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The Moderating Effect of Tangibility of assets on The Relationship Between the Mandatory IFRS Adoption and Credit Relevance of Accounting Information: An Empirical Study on non-financial listed companies in The Egyptian Stock Exchange

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Abstract:

Purpose— The Effect of the mandatory IFRS adoption on Credit relevance of accounting information can be influenced by Tangibility of assets as a moderator Variable. This study aims to study and investigate The Effect of mandatory IFRS adoption on Credit Relevance of Accounting information, The study Also aims to study and investigate the moderating effect of Tangibility of assets on the relationship between the mandatory IFRS adoption and Credit Relevance of Accounting information.

Design/methodology/approach— the research an empirical study was conducted on a sample of non-financial companies listed in the Egyptian stock exchange between 2012 and 2018. This study uses the multiple regression model in analyzing the data collected from secondary sources to determine the relationship between the underlying variables.

Findings—The findings of this study are that based on an empirical study approach, there is non- significant difference in the credit Relevance of Accounting information After mandatory IFRS adoption period compared to pre-mandatory IFRS adoption period. The results also showed that the effect of tangibility of assets has led to a significant and negative effect on the relationship between mandatory IFRS adoption and credit relevance of accounting information in case an interactive variable of —Tangibility of assets with Interest coverage ratio and Corporate's Size. And hasn't a significant effect on this relationship in case an interactive variable of tangibility of assets with corporate's leverage, corporate's Return on Assets, corporate's Capital intensity and the result of operational activities of a business.

Research limitations / implications –To the best of this study's review, there is inadequacy of literature within the credit relevance research in the Egyptian stock exchange. in the light of this, this study intends to narrow the gap.

Practical implications— This study is specifically important to regulatory authorities, both primary and secondary regulators. Specifically, this study has implications in the regulatory roles of Central Bank of Egypt (CBE) and the Egypt's Accountability State Authority (ASA). However, the study recommends that regulatory authorities should encourage DMB to avail their financial reports annually to credit rating agencies (local and international) for proper evaluation for subsequent ratings.

Originality/value—The peculiarities in this study, that is the utilization of the moderating effect design and the use of credit relevance Model, which is a statistical model that has been developed to measure the creditworthiness of companies using financial ratios as inputs. The study examines the impact of IFRS adoption on the predictive power of the Credit Model as the dependent variable, making this study important and novel to push the frontier of existing knowledge.

Keywords: IFRS adoption- Accounting information - Credit Relevance- Credit Rating- non-financial companies listed - Egyptian Stock Exchange-Tangibility of assets.

1. Introduction:

The primary objective of financial Reporting is to provide useful information assists users of general purpose financial reporting, especially existing and potential investors, lenders, financial analysis and other creditors to assess that a corporate's financial position, and its financial strengths and weaknesses, liquidity and solvency, and its need and ability to obtain financing and to predict its future cash flows, which assists them in making an informed economics decisions (IASB, 2020). To make these decisions an informed, accounting information must be relevant and represent faithfully what it purports to represent. The usefulness of this information is enhanced if it is comparable, verifiable, timely and understandable (IASB, 2020). Financial Reporting is prepared in accordance with International Financial Reporting Standards (IFRS), which has been a major development in the field of accounting worldwide. The International Financial Reporting Standards (IFRS) are a globally acceptable set of accounting principles and standards that are used by corporates around the world to prepare their financial reporting (Turki et al., 2017; Vidal-García and Vidal, 2020). These standards are designed to provide a common language for financial reporting. The adoption of IFRS should enhance the quality of accounting information through providing more detailed and transparent accounting information, which is increased reliability and comparability and promote a more consistent approach to financial reporting. That makes it easier for investors and other stakeholders to compare financial information across corporates and countries (Kim and Koga, 2020 and Dang et al., 2020).

One of the most benefits of adopting IFRS is that it enhances the credit relevance of accounting information which refers to the ability of accounting information to predict the creditworthiness of the corporation (Rafay et al., 2018; Dang et al., 2020). According to international credit rating agencies (Fitch, 2004; Moody's, 2010, 2020; S&P, 2008, 2018, 2020), financial reporting is one of the most it's sources of information important for creditworthiness evaluation purposes, where these agencies analyze financial reporting and other accounting information provided by corporates and use financial ratios

and indicators derived from these reporting as a primary inputs in credit rating models to assess its creditworthiness and the likelihood of default on their debt obligations. These ratios and indicators may include measures of liquidity, solvency, profitability, and efficiency, a corporate's debt-to-equity ratio, interest coverage ratio, and cash flow from operations and others, which a credit rating agency may using to assess corporate's ability to meet its debt obligations and to determine its credit rating. The agency may also analyze a corporate's financial statements to identify trends or patterns that may indicate future financial difficulties or other risks (Florou et al., 2017).

This refers to the fact that accounting information is deemed relevant for Credit Relevance purposes if it has ability to explain and interpret the creditworthiness of these corporate and predict their likelihood of Default Risks based on financial ratios and indicators derived from financial reporting (Pascan, 2015; Florou et al., 2017). The credit relevance of accounting information lies in its relative ability to predict a company's ability to generate future cash flows being sufficient to meet its financial obligations, provide reliable estimates of assets and liabilities values, and predict the probability of default (Florou et al., 2017; De Lima et al., 2018; Park et al., 2019; Gorgijevska and Gorgieva-Trajkovska, 2019; Dang et al., 2020). In other words, the more relevant the accounting information is to assess a corporate's creditworthiness, the better it is for lenders and investors who rely on this information to make their credit decisions (Pascan, 2015; Florou et al., 2017). Overall, IFRS enhances the credit relevance of accounting information by providing a consistent and comparable framework for financial reporting, improving transparency, using fair value accounting, and requiring disclosure of financial risks. These benefits make it easier for lenders and investors to assess the creditworthiness of a company, reducing the risk of default and improving the efficiency of credit markets.

2. Research Problems:

Proponents of adopting IFRS argue that it provides more relevant information for creditworthiness assessment purposes, as it is principlebased and relies on fair value, which increases the usefulness of financial information related to measuring assets, liabilities, and recognizing gains and losses in a timely manner. This leads to increased accuracy in predicting future cash flows, and subsequently in assessing a company's creditworthiness, which is reflected in the accuracy of accounting inputs in credit rating models issued by credit rating agencies. This, in turn, leads to an improvement in creditworthiness assessment for companies, according to the increase in the quality of accounting information (Pascan, 2015; Florou et al., 2017; De lima et al., 2018). On the other hand, some argue that fair value is not relevant for creditworthiness assessment purposes, because it has a negative impact on this assessment due to the recognition of unrealized gains and losses that have a temporary impact on a corporate's cash flows, additionally use of personality estimates in assessing assets and liabilities recognized at fair value, which are difficult to verify. This leads to a decrease in the reliability of accounting information for credit rating agencies. Therefore, credit rating agencies make significant adjustments to accounting information received from financial reports to fit the process of assessing credit ratings for companies (Li, 2010; Ball et al., 2015).

Creditworthiness is influenced by a set of determinants, including a company's profitability, earnings management practices, firm size, Tangibility of assets, earnings quality, future cash flows, disclosure quality, transparency, corporate governance, the industry it belongs to, the state of the economy, the market situation, legal and regulatory changes, and other factors that may affect the corporate's creditworthiness (Jeong et al., 2015; Park et al., 2018). Tangibility of assets is the most important issue in financing markets, due to Tangibility of asset are significantly related to financial leverage as the main reason for many corporate' failures and collapses in 2008 was attributed to the lack of transparency. Therefore, a company's degree of Tangibility of assets plays a crucial role in creditworthiness

evaluation, by considering corporate with more Tangibility of asset tend to have low leverage and therefore it becomes difficult for them to use such assets as collateral for getting the external financing which may expose the corporate towards the bankruptcy. On the other hand, Tangibility of asset may also enhance the corporate capacity to use fixed assets as collateral whenever external financing are required owing to the reason that investment in assets is diversified which may untimely decrease the chances of bankruptcy. The higher a corporate's degree of tangibility of assets, the greater the chance of obtaining a higher credit rating, reflecting a company's ability to manage financial risks effectively.

This study is one of some studies that have been conducted to examine the impact of IFRS adoption on credit relevance of accounting information. The results of these studies have been mixed, with some studies finding positive effects and others finding no significant effects. One possible explanation for the mixed results is that the impact of IFRS adoption may vary depending on the specific context and characteristics of the companies being studied. For example, companies in different industries may have different levels of complexity in their financial reporting, which may affect the impact of IFRS adoption on credit relevance of accounting information. Despite the mixed results, the adoption of IFRS has been a positive development for financial reporting, where the adoption of IFRS has increased the transparency and comparability of financial reporting, which has improved the ability of accounting information for explain and assess creditworthiness assessment. In conclusion, the impact of IFRS adoption on the credit relevance of accounting information has been a topic of interest for researchers in Egypt. The evidence suggests that the adoption of IFRS has improved the quality of accounting information and made it more relevant for credit assessment purposes. However, more research is needed to fully understand the impact of IFRS adoption on financial reporting quality in Egypt.

Based on the above, the current research seeks to practically answer the following research questions: Does the mandatory adoption of international financial reporting standards (IFRS)

affect the credit relevance of accounting information of nonfinancial listed companies on the Egyptian Stock Exchange? Does this impact differ according to the degree of its asset's tangibility as a moderating variable for this relationship? Finally, is there practical evidence of the previous causal relationship in nonfinancial listed companies on the Egyptian Stock Exchange?

3. Research Objective:

This study aims to study and examine the relationship between the mandatory IFRS adoption and Credit Relevance of Accounting information, as well as examine the impact of the Tangibility of asset on this relationship as a moderating variable, using a sample of non-financial corporates listed on the Egyptian stock exchange for period from 2012 to 2018.

4. Research Importance:

This study is specifically important to regulatory authorities, both primary and secondary regulators. The peculiarities in this study that is the utilization of moderating effect design and using of credit relevance Model, which is a statistical model that has been developed to measure the creditworthiness of companies using financial ratios as inputs. The study examines the impact of IFRS adoption on the predictive power of the Credit Model as the dependent variable, making this study important and novel to push the frontier of existing knowledge. The remaining part of this paper comprises of theoretical framework and hypothesis development, methodology, results and discussions and conclusion and recommendations. Some of these sections have subsections for a clearer perspective of this study.

5. theoretical framework and hypothesis development:

The theoretical framework for this research is based on the credit relevance theory, which suggests that accounting information is relevant for credit decision-making when it can explain and predict a company's creditworthiness. The adoption of International Financial Reporting Standards (IFRS) is expected to improve the credit relevance of accounting information by providing a more consistent and comparable framework for financial reporting, enhancing transparency, and requiring disclosure of financial risks.

5-1. IFRS and Credit Relevance of Accounting Information

From the perspective of finance, the term credit expresses the lender's confidence in the financial health of the borrower, and his ability to repay at a specified time in the future (Daniel et al., 2018). Economically, the term credit is a financing investment formula that involves a combination of the ability to lend and the desire to borrow, whereby the lender grants the borrower funds, goods, or services, in exchange for a promise to fulfill their value at a specific time in the future (Al-Shammari, 2013). From the perspective of financial accounting, the term credit is applied to financial loans provided by banks or financial institutions to their customers, based on the elements of trust and the specified period for repayment in the future, to invest them in production and consumption, or in an economic activity for which the bank provided credit facilities for its establishment, in return for returns. A remuneration obtained by the bank or financial institution, which is determined based on the customer's financial situation, the type of economic activity in which he operates, the purpose of the credit request, and finally the documentation of the credit with the appropriate guarantee for the loan (Faraj, 2017).

Credit ratings are designed to inform debt market participants interested in assessing the ability of borrowers to service future debt obligations. Hence the economic fundamentals of importance to creditors include the future cash flow prospects of a borrower relative to its debt obligations, the risk of a borrower defaulting on its debt obligations and the values of a borrower's assets that could be liquidated to meet debt obligations if future cash flows are insufficient to meet debt obligations. Asset values are also important when debt contracts include collateral provisions. Therefore, financial statements will be useful to creditors and credit rating analysts if they contain information that is useful in the prediction of future cash flows or if they provide reliable estimates of asset and liability values (Armstrong et al. 2010; Florou et al., 2017; Dang et al., 2020, Ateya, 2021).

For the purposes of measuring corporate credit ratings at the company level, financial accounting information is a suitable indicator of the company's financial performance, which helps information intermediaries, especially credit rating agencies, to predict future cash flows and evaluate

the risk of default or adjust their previous opinions and analyses of the company's performance and financial position through some financial indicators and ratios derived from disclosed accounting numbers. Therefore, credit rating models for companies at this level rely on financial accounting information as a major measurement input on a wide scale, to evaluate financial performance and financial risks related to the rated company (Erdem and Varli, 2014).

In this regard, Bonsall et al., (2017) pointed out that financial indicators and ratios can be relied upon in evaluating financial performance and predicting the future cash flows of the rated company directly, through analyzing the content of the financial statements. Among the most prominent of these indicators and ratios are the ratios of operating performance results, which include total profit, return on sales, return on equity, and return on assets. Liquidity ratios include the turnover ratio, the quick liquidity ratio, the collection period, the inventory turnover rate, and the cash flow and debt service ratios, which include the debt coverage ratio, total debt attributed to EBITDA, and the operating cash flows for financing expenses. Finally, the financial structure ratios include total debt/net equity, financial leverage ratio, pricing and costs.

Therefore, the financial accounting inputs relied upon by credit rating models for companies at this level include the elements of the financial position statement, including cash and current investments, book value of equity, total assets, total liabilities, current assets and liabilities, customers, inventory, long-term liabilities, and the elements of the income statement, including EBITDA, net income, sales, total profit, cost of goods sold, interest expense, selling, administrative, and general expenses, in addition to the elements of the cash flow statement, including operating cash flows and financing cash flows, lease payments, long-term loan repayments, government and tax exemptions, and proceeds from the sale of fixed assets (S & P, 2018, 2020).

Regarding the additional factors for measuring corporate credit ratings, using financial accounting information in credit rating models for companies at this level involves evaluating the capital structure, assessing the efficiency of investments, and assessing liquidity, through using the elements of the financial position statement, including equity,

investments, and total fixed assets, in addition to evaluating investment risks using the elements of the income statement, including earnings per share, as well as the elements of the cash flow statement, which include working capital flows, capital expenditures, outstanding debts, and government tax exemptions and proceeds from the sale of fixed assets (S&P, 2018, 2020).

In accounting literature, value relevance is a commonly used metric to test the usefulness of accounting information for investors to make an informed investment decisions (Barth et al., 2012; widiastuti and Safira, 2018). On the other side, Credit relevance is not among commonly used metrics in accounting research. But recently, accounting researchers add the word "credit" to the term "relevance" to test the usefulness of accounting information for creditors to make an informed credit decisions (Widiastuti and Safira, 2018). More specifically, testing of credit relevance is indicated by the relationship of accounting information with bond yield or rating. The study of Hann et al. (2007) is one the first studies to provide a good explanation of credit relevance, which defines credit relevance as the association between accounting information and creditors' future cash flow expectations that are captured by credit ratings. According of (Das et al., 2009; Demirtas and Cornaggia, 2013). Another Definition of the credit relevance of accounting information Knows it's as the extent to which accounting information derived from financial reporting can be used by lenders to assess the corporate's creditworthiness (Florou et al., 2017). Also, Credit relevance can be defined as the association between financial reporting measures and market value of debt (Dang, et al., 2020)

The credit relevance of accounting information is often assessed using various financial ratios and metrics that are derived from financial reporting. These ratios and metrics provide insight into the financial health of a corporation and its ability to repay its debt (Wu and Zhang, 2009; Pascan, 2015; Floure et al., 2017; Sharaf, 2022). Some common financial ratios used in credit analysis include **first the Debt-to-equity ratio** This ratio compares a corporate's total debt to its equity. It is used to assess the degree to which a corporate is financed by debt versus equity. **Second, Current ratio** This ratio compares a corporate's current assets to its current liabilities. It is used to assess a corporate's ability to meet its short-term debt obligations. **Third, Interest coverage ratio**

This ratio compares a corporate's earnings before interest and taxes (EBIT) to its interest expenses. It is used to assess a corporate's ability to service its debt obligations. Fourth, Cash flow coverage ratio This ratio compares a corporate's cash flow from operations to its debt payments. It is used to assess a company's ability to generate sufficient cash flow to service its debt obligations. Finally, Profitability ratios These ratios, such as return on equity (ROE) and return on assets (ROA), assess a corporate's ability to generate profit from its operations. Lenders also consider other factors when evaluating the creditworthiness of a borrower, such as the borrower's credit history, collateral, and overall financial stability. However, accounting information and financial ratios are important components of the credit evaluation process and can provide valuable insights into a borrower's financial health and ability to repay debt (Ateya, 2021).

The credit relevance of accounting information is influenced by the accounting standards used to prepare financial statements. These standards provide guidelines for the preparation and presentation of financial information, and help ensure that accounting data is reliable, comparable, and understandable. Lenders may prefer financial statements that are prepared according to widely recognized accounting standards, such as International Financial Reporting Standards (IFRS), as they are more likely to provide accurate and reliable information (ateya, 2021). Credit relevance metrics were developed to investigate whether IFRS adoption provides quality financial reporting in terms of the needs of lenders, such as banks and other creditors. Credit ratings agency, such as Standard and Poor's (S&P) credit ratings are identified with financial analysis to accounting information, especially ratios. However, credit relevance can be summarized as the reflection of accounting information on the credit ratings of agency influenced by reporting framework, which has predictive and/or confirmatory value to creditors and other credit providers. If changes in financial reporting information relate to changes in credit rating of the agency, it is viewed that the financial reporting produces relevant accounting information for credit decision-making (Standard and Poor's, 2020)

according of Ateya (2021) There are several ways in which IFRS enhances the credit relevance of financial reporting; First, Consistency and comparability: IFRS provides a consistent and comparable framework for financial reporting, which makes it easier for lenders and investors to compare the financial performance of different companies. This consistency and comparability improve the accuracy of credit assessments, reducing the risk of default and improving the efficiency of credit markets. Second Transparency: IFRS requires companies to provide detailed information about their financial performance, including their assets, liabilities, revenues, and expenses. This transparency helps lenders and investors to understand the financial health of a company and to identify potential risks and opportunities. Third Fair value accounting: IFRS requires companies to use fair value accounting to value their assets and liabilities. Fair value accounting provides a more accurate picture of a company's financial position, and it helps lenders and investors to assess the creditworthiness of a company more accurately. Fourth Disclosure requirements: IFRS requires companies to disclose information about their financial risks, including market risk, credit risk, and liquidity risk. This information helps lenders and investors to understand the potential risks associated with lending to or investing in a company (Vergas et al., 2015; Ahsan et al., 2016; Degos et al., 2015; Florou et al., 2017; Basu and Naughton, 2020).

Finally, the researcher concludes from the above that the credit relevance of accounting information evaluation purposes is demonstrated by credit rating agencies relying on it. Credit ratings are also sensitive to changes in accounting information which is prepared based on IFRS. Additionally, accounting information is more suitable for credit relevance models measurement purposes when it is useful in predicting future cash flows and provides reliable and verifiable estimates of the values of assets and liabilities. The researcher also concludes that there are many determinants of credit relevance, but the most important ones are the Debt-to-equity ratio, profitability, its governance commitment, Current ratio, Interest coverage ratio and Cash flow coverage ratio. as well as, the quality of accounting information, the quality of earnings, future cash flows, the quality of disclosure, and the disclosure of profit expectations. This means that

IFRS enhances the credit relevance of financial reporting by providing a consistent and comparable framework for financial reporting, improving transparency, using fair value accounting, and requiring disclosure of financial risks. These benefits make it easier for lenders and investors to assess the creditworthiness of a company, reducing the risk of default and improving the efficiency of credit markets.

5-2. hypothesis development

In the context of the impact of accounting information as determinants of credit relevance models. Age and Hansen (2017) emphasized the importance of accounting information as a determining factor for evaluating the creditworthiness, especially Dept and profitability ratios. Additionally, Bhattacharya and Sharma (2019) and Sharaf (2022) believe that accounting information can't be excluded when measuring the credit rating of corporates, along with other information, and that integrating accounting information with other information improves the predictive ability of credit rating models. Furthermore, Kosi (2010) employed a large international sample across 34 countries between 1999 and 2009, to investigate whether mandatory IFRS adoption affects credit relevance of accounting information. Specifically, testing whether credit ratings are more sensitive to profitability, leverage and interest coverage ratio reported under mandatory IFRS reporting regime. To the extent that mandatory IFRS adoption provides more informative financial statements, then an increase in credit relevance of accounting information. Findings demonstrate an increase in credit relevance of the interest coverage ratio for mandatory IFRS adopters when ratings are measured by a binary indicator.

In the same context, Florou et al., (2017) used a comprehensive dataset for listed corporates, they document that adoption IFRS has led to an improvement in the information environment through several dimensions, perhaps the most important of which are, improving access to information, reducing information asymmetry, improving market liquidity, reducing information risks, increasing the quality and level of disclosure and transparency, and mitigating the negative market reaction. Which makes accounting information more able to explain the creditworthiness of companies, and thus accounting information becomes more relevant to credit measurement. Chan et al. (2013)

examined whether the mandatory IFRS adoption affects the credit ratings of foreign firms in the USA using regression analysis. Their findings shows that significant higher credit ratings among cross-listed firms after IFRS adoption. De Lima et al. (2018) examined the effects of mandatory IFRS adoption on credit relevance of accounting information to creditors using listed Brazilian corporates sample. The results suggest that the ability of accounting information to explain corporate credit ratings increased after mandatory IFRS adoption.

Similarly, the results of several studies (Degos et al., 2015; Florou et al., 2017; Sun and Zhang, 2017; De Lima et al., 2018; Dang et al., 2020; Basu and Naughton, 2020, ateya, 2021) indicate that the adoption of IFRS leads to an improvement in the quality of accounting information, making it more relevance for credit rating measurement purposes. This is because IFRS standards are principles-based, derived from a single conceptual framework, focus on fair value, and recognize gains and losses in a timely manner. As a result, the relevant information environment related to debt contracts is improved, the comparability of accounting information is increased, and it is more suitable for evaluating credit risks that the company may be exposed to, which in turn has a positive impact on the credit rating measurement of companies.

In the other hand, (Li, 2010; Deloitte, 2011; Christensen and Nikolaev, 2012; Ball et al., 2015) believe that fair value accounting is not relevant for measuring the cost of financing and determining the terms of indebtedness. They justified this by the fact that fair value accounting relies heavily on the personal judgments accountants in evaluating the elements of assets and liabilities, and asset deterioration tests, in addition to recognizing unrealized gains and losses that are difficult to verify, which makes accounting profits more volatile and then an increase in opportunistic practices (Li, 2010 and Christensen and Nikolaev, 2012), which leads to a decrease in the efficiency of accounting profits in assessing the cost of financing and determining the terms of the indebtedness contract (Ball et al., 2015). Also, the terms of indebtedness contracts may be violated by management, because of fundamental differences in accounting policies resulting from changing accounting standards before and after adoption. This means that accounting information is less credit relevance after adopting IFRS.

Based on the analysis of the related accounting literature, the most reviewed previous studies on credit relevance show positive results of IFRS adoption influencing credit relevance of accounting information, while other studies showed negative results of This relationship. it can be said that Mandatory IFRS Adoption in the contemporary have affected (positive/ negative) the credit relevance of accounting information in terms of the quality and content of accounting disclosure and presentation, and improved transparency, has resulted in reduced uncertainty about future cash flow, and thus a decrease in the level of default risk. Thus, the first hypothesis of the research can be derived as follows:

Hypothesis 1: The mandatory adoption of IFRS has a significant effect on the credit relevance of accounting information for non-financial listed companies in the Egyptian Stock Exchange.

On the other hand, a corporate's tangibility of assets is considered one of the most important informational resources of the company that strongly affects its financial position, and financing restrictions (obligations arising from indebtedness contracts) considering the request for financing by borrowing. It also reflects the nature of its operational operations, and thus determines its operational efficiency and the extent of investment efficiency in assets. These elements are among the most important inputs to the credit rating measurement models for companies, which reflect the differences in the characteristics of the companies subject to the rating (Ateya, 2021). In the same context, The results of some studies such as (Vergas et al., 2015; Ahsan et al., 2016; Degos et al., 2015; Florou et al., 2017; Ibrahim and Lau, 2019; Basu and Naughton, 2020) showed a difference in the credit relevance models with different degrees of their tangibility of assets.

additionally, a corporate's tangibility of assets is one of the main determinants for assessing financial risks, because of their reflection on cash flows, the cost of borrowing, and the financing structure, which is considered one of the main financial inputs that were included in the credit relevance model, as an additional confirmation of the rights of borrowers and protecting them from the risks of default, or Bankruptcy risks. Based on the foregoing, the degree of Tangibility of assets in the structure of the corporate's assets, and how they are accounted for,

greatly affect the inputs of the companies' credit relevance models, where companies with more Tangibility of assets will see a greater improvement in credit relevance than those with less Tangibility of assets (Ateya, 2021). Based on the review and analysis of the set of literature, the other two hypothesis of the research can be derived as follows:

Hypothesis 2: the significant effect of the mandatory IFRS adoption on the credit relevance of accounting information varies according to the degree of Tangibility of assets for non-financial companies listed in the Egyptian stock exchange.

The empirical testing of these hypotheses will provide insights into the impact of IFRS adoption on the credit relevance of accounting information for companies listed on the Egyptian Stock Exchange, and the extent to which this impact varies with the degree of Tangibility of assets.

6. Research Methods:

6-1. Sample Selection:

The research population consists of all non-financial corporates listed on the Egyptian Stock Exchange, during the period from 2012 to 2018. a sample of these corporates selected according to firm-year observations method (talkhan, 2017). The researcher used Power and Simple Size Analysis (PSS) to determine the number of observations needed by the researcher to achieve the research objectives (Stata Press, 2013; ateya, 2021), as show in Table (1).

Table (1): Power and simple Size analysis (PSS)

| Sig (Alpha) | Statistical Power (1-β) | Std. | Simple size | Power Analysis | Effect size | Population Size |
|-------------|-------------------------|------|-------------|----------------|-------------|-----------------|
| 0.05 | 0.80 | 1 | 875 | 0.8 | 0.04 | 1064 |

Source: The Researchers

The size of the final sample used by the researcher to test the validity of the research hypotheses was 951 observations, which is larger than the average sample size estimated by PSS, which is 875 Firm-year observations. This increases the power of the sample used in the current study. For the purposes of testing research's hypotheses, the researchers divided the sample into two independent Samples; Pre-IFRS sample

from 2012 to 2014, which is 472 Firm-year observations. and Post-IFRS Sample from 2016 to 2018, which is 490 Firm-year observations. with the year 2015 excluded from the analysis. As Show in Table (2).

6-2. Research Model:

Tangibility of assets

Table (2): Power and simple Size analysis pre/post IFRS (PSS)

| Sample Period | Sample Size | Power | Effect Size | Population Size |
|-----------------------|-------------|-------|-------------|-----------------|
| Pre-IFRS (2012-2014) | 472 | 0.80 | 0.03963 | 521 |
| Post-IFRS (2016-2018) | 490 | 0.80 | 0.03963 | 543 |

Source: The Researchers

Mandatory of IFRS
Adoption

(Independent variable)

Credit Relevance of accounting information
(Dependent variable)

Figure 1: Research Model

Source: The Researcher

6-4. Research Variables:

6-4-1. Dependent variable:

-Credit Relevance of accounting information (CR):

Some studies (Hann, et al., 2007; Jorion, 2009; Florou, 2017; Ross,2019 and ateya, 2021) provided a measure to measure the CR, which can be calculated through the following regression model that expresses the relationship between accounting Numbers and the Corporate's Yearly credit Rating, which takes the following formula:

$$CR_{it} = \beta_0 + \beta_1 INCOV_{it} + \beta_2 LEV_{it} + \beta_3 ROA_{it} + \beta_4 SIZE_{it} + \beta_5 CI_{it} + \beta_6 IOSS_{it} + \epsilon_{it}$$
 (1)

Whereas:

CR it: credit rating of Corporate (i) in fiscal year (t), This variable was measured by the Credit Rating index developed by Ateya (2021) that issuer credit rating at the end of fiscal year, it consists of seven financial and non-financial factors; Country Risks Assessment, Industry Risks Assessment, Competitive Position Assessment, BUSINESS RISK Assessment, FINANCIAL RISK Assessment, Modifiers Additional Rating, and Comparative ranking analysis. After all

these factors were converted into numerical values from 6 (Higher rating) to 1 (Lower rating).

INCOV it: Interest coverage ratio of Corporate (i) in fiscal year (t), This variable was measured by operating income before depreciation (EBIDT) deflated by interest expense (Florou et al.,2017; Basu and Naughton, 2020; ateya, 2021; Sharaf, 2022).

LEV it: Long-term debt leverage of Corporate (i) in fiscal year (t), This variable was measured as a ratio of long-term debt to total assets (Florou, 2017; Bradford et al., 2019; Ateya 2021; Sharaf, 2022)

ROA it: Return on Assets of Corporate (i) in fiscal year (t), This variable was measured as a ratio of Net income before extraordinary items deflated by total assets (Florou, 2017; Bradford et al., 2019; Ateya 2021; Sharaf, 2022)

SIZE it: Size of Corporate (i) in fiscal year (t), This variable was measured by Natural log of total assets (Florou, 2017; Bradford et al., 2019; Ateya 2021; Sharaf, 2022).

CI it: Capital intensity of Corporate (i) in fiscal year (t), This variable was measured as a ratio of net property, plant and equipment to total assets (Florou, 2017; Bradford et al., 2019; Ateya 2021; Sharaf, 2022).

IOSS it: Dummy variable that equals 1 if net income before extraordinary items is negative in the current and prior fiscal year, and 0 otherwise.

ε it : Standard error.

6-4-2. Independent Variable:

- mandatory adoption of IFRS (IFRS):

The researchers established a direct link between credit relevance changes and a firm-level measure of the impact of mandatory adoption of IFRS on accounting information, exploiting reconciliations of pre-IFRS sample comparative with post-IFRS sample. And so, this variable was measured using The Credit Relevance model which tested once before the adoption, and again after an adoption. Based on the difference in the explanatory ability R² of the two models, and the significance of this difference, the impact of adopting IFRS on the credit Relevance of accounting information was determined (Dang et al., 2020; Florou, 2021).

6-4-3. Moderating variable:

- Tangibility of assets (Tang):

Tangibility of assets of Corporate (i) in fiscal year (t), This variable measured as a ratio of Fixed Assets to total assets (Ibrahim and Lau, 2019; Basu and Naughton, 2020; ateya, 2021)

6-5. Statistical Tests:

The researchers using Descriptive statistics for the study variables (arithmetic mean), measures of dispersion (lowest value, maximum value, standard deviation), and the researchers also tested the correlation relationships between the study variables using Pearson's correlation coefficient. The researchers Using Breusch-Pagan Test for test the stability of heteroscedasticity across the two research samples. And to test the research hypotheses Panel Data Ordinal Probit Regression was applied (Vijayamohanan, 2017; Ateya, 2021). Finally, the researchers was employed Pseudo (R²)¹ to determine the explanatory power of independent variables to explain the change in the dependent variable (Ross, 2019; ateya, 2021).

7. Experimental Results:

7-1. Descriptive statistics:

Table 3 provides descriptive statistics of the model variables and their statistical differences between the pre- and post- IFRS period. Where Panel (A) describes the key features of the data and summarize the results of the pre-IFRS sample, while Panel (B) describes those features of the data of the post-IFRS sample, Table 3 reveals that the credit relevance of accounting information differs fundamentally before and after adoption. The explanation for this is that the mean of the research's sample pre-IFRS was 3.89, with a standard deviation of 1.19, While the mean of the research's sample post-IFRS was 2.91, with a standard deviation 1.39, This indicates that the mean of the research's sample decreased during the post-IFRS sample compared to the pre-

Compared model (Florou et al., 2017)

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¹ Pseudo $R^2 = 1 - \frac{LL_M}{LL_R}$ Whereas: LL_M : Log Likelihood for estimation model and LL_R : Log Likelihood for

IFRS sample. It is also clear from the results that there is a significant discrepancy between the values of the means. In addition to the higher standard deviation for measuring the credit relevance of accounting information during the post-IFRS sample than during the pre-IFRS sample, this indicates that the measurement of the credit relevance of accounting information is more homogeneous before adoption, and less homogeneous after adoption. Therefore, the probability of the effect of measuring the credit relevance of accounting information after adoption will be greater than its effect before adoption. This means that a decrease in the measurement of the credit relevance of accounting information during the post-IFRS sample compared to the pre-IFRS sample. Also, table (3) showed that the means of the moderating variable, Tangibility of assets has significantly different across the preand post- IFRS sample. This means that the moderating variable, Tangibility of assets has significantly effected on the relationship between mandatory IFRS adoption and credit relevance of accounting information when comparing their means crosse our two independent two samples.

Table (3): Descriptive statistics

| Variables | Panel (A) descriperiod (2012-20 | RS Adoption | Panel (B) descriptive statistics for the After-IFRS Adoption period (2016-2018) N = 492 | | | | | |
|------------|---------------------------------|-------------|---|--------|--------|-----------|--------|---------|
| | Mean | Std. Dev. | Min | Max | Mean | Std. Dev. | Min | Max |
| C-RV | 3.89 | 1.19 | 1 | 6 | 2.91 | 1.39 | 1 | 6 |
| INCOV | 55 | 946 | -10366 | 6483.2 | 1211 | 17577 | -8395 | 275278 |
| LEV | 1.77 | 19.66 | .0026 | 298.18 | 5009 | .657 | .00080 | 7.65 |
| ROA | .062 | 1.79 | -36.57 | 5.81 | .365 | 2.35 | -7.684 | 29.5068 |
| SIZE | 8.75 | .644 | 7.204 | 10.48 | 8.91 | .678 | 7.373 | 10.737 |
| CI | .22 | .248 | 0 | 1.78 | .18 | .206 | 0 | .857 |
| LOSS | .79 | .409 | 0 | 1 | .80 | .399 | 0 | 1 |
| TANG | .24 | .251 | 0 | 1.65 | .21 | .271 | 0 | 3.063 |
| TANG INCOV | 54.3 | 406.8 | -452.65 | 5319.4 | 265.82 | 3859.8 | -2026 | 60549 |
| TANG LEV | .605 | 7.76 | 0 | 117.77 | .097 | .145 | 0 | 1.165 |
| TANG ROA | .035 | .237 | -3.419 | 1.99 | .062 | .460 | -2.190 | 6.49 |
| TANG SIZE | 2.098 | 2.20 | 0 | 15.23 | 1.86 | 2.42 | 0 | 28.75 |
| TANG CI | .097 | .155 | 0 | .858 | .078 | .145 | 0 | .915 |
| TANG LOSS | .202 | .249 | 0 | 1.649 | .166 | .262 | 0 | 3.063 |

Source: out put of Stata 15

-correlation relationships matrix:

Multicollinearity means that one or more explanatory variables are strongly correlated that so there remains little unique variation to estimate the slope coefficient(s) (Stock & Watson, 2020, p. 228). This affects the standard errors in the analysis. There are several signs of multicollinearity. As shown in Table 4, Using Stata, we have tested our data for multicollinearity and find that our data does not have a multicollinearity issue. as all values of the Pearson correlation matrix are less than 80%.

| | CRE | INCOV | ROA | CI | LOSS | LEV | SIZE | TANG | TANG_I~V |
|---|--|--|---|---|---|---|---|--|---|
| CRE INCOV ROA CI LOSS LEV SIZE TANG_INCOV TANG_SIZE TANG_LEV TANG_ROA TANG_CI TANG_LOSS | 1.0000 -0.0439 -0.0769 0.0866 -0.0847 -0.0007 -0.1950 0.0506 -0.0468 0.0346 -0.0081 -0.0480 0.0608 | 1.0000 0.6409 0.0096 0.0448 -0.0026 -0.0367 0.0049 0.9946 0.0023 -0.0024 0.8023 -0.0034 0.0163 | 1.0000 0.0009 0.1185 0.0080 0.0402 0.0001 0.6381 0.0023 0.0078 0.8766 -0.0161 0.0284 | 1.0000 0.0107 0.0347 -0.1595 0.7137 0.0285 0.6824 0.0505 0.0501 0.8823 0.5448 | 1.0000 0.0209 0.1135 0.0393 0.0379 0.0494 0.0219 0.1086 -0.0190 0.3631 | 1.0000 0.0049 0.0256 -0.0032 0.0272 0.9983 0.0215 0.0161 0.0330 | 1.0000 -0.0865 -0.0462 -0.0206 0.0102 0.0304 -0.1752 -0.0140 | 1.0000 0.0221 0.9953 0.0466 0.1162 0.8484 0.8653 | 1.0000 0.0170 -0.0028 0.8016 0.0211 0.0347 |
| | TANG_CI | TANG_L~S | | | | | | | |
| TANG_CI TANG_LOSS | 1.0000 0.6585 | 1.0000 | | | | | | | |

Table (4): Pearson correlation matrix

7-2. Testing and Discussion of Research Hypotheses:

7-2-1. Testing and Discussion of hypothesis (H_1) :

To test the first research hypothesis (H₁), which expects that mandatory IFRS adoption has a significant impact on credit relevance of accounting information. To test this hypothesis, the following multiple regression model was used (Florou et al., 2017; Ateya, 2021; Sharaf, 2022):

$$CR_{it} = \beta_0 + \beta_1 INCOV_{it} + \beta_2 LEV_{it} + \beta_3 ROA_{it} + \beta_4 SIZE_{it} + \beta_5 CI_{it} + \beta_6 IOSS_{it} + \epsilon_{it}$$
 (1)

(These variables were described previously.)

 $\mathbf{var}(\mathbf{R^2_{After}}))$]× $\sqrt{\mathbf{n}}$ And then, the researchers employed Cramer's z statistics (Cramer, 1987) and Chow- test are among the methods that are based on $\mathbf{R^2}$ was calculated using Stata 15., to compare the results obtained for comparing value changes Pre and Post IFRS. To confirm whether credit relevance of accounting information was affected due to the adoption of IFRS, the $\mathbf{R^2}$ for the Post- IFRS sample should be greater than the pre-IFRS sample. This is to ascertain if there are significant differences between the two samples. Cramer's Z is computed using the following formulas, which are based on Simon et al. (2017):

Z=[(R²_{Pre} - R² _{After})/
$$\sqrt{(var(R^2_{Pre}) + var(R^2_{After}))]} \times \sqrt{n}$$

 $var(R^2) \sim \frac{4}{n} R^2 (1 - R^2)^2 - [1 - \frac{2(q+1)+3}{n}]$

Whereas:

n = total sample size, q = number of predictors, R^2_{pre} and R^2_{after} are R^2 for regression model one and two, and $Var(R^2_{pre})$ and $Var(R^2_{after})$ are variances of first and second regression.

As shown in table (5) In our Pre-IFRS sample the model has Pseudo-R² of 0.0597. This decreases to 0.0306 post-IFRS sample, a decrease of 0.0291which is statistically significant at p-value<0.05, where the Value of Cramer's Z (5.692) is greater than the Value of tabulated Z (1.96) for testing the significance of the difference (Sig of Diff). (PRINT): ISSN 2682-3446 181 (ONLINE): ISSN 2682-4817

Therefore. This is largely due to a decrease in the LL_M, which goes from -640.1988 to -767.66945, a change that is also significant at the pvalue<0.0002 level. This indicates accounting information has become less ability to explain the corporate's creditworthiness and a worse predictor of its Default Risks after the mandatory adoptions IFRS. In addition to decrease in the coefficient of the independent variables, LEV, ROA and CI. However, increases other independent variables; INCOV, SIZE and LOSS but this increase is not statistically significant. Overall, we conclusion an <u>impairment</u> in fit caused by changes in the independent variables. This indicates an overall decrease in credit relevance after the mandatory adoptions of IFRS. So, the null hypothesis is accepted, and rejected an alternative hypothesis stating that "The mandatory adoption of IFRS has a significant effect on the credit relevance of accounting information for non-financial listed companies in the Egyptian Stock Exchange".

This indicates that an accounting information prepared according to IFRS have less ability to explain and interpret the corporate's creditworthiness, which is reflected in the credit relevance estimations compared to an accounting information prepared before the adoption of IFRS. This suggests that a decrease in the relevance of accounting information for creditworthiness measurement and credit rating of corporates listed on the Egyptian Stock Exchange (Credit Relevance) after the adoption of IFRS compared to Credit Relevance of Corporates listed on the Egyptian Stock Exchange before the adoption, and this decrease is statistically significant.

Table (5) Results of Probit Regression test for Credit Relevance of

| | | | ig unormaci | OII | | | |
|-----------------------|----------|----------------|-------------|-----------------------|---------|--|--|
| | | Pre-IFRS N=459 | | Post-IFRS N=492 | | | |
| | | Coeff. | p-value | Coeff. | p-value | | |
| INCOV | | 0.000359 | 0.99 | .000991 | 0.59 | | |
| SIZE | | .0183117 | 0.94 | .098834 | 0.049 | | |
| LEV | | 1.255638 | 0.002 | .237739 | 0.0186 | | |
| ROA | | .0926037 | 0.0190 | .0645413 | 0.0305 | | |
| CI | | 2.879644 | 0.000 | .4343443 | 0.0524 | | |
| LOSS | | 3306913 | 0.149 | 1207682 | 0.574 | | |
| Prob>Chi2 | | 0.00 | 02 | 0.0002 | | | |
| LL_{M} | | -640.1988 | © | -767.66945 | | | |
| LL_R | | -680.87487 | | -791.97465 | | | |
| Pseudo-R ² | | (A) 0.0597 | 100 | ^(B) 0.0306 | | | |
| Difference (A-B) | | 0.0291 | | | | | |
| Sig of Diff | Z Cramer | | | | 5,692 | | |
| | Z Tab | | | | 1.96 | | |

Source: output of Stata 15

The finding of this study is in the same direction with the a priori expectation and other studies (Li, 2010; Deloitte, 2011; Christensen and Nikolaev, 2012; Ball et al., 2015 and Dang et al., 2017), which argue that the adoption of IFRS has a negative impact on the credit relevance of accounting information, while The finding contradicts the positive IFRS effect results of some other studies (Florou et al., 2017; De lima et al., 2018; Dang et al., 2020; Basu and Naughton, 2020) that confirm that the adoption of IFRS has a positive impact on credit relevance of accounting information.

The researchers Viewed that the non-Significant impact of adopting IFRS on the credit relevance of accounting information is attributed to the weak infrastructure of the accounting in the Egyptian practice environment, the absence of strong legal enforcement mechanisms, and effective regulatory structures necessary for implementing IFRS requirements. This has resulted in a lack of full compliance with IFRS requirements by companies listed on the Egyptian Stock Exchange. Additionally, IFRS is principle-based and does not include detailed rules explaining the application requirements of these standards. It relies on the judgment and personal estimates of the preparers of accounting information to interpret these general principles. Therefore, if the preparers of financial reporting are not sufficiently familiar with the requirements of applying IFRS, it will be difficult for them to issue accurate personal judgments. This will lead to an increase in the risks associated with management estimation errors, resulting in a decrease in the effect of adopting IFRS on the credit relevance of accounting information due to the reduced learning curve effect (Florou et al., 2017). This requires more time and effort to acquire the necessary expertise and technical capabilities for effectively dealing with the requirements of applying IFRS. Therefore, it can be said that the study period plays an important role in the non-significant effect of adopting IFRS on the credit relevance of accounting information. The study period included the first three years of adopting IFRS in Egypt, which is not sufficient time to acquire the necessary expertise and capabilities to understand the requirements of applying IFRS and effectively implement them.

Also, The researchers justify the decrease in corporate's credit relevance of accounting information after adopting IFRS, due to the fact that IFRS focuses on the economic essence of economic transactions rather than the legal form, and therefore the accounting numbers prepared under IFRS achieve harmonization between book values and real market values, through accounting disclosures related to the results Deterioration tests, and fair value estimates, where the accounting figures disclosed under IFRS are more closely related to the real economic situation, which allows the recognition of losses related to the decrease in the market value of assets and liabilities from their book value in a timely manner, which results in the reduction of exaggerated credit ratings, Especially given the fact that credit givers are more sensitive to bad news than to good news.

7-2-2. Testing and Discussion of hypothesis (H₂):

To test the second research hypothesis (H₂), which related to the impact of tangibility of assets on the relationship between mandatory IFRS and credit relevance of accounting information. To test this hypothesis, the following multiple regression model was used (Ateya, 2021):

 $CR_{ii} = \beta_0 + \beta_1 INCOV_{ii} + \beta_2 LEV_{ii} + \beta_3 ROA_{ii} + \beta_4 SIZE_{ii} + \beta_5 CI_{ii} + \beta_6 IOSS_{ii} + \beta_7 TANG$ $ii + \beta_8 TANG_INCOV_{ii} + \beta_9 TANG_SIZE_{ii} + \beta_{10} TANG_LEV_{ii} + \beta_{11} TANG_ROA_{ii} + \beta_{12} TANG_CI_{ii} + \beta_{13} TANG_LOSS_{ii} + \epsilon_{ii}$ (2)

Whereas:

 CR_{it} , $INCOV_{it}$, LEV_{it} , ROA_{it} , $SIZE_{it}$, CI_{it} , $lOSS_{it}$, $TANG_{it}$ they were described previously.

TANG_INCOVit: refers to the interactive effect of the tangibility of assets and Interest coverage ratio on credit relevance of accounting information of Corporate (i) in fiscal year (t).

TANG_SIZEit: refers to the interactive effect of the tangibility of assets and Corporate's Size on credit relevance of accounting information of Corporate (i) in fiscal year (t).

TANG_LEVit: refers to the interactive effect of the tangibility of assets and Leverage on credit relevance of accounting information of Corporate (i) in fiscal year (t).

TANG_ROAit: refers to the interactive effect of the tangibility of assets and Return on Assets on credit relevance of accounting information of Corporate (i) in fiscal year (t).

TANG_CIit: refers to the interactive effect of the tangibility of assets and Capital intensity on credit relevance of accounting information of Corporate (i) in fiscal year (t).

TANG_LOSSit: refers to the interactive effect of the tangibility of assets and the result of operational activities of a business. on credit relevance of accounting information of Corporate (i) in fiscal year (t). Similarly, as hypothesis H₁, the researchers employed Cramer's z statistics confirm whether tangibility of assets was affected on the relationship between IFRS adoptions and credit relevance of accounting information.

To test the hypothesis (H₂), the p-value of the test variables TANG INCOV, TANG SIZE, TANG LEV, TANG ROA, TANG CI and TANG LOSS in Table (6) is used. The p-value of the interactive term (TANG INCOV) pre-IFRS and post-IFRS is 0.004 and 0.049 respectively at 0.05 level of significance; therefore, the null hypothesis (H₂) is rejected. Meaning that the interactive variable of tangibility of assets and Interest coverage ratio has a significant and negative effect on the relationship between mandatory IFRS adoption and credit relevance of accounting information on listed Corporations in The Egyptian Stock Exchange. but, the study finds a significant decrease in credit relevance after the mandatory IFRS adoption on listed Corporations in The Egyptian Stock Exchange. The p-value of the interactive term (TANG SIZE) pre and post-IFRS is 0.003 and 0.001 respectively at 0.05 level of significance; therefore, the null hypothesis (H₂) is rejected. Meaning that the interactive variable of tangibility of assets and corporate's size has a significant and negative effect on the relationship between mandatory IFRS adoption and credit relevance of accounting information on listed Corporations in The Egyptian Stock Exchange. In other words, the study finds a significant increase in credit relevance after the mandatory IFRS adoption on listed Corporations in The Egyptian Stock Exchange. While The p-value of the interactive term (TANG LEV) pre-IFRS and post-IFRS is 0.002 and 0.226 respectively at 0.05 level of significance; therefore, the null hypothesis (H₂) is accepted. Meaning that the interactive variable of tangibility of assets and corporate's leverage has not a significant effect on the credit relevance of accounting information after mandatory IFRS adoption on listed Corporations in The Egyptian Stock Exchange.

Table (6) Results of Probit Regression test for Credit Relevance of accounting information

| of accounting mior mation | | | | | | | | | |
|---------------------------|------------|---------|-----------------------|---------|--|--|--|--|--|
| | Pre-IFR | S N=459 | Post-IFRS N=492 | | | | | | |
| | Coeff. | p-value | Coeff. | p-value | | | | | |
| TANG INCOV | 0007851 | 0.004 | 0004763 | 0.049 | | | | | |
| TANG SIZE | -2.137017 | 0.003 | -1.774383 | 0.001 | | | | | |
| TANG LEV | -3.18358 | 0.002 | 1.235325 | 0.226 | | | | | |
| TANG ROA | -1.075987 | 0.048 | .4042824 | 0.353 | | | | | |
| TANG CI | -2.761077 | 0.111 | -1.945752 | 0.204 | | | | | |
| TANG LOSS | 1.443109 | 0.083 | .3156912 | 0.626 | | | | | |
| Prob>Chi2 | 0.0 | 00 | 0.000 | | | | | | |
| LL _M | -610.99046 | | -760.60971 | | | | | | |
| LL _R | -654.2 | 7678 | -785.89942 | | | | | | |
| Pseudo-R ² | (A) 0. | 1234 | ^(B) 0.1225 | | | | | | |

Source: output of Stata 15

The p-value of the interactive term (TANG_ROA) pre-IFRS and post-IFRS is 0.048 and 0.353 respectively at 0.05 level of significance; therefore, the null hypothesis (H₂) is accepted. Meaning that the interactive variable of tangibility of assets and corporate's Return on Assets has not a significant effect on the credit relevance of accounting information after mandatory IFRS adoption on listed Corporations in The Egyptian Stock Exchange. And The p-value of the interactive term (TANG_CI) pre-IFRS and post-IFRS is 0.111 and 0.204 respectively at 0.05 level of significance; therefore, the null hypothesis (H₂) is accepted. Meaning that the interactive variable of tangibility of assets and corporate's Capital intensity has not a significant effect on the credit relevance of accounting information before / after mandatory IFRS adoption on listed Corporations in The Egyptian Stock Exchange. Finally, The p-value of the interactive term (TANG_LOSS) pre and post-IFRS is 0.083 and 0.626 respectively at 0.05 level of significance;

therefore, the null hypothesis (H_2) is accepted. Meaning that the interactive variable of tangibility of assets and the result of operational activities of a business has not a significant effect on the credit relevance of accounting information before / after mandatory IFRS adoption on listed Corporations in The Egyptian Stock Exchange. So, the null hypothesis (H_2) Partially acceptance, and partially rejected an alternative hypothesis stating that " the significant effect of the mandatory IFRS adoption on the credit relevance of accounting information varies according to the degree of Tangibility of assets for non-financial companies listed in the Egyptian stock exchange".

The researchers believes that tangibility of assets is considered one of the most important determinants of the market value of corporates, to which users of financial reports give a relative weight greater than other accounting information, especially when predicting the corporate's profitability and its ability to generate operating cash flows to pay and cover its debts in the future, which affects the classification measurement. Corporate credit in a positive way, because profitability and operating cash flows are among the most important inputs to the corporate credit relevance model. According to the fair value basis, tangibility of assets is re-evaluated at the end of each financial period, and the deterioration of the value of the asset (cash-generating unit) is tested, by comparing the recoverable value of the asset with its book value. If the recoverable value is less than the book value of the asset, this is an indication of deterioration in the value of the asset, and its book value must be reduced to its recoverable value, and the amount of this decrease shall be recognized as deterioration losses within the income statement expenses. Which entails adjusting the depreciation value of the asset in future periods, by allocating the revised book value less its value as scrap at the end of its useful life over the remaining useful life. Accordingly, it can be said that the shift from historical cost to fair value after adopting IFRS when Tangibility of assets are accounted for increases the relevant of accounting information for Tangibility of assets for the purposes of measuring corporate credit relevance.

8- Discussion and Conclusion

The main research questions were: Does the mandatory adoption of international financial reporting standards (IFRS) affect the credit relevance of accounting information of non-financial listed companies on the Egyptian Stock Exchange? Does this impact differ according to the degree of its tangibility of assets as a moderated variable for this relationship? Finally, is there practical evidence of the previous causal relationship in non-financial listed companies on the Egyptian Stock Exchange? To answer these questions, the researchers conducted an empirical study on listed corporations in the Egyptian stock exchange, where a Population was distributed into two independent samples of a period that period companies didn't adoption IFRS named pre-IFRS Sample (2012-2014), and another sample of companies that adopted IFRS named Post-IFRS sample (2016-2018), and statistical tests were conducted to answer the questions of the study. The results of the study concluded that:

- The mandatory adoption of international financial reporting standards (IFRS) did not affect the credit relevance of accounting information of corporates listed on the Egyptian Stock Exchange.
- Regarding the effect of assets tangibility, it has led to a significant and negative effect on the relationship between mandatory IFRS adoption and credit relevance of accounting information in case an interactive variable of tangibility of assets with Interest coverage ratio and Corporate's Size. And hasn't a significant effect on this relationship in case an interactive variable of tangibility of assets with corporate's leverage, corporate's Return on Assets, corporate's Capital intensity and the result of operational activities of a business.

The researchers Viewed that the non-Significant impact of adopting IFRS on the credit relevance of accounting information is attributed to the weak infrastructure of the accounting in the Egyptian practice environment, the absence of strong legal enforcement mechanisms, and effective regulatory structures necessary for implementing IFRS requirements. This has resulted in a lack of full compliance with IFRS requirements by companies listed on the Egyptian Stock Exchange.

Additionally, IFRS is principle-based and does not include detailed rules explaining the application requirements of these standards. It relies on the judgment and personal estimates of the preparers of accounting information to interpret these general principles. Therefore, if the preparers of financial reporting are not sufficiently familiar with the requirements of applying IFRS, it will be difficult for them to issue accurate personal judgments. This will lead to an increase in the risks associated with management estimation errors, resulting in a decrease in the effect of adopting IFRS on the credit relevance of accounting information due to the reduced learning curve effect (Florou et al., 2017). This requires more time and effort to acquire the necessary expertise and technical capabilities for effectively dealing with the requirements of applying IFRS. Therefore, it can be said that the study period plays an important role in the non-significant effect of adopting IFRS on the credit relevance of accounting information. The study period included the first three years of adopting IFRS in Egypt, which is not sufficient time to acquire the necessary expertise and capabilities to understand the requirements of applying IFRS and effectively implement them.

In the light of the objectives of the research and its problem, and the results it reached in both its theoretical and empirical aspects, the researchers recommend the following:

- Increasing the awareness of the preparers of the financial statements to the importance of IFRS, and its significant effects on the credit Relevance of Accounting information.
- Motivating the accountants to accurately applying the requirements of IFRS as defined by the issuing authorities so as not to affect the Relevance of accounting information in financial statements in order to provide more effective support in the decision-making process.
- Accounting Conference's must give attention to credit rating and the important roles that accounting information will play in the credit rating models.

In addition, the researchers suggest a number of future research areas, the most important of which are the following:

- Conducting other studies to test the impact of IFRS on the in other disciplines, such as audit report lags and audit fees, Corporate's cost of capital and earnings management.
- Conducting case studies for companies applying big data to get a deeper understanding of the impact of big data on credit relevance of accounting information.
- Developing an integrated framework for the financial and nonfinancial dimensions of the professional practice environment, as there is no unified framework for measuring these dimensions on credit relevance of accounting information.
- Effect of digitalization on the relationship between IFRS adoption and quality of accounting information.

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