Determinants of Accounting Measurement of Relational Capital and Competitive Advantage: Study on Egyptian Banking Sector

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Abstract:
The study aimed to examine the relationship between Accounting measurement determinants of relational capital and the competitive advantage achievement, by using convenience sample Questionnaire was distributed to the managers in Egyptian Banking sector (Cairo City), and tested the hypotheses by using SPSS. The result suggested that the accounting measurement determinants of relational capital significantly affect competitive advantage achievement, and revealed that the customer's item has the most significant relationship on the quality followed by suppliers, and strategic alliance. In addition the results also showed that Strategic alliance have the most significant effect on innovation followed by suppliers and customer.

Keywords: Accounting determinants, relational capital, and competitive advantage

1. Introduction

Recently, especially in 1980S, up to now, have been seen a major shift in type and nature of the international economic tools. Where we have seen a shift from the industrial economy which depends on the physical assets in value creation, To the knowledge economy, which depends on the knowledge and creative wealth, crystallized in the form of another kind of assets, unphysical, and intangible, which known as intangible assets, the term equivalent of the intellectual capital.

From a practical point of view, there is continues importance increasing of this kind of resources in the future. This is evident from the increased reliance of firms on these resources in achieving their objectives, especially the competitive advantage. One of the studies conducted to extract some indicators from the US economy during the period from 1975 to 2015 reached to there is an increasing in the percentage of intangible assets owned by firms, it was be around 28% in 1975 and it reached to 82% in 2015(Cokins,et.al.).

Where it was found that the success of the firm is not achieved by its tangible assets only but also by its intangible assets (intellectual capital) owned and developed.(Campbell & Rahman 2010). According to (Ramman et.al2002) the investment in the (intellectual capital) will generate higher financial returns than the same value of investment in physical assets).All of the above can be summarized in one sentence “The intellectual capital is the future”.Several studies have presented several proposals for the division of intellectual capital, the most accepted one is to human capital, relational capital, and structural capital (Stewart,1997,Edvinsson,1997, Andriana & Dumitrescu 2012)(Nosella&Crema2014, Sveiby 2010).

The important of relational capital in value creation stems from its external nature, which makes it responsible for the external image formation by managing its different relationships with external parts. However the accounting rules and standards cannot recognize and measure all the value generated by relational capital through establishing a set of determinants and conditions, Which led to increase the gap between the market value and the book value produced by the accounting, followed by an important problems such as (information asymmetry, loss of accounting information reliability and suitability, high uncertainty, increase the capital cost (Bilal&Abdenacer2016,Maaloul&Zeghal, 2014, Chao Yu,H.,et,al.2015)In the same time there is a large part of the relational capital will be left to voluntary disclosure of management and its orientation? This is also reflected in some of management literature, where it has been shown that if the disclosure of intellectual capital information exceeds certain limits, it will affect the firm’s competitive advantage (Vergauwen et al., 2007).

According to the above this paper aims to study the impact of these accounting detriments and conditions relating to relational capital on the firm’s ability to achieve competitive advantage, This is done by management controlling the amount and quality of information disclosed about the relational capital.
2. Literature Review

2.1. Relational Capital as a Part of Intellectual Capital

There are several definitions that refer to the intellectual capital according to adapted view. Economically, it can be defined as the economic value of the intangible assets of the organization, and the main source of value creation (Bilal & Abdennacer 2016, OECD 2004). While from the management perspective, it can be defined as the ability of the enterprise to outperform all competitors with its distinct skills, creativity, and knowledge that are achieving the firm’s value (Tayles et al. 2007), and from the accounting point of view, it can be defined as a type of the firm’s assets that had a cognitive nature, has no physical presence, contributes to the firm’s value creation, is acquired through ownerships, legal rights, or internally generated.

Many studies have proposed different divisions of intellectual capital components (categories) and their sub-items (Guthrie et al. 2006, Cronje & Moolman 2012, Wagiciengo & Belal 2012, Asare et al.). The proposed categories ranged from 2 to 21 categories and the sub-items ranged from 18 to 58 items. But the most common and acceptable classification, which classified the intellectual capital for three categories:

1. Human capital
2. Structural capital
3. Relational capital

By reviewing the literature of accounting and management in dealing with intellectual capital, we found that it has taken two main directions:

- Focusing on intellectual capital in general while addressing its components within this framework. Based on that, the firm’s value derived from the interaction of all intellectual capital components together (Murthy & Mouritsen 2011).
- Focusing on the human capital (Rimmel et al. 2012) as a confirmation of the importance of this component and recognition of its essential role in influencing other components.

Our agreement with the above does not prevent us from emphasizing the importance of the rest intellectual capital components role, which did not take sufficient and appropriate attention to its role. In addition, the classification of the intellectual capital to its components helps in studying the nature of each, and the problems associated with the process of measuring them in more detail and depth (Chun & Bonties 2002).

Relational capital is an essential part of the intellectual capital, called external capital, which represents the knowledge and competitive advantage achieved by the firm through its external relations (Seveiby 1997).

It is difficult to limit these relationships to the firm’s customers’ relationships only, based on that the customer loyalty is one of the firm’s assets and the source of its strength, making some call it customer capital. (Sveiby 1997)

The practical reality indicates that the firm is surrounded by many parties with different bi-directional relationships, and the successful management of these relationships turns them into a source of value creation. Accordingly, the Relational capital is taken as a form of a set of relationships with external parties, through which the reputation and image of the firm is formed as a key source for achieving its competitive advantage. Relational capital depends on achieving this value by achieving credibility, customer satisfaction, quality of raw materials provided by suppliers, feedback from the external environment that guides the organization in the development of its plans and objectives, benefits arising from the conclusion of contracts of outsourcing, licenses, Franchise, Strategic Alliances.

Due to the association of the relational capital with the external environment of the firm, which is characterized by being open and changeable, there were no specific items for this type of capital. Some of the studies presented a number of proposed items (April 2003, Guthrie et al. 2006, Oliveria et al. 2006, Wagiciengo & Belal 2012). (Asare et al) rearranged and organized the proposed items in the previous studies and included them in ten items, he used them in his study which included a large number of organizations, including banks.

In this study, we will adopt three items as a framework through which we can understand the nature of this type of intellectual capital (relational capital) and thus determine the conditions and problems of accounting measurement and consequently the impact on competitive advantage.

The items of capital relational adopted by the study depending on the fact that they are the most common items and are suitable for the nature of the work of banks: (1) Customers (2) Suppliers (3) Strategic Alliance

2.2. Determinants of Accounting Measurement of Intellectual Capital

The Financial statements the most important source for stakeholders to obtain information about the financial position, which can be used as indicators of future performance and value of the entity.

In the light of ignoring accounting for the value generated by intellectual capital in general (including relational capital), and focus mainly on tangible assets, this undoubtedly has an impact on the quality and usefulness of accounting information. According to (Lev and Zarow in 1999) dropping in value relevance of accounting information caused by the lack of accountability to deal with the changes that occur in business. It has also become misleading, as it does not accurately reflect the fact of the firm’s financial position (Hall 2006, Zéghal, and Maaloul 2011). All of the above increases the risk of using the financial statements, which increases the Cost of capital (Giovy and Shi 2008).

Therefore the accounting recognition and measurement of intangible assets including relational capital, has become very important and cannot be ignored (Skyrme 1997).

The current reality indicates that accounting has not completely ignored intellectual capital, but it recognizes the existence of this type of invisible resources, which is largely responsible for realizing the value of the enterprise.
Where a number of accounting standards have been issued dealing with such assets and have been called intangible assets, such as International Standard No. 38, Egyptian Standard No. 23, Saudi Standard No. 1, and others.

However, these standards have established a set of determinants and conditions that must be met in the item so that it can be recognized as an intangible asset, when applying these accounting determinants and conditions, a significant portion of the relational capital will be excluded from accounting interest and will not appear in the financial statements. The alternative would be to leave this important part of these resources to the freedom of management decisions and directions (voluntary disclosure).

That the accounting recognition of intangible assets has a significant inverse relationship with the quantity and quality of the voluntary disclosure (Zeéhal, and Maaloul 2011, Schiemannet, al.2015).

To confirm this, a number of studies have revealed that ratio of voluntary disclosure of the relational capital ranged from (35%-48%) (Cronje, C., & Moolman, S. 2013), Asare, et al. (2014). It also ranked first or second in comparison to other intellectual capital categories (Lim, et al, 2017) (Cronje, C., & Moolman, S. 2013)

We conclude from the above that the recognition and accounting measurement of a large part of the relational capital is restricted by a number of determinants and conditions, which led to an increase in the voluntary disclosure, which is controlled by the administration and its strategic change. (Slack & Munn 2016)

According to IAS 38, the most important determinants of the recognition and accounting measurement of intangible assets are:

- Can be determined, where the asset becomes identifiable if it is separable from the enterprise or arises from contractual or legal rights.
- May have future benefits to the enterprise in the form of revenue or cost savings.
- The entity's control over the asset and its expected future economic benefits, to prevent others to reach these benefits, this shall be done under legal rights or through confidentiality of use.
- Measure the cost of asset reliably.

By applying these conditions to the relational capital items adopted by this study we find that both customer loyalty and the firm's share in the market are not fully controlled by the firm, and it is difficult to determine reliable value for those items, this also applies to the entity's relationships with suppliers and their distribution channels.

As for strategic alliances, this item involves a wide range of contractual relationships with different objectives and the complementary nature of the parties involved. A strategic alliance may involve the establishment of a joint venture between two or more enterprises. Here, the assets, liabilities, revenues and expenses of this project will be subject to accounting recognition, but if this alliance involves a range of intangible benefits, such as increased market share and technological development, then these intangible benefits will collide with the determinants of accounting recognition and thus deviate from the scope of accounting recognition and measurement.

2.3 Competitive Advantages

Some studies have dealt with the relationship between intellectual capital and competitive advantage (Tovstiga and Tulugurova, 2007, Marr et al., 2006, Marr, Gray and Neely, 2003), but for the best of our knowledge there is no research that studied the relationship between the determinants of the accounting measure of relational capital with the competitive advantage. Which will be addressed in our research.

Scholars defined competitive advantage in many ways with respect to the degree of competitions among companies. Haolma, define competitive advantage in differences of characteristics or dimensions of a company, that enables better services than competitors for customers (Azam & Mahmoud, 2014). (Porter, 1985) defined it as "presentable values for customers in a way that, these values are higher than customers costs". (Ansoff, 1965), defined competitive advantage as "to isolate characteristics of unique opportunities within the field defined by, the product, market scope and the growth vector. It seeks to identify particular properties of individual product markets, which will give the firm strong competitive position". On the other hand, competitive advantage; is the ability to perform at higher level than competitors in the same industry (Christensen & Fahy, 1984). With respect to competitive advantages dimensions and measurement, one can present two competing perspectives for explaining, value creation and competitive advantage; the first one, the Position – Based framework (also called environmental models) and the Resources-Based View (Sponsa & Lionkas, 2001). The position-based framework model, was developed by Porter (1985), explains competitive advantage by, how company adopts and makes use of key characteristics in an industry, in this respect; industry structure affects the sustainability of firm performance; whereas position reflects a company's ability to establish competitive advantage, compared to its rivals, in his model; Porter identify the attractiveness of a certain industry as what has become known as, Porters five forces; namely, supplier power; buyer power; competitive rivalry; threat of substitution and threat of new entry. On the other hand, the resources based framework, focus on a sustained competitive advantage, According to Barney (1991), a firm is said to have a sustained competitive advantage "when it implementing a value creating strategy not simultaneously being implemented by any current or potential competitors, and when these other firms are unable to duplicate the benefits of this strategy" According to Barney (1991), a company's resources must have four features, the so-called VRIN attributes, to have a sustained competitive advantage; they are, Valuable; Rare; Inimitable and Non-substitutable. Hence which of the two model is better, to explain company's competitive advantage, let us consider Lioukas (2001) contrast of Porters framework with the Resources-Based Views; his findings shows that, together with strategic activities, both industry and firm assets affects contributes to firm success, therefore the two prospective model can be seen as complementary to each other. Competitive advantage dimensions involve innovating, Quality and Customer responsiveness. Innovation can be defined as a new or innovative method used by the firms, or the new products, it is the most important source of competitive advantage (Chang, K.C; Chen, M.C; Hsu, C.L, 2010). There is a general consensus that...
all types of innovation can contribute to competitive advantage. In addition quality a product is said to be of high quality, when it is in agreement with customer’s needs and demand. (Akram Sadat Hosseini, Sanaz Soltani, and Mohammad Mehdizadeh, 2018). Customer responsiveness: The organization can achieve competitive advantage through its ability to provide customers needs better than its competitors. This requires high sensitivity and accurate knowledge of customers first and then focuses on the needs that can be provided in order to achieve a certain quality level (Akram Sadat & at-al, 2018).

2.4. The Relationship between the Relational Capital and the Firm’s Competitive Advantage

Sustained competitive advantage can be obtained when a firm develops a distinctive core competency (Hoffman et al., 2006: 140). Literature suggested that competitive advantage achieved by those firms that succeed in mobilizing their intangible resources in the form of knowledge, technological skills, experience, and strategic capabilities toward creating new processes and product or service offerings (Tovstiga and Tulugurova, 2007). Therefore the successful mobilization of these intangible resources may be known as a distinctive core competency for the organization. The most common theory that examines competitive advantage of the firms is resource based theory. Resources can be important sources of innovation through new or different combinations of new or already existing resources (Schumpeter, 1934) and through their superior abilities (Hoffman et al., 2006). This study developed a framework to connect relational capital and competitive advantage. Therefore, firms need to strategically identify and develop their relational capital in order to gain a competitive advantage and to increase their performance (Marr et al., 2006).

2.5. Theories Hypotheses and Frameworks

Our study depends on three main theories in hypotheses development and interpretation the results as follows:

2.5.1. Agency Theory

Agency theory is used to interpret and regulate the relations between the parties of the Agency, the principal (shareholders) and the agent (management), it is based on a set of assumptions, the conflict of interest between the agency parties with information asymmetry is considered. The main reasons for the problems and costs of the Agency, Which the accounting principles and standards work to minimize, by providing relevant information in the financial statement. (Watts and Zimmerman 1990)

Accordingly, the establishment of Determinants and conditions on the recognition and measurement of the relational capital helps to increase the information gap between the principal and the agent, thereby increasing the Agency’s costs. Thus, reducing these Determinants and conditions reduces information asymmetry, which increases the trust that an entity obtains from the publication of its financial statements, which support the reputation and competitive advantage of the enterprise. According to (Biala & Abdenacer, 2016, Nurunnabiet, al, 2011) The studies use the agency’s theory to describe indirect effect of Intellectual capital on market values, the appearance of those assets in the financial statements or their treatment as an expense is used by management to reduce political costs.

2.5.2. Signal Theory

Signal theory addresses the problem of information asymmetry in the market, illustrating the factors that affect the quantity and quality of the information announced by management, which give very important signals that affect current and prospective investors and creditors (Morris, 1987). It also tries to answer the important question of why some enterprises disclose information more than others, Where the management can reduce the disclosed information to hide the real value of the entity (Donnelly and Mulcahy, 2008).

Management usually uses intellectual capital information to signal the value of the enterprise and its expected financial position (Tsoligkas and Tsalavoutas, 2011). In the light of ignoring accounting for a large part of the relational capital and leaving the scope of mandatory disclosure, this part will be subject to the management’s actions and decisions in determining the quantity and quality used to send signals to external parties.

2.5.3. Resource Based Theory

The main purpose of the RBV is to develop our understanding of how competitive advantage within firms is achieved and how that advantage can be sustained in the future. Resources can be divided into two types: tangible and intangible. Tangible resources, such as machinery, land, and supplies, are easy to imitate. Intangible resources, on the other hand, are not easily definable and are difficult to quantify (Grant, 1996). According to RBV, not all resources of a firm will be strategic resources. Resource based view (RBV) analyze and interpret resources of the organizations to understand how organizations achieve sustainable competitive advantage and focuses on the concept of difficult-to-imitate attributes of the firm as sources of performance and competitive advantage (Barney, 1991).

So, we aim to explore whether The accounting determinants of recognition and measurement of relational capital support the competitive advantage of an enterprise by leaving the management free to choose the appropriate quantity and quality of information that it wishes to disclose, or that these determinants are not in favor of the competitive advantage of the enterprise, increasing the information asymmetry, decreasing trust in the financial statements and distorting the image and reputation of the enterprise.

Therefore we test the following hypothesis:
• H1: There is a statistically significant relationship between the accounting measurement determinants of relational capital and competitive advantage.
• H1-a There is a statistically significant relationship between the accounting measurement determinants of relational capital namely (Customer, Suppliers and Strategic Alliances) and quality.
• H1-b there is a statistically significant relationship between the accounting measurement determinants relational capital namely (Customer, Suppliers and Strategic Alliances) and innovation.
• H1-c there is a statistically significant relationship between the accounting measurement determinants relational capital namely (Customer, Suppliers and Strategic Alliances) and Customer responsiveness

2.6 Conceptual Framework
Based on extensive literature review on previous studies on the concept of relational capital and the firm’s competitive advantage and the gap appeared in these studies, the research conceptual framework is considered. The theoretical framework for this study is based on Agency theory, Signal theory and resource–based view of the firm.

![Figure 1: The Conceptual Model](source: Researchers)

3. Methodology
This paper employed convenience sampling of non-probability sampling because researchers cannot obtain the list of names of employees in Egyptian Banking sector. Therefore, data was collect from those people who were conveniently available and willing to co-operate. Convenience sampling is probably the most common of all sampling techniques. With convenience sampling, the samples are selected because they are accessible to the researcher. Senior managers of these banks in Cairo City were chosen to represent the population in Cairo state. Other states in Egypt are not chosen due to the lack of the secondary data. This choosing was because of the time and money limitations. Primary data was collected via the sampling Banking sector through the questionnaires which were designed according to the goals of the study containing close-ended questions.

3.1 Measurement of the Variables
Independent variables: The independent variables were the accounting measurement determinants of relational capital (Customers, Suppliers, and Strategic Alliances). Some studies have provided a number of proposed items for relational capital (April 2003, Guthrie et al. 2006, Oliveria et al. 2006, Wagicieng&Belal 2012). (Asare,et.al, 2014). But in this study we review the previous items and choose only three items (customer, suppliers, strategic alliance) depending on the fact that they are the most common items and are suitable for the nature of the work of banks. In the questionnaire we measure the accounting measurement determinants of customer by (12) sentences, as we measure the accounting measurement determinants of suppliers (12) sentences, and we measure the accounting measurement determinants of strategic alliance by (9) sentences. 5-point Liker-type scale

3.1.1 Independent Variable
This paper measured dimensions of competitive advantage in terms of quality, innovativeness and Customer responsiveness with 25-item, 5-point Liker-type scale adopted from (Akram Hosseini and et-all, 2018)

3.2 Data Analysis and Results

3.2.1 Factor Analysis
In conducting factor analysis, this study followed assumptions that recommended by (Hair et al. (2010). Firstly, there must be sufficient number of statistically significant correlations in the matrix. Secondly, Kaiser-Meyer-Olkin measure of sampling adequacy should be at least 0.6. Thirdly, Bartlett’s test of Sphericity should be significant at 0.05. Fourthly, communalities of items should be greater than 0.50. Fifthly, the minimum requirement of factor loading 0.50 based on a 0.05 significant level, with value of cross loading exceeds 0.50. Finally, Eigen values should be more than 1 for factor analysis extraction (available at www.agba.us).

Factor analysis was done on the 33 items for relational capital many items were dropped in the subsequent run. Finally, all assumptions were satisfactory fulfilled. The items for relational capital loaded on three components/factors(Customers, Suppliers, and Strategic Alliances). In addition, Factor analysis was done on the 25 items, which was used to measure
competitive advantage constructs namely (innovation and quality, and Customer responsiveness). Many items were dropped in the subsequent run. Finally, all assumptions were satisfactory fulfilled. In this study competitive advantage loaded on two components/factors. These factors were named as innovation and quality.

3.3 Reliability Analysis

Reliability is an assessment of the degree of consistency between multiple measurements of variables (Hair et al., 2010). To test reliability this study used Cronbach’s alpha as a diagnostic measure, which assesses the consistency of entire scale, since being the most widely used measure (Sharma, & Gur-Arie 1981). According to (Hair et al, 2010), the lower limit for Cronbach’s alpha is 0.70, although it may decrease to 0.60 in exploratory research. While (Nunnally,1978) considered Cronbach’s alpha values greater than 0.60 are to be taken as reliable.

The results of the reliability analysis summarized in Table 1 confirmed that all the scales except one factor display factory level of reliability (Cronbach’s alpha exceed the minimum value of 0.6). Therefore, it can be concluded that the measures have acceptable level of reliability.

| Construct                                      | Variable           | Number of Items | Cronbach's Alpha |
|-----------------------------------------------|--------------------|-----------------|------------------|
| Disclosure of the Relational Capital items in | Customers          | 5               | .906             |
| the context of recognition and accounting     | Suppliers          | 7               | .900             |
| measurement Determinants                      | Strategic Alliances| 5               | .940             |
| Competitive advantage                          | quality            | 9               | .968             |
|                                               | Customer           | 2               | .630             |
|                                               | innovation         | 4               | .946             |

Table 1: Cronbach’s Alpha for Study Variables

Based on the modified theoretical framework, the study aims to test one major hypothesis that illustrates the relationship between the accounting measurement determinants of the relational capital and the competitive advantage. A number of sub-hypothesis are derived from it. Restated Research Hypotheses shown below:

- H1-a There is a statistically significant relationship between the accounting measurement of Customer and Quality
- H1-b There is a statistically significant relationship between the accounting measurement determinants relational capital Suppliers and Quality
- H1-c There is a statistically significant relationship between the accounting measurement determinants relational capital Strategic alliance and Quality
- H2-a There is a statistically significant relationship between the accounting measurement of Customer and innovation
- H2-b There is a statistically significant relationship between the accounting measurement determinants relational capital Suppliers and innovation
- H2-c There is a statistically significant relationship between the accounting measurement determinants relational capital Strategic alliance and innovation.

3.4 Descriptive Statistics of Variables

| Relational Capital Variables | Mean   | Standard Deviation |
|------------------------------|--------|--------------------|
| Customer                     | 12.5200| 3.67212            |
| Suppliers                    | 18.1300| 5.33647            |
| Strategic Alliances          | 10.5051| 4.45470            |

Table 2: Descriptive Analysis of Determinants of Accounting Measurement of the Relational Capital

Source: Prepared By Researcher, (2018). Note: All Variables Used a 5-Point Likert Scale (1=Strongly Disagree, 5=Strongly Agree)

Table 2 shows the means and standard deviations of the two components of: Quality, innovation. The table reveals that the Banks in Egypt more on Quality (Mean=11.3400, standard deviation=3.41482), followed by Innovation (mean=7.3200, standard deviation=2.75930) Given that the scale used a 5-point scale (1=strongly disagree, 5=strongly agree) it can be concluded that the banks in Egypt is highly of Quality above the average mean.

| Competitive Advantage Variables | Mean   | Standard Deviation |
|---------------------------------|--------|--------------------|
| Quality                         | 11.3400| 3.41482            |
| Innovation                      | 7.3200 | 2.75930            |

Table (3): Descriptive Analysis of Competitive Advantage Variables

Source: Prepared by Researchers, (2018). Note: All Variables Used a 5-Point Likert Scale (1=Strongly Disagree, 5=Strongly Agree)
3.5. Correlation Analyses

Table 4 presents the results of the inter correlation among the variables. The Correlation analysis was conducted to see the original picture of the interrelationships among the variables under the study. Therefore, the importance of conducting correlation analysis is to identify any potential problems linked with multi co linearity (Sekaran, 2003). Table 4 represents the correlation matrix for the constructs operationalized in this study. These bivariate correlations allow for preliminary inspection and information regarding hypothesized relationships. In addition to that, correlation matrix gives information regarding test for the occurrence of multi-co linearity:

Table 4: Correlation Analysis

| Variable      | Customers | Suppliers | Strategic Alliances | Quality | Innovation |
|---------------|-----------|-----------|---------------------|---------|------------|
| customers     | 1         |           |                     |         |            |
| suppliers     | .284**    | 1         |                     |         |            |
| Strategic Alliances | .377** | .977**    |                     | .977**  | .977**     |
| Quality       | .856**    | .446**    | .605**              | .446**  | .446**     |
| Innovation    | .829**    | .440**    | .468**              | .468**  | .468**     |

Table 4: Correlation Analysis
Source: Prepared by Researchers, (2018). Note: All Variables Used A 5-Point Likert Scale (1= Strongly Disagree, 5= Strongly Agree)

3.6. Hypotheses Testing: Hypothesis Test (H1-A, H1-B and H1-C)

There is a statistically significant relationship between the accounting measurement determinants of relational capital namely (Customer, Suppliers and Strategic Alliances) and quality.

![Table 5: Multiple Regression Result for Hypothesis ((H1-A, H1-B and H1-C).](image)

Source: Prepared by Researchers, (2018). Note: Level of Significant: *P<0.10, **P<0.05, ***P<0.01

The results showed that the hypothesis was supported, i.e. there is a positive relationship between accounting measurement determinants of the relational capital and quality. The results also showed that Customer have the most significant effect on Quality (ß=.569, p=.00), followed by Suppliers (ß=.242, P=.01), Strategic alliance (ß=.569, p=.030), these results give support to hypotheses H1.a (Customer and Quality), H1.b (Suppliers and Quality), H1.c (Strategic alliance and Quality). Therefore, these results provide support for the declaration that the effort to have accounting measurement determinants of the relational capital does achieve competitive advantage in term of Quality. According to Table 5 all hypotheses have been supported.

![Table 6: The Results of Hypotheses Test (H1-a, H1-b and H1-c)](image)

3.7. Hypothesis Test (H2-a, H2-b and H2-c)

There is a statistically significant relationship between the accounting measurement determinants relational capital namely (Customer, Suppliers and Strategic Alliances) and innovation.
The results showed that the hypothesis was supported, i.e. there is a positive relationship between accounting measurement determinants of the relational capital and Innovation. The results also showed that Strategic alliance have the most significant effect on Innovation (β=.363, p=.01), followed by Suppliers (β=.042P=.020), and Customer (β=.267, p=.050). These results give support to hypotheses H2.b (Customer and Innovation), H2.b (Suppliers and Innovation), H2.c (Strategic alliance and Innovation). Therefore, these results provide support for the declaration that the effort to have accounting measurement determinants of the relational capital does lead to achieve competitive advantage in term of Innovation). According to Table 3 all hypotheses have been supported.

### Table 7: Multiple Regression Result for Hypothesis (H2-A, H2-B and H2-C)

| Variables                        | Beta    | Sig.   |
|----------------------------------|---------|--------|
| Model variables:                 | Beta    | Sig.   |
| Customer                         | .267**  | .050   |
| Suppliers                        | .042**  | .020   |
| Strategic alliance               | .363**  | .010   |
| F value                          | 8.896***| .010   |
| R²                               | .278    |        |
| Adjusted R²                      | .254    |        |
| Δ R²                             | .225    |        |
| F change                         | 9.721***|        |

Source: Prepared By Researchers (2018). Note: Level Of Significant: *P<0.10, **P<0.05, ***P<0.01

### Table 8: The Results of Hypotheses Test (H2-A, H2-B and H2-C)

| Study Hypotheses | R          |
|------------------|------------|
| There is a statistically significant relationship between the accounting measurement determinants relational capital and competitive advantage | Fully Supported |
| There is a statistically significant relationship between the accounting measurement of Customer and Innovation | Supported |
| There is a statistically significant relationship between the accounting measurement determinants relational capital Suppliers and Innovation | Supported |
| There is a statistically significant relationship between the accounting measurement determinants relational capital Strategic alliance and Innovation | Supported |

4. Discussion

In this study we examine the relationship between determinants of accounting measurement of the relational capital and competitive advantage in Egyptian banking sector. Our study found that the accounting measurement determinants of customers, Suppliers, and strategic alliance positively influence quality.

In addition the study explores the impact of the accounting measurement determinants of customers, Suppliers, and strategic alliance on Innovation. This study discover that the accounting measurement determinants of the previous items effect positivity on quality, innovation and this mean those accounting measurement determinants are useful in achieving competitive advantage. We can Interpret the results in the light of the Agency theory assumptions, (Conflict of interest, Information asymmetry) (Watts and Zimmerman 1990).

According to the research results, managers prefer not to disclose the information about customer, suppliers and strategic alliance in a mandatory way within the accounting information, where it is considered private information which C You must be careful in the quantity and quality of information disclosed, thus contributing to the company’s ability to achieve competitive advantage. However, this increases Agency costs resulting from asymmetry of information between the two parties of agency.

According to the theory of signals, the results of the study confirm that the management controls disclosure of the relational capital information (customer, suppliers, and strategic alliance) to send signals to the external parties according to its orientation. According to the results of the study, the management in this vital sector (banks) prefers to reduce the disclosure of the relational capital in order to achieve the competitive advantage of the Firm.

According to resource-based view theory, firm possession of certain key resource characteristics, which are value, rareness, inimitability, and non-substitutability, will allow the firm to sustain competitive advantage. In this study, accounting measurement determinants of the relational capital was conceptualized as a strategic resource this study adds to the resource-based view theory by providing empirical evidence to support the effect of resource, which describes the extent to which firm, practices the resource-based view (Palaadino, 2006). Specifically, the results of this study display that accounting measurement determinants of the relational capital is a resource, which is an important determinant of competitive advantage in the form of, quality, and Innovation.
5. Implication

This study found that the determinants of accounting measurement for relational capital items as a part of intellectual capital help in competitive advantage achievement (Quality and Innovation). This result meets with which is adopted by the international accounting standards, despite the problems of those accounting determinants (Lev and Zarowin 1999, Giovly and Shi, 2008, Hall 2006, Zéghal, and Maaloul, 2011)

6. Limitations and Future Research Suggestions

This study limits it’s generalize ability to Banking sector in Egypt. Other sector will be studied. A cross-sectional design was carried by the study. Cross-sectional design is confined to a specific point of time, thus might not reflect the exact casual situation. Longitudinal design should conduct by Future studies. The research suggests other studies to be conducted in developing countries, and specifically in Arabian. This study adopted only three items of relational capital another studies can adopt another items which may provide deeper understanding of variables. As that, the future studies need to conduct a study on another sector such as (communications, Industries, etc.).

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