the comprehensive income especially in case of commercial banks.

In addition, future research could also examine the effect of the mandatory reporting of comprehensive income on the audit process, as well as, the effect of the volatility of the other Comprehensive Income on the audit fees. Future research could also examine the effect of the disclosure of Comprehensive Income on Future Earning and Analysts' Forecasts.

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Appendix

Table (1): The Names of listed Firms included in the Research Sample

Serial	Names of firms
1.	The Egyptian firm for international touristic projects (Americana Group)
2.	Oriental Weavers (Elnasagoun Elsharkyuon)
3.	The Egyptian Starch & Glucose
4.	AMOC - Alexandria Mineral Oils Co.
5.	Sidi Kirayr Petrochemicals
6.	Cairo Poultry Co.
7.	SODIC - 6 October Development & Investment
8.	Telecom Egypt
9.	Talaat Moustafa Group
10.	Arabian Food Industries Co. – Domty
11.	Arab Cotton Ginning
12.	Ghabbour Auto
13.	Suez Cement
14.	Arabian Cement Company
15.	Eastern Tobacco Company
16.	Madient Nasr for housing and development
17.	El Sewedy Electric
18.	Palm Hills Developments
19.	Ezz Steel
20.	Egyptian Resorts Company
21.	Egyptian International Pharmaceutical Industries Company – EIPICO
22.	Abu Qir Fertilizers
23.	National Company for Maize Products