

THE MODERATING EFFECT OF THE EFFECTIVENESS OF THE AUDIT COMMITTEE BETWEEN OWNERSHIP CONCENTRATION AND INTELLECTUAL CAPITAL DISCLOSURES AMONG COMPANIES IN GULF CO-OPERATION COUNCIL

Mohammed Helmi Qeshta, Basel J. A. Ali, Mahfoudh Abdulkarem Al-Musali

***Abstract---** This study aims to investigate the moderating impact of the effectiveness of the audit committee on the relationship between concentration of ownership and disclosure of intellectual capital (IC). Empirical data was taken from the annual reports of 119 top-noted corporations in the Gulf Cooperation Council (GCC) countries at the end of 2017 using a content review methodology. Multiple hierarchical regression is used to check for moderator influence. Our findings show that ownership concentration has an insignificant relationship with IC disclosure. However, our analysis shows that the extent of the effectiveness of the audit committee in GCC firms moderates the relationship between the concentration of ownership and the disclosure of IC. The results of the study are relevant for policymakers and investors, as they indicate that the efficacy of the audit committee in companies owned or regulated by the large shareholder would minimize the knowledge asymmetry and the agency issue by allowing management to reveal more knowledge to outside parties. Therefore, policymakers must search for other strategies that allow management to enhance the disclosure of ICs in companies with a high concentration of ownership. This research adds to the literature as it is the first research to investigate the variables that may influence the relationship between the concentration of ownership and the disclosure of IC in the GCC countries.*

***Keywords---** Ownership Concentration, Audit Committee, Intellectual Capital Disclosure, Gulf Co-Operation Council.*

I. INTRODUCTION

In organizations operating within the so-called knowledge-based economy, the firm's main performance has been generally viewed as intangible assets or "IC" intellectual capital. The company's IC is found in its relationships, structures and people and brings value to the company by generating and sustaining creativity, inventions, information technology, interpersonal practices and competitive advantages. As a consequence, (IC) has been widely recognized as an significant tool for businesses in generating value and competitive advantage (Widiatmoko, Indarti, & Pamungkas, 2020). According to Guthrie and Petty (2000), intellectual capital disclosure is now more relevant than in the past. For most industries today, disclosure of intellectual capital information is one of the top ten information needs of financial accounting

*Mohammed Helmi Qeshta, Assistant Professor, Accounting and Finance Department, Applied Science University, Kingdom of Bahrain.
E-mail: mohammed.qeshta@asu.edu.bh*

information managers (Francis and Schipper, 1999). This is because the IC is the main driver of the company's today disclosure of intellectual capital information is one of the top ten information needs of financial accounting information managers (Francis and Schipper, 1999). This is because the IC is the main driver of the company's competitive advantage, and the disclosure decreases investor confusion regarding potential prospects and encourages a more reliable assessment of the product. (Li, Mangena, & Pike, 2012; Sonnier, Carson, & Carson, 2008). Furthermore, information asymmetry is critical for IC as it is exclusive to a single business and can not be used by other companies (Aboody & Lev, 2000) Therefore, if information on IC is not released, incentives for moral hazard, adverse selection and other opportunistic management actions will be increased (Holland, 2006).

IC-related literature can be clearly described in two streams. One of them focus on the level of disclosure of IC & its components. The main focus of these studies was on developed and emerging economies (April, Bosma, & Deglon, 2003) Hong Kong & Australia (Guthrie, Petty, & Ricceri, 2006), Australia (Sujan & Abeysekera, 2007), and New Zealand (Miller & Whiting, 2005). The second one focuses on research development in the literature of IC disclosure is related to determinants of disclosure of IC which aims to identify a relevant conceptual framework for examining and explaining factors affecting IC disclosure. Some of these studies looked at the relationship between IC disclosure and firm characteristics, such as firm size, firm age, and industry type, were mainly examined in developed countries (Bozzolan, O'Regan, & Ricceri, 2006), Australia (Whiting & Woodcock, 2011), and Portugal (Ferreira, Branco, & Moreira, 2012).

A little attention has been paid to the potential association between IC disclosure, corporate governance CG, and ownership structure patterns (Azman & Kamaluddin, 2012; Ahmed Haji & Mohd Ghazali, 2013; Shahwan, & Habib, 2020). This the case in spite of the considerable recognition that intellectual capital and corporate governance are connected (Al-Musali and Ku Ismail, 2012; Safieddine et al., 2009). Meanwhile Shahwan, & Habib, (2020) The Wilcoxon signed-rank check showed virtually negligible evidence of CG and IC performance changes over the study period. CG 's effectiveness score had no bearing on the probability of financial distress. However, IC's efficiency score negatively impacted the risk of financial distress. An analysis of the path was carried out and the findings showed that corporate governance practices have a positive impact on the disclosure of intellectual capital which has a consequent effect on market capitalization (Widiatmoko, Indarti, & Pamungkas 2020).

Ishak & Abood (2013), for example, provide evidence regarding audit committee effectiveness has a positive association with IC disclosure. Li, Mangena & Pike, 2012 observed that the relationship between the characteristics of the audit committee and the disclosure of IC differs with the components of IC (i.e. human capital, structural capital and relational capital), indicating that the underlying factors which drive different components of IC disclosure are different. In addition, Previous research that looked at the relationship between ownership concentration and IC disclosure (e.g. Azman & Kamaluddin, 2012; Ferreira et al., 2012; Hidalgo et al., 2010; Woodcock & Whiting, 2009) found somewhat mixed results. Perhaps these previous studies never considered the influential role of audit committee effectiveness in this association. Therefore, the positive relation, as shown by the results, could be Compared to the performance of the audit committee, the unfavorable outcome may be due to a poor audit committee.

The extent of the Agency problem and the asymmetry of information between the majority and the minority shareholders depends on the corporate governance effectiveness (Akhtaruddin & Haron, 2010; Chobpichien, Haron, & Ibrahim, 2008). eg. in companies which are owned or regulated by large shareholders which have an effective audit committee, will reduce information asymmetry and agency problem by enforcement of management to reveal more information to third parties (Akhtaruddin & Haron, 2010). In addition, audit committee effectiveness has been

suggested as being an important instrument that plays a crucial role in moderating the relationship between ownership structure and voluntary disclosure by reducing information asymmetry, agency problem between majority and minority shareholders (Akhtaruddin & Haron, 2010; Li, Pike, & Haniffa, 2008). This problem is especially critical in developing countries, which are categorized as having concentrated ownership, substantial family and government ownership, and interlocking business relationships, and where the legal security of investor rights and legal compliance is weak. (Chahine, 2007). In addition, countries are characterized by a major agency problem between large and small shareholders (Al-Shammari & Al-Sultan, 2010). In the GCC countries, three shareholder groups usually have a significant shareholding in listed companies. These entities are the government and its agencies, the families and the institutional investors, all of whom can control the extent and quality of disclosure. (Al-Shammari, Brown, & Tarca, 2008).

Specifically, the top companies in the GCC are chosen for this investigation on the basis of the following reasons: first, the listed firms in most of the GCC countries, which are the country's main contributors to GDP from the oil and gas and financial sectors, are usually dominated by large companies, divided into financial and non-financial corporations (Reiche, 2010). Second, unlike small companies, large businesses have an opportunity to provide information on IC, since they are dependent on their stakeholders and improve their chances of attracting foreign investment (Vergauwen et al., 2007). In fact, the annual market capitalization reports of major companies reflect the needs and interests of businesses to be benchmarked for best practice in corporate governance (Yau et al., 2009). High information quality in information content context (accuracy, completeness, relevance to decision making) can cause high organizational impact in terms of market information support(i.e., anticipating customer needs) and internal organizational efficiency (high-quality decision making (Ali, Bakar, & Omar, 2016:Ali, Omar, & Bakar, 2016) .Finally, many of the GCC Public-listed companies are owned by major controlling owners, who are usually managers compared to those of developed countries (Al-Shammari et al., 2008). The emphasis on one year (i.e. 2017) is considered sufficient to avoid the issue of stickiness in the reporting of IC Reports and the characteristics of the audit committee and the fact that most GCC countries provided a corporate governance code between 2001 and 2010.

This paper is structured as follows. Next to the literature review and the formulation of hypotheses, the third section introduces the research methods followed by the research findings in the fourth section. Discussion and conclusion of the analysis is provided in the last section.

AI. LITERATURE REVIEW

Ownership Concentration

Ownership concentration has been identified as a central determinant of IC disclosure (Azman & Kamaluddin, 2012; Ferreira et al., 2012; Hidalgo et al., 2010; Moeinfar et al., 2013; Whiting & Woodcock, 2011). With the concentration of share ownership of firms with few investors, the problems related to the ownership being separate from control could be reduced (Li et al., 2007). Nonetheless, there could be other difficulties. For example, there is a problem of asymmetry of information from the internal investors (owner-manager) and external investors caused by ownership concentration. Therefore, concentrated ownership could encourage the control of shareholders to take away other shareholders' wealth that could affect the decisions of management, which gains the individual wealth of the owner (Shleifer & Vishny, 1997). Without substantial external share ownership, companies whose ownership is concentrated within insiders or controlling shareholders are likely to provide less details (Allegrini & Greco, 2011).

Empirical research on the correlation of ownership with the disclosure of IC do not, however, have definitive results. For instance, Ferreira et al. (2012) in Portuguese , Moeinfar et al. (2013) in Iran, Whiting and Woodcock (2011) in Australia, All stated in significant relationship between share concentration and disclosure of IC. Other empiric studies stated that the concentration of ownership is negatively linked to the disclosure of IC, eg Oliveira et al. (2006) in Portugal, Li et al. (2008) in the UK, and Hidalgo et al. (2010) in Mexico, investigate how ownership concentration affects the voluntary disclosure of IC disclosure. On the basis of the Agency's claims and some empirical evidence to date, the hypothesis is as continues to follow:

H1: The Ownership concentration has a significant negative relationship with IC voluntary disclosure level.

Audit committee effectiveness

Effectiveness of the Audit Committee has been proposed as an significant instrument that can play a key role in moderating the relationship between the ownership structure and the extent of voluntary disclosure (Akhtaruddin & Haron, 2010). In addition, the efficacy of the audit committee has been recognized as an essential corporate governance mechanism to resolve agency concerns and improve corporate voluntary disclosure). In addition, Chung et al. (2004) indicated that the Agency's theory maintains that the audit committee reduces information asymmetry, decreases managerial opportunism and increases the quality of disclosure.

Akhtaruddin and Haron (2010) noted that the establishment of audit committees with more external directors suggested less involvement by management in the exercise of their independence and increased efficiency of the audit committee. Chobpichien et al. (2008) suggest that if the chairman of the audit committee is independent with independent directors it will lead to an improvement in audit committee effectiveness and enhance the quality of disclosure. The competence of the Audit Committee is also a further function, apart from the independence of the Audit Committee. The former was related to the efficacy of the audit committee and attracted significant attention in the previous literature. For eg, Agrawal and Chadha (2005) noted that independent directors with financial expertise are very capable of taking care of financial reporting. Similarly, Mustafa and Youssef (2010) show that the independence of the audit committee could not be considered successful unless the members had financial expertise. Numerous directorships are part of the audit committee's competence. Ismail et al. (2008) argue that a range of directorates among the members of the audit committee add diversity to the members as they have various perspectives and backgrounds in the management of the business. Around the same way, other studies such as Ruzaidah and Takiah (2004) explain that multiple directorates will boost the competence of the audit committee and enable better monitoring of companies to generate quality reporting.

In addition, the frequency of meetings of the audit committee is another function that has been related to the effectiveness of the audit committee. Haji-Abdullah and Wan-Hussin (2009) argue that attending meetings of the audit committee are more successful in controlling management and can increase the quality of financial reporting (Haji-Abdullah & Wan-Hussin 2009). In addition, the number of meetings and attendance is known to be the main factor impacting the efficacy of the audit committee. The Agency's theory indicates that, if the resources allocated to the internal audit role are high, the committee's oversight would be very effective in terms of the disclosure of value relevant information, which, in effect, can minimize the costs of the agency (Haji-Abdullah & Wan-Hussin 2009) According to DeZoort, Hermanson, and Archambeault (2002), the basis for the efficacy of the audit committee could improve considerably if the characteristics of the audit committee were examined together.

As has already been pointed out, multiple studies that have studied the relationship between the concentration of ownership and the disclosure of IC do not provide consistent results. Perhaps these past studies have never acknowledged the important role of the effectiveness of the audit committee in this relationship. The positive outcome, as seen by the findings, may, therefore, be due to the success of the audit committee, while the negative result could be attributed to a poor audit committee. This indicates that the audit committees have been analyzed in isolation from other considerations in these past studies. The current research explores the relationship between the efficacy of the audit committee and the ownership structure. And how this relationship affects the decision of the manager about the disclosure of IC in the listed companies in the developing countries where legal security and compliance is small. Through presenting an audit committee score on the basis of its characteristics, the current researcher hypothesizes the positive influence of the audit committee's effectiveness between the ownership structure and the degree of IC disclosure. The following suggestions are therefore made:

H2: The effectiveness of the audit committee positively moderates the relationship between ownership concentration and IC disclosure.

Control variables

Five control variables were used in this study: type of business, firm size, profitability, leverage and country. Those control variables have been chosen on the basis of previous research as factors that could be correlated with the IC disclosure.

The literature sets out the understanding of keys to the industry's effect on corporate disclosure. Firstly, the cost of ownership varies depending on the sector (Verrecchia, 1983). Secondly, companies are encouraged to reveal information relevant to their industry in their annual reports (Cooke, 1992) to potential investors who need these details on the state of the company to the sector so that they can determine the value of the company (Lev & Zarowin, 1999). Disclosure of industry can also be affected by the behavior of the dominant corporation (Cooke, 1992). In addition, Botosan (1997) and Nagar et al. (2003) maintain that different disclosure rates that exist in various industries due to their differing disclosure needs, and financial service companies have specific disclosure rules that are special to their industry.

Larger organizations tend to hire highly qualified individuals and advanced management monitoring structures capable of delivering a variety of corporate information (Bozzolan et al., 2006). In fact, larger corporations are more likely to report information on a voluntary basis as they are more visible to the public and could potentially face additional political costs; for eg, increased oversight, pressure from trade unions to raise salaries, consumer boycotts and higher taxes (Watts & Zimmerman, 1978). In addition, the cost of supplying detailed information for smaller companies is comparatively high compared to larger companies (Singhvi & Desai, 1972). Furthermore, smaller businesses are unwilling to reveal full details to their rivals for competitive purposes. Since their annual report is the primary source of information for their rivals, smaller companies are more likely to be unwilling to reveal additional details on their operations that put them at a competitive disadvantage (Raffournier, 1995). Li et al. (2008) argue that profitability can benefit from continuous investment in IC and that firms can reveal the information needed to convey the importance of their investment decisions to long-term firm value growth. Previous studies suggest that companies with high business output are more likely to participate in higher disclosure (Li et al., 2008). According to Yanesari et al. (2012), profitability is measured as the annual net income of the individual business before tax, divided by the estimated total assets.

Past empiric studies have shown that leverage raises the level of voluntary disclosure in annual reports (Lim, Matolcsy, & Chow, 2007). But, Chau and Gray (2002) suggest that long-term creditors need sufficient information from lenders to mitigate risks. Added to this, Meek et al. (1995) demonstrate that an organization with higher leverage is more likely to reveal more information. In other words, the greater the leverage, the greater the voluntary disclosure.

Much leverage is related to a higher degree of IC voluntary disclosure. Countries are likely to have an effect on the degree of voluntary disclosure that may be influenced by national and cultural factors. Debreceeny and Rahman (2005) maintain that, although the choice of identification material and the manner in which it will be made available to the market is essentially voluntary, the specifications of the stock exchange listing, the rules of the securities agencies and the accounting standards of the respective countries that affect the pace of continuous disclosure.

BI. RESEARCH METHODOLOGY

Population and sample selection

Below is a cross-sectional analysis of the top GCC listed companies on the GCC Stock Exchange at the end of 2017. Four countries have been chosen from the UAE, Saudi Arabia, Oman and Bahrain. Top companies have been chosen, most of which are generally considered to have high IC disclosures. The number of companies in each country is not the same and a proportionate stratified sampling was used to increase precision (Moser & Kalton, 1996).

The stratified random sampling method is used to confirm that the different population groups are appropriately represented in the sample to enhance the accuracy of the estimation of the parameters (Sekaran & Bougie, 2010). In other words, stratified random sampling is the best sampling approach when strata populations are available that can provide the necessary information (Sekaran & Bougie, 2010). The current study follows the methodology developed by Krejcie and Morgan (1970) who provided a table and diagram showing the population and sample size parameters for consideration by the researcher, which is useful in carrying out this analysis.

It provided us with a population size of 509 companies, of which a sample size of 119 was chosen. This study used annual reports as source documents as the most widely circulated and regularly produced documents (Campbell, 2000). Annual reports are a medium that a corporation uses to build an identity in the public domain and interacts with investors (Lang & Lundholm, 1993).

Table 1: Sample Selection GCC Listed Firms

Indicator	UAE	Saudi Arabia	Oman	Bahrain	Total
Listed of firms end of 2017	141	194	124	50	509
Stratified sampling 43%	60	83	53	21	217
Incomplete data	(31)	(44)	(21)	(2)	(98)
Sample size	29	39	32	19	119

As shown in Table 1, the total number of listed companies on the GCC Stock Exchange at the end of 2017 was 509. According to Krejcie and Morgan (1970), the representative sample of the population is 217 firms. Stratified sampling was therefore 43% (i.e. 509/217). Samples must have the following conditions in this study:

1. The businesses released their 2017 annual report on their website or on the country's stock exchange.
2. The financial annual report was accessible and provided the full information needed.

The final sample, therefore, contains of 119 out of 217 firms from each country: UAE (29), Saudi Arabia (39), Oman (32) and Bahrain (19).

IC disclosure framework

The IC framework captured based on the index which developed by Sujan and Abeysekera (2007). There are several reasons for adopting Sujan and Abeysekera's 2007 framework in this study; First, they developed their frameworks on the basis of Guthrie and Petty (2000), which were adopted and used by a variety of studies and almost identical frameworks with Guthrie et al. (2006) and Yau et al. (2009). Second, since their framework has been extended to top capitalization firms, only those items that have been regularly defined as important and likely to be reported by top companies have been included. Sujan and Abeysekera's have added a range of items from Guthrie and Petty's framework on the grounds that they will be best documented inside the human capital of companies and that IC disclosure is training.

Table 2: IC Framework Adopted for the Study

Internal capital	External capital	Human capital
Patents	Brands	Know how
Copyrights	Customers	Education
Trademarks	Customer loyalty	Vocational qualifications
Management philosophy	Company name	Training
Corporate culture	Favorable contracts	Work related knowledge
Management processes	Distribution channels	Work related competence
Information systems	Business collaboration	Entrepreneurial spirit
Networking systems	Licensing agreements	
Financial relations	Franchising agreements	

Source: Ahmed Sujan and Indra Abeysekera (2007)

Measurement of Variables

Dependent variable: To measure IC disclosure, The research used content analysis as the aim of this current study is to determine the magnitude of the degree of IC disclosure of listed companies by the amount (i.e. frequency count) and type (i.e. categories) of IC disclosures in annual reports. Content analysis was also used in previous IC disclosure studies (Li et al., 2012; Li et al., 2008). In order to improve the reliability of the ratings, this study used the measures taken by Guthrie, Cuganesan, and Ward (2008) as follows: First, the categories of disclosure of well-founded, applicable literature, such as Sujan and Abeysekera (2007) Secondly point, To order to enhance the quality of the content analysis, this study used the term as a unit of measurement mentioned by (Milne & Adler 1999). Second, as per Guthrie et al. (2008), the coder underwent a sufficient amount of training and a pilot test was performed to obtain an adequate degree of reliability of the coding decisions.

Independent variables: The concentration of ownership shall be measured as the aggregate percentage owned by one or more persons <5% (Dhouibi & Mamoghli, 2013; Juhmani, 2013).

Moderating variable: The effectiveness of the audit committee is used as a moderating variable in this study. This research was consisting of the course of last studies (Kiatapiwat, 2010) and used a composite governance score to assess the variable of the effectiveness of the audit committee. The score is a composite metric summarizing the value of the result of the 7 dichotomous characteristics of the audit committee to build a firm-specific summary metric of the effectiveness of the audit committee. The higher score is an indication of the higher performance of the audit committee. The seven binary characteristics used in this measurement are independent of the audit committee, chairman independence, size, expertise in financial, multiple directorships, meeting, and diligence. But, in order to be compatible with previous research, presented from this study audit committee has an independent committee with chairman independence, which is larger in size with financial expertise and has multiple directorships in other firms.

Control variables: Five control variables were used in this study: - Industrial types: which described as a dichotomous financial and non-financial variable. For this analysis, the variable has a value of one if it is a financial company; otherwise, it has a value of 0.

Firm size was calculated using the logarithm of the book value of the total assets of the firm (Hidalgo et al., 2010). Yanesari et al. (2012), profitability is measured by the following annual net profit of the individual business

before tax, then divide by average total assets. The study calculates firm leverage by dividing total liabilities by total assets. The country variable is calculated as a dummy where 1 to 4 values assigned to different countries; For instance: the kingdom of Bahrain gets 1 UAE is 2, Saudi Arabia assigned 3, Oman is 4.

Table 3: Summary of the Operationalisation of the Research Variables

Variables	Operational definition
Dependent variable:	
IC disclosure index	Intellectual capital disclosure level
Independent variable:	
Ownership concentration	Ownership concentration held by one person or more <5%
Moderating variable:	
Audit committees' Effectiveness	Is bounded by "1-0," with a higher score indicating a higher effectiveness of audit committee.
Control variables:	
Industry types	Dichotomous with 1 for financial firms and 0 otherwise.
Firm size	Natural log of total assets.
Profitability	The annual net profit of individual firm before tax divided by average total assets.
Leverage	The ratio of total liabilities to total assets.
Country	1-4 Dichotomous dummy for country (UAE, KSA, OM and BA)

Explanatory Model of the Study

The research used hierarchical regression analysis widely used as a methodology for the detection of moderating effects (Frazier, Tix, & Barron, 2004). According to Aiken and West (1991), interaction terms have to be developed in order to identify moderator effects. Interaction term is the result of the multiplication of an independent variable with a moderator variable. Thus, the term interaction raises questions about the question of multicollinearity between the terms of interaction and the terms of their components. In order to prevent any issue, IV and MV have been standardized as per (Frazier et al., 2004) Standardization (i.e. z score) also makes it easier to interpret the predictor and moderator impact in a meaningful way (Frazier et al., 2004).

Hierarchical multiple regression equations used by SPSS 25 to check for moderator impact. To do so, variables are entered in a four-step regression equation. At the binging process is to examine -control variable to examine IV; the MV; and the final process is to examine the relationship between the IV and the MV. our measures used as per recommendations of Frazier et al. (2004).

Model No 1: $ICD = \alpha + \beta_1 INTYP + \beta_2 FSIZ + \beta_3 ROA + \beta_4 LEVER + \beta_5 UAE + \beta_6 KSA + \beta_7 OM + \beta_8 BA + e$.

Model NO 2: $ICD = \alpha + \beta_1 INTYP + \beta_2 FSIZ + \beta_3 ROA + \beta_4 LEVER + \beta_5 UAE + \beta_6 KSA + \beta_7 OM + \beta_8 BA + \beta_9 CONOWN + e$.

Model NO 3: $ICD = \alpha + \beta_1 INTYP + \beta_2 FSIZ + \beta_3 ROA + \beta_4 LEVER + \beta_5 UAE + \beta_6 KSA + \beta_7 OM + \beta_8 BA + \beta_9 CONOWN + \beta_{10} ACE_Score + e$.

Model NO 4: $ICD = \alpha + \beta_1 INTYP + \beta_2 FSIZ + \beta_3 ROA + \beta_4 LEVER + \beta_5 UAE + \beta_6 KSA + \beta_8 OM + \beta_8 BA + \beta_9 CONOWN + \beta_{10} ACE_Score + \beta_{11} CONOWN \times ACE_Score + e$.

Where:

ICD= Intellectual capital disclosure. CONOWN= Concentration Ownership. ACE_Score = Score for effectiveness of audit committee. INTYP= Industry type. FSIZ= Firm size. ROA= Return on assets. LEVER= leverage. UAE =United Arab Emirates. KSA = Kingdom of Saudi Arabia, OM =Oman BA = Bahrain.

IV. ANALYSIS AND RESULTS

Descriptive statistics

In terms of descriptive statistics Table 4, Panel A presents IC disclosure, with regard to overall IC disclosure, Table 4 reveals that the mean number of IC disclosure sentences disclosed is 153.72. The minimum value is 16 sentences and the maximum value is 423 sentences. With regard to the relative importance of the three categories of

IC disclosure, internal capital is shown as the most reported category among the three categories with a percentage of 45% of the overall IC category. The external capital is graded as the second category with a percentage of 30% and finally human capital with a percentage of 25%. This finding is consistent with previous studies (Yau et al., 2009).

A description of the descriptive statistics for the IV: MV or the rest of control variables is provided in Table B of Table 4. Panel B displays the level of ownership concentration varying from 0 to 96 per cent and the average shareholding of 0.53. This finding is similar to that of Juhmani (2013). As shown in Table 3, the average score for the effectiveness of the audit committee is 0.49 with a maximum score of 0.86 and a minimum score of 0.00. In addition, Table 5 reveals that the majority of GCC-listed companies have 2 (25 companies), 3 (34 firms), 4 (21 firms) and 5 (20 firms) of the audit committee. Just five firms have the highest score (i.e. 5) and only seven firms have the lowest score (i.e. 0). In terms of control variables, Table 6 indicates that 57 financial companies are represented in this analysis with a percentage of 47.9% and 62 non-financial companies with a percentage of 52.1. With regard to firm size, Table 4 Panel B reveals that the average total assets of companies are 10.91, while the minimum total assets are 5.8. On average, the total assets are 8.9. As shown in Table 4, the maximum return on Assets value is 0.12, while the minimum ROA value is -0.07. Then The average return on assets is 0.05. The negative result of the return on Assets suggests that several companies have suffered losses during the investigation era. In the end, the study has an average leverage amount of 0.56.

Table 4 : Descriptive Statistics

Variables	Minimum	Maximum	Mean	Std. Deviation
Panel A				
Overall IC Disclosure	16	423	153.72	93.46
Internal Capital	6	162	68.76	34.88
External Capital	0	243	46.82	44.87
Human Capital	0	166	38.15	36.4
Panel B.				
Ownership Concertation	0.00	0.96	0.53	0.22
Audit committee effectiveness score	0.00	0.86	0.49	0.20
Firm size	5.80	10.92	8.88	1.11
Return on equity	-0.07	0.21	0.05	0.05
Leverage	0.00	1.00	0.56	0.27

Table 5: Frequency Audit Committee Effectiveness

ACE-Score	Frequency	Percent
0	2	1.7
1	6	5.0
2	25	21.0
3	34	28.6
4	21	17.6
5	20	16.8
6	11	9.2
7	0	0.0
Total	119	100.00

Table 6: Descriptive Statistics Dummy Variables

Variables	Total Firms	Percentage
Industry Type		
Financial	57	47.9
Non-Financial	62	52.1

Countries	Bahrain		
		19	16
	Oman	32	26.9
	KSA	39	32.8
	UAE	29	24.4

Multiple regression analysis:

Before starting the regression analysis, we first analyze whether multicollinearity was a problem among independent variables. The Pearson correlation coefficients between the independent variables are shown in Table 7. The table reveals that the coefficients of the association are less than 0.70. According to Hair et al. (2006), the correlation between independent variables is not of interest until it reaches 0.7. This implies, therefore, that multicollinearity is not an issue in the regression process

Table 7: Pearson Correlation Matrix

	ICD	OWNCON	ACES	INTYP	FSIZ	ROA	LEVER	UEA	KAS	OM	BA
ICD	1										
OWNCON	0.04	1									
ACES	0.11	0.22**	1								
INTYP	0.24**	0.00	0.03	1							
FSIZ	0.08	-0.18*	0.21*	0.14	1						
ROA	-0.20*	-0.19*	0.08	-0.51**	-0.15	1					
LEVER	0.12	0.20*	0.10	0.39**	0.25**	-0.43**	1				
UEA	0.01	0.00	0.21*	-0.03	0.20*	-0.09	0.01	1			
KAS	-0.24**	-0.17*	-0.25**	-0.13	0.13	0.05	0.04	-0.33**	1		
OM	-0.24**	0.21*	0.20*	-0.13	-0.18*	0.24**	0.11	-0.34**	-0.35**	1	
BA	0.40**	0.08	-0.24**	0.23**	-0.40**	-0.16*	-0.17*	-0.25**	-0.25**	-0.24**	1

Note: * Correlation is significant at the 0.05 level (1-tailed). ** Correlation is significant at the 0.01 level (1-tailed). ICD= Intellectual capital disclosure, OWNCON= Ownership Concentration, ACES = Effectiveness of audit committee score, INTYP= Industry type, FSIZ= Firm size, ROA= Return on assets, LEVER= leverage, UAE =United Arab Emirates, KSA = Kingdom of Saudi Arabia, , OM =Oman, BA = Bahrain.

Regression analysis:

In the first step, when the control variables are inserted in the regression model, the coefficient of determination (R²) is 0.328, indicating that 32.8% of the degree of IC disclosure easily identified by the control variables. The finding indicates, firm size, leverage and countries have a good influence with IC disclosure.

However, the type of industry and ROA are not related to IC. This is consistent with the findings of Li et al (2008). In Step 2, Table Four (4) also indicates that R² is not substantially altered by adding a concentration of ownership. As per to result, the concentration of ownership is not significantly linked to the disclosure of IC. This finding suggests no significant impact on the concentration of ownership. This finding is consistent with that obtained by Ferreira et al. (2012) and Whiting and Woodcock (2011) where the concentration of ownership was not significantly linked to the disclosure of IC.

Table 4 also shows that, by introducing an audit committee to Phase 3 (Model 3), R² is substantially improved. According to the model, the effectiveness of the audit committee is significantly linked to IC disclosure. This finding suggests that there is a significant impact on the audit committee. This finding supports the hypothesis of

agencies and the claims that, as the degree of effectiveness of the audit committee rises, the degree of IC disclosure rises.

In order to analyze the influence of the audit committee's effectiveness on the relationship between the concentration of ownership and the disclosure of IC, the interaction of the audit committee with the concentration of ownership was applied to the final step 4 (Model 4) in Table 8. As seen in the model, IC disclosure is strongly linked to the relationship of the audit committee with ownership. The R2 is further rising from 0.35 to 0.38. The shift in R2 (0.03) is important.

This suggests that the audit committee moderates the relationship between the concentration of ownership and the disclosure of IC. At the other hand, the findings indicate that, as the degree of effectiveness of the audit committee increases, the negative relationship between the concentration of ownership and the disclosure of IC decreases.

Figure 1 also shows the moderating impact of the effectiveness of the audit committee (level where the audit committee scores) on the relationship between the concentration of ownership and the disclosure of IC. It appears from the data that the higher degree of effectiveness of the audit committee is correlated with higher IC disclosure. When the percentage of ownership concentration is low, the degree of IC disclosure is low in firms with high and low levels of efficiency of the audit committee. However, where the percentage of ownership concentration is high, the degree of IC disclosure is high in firms with high and low rates of effectiveness of the audit committee, but the impact of ownership concentration on IC disclosure in firms with a high level of efficiency of the audit committee is greater than the low level of effectiveness of the audit committee associated with IC disclosure.

Table 8: Results of Hierarchical Regression Analysis

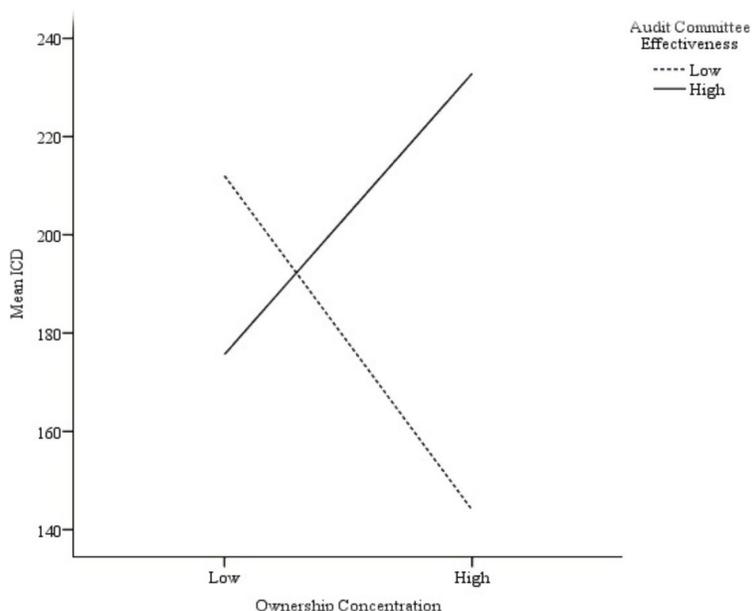
Variables	Step 1 CV	Step 2 IV	Step 3 MV	Step 4 MV*IV
INTYP	-0.010 (-0.101)	0.001 (-0.013)	-0.021 (-0.212)	-0.041 (-0.417)
FSIZ	0.152 (1.574)*	0.159 (1.623)*	0.124 (1.262)*	0.122 (1.260)*
ROA	0.048 (0.480)	0.061 (-0.593)	0.028 (0.273)	0.015 (0.150)
LEVER	0.206 (2.105)**	0.197 (1.981)**	0.196 (1.997)*	0.191 (1.981)**
UAE	-0.512 (-4.095)***	-0.509 (-4.053)***	-0.562 (-4.414)***	-0.543 (-4.329)***
KSA	-0.710 (-5.587)***	-0.700 (-5.448)***	-0.700 (-5.514)***	-0.707 (-5.669)***
OM	-0.700 (-5.576)***	-0.705 (-5.584)***	-0.753 (-5.909)***	-0.725 (-5.771)***
OWNCON		0.050 (0.574)	0.007 (0.077)	0.015 (0.563)
ACE_Score			0.168 (1.867)**	0.139 (1.564)*
OWNCON* ACE_Score				0.187 (2.277)**
R2	0.328	0.330	0.351	0.381
Adjusted R2	0.280	0.275	0.291	0.318
R2 change	0.328	0.002	0.021	0.030
F change	6.724	0.330	3.485	5.184
Significant F change	0.000	0.567	0.067	0.025

Note: CV = Control Variables, IV= Independent Variables, MV= Moderator Variables.

*, **, *** = p-value < .10, .05, .01, respectively, one-tailed. The coefficient estimates (numbers in

parenthesis are t-statistic) from the regressions. Variables: INTYP= Industry type, FSIZ= Firm size
ROA= Return on assets, LEVER= leverage, UAE =United Arab Emirates, KSA = Kingdom of Saudi
Arabia, OM =OMAN, OWNCON= Ownership Concentration, ACE_Score = Effectiveness of audit
committee score, OWNCON* ACE_Score= the interaction of two variables.

Figure 1: The Moderating Effect of Audit Committee Effectiveness



IV. DISCUSSION AND CONCLUSION

The purpose of this analysis is to explore the moderating impact of the effectiveness of the audit committee on the relationship between the ownership structure and the degree of voluntary IC disclosure. Study of 119 top-list GCC firms.

Contrary to the expectation of the hypotheses, this analysis does not find any significant association between the concentration of ownership and the disclosure of IC. Thus, this study concludes that the concentration of ownership in GCC firms does not affect the degree of IC disclosure.

This result is inconsistent with the findings of previous research by Oliveira et al. (2006) which found a significant negative association between concentration of ownership and voluntary disclosure in Portuguese. However, the findings are consistent with those of Whiting and Woodcock (2011) who do not find a significant relationship between the concentration of ownership and the disclosure of IC in the Australian listed companies. We conclude that companies that aim to minimize the costs of the agency through alternative means, such as paying managers to better align their interests with those of the company, or by offering other voluntary information (e.g. social and environmental information).

In addition, it is important to remember that GCC companies have a high concentration of ownership. It is illustrated by a comparison of the descriptive statistics for this concentration of ownership in various studies (see

Table 9). If there is a high degree of concentration of ownership, the key shareholders have other ways of accessing the information they need in addition to the annual report. Thus, the concentration of ownership is not significantly linked to the disclosure of IC when the concentration of ownership is high.

Table 9: Comparison of descriptive statistics for ownership concentration in different

	Country	Mean	Min	Max
This study	GCC	53.00	0.00	96.00
Hidalgo et al. (2010)	Mexico	36.43	0.00	100.00
Dhouibi & Mamoghli (2013)	Tunisia	31.10	5.61	64.24
Juhmani (2013)	Bahrain	49.85	11.00	96.00
Whiting & woodcock (2011)	Australia	38.42	11.82	91.60

The results of the study indicate that the effectiveness of the audit committee moderates the relationship between the concentration of ownership and the disclosure of IC. The findings indicate that the effectiveness of the audit committee in firms that are owned or regulated by a large shareholder decreases the information asymmetry and the agency problem by allowing management to reveal more information to outside parties. This result supports agency theory, which indicates that the audit committee set up acts as a way of reducing information asymmetry, managerial opportunism and enhancing the quality of disclosure.

As far as control variables are concerned, Table 8 of Model 2 shows that the type of industry is not significantly linked to IC disclosure. As such, it means that financial firms are not strong enough to control IC disclosure, even though they may be associated with higher IC disclosure. Nonetheless, the findings are in line with those of Bozzolan et al. (2003) and García-Meca and Martínez (2005), who note that there is no significant relationship between the type of industry and the disclosure of IC in the UK and the Spanish listed companies. In addition, Table 8 indicates that ROA is not significantly linked to IC disclosure. This result indicates that ROA is not associated with the disclosure of IC. This result is, however, in contrast to the recent results of Li et al. (2012) and (2008) in the United Kingdom, which indicates that profitability is significantly and positively associated with IC disclosure. However, the results of this study are consistent with those of García-Meca et al. (2005) and Oliveira et al. (2006) who find that the profitability of the board has an insignificant relationship with the disclosure of IC in Spain and Portugal, respectively.

Consistent with the Agency's theory, this analysis considers a positive relationship between the total assets of the company log and the disclosure of IC. This finding is consistent with previous studies that examined the relationship between IC disclosure in corporate annual reports and firm size and found a significant positive relationship, see, for example, Li et al. (2012). In addition, the analysis found a significant positive relationship between leverage and IC disclosure level This finding is consistent with previous empiric research by Uyar et al. (2014).

In line with expectations, this study showed that there was a strong negative correlation between countries and the disclosure of IC. In this regard, the majority of coefficients were negative, indicating that the country's environment in this region has no positive impact on the regularity of disclosure. However, current empirical findings are consistent with the findings of Debreceeny and Rahman (2005), who reported a significant negative association between country and corporate disclosure. They indicate that the country's climate in this area has no positive effect on the regularity of disclosure.

The results of the research are beneficial to investors, and also to policymakers who indicate and assess the effectiveness of the audit committee in companies owned or regulated by a large shareholder would minimize the

information asymmetry and the agency problem by allowing management to reveal more information to outside parties.

Therefore, policymakers will look for other tools that enable management to improve IC transparency in companies where the concentration of ownership is high. With regard to the future research, There are various styles of ownership concentration such as government family and institutional need to explore further as different types of large shareholder have diverse investment, strategic and discrepant monitoring costs, which have a differential impact on the level of voluntary disclosure (Jiang & Habib, 2009). Other audit committee characteristics such as industry expertise as has been argued that directors who have strong industry backgrounds increase the understanding of the business environment.

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