Effects Of Intellectual Capital Disclosure On Market Capitalization Of Listed Companies In Ghana

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ABSTRACT

Purpose: The focus of the paper is to examine the effects of intellectual capital disclosure on market capitalization of the listed firms in Ghana. **Methodology:** The study used the annual reports and the share prices of twenty listed firms on the GSE from 2005 to 2014. The data was analyzed using pooled ordinary least square regression approach. **Findings:** The results of the study indicate that there is a positive significant effect of intellectual capital disclosure on market capitalization. Moreover all the components of intellectual capital (human, structural and relational) are found to be positively significant with market capitalization. **Research implication:** The results imply that investors who acquire the stocks of listed firms that disclose their IC are likely to experience appreciation of their share capital. **Practical Implication:** The study therefore recommends to the Security and Exchange Commission (SEC) and the Ghana Stock Exchange (GSE) to collaborate with the Institute of Chartered Accountants Ghana (ICAG) the accounting regulatory body in the country, perhaps, to develop guidelines or framework on IC disclosure in order to enhance the adequacy of such disclosures. Accountants of the listed firms should be empowered in the form of training in order to adequately disclose their wealth of IC. **Originality/value:** The paper is considered the first empirical study to examine the effects of IC disclosure on MCAP of listed firms in Ghana.

Keywords: Intellectual capital, Effects, Disclosure, Market capitalization, Ghana

1. INTRODUCTION

Adequate information disclosure plays an important role in a firm's valuation. The value assigned to a firm depends on the amount of information disclosed. Interestingly, annual reports mostly communicate financial information. Yet the value of a firm goes beyond the financial information. Edvinsson and Malone, (1997) posit that a company's value does not only lie in the book values but the intellectual capital which is hidden behind the book values. Drucker (1992) notes that physical capital, natural resources and labour are no longer the major economic resources in a knowledge-based economy but knowledge itself. In view of this, in order for companies to build and maintain sustainable competitive advantage have to focus in greater extent on their intellectual capital as well as their knowledge activities (Pupula and Volná, 2011). Managers therefore need adequate knowledge of IC in order to assist them to manage and monitor their IC.

From the perspective of wealth creation, Al-Ali (2003) defined IC as intangible resources that businesses use to create value by changing it into new processes, goods or products and services. It therefore suggests that IC creates hidden value which is the difference between the market capitalization and the book value of a firm. Broadly speaking, this hidden capital can be called "intellectual capital" (IC) (Stewart, 2000; Brennan, 2001). IC is mostly categorized into three main components, based on a popular categorization by Sveiby (1997). He

categorized IC as employee competence, internal structure and external structure. Bontis, Chua and Richardson, (2000) adopted human capital (HC), structural capital (SC) and relational capital (RC) as the types of IC.

According to Abdolmohammadi, (2005), HC captures employees' knowledge and their value. Abeysekera and Guthrie (2005) described HC to be a collection of talents and abilities possessed by individuals and the collective workforce of a company. SC according to Van Buren (1999) consists of process capital (a firm's techniques, systems, tools and processes) and innovation capital (the ability of a company to innovate and to create new products and services). RC refers to the IC that exists outside of the company, which includes information about customers (e.g. information about the customers number or market share), business partnering and alliances, business combination, customers' satisfaction, suppliers (e.g. information about suppliers), distribution channels, marketing, market value and share price, and shareholders (Sanchez et al., 2000; Brennan, 2001; Bontis, 2003; Seetharaman et al., 2004; Olsson, 2004).

There have been some prior empirical studies done in the subject area. Abdolmohammadi, (2005) in the USA, Orens et al. (2009) in continental European countries. Abeysekera (2011) in Sri Lanka, Ragab and Omran (2006) and Anam, Fatima and Majdi, (2011) in Malaysia. Their study examined the effects of IC on MCAP. Different results (i.e. positive and negative relationships of IC on MCAP) were obtained.

IC has clearly shown to drive the business of an enterprise and therefore playing a key role in a firm's valuation. A firm that therefore discloses the IC of its entity is likely to have higher value in the eyes of investors. Instead, the question of whether adequate disclosure of IC enhances market capitalization remains important but unanswered within the Ghana context.

Thus, the primary objective of the paper is to examine the effect of IC on MCAP of listed firms in Ghana. Several contributions are made by the paper. Firstly, to assist the regulatory bodies in Ghana such as the Security and Exchange Commission (SEC), the Institute of Chartered Accountants – Ghana (ICAG) and the Ghana Stock Exchange (GSE) to develop comprehensive guidelines on the recognition, presentation and disclosure of IC in the financial statements. This will ensure consistency in the disclosure of the intellectual capital to enhance transparency in the financial statement. Second, it contributes to the literature in Ghana especially on the issue of IC disclosure on MCAP of the firms.

2. LITERATURE REVIEW

Traditionally, a company's key resources were its physical and human capital that was used to facilitate productive and economic activity. In the recent time, knowledge, too, (intellectual capital) is regarded as invaluable resource by economists (Janine and Sumantra, 1998). In view of this, there has being a rising interest in IC and thus, it has resulted in taking a prominent feature of business transactions and discourse. This has therefore necessitated insightful studies in both developed and developing countries.

Prior studies done in both developed and emerging economies to assess the effect of IC disclosure on MCAP, reported a significant relationship. For example (Ming-Chin Chen, Shu-Ju Cheng, Yuhchang Hwang, 2005; Abdolmohammadi, M.J., 2005; Anam et al., 2011; Mahalakshmi Mudliar, 2016; Taliyang, Rosmaria, Mustafa and Mansor, 2014 and Jafari, 2013), found a positive relationship between IC disclosure and MCAP. The finding of their study indicate that useful information is highly valued by the stock market (Hassan et al., 2011) as cited in Anam et al., (2011).

Other studies show a negative relationship between IC and MCAP. For example the study of Boujelbene and Affes, (2013) on the effects of IC on the cost of equity, confirmed their hypothesis that there is significant and negative association between IC disclosure with its two components (human and structural capital) and their cost of equity. Their study was based on the firms listed in the French SBF 120 stock market index. However, the negative effect of the RC disclosure was not validated. Similar finding was obtained in the work of Maditinos, Chatzoudes, Tsairidisand and Theriou (2011). Results of their study did not support their hypothesis. They concluded that there was statistically significant relationship between HC efficiency and financial performance. The results failed to support the claim that IC which is increasingly recognized as an important strategic asset for sustainable competitive advantage.

3. THEORITICAL FRAMEWORK AND HYPOTHESES

The signaling theory can be used to explain the relationship between IC disclosure on MCAP. Most often than not, management of firms may disclose information to other parties to signal the underlying quality of that information to them. The theory was introduced by Spence (1973) to explain the labour market. According to (Spence 2003), signaling theory is basically concerned with decreasing information asymmetry between two parties. Watts and Zimmerman (1986) noted that the theory explained why some companies disclosed more information than the others. The theory makes an assumption that information disclosure is a reaction to informational asymmetry in markets. Managers of firms are better informed than investors or the public. There is therefore a minimization of the negative effect of information asymmetry, if managers disclose more information (Akerlof, 1970). The company will signal critical information in terms of attracting potential and prospective investors and creditors (Morris, 1987).

Thus, the management of a company that has good value of its resources including IC will attempt to signal this fact by disclosing more IC information in the financial statements to its stakeholders. Thus, this information might be reflected in the firm's value. Additionally, disclosure of information about IC might enable the user of that information to better determine the company's future value which might have the potential of increasing the company's share price (Anam et. al., 2011).

Following the theoretical framework, the following hypotheses are therefore formulated;

H_1 IC disclosed from 2005 to 2014 has positive effect on MCAP

H_2 HC disclosed from 2005 to 2014 has positive effect on MCAP.

H_3 SC disclosed from 2005 to 2014 has positive effect on MCAP.

H_4 RC disclosed from 2005 to 2014 has positive effect on MCAP.

4. RESEARCH METHODS

4.1 SAMPLE SIZE AND SAMPLING TECHNIQUE

Twenty firms out of the forty-three firms as at May, 2017 listed on the Ghana Stock Exchange are purposively selected with at least ten years annual reports. Data from listed companies are used because they are assumed to appreciate IC issues especially with the perception that it can assist them to achieve competitive advantage. Again, listed companies are more likely to make more disclosure than unlisted companies.

However, the researcher ignores all firms that report in foreign currency. Again firms with complete data for a twelve month accounting year for the ten year study period from 2005 to 2014 are considered. Ultimately, this assists the inclusion of twenty firms on the market that have complete data for the period. This results in two hundred firm year observations.

4.2 DATA COLLECTION METHODS

The researcher obtains the data used for the purposes of achieving the objective of this study from different sources including the fact book of the GSE, the official websites of Annual Reports Ghana. Subsequently, data for the period 2005 to 2014 is extracted from the annual reports of the sampled firms whilst the month-end stock prices for the same period for all the sampled firms are collected from the marketing department of the GSE.

4.3 MEASUREMENT OF VARIABLES

Dependent Variables

The dependent variable in the regression model is the MCAP. For the purpose of the study, MCAP is measured by the value of owners' equity, which is calculated by multiplying its share price by the number of share existing at the end of the accounting period (Hussey 1999; Ibrahim et al., 2004), as cited in Anam et al., (2011).

The MCAP in this study for the years 2005 to 2014 were obtained from Ghana Stock Exchange.

Independent Variables

To measure IC, content analysis is undertaken on the annual reports of the twenty firms from 2005 to 2014. HC, SC and RC indicators represent the intellectual capital disclosure. The IC disclosure is measured based on a disclosure index that is developed by Wagiciengo and Belal's (2012) study as cited in Asare et al., (2013). A modification of their framework is performed to suit the Ghanaian regulatory environment, hence 30 indicators

(i.e. 10 for each component of IC). It is assumed to be applicable to all the listed firms that are selected (see Table.1). Each of the firm's entire annual report is analyzed but the Chairman's and the Managing Directors' reports are predominant areas where IC is disclosed. A dichotomous scoring system is adopted, where "1" is assigned when an indicator in the index is disclosed in the annual report and "0" where no disclosure is made as measured in prior studies (Anam et al., 2011: Omar, 2008 and Abdolmohammadi, 2005).

The paper adopts the formula developed by Bukh et al., 2005 and Oliveira, Rodrigues and Craig (2006) in their study to determine the overall disclosure index score. The disclosure index is therefore computed by the formula below;

$$\text{Overall Disclosure Index Score} = \sum_{i=1}^{M} d_i$$

where

d_i expresses indicator with the value of 1 if an item of IC is disclosed and 0 if the intellectual indicator is not referred to.

M shows the highest possible score a firm can achieve, that 30 (30 indicators multiplied by 1).

To make sure the allocation of different weights to various IC components is objectively done, a 0 – 1 coding scheme is used, following the set of coding rules. The coding scheme of 0 – 1 is used because applying a coding scheme with more points results in high subjectivity (William, 2001). The independent variable used in this study is ICD. Content analysis, descriptive, correlation and regression analysis are employed to analyze the data.

Table 1: The IC Reporting Framework

Human Capital No. of Companies	Structural Capital	Relational Capital
Remuneration and Incentives	Management processes	Financial relations
Innovation, Initiative, motivation	Information systems	Investors
Know-how and experience	Policies and procedures	Partnerships and Alliances
Education	Corporate culture	Customer & Supplier
Training &Work-related competencies	Management philosophy	Distribution channels
Teamwork capacity	Quality services/products	Organisation name/ brands
Employee demographics	R&D	Community Involvement
Career planning/development	Intellectual property	Competitors
Occupational health and Safety	Organizational learning capacity	Licensing/franchising
Industrial relations	Organisational structure	Favourable contracts

This is adopted from Asare et al., (2013)

Control Variables

These control variables are included in the regression model because of their importance in the determination of MCAP in the Ghanaian economic environment.

(a) Age (AGE) is computed by finding the difference between the year of incorporation and the end of the study period.

(b) Net profit (NETPROFT) represents the net profit of the firm at the end of the accounting year (Citron et al., 2005; Zuliana, 2007; Orens et al., 2009 and Anam et al., 2011).

(d) Leverage (LEVERAGE) is measured as a ratio of total liabilities to shareholders' equity, (Anam et al. 2011; Omar, 2008 and Williams, 2001).

Table 2: Variables and Measurements

VARIABLES	SYMBOLS	MEASUREMENT
Market Capitalization	*MCAP*	Represents the share price multiplied by the number of shares of firm *i* at year *t*
Human Capital	*HC*	Represents the extent of human capital disclosed in the annual reports of firm *i* at year *t*
Structural Capital	*SC*	Represents the extent of structural capital disclosed in the annual report of firm *i* at year *t*
Relational Capital	*RC*	Represents the extent of relational capital disclosed in the annual report of firm *i* at year *t*
Intellectual Capital	*EICD*	Represents the extent of intellectual capital disclosed in the annual report of firm *i* at year *t*
Age	*AGE*	Represents the difference between the year of incorporation and the end of the study period of firm *i* at year *t*
Net Profit	*NETPROFT*	Represents net profit at the end of the accounting year of firm *i* at year *t*
Leverage	*LEVERAGE*	Represents ratio of total liabilities to shareholders' equity of a firm *i* at year *t*

Source: Author's own development from extant literature (2017)

4.4 REGRESSION MODEL

Regression model of a multiple ordinary least square based on the transformation of the variables to normal scores is adopted, to examine whether the market perceives IC disclosure information as an important variable in the determination of the company's market value. The regression model is adopted from prior studies with modification (Abeysekera, 2011; Orens et al., 2009; Abdolmohammadi, 2005) as cited in Anam et al. (2011). The framework of this model was originally developed by Ohlson (1995) cited in Anam et al. (2011). The model includes the dependent variable (MCAP), independent variable (EICD) and control variables (AGE, NETPROFT and LEVERAGE) and specified as follows:

$$MCAP_{it} = \alpha + \beta_1 EICD_{it} + \beta_2 AGE_{it} + \beta_3 NETPROFT_{it} + \beta_5 LEVERAGE_{it} + e_{it} \ldots (1)$$

$$MCAP_{it} = \alpha + \beta_1 HC_{it} + \beta_2 AGE_{it} + \beta_3 NETPROFT_{it} + \beta_5 LEVERAGE_{it} + e_{it} \ldots\ldots (2)$$

$$MCAP_{it} = \alpha + \beta_1 SC_{it} + \beta_2 AGE_{it} + \beta_3 NETPROFT_{it} + \beta_5 LEVERAGE_{it} + e_{it} \ldots\ldots (3)$$

$$MCAP_{it} = \alpha + \beta_1 RC_{it} + \beta_2 AGE_{it} + \beta_3 NETPROFT_{it} + \beta_5 LEVERAGE_{it} + e_{it} \ldots\ldots (4)$$

Where for firm *i* in year *t*, the variables assume the meanings displayed in Table2.

5. RESULTS AND DISCUSSION

The chapter presents and discusses the results obtained following the analysis of the data collected from the selected samples. The descriptive analysis, correlation analysis and the regression analysis are discussed in the following subsections.

5.1 DESCRIPTIVE STATISTICS

The variables employed are considered in this section of the study. The common measures of central tendencies such as the mean, standard deviations, maximum and minimum are presented. As can be seen from Table 3, the mean average of MCAP is 0.653 with minimum and maximum values of -3.912 and 3.817 respectively. HC recorded a mean of 0.529 and its associated minimum value of 0.1 and maximum of 0.9, whereas SC and RC recorded mean averages of 0.604 and 0.7 and their associated minimum values 0.2 each and maximum values of 0.9 each respectively. Age recorded a mean average of 36.71 with minimum and maximum values of 3 and 90 respectively. Again, net profit recorded a mean value of 12.886 with minimum of 0 and maximum value of 19.460 whereas leverage recorded a mean average of 2.0791 with minimum and maximum values of 0 and 17.667 respectively.

Table 3: Descriptive Statistics of Dependent and Independent Variables

Variable	Mean	S.D	Minimum	Maximum
MCAP	0.653	1.930	-3.912	3.817
HC	0.529	0.189	0.100	0.900
SC	0.604	0.175	0.200	0.900
RC	0.700	0.126	0.200	0.900
EICD	0.610	0.142	0.167	0.867
AGE	36.710	18.170	3.000	90.000
NET PROFIT	12.886	6.096	0	19.460
LEVERAGE	2.0791	3.125	0	17.667

Note: The variables are defined in table1

Source: Generated by the Researcher, 2017;

The MCAP of 0.653 indicates that the average capitalization of the selected firms listed on the stock exchange is GHS 6,530 billion. Out of the ten indicators to be disclosed under each of the component of IC, an average of 5, 6 and 7 were disclosed under HC, SC and RC respectively. This therefore shows that RC is the component which is largely disclosed whilst HC is the least disclosed component of IC. However, the composite of the three components of IC (ie., EICD) has an average disclosure of 6 with a minimum of 2 and 9 items disclosed at a time. The descriptive statistics also shows that the average age of the firms selected for the study is 37 years. The firms made an average profit of GHS12.886 million whilst the leverage the firms on average is 21 percent.

5.2 CORRELATION ANALYSIS

From Table 4, it is seen that there is a positive relationship between HC and MCAP with a correlation coefficient of 0.267 with a very strong significance of less than 0.01. Again, SC and MCAP are positively significant. Likewise, RC and MCAP also record a positive significant coefficient of 0.427. The composite of the three components of IC (EICD) is also positively related to MCAP with coefficient of 0.357. It can also be observed

from the table that all the components of IC including the composite of the three components are highly significantly related with MCAP at the significance level of 0.000.

Table 4 Correlation matrix of Dependent and Independent variables

	1	2	3	4	5	6	7
1.MCAP	1						
2. HC	0.267**	1					
3. SC	0.275**	0.634**	1				
4. RC	0.427**	0.611**	0.664**	1			
5. EICD	0.357**	0.883**	0.886**	0.837**	1		
6. AGE	0.363**	0.286**	0.250**	0.465**	0.366**	1	
7. NETPROFIT	0.549**	0.254**	0.270**	0.305**	0.320**	0.210**	1
8.LEVERAGE	-0.189**	0.238**	0.329**	0.153*	0.286**	-0.125	0.007

Note: The variables are defined in table 3. *, ** indicate the level of significance among the variables as 0.05 and 0.01 correspondingly.

The control variables comprising Age and Net profit are positively significantly (P<0.00) related with MCAP with coefficient of 0.363 and 0.549 respectively. However, leverage is negatively related with MCAP with a coefficient value of -0.189 but highly significant at less than 0.00.

5.3 REGRESSION ANALYSIS

5.3.1 EFFECTS OF ICD ON FIRMS' MCAP

Table 5 reports the relationship between Intellectual Capital Disclosure (ICD) and Market Capitalisation (MCAP). The R^2 of 0.39 indicates that the model explains up to 39 percent of the variation in market capitalization of listed companies in Ghana. All variables together influence Market Capitalization significantly at 1%.

Table 5 Effects of ICD on firms' MCAP

	Coefficient	Std. Error	T	Sig.
EICD	3.126***	1.014	3.08	0.002
AGE	0.014**	0.007	2.11	0.036
NETPROFIT	0.141*	0.021	6.66	0.000
LEVERAGE	-0.151***	0.038	-4.01	0.000
Con	-5.030	6.240	-0.81	0.421

*R-Squared adjusted 0.38, R-Squared=0.39, ***= Sign. |at 1%, **= Sign. |at 5%, Sig. at 10%Sig. P=0.000*

From Table 5, the result shows that there is a positive significant relationship between EICD and MCAP with coefficient of 3.126 and P-value of 0.002, thus the hypothesis H_1 is therefore supported. This simply means that EICD can be considered as a predictor of MCAP. Thus, the coefficient of 3.126 indicates that an increase in the composite of the IC will lead to a 3.126 increment in MCAP. This suggests that investors are more interested in firms that disclose the indicators of all the components of IC. There are several reasons that can possibly explain the significant relationship between EICD and MCAP. First the disclosure of IC information in listed company's annual reports gives its stakeholders the ability to make understanding of the process of wealth creation, hence leading to a decrease in the misevaluation of the share prices of companies, and increases

Market Capitalization. Second, there are several benefits for increases in market value of firms, therefore it creates incentive for companies to disclose more information of Intellectual Capital (Abdolmohammadi, 2005). Third, in line with theory on signaling, companies with good values will make a signal of the fact by making more disclosure on IC information to its stakeholders in their annual reports. The finding of the study is consistent with the findings by Abdolmohammadi, 2005; Orens et al., 2009; Abeysekera, 2011 and Anam, 2011. Perhaps, both the current and the prior studies employed the same methodology which may have accounted for the similarities.

The control variables including Age and Net profit are positively significantly related with MCAP. The coefficient of Age which is 0.014, simply means that an increase in the age of a firm will lead to 0.014 increment in the MCAP of that firm. The results therefore suggest that shareholders will witness a slight gain in their investment with firms that have advanced in age than firms that are young. This suggests that the older the firm, the more return an investor is likely to get on his or her investment. The coefficient of net profit which is 0.141, means that an increase in net profit of a firm will lead to 0.141 increase in MCAP. Therefore investors or potential investors should invest in firms that are profitable in order to experience a rise in their investments. On the other hand, Leverage is negatively related with MCAP with a coefficient of -0.151 and P-value of 0.000. This indicates that when a firms leverage (debt) increases, it will lead to a 15.1 percentage decrease in its MCAP. This means that is not attractive to invest in firms that are highly geared.

5.3.2 EFFECTS OF HC ON FIRMS' MCAP

Table 6 Relationship between Human Intellectual Capital and Market Capitalization

MCAP	Coefficient	Std. Error	T	Sig.
HC	1.311**	0.688	2.00	0.05
AGE	0.180***	0.007	2.66	0.009
NETPROFIT	0.152***	0.022	7.20	0.000
LEVERAGE	-0.128***	4996338	-3.40	0.000
Con	-3.657***	4.140	-8.42	0.000

*R-Squared adjusted 0.36, R-Squared=0.37,***= Sign. |at 1%, **= Sign. |at 5%, *=Sig. at 10% Sig. P=0.000*

The results presented in Table 6, show that HC is positively significantly related to MCAP with a coefficient value of 1.311 and a P-value of 0.05 and thus supporting H_2. This simply means that an increase in HC disclosure will lead to a 1.311 increase in MCAP. This implies that shareholders will see appreciation of the prices of the stocks they hold if the firms make more HC disclosure. This suggests that investors react positively to HC disclosure firms make and therefore are willing to buy the shares of those companies. Hence, the effect of their action is a sudden appreciation of the share price.

However, the result is inconsistent with the finding of Boujelbene et al., (2013). The result of their study indicates a significant negative relationship between human intellectual and market capitalization. Differences in the methodology and the economic arrangement existing between the two countries may account for the

inconsistencies of the findings obtained by the researcher of the current study and that findings obtained by Boujelbene et al., (2013).

5.4 EFFECTS OF SC ON MCAP

Table 7 Relationship between Structural Intellectual and Market Capitalization

MCAP	Coefficient	Std. Error	T	Sig.
SC	1.770**	0.763	2.32	0.022
AGE	0.018***	0.006	2.67	0.008
NETPROFIT	0.148****	0.021	7.01	0.000
LEVERAGE	-0.142***	0.038	-3.70	0.000
Con	-3.954***	0.484	-8.17	0.000

*R-Squared adjusted 0.36, R-Squared=0.38,***= Sign.| at 1%, **= Sign. |at 5%, *=Sign. at 10% Sig. P=0.000*

The results presented in table 7, show that SC is positively significantly related to MCAP with a coefficient value of 1.770 and a P-value of 0.022 and therefore supporting H_3. This simply means that an increase in SC disclosure will lead to a 1.770 increase in MCAP. This implies that shareholders will see appreciation of the prices of the stocks they hold if the firms make more SC disclosure. This therefore suggests that SC is an important predictor of MCAP. Investors react positively to SC disclosure firms make and therefore are willing to purchase the shares of those companies.

5.5 EFFECT OF RC ON IC

Table 8 Relationship between Relational Intellectual Capital and Market Capitalization

	Coefficient	Std. Error	T	Sig.
RC	4.586***	1.189	3.86	0.000
AGE	0.010	0.069	1.48	0.140
NETPROFIT	0.140***	0.021	6.80	0.000
LEVERAGE	-0.141***	0.036	-3.96	0.000
Con	-5.716	0.738	-7.74	0.000

*R-Squared adjusted 0.39, R-Squared=0.41, ***= Sign. |at 1%, **= Sign. |at 5%, *=Sig. at 10% Sig. P=0.000*

From Table 8, it can be seen that there is a high level of positive significant relationship between RC and MCAP with its associated coefficient and P-value of 4.586 and 0.000 respectively and thus supporting H_4. The high significance level between RC and MCAP indicates that RC is a vital predictor of MCAP and an important component of EICD as well. The coefficient of 4.586 simply means that an increase in the disclosure of RC will lead to a 45.9 percentage increase in MCAP. This shows that firms which disclose more of their relational intellectual capital are likely to experience a sharp appreciation of their stock prices. Apparently, investors on the stock exchange react positively to RC disclosure made and therefore patronize the stocks of the firms which make such disclosures. This eventually will lead to a gain in the share prices of investors.

6. CONCLUSION AND SUGGESTIONS

The study examined the effect of intellectual capital and market capitalization of listed firms in Ghana. From the study, all the variables are positively correlated with MCAP except leverage. The finding also shows that

human capital, structural capital and relational capital after controlling for age, net profit and leverage are positively significantly related to MCAP. Age and net profit are found to be positively significantly related to MCAP whilst leverage is negatively related to MCAP. The composite of the three intellectual components (ie. Human, structural and relational), ICD is also found to be positively significantly related to MCAP. Thus, firms on the GSE should be motivated to disclose more of their intellectual capital since the cost of such disclosure is compensated by the benefits that will be derived.

It is therefore recommended that the Security and Exchange Commission (SEC) and the Ghana Stock Exchange (GSE) should collaborate with the Institute of Chartered Accountants Ghana (ICAG) the accounting regulatory body in the country, perhaps, to develop guidelines or framework on IC disclosure in order to enhance market capitalization. The framework will ensure consistency in the disclosure of the intellectual capital to facilitate transparency in the financial statement. Secondly, the empirical evidence that there is a positive significant effect of intellectual capital on market capitalization should motivate the listed firms on the Ghana Stock Exchange to disclose more of the intellectual of any components, since such disclosure increase the market value of the firms. Thirdly, investors are encouraged to purchase the shares of a listed firm that discloses more intellectual capital since their shares are more likely to appreciate than companies that disclose less intellectual capital as evident in the findings of the study.

Finally, the current study looked at the effect of intellectual capital on market capitalization. Future study can be conducted to examine the effects of intellectual capital disclosure on market capitalization of listed banks in Ghana.

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