

The Impact of Intellectual Capital on The Financial Performance of Non-Banking Financial Companies Listed on The Egyptian Stock Exchange Analytical Study For 2010 To 2021

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Abstract

The aim of this research is to examine the impact of the value added of intellectual capital (MVAIC) on the financial performance of non-banking financial companies listed on the Egyptian stock exchange. The research sample consisted of 25 non-banking financial companies listed on the Egyptian stock exchange for the fiscal year 2010–2021. Data analyzed using the Spss27 version. The study results revealed the positive impact of the value added of intellectual capital (MVAIC) on financial performance indicators: return on assets (ROA) ratio, return on equity ratio (ROE), and market value of stock. The study also claimed that human resources should be maximized in non-banking financial companies towards the establishment of specialized divisions for the use of intellectual capital, with work on the management of human resources that would contribute to the upgrading of corporate infrastructure in the light of which a high level of financial performance could be achieved.

Keywords: Value Added to Intellectual Capital (MVAIC), Financial Performance, Stock Exchange, Return on Assets (ROA), and Return on Equity (ROE), market value of stock

Introduction

Competitive businesses have experienced significant growth in their use of intangible assets, despite the significant growth of intellectual capital management technologies. The importance of innovations, intellectual progress, and human brain expertise has become crucial for their survival. This shift aligns with the academic discourse, globalisation, and open markets. A theoretical framework embracing intellectual capital aims to improve administrative operations and time management, ensuring the preservation of these valuable resources for competitive businesses. (Abu Jabbar, 2018)

In 2019, Vidyarthi and Tiwari did a research on intellectual capital, which is a current and important topic in the area of economics.. This is especially pertinent considering the recent progress made in administrative and operational methods, which prioritise the recruitment of personnel and the improvement of efficiency in businesses. Moreover, the authors contend

that intellectual capital has a pivotal function in enhancing the economy. Intellectual capital has become a crucial asset and a key factor for achieving success in the modern day.

The notion of intellectual capital, which is an essential component in management, has undergone changes throughout the years, as the conventional view of capital has been questioned. Contemporary firms have transitioned their attention from physical assets to intellectual capital, since the revenues generated from tangible assets currently exceed those derived from intangible assets. Ibrahim (2020)

As stated by Akor (2018) intellectual capital plays a crucial role in enhancing corporate financial performance, which is essential for achieving corporate goals and ensuring long-term success. This connection is crucial for enhancing competencies and overall effectiveness, as it significantly influences company outcomes and ensures survival and financial gains for organizations.

Intellectual capital, an intangible asset, holds significant value for businesses, both internally and externally. However, assessing intellectual capital presents challenges for financial and accounting systems. Efforts are underway to develop robust metrics and indicators for evaluating intellectual capital, fostering a more efficient and effective capital management system. (Devilliers & Sharma, 2020)

Intellectual capital is a crucial component of a company's financial performance and market value. It comprises human-structural and relationship-user components, and can be utilized to increase profits, acquire new clients, create new products, or improve business operations. It also includes the collective expertise of employees and organizational processes. However, many companies are unaware of the importance of intellectual capital and its impact on corporate financial performance. It is essential to clarify the significance of intellectual capital, its multiple elements, and its influence on corporate financial performance to help companies understand its value and leverage it effectively.

Thus, from the previous presentation, the main question of the study is:?

□ What effect does the value added of intellectual capital have on the financial performance of non-banking financial companies listed on the Egyptian exchange?

Intellectual capital has a significant impact on financial performance. Corporate governance and financial structure are important determinants of the disclosure of information on intangible capital (DIIC) (Eric et al., 2020). DIIC practices increase the financial performance of firms, particularly in terms of market performance (Victoria et al., 2017). The degree of intellectual capital disclosure, including relational and human capital, positively affects the performance of companies (Velia et al., 2017). Intellectual capital performance is negatively associated with the probability of default, and including it in bankruptcy prediction models improves their predictive ability (Chokri et al., 2012). Intellectual capital is associated with long-term financial stability and lower bankruptcy risk, creating a virtuous circle between higher performance and greater financial stability (Sohail, 2016). The impact of intellectual

capital on firm performance is still poorly defined, but empirical studies have been conducted to determine its exact impact.

According to what has been reviewed of the problem of the study, the objectives and importance of the study, and based on what has been extrapolated from previous studies related to the subject of the study, the hypotheses have been formulated as follows:

1st Hypothesis: There is a significant positive impact of the value added of intellectual capital MVAIC on the financial performance of non-banking financial companies listed on the Egyptian stock exchange."

H1.a: There is a statistically significant positive impact of the value added of intellectual capital MVAIC on the rate of return on assets in non-banking financial companies listed on the Egyptian Stock Exchange."

H1.b: "There is a statistically significant positive impact of the value added of intellectual capital MVAIC on the rate of return on property rights in non-banking financial companies listed on the Egyptian Stock Exchange."

H1.c: "There is a statistically significant positive impact of the value added of intellectual capital MVAIC on the market value of the stock price in non-banking financial companies listed on the Egyptian stock exchange."

The study variables appear according to the study model as follows

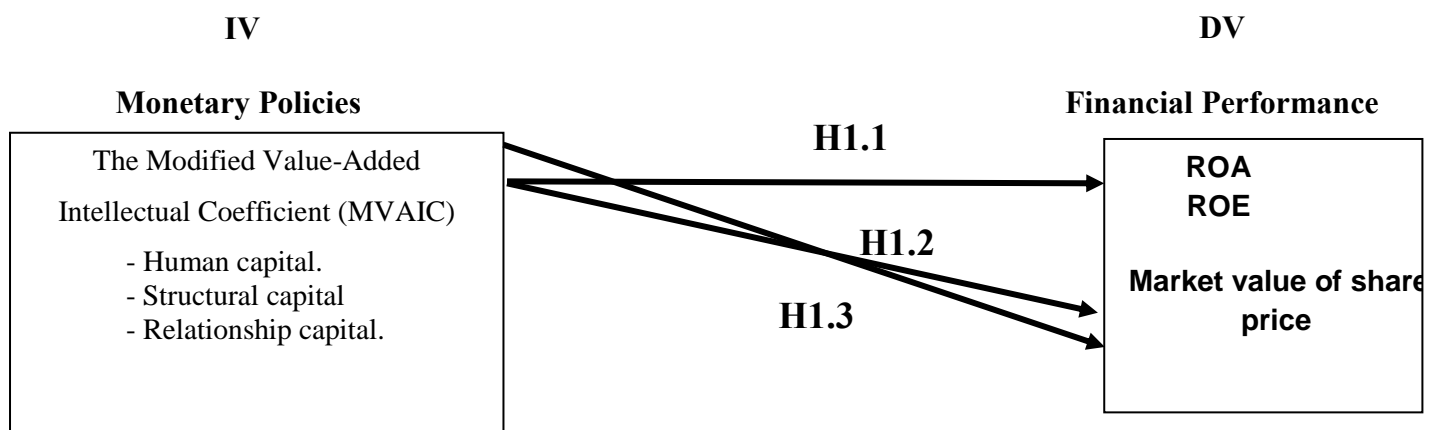


Figure (1): Proposed Research Model

Source: the authors based on previous studies

Methodology:

The researcher utilized an analytical descriptive approach in order to comprehend the phenomenon under investigation and gain insights into its multifaceted dimensions. Additionally, this approach was employed to ascertain the magnitude and direction of the influence exerted by the financial statements issued by the 25 non-banking financial companies, which were selected as the study's sample. The financial statements were acquired via the disclosure management system of the Egyptian exchange in order to assess the influence of intellectual capital on financial performance.

The study population is represented by the 33 non-banking financial enterprises registered on the Egyptian Stock Exchange. Since the researcher had difficulty with not having access to all the data for the period 2010-2021, the sample of the study concluded with 25 non-banking financial businesses on the Egyptian Stock Exchange, to the degree possible with information on the companies in the study community.

Once the data is collected, and then analyzed the data. Data processing and data analysis in this study uses multiple regression models through using SPSS27 package.

Findings:

The hypothesis proposes that there is a statistically significant positive correlation between the value added of intellectual capital (MVAIC) and the financial performance of non-banking financial enterprises that are publicly listed on the Egyptian Stock Exchange. The study's methodology involves conducting a multiple linear regression analysis to examine the impact of intellectual capital components, specifically human capital efficiency (HCE), on the market value of stock prices. Controlled variables are also introduced to assess their influence. The main assumption test and subsequent sub-tests are conducted using multiple linear regression to measure the direct relationship between subsidiary variables of intellectual capital (HCE, structural capital efficiency (SCE), and relational capital efficiency (RCE)) and the market value of stock prices.

In order to get at the outcomes of the main hypothesis, sub-premises must be investigated.

The first sub hypothesis stated that "there is a statistically significant positive impact of the value added of intellectual capital MVAIC on the rate of return on assets (ROE) in non-banking financial companies listed on the Egyptian exchange," and table 1 shows the linear regression model to show the effect of the value added of intellectual capital on the rate of return on assets.

Table.1 Results of a linear regression model to show the effect of the added value of intellectual capital (MVAIC) and its components On the ROA

Item	β	Sig
Constant	1.988	0.001
MVAIC	1.512	0.000
R²	0.465	
Adj R²	0.454	
F Statistic	166.6678	
E	0.00026	
Model Sig	0.000	

Where Table 1 shows that there is an effect of the added value of intellectual capital MVAIC on the rate of return on assets according to the significant value of the Sig model, which shows a level of less than 5%, and the value of the explanatory estimate of the model (Adj R²) indicates that the value added of intellectual capital MVAIC explains the change in the rate of return on assets by (45.4%). The results of the regression model indicate that there is a direct relationship between the added value of intellectual capital (MVAIC) and the rate of return on assets in non-banking financial companies at a slope level of (1.512). It shows that every increase in the level of added value of the intellectual capital MVAIC by one unit leads to a rise in the market value of the share price by the slope of the regression. The first is that "there is a statistically significant positive effect of the added value of intellectual capital (MVAIC) on the rate of return on assets in non-banking financial companies listed on the Egyptian Stock Exchange."

The second sub-hypothesis stated that "there is a positive, statistically significant effect of the added value of intellectual capital (MVAIC) on the rate of return on equity (ROE) in non-banking financial companies listed on the Egyptian Stock Exchange." Table No. (2) Shows the linear regression model to demonstrate the effect the value added of intellectual capital (MVAIC) over the rate of return on equity.

Table No. (2) Results of a linear regression model to show the effect of the added value of intellectual capital (MVAIC) and its components on the rate of return on equity

Items	β	Sig
Constant	1.955	0.002
MVAIC	1.455	0.000
R²	0.436	
Adj R²	0.420	
F Statistic	170.664	
E	0.00011	
Model Sig	0.000	

Table No. 2 shows that there is an impact of the added value of intellectual capital (MVAIC) on the rate of return on equity according to the significant value of the Sig model, which shows a level of less than 5%, and the explanatory value of the model (Adj R2) indicates that the added value of capital Intellectual MVAIC explains the change in the rate of return on equity by (42.0%), and by analyzing the previous table, it is clear that the model continues to be valid to test the ability of the added value of intellectual capital MVAIC to affect the rate of return on equity. The results of the regression model indicate that there is A direct relationship between the added value of intellectual capital MVAIC and the rate of return on equity in non-banking financial companies at the level of slope slope of (1.455) shows that every increase in the level of added value of intellectual capital MVAIC by one unit leads to an increase in the market value of the share price By the slope of the regression, this expresses the presence of a significant level less than 5% that is statistically acceptable and with a degree of confidence greater than 95%, to show that every increase in the added value of intellectual capital MVAIC by one unit leads to an increase in the market value of the share price by the slope of the regression, that expresses There is a significant level of less than 5% that is statistically acceptable and with a degree of confidence greater than 95%, and then the first sub-hypothesis can be accepted as “there is a statistically significant positive effect of the added value of intellectual capital (MVAIC) on the rate of return on equity in non-financial companies Banking listed on the Egyptian Stock Exchange

The third sub-hypothesis stated that “there is a positive, statistically significant effect of the added value of intellectual capital (MVAIC) on the market value of the share price in non-banking financial companies listed on the Egyptian Stock Exchange.” Table No. (3) Shows the linear regression model to demonstrate the effect of value. Adding the intellectual capital MVAIC to the market value of the share price.

Table No. (3) Results of a linear regression model to show the effect of the added value of intellectual capital (MVAIC) and its components on the market value of the stock price

Item	β	Sig
Constant	1.847	0.001
MVAIC	1.485	0.000
R^2	0.527	
Adj R^2	0.509	
F Statistic	160.687	
E	0.000016	
Model Sig	0.000	

Table No. (3) shows that there is an effect of the added value of intellectual capital (MVAIC) on the market value of the share price according to the significance value of the Sig model, which shows a level of less than 5%, and the explanatory value of the model (Adj R2) indicates that the value added of intellectual capital (MVAIC) explains The change in the market value of the share price amounted to (50.9%). The results of the regression model indicated that there is a direct relationship between the added value of intellectual capital (MVAIC) and the market value of the share price in non-banking financial companies at a regression slope level of (1.485), which shows Every increase in the level of value added to intellectual capital (MVAIC) by one unit leads to an increase in the market value of the share price by the amount of the regression slope. This expresses the presence of a statistically acceptable level of significance of less than 5% and with a degree of confidence greater than 95%, and then the sub-hypothesis can be accepted. The first is that “there is a statistically significant positive effect of the added value of intellectual capital (MVAIC) on the market value of the share price in non-banking financial companies listed on the Egyptian Stock Exchange.”

Therefore, according to the positive results reached for the sub-hypotheses, the fourth main hypothesis can be accepted, as it can be said that “there is a statistically significant positive effect of the added value of intellectual capital (MVAIC) on the financial performance of non-banking financial companies listed on the Egyptian Stock Exchange.”

Conclusion

Based on the previous analysis the study results revealed that:

- There is an effect of the added value of intellectual capital MVAIC on the rate of return on equity according to the significant value of the Sig model, which shows a level less than 5%, and the value of the explanatory ability of the model (Adj R2) indicates that the value added of intellectual capital MVAIC explains the change In the rate of return on equity by (47.2%), the results of the regression model came to indicate that there is a direct relationship between the added value of intellectual capital (MVAIC) and the rate of return on equity in non-banking financial companies at a slope level of (1.566) to show Each increase in the added value of intellectual capital (MVAIC) by one unit leads to an increase in the market value of the share price by the slope of the regression. A statistic of the added value of intellectual capital (MVAIC) on the rate of return on equity in non-banking financial companies listed on the Egyptian Stock Exchange. This result is in line with: Ali et al. (2019) & Saged (2019).
- 4) There is an effect of the value added of the intellectual capital MVAIC on the market value of the share price according to the significant value of the Sig model, which shows a level less than 5%, and the value of the explanatory ability of the model (Adj R2) indicates that the value added of the intellectual capital MVAIC

explains the change in the market value of the price The share value increased by (53.8%). The results of the regression model indicated that there is a direct relationship between the added value of intellectual capital (MVAIC) and the market value of the share price in non-banking financial companies at a regression slope level of (1.526) to show that each increase in value added The intellectual capital MVAIC by one unit leads to an increase in the market value of the share price by the slope of the regression, which expresses the presence of a significant level of less than 5% statistically acceptable and with a degree of confidence greater than 95%, as there is a statistically significant positive effect of the added value of intellectual capital MVAIC based on the market value of the share price in non-banking financial companies listed on the Egyptian Stock Exchange. This result is in line with: Abu Higaa et al. (2018), Elmamoni (2017), Mohamed et al.(2016), & Anas(2015).

5) In light of the presence of an effect of the added value of intellectual capital (MVAIC) on the financial performance indicators of the financial performance (high - medium - low) for each of (the rate of return on assets ROA - the rate of return on equity ROE - and the market value of the share price), there is a positive effect It is statistically significant for the added value of

1. Intellectual capital (MVAIC) on the financial performance of non-banking financial companies listed on the Egyptian Stock Exchange.

In light of the results of the research, the researcher concludes the study by presenting a set of recommendations to non-banking financial companies, along with proposing some of the mechanisms it deems appropriate to activate these recommendations and put them into practice. These recommendations can be summarized in the following items:

1. Maximizing human resources and moving towards the establishment of specialized departments to benefit from intellectual capital, while activating the completion of work related to human resource management in a way that contributes to the advancement of the companies' infrastructure, in the light of which a high level of financial performance can be achieved.

2. Work to benefit from the relational capital due to the fact that the non-banking financial services sector is based to a large extent on the communication and knowledge network, which supports practical experience to achieve the effectiveness of intellectual capital and thus increase the rates of financial performance.

3. The company should work to attract knowledgeable individuals who hold academic and professional certificates and who have a high degree of knowledge, experience and skills, which supports knowledge and thus the effectiveness of human capital, thus increasing the company's ability and improving financial performance.

6. The management of companies should work to make the strategy of developing intangible assets the best way to acquire scientific skills to raise the quality of skills, capabilities and

experience in companies and thus achieve high intellectual capital, while keeping pace with the reality occurring in the financial services sector in general and innovating tools that contribute to the disappearance of communication problems between Clients and companies, whether individuals or institutions, due to the development of financial technology elements due to the need to keep pace with market needs.

The future research should be directed toward:

1. Studying the relationship between the added value of intellectual capital (MVAIC) and competitiveness and their impact on financial performance.
2. Examining the role of intellectual capital as an intermediary variable between the financial stability of the banking sector and market risks.
3. Studying the effect of the added value of intellectual capital (MVAIC) on improving profitability indicators
4. Studying the effect of both financial leverage and operating leverage on intellectual capital in industrial companies.
5. Studying the relationship between systematic and unsystematic risks and their impact on intellectual capital in non-financial companies listed on the Egyptian Stock Exchange.

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